



PUBLIC WORKS DEPARTMENT

CITY HALL

10300 TORRE AVENUE • CUPERTINO, CA 95014-3255

TELEPHONE: (408) 777-3354 www.cupertino.org

CITY COUNCIL STAFF REPORT

Meeting: November 20, 2018

Subject

Guidelines for an 18-month pilot program to enable bicycle sharing systems to operate within Cupertino, subject to City criteria regarding parking, quality of bicycles, and other factors.

Recommended Actions

Adopt Resolution No. 18-XXX, "A Resolution of the City Council of Cupertino approving guidelines enabling an 18-month pilot program for dockless bicycle sharing."

Background

In the United States, bicycle sharing programs initially emerged with a model where cities purchased capital equipment and paid operating fees, often to a contracted vendor, to manage program operations and maintenance. Such systems, now referred to as legacy systems, use point-to-point systems where bicycles are checked-out from one docking station and returned to another station at the end of a trip. Many large cities continue to use this type of bicycle share system, often subsidized through corporate sponsorship or public grant funds. These types of systems account for the majority of bicycle share trips in the United States according to the National Association of City Transportation Officials (NACTO).

Over the last several years, the bicycle sharing industry has been upended by new entrants that use a different business model, whereby private funding covers all capital expenses and vendors operate and maintain their own private fleets. This type of bicycle sharing program utilizes GPS-enabled smart bicycles that often lock internally and no infrastructure is required in the public right-of-way. Fees charged by dockless bicycle share companies are generally lower than fees charged by legacy point-to-point bicycle share systems, although increased competition will likely lead to lower fares among legacy systems.

These human-powered, dockless bicycle sharing systems have exploded in popularity across the county, with approximately 44,000 bicycles in operation nationwide, accounting for 44% of the total bicycle sharing fleet in the nation. Many companies are

now transitioning to electric-assist bicycles, and a combination of human-powered and electric bicycles to vary their fleet.

Some dockless bicycle share vendors reduce operating costs by using their clients to help recharge electric bicycles, versus using paid staff, and reducing the need for company vehicles to collect and recharge e-bicycles. In addition, the nature of free floating bicycle share is such that the rebalancing (an industry term meaning redistribution of bicycles among stations to ensure availability) is not needed as often. The bicycles have been manufactured to minimize the need for routine maintenance, with features such as solid rubber tires and belt-drive systems that do not require frequent maintenance. The bicycles are manufactured in large volumes, primarily in China, and the production cost has dropped significantly due to the scale in which they are now produced and deployed around the world.

For government agencies, the primary appeal of this type of bicycle sharing system is that all costs are covered by private funds, with no public funds and minimal staff time required, primarily relating to the processing of permit applications. In addition, no lengthy process for station siting is required.

Initially with the rollout of dockless bicycle share, many cities experienced issues with bicycle durability, congested and problematic parking, and obstructed walkways and driveways. Over the course of the last 1-2 years, several cities have enacted bans, followed by ordinances to regulate dockless bicycle share and address public nuisances arising from dockless bicycle share. Most vendors now encourage users to park considerately, comply with city regulations, and follow the rules of the road when riding. In addition, most companies have improved the quality and durability of bicycles, now complying with national and international quality and safety standards.

Evolution of Bicycle Share Technology

Dockless bicycle sharing systems have proliferated worldwide, providing first/last mile mobility solutions for little to no cost to municipalities. The bicycles lock internally and can be parked at public bicycle racks or on City sidewalks. Without the need to limit bicycle parking to available docking stations, users can now ride bicycles to their final destination. This model allows for a much broader coverage area and is especially appealing in less densely populated areas.

Some of the early entrants to the dockless bicycle share industry have left the US market and significantly scaled back operations. Consolidation has also occurred within the industry with companies such as Alphabet, Uber and Lyft investing heavily in shared mobility. Lyft recently launched its own e-scooter system in Denver, CO and Santa Monica, CA. Many bicycle share companies that also operate shared e-scooters are now focusing more heavily on the e-scooter portion of their business as this segment is showing the fastest growth with a much higher ridership than bicycle share. However, companies such as Lime and Jump have expressed interest in operating electric-assist bicycle sharing programs in Cupertino. In addition, Lyft has recently entered the bicycle

sharing space with its acquisition of Motivate, LLC, which owns and operates bicycle sharing systems nationwide.

Dockless bicycle sharing companies have been heavily invested in, and in some cases acquired outright by rideshare companies such as Lyft and Uber. These companies are now providing multiple private transportation services such as ride-share, bicycle-share, and e-scooter sharing all within the same App.

Users gain access to bicycles by downloading a mobile App, entering payment information, and tapping to unlock a bicycle. At the end of a trip users park at a bicycle rack or in the furniture zone of a sidewalk and end the trip in the App to end billing and lock the bicycle. Lime charges \$1 to unlock an electric-assist bicycle, and \$.15 cents per minute to ride. Jump charges users \$2 for the first 30 minutes and \$.07 per minute thereafter. Each vendor's customer service department phone number is printed onto the bicycles should users have questions. Mobile Apps include Agreements and Terms of Service, which requires users be 18 years of age and possess a valid driver's license.

Funding Responsibility

Bicycle sharing companies now cover all capital costs relating to their systems, offering the potential for quick implementation on a significant scale without any direct cost to government agencies. The business model is based on heavy private investment, sponsorship and user fees. Local agencies may incur some administrative costs in regulating the bicycle sharing systems but are not being asked to contribute funding to purchase or lease the bicycles or to supplement the user fees. Administrative costs are not anticipated to exceed \$2,500 annually.

Government Role

Many cities are now permitting privately-funded bicycle sharing systems through a regulatory framework, rather than procuring bicycle sharing services as was previously common prior to the emergence of dockless bicycle sharing. NACTO has formed a committee to discuss bicycle sharing systems regulations and City staff participates in this ongoing effort. In June 2018 NACTO released Guidelines for the Regulation and Management of Shared Active Transportation, which has helped to inform the proposed draft pilot program guidelines.

Examples of dockless bicycle sharing systems permitted through a regulatory framework include:

- **Mountain View, CA:** The City of Mountain View is half way through a pilot program for dockless bicycle share that allows for a total of 800 bicycles with restricted and geo-fenced parking areas along Castro Street and other locations with high pedestrian activity. Lime Bicycle is currently operating e-bicycles and the pilot program concludes on May 8, 2019. Mountain View staff will assess the

success of the program at the end of the pilot and may consider making the program permanent.

- **Seattle, WA:** Seattle has 10,000 bicycles in operation among various vendors and that number may soon grow to 20,000 bicycles. Seattle has the largest dockless bicycle fleet in the nation. After a successful pilot program in 2017, Seattle's City Council adopted permanent guidelines and a permit process to regulate vendors and ensure compliance with City standards.

Discussion

The recommended action will authorize staff to create a permit process to create an 18-month pilot program to allow for dockless bicycle share in Cupertino. The proposed guidelines are intended to protect the City from potential nuisances related to bicycle parking clutter and blocking of ADA pathways, while providing an alternative transportation option for residents and visitors that can reduce local congestion and greenhouse gas emissions.

Minimum/Maximum Number of Bicycles & Participating Vendors

Staff recommends that each operator be required to provide a minimum number of 100 bicycles to participate in the pilot program. This operator minimum helps to ensure that operators have adequate staff resources for rebalancing (refers to the redistribution of bicycles to reduce bunching in popular locations) bicycles and responding to customer service calls for repairs or damaged bicycles. Staff is not recommending a numeric cap on the total number of bicycles at this time, or a cap on the total amount of vendors that may participate in the pilot program. Private vendors use metrics such as overall population, density, transit access and other factors to determine the number of bicycles needed for a given area. Staff does not anticipate that Cupertino will attract an over-abundance of bicycles given the City's land use patterns, density, and activity centers. Two companies have expressed interest in operating in Cupertino, which focus primarily on electric-assist bicycles.

E-Scooters

The pilot does not include e-scooter systems which have proliferated nationwide over the last year. Staff is continuing to assess whether e-scooters are appropriate for Cupertino and will return to council at a future date with additional information once industry best practices have been established to mitigate many of the current issues being faced by communities across the country.

Safety, Operating & Performance Requirements

City requirements for each bicycle and e-bicycle pertain to parking, safety features, operating requirements, data collection, and customer service performance standards. Requirements include quickly relocating bicycles parked inappropriately, rebalancing

bicycles if clustered in one geographic area, among others to ensure an orderly program. The City's permit would also include detailed provisions for insurance, indemnification, cost recovery fees, and the ability to terminate. Vendors must indemnify the City from all liabilities, claims, causes of action, judgements, etc., from any injury arising from the use of a bicycle share system in the public right of way.

Fees & Revenues

The attached guidelines contain a non-refundable encroachment permit fee of \$1,200 per vendor, along with a \$25 per-bicycle fee for each bicycle permitted through the Cupertino bicycle sharing pilot program. These cost-recovery fees are consistent with other comparably-sized cities with dockless bicycle sharing programs, such as Mountain View, and others nationwide. Per-bicycle fees range from as little as \$10-12 per-bicycle to as much as \$130 per-device (in Los Angeles). Revenues collected will help cover staff time to manage the program, create consolidate parking areas if needed, and add bicycle parking citywide to support the program. Since this program is proposed as a pilot program with revocable permits, if the program is causing enforcement and other nuisance administrative time, then staff will recommend revoking an individual permit or ceasing the program altogether, so \$25 per-bicycle fee is anticipated to be adequate to cover administrative costs and still low enough to incent entries into the pilot program. The initial \$1,200 encroachment permit fee is intended to cover the staff costs to issue the initial permits with each vendor. Staff will setup a separate cost accounting system to track revenues and expenditures for this program.

Duration of Pilot

An 18-month pilot program anticipated to begin on February 1, 2019, will allow the City to test bicycle sharing in Cupertino, assess the quality and popularity of various vendors, and collect and analyze data upon conclusion of the pilot program. Prior to the conclusion of the pilot, staff will return to City Council with a report, and if the program is successful will bring forward permanent guidelines for adoption.

Sustainability Impact

Bicycle sharing systems are consistent with the City's Climate Action Plan, specifically Measure CT-2, "Develop a Bicycle-share Program." Bicycle share has emerged as an important area of regional collaboration. Bicycle sharing systems can help to reduce transportation related greenhouse gas emissions, reduce local traffic congestion, and make cycling a transportation mode more convenient for residents.

Fiscal Impact

Under the proposed 18-month pilot program minimal costs are anticipated, primarily for Staff time issuing permits. The proposed encroachment permit and per-bicycle fees are anticipated to cover the minimal administrative costs. If the administration cost becomes more than anticipated, staff will recommend changes or termination of the

pilot program. Some additional staff time may be required if the City desires to establish designated parking areas such as bicycle racks and corrals, however this is not likely to exceed \$3,000 and will serve city-wide bicycle parking needs, not only bike share bicycles. It is anticipated existing Transportation Division staff can manage the program using existing resources. A fee for a Public Works Department encroachment permit issued to each vendor will be collected for cost recovery of staff time to manage the program.

Prepared by: Chris Corrao, Senior Transportation Planner

Reviewed by: Timm Borden, Director of Public Works

Approved for Submission by: Amy Chan, Interim City Manager

Attachments:

A – Draft Pilot Bicycle Sharing Guidelines

B – Draft Resolution