

Bicycle Sharing in San Francisco

Introduction to the Regional Bike Sharing System

Bike sharing is coming to San Francisco! A regional pilot program led by the Bay Area Air Quality Management District (BAAQMD) in partnership with the SFMTA will deploy 1,000 bicycles regionally in spring/summer 2012 at up to 100 stations along the Peninsula transportation corridor, with 500 bicycles (and approximately 50 stations) in San Francisco, 200 in San Jose, 100 in Palo Alto, 100 in Mountain View, and 100 in Redwood City. The SFMTA is working with a regional team to implement this pilot along the Caltrain corridor in San Francisco, Mountain View, Palo Alto, Redwood City and San Jose. The project is funded through a combination of local, regional and federal grants with major funding coming from a \$4.3 million grant from the Metropolitan Transportation Commission's Innovative Bay Area Climate Initiatives Program (BACI). The SFMTA is leading the project in San Francisco, and we are working in cooperation with our City and County partners, including the Planning Department, Department of Public Works, San Francisco Recreation and Park Department and the Port of San Francisco. The SFMTA has a bike sharing website available here: <http://www.sfmta.com/bikesharing>

Location of Bike Sharing in San Francisco

As the San Francisco Bicycle Share Pilot Service Area map (http://www.sfmta.com/cms/bshare/documents/BikeShare_service_area_082911_000.pdf) presents, in San Francisco, the pilot service area will be centered in San Francisco's employment- and transit-rich Downtown/SOMA corridor between the Financial District, Market Street and the Transbay and Caltrain terminals. This area is notably flat, has the densest bikeway network coverage in San Francisco and enjoys the highest levels of cycling, yet those who commute by transit from cities to the east and south encounter difficulties bringing a bicycle with them on BART or Caltrain. Much of San Francisco's densely urbanized northeastern quadrant is similarly well-suited to bicycle sharing.

What is Bike Sharing?

The System

Similar to car sharing, bicycle sharing is a term used to describe a membership-based system of short-term bicycle rental. Members can check a bicycle out from a network of automated bicycle stations, ride to their destination, and return the bicycle to a different station. Bicycle sharing is enjoying a global explosion in growth with the development of purpose-built bicycles and stations that employ high tech features like smartcards, solar power, and wireless internet and GPS technologies. Members will likely be able to join for daily, weekly, monthly, and annual rates; joining the system through the system webpage or at a station using a credit card.

The Stations

The bike share stations themselves are solar powered with battery backup and do not require any trenching. The stations are placed on a hard level surface and are not secured, they remain stationary from the weight of the station. The stations are modular, meaning they can have 11 to 60+ docks for storing bicycles. Modules consist of two or four bike docks (depending on the system) and are connected to achieve the desired number of docks at the station. Installation is quite simple and stations can be placed and broken down within an hour. Station modules are transported to the site using a truck with a lift gate or a small boom and then are erected on location.

The Bikes

The bikes are a utility bicycle built specifically for bike sharing purposes. They are a commuter style bike with a rear rack, a front basket, and up to 8 speeds in an internal rear wheeled hub. These bikes are built to withstand the urban environment.

Because the bicycles can be returned to stations elsewhere than where they were checked out, and some stations will inevitably be used more for departures and others as destinations, the distribution of bicycles throughout the service area needs to be monitored and regularly rebalanced. Accordingly, the system operator circulates between the stations daily with a truck and rebalances as needed – pulling bikes where there are not sufficient empty docks or adding bikes where more are needed.

The Users

This Project will promote bicycles as a first- and last-mile transportation alternative for commuters and residents taking all forms of transit, thereby reducing vehicle miles traveled and greenhouse gas emissions and improving local air quality. Bike sharing is typically made available to the public on a membership basis. Anyone over 18 with a credit card who signs a waiver and pays a pre-determined fee can become a member. Membership duration is flexible and can be annual, monthly, weekly or even daily. The pricing structure, which is also flexible, would need to be established once a local vendor is selected, but the goal would be to encourage shorter duration trips by offering members the first 30 minutes free or at a nominal charge, while successive increments of time cost increasingly more money. This helps encourage quick turnover of the bikes and maximizes their use while at the same time reduces direct competition with bike rental companies.

Experience in Montreal, the leading North American City with regard to bicycle sharing, has shown that bicycle sharing riders as a group are safer than other cyclists. Injury collisions involving bicyclists in Montreal fell in 2010 despite (or perhaps because of) the introduction of 5,000 public bicycles in 2009.

The Benefits

There are many assumed benefits of bike sharing. Bike share trips provide an alternative transportation option for short trips and increase accessibility to transit services. Connecting bike share with transit allows riders to be located further away and still be able to access a transit stop or station. Other potential benefits include user cost savings, travel time savings, congestion reductions, relief on over-capacity transit lines, and improved public health.

What is the Schedule for this Project?

The project schedule aims to circulate an RFP in winter 2012, award the contract in the winter/spring, and launch the service in spring/summer of 2012, with the pilot to run for 12 months, followed by a final evaluation. Upon completion of the evaluation and an eventual determination by the partners that the endeavor is both worthy of pursuing and economically sustainable (whether through operating income, sponsorships, continued grant funding, or some other mechanism), the goal of the project is for regional operations to continue and expand following the pilot period. The involved parties will determine final, post-pilot ownership of the program and initial components before the end of the first year.

North American Bike Share Vendors

The regional partners will be selecting a vendor to install, operate, and manage the bike sharing system in 2012 with the goal of a system launch in spring/summer 2012. There are two leading North American bike sharing vendors, B-cycle (<http://www.bcycle.com/>) and Public Bike System (<http://www.bixisystem.com/home>). Additionally, there are European companies and multinational advertising companies that operate bike share systems in other countries. The B-cycle webpage provides a short video on the system and how it works.

Pictures of Bike Sharing Stations



Madison, WI



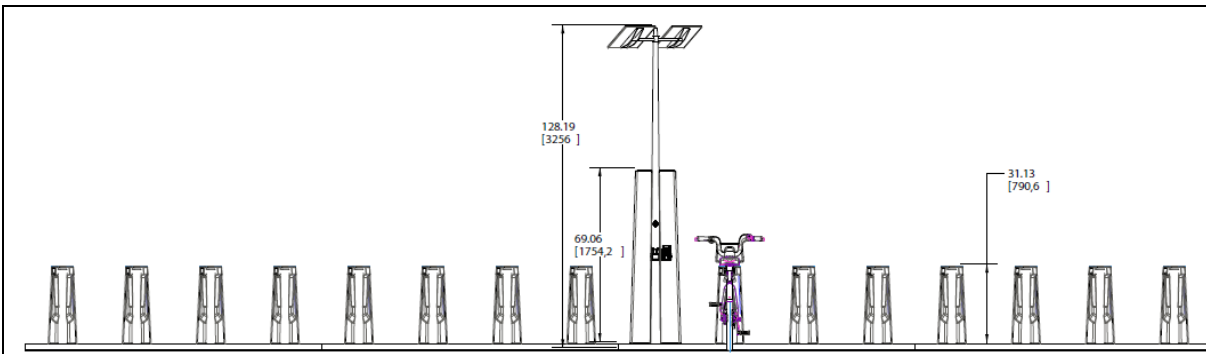
Montreal, QB



Bicycle Kiosk, December 2011 Demo in San Francisco



Washington, DC



PBSC Urban solutions, Bixi Station cross-section



Montreal, QB



Minneapolis, MN



Boston, MA



Denver, CO



Minneapolis, MN



Toronto, ON