

STAFF REPORT

Date: February 12, 2020

To: Mayor and City Council

Thru: Sabra Newby, City Manager

Subject: **D.7. Staff Report (For Possible Action): Presentation, discussion and potential direction on implementing a Dockless Electric Scooter Pilot Program.**

From: Lynne Barker, Sustainability Manager

Summary: In March 2019, at the completion of an eight-month pilot program to test a dockless bikeshare system in the Truckee Meadows region, Council directed staff to collaborate with stakeholders to establish a state regulatory framework for electric scooters (e-scooters). Council also directed staff to request Council direction on implementation of an e-scooter pilot program once regulations were in place. The 80th Legislature passed, and Governor Sisolak signed, Assembly Bill 485, which granted rights of local authorities to adopt an ordinance for the use of e-scooters and to regulate the operations of a scooter-share program. Following the passage of the law, Council adopted two ordinances to: 1) enact local regulations that apply bicycle laws to electric scooters; and 2) grant the right to Council to award an exclusive or non-exclusive franchise to operate a system of dockless devices including e-scooters and prohibit a shared system without a franchise.

With state and local regulations in place, staff requests direction from Council on implementation of an e-scooter pilot program.

Previous Council Action:

December 4, 2019 – Council adopted two ordinances to regulate e-scooter use and operations of e-scooter share programs.

- July 31, 2019 – Council adopted the Sustainability and Climate Action Plan.
- March 13, 2019 – Council elected not to approve an extension of the Bike Share Franchise Agreement.
- January 9, 2019 – Lime provided a quarterly update, and Council directed staff to extend the franchise agreement for one year.
- April 11, 2018 – the City of Reno executed the Exclusive Agreement for Dockless Bike Share between the City of Reno and LimeBike for the purpose of a pilot program.
- December 13, 2017 – Council provided direction to launch a dockless bikeshare pilot.

Background: In May 2018, a dockless bikeshare pilot program was launched in the Truckee Meadows region through March 13, 2019. There were challenges during the pilot, from high levels of vandalism to poor communication between the vendor and the city. However, the community otherwise embraced the program. The outcomes of the pilot program included:

<ul style="list-style-type: none"> • Over 140,000 rides 	<ul style="list-style-type: none"> • Est. 78,625 miles of driving avoided
<ul style="list-style-type: none"> • Nearly 60,000 riders 	<ul style="list-style-type: none"> • 3,302 gallons of gas saved
<ul style="list-style-type: none"> • More than 115,000 miles ridden 	<ul style="list-style-type: none"> • 53.4 tons of CO₂ reduced

By the end of the pilot period, Lime – as well as other vendors – found that operating dockless bikeshare was not profitable. The market saw a transition from bicycles to e-scooters, which were proving to be profitable. Vendors also found ridership for e-scooters to be much higher than dockless bicycles.

Discussion: In July 2019, Council adopted the Sustainability and Climate Action Plan. An e-scooter pilot program will help the city to achieve one of the actions in the plan:

Priority 4: Create Lively, Low-Carbon Neighborhoods.
4.6. Expand use of shared, micromobility alternatives.

The City of Reno also established guiding principles for the Master Plan, including GP5: Well-Connected City and Region specific to the regional transportation system. The city’s performance metric is to increase the number of commuters using alternative transportation modes to single-occupancy vehicles (SOVs). The 2016 baseline was 23 percent for multimodal transportation usage. In 2017, there was a slight reduction in SOV usage to 24 percent.

In Nevada, the transportation sector generates the largest percentage of greenhouse gas emissions at 35 percent of total emissions. In Reno, the transportation sector generates 30 percent of total emissions, and 25 percent of total community-wide emissions are generated from passenger vehicle use. Results from e-scooter rider surveys in U.S. cities show that 30 to 75 percent of rides are replacing a car trip. Providing alternatives to SOV use can help the city to achieve its target to reduce community-wide emissions 28 percent by 2025 and 40 percent by 2050 in accordance with the Paris Climate Agreement.

Collaborating with Regional Partners: Staff have engaged regional partners to keep them informed and gather input on the e-scooter ordinances adopted by Council, and continues discussions on implementing a regional e-scooter pilot program. Partners include:

<ul style="list-style-type: none"> • City of Sparks 	<ul style="list-style-type: none"> • University of Nevada, Reno
--	--

<ul style="list-style-type: none"> • Washoe County 	<ul style="list-style-type: none"> • RTC Washoe
<ul style="list-style-type: none"> • Washoe County Health District 	<ul style="list-style-type: none"> • Carson City
<ul style="list-style-type: none"> • Reno-Sparks Indian Colony 	<ul style="list-style-type: none"> • Nevada Department of Transportation

In the Truckee Meadows region, 48 percent of all vehicle trips are three miles or less and 20 percent are less than one mile. E-scooters are a micromobility innovation that have the potential to replace some of these vehicle trips. In fact, a new study estimates that shared bikes and e-scooters could replace as much as 50 percent of short trips, with a focus on downtown areas. Cities are testing how these devices can help to solve a myriad of challenges leading to a rapid expansion of e-scooter share programs throughout the U.S. As of January 2020, more than 120 U.S. cities have e-scooter share programs. E-scooters have the potential to:

<ul style="list-style-type: none"> • Reduce SOV trips 	<ul style="list-style-type: none"> • Bridge first/last mile public transit gap
<ul style="list-style-type: none"> • Reduce traffic congestion 	<ul style="list-style-type: none"> • Contribute to the local economy
<ul style="list-style-type: none"> • Offer affordable transportation option 	<ul style="list-style-type: none"> • Reduce carbon and air pollution
<ul style="list-style-type: none"> • Expand access to jobs and services 	<ul style="list-style-type: none"> • Improve health outcomes

Safety: Council expressed concerns about the safety of e-scooters and the city’s role in protecting the health and safety of the public. Early findings have shown that e-scooter injuries are similar to or less than bicycle and pedestrian injuries. A few recent studies have evaluated injuries related to e-scooter use. One study conducted in Austin using data from emergency medical services and nine area hospitals found the rate of injury of 20 individuals injured per 100,000 e-scooter trips taken. (Austin Public Health. (2018). *Dockless E-scooter-Related Injuries Study* (Rep.). Austin, TX.)

Bird Data on E-scooter Injuries in Cities

Bird, an e-scooter share operator, reported injury rates similar to bicycle injury rates. However, Bird found that the higher the city scorecard from the PlacesForBikes City Rating the lower the injury rate. The score is a data driven approach that assesses ridership, safety, bicycle network, equitable access to bicycle network, and growth in bicycle facilities.

City	Injuries per Million Miles	PeopleForBikes Score
San Diego	32.4	3.0
Austin	32.8	3.0
Phoenix Area	37.3	1.5
Dallas	38.7	1.5
San Antonio	51.2	1.0

RTC is investing in new bike lanes and sidewalks to increase safety and connectivity between destinations within the city and promote greater use of alternative modes of transportation. In addition, city staff are conducting an analysis of pedestrian, bicycle and multiuse trail infrastructure on regional and local roads to identify connectivity gaps and use the data to prioritize infrastructure projects that improve connectivity. Community Development also will

use the information to support community-based planning and guide future investments in multimodal transportation infrastructure improvements. In addition, the University of Nevada, Reno is analyzing the data from the bikeshare pilot program using geospatial information systems to predict the routes taken by users to travel from the start and stop locations. The information can also be used to evaluate planned infrastructure investments. While most residents still choose to drive for most daily trips, demand for infrastructure that supports alternative modes of travel—such as walking, bicycling, and taking transit—is growing.

In Washoe County, there are 230 bike lane miles, 86 bike path miles and 316 total existing bike facility miles. The Bicycle and Pedestrian Master Plan identifies and prioritizes 339 additional miles of sidewalk and 116 miles of bicycle facilities for construction by 2040. The plan calls for a range of bicycle facilities from painted bicycle lanes parallel to parking, to protected and separated cycle tracks. A new study of 12 metropolitan areas showed that “cities with protected and separated bike lanes had 44 percent fewer deaths than the average city.” (Short, A. (2019, May 29). *Separated Bike Lanes Means Safer Streets, Study Says*. <https://usa.streetsblog.org/2019/05/29/protect-yourself-separated-bike-lanes-means-safer-streets-study-says/>)

Pilot Program Considerations

Regulating Operations: One of the most important considerations is determining the type of procurement, contracting, or permitting process used to allow an e-scooter share program to operate. Another consideration is whether to engage with a single vendor or multiple vendors. An exclusive relationship can be more attractive to the top e-scooter vendors. Having multiple vendors may protect the city against ‘industry shifts’ in this rapidly evolving market. Staff recommends using a similar process to the bikeshare pilot program. The city released a Request for Qualifications and evaluated proposals against a set of criteria. Once the city and its partners selected a vendor, the city entered into an exclusive franchise agreement. The term of the agreement was for an eight-month pilot period and included an option to extend the agreement for one year. Based on best practice in cities of similar size to Reno, staff recommends selecting one, and no more than two, vendors for the e-scooter share program.

Fleet Size: An e-scooter share system that provides too few shared devices will be limited in the number of trips and destinations it serves, and therefore have less utility. Too few devices is less attractive to potential users and reduces the likelihood that a vendor will be successful in the community. Based on similar cities, staff recommends deploying e-scooters in three phases.

Phase	Period	# E-Scooters
Phase I	14 Days	250
Phase II	30 Days	500
Phase III	45 – 245 Days	1,000 – 1,250

Fees: Cities employ a variety of methods for assessing fees paid by the e-scooter share operator. Fees have been assessed on a permit, per vehicle, per ride, and/or per day basis. Further analysis is needed to evaluate the best fee schedule for the community. However, based on information from Boise, ID and Portland, OR, two cities that use different fee schedules, staff estimates the potential for revenue generation between \$100,000 to \$125,000 during the pilot period for the number of e-scooter devices recommended above.

Density and Parking Hubs: Providing e-scooters and parking corrals and/or hubs at high densities maximizes the visibility and convenience of the system and provides users with a reasonable expectation that there will be a device within walking distance (a quarter-mile) from anywhere in the system area. Staff recommends piloting parking corrals/hubs in the downtown and inner core neighborhoods. Staff has worked with data from the bikeshare pilot to identify the most frequented destinations. The city can use this data to identify areas to place parking corrals and employ geo-fenced parking hubs to reduce bad parking behavior and preserve accessibility on sidewalks and right-of-ways. (Attachment shows most frequented destinations in downtown.)

Safety: Research shows the best way to improve safety outcomes is to invest in protected and separated bike lanes, which can be a consideration for future investments. RTC Washoe's vision for the Regional Bicycle and Pedestrian Master Plan states, *"To support walking and bicycling, the Region will have an integrated system of safe, convenient and comfortable bicycle, pedestrian and other non-motorized facilities that provide access to schools, jobs, shopping, neighborhoods, community facilities, parks and regional trails."* Protected and separated bike lanes are integrated into the Oddie Wells and Center Street projects.



Concept: 2-way cycle track on Center Street

Education and Outreach: Many cities are addressing safety concerns by implementing robust education and outreach campaigns in partnership with vendors, as well as private and nonprofit stakeholders. Campaigns are designed to provide more safety education to e-scooter riders, potential riders, and the public to build familiarity with new vehicles operating in the public right-of-way and build a culture of safety in shared e-scooter use. (Attachment provides examples of education and outreach materials in other communities.)

Equity and Inclusion: E-scooter share programs have the potential to facilitate and improve access to transit, jobs, and other destinations, especially for historically underserved

communities. Reno can follow the example of many cities by requiring the e-scooter vendor(s) to provide expanded access for underserved communities.

Pilot Evaluation: Staff has established a collaborative effort with the University of Nevada, Reno to establish a framework for an e-scooter pilot evaluation program. The evaluation program would analyze data gather from the vendor(s) and user surveys to determine a range of issues. The information can be used to inform future policies, programs, and infrastructure investments. The range of research questions are:

How do electric scooter users navigate through the City of Reno and region, what is the relationship to existing bicycle infrastructure and safety outcomes, and how can the information be used to inform future infrastructure investments?

What are the sociodemographic characteristics of e-scooter users and locations with most frequented start and stop destinations, what percentage of trips are used for commuting versus recreation and other uses, is usage completing the first / last mile gap related to transit and transportation infrastructure, and what is the range of destination types?

Are low-income and non-English speaking residents using e-scooters, how effective are the education and outreach efforts to reach these community groups, and what strategies may be more effective in increasing ridership in underserved communities?

Financial Implications: Staff estimates the potential for revenue generation between \$100,000 to \$125,000 during the pilot period. These amounts will vary based on the number of e-scooters eventually introduced to the community during the program. There may be also be additional costs to the City, which would be discussed when franchise agreements are brought to Council for approval.

Legal Implications: Legal review completed for compliance with City procedures and Nevada Law.

Recommendation: Staff recommends implementing an electric-scooter share pilot program through an exclusive franchise agreement with one or more vendors.

Proposed Motion: I move to approve staff recommendation.

Attachments:

- Downtown Lime Destination Cluster Map (1) (PDF)
- Example Communications Riding and Parking (PDF)