



City of Burlington
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Chapin Spencer
Director of Public Works

MEMORANDUM

TO: Transportation, Energy and Utilities Committee

FROM: Chapin Spencer, Director, Public Works
Robert Goulding, Public Information Manager, Public Works
Nicole Losch, Senior Planner, Public Works

DATE: May 20, 2019

CC: Cindi Wight, Director of Parks, Recreation & Waterfront
Nicholas Lopez, Assistant City Attorney
Elizabeth Gohringer, Associate Transportation Planner, Public Works

RE: Affordable, Sustainable Transportation Choice --
Transitioning Existing Bike-Share to Shared Electric Mobility

OVERVIEW

Burlington has a rich and ongoing legacy as a city committed to equity and sustainability. We believe that shared mobility aligns key consensus beliefs of our community. This consensus recognizes that all options must be on the table to build a sustainable city, and that expanded, equitable transportation choice is vital to economic success and environmental health. This said, City staff also recognize that it is important to deliberately manage and regulate new technologies to ensure that their positive benefits are maximized and that potential risks are minimized.

Growing Importance of Shared Mobility in a Transportation Network

According to Census data for Burlington, bicycle commuting increased from 4.7% to 5.7% from 2011 to 2016, a change of 21%. According to the National Association of City Transportation Officials, there were 25 million bike-share trips nationally in 2016, up from under 5M in 2010. With the addition of e-scooters in more recent years, this number increased to 84 million micro-mobility trips nationally in 2018; 36.5 million by bike and 38.5 million by scooter. In communities with both e-bikes and pedal bikes, e-bikes are used twice as frequently.

In one of the first comprehensive studies of e-scooter implementation, the City of Portland found that 71% of riders used e-scooters for transportation. In fact, 34% of Portland residents and 46% of visitors used an e-scooter as a replacement for a vehicle trip. As automobiles are far more likely to be the cause of serious or fatal injuries than any other mode of transportation, micro-mobility has the potential to be a safety improvement to a holistic transportation network.

We see a growing interest and desire in this transportation model.

Key tenets of this proposal

- Transition the current regional bikeshare system from 105 docked, manually powered bikes to 200 docked, electric bikes. These e-bikes do not have a throttle, are pedal assist only and the e-assist caps out at 20 MPH. Additional speed and location restrictions are possible through built-in technology.
- **If state regulations change and only when we issue a notice to proceed**, launch an e-scooter pilot. If this launches, the Operator will pay into a regional fund (based on scooters rented) to be disbursed to all contract participants. E-scooters can go up to 15MPH with additional speed or location restrictions possible through built-in technology. E-scooters will be kept at hubs adjacent to bikeshare racks and at virtual hubs - consisting of marked, organized locations.
- The encumbrance process for docks, stations and hubs will still be in effect, requiring License Committee and City Council approval.
- We will work with the Transportation, Energy and Utilities Committee to define the framework and conditions of any future pilot program.
- Working through a direct contract offers our city more control over how this transition is introduced to Burlington. This can directly inform future changes to ordinance, as needed.
- Due to a rapidly changing industry, the financial commitment of \$42K/year that we currently pay for participation in regional bikeshare will be removed if we transition to this all electric fleet.

Regulatory Framework for Usage

- Vermont law regulates e-bikes the same as bicycles, except that sidewalk riding is prohibited. This extends to the municipal level.
- Vermont law defines e-scooters as motor-driven cycles and requires registration and limits the use of these devices to roads and highways
- E-bikes are currently allowed on the Burlington Waterfront Greenway. We are proposing a 10MPH speed restriction (when relying on pedal assist) for e-bikes from this bikeshare system, regulated through built-in technology. This will also discourage the use of e-bikes for longer-term, longer distance usage.
- We propose allowing e-bikes on shared use paths

BACKGROUND

In April 2018, regional partners (CATMA, CCRPC, UVM, Champlain College), led the Phase 1 launch of Greenride bike-share with the transportation company Gotcha in three neighboring municipalities: Burlington, South Burlington, and Winooski. This phase introduced 17 stations and 105 bikes to these communities. Gotcha was chosen through an RFP process released by CATMA to find a qualified vendor to supply the equipment and business model to serve as a first mile and last mile option for shared bicycle transportation.

Some key statistics from the first two quarters (April - December 2018) of operation include:

- 587 active members
- 8,740 trips taken
- An average trip distance of 1.78 miles
- An average trip duration of 18 minutes.

Phase 1 of the program has been modestly successful, but greater demand for access has shifted our focus to providing shared electric mobility devices. While the original intent was to gradually increase the share

of e-bikes, due to rapidly changing technology and demand, conditions now support a more immediate shift to an all-electric fleet.

Now, shared electric mobility (e-bikes, e-scooters) presents an opportunity to provide residents and commuters more choice in the first mile and last mile of their commutes and better access around Burlington and the greater Chittenden County region. Burlington is home to hilly topography and users of all abilities, which require a predictable and convenient all electric fleet to provide all residents and visitors with access to shared mobility. Shared mobility also presents a unique opportunity to reduce congestion, reduce the demand for parking, and improve local air quality. In addition, shared mobility has the effect of lessening the financial burdens that exist with vehicle ownership, daily commuting, purchasing fuel, and parking.

Over the course of the last three months, we have worked diligently to better understand the needs of Burlington and the benefits that an electric shared mobility program can provide to our City. To that end, we have engaged public and private stakeholders within Burlington, we have created partnerships with other municipalities within Chittenden County, and we have worked with our legal team and the Mayor's Office to better understand how this program fits into existing structures. Most importantly, we have engaged in an extensive effort of public engagement to provide transparency and community participation. Our community outreach efforts include:

- We held a citywide public forum on February 12, 2019, presented the concept, and took questions. This was live streamed via Facebook Live and is currently hosted on DPW's Facebook page and website.
- We presented information and addressed questions at the Transportation, Energy and Utilities Committee ("TEUC") in February, March and May.
- We used Front Porch Forum and social media to promote some of these public engagement opportunities.
- We presented details of this proposal to the following NPAs in April: Wards 1 & 8, Wards 2 & 3, Wards 4 & 7 and Ward 6. Our partner at the Chittenden County Regional Planning Commission (CCRPC) discussed this on our behalf during public comment at the Ward 5 NPA.
- Our partner, CCRPC, has conducted a region-wide survey and hosted an online crowdsourcing map for the public to share thoughts on the first year of bikeshare and preferred locations. We supported this with social media to advise the community of these efforts.

We have listened carefully to our community and learned important lessons about their interests and concerns with shared mobility. Based on that feedback, we believe that our City is ready for electric shared mobility.

PROPOSAL

We considered numerous different formats for launching electric shared mobility, but after consultation with the City's legal team, the Mayor's Office, and our community partners, we have decided to contract directly with Gotcha and our partners in South Burlington, Winooski, the University of Vermont, Champlain College, and the Chittenden Area Transportation Management Association.

This approach will allow the City to transition and expand the region's existing bikeshare fleet to an all-electric bike fleet as early as this summer and potentially launch an electric scooter pilot, with fixed

docking locations and speed restrictions. The bike fleet will include 200 e-bikes and access to the fleet will be provided year-round. If a pilot of e-scooters is approved by the Burlington City Council, an agreed number of e-scooters will be distributed throughout the region and operated based on the conditions set by the City. E-scooters will be removed during winter months. However, the introduction of an electric scooter pilot program will be dependent upon clarification as to the use of these devices under state law, which currently defines these as motor-driven cycles.

During this program, the City will be able to maintain control over the use of Gotcha's electric shared mobility fleet by asserting conditions in the contract relating to safety, use, and speed restrictions, among others. We will continue to work with city officials, our legal counsel, and the TEUC to formalize these conditions. Furthermore, we believe that this method will allow the City to better understand what regulatory changes, if any, should be enacted in response to this new technology.

Many communities across the country have successfully introduced shared mobility, and others have had more mixed results. We have embarked on a careful approach to learn the right lessons to introduce shared mobility in a controlled, thoughtful way. Key tenets of our approach include:

- **Building on past work:** Regional bikeshare in Chittenden County has just turned one year old - thanks to an effort advanced by our regional partners. We have learned valuable lessons from this first year and our subsequent community engagement.
- **Direct contract:** To properly administer shared mobility in Burlington and the transition to an all-electric fleet, we are seeking to enter into a direct contract with the same vendor and our regional partners. This will allow us to introduce municipal specific conditions and facilitate direct coordination and communication on implementation.
- **Fixed Locations:** This proposal introduces fixed locations (versus dockless), with speed restricted capability on the fleet. Docking stations will be clearly defined by racks and/or marked and signed parking corrals and there will be a user fee for leaving an e-bike or e-scooter outside of a docking station. The use of fixed locations addresses many of the issues that other communities have experienced when introducing a dockless fleet. The City will have additional oversight for station locations in the right-of-way through the master encumbrance agreement and permits that will be required.
- **Meaningful access:** The current rideshare system includes a \$5 monthly and \$25 annual membership fee for low income qualified residents. We are committed to ensuring that qualified low-income residents, people without bank access, and individuals without mobile phones will have meaningful access to this program.
- **Local vendors:** We are stipulating that all sub-contracting include local vendors.

MOTIONS:

1. To recommend that City Council authorize the Director of Public Works to execute a one year contract with annual renewal options for two additional years with Gotcha, CATMA (as representatives of UVM and Champlain College) and its municipal partners—subject to approval by the City Attorney's Office—which allows Gotcha to launch an e-bike program in Burlington and explore the possibility of a future e-scooter pilot program to be approved by the City Council.

2. To recommend that City Council authorize the Director of Public Works to work with TEUC to define the scope and conditions of an e-scooter pilot program for future consideration by the City Council.