



**TOWN OF ARLINGTON**  
DEPARTMENT OF PLANNING and  
COMMUNITY DEVELOPMENT

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**MEMORANDUM**

To: Adam Chapdelaine, Town Manager/Select Board

From: Daniel Amstutz, Senior Transportation Planner

CC: Jennifer Raitt, Director of Planning and Community Development

Date: December 6, 2018

RE: Arlington LimeBike Program Update

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Dockless bike sharing launched in Arlington on June 28<sup>th</sup>, 2018, with 150 bikes from bike share vendor Lime. Spin was part of the regional bike share program but the company decided to forego participation in the program before launching any bicycles in the town. This memo provides an overview of the first six months of the Arlington LimeBike program and the regional bike share program coordinated through MAPC.

**Six-Month Overview of the Arlington Program Bike Share Program**

From the beginning of the program through the end of November, more than 18,400 trips have been made on LimeBikes in Arlington, with approximately 14,900 on manual bicycles and 3,500 on Lime-E electric assist bicycles. Lime-E bicycles were delivered to the Town at the beginning of September. The total trip number averages to around 3,500 rides per month from July to November with the highest ridership in September at almost 5,000 rides. A significant drop-off in November was seen with only about 2,000 rides occurring in this month.

E-Bikes proved to be popular with over 1,600 rides in September, 1,000 in October, and 730 in November. On average Lime-Es accounted for 32% of the total rides from September through November.

Currently there are approximately 4,500 unique manual bike riders and 1,150 e-bike users. Over 13,800 miles have been ridden on manual bikes and 2,725 miles on e-bikes. Lime operated an average of 120 manual bicycles and 30 e-bikes in Arlington during the peak program period (July through October) for a total of 140-150 bicycles. The Select Board approved an addition of 150 bicycles to make up for the loss of Spin's participation. While Lime may now operate up to 300 bicycles in Arlington, the company has not ramped up to this amount partly due to the slow roll-out of the program in other communities in the region.

The highest density of start and end trips are in East Arlington, Arlington Center, at Alewife Station, and along Mass Ave, Broadway, and the Minuteman Bikeway. See the attached maps which show a hot spot analysis of the start and end point locations of LimeBikes in Arlington from July to September.

The Town has access to a data dashboard provided by Lime that includes high-level information on routes that are taken by LimeBike users. Routes are aggregated onto a Google Map with darker red lines indicating routes frequently taken by users, and lighter red lines indicating showing other routes taken by users but less often. A screenshot of this map is attached showing routes throughout Arlington. It is clear that there is high usage of the Minuteman Bikeway and Mass Ave and patterns of usage on many side streets in East Arlington. However, there is also significant bicycle activity on Broadway, Summer Street, Warren Street, Mystic Street, Lake Street, and Pleasant Street.

The Rules and Orders for the Licensing and Operation of Pilot Bicycle Share Programs includes a requirement for a summary of data on the impact of bike sharing on traffic, transportation, safety, tourism, and economic development. Available data on the impacts of bike share on these factors is described below.

### *Safety*

- There have been no crashes involving LimeBikes reported in Arlington since the program began.
- Occasional concerns have been raised by community members regarding LimeBikes blocking sidewalk access. Over time users have generally learned where to leave bicycles, and there have been few complaints recently about this issue.
- Some concerns have been raised about LimeBikes being staged too close to handicap parking spots and wheelchair ramps. Lime was notified of the issue and has committed to adjusting operations to avoid these conflicts.

### *Traffic & Transportation*

- As noted above, there have been 18,400 trips on bike share bicycles, with an average of 3,500 trips per month. This equates to about 2,900 trips per month on manual bicycles (July-November) and 1,150 trips per month on e-bikes (September-November).
- Although Lime-E Electric Assist bicycle trips make up just 19% of the total trips overall, for the months Lime-Es were being used, Lime-E trips made up one third of all trips, despite being only one fifth of the total fleet.

### *Economic Development & Tourism*

- There have been a high density of trips ending in business districts -- Arlington Center and East Arlington in particular. While we cannot correlate bike trips and stops to spending in these districts, it is clear that users are making trips to business districts on bikes more often than to other areas.
- End points have been identified near tourist attractions such as the Jason Russell House, Jefferson Cutter House (Cyrus Dallin Museum), Whittemore Robbins House, Old Schwamb Mill, and Uncle Sam park.

MAPC has been provided access to Lime's Application Programming Interface (API) which will allow them to analyze and manipulate the raw data from LimeBike usage. They will be able to do a more robust analysis of trips around Arlington and the region, using their technical staff. Working with MAPC, Arlington will be able to provide greater details about bike share impacts on the above factors.

### **Six-Month Overview of Regional System**

Out of the fifteen municipalities included in the regional program, twelve launched a system through Lime. Medford, Milton, and Waltham have not launched bike share as of mid-November.

More than 250,000 trips overall have been taken in the regional system. Approximately 2,000 pedal and electric assist bicycles were active at the height of the program during the summer/fall seasons. The program has more than 55,000 unique active riders who have traveled over 200,000 miles. The largest areas of activity are around public transportation hubs and central business districts. There has been a low incidence of complaints relative to the overall number of trips in the system.

E-Bikes are used about twice as often as manual pedal bikes. The participating communities of Belmont, Revere, and Winthrop do not allow e-bikes.

The Lime Access program is up and running but has had a low uptake so far from partner municipalities/users. Lime Access provides discounted rides for individuals who can demonstrate that they qualify or participate in any state or federally-run assistance program by possessing an EBT card, a discounted utility bill, or other official document. Once a user qualifies for Lime Access, the user can purchase 100 rides for \$5, which can be paid in cash and does not require the use of a smartphone. Staff are working to get the word out to local social service organizations about Lime Access.

### **LimeBike Winter Plan**

Lime plans to keep out as many LimeBikes as possible in the region during the winter season while maintaining high safety standards for users. However, they are reducing the fleet of bicycles by 40-50% of current deployment, which will leave about 750-1,000 in the fleet total for the region (a few municipalities have asked for full fleet removal). This amounts to about 75 bicycles in Arlington over the winter.

This reduction may be reduced further based on demand (weekly ridership levels). Lime will also reallocate hotspots for winter usage, keeping bikes mainly close to transit hubs, central business district areas and pathways cleared by DPW.

Lime will monitor the 10 day forecast closely to anticipate and prepare for adverse weather. Lime will leave bicycles where they are if snow is predicted to be less than 1.5" in total accumulation. However, when snowfall accumulation is predicted to be above 1.5" or during snow emergencies, they will attempt to pull all bicycles out of circulation within 48 hours and

bring them back to the Lime warehouse or a local warehouse location. Afterwards they will redeploy the fleet after the storm passes unless there is a hard freeze and lots of accumulated snow. Bikes will be redeployed back to the winter hotspots. Lime will not be responsible for removing snow or ice.

Lime has requested municipalities provide “safe havens” for 20+ bikes during snow events. Staff have provided suggestions to Lime for local warehousing locations. Another option presented to Lime is to rent a storage unit that can be placed in an underutilized municipal parking lot over the winter.

For the spring relaunch they aim to deploy at least 4,000 bicycles in the region, starting to scale up in March and having full deployment by the end of May (weather permitting). In addition they are planning to have at least 50% of the Lime fleet to be E-Bikes for the relaunch.

### **Contract Extension**

A meeting with municipalities participating in the regional program will be held at MAPC on December 18<sup>th</sup> to discuss the MAPC contract extension, which expires on May 3, 2019. Lime’s Arlington Pilot Bike Share License expires on July 1, 2019. Renewing the license may depend on the MAPC contract renewal. If MAPC were to let the contract expire, the Town could negotiate with Lime individually, but a competitive procurement may be necessary.

### **Conclusions and Preliminary Recommendations**

Arlington’s bike share program has had a successful six months with high bicycle usage and few issues. Early indicators show that Lime may be closing the first mile/last mile gap for Arlington commuters – the significant number of LimeBikes ending at Alewife Station makes this clear. The routing map showing where users ride the LimeBikes indicates that bicycle facilities like the Minuteman Bikeway and bike lanes on Mass Ave are being well-used. However, it also shows that bicyclists are frequently using roadways that have no bicycle facilities in order to get to their destinations. There is an unmet need for safer bicycle accommodations on roadways such as Broadway, Summer Street, and Mystic Street. In addition, bicycle parking infrastructure should be considered around areas of high demand not only for personal bicycles but also to organize bike share parking to avoid conflicts with pedestrians. We look forward to working with you, the Board, and the Bike Share Working Group to continue to explore ways to create the infrastructure needed to continue to encourage bicycling as a safe, efficient transit mode.