



2021 Program Evaluation Report

Micromobility Permit Program

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Background and context

As Kelowna’s population grows, traffic is increasing, and transportation-related carbon emissions continue to rise. E-scooters have the potential to shift trips from single-occupancy vehicles to a more space-efficient, less-polluting mode. Realizing this potential would advance city goals to reduce congestion, reduce climate emissions, and advance equity. However, challenges remain, and the City must continue to ensure shared e-scooters do not exacerbate inequities, pose safety risks, or consume significant staff resources.

Shared e-scooters in North America

Shared e-scooters first arrived in North America in 2017. In 2020, at least 224 cities had one bikeshare or shared e-scooter system, and 72 have both.¹

Shared e-scooters represent 45 per cent of shared micromobility vehicles in North America. In Canada, the following cities have launched shared micromobility services over the last six months: North Vancouver, West Vancouver, Kelowna, Vernon, Windsor, Red Deer, Okotoks, Cochrane, and St. Albert.

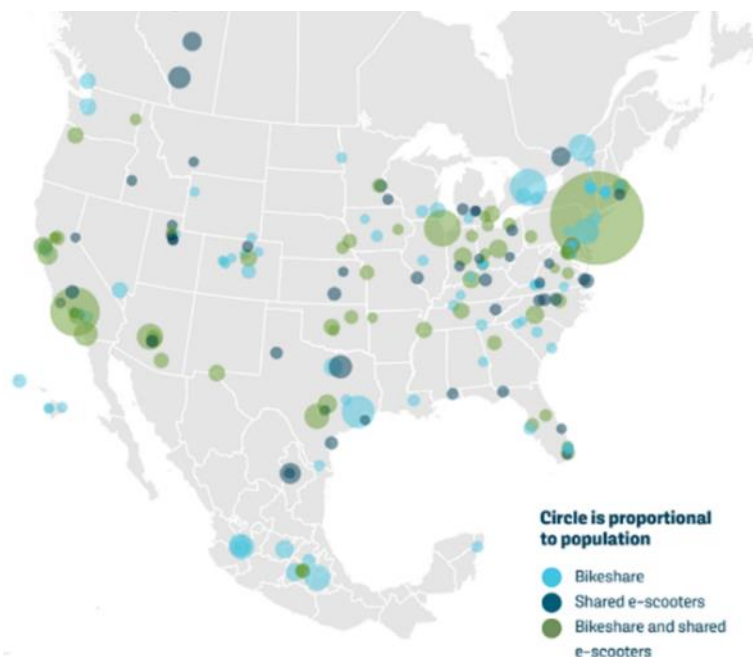


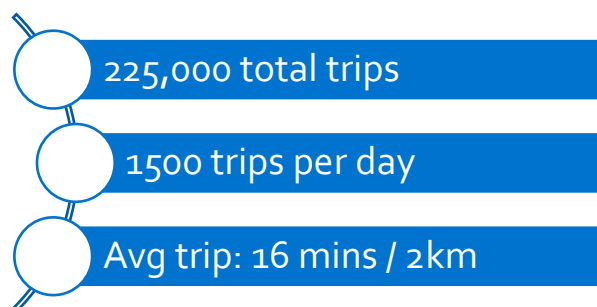
Figure 1 This map highlights where shared bikes and e-scooters were available in 2020 within North America. (North American Bikeshare & Scootershare Association, 2020 state of the industry report)

Evaluation Methodology

Unless otherwise noted, the time span for the data in this report is April 19th, 2021, to September 19th, 2021. This represents the first five months of city-wide service for shared e-scooters. Analysis of e-bikeshare is not included in this report due to their new arrival at the time of publication.

Through this period, multiple community engagement and data collection techniques were used to inform this report, including:

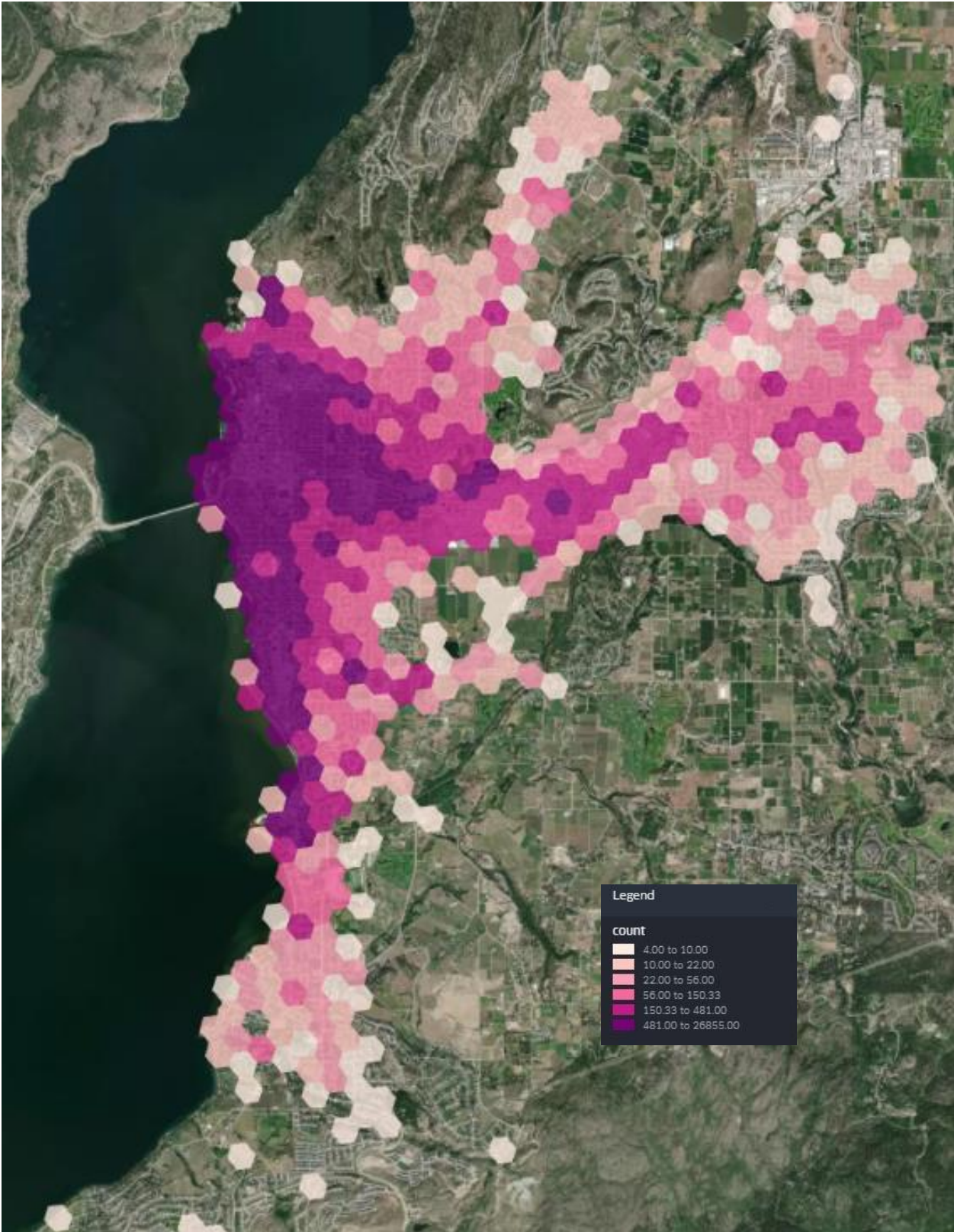
- Data from E-scooter Companies
- Community Feedback
- E-scooter Rider Surveys
- Community Survey
- Injury Data collected by Interior Health
- Stakeholder Engagement



¹ North American Bikeshare & Scootershare Association. (2021, August 4). 2020 state of the industry report. Retrieved September 24, 2021, from <https://nabsa.net/2021/08/05/2020industryreport/>.

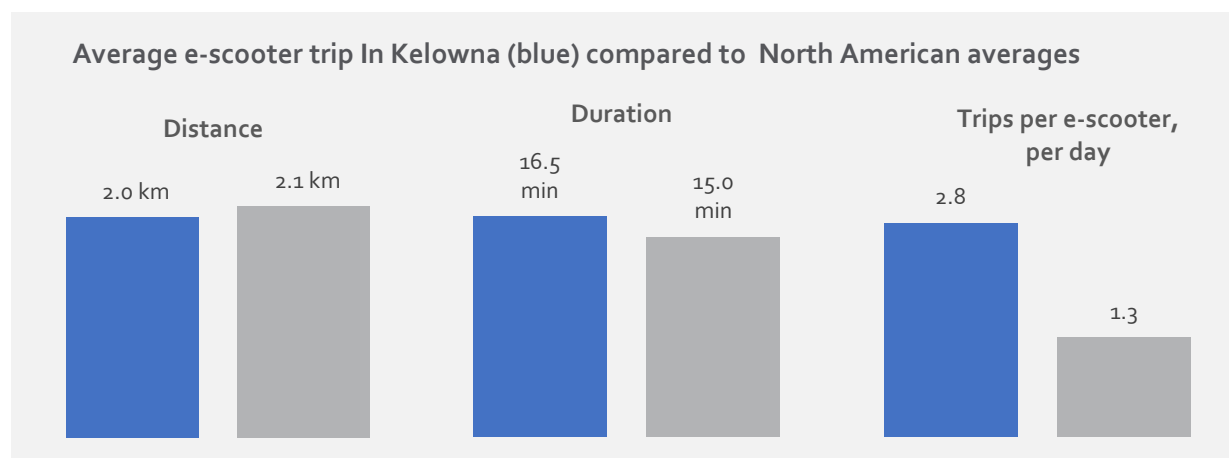
2021 Snapshot

E-scooter Trip Destination Map

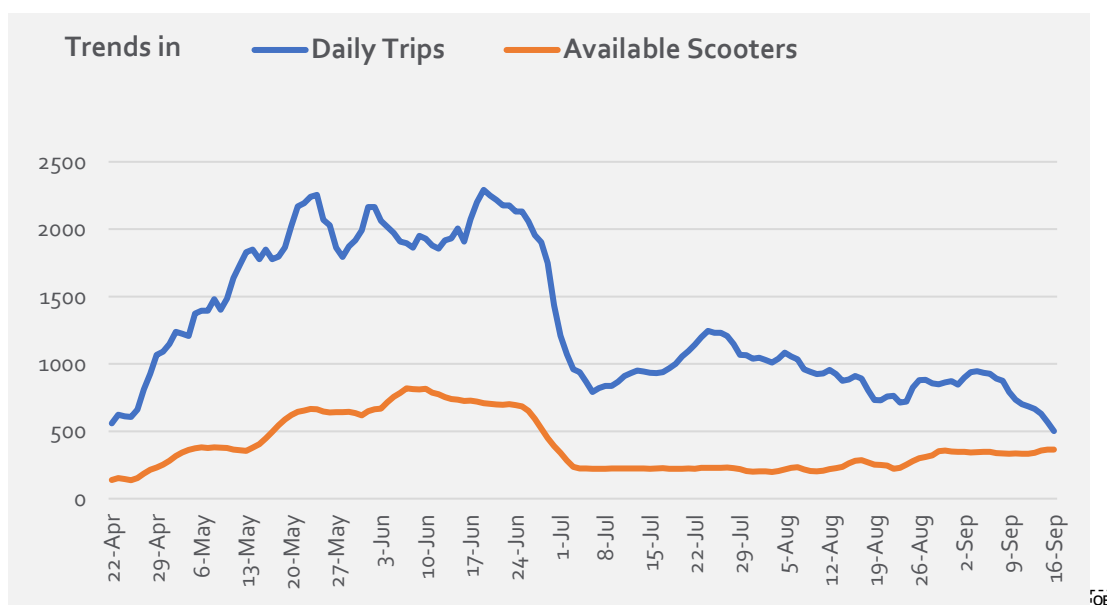


People tend to use e-scooters for short trips with an **average trip distance of 2 km** and a **duration of 16 minutes**. This lines up with the North American average² and is shorter than a typical bike trip in Kelowna of 2.9km³.

Just under 90 per cent of trips have destinations in the triangle between the Capri-Landmark, Downtown, and Pandosy Urban Centres. The 2040 OCP envisions half of the City’s future growth happening here. With limited potential to expand roadways, Kelowna will need to maximize the use of space-efficient options like bikes, e-scooters, and transit to mitigate rising levels of traffic congestion.



When the number of e-scooters available citywide and downtown was reduced at the end of June, total ridership decreased, but the number of rides taken per e-scooter increased. While the average number of available e-scooters decreased by almost 50 per cent, the average number of daily trips decreased by about 40 per cent, resulting in a 60 per cent retention of daily ridership.



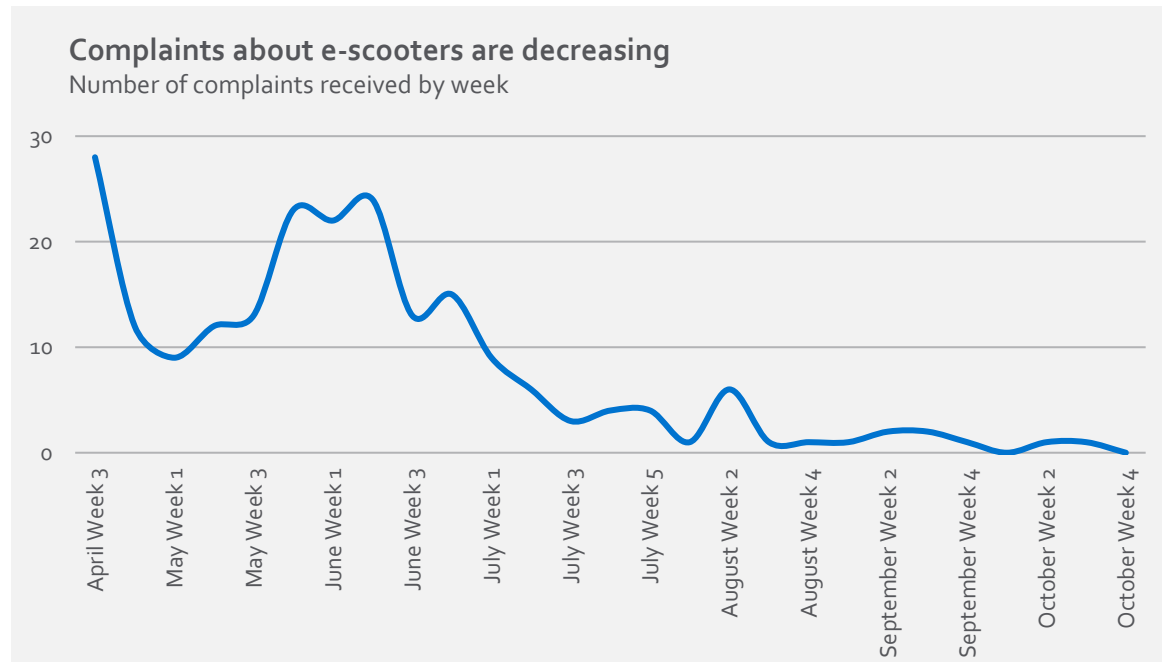
² 2020 state of the industry report. North American Bikeshare & Scootershare Association. (2021)

³ 2018 Okanagan Travel survey. Okanagan Travel Survey. (2020). <https://okanagantravelsurvey.ca/>.

Approximately 69,000 e-scooter customer accounts have been created since mid-April. The majority of these accounts (46,000) likely belong to residents of Kelowna or the Central Okanagan. Staff estimate that 20 to 30 per cent of Kelowna’s population aged 16 or over has tried a shared e-scooter.

Community Feedback

Over the first six and half months of shared e-scooter service city-wide, the City received a total of 211 complaints direct to transportation staff, through the Mayor and Council inbox, or to Bylaw Services.



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 concerns over time.

A Community Survey was conducted on the City’s Get Involved platform between October 25th and November 7th. A summary of the results is provided in the Council Report and the full summary is in Attachment #5: *Community Survey Summary*.

Rider Survey

A Rider Survey was conducted in June (n = 853) and again in August (n = 729) to better understand critical factors such as e-scooter trip purpose and how trips would have been made if e-scooters were not available. The service providers emailed the survey to their customers and the results were shared with the City. As with all opt-in surveys, respondents are not drawn from a random sample and may not represent all e-scooter riders. Results from the June survey have been summarized previously.⁴

Who rides e-scooters?

Riders are primarily residents of Kelowna (57 per cent) or other communities in the Central Okanagan (10 per cent). E-scooter riders skew slightly male (55 per cent).

⁴ City of Kelowna. (2021, June). [Attachment 1: Summary report on the challenges and wins](#)

Riders are younger than Kelowna’s population, with 49 per cent of users under 34 years old. They also tend to come from higher-income households than Kelowna’s population with 47 per cent of riders having a household income over 100 thousand. However, people with incomes under 30 thousand make up the largest share of frequent e-scooter riders.

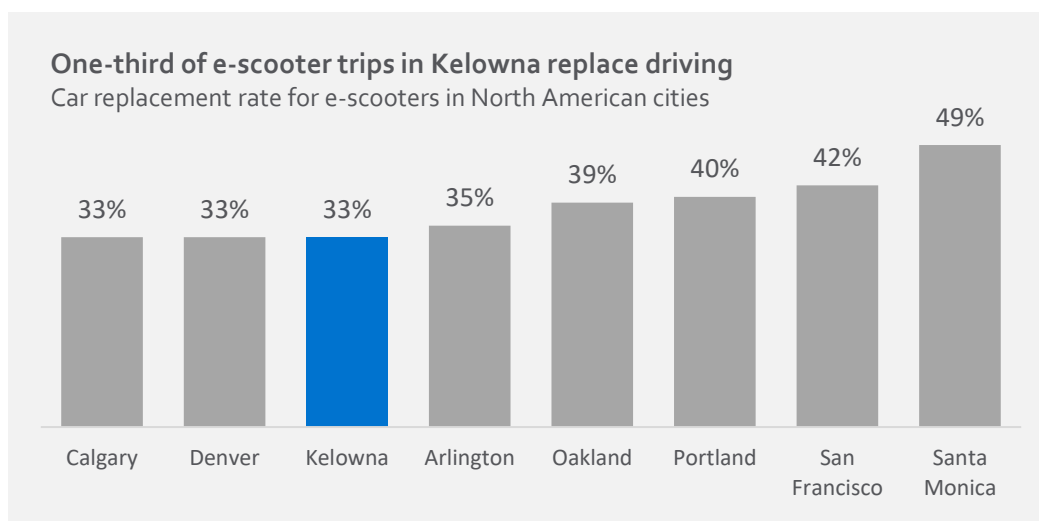
Amongst shared e-scooter riders, 34 per cent have not ridden a bike in the last year. As a result, **shared e-scooters have likely welcomed thousands of new riders to Kelowna’s bike network** over the first five months.

Congestion and Climate

One of the main benefits of shared micromobility programs is to mitigate congestion by offering space-efficient transportation options. If shared e-scooters successfully take cars off the road, they can help lower congestion and emissions from transportation.

Mode Replacement

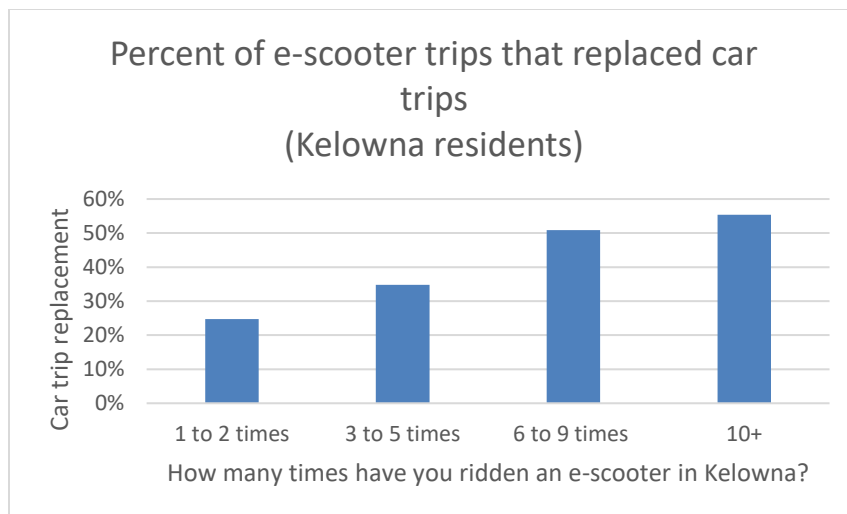
Based on user survey results, **33 per cent of e-scooter trips replace car trips** (personal car, taxi, or ride-hail). This is similar to the travel behaviours of riders in other cities.



Source: (Portland Bureau of Transportation, 2019 E-Scooter Report and next steps)

Residents replace driving with e-scooters more often than visitors. Among Kelowna residents, the share of e-scooters trips that replaced car trips increased from 35 per cent in June to 39 per cent in August. Other Central Okanagan residents and visitors reported that 26 per cent of their e-scooter trips replaced driving.

Among Kelowna residents that are repeat riders, 55 per cent of e-scooter trips replaced car trips. This indicates there may be a potential for greater benefits as the program becomes more established.



Overall, shared e-scooters replaced enough car trips to prevent 148,500 kilometers from being driven 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 over the first five months.

Some e-scooter trips also replace walking trips, but when asked about how shared e-scooters have impacted their travel patterns, on the whole, riders are split with some walking more (21 per cent) and some walking less (23 per cent). This highlights that replacing walking trips with e-scooter trips doesn't ultimately lower the amount people are typically walking.

Going Car-Free / Car-Light

When people have greater access to several reliable transportation options, they can conveniently live without a car or go "car light", reducing the likelihood of driving alone, reducing their cost of living, and freeing up space on our roadways. E-scooters can supplement transit, walking, and personal bikes for everyday trips and provide a backup plan, for example, if you miss the bus, or your bike gets a flat.

Based on the August Rider Survey, **nine per cent of respondents (68 people) indicated that they had either sold or avoided purchasing a car this summer because of the shared e-scooter program.** This aligns with a similar finding in a rider survey in Portland (seven per cent). An additional 10 per cent of Kelowna respondents (75 people) said they are considering doing so. This is a significant finding considering the service underwent frequent changes this summer and is not yet established as a permanent transportation offering.

Connecting to Transit (First/Last Mile)

E-scooters have the potential to be a solution to the last-mile problem with **12 per cent of Kelowna riders reporting using e-scooters to get to or from transit.** When asked, **28 per cent of riders say that shared e-scooters encourage them to use transit more often.** Transit, e-scooters, carshare, biking, and walking reinforce each other as transportation options that help people reliably travel without a personal vehicle. Staff will work to further align e-scooter deployment, pricing, and preferred parking areas to reinforce the link between transit and e-scooter use.

Life Cycle Climate Analysis

E-scooter use and other shared micromobility trips that replace car trips offer an opportunity to reduce emissions, air pollution, and traffic congestion. However, if the emissions associated with producing, deploying, charging, rebalancing, and disposing of e-scooters are not well managed, the environmental benefits can shrink. In general, staff estimate that shared e-scooters are a net positive on GHG emissions based on how frequently they take people out of their cars and the low lifecycle emissions associated with the service.

A study by Ernst and Young found that Voi, an e-scooter company, used a variety of combined initiatives to yield a 71 per cent reduction in emissions since January 2019, resulting in 35 g CO₂ equivalent per person kilometre in lifecycle emissions. This is on par with many public transport options.

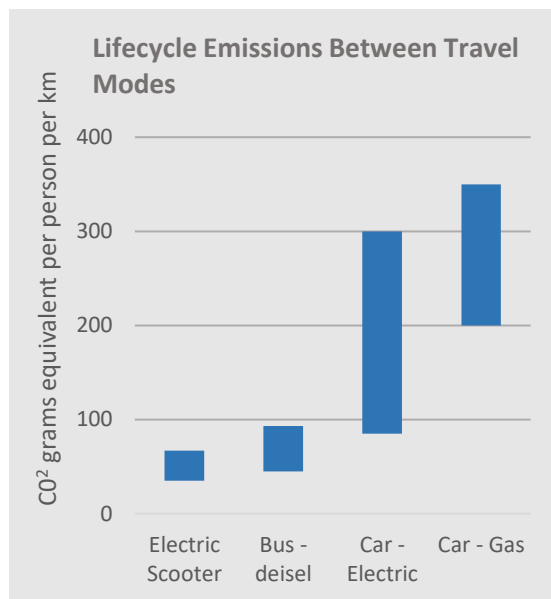


Figure 2 Source: Voi LCA data; EY analysis; The North Carolina University LCA study, Aug. 2019

In recent years, staff reviewed life cycle assessments of the shared micromobility industry to understand where policy interventions can shrink the emissions associated with operating these services to maximize the overall GHG emission reductions. To further reduce the emissions from shared micromobility, the City will look to incentivize:

- The use of recycled raw materials in vehicles
- A longer lifespan for shared vehicles
- Efficient deployment and rebalancing of e-scooters with electric vehicles and cargo e-bikes
- Charging models that utilize swappable batteries, charging stations or better battery life

Safety

There are roughly six thousand collisions and two thousand injuries each year on Kelowna's street network across all modes. The City is piloting shared e-scooters to help take cars off the road and reduce vehicle kilometers travelled. Research supports a high degree of correlation between the amount of driving in a community and the number of injuries and fatalities. This means efforts to take cars off the road can increase safety overall.

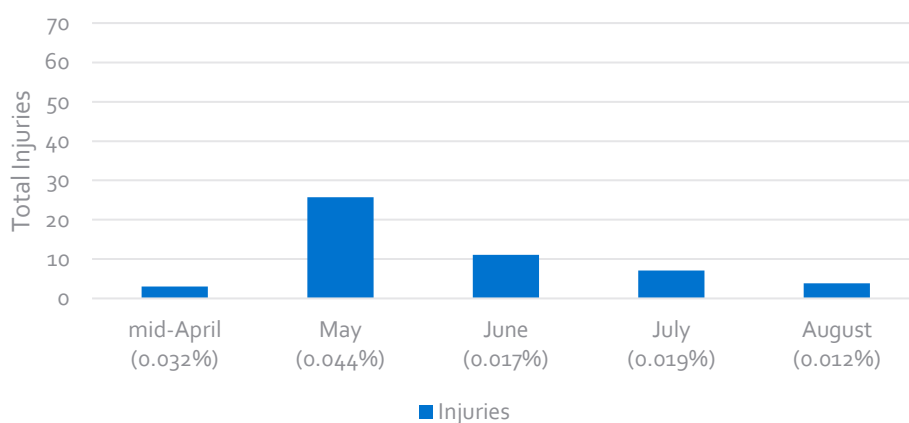
Due to the volume of e-scooter trips that would have been made by car or truck, e-scooter use may contribute to a net reduction in serious injuries and fatalities. While the effects of reduced driving and safety in numbers (more users on the bike network) are both proven to reduce overall injury rates, they fall outside the scope of this report and are recommended for future consideration. Additionally, just like bicycles, most e-scooter deaths in North America result from a person on an e-scooter being hit by a car or truck (86 per cent).⁵

⁵ Dwyer, F., Curran-Groome, W., & Harmon, K. (2021, March). [E scooter fatalities](#) - University of North Carolina

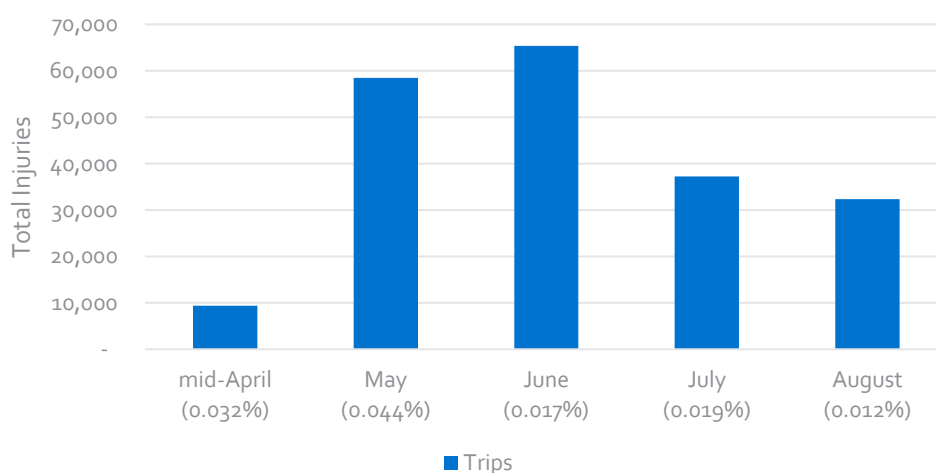
E-scooter injuries

In 2021 the City of Kelowna partnered with Interior Health to track injuries related to e-scooters. Interior Health identified **51 confirmed e-scooter-related injuries** were registered with the Kelowna General Hospital emergency department and **zero fatalities occurred**⁶. Over the same time period, 203,000 shared e-scooter trips were taken. This equates to an injury rate of 25 injuries per 100,000 trips (0.025 per cent), 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 e-scooter injury rate research presented to Council in June. However, this is the average injury rate experienced over the entire evaluation period. When examined by month, a clearer picture emerges where we see injury rates highest in April and May (first 40 days) and then declining over the summer.

E-Scooter Injuries by Month
(Injury Rate)



E-Scooter Trips by Month



⁶ Note that these injury statistics include injuries from both personally owned and shared scooters. Additionally, the data do not capture all injuries on e-scooters, as some more minor injuries may not have gone to the hospital.

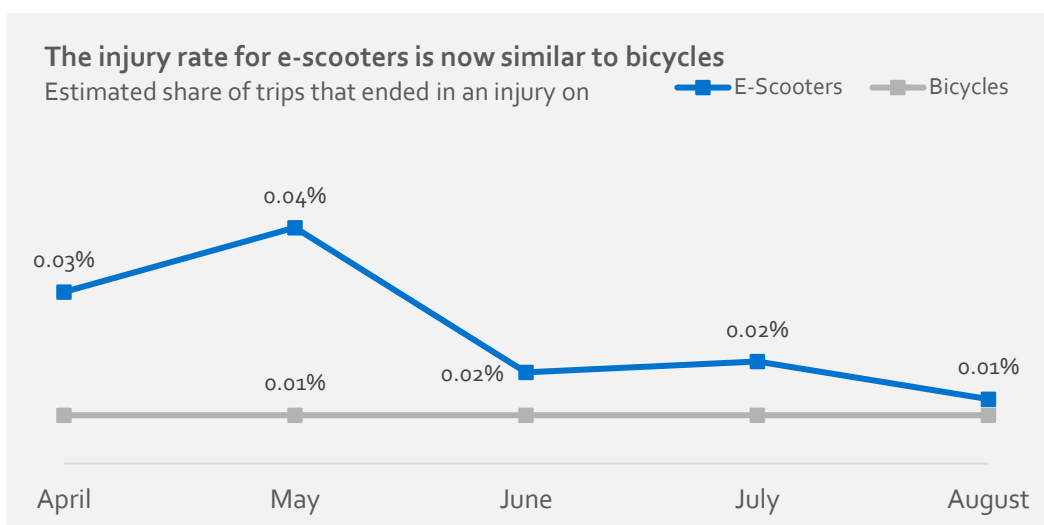
This likely explains our experience this year, where we saw less experienced riders getting injured on their first rides, followed by calls from the medical community to take action. A combination of riders getting more familiar with this new-vehicle type and the restrictions implemented at the end of June likely lead to injury rates falling to more typical levels. This is supported by the data, as research shows about 33 per cent of e-scooter injuries occur during first rides⁷, and we know that 72 per cent of Kelowna riders had never ridden an e-scooter before the program launched in April.

The Interior Health data also indicate that we have seen 48 per cent fewer total scooter-related injuries (57) than bicycle-related injuries (118) come to the KGH emergency department so far in 2021. However, more trips have been taken by bicycle than e-scooter this year. When the number of bicycle trips are accounted for, we estimate an injury rate of approximately 9 injuries per 100,000 trips for biking in Kelowna (0.01 per cent) which is also in line with the safety research presented to Council in June. The research was based on the OECD’s International Transport Forum’s recent report⁸, which compared the safety of bicycles and e-scooters in 15 countries in an urban context. The report 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 bicyclists (0.01 per cent) and e-scooter riders (0.025 per cent) in Kelowna in 2021 are on par with global injury rate ranges presented for these modes in the report:**

Travel Mode	Injury Rate (Emergency Room Visits)	
E-scooter (Global)	9-25 injuries per 100,000 trips	.01 - .03%
Bicycle (Global)	11- 18 injuries per 100,000 trips	.01 - .02%

Source: Safe Micromobility, OECD International Transport Forum, 2020

As the summer went on, injury rates fell to the low end of global injury ranges for e-scooters. **Since June, the injury rate for e-scooters in Kelowna has been similar to the local injury rate for bikes.**



⁷ City of Austin (2019, April 22). [Dockless electric scooter-related injuries study](#)

⁸ Safe Micromobility, Organisation for Economic Cooperation and Development / International Transport Forum (OECD / ITF), 2020

When assessing injuries from e-scooters, it is critical to contextualize e-scooters within the broader transportation system. Staff recommend continuing to partner with Interior Health to better understand injury rates across all modes comprehensively (rather than looking at single modes in isolation). Ultimately, further research is needed to better understand transportation safety in Kelowna and is recommended to help reduce injuries and fatalities across all modes.

Policy and program considerations from Interior Health

Staff have reviewed the Policy and Program Considerations provided by Interior Health in Section V of their attached report and incorporated them into the program recommendations.

This section below provides a summary of the Interior Health safety recommendations, by topic, and how shared e-scooters in Kelowna either meet these considerations currently or how we plan to in our 2022 permit process (in italics).

Speed regulation

Focus on ways to reduce speed in high traffic areas. Consider using geofencing to regulate speed in high-risk zones.

- ✓ *The City utilizes geofencing to establish slow-speed zones in areas where higher pedestrian traffic is likely such as the multi-pathway between Boyce-Gyro Beach and Rotary Beach.*

Consider charging by distance travelled, or per trip, or a monthly subscription.

- ✓ *Subscription plans exist across all providers currently. One e-scooter company has a base price that includes unlocking and the first 7 minutes of the trip to limit rushing. Staff will look for pricing strategies to continue to mitigate rushing in the 2022 selection process.*

Helmet use

Consider mandating and enforcing helmet use on e-scooters travelling at high speeds, and in high-traffic zones. E-scooter companies can promote the use of helmets through positive messaging and incentives. Consider providing helmets that are attached to the e-scooters.

- ✓ *In addition to the financial reward for wearing a helmet, staff propose requiring a shared helmet onto every shared e-scooter and e-bike.*

E-scooter design

Consider mandating changes to improve the visibility of e-scooters, such as bells, horns, lights, reflectors, and turn indicators.

- ✓ *Bells or horns and lights are required on all e-scooters based on provincial law. Reflectors are present on all shared e-scooters in Kelowna. Some shared e-scooters in Kelowna additionally have "brake lights" where the rear light shines brighter in the case of the brake being applied. Just like bicycles, few e-scooter designs have turn signals. In their absence, users are encouraged to use hand signals.*

Infrastructure changes

Build segregated road infrastructure for micromobility devices to reduce the likelihood of collisions with vehicles and pedestrians.

- ✓ *Kelowna invests in protected bike lanes and plans to keep people on bikes and e-scooters safe through investments proposed in the draft 2040 Transportation Master Plan.*

Education and awareness

We suggest collecting data on injuries associated with inexperienced vs more experienced riders to help inform educational efforts in Kelowna.

- ✓ *When people try things for the first time, their risk of injury is much higher than users with experience. The low-speed first-ride feature on every shared e-scooter ensures new riders get accustomed to e-scooters with less risk of injury. Staff will work with Interior Health to collect this data in the future.*

Consider using a variety of methods to spread educational messages on safe e-scooter riding practices, appealing to both males and females, and increase the frequency of such messages.

- ✓ *In the Rider Survey, most riders reported receiving education about the rules of the road and how to stay safe through in-app education. There are many other opportunities to get informed, but this is the most vital tool to reach riders. Staff will require in 2022 permits include an occasional quiz that each rider must pass.*

Include awareness and safety training regarding e-scooters in the knowledge and road tests for driver licensing.

- ✓ *Kelowna can continue to advocate to the Province, encouraging amendments to driver training education provincially. The City will also continue to deliver safety messages to mitigate the most severe automobile-related injuries for people who get around on two wheels.*

Enforcement and incentives

Implement measures to reduce intoxicated e-scooter riding. Provide additional resources to enforce policies for riding while intoxicated

- ✓ *Kelowna has a restriction covering the downtown between 10:30 pm to 4 am every night to limit intoxicated riding and a cognitive test/pledge for riders to learn about the risks of riding intoxicated.*

Helmet use

Residents and visitors wear helmets at different rates, but helmet use remains low with e-scooters. A minority of e-scooter riders indicate they wear a helmet usually or always when they ride an e-scooter(20 per cent) or a bicycle(47 per cent).

In the Rider Survey, 70 per cent of riders from BC knew of the helmet law for e-scooters. Only 26 per cent of riders from the rest of Canada were aware of the helmet law. In Canada, less than one-fifth of the population lives in a jurisdiction with a mandatory all-ages helmet law for bicycles.

Two elements introduced to encourage helmet use had low awareness among riders. Nineteen per cent of riders were aware that residents could request a helmet for free. Roughly one-third of riders were aware of the helmet selfie feature that gives riders a discount for wearing a helmet.

When asked, just 20 per cent of riders indicated they would wear a shared helmet if provided. A third of that group stated they already wear a helmet usually or often while riding e-scooters.

Do riders know the rules?

Riders were quizzed on their knowledge of the rules of the road as part of the August Rider Survey. The following shows the results five months into the launch of the 2021 shared e-scooter program:

<i>Knowledge of rule</i>	Percent correct
<i>Wear a helmet while riding</i>	58% (75% for Kelowna residents)
<i>Don't double up on a single scooter</i>	95%
<i>Don't ride on the sidewalk</i>	90%
<i>Ride in bike lanes, in the street and on shared paths</i>	70%
<i>Be over 16 (18 for some shared scooter providers)</i>	58%
<i>Park scooters in a way that doesn't block sidewalks</i>	73%

Generally, riders possess a good understanding of e-scooter rules. In a few areas, riders underperform such as knowledge of the helmet law for reasons highlighted in the *Helmet Use* section.

Safety education events

While safety education events were slow to start because of Covid-19 public health guidance, e-scooter companies delivered their first safety education event the day after restrictions were eased to make them possible. Since then, **e-scooter companies together have been hosting one event every week over the study period.** This allows riders to try a scooter in a safe environment, receive a free helmet, get fitted for it, and get familiar with the service.



A safety event is held in Stuart Park with e-scooter companies and Brain Trust (a local organization focusing on brain injury awareness)

Warning and Fines to Riders

E-scooter companies issued 222 fines and 537 warnings directly to their riders between July 1st, when the City started collecting this data, and September 19th.

Public Education Campaign

Much of the discussion in this report highlights how the City worked with e-scooter companies and shared e-scooter riders. Most e-scooter trips in Kelowna occur on shared e-scooters, but Kelowna has



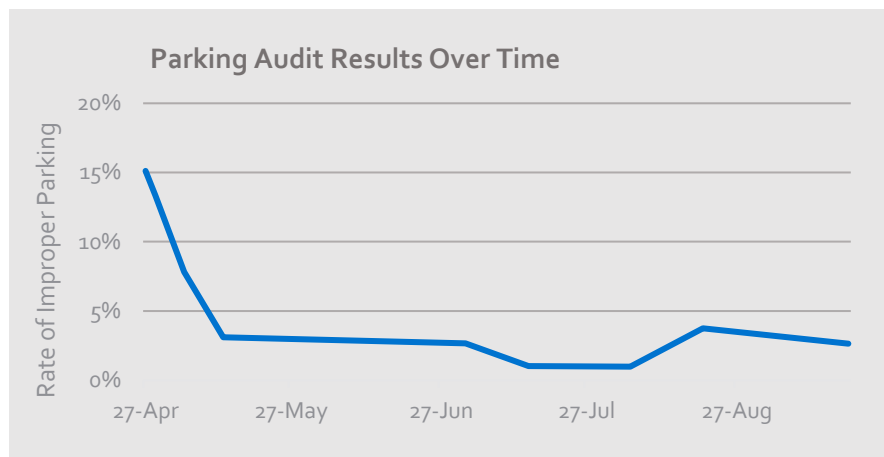
also allowed residents to own an e-scooter. These riders are harder to reach with the rules of the road. The City developed a campaign to help this user group and the general public better understand the regulations on e-scooters. The campaign was launched in November 2021, with a wider release planned for 2022 to educate riders and non-riders alike.

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. Actions the City has taken to help address this issue include:

- Preferred parking areas installed to designate proper parking locations in high activity areas,
- Regular parking audits conducted to monitor parking compliance,
- E-scooter companies incentivised to improve and perfect their rider’s parking performance,
- Complaints passed to e-scooter companies to issue warnings and fines to their riders, and
- E-scooter companies required to move reported improperly parked scooters in under an hour.

Staff have been conducting parking audits to monitor compliance. The results indicate **the rate of improperly parked e-scooters has decreased over time** and has been observed to be under 4 per cent since mid-May. Staff will keep tracking parking performance for e-scooters to understand how our program amendments impact e-scooter parking and ensure compliance.



Sidewalk Riding

Like biking on the sidewalk, sidewalk riding with an e-scooter is dangerous for the rider and people walking. Other cities in Canada, including Red Deer, Vernon, and Calgary, often with less developed bike networks, have allowed or required e-scooters to be ridden on the sidewalk. Kelowna chose to regulate e-scooters like bikes which are also banned from riding on sidewalks.

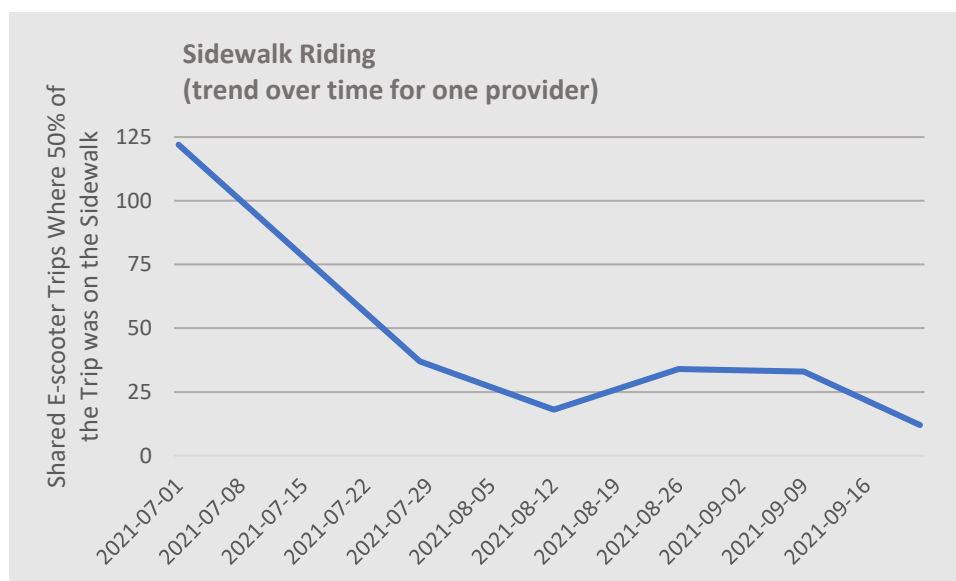
Education on the scooter and the app has consistently highlighted the importance of riding on streets and bike lanes and never riding on sidewalks. Actions the City has taken to help address this issue include:

- Sidewalk decals reminding riders to “walk your wheels” – these were installed in 108 locations in our Downtown and Pandosy Village urban center in June.

- Sidewalk riding detection was required of all e-scooter companies as of July 1st. When a significant amount of a trip is spent on a sidewalk, riders get an automated warning or fine. Repeat sidewalk riding can also result in account suspension
- Staff have conducted sidewalk riding audits to monitor compliance

The new sidewalk riding detection feature allows staff to track where sidewalk riding is most common (Water St., Sunset Dr, and Ellis St) in Downtown. It also indicates that sidewalk riding is typically occurring along streets where bike facilities don't exist or are less protected from vehicles, rather than over entire trips. This is consistent with what we know from studies about bike riding on sidewalks (i.e., sidewalk riding typically happens on streets where riders don't feel adequately protected from vehicle traffic).

Since July 1st, sidewalk riding detection data from one company indicates that sidewalk riding is declining as riders receive education, warnings, and fines helping to correct their behavior.



The behaviour of e-scooter riders is consistent with studies about bike riding on sidewalks. Sidewalk riding happens in areas where riders are looking to protect themselves in places where bike facilities are uncomfortable or do not exist. In Downtown Kelowna the worst streets for e-scooter sidewalk riding are Water St., Sunset Dr, and Ellis St. Sidewalk riding for the most part rarely happens for a large portion of a rider's trip as those uncomfortable facilities typically make up only a portion of the typical trip.

Overall, **only 2 per cent of trips spent half of the trip on the sidewalk** and this rate is decreasing over time as riders get more familiar with the service.

To understand this challenge more fully without solely relying on data from e-scooter companies, the City observed two evenings a month apart to get a percentage of use on sidewalks between bike and e-scooters in one of the worst locations based on sidewalk riding detection data. Overall, e-scooters riding the bike lane instead of the sidewalk at this location (Ellis and Bernard) improved from 53 per

cent at the end of July to 68 per cent one month later. On average, bikes and skateboards were ridden in the bike lane 83 per cent of the time during the same period.

Equitable Access

Barriers to e-scooter use exist, but if they are correctly managed and promoted in partnership with the community, equity challenges can be minimized. E-scooter companies have programs that provide incentives and options for low-income, unbanked, and underserved residents.

Low-Income Discounts: Low-income residents enrolled in income support or low-income assistance can access e-scooter services at a 50-70 per cent discount.

Alternative Payment and Unlock Options: All current operators enable shared e-scooters to be unlocked by people who are unbanked or lack a smartphone. Unfortunately, awareness of these programs is low among riders, with only 6 per cent of riders reporting knowledge of low-income discounts and alternate payment and access options. Other programs, like those related to free helmets and helmet selfie had much greater awareness, likely due to news articles and prominence in the app. The City will look to bolster knowledge of these programs in the future.

Affordability: At the time of publication, the price of a median e-scooter trip (\$6.60 plus tax) is more than double the cost of a single transit ticket in Kelowna. Staff will be looking to find ways to lower the cost of these services in future years and expand the availability and knowledge of loyalty programs, passes (daily, weekly, and monthly) and the existing low-income access programs. Staff will also look for opportunities in the future to seamlessly connect these services into the digital fares for the Kelowna Regional Transit System in the future, allowing residents to plan and pay for their multi-modal trip all in one app.

Supporting a range of body types, abilities and needs: In the e-scooter rider survey, 6 per cent of respondents indicated they identify with having a disability, and some respondents indicated the e-scooter enabled them to get around town more easily without a car because walking or biking is a challenge for them physically.

In the community survey, seven per cent of survey respondents indicated they would be physically unable to use an e-scooter, which aligns with the share of Kelowna's population who report having a *mobility-related* disability⁹. Portland has highlighted that e-scooters with seats provide more stability, better balance, and access for a sub-set of mobility-related disabilities. This option has helped give a broader customer base more options in Portland and Seattle, where legislation allows seated scooters. Due to provincial legislation, seated e-scooters and more accessible e-scooter designs are not currently legal. Kelowna will continue to advocate to the Province for a more comprehensive array of small, electrified vehicles to be permitted on roadways, while retaining municipal control over where they may ride. This would allow more options for residents while allowing municipalities to fit new vehicles into appropriate facilities by size, weight, and speed.

In the Rider Survey, over 50 per cent of female riders said the inclusion of a basket on the e-scooter would encourage them to ride more. Staff will continue to investigate options that meet a broader range of body types, abilities, or utility for riders.

⁹ [2018 Okanagan Travel Survey Report #3. Table 8, p.63](#)

What's Next

Based on the first 150 days of shared e-scooter service, e-scooters hold promise to fill gaps in Kelowna's transportation system, especially if safety and accessibility challenges continue to be reduced. Staff recommend moving forward with program amendments to allow e-scooters to improve and remain a viable way for Kelowna residents to get around in 2022.

Staff capacity and coordinating decision-making: Managing a fleet of hundreds of shared micromobility vehicles across multiple companies under strict requirements requires dedicated staff resources. While Kelowna has leveraged existing staffing to date, the City has experienced challenges dedicating enough staff capacity to manage day-to-day operations, relationships with service providers, conduct regular compliance audits, and deliver reports to council. Staff propose an administrative fee to help cover the costs of program administration.

Clear expectations and plans to implement: Kelowna explicitly outlined permit holders' requirements and created new requirements as the program rolled out to solve the challenges that were experienced. Clear and simple requirements should outline what the City intends to regulate and how these elements will be audited or calculated will be clarified for future permit holders.

Number of Operators: **Staff recommend limiting the number of e-scooter companies operating to no more than two companies** to help reduce staff administration time and provide more certainty for both operators and riders.

Duration of permit: The shared e-scooter industry is four years old. The City needs to balance a stable working environment for companies while mitigating risks associated with a young and volatile market. To reduce the risks involved with forgoing potential new technology in the marketplace while also ensuring companies can make long-term investments. **Staff recommend pursuing a two-year permit.**

E-bikeshare and E-scootershare together: In February 2021, Staff highlighted that only one current shared e-scooter operator in Canada had ever delivered e-scootershare and e-bikeshare together. This would have created a monopoly where only one company could choose to provide service to Kelowna. The number of companies active in Canada has doubled in recent months. Many companies now have the ability and interest in delivering both shared e-scooters and e-bikes. **Staff recommend modifying the permit program to bundle e-scooter and e-bike permits together**, ensuring providers offer shared e-bikes alongside shared e-scooters.

Shared Helmets: Twenty per cent of shared e-scooter riders indicated that they would wear a shared helmet in the Rider Survey. This suggests that shared helmets may somewhat increase helmet law compliance among riders. **Staff propose requiring a shared helmet to be attached to each vehicle that falls under the BC all-ages helmet law in Kelowna.**

Parking and Accessibility: To limit sidewalk riding, reduce e-scooters blocking sidewalks, and address additional concerns, staff will investigate the following program options: requiring a braille identifier, exploring a small noise constantly emitted through the scooter when ridden, requiring each rider to pass a periodic quiz identifying safe riding behaviour, expanding the number of preferred parking areas, exploring dedicated charging infrastructure in high activity areas (installed and maintained by permit holders), and exploring enhanced sidewalk riding detection to stop sidewalk riding during a trip.