San Francisco Bike Share Service Area and Station Location Planning
Heath Maddox
ITE Luncheon, February 20, 2014
Regional Pilot: Bay Area Bike Share

Lead Agency: BAAQMD
1,000 bicycles
100 stations:
- San Francisco (50)
- Redwood City (10)
- South Bay (40)
  - Palo Alto
  - Mountain View
  - San Jose

Launched in August 2013 with:
- 70 Stations
- 700 Bikes
- One membership
SF Service Area

- 35 stations
- 1.78 sq mi.
- Dense
- Mixed Use
- Transit Rich
- Flat
- Bikeable
### Bike Share Suitability Analysis

Raster-based GIS overlay using 11 factors:

<table>
<thead>
<tr>
<th>1. Retail Job Density</th>
<th><img src="image1" alt="Map Image" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Population Density</td>
<td><img src="image2" alt="Map Image" /></td>
</tr>
<tr>
<td>3. Employment Density</td>
<td><img src="image3" alt="Map Image" /></td>
</tr>
<tr>
<td>4. Zoning</td>
<td><img src="image4" alt="Map Image" /></td>
</tr>
<tr>
<td>5. Slope</td>
<td><img src="image5" alt="Map Image" /></td>
</tr>
<tr>
<td>6. Pedestrian Commuters per Square Mile</td>
<td><img src="image6" alt="Map Image" /></td>
</tr>
<tr>
<td>7. Bicycle Commuters/Square Mile</td>
<td><img src="image7" alt="Map Image" /></td>
</tr>
<tr>
<td>8. Bicycle Infrastructure</td>
<td><img src="image8" alt="Map Image" /></td>
</tr>
<tr>
<td>9. Transit</td>
<td><img src="image9" alt="Map Image" /></td>
</tr>
<tr>
<td>10. Tourist Sites</td>
<td><img src="image10" alt="Map Image" /></td>
</tr>
<tr>
<td>11. Per Capita Income</td>
<td><img src="image11" alt="Map Image" /></td>
</tr>
</tbody>
</table>
SF Service Area Planning

- Paris Benchmark: 300-meter grid
- 1 station every 2-3.5 blocks
- 28 stations per sq. mile
- 50 stations
  - \( \frac{50}{28} = 1.75 \) sq. mile service area
Station Elements

- Battery powered
- Secured by own weight
- No excavation
- Modular
Typical Station Locations
Station Placement

Opportunities & Constraints

**Opportunities:**

- **Use of the parking Lane**
  Bike share stations are designed to fit into the width of a typical parking lane

- **Plazas, privately owned public open space, wide sidewalks**
  With careful planning and a focus on urban design, bike share stations can activate open spaces in the city's downtown core

- **Adjacent bicycle facilities**
  The bike lanes, sharrows, and cycltracks that cross the downtown core provide access to bike share station locations

- **Bike Corrals and Parklets also offer alternative uses for the parking lane**

- **UN Plaza in downtown San Francisco is an active open space with excellent access to transit**

- **The bicycle infrastructure along Market St. provides easy access to multiple bike share stations**
Station Placement

Opportunities & Constraints

Constraints
- Limited sidewalk width
- Parking regulations
- Utility conflicts

...and community support
Petition opposing proposed SFMTA Bike-Sharing Station

The SFMTA is now considering the area in front of 510 Townsend Street as a location for a large Bike-Sharing Station. Such a service would negatively affect the Townsend Street residential community and physical property in many ways, including:

- Increasing already-heavy traffic congestion at driveway apron
- Creating hazardous driving conditions for residents entering/exiting the garage
- Eliminating curbside parking for moving vans used by residents
- Blocking access to Recology for pickup of trash and recycling bins
- Increasing public loitering, noise and litter in street and on sidewalk
- Increasing risk of secondhand smoke from users of bike-sharing service
- Eliminating three street parking spots used periodically by residents and visitors

We, the undersigned eligible voters of the City of San Francisco and members of the Townsend Street Homeowners Association (510 Townsend Street) strongly oppose the installation of any Bike-Sharing Station at our location and urge the SFMTA to consider alternative locations that would provide a safer and more appropriate site for this service.
2014 Expansion

17 new stations:
• Mission
• Upper Market
• Castro
• Hayes Valley
• Mission Bay
Full Expansion

- 2,500 – 3,000 Bikes
- Break-Even: 2,000 Bikes
- 9.5 sq. miles
- 42% of residents
- Cost: $21-$23M
Major Developments & “Islands of Suitability”:
- SF State/Parkmerced
- City College/Balboa Park
- Treasure Island
- Hunters Point/Candlestick Point Shipyard
Thanks for Sharing

Heath Maddox
SFMTA | Municipal Transportation Agency
Livable Streets

heath.maddox@sfmta.com
415.701.4605

bayareabikeshare.com