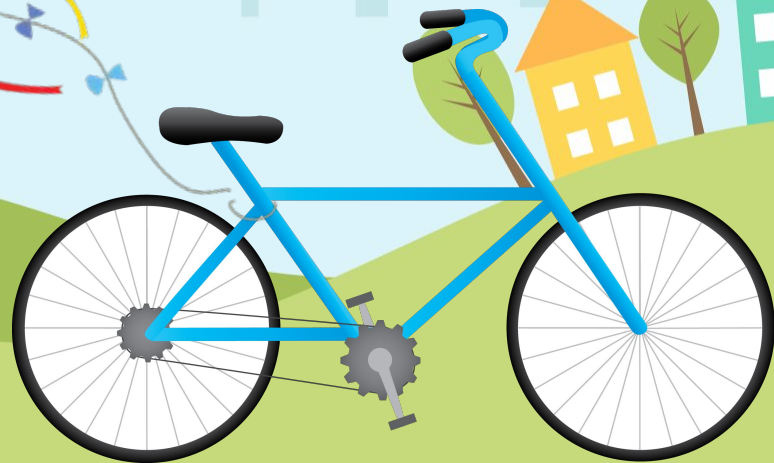


Bike Sharing

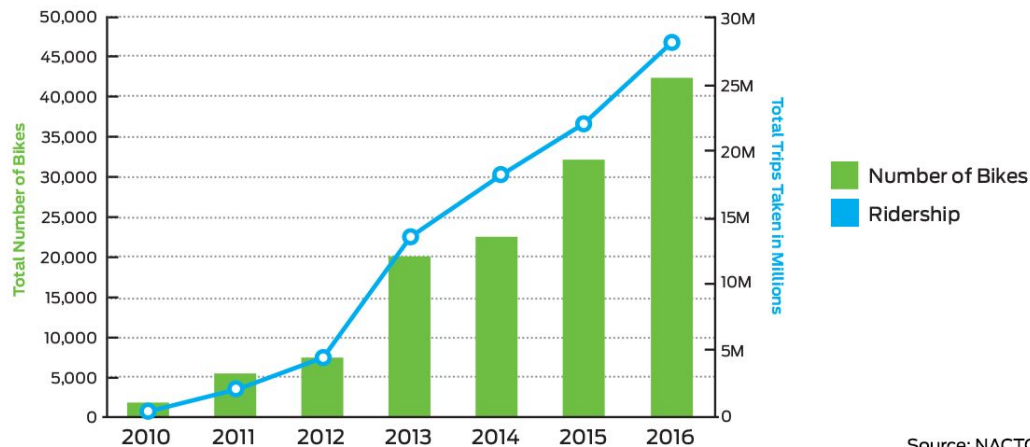
By Siwadon and Surada



*CS560 Data Visualization
University of San Francisco*



Motivation



[National Association of City Transportation Officials](#)

Source: NACTO

❏ Bike share is growing at an astounding clip across and shows no signs of stopping.

❏ Bike share systems provide greater transportation options, helps create a healthier workforce and a more interactive, competitive economy.

❏ The Bay Area bike share is expanding from a 700 to a 7,000 bike system across the East Bay and San Jose areas in addition to San Francisco itself.



Bike Sharing, what is it and how does it work?

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What is Bike Sharing? Bike sharing systems provide short-term bike rental through automated systems in cities.

How does it work? The Bay Area Bike Share, as known as **Ford GoBike**



Join

Become an Annual Member or buy a Single Ride or Access Pass to use the system.



Unlock

Use the [mobile app](#) or your [Clipper card](#) to unlock any bike in the system.



Ride

Take as many rides as you want while your pass or membership is active.



Return

Dock your bike at any station and wait for the green light to make sure it's locked.

Data.CSV

Ford GoBike's public trip data

- ☐ Trip Duration (seconds)
- ☐ Start Time and Date
- ☐ End Time and Date

- ☐ Start Station ID
- ☐ Start Station Name
- ☐ Start Station Latitude
- ☐ Start Station Longitude

- ☐ End Station ID
- ☐ End Station Name
- ☐ End Station Latitude
- ☐ End Station Longitude

- ☐ Bike ID
- ☐ User Type
- ☐ Member Year of Birth
- ☐ Member Gender



Data.CSV

Ford GoBike's public trip data

- ☐ Trip Duration (seconds)
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- ☐ Start Station ID
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- ☐ End Station ID
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- ☐ End Station Latitude
- ☐ End Station Longitude
- ☐ Bike ID
- ☐ User Type
- ☐ Member Year of Birth
- ☐ Member Gender





Data.CSV

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- Anonymized data
- Many Records (> 500K)
- Huge File Size for Web App
 - 2017-original.csv 120 MB
 - 2017-trips.csv 38 MB
 - stations.csv 16 KB
- **Tip:** Remove “double quotes”

Current W^ork

Future W rk



Fun Facts

- Longest Trip ~21 hours
 - From: Isabella St at San Pablo Ave, Oakland
 - To: 20th St at Bryant St, San Francisco
 - Male, Age 36
- ~70 Trips from one to another region



Q&A