BICYCLE UPDATE

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Strategic Goals & Objectives

• **Goal 1:** Create a safer transportation experience for everyone
  – Objective 1.3: Improve the safety of the transportation system

• **Goal 2:** Make transit, walking, bicycling, taxi, ridesharing and carsharing the preferred means of travel
  – Improve the use of all non-auto modes

• **Goal 3:** Improve the environment and quality of life in San Francisco
  – Objective 3.1: Reduce the Agency’s and the transportation system’s resource consumption, emissions, waste and noise
Key Strategic Actions

• **1.3 #9:** Implement citation diversion program to provide bicycle safety education in lieu of citations

• **1.3 #11:** Identify and implement remaining safety capital actions from Bicycle Plan and collisions analysis specific to SFMTA

• **2.3 #6:** Implement 10 miles of new bicycle facilities each year

• **2.3 #7:** Implement comprehensive bicycle sharing program and expand scope

• **2.4 #8:** Develop and implement bicycle parking strategy
Key Successes

- Rapid 71% growth in bicycling since 2006
  - 3.5% mode share (second highest in the nation)
  - Broadening demographic of people cycling for daily transportation
  - Bicycle Plan near-term projects are more than two-thirds complete
  - 75% of the total number of sharrows have been installed
  - New signalized left turn from Market to Valencia St.
  - Bicycle Design guide showcases many San Francisco innovations

- 3:1 ratio of people on bicycles, compared to people in cars on Market St. during Bike to Work day

- New long-term projects initiated including:
  - Oak Street Cycle track between Baker Street and Scott Street
Key Challenges

• Only 10% (20 miles) of the 215 mile bicycle network has the facilities that meet most people's level of comfort.

• Half a dozen BART, Caltrain, and Muni Metro stations are without secure bicycle parking.

• Promoting a culture of courtesy and safety

• The bicycle network is fragmented and not legible to current and potential users.

• Bicycle funding needs to match rapid demand for growth to be successful

• Currently, we can only fund 6 out of 10 miles per year, let alone the bike parking and community outreach needs
Key Benefits of Growing Bicycling

• Bicycling is the most affordable, quickest, and healthiest way to make the average trip (2 to 3 miles).
• Bicycling is a convenient transportation option for those who rely on sustainable modes.
• More connected neighborhoods, safer street intersections and quieter neighborhood circulation.
• Transit and bicycling create multiple synergies that increase public transit's peak-period performance.
• Improved air quality, community, economic and public health.
Most growth potential is from bicycles

All Trips 2010

- 61% auto
- 39% non-auto

2018 Goal

- 50% auto
- 50% non-auto

Bicycle capacity growth is complementary to transit
How we compare

Bicycling conditions

Good
Moderate
Poor

Bicycle mode share (% of total trips)

10%
20%
30%

CHAMPIONS
Amsterdam
Copenhagen

CLIMBERS
Beijing

STARTERS
San Francisco
Bogotá
Melbourne
Portland
Vancouver

Berlin
Munich
Tokyo

Intro
Strategic Plan
SFTP
TDM
Facilities
Transit
Bicycle
Pedestrian
Taxi
Key Travel Patterns
Emerging Bicycle Core Area

Bicycle Commute Mode Share (2010)

- **2010 Commute Mode Share**
  - 0 - 1%
  - 1% - 4.9%
  - 5% - 9.9%
  - 10% - 14.9%
  - >15%

  **Areas with commute mode share > 3.9% (city average)**

  - **Hayes Valley** + 275%
  - **Civic Center** + 250%
  - **Mission** + 113%
  - **Outer Mission/Bernal** + 175%
  - **Inner Richmond** + 157%
  - **Inner Sunset** + 209%

**Destination Land Uses**

- **LOW Employment Density**
- **High**
- **Neighborhood Commercial**

- **CITYWIDE**
  - Potential 8-10% mode share by 2020

- **CORE BICYCLE AREA**
  - Potential 20% mode share by 2020
Capital Process for Bicycle Projects & Programs

**Goal 1:** Improve safety & connectivity for people travelling by bicycle

**Goal 2:** Increase convenience for trips made by bicycle

**Goal 3:** Normalize Bicycling as everyday transportation

**Goal 4:** Integrate bicycle projects into overall city planning
Bicycle Network Toolkit

Wayfinding signs
Traffic diveters
Bicycle box
Bicycle signal
Buffered bicycle lane
Basic cycle track
Deluxe cycle track
Colored bicycle lane
Bicycle Support Facilities
Support Programs
System Comfort & Connectivity

Level of Traffic Stress (LTS)

LTS 1 - The level comfortable for all user groups, including vulnerable users (children, youths, disabled persons, and seniors).

LTS 2 - The level comfortable for most adults on bicycles, including beginning riders and seniors; experienced children and youths.

LTS 3 - The level comfortable for most intermediate and experienced adult bicycle riders, e.g. the "enthusiastic and confident".

LTS 4 - The level tolerated only by "strong and fearless" people on bicycles.

Physical / lateral separation
Auto lane width
Bicycle facility width
Adjacent traffic speed
Facility blockages
Intersection crossings
Terrain

Wide
Low
Rare
Narrow, includes bicycle priority
Flat
Narrow
High
Frequent
Wide, no bicycle priority
Hilly

JFK Drive
The Wiggle / Panhandle
Market St

JFK Drive
The Wiggle
Mid-Market
Market at 5th
Example of Needs Assessment Methodology

EXAMPLE ASSESSMENT

INTERSECTION HOT SPOT
The Wiggle at Market

INTERSECTION HOT SPOT
Panhandle at Stanyan

THE WIGGLE
Baker to Market

JFK DRIVE
Golden Gate Park

THE PANHANDLE
Stanyan to Baker

MID-MARKET
Dolores to 8th

MARKET STREET
8th to Embarcadero

JFK Drive

The Wiggle

Mid-Market

Market at 5th
System Comfort & Connectivity Upgrades

Example of upgrade at Valencia and Market Intersection
Prioritization Criteria & Methodology

1. Establish project criteria
2. Establish evaluation criteria
3. Inventory and score potential projects
4. Prioritize projects
5. Allocate funds and implement projects

Project Categories:
- Network
- Support Facilities
- Support Programs

Evaluation Criteria:
- Need
- Effectiveness
- Readiness

Funded Projects
Investment Scenario Outcomes

Citywide bicycle mode share (% of total trips)
Bicycle Strategy Investment Scenarios

“Bicycle Plan Plus” scenario
- Complete the bicycle plan (10 miles)
- Upgrade 10 miles of the existing bicycle network to premium bicycle facilities
- Upgrade 10 intersections to accommodate bicycles
- Install 4000 bicycle parking spaces
- Deploy and maintain a 500 bicycle / 50 station bicycle sharing system
- Provide the existing level of support programs ($1.2m / yr)

Total cost: $60m through 2018 (6 year total)

Strategic Plan scenario
- Complete the bicycle plan (10 miles)
- Upgrade 50 miles of the existing bicycle network to premium bicycle facilities
- Construct 12 miles of new bicycle facilities
- Upgrade 50 intersections to accommodate bicycles
- Install 21000 bicycle parking spaces
- Deploy and maintain a 2750 bicycle / 275 station bicycle sharing system. Support electric bicycles.
- Double the existing level of support programs ($2.5m / yr)

Total cost: $190m through 2018 (6 year total)

System Build-out scenario (Amsterdam / Copenhagen-system)
- Complete the bicycle plan (10 miles)
- Upgrade 200 miles of the existing bicycle network to premium bicycle facilities
- Construct 35 miles of new bicycle facilities
- Upgrade 200 intersections to accommodate bicycles
- Install 50,000 bicycle parking spaces
- Deploy and maintain a 3000+ bicycle / 300+ station bicycle sharing system. Support electric bicycles.
- Provide a build-out level of support programs ($10m / yr)

Total cost: $500m for infrastructure, plus $4m / yr for bicycle sharing and $10m / yr for support programs.

Outcome contingent on complementary auto pricing fees and policies
$170M Funding Gap to Meet Strategic Plan Investment Scenario

- **Bicycle program funding (through 2017)**
  - State - $1m
  - Regional - $1.9m
  - City / County - $23.2m
  - SFMTA (Bond) - $4.1m
  - Transportation Sustainability Program = TBD
  - Total: $30.3m
Next Steps to Grow Bicycle Mode Share

SFMTA 2013-2018 Strategic Plan

SFMTA 2013-2018 Bicycle Strategy

Needs Assessment
- Network Infrastructure
- Support Facilities
- Support Programs

Gap Analysis

Prioritization

SFMTA 5-year CIP

Project Design, Env. Review, Fund, Implement

Create and approve needs / gap closure assessment methodology for bicycle comfort.

Complete the needs / gap closure assessment.
Establish an “Eight-to-Eighty” bicycle ride team and leverage crowdsourcing resources for data collection.

Develop a Capital Program for the FY 2013-2018 time frame.

Design and implement key projects, including necessary approvals and environmental clearance.
Seek funding to close the funding gap.

Report annually on progress through the Strategic Plan Annual Mobility Report.

Jan-Feb 2013
Jan - April 2013
April 2013
Jan 2013 - ongoing
Key Policy Questions

• **Support next steps in strategy for needs assessment analysis and prioritization**

• **Which method of prioritization is preferred?**
  - Upgrade one corridor to “green” at a time or upgrade entire network to “orange” by fixing “red” segments first.