Recommendations for dockless bikeshare

Dockless bikeshare is a class of new transportation services where private operators deploy GPS-enabled and wireless-connectivity bicycles. These bikes have the ability to self-lock the wheels, so that they can be parked anywhere. Customers find and unlock them using an app and pay a fee (such as $1 per 30 minutes) to ride.

At least three dockless bikeshare operators (Mobike, Limebike, and Social Bicycles, or SoBi) have expressed interest to DDOT, legislators, and/or advocacy groups about launching dockless bikeshare in DC. A DCST working group consisting of people from WABA, local BIDs, the DC Council, and DDOT met to discuss the issue and likely significant policy implications.

Overall sentiment

- The group feels that dockless bikeshare represents a significant opportunity to expand bike sharing and bike ridership in the District, and we would like to encourage dockless bikeshare operators to begin operations here.
- The group feels that dockless bikeshare also brings significant risks, such as to the use of public space, safety, and equity. Any deployment in DC must be in coordination with government through an MOU or subject to a permit process that could be defined in regulation or legislation.

We recommend that an MOU, regulation, and/or legislation cover the following issues.

Safety

Operators must take sufficient steps to ensure the safety of their bicycles. This should include:

- Commitments to respond to reports of broken bicycles quickly (see “Third party complaints”);
- Tracking of broken bicycle and injury reports;
• Liability and/or fines for operators which launch unsafe bikes or do not maintain their bikes.

Data sharing
Operators should be required to share data on topics like bicycle locations, routes, and complaints with the public and localities. There can be various types of storage/access for data:

1. Data that is shared with the public in an open data format. There should be some of this to at least the level of granularity required of CaBi, and additional data reflecting the ability to track routing. For example, the data could demand:
   - The location of each parked bicycle, accurate to 1,000 feet, updated every 5 minutes
   - For each roadway link, the volume of travel by the operator’s bikes in each direction per 10 minutes

2. Data that is shared with the government but not subject to FOIA. This could be held by DDOT or OCTO, or potentially by a research institution which can grant access to government officials and researchers but maintain individual privacy.\(^1\) This should include:
   - The precise location of each parked bicycle, updated every 1 minute, and the amount of time since it was last moved
   - The precise location of each bicycle in motion, updated every 1 minute
   - The start time, end time, and path of each bicycle trip
   - Any reports of broken bicycles, giving the time of the report and precise location, as well as the time and resolution of such reports
   - Any reports of illegally parked bicycles or other complaints, giving the time of the report and precise location, as well as the time and resolution of such reports

3. Data or analyses using the vendor’s own portal. The vendor can give officials or non-competing organizations like nonprofits access to this portal. However, this does not substitute for disclosure of the data in real time, because only having the data external to the company will ensure it remains available and is not changed after the fact or deleted by the company.

We strongly urge any MOU to require strong data sharing from the beginning. With ride hailing services (TNCs), these services became established without regulation and without sharing data. When the DC Council moved to legalize them, councilmembers were resistant to requiring data sharing because the companies would have opposed such a requirement and had a vocal existing customer base. If these services are able to launch without data sharing, there is a strong danger that data sharing will not be added later.

\(^1\) See David Zipper, "Private Mobility Services Need To Share Their Data, Here’s How," in Citylab.
Parking in public space

Public space in dense areas of DC is very highly sought after for sidewalk cafes, parking meters, bike racks, art, pedestrian walking space, and more. The group generally supports:

- Allowing bicycles to be parked at any public bicycle rack which has available space;
- Allowing bicycles to be parked in the “tree box area” (but not in actual tree boxes) of roadways outside a defined congested core zone;
- Reserving a set of on-street parking spaces as designated dockless bikeshare parking inside the congested core zone;
- Providing a permit process for the designation of other areas in public space which would then be available to all permitted dockless bikeshare operators.

While reserving on-street parking may be a politically more difficult approach, we feel that it will increase the number of people served by public space and the road network and allow the demand to be met without overcrowding sidewalks which already have to meet many needs.

Third party complaints

There will be a strong likelihood that some bicycles will be parked in problematic locations. Operators have said that they have methods through their apps for riders to “rate” the parking job of someone who takes out the bike next. However, there also should be a mechanism for non-riders to report problems.

We recommend:

- Requiring operators to have a prominently posted URL and phone number on a bike for reporting problems (without requiring an app or smartphone);
- Requiring operators to remove or move a reported bike within a set time period a high percentage (95%) of the time.
- Provide regular feeds to the government of all such reports, the location of the bike and time reported, response time, and resolution.

Equity and rebalancing

There is a significant risk of private dockless bikeshare systems winning away the most profitable traffic from Capital Bikeshare but not serving less profitable areas, such as lower density and/or lower income sections of the city which CaBi expends significant resources in capital (stations) and operations (rebalancing) to serve.

It is true that these systems can avoid one reason low density areas are expensive for CaBi, namely the capital cost of stations, but low density areas will be more prone to bikes sitting idle for longer periods of time.
Operators may also find it to be more profitable to leave bicycles in areas with daytime jobs than rebalance them, though operators also insist they would like to rebalance bikes in order to achieve more rides which generate more revenue.

We recommend an approach which combines service standards with in-lieu fees. The standards would:

- Require operators to have a certain fraction of their bicycles in each of a set of geographic zones (we suggest areas that are smaller than whole wards)
- Require operators to have no more than a certain fraction of their bicycles in a geographic zone (over-concentration that requires rebalancing)
- Require operators to have a certain fraction of overall rides start or end in any of those zones

If operators are not able to achieve this level, they would pay an in-lieu fee which could be dedicated to covering the costs of having Capital Bikeshare serve these areas.

Hopefully, operators would choose to find methods to generate ridership in underserved areas that perhaps the government lacks the resources or coordination to implement.

The fee structure would also incentivize rebalancing, if the distribution requirement and fee applies to times within the day as well as whole days. Heavily unbalanced systems would violate both the minimum and maximum concentration requirements; the operator would then have an incentive to rebalance to meet those limits.

These fees should be high enough to create incentives for operators to increase equity and rebalance on their own, but not higher than necessary as this should not be a source of general operating funds for the District.

Other considerations

The District is not able to authorize parking these bicycles on federal land like the National Mall. It is likely that people will try to park them there anyway. This can be an issue between the operators and the Park Service, but:

- Operators should program their bikes to not lock in prohibited areas; this won’t be able to prevent locking on small federal triangles but could prevent the most likely popular activities such as locking at major monuments.
- The District should seek to consult with NCPC and the Park Service about appropriate measures to manage locking in prohibited areas.

(One slightly mitigating factor is that these services will not be able to operate on National Park Service land like the National Mall, which is one location of high-revenue trips for CaBi, but this does not outweigh the concern.)