

## **Appendix D – Issue Brief: Infrastructure**

### **Infrastructure: Safety is key to increasing ridership**

Bike Share systems across the world are changing how people move. Bike share is growing on a daily basis and becoming a popular transportation choice to get around. It provides many benefits and poses a lot of opportunity for the future of mobility – it can reduce car trips, provide a solution for first/last mile connections to transit, eliminate greenhouse gas emissions, and help people be more active. The cities of Davis, Sacramento, and West Sacramento have now joined the ranks of cities across the country with bike share systems by adding North America's largest electric bike share system in May 2018. Through the implementation process, and after two months of operation, the Sacramento Area Council of Governments has gained valuable lessons, specifically on the current state of biking and bike share infrastructure.

Bike share depends on two main components, density of land use and the infrastructure that supports it, which includes bike lanes, maintained roads, safe intersections, and bike racks. Though even when there is enough density, without adequate infrastructure the system can be underused. The infrastructure directly impacts the system's functionality from who uses the system to how equitable the system is. Quality infrastructure reflects investments into a community and creates safety on the roads for all users. Safe streets welcome more pedestrians and bicyclists and results the "strength in numbers" effect, and can make driving cars safer as well. Yet, many roads still prioritize cars and add pedestrian and cyclist amenities as secondary uses. But with bike share becoming more popular, and the popularity of the Sacramento system in particular, cities need to dig deeper into the infrastructure needs of their communities.

According to the [Transportation Research and Education Center at Portland State University](#), people are less likely to use bike share without safe roads. With safety as the number one issue for people across demographics, it's an easy connection to see the need for cycling-safe infrastructure, which includes painting bike lanes, creating protected lanes, and/or street design that prioritizes the movement of bikes and pedestrians. Aside from bike-safe infrastructure, a missing component are racks and places to store/lock bikes. These are barriers for all people, but it becomes a greater barrier for low-income communities and communities of color because they lack infrastructure investments. When infrastructure is updated and improvements do occur in low-income neighborhoods, it often comes with a wave of change – gentrification that leads to displacement. When a system that depends on public infrastructure is introduced, like bike share, it can be exclusive to those in communities that have safe roads and appropriate supporting infrastructure, leaving behind many people that could benefit from the system.

The bike share industry has changed over the last few years and public infrastructure has become more important for systems to be successful. Traditional



bike share operators came with specific racks, or docking stations, for their bikes. They often left out low-income/high minority communities, but they provided bike share specific infrastructure when they did include them. The newest wave of bike share systems, which is referred to as dockless systems, do not require special racks because bikes either lock to themselves or come with a lock to use on any rack. With systems that don't technically need racks, it's easy for people to leave them anywhere and these systems provides convenient flexibility. However, this flexibility has shed light on the missing public infrastructure when they are required to lock to racks.

Many cities, including Davis and Sacramento, have created ordinances to guide the use of dockless and hybrid systems to protect the public right of way and safety of users. For Davis and Sacramento, the adopted ordinances require operators to provide infrastructure and for the bicycles to be locked to racks and not block the public right of way. These systems present new challenges and showcase the need for additional infrastructure because if the bikes can technically be parked without a rack, people will park them to what is most convenient. With just two months of operations, bikes are often parked on various fixed objects, reflecting the need for more bike racks in public spaces, particularly in the more suburban communities. The communities in most need are the low-income areas such as Oak Park and Tahoe Park in Sacramento and locations in West Sacramento include the suburban community areas of Bryte and Washington. The challenge is that a lot of neighborhoods that have low-income residents and communities of color have often not received infrastructure for bikes. Now with an influx of bikes, it will be important to address the need of residents so they have places to lock bikes safely out of the right of way and that the system is still convenient for their use.

As the Sacramento region continues to implement its bike share system with a hybrid system, opportunity lies ahead. First, bike share can be a catalyst for continued improvements to infrastructure throughout the cities. Second, bicycling amenities can make communities safer for all and promote more active environments that encourage residents to take walks or go for rides and be healthier. Infrastructure is a common thread for bike share, economic development, and public health improvements and should be leveraged as such.