

Report to Council



Date: March 4, 2019

File: 1350-30

To: City Manager

From: Jerry Dombowsky, Transit and Programs Manager

Subject: Bikeshare Pilot Update and Next Steps

Report Prepared by Matt Worona, Active Transportation Coordinator

Recommendation:

THAT Council receive for information, the report from the Transit and Programs Manager, dated March 4, 2019 with regard to the Bikeshare Pilot Update and Next Steps;

AND THAT Council direct staff to explore a system to regulate use of the public right-of-way for bikeshare service that allows for multiple operators and multiple vehicle types and report back to a future Regular Meeting of Council.

Purpose:

To present council with an update on the Kelowna Bikeshare Pilot and explore next steps to create a program to regulate bikeshare operators into the near future.

Background:

Bikeshare is a service where bicycles and other small vehicles are made available for shared use to individuals on a short-term basis. These systems allow users the ability to pick up a vehicle in one location and return it to another located within a service area.

The City is currently working to deliver on the recommendations from the Kelowna On The Move Pedestrian and Bicycle Master Plan which recommends that staff "research and develop a strategy to demonstrate which programs would be most effective in achieving behavioural change to grow the share of residents selecting active modes of transportation." Through the pilot, staff have discovered that bikeshare can act as an extension of the public transportation system and add new mobility options for residents and visitors to our City.

The Kelowna Bikeshare Pilot launched in June 2018 and wound down for winter in November. This report provides an update on how the program has performed and direction for the future. System data provides information on usage and travel patterns while a user survey provides insight into user behavior

and demographic information. In addition, our experience with the operator and some of the challenges met provide an invaluable learning experience that will help shape bikeshare in the future.

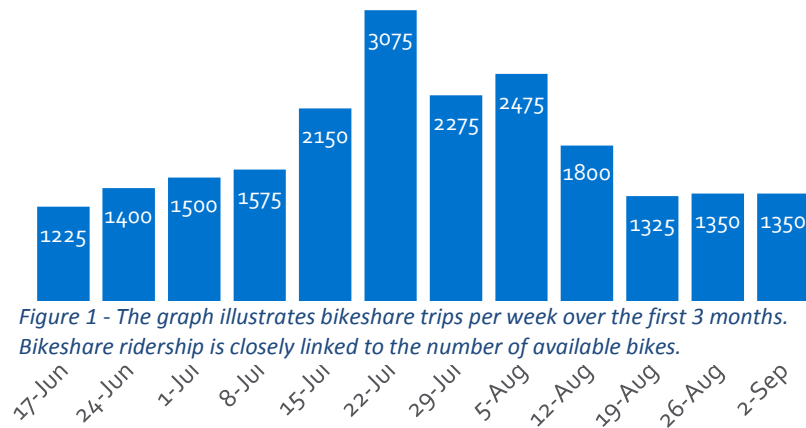


Figure 1 - The graph illustrates bikeshare trips per week over the first 3 months. Bikeshare ridership is closely linked to the number of available bikes.

Results to date

The uptake of bikeshare in Kelowna has been higher than expected. Over the first three months, from June 12th to September 9th, there were more than 33,000 rides from 9,000 unique users on 331 bikes. For a mid-size community, this is a strong indication of future potential. Breaking the data down further, roughly a third of the total trips were made by 600

frequent users which indicates that there is a dedicated user base emerging for this service. As anticipated, the pilot proved to be a learning experience, and valuable insight was gained.

User Survey

User feedback on bikeshare was determined through a survey delivered by the operator, Dropbike. The survey's questions were developed by both the City of Kelowna and Dropbike. The opt-in survey received 374 responses. High-level results tell us that there is considerable support for the service (95%) from users.

The survey revealed that Kelowna bikeshare users were younger and wealthier than the average Kelowna resident. Interestingly, 73% of Kelowna bikeshare users have access to a bicycle, and 92% have access to a car. Several conclusions can be drawn from this. One is that bikeshare is a service that increases travel options across the income spectrum. Another conclusion is that staff should examine how accessible the service is for the economically disadvantaged, making amendments if prudent.

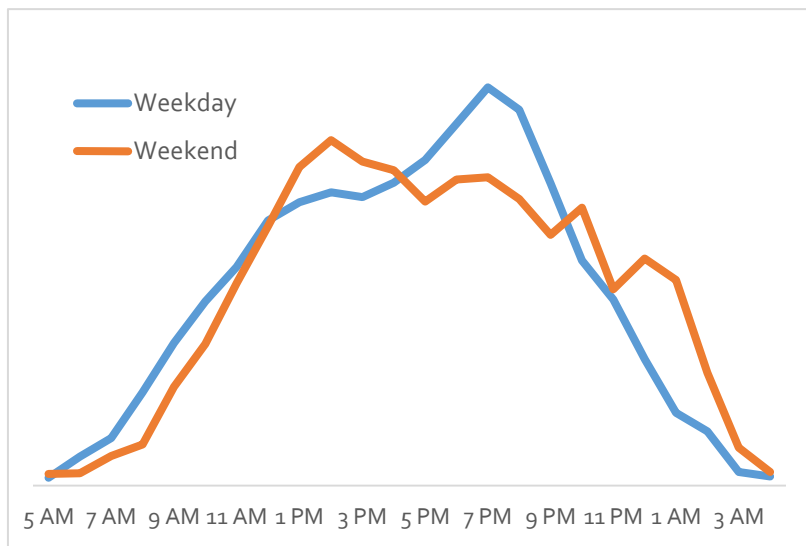


Figure 2 - Weekday and weekend hourly trip volumes displayed distinct peaks and overall trends.

Survey results indicated that 28% of all bikeshare trips would have been made by driving. Benchmarked to systems worldwide, bikeshare in Kelowna was able to pull people out of their cars at a higher rate. Because Kelowna's transportation network isn't as diversified as larger cities where bikeshare has been implemented, it is believed that pedal bikeshare, and other services like it, can compete more directly with personal car trips.

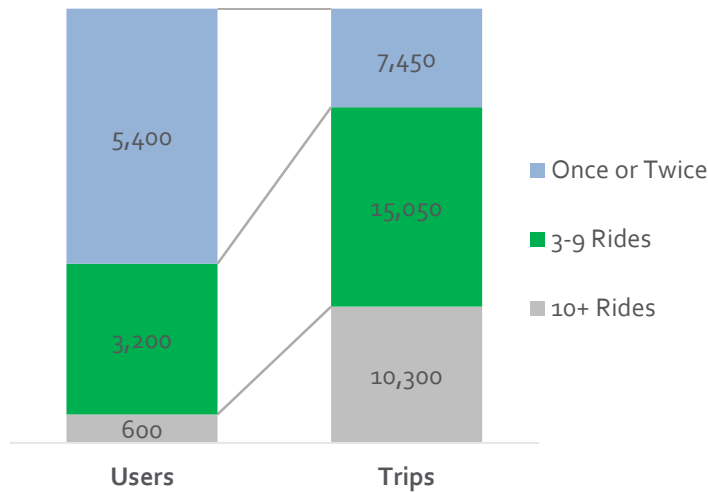


Figure 3 - While most bikeshare users accessed the service only a handful of times, almost a third of trips were taken by a small subset of 600 frequent users.

our bikeshare system and have not yet been deployed including cash payments, debit credit payments, and unlocking a bike with a text message. Consequently, to date staff have been unable to evaluate the impact of these features on ridership.

The durability of the bikeshare fleet was tested in the pilot. Over the first three months, every bike was ridden more than one hundred times on average. Kelowna was the initial market for the operator's third generation bicycles; allowing for lessons to be learned about various design elements that did not perform well with active use and

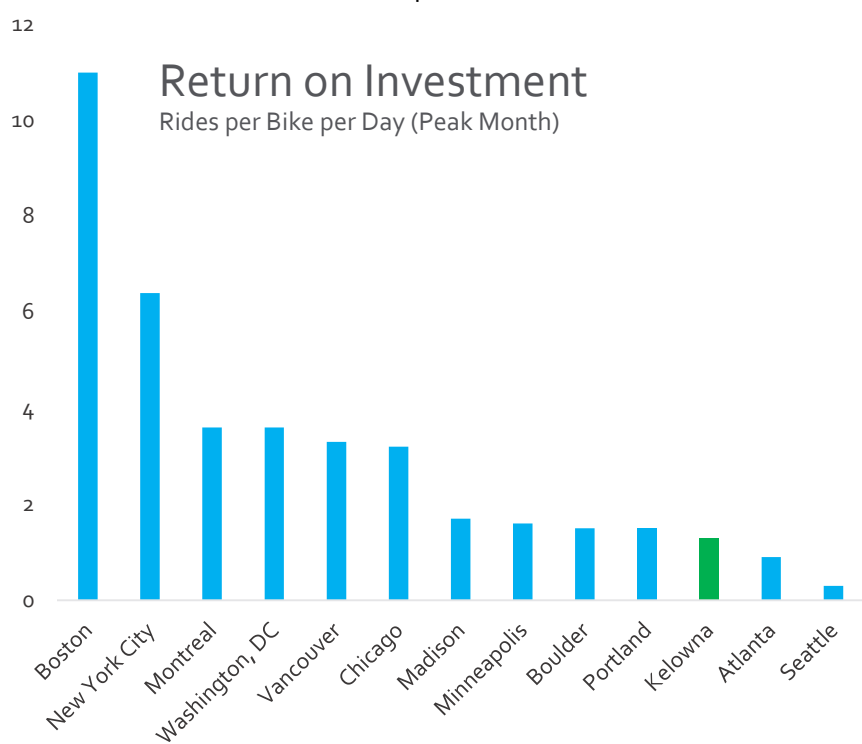


Figure 4 – Traditionally bikeshare has been measured on utilization. Cities had invested heavily in these systems and as a result metrics were developed to understand return on investment. This measure is less helpful for cities, like Kelowna, that did not finance large upfront capital costs associated with their systems.¹

An additional 50% of bikeshare trips would have been made by walking. It is believed that bikeshare is offering benefits to users for distances between a long walk but still too short to take transit or drive and park.

Opportunities for Improvement & Lessons Learned

Learning opportunities are one of the benefits of a pilot program in which both successes and failures help to formulate the best model moving forward. In this respect, the experience to date with the current operator has highlighted some areas for attention.

Multiple features were to be included in

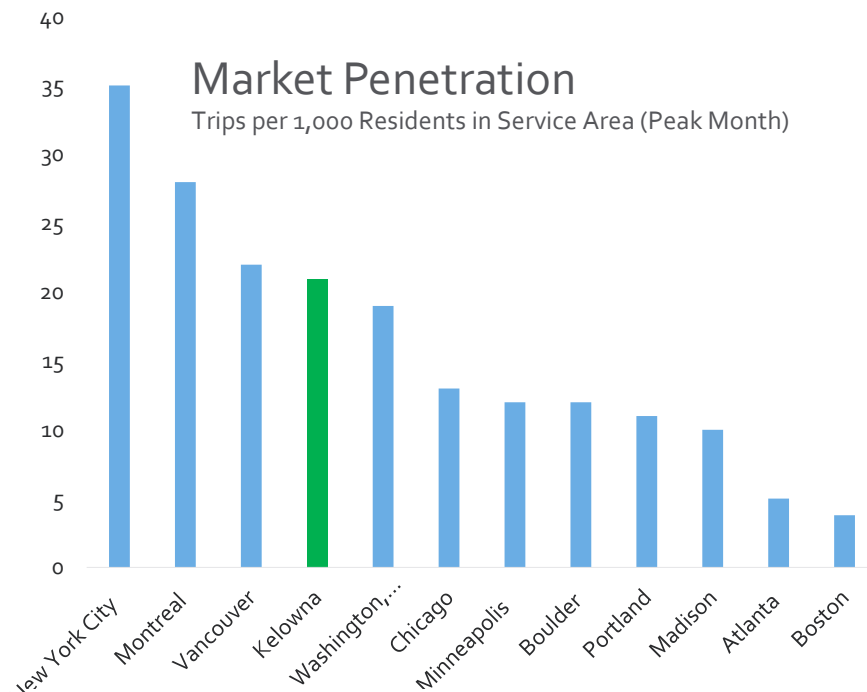


Figure 5 – New metrics have been developed to reflect the changing landscapes and new ways to assess elements of bikeshare performance. A measure of market penetration or ridership per capita is more appropriate for Kelowna’s bikeshare landscape.¹

exposure to the elements. Also, requiring bikeshare operators to deliver real-time availability data is an emerging bikeshare best practice. Real-time bikeshare availability enables mobility applications such as Google Maps to incorporate bikeshare availability into trip planning to shorten journeys.²

Meeting operating standards the City of Kelowna set for returning bikes into the service area, as well as timelines for removing broken bikes, was another issue experienced. In the future, staff believe a fine for failing to deliver would incentivize operators to adhere to these timelines.

Future of Bikeshare in Kelowna

Since the introduction of bikeshare in Kelowna, the industry has itself experienced considerable growth³ and has changed how bikeshare can be delivered.

The latest improvement in bikeshare technology is in electrified fleets. As a result, bikeshare operators are integrating a variety of electrified vehicle types into their fleets including e-bikes, e-scooters, and others.⁴ A larger share of the total travel market can be encouraged to make a trip on a small electric vehicle than traditional bikeshare even with a higher price point.⁵ These vehicles show signs of competing more directly with car trips while also displaying much faster adoption rates than pedal bicycles. For every pedal bike ride, bikeshare operators see more than two electric bicycle rides.⁶

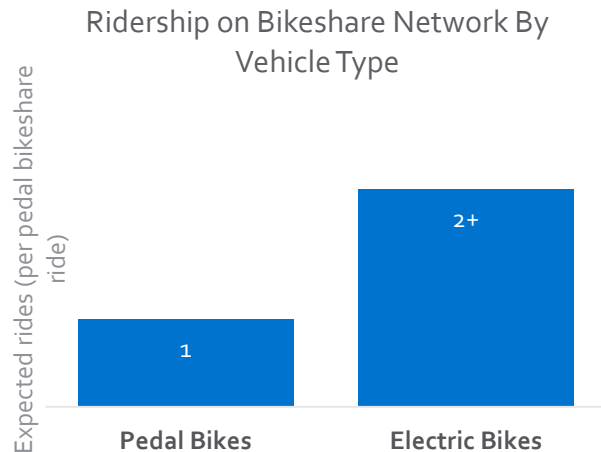


Figure 6 - Bikeshare operators can expect at a minimum double the rides on electrified vehicles when compared to pedal bikes.

There is a potential to reach more residents and attract more trips on our existing active transportation facilities by enabling private bikeshare operators to compete and deliver a variety of vehicle types.⁷ With the evolution of the industry to more electrified vehicles, bikeshare companies are now growing faster than Uber did when it first launched.⁸ Considerable potential now exists to attract seasoned global operators to invest in Kelowna.⁹



Figure 7 - Jump (owned by Uber) and Lime (formerly Limebike) operate e-bikes and e-scooters (pictured above) in networks as a shared transportation service in many cities worldwide.^{10,11}

Approach to Future Bikeshare Regulation

The speed of change in the bikeshare industry has been remarkable in the last 12 months. There currently exists considerable opportunity to modernize our bikeshare regulations. Dependable and flexible regulations will likely scale up the area serviced, the ridership from these fleets, and the variety of vehicles available to residents and visitors. It also poses the opportunity to close gaps experienced within our current bikeshare agreement and ensure we are responding to resident concerns that were identified in the pilot. Staff recommends exploring new ways of providing flexible, affordable, and accessible transportation options.

Transportation Master Plan Vision

"Kelowna will be a city with vibrant urban centres where people and places are conveniently connected by diverse transportation options that help us transition from our car-centric culture."

From the City of Kelowna's Transportation Master Plan vision, bikeshare should aim to achieve the best quality service, delivering that service to the highest number of people and managing negative externalities like disorder within the public realm and on our right-of-way. By establishing future bikeshare regulations, we will be able to maximize investment and competition from firms delivering shared small vehicles in Kelowna.

Based on the TMP vision, staff have built the following guiding principles for bikeshare regulation to deliver on:

- *Deliver the opportunity for more residents not to drive* by building and enabling an interconnected network of transportation options.
- *Ensure public benefit* by removing the pressure to move more cars on our road network, therefore, minimizing the requirements for new transportation infrastructure investment associated with growth in travel demand.
- *Encourage people to walk, cycle and take public transit* more often, by adding options that improve the utility of other sustainable travel modes.
- *Lower the cost of living* by giving residents the opportunity to build a robust set of options around how they move, enabling some to avoid the cost of car ownership.
- *Build on a culture of active living* in the community.

Next Steps

Assuming council direction, staff will explore a system to regulate bikeshare into the near future. This evaluation will center on enabling a competitive bikeshare marketplace allowing for multiple operators to deliver a variety of vehicles types while managing conflicts within the right-of-way.

Internal Circulation:

Communications Advisor
 Department Manager, Infrastructure Operations
 Deputy City Clerk
 Director, Business and Entrepreneurial Development
 Divisional Director, Community Planning and Strategic Investments
 Divisional Director, Corporate Strategic Services
 Divisional Director, Infrastructure
 Manager, By-Law Services
 Manager, Community Communications
 Manager, Financial Planning
 Manager, Long Range Policy Planning
 Manager, Transportation Engineering
 Park and Landscape Planner
 Planner Specialist
 Traffic Operations and Technical Services Supervisor
 Transit Service Coordinator
 Transportation Planner

Existing Policy:

The Kelowna On The Move: Pedestrian and Bicycle Master Plan recommends staff “research and develop a strategy to demonstrate which programs would be most effective in achieving behavioural change to grow the share of residents selecting active modes of transportation.”

External Agency/Public Comments:

Pandosy Village Business Association
 Downtown Kelowna Business Association

Considerations not applicable to this report:

Financial/Budgetary Considerations
Personnel Implications
Legal/Statutory Authority
Legal/Statutory Procedural Requirements
Existing Policy
Communications Comments
Alternate Recommendation
External Agency/Public Comments

Submitted by:

J. Dombowsky, Transit and Programs Manager

Approved by:

R. Villarreal, Department Manager, Integrated Transportation

Approved for inclusion:



A. Newcombe, Divisional Director, Infrastructure

Attachment 1 - Bikeshare Pilot Update – Presentation

cc: City Clerk
Deputy City Manager
Divisional Director, Community Planning & Strategic Investments
Divisional Director, Corporate Strategic Services
Divisional Director, Financial Services
Divisional Director, Infrastructure
Infrastructure Operations Department Manager

¹ “The Online Bikeshare Planning Guide.” Institute for Transportation and Development Policy, 18 July 2018, www.itdp.org/2018/06/13/the-bike-share-planning-guide-2/.

² Mogg, Trevor. “Google Maps Makes It Easier Than Ever to Find a Lime Bike or Scooter.” Digital Trends, 14 Dec. 2018, www.digitaltrends.com/outdoors/google-maps-makes-it-easier-than-ever-to-find-a-lime-bike-or-scooter/.

³ Heineke, Kersten, et al. “Micromobility's 15,000-Mile Checkup.” McKinsey & Company, Jan. 2019, www.mckinsey.com/industries/automotive-and-assembly/our-insights/micromobilitys-15000-mile-checkup.

⁴ Lazo, Luz. *First the Dockless Bikes, Now Scooters*. The Washington Post, 13 Mar. 2018, www.washingtonpost.com/news/dr-gridlock/wp/2018/03/13/first-the-dockless-bikes-now-you-can-hop-on-a-scooter-at-a-sidewalk-near-you/?noredirect=on&utm_term=.ee1c10f17ec1.

⁵ Russell, Melia. “Lime Dropped the 'Bike' from Its Name; Now the Bikes Are Disappearing.” San Francisco Chronicle, 16 Feb. 2019, www.sfchronicle.com/business/article/Lime-dropped-the-bike-from-its-name-now-13621057.php.

⁶ Wachunas, John. “Lime One Year Report Reveals Early Impact Of Scooter And Bike Sharing.” Lime, July 2018, www.li.me/blog/lime-one-year-report-scooter-bike-sharing.

⁷ Cao, Guangyu, et al. “Competition with Network Effects in Bike-Sharing.” The Centre for Economic Policy Research, 9 Nov. 2018, voxeu.org/article/market-expanding-network-effects-bike-sharing.

⁸ Dediu, Horace. "Who's the Fastest of Them All?" *Twitter*, @asymco, 8 Nov. 2018, twitter.com/asymco/status/1060649488208089093.

⁹ Schwartz, Zane. "Bird and Lime Eyeing Expansions into a Combined 14 Countries." *The Logic*, 5 Feb. 2019, thelogic.co/news/exclusive/bird-and-lime-eyeing-expansions-into-a-combined-14-countries/.

Photo References

¹⁰ "Press." Lime, www.li.me/press.

¹¹ "Press Kit." JUMP Bikes, jump.com/press-kit/.