

FREE RANGE BICYCLES

WHAT WINNIPEG CAN LEARN FROM THE RECENT
LAUNCH OF LIME BIKES IN THE CITY OF CALGARY

CASE IN POINT 2019

by: Brad McGregor

in collaboration with: Jamie Hillland (Urban Systems)

ABSTRACT

In early 2019, Councillor Matt Allard proposed a motion to the public works committee to prepare a report on the implementation of a bicycle and e-scooter sharing platform with the aim of establishing a permitting and fee system for the program. Lime, a company from the United States, is interested in Winnipeg as a potential new market. Lime operates in many locations in the United States, along with two Canadian locations, Waterloo University and the city of Calgary. Chris Shafer, Lime's senior director of Canada, believes that Winnipeg might be a good fit for Lime. Winnipeg's sizable population, denser core neighbourhoods, booming tech industry, and university populations are all features that could mean success for a bicycle sharing platform such as Lime (Thorpe, 2019). As the only Canadian city with Lime bicycle sharing, Winnipeg may look to Calgary as an example of implementation of a bicycle sharing platform.



WHAT IS LIME?

Lime is an American-based bicycle and e-scooter sharing platform. Operating in many locations throughout the United States, Lime also operates within Canada at the Waterloo University and in Calgary. They offer users three options for transportation; electronically powered scooters, electronically assisted pedal bicycles, and old-fashioned pedal bicycles. While many cities have bicycle sharing programs where bicycles can be rented and returned at docking stations within certain areas, Lime operates differently. Lime doesn't use docks to wrangle their fleet of bicycles and scooters. Instead, the bikes are intended to be picked up and dropped off anywhere within a given service area.

As many ride-sharing companies, Lime operates through a smartphone app. Users download the app, use a credit card to load up their account, and are ready to ride. The app is then used to locate and unlock the bike and at the end of the ride, it is used to lock the bike. Rentals start at \$1 to unlock the bike and each minute of ride-time is an additional thirty cent charge (Lime, n.d.).

In addition to their regular rental services, Lime has several additional programs available for interested parties. Lime Corporate Partners Programs is available for business, or a business campus, to

offer Lime bikes and e-scooters as an employment benefit. Lime Hub Network and Lime Real Estate Partners Program provide businesses, property managers and owners incentives and free rides for acting as bicycle stations. Lime Campus which aims to reduce traffic on university campuses and provide students with affordable transportation options. Lastly, is Lime Access, a program that works with community organizations to provide rides for low-income individuals at up to a 95% discount (Lime, n.d.).



Figure 1: A map showing cities or campuses that currently use Lime bikes in North America. Retrieved from: <https://www.li.me/locations>

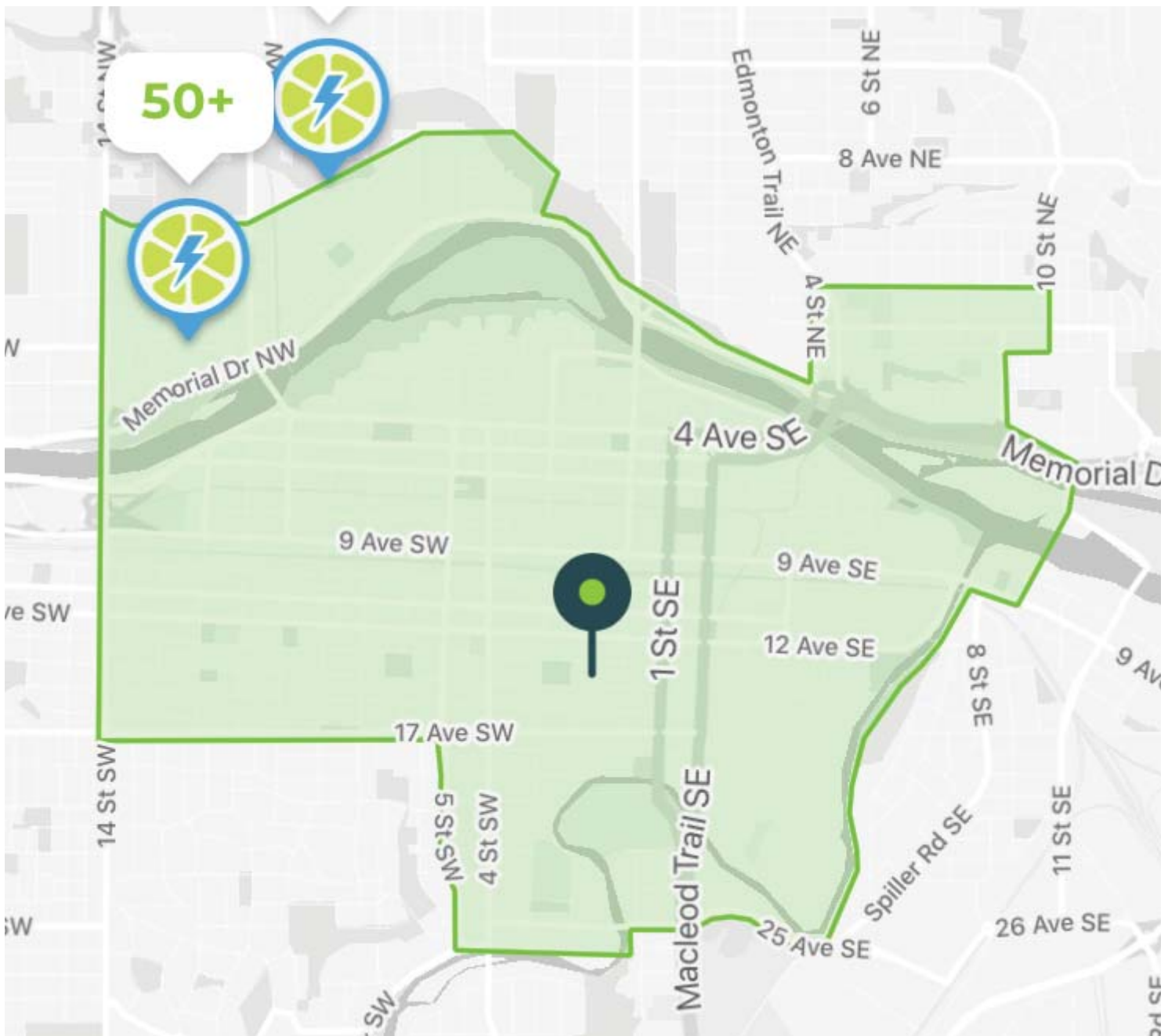


Figure 2: Lime's service area in Calgary. Retrieved from: <https://dailyhive.com/calgary/how-to-lime-bike-calgary>

LIME IN CALGARY

Mentioned in the 2011 Cycling Strategy, a bicycle sharing program has been in the works for quite some time. With this plan calling for a program to be in place in 2013, the plan has clearly fallen behind. In October 2018, Calgary welcomed a fleet of Lime's green bicycles to the city, bringing the Cycling Strategy goals to fruition. The operation of Lime is the first phase of a two-year pilot project for the city to

gather user feedback and assess if this new transportation option meets the goals of the Calgary Transportation Plan (City of Calgary, n.d.). These four goals are outlined in the Cycling Strategy and are more people cycling, more bicycle infrastructure, safe cycling conditions, and increase satisfaction with cycling in Calgary (City of Calgary, 2011, p.2). This first phase saw Lime introduce a fleet of 375 electronically assisted pedal



Figure 3: A timeline of the bicycle sharing pilot project in Calgary. Retrieved from: <http://www.calgary.ca/Transportation/TP/Pages/Cycling/Cycling-Strategy/Bike-share-system.aspx?redirect=/bikeshare>

bicycles within the given service area (figure x.). Included in this service area are the anticipated high utilization corridors which include Stephen Avenue, Eau Clair, 17th Avenue south, and the river pathway system. The service area will also include the neighbourhoods of Mission, Bridgeland, Kensington, and Inglewood (City of Calgary, n.d.), and after winter, will likely be expanded to include the rest of Calgary (Heydari, 2018). While the program is still a new addition to the streets of Calgary, the first week saw a total of 2,769 riders try out the bikes (King, 2018). As the pilot continues, it is expected that the number of users will rise and fall with the weather, which will ultimately determine the success or failure of the pilot project (King, 2018).

CHALLENGES FOR LAUNCH

WINTER CONDITIONS

The biggest challenge for Canadian cyclists is the riding conditions during the winter months. Not only are road conditions a concern, but the conditions of the bicycles given the cold and wet conditions are also potential issues. This is especially key given that the Lime bikes in Calgary are all electronically assisted. Scott Harvey, Lime's operation manager in Calgary, stated that



the bikes have been used and tested in northern U.S. markets with similar weather conditions and believes that the bikes are able to handle the harsher condition of Canadian winters (Heydari, 2018). Harvey did note that the charge of the battery of the bikes is something they will be watching over and hope not to have power drop below 40%. Given the dockless nature of the Lime bikes, Lime has crews dedicated to monitor and charge the bikes out in the streets as needed (King, 2018).

RIDER SAFETY

Another major concern is the safety of riders. While pedal bikes in Alberta do not require the rider to wear a helmet, e-bike riders are required to wear a helmet. It is also Lime policy that riders wear a helmet while riding one of the rented bikes. At the launch of the program Lime did giveaway 120 helmets and plans to give away more gear, but this does not provide a solution for many riders (King, 2018). If people do not own a helmet, or don't have one with them, potential riders may choose not to ride a bike for fear of being ticketed. There are other bike sharing programs that provide a helmet with the bike rental, but Harvey has stated that this is not the option that Lime chooses. Harvey stated that instead of providing helmets, Lime wants to use this opportunity to engage with the community and riders and promote a safety program (Babin, 2019). While this may be a suitable solution for now with a small number of

bikes available to the public, the issue could become much more critical with more bikes on the road during the second phase of the pilot project, and with potential success of the bike sharing program.



Figure 4: As part of their Respect the Ride campaign, Lime will be distributing 250,000 free helmets to riders. Retrieved from: <https://ca.mysavings.com/free-samples/Lime/116610/>



BICYCLE AVAILABILITY

One other concern for Lime bikes is the availability of the bikes themselves. There are a few different issues related to this. One obvious issue is vandalism of the bicycles. During the first few days of the launch, there were 4 bicycles that were taken out of operation due to vandalism. While the bikes do have some valuable components to them, once they are removed from each other, they do not work and are worthless (King, 2018). While there is not much Lime can do to resolve this issue, it has an impact on the number of bicycles available to riders. As mentioned earlier, Lime operates in a defined service zone and the bikes are intended to stay in the zone (until service is expanded). While the bikes will still work outside of the zone, they do not show up on the app as available to riders and need to be retrieved by Lime staff (Babin, 2019). Currently, there is no way for a rider to guarantee that they will be able to rent a bike when they need one. Car-sharing platforms allow riders to reserve a car ahead of time to ensure they can get where they need to go on time. Right now, this may not be a pressing issue, but if ridership rates increase and Lime bikes become very popular, this could be a major concern. According to Harvey, Lime is looking into a reservation program for the bikes as a top priority for new software for the platform (Bird, 2018).

“OFTEN TIMES PEOPLE ARE TRYING TO GAIN THEMSELVES A FREE ELECTRIC BIKE OR MAYBE RECYCLE THE BATTERY,” SAID HARVEY. “BUT ALL THE COMPONENTS OF THE BIKE WORK TOGETHER AND ONCE THEY’RE SEPARATED FROM EACH OTHER THEY BECOME USELESS.”

- Scott Harvey, Operations Manager of Lime Calgary



LESSONS FOR WINNIPEG

With the pilot project well into its first year, Winnipeg may be able to look to Calgary to provide insight on practices to make dockless bicycle sharing a reality in the city. There are several key lessons that could be applied which may provide the opportune conditions for success

FINANCIAL IMPLICATIONS

The first lesson Winnipeg could learn is to embrace a private company as part of the overall transit system. Calgary is similar to Winnipeg in that their transit service is municipally operated. This is an expensive service to operate and maintain. This is only made more pressing by the lack of provincial funding for Winnipeg Transit. Since Lime is a private company, they would solely be responsible to pay for all costs and the burden would not be on taxpayers. This includes the cost of the bikes themselves, maintenance of those bikes, and staff to perform the required functions (charging the batteries, retrieving bikes). In addition to covering the cost of their platform, Lime would provide new jobs as they would need staff to manage and maintain the fleet, as well as market the platform within the city. As a comparison, SoBi bikes in Hamilton, is a non-profit bicycle sharing program. SoBi was provincially funded and the launch had a total cost of \$1.6 million dollars for 100

stations and 200 bicycles (Bennett, 2015). This example demonstrates the substantial amount of money that could be saved by allowing an outside company to operate the bicycle sharing program.

SNOW CLEARING POLICY

Winter road and cycle path maintenance is the most critical lesson Winnipeg can learn from Calgary. In Calgary, there is a

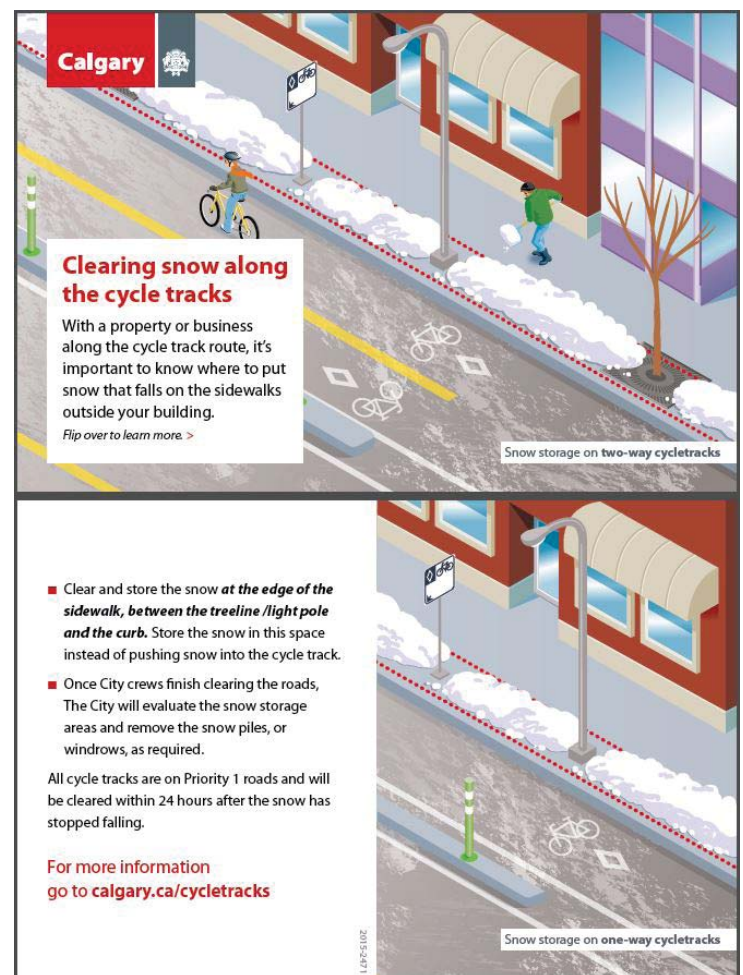


Figure 5: Included in Calgary's bicycle lane snow removal policy are standards of snow storage. Retrieved from: <http://www.calgary.ca/Transportation/TP/Pages/Cycling/Cycling-Route-Improvements/Snow-Clearing-on-Bikeways.aspx>



higher importance placed on maintaining dedicated cycling paths, which greatly increase the usability of the paths during the winter months. According to Calgary's Snow and Ice Control Policy, all marked bicycle lanes are treated as a "Priority 2". This means that these lanes and paths must be cleared within 48 hours from the end of a snowfall. In addition to this, bike lanes in the downtown area, and consequently the Lime service area, are treated as "Priority 1" and are required to be cleared within 24 hours of a snowfall (City of Calgary, 2017). Winnipeg's snow removal policy is much less favorable for those who cycle during winter. The first issue is that there are not guides for bicycle lanes. Instead, they are considered under the "Active Transportation Trail" section that states that they are currently developing a plan for individual trails based on their use (City of Winnipeg, 2011, p.11). To put this into perspective, the sidewalks that are designated as "Priority 3" can be cleared as late as five days after a snowfall (City of Winnipeg, 2011, p.10). For any bicycle sharing platform, or the existing cycling infrastructure, to be effective, the City of Winnipeg needs to adjust the policies on snow removal to ensure that the infrastructure is usable at all times of the year.

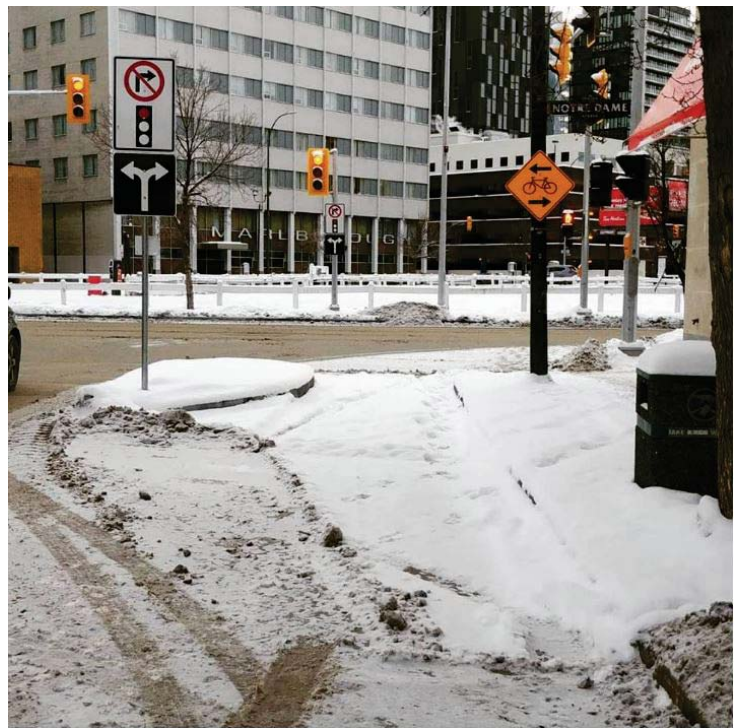


Figure 6 (top) & 7 (bottom): Bicycle lane clearing does not have an established policy in Winnipeg. These photos demonstrate that there is a demand to cycle in the winter months, even in harsh conditions, and can only be done if snow is removed in a timely manner. Source: Lawrence Bird



HOW MANY IS TOO MANY?

One of the reasons that Councillor Matt Allard made a motion to pursue a study related to bicycle sharing platforms is because they have a tendency to happen very quickly and often without proper controls (Thorpe, 2019). This can lead to an extreme excess of bicycles or scooters within a small area, especially if there is more than a single provider operating in that area. Calgary was very conscious of this and put in measures of control to ensure this didn't happen. According to the terms of the pilot, there can be 5,000 total units available between all providers, and each provider is limited to a maximum fleet size of 750 units (City of Calgary, n.d.). In several cities, these bicycle sharing

platforms and units are so plentiful that they have become a nuisance for residents of the service area. In these cases, the units were thrown in the garbage, burned, or vandalized in some manner. Although this phenomenon is usually related to high number of e-scooters, it is a concern that Winnipeg should be cognizant of, especially if there is a possibility of multiple providers as there is with ride-share companies like TappCar, Cowboy Taxi, and InstaRyde.

Figure 8: In some communities, the high number of e-scooters has made them a nuisance for area residents. In certain cases, people have resorted to throwing them in the garbage to "cull the herd" Retrieved from: https://www.reddit.com/r/LosAngeles/comments/8wu6gy/many_of_the_boardwalk_trashcans_in_venice_beach/





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