



Promoting Access and Innovation with Dockless Bike Share in Seattle, WA

Challenge

The city of Seattle, Washington is the largest city in the state with a population of nearly 725,000 people. Despite the city's rainy climate and hilly topography, as of 2015 approximately **four percent of the population** regularly commuted to work by bicycle, which ranks fifth among large cities in the United States. Following the closure of the *Pronto!* docked bike share system in March of 2017, Seattle was left as the only large city in the United States without a bike share system. Bike sharing is rapidly growing and evolving nationwide, and provides a way to expand access to bicycling, as well as connections to transit. Without the necessary public funding and political will to revisit bike sharing, the loss of *Pronto!* left a void in Seattle's transportation system. In the months following the shuttering of the docked bike share system, city officials began to explore dockless bike share, which was just beginning to take hold in the country.

Solution

In July of 2017, the Seattle Department of Transportation (SDOT) formally adopted citywide dockless bike share. Through a comprehensive application process, SDOT welcomed three private operators and a scalable bicycle fleet model that started with fewer than 1,000 bicycles, before growing to nearly 10,000 bicycles on Seattle's streets by the end of the pilot. Traditional bike share systems operate with permanent docks located throughout the system's operating area, where all trips must start and finish. The model has proven to be effective across the country, but requires significant public investments in costly docks and bicycles to get the system up and running. On the other hand, dockless bike share systems allow users to unlock bicycles with a smartphone app and drop them off where they wish whether that be at a bike rack, in a park, or on the sidewalk. These systems are privately funded, providing an opportunity to expand mobility options at no cost to taxpayers. While various cities across the country were considering adding dockless bike share systems at the time, SDOT was the first agency to embrace the innovation head on and begin a pilot program at scale.



Three types of dockless bikes in Seattle. Image courtesy City of Seattle.

In order to prepare the city for the dockless approach, SDOT worked with stakeholders to develop an extensive permit, which addressed issues related to safety, parking, operations, fees, and data sharing. An early priority was to ensure that each operator would provide the city with anonymized data for each trip taken on a dockless bicycle to provide insight into how the bicycles were being used and to inform future policy recommendations.

Creating more livable communities through transportation choices



Over the initial 6-month pilot period from July to December 2017, there were approximately 469,000 rides taken on dockless bicycles throughout Seattle, nearly 10 times the number of rides on the docked system during the same period in 2016. Approximately 75 percent of users reported taking bike share to access transit and 33 percent regularly accessed transit with bike share. By providing easy and convenient first- and last-mile connections to transit, the dockless bike share system demonstrated its ability to augment and improve Seattle's public transportation network rather than supplanting it.

During the pilot program, SDOT designed and administered two surveys – a statistically valid citywide survey of both users and non-users, and a company issued user survey – in order to learn how the public was using the bicycles and gauge public sentiment toward the model as a whole. The surveys found that 75 percent of residents viewed the bike share program favorably and that the system enhanced mobility options in traditionally underserved areas.

Despite these improvements, SDOT continues to receive complaints, primarily related to improperly parked bicycles and safety-related concerns. The flexibility inherent in the system that allows bicycles to be parked anywhere has the potential to create more obstacles, if the bikes block access to curb ramps, loading zones, and sidewalks. SDOT has begun to update the permitting process, which will include a focus on bicycle parking and improving access for the unbanked population and those without smartphones. SDOT also plans to incorporate flexibility in the permit to accommodate mid-year changes and continuous evaluation and learning. This approach will preserve opportunities for private sector innovation, while ensuring that the outcomes meet the public's best interests.



Dockless bicycle user in Seattle. Image courtesy City of Seattle.

Conclusion

Moving forward, Seattle expects to expand dockless bike share through a [new permit approved in August of 2018](#) that will allow up to 20,000 bicycles on the streets, from four private operators. The major expansion demonstrates the success of the pilot and an increased interest in and commitment to improving multi-modal transportation options. In the coming years, SDOT will use the fees collected from the private operators to address potential safety-related externalities from the program by creating designated parking areas throughout the city to ensure that visually- and mobility-impaired populations can easily navigate the streets. The city will also take steps to ensure that the unbanked and individuals without smartphones may access the system.

Through the new permitting process, SDOT is also increasing its commitment to invest in bicycle infrastructure. Using a range of funds including the [Move Seattle Levy](#), the city will work with stakeholders to complete several bicycle infrastructure projects to strengthen Seattle's bicycle network. SDOT is also in the process of updating its bicycle master plan to incorporate bike share and e-scooters to its overall network.

With a rapidly changing industry, it is critical for cities to determine their goals and approach to "new mobility" options. SDOT's ability to promote the use of technology and data in transportation, while leveraging support and funding from the private sector directly aligns with the Federal Highway Administration's priorities. Seattle's experience demonstrates how innovations such as dockless bike share present an opportunity for cities to further promote livability by expanding options and improving connectivity for all users.

Federal Highway Administration: www.fhwa.dot.gov/livability

