



San Francisco Bicycle Plan

JUNE 26, 2009

SFMTA

Municipal Transportation Agency

This project was funded through a Transportation Development Act Article 3 Grant, with oversight from the California Traffic Control Devices Committee.



Additional funds were provided by Transportation Development Act Article 3 Grants.

Public outreach and community planning for the San Francisco Bicycle Plan was funded by a Caltrans Community Based Planning Grant administered by the San Francisco County Transportation Authority to the San Francisco Bicycle Coalition.



ACKNOWLEDGEMENTS

MAYOR

Gavin Newsom

SAN FRANCISCO BOARD OF SUPERVISORS

Eric Mar, District 1
Michela Alioto-Pier, District 2
David Chiu, District 3, Board President
Carmen Chu, District 4
Ross Mirkarimi, District 5
Chris Daly, District 6
Sean Elsbernd, District 7
Bevan Dufty, District 8
David Campos, District 9
Sophie Maxwell, District 10
John Avalos, District 11

FORMER SUPERVISORS

Tom Ammiano
Fiona Ma
Jake McGoldrick
Aaron Peskin
Gerardo Sandoval

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA) BOARD OF DIRECTORS

Tom Nolan, Chairman
Rev. Dr. James McCray Jr., Vice Chairman
Cameron Beach
Shirley Breyer Black
Malcolm Heinecke
Jerry Lee
Bruce Oka
Roberta Boomer, SFMTA Board Secretary

FORMER SFMTA BOARD MEMBERS

Wil Din
Michael Kasolas

Peter Mezey
Leah Shahum
Cleopatra Vaughns

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY STAFF (SFCTA)

José Luis Moscovich, Executive Director
Maria Lombardo, Deputy Director

Chad Rathman
Michael Schwartz
Ben Stupka

FORMER SFCTA STAFF

Adam Leigland
Ian Moore
Melissa Pelkey

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA) STAFF

Nathaniel P. Ford Sr., Executive Director and Chief Executive Officer
Debra A. Johnson, Chief of Staff and Director of Administration
Bond M. Yee, Director of Parking and Traffic
Carter Rohan, Senior Director of Transportation Planning and Development
Amit K. Ghosh, Deputy Director of Transportation Planning and Development
Jack Fleck, City Traffic Engineer
Jerry Robbins, Transportation Planning Manager
Timothy Papandreou, Assistant Deputy Director of Transportation Planning and Development
Peter Albert, Manager of Urban Planning Initiatives Program
Bridget Smith, Manager Public Life Planning Section
Oliver J. Gajda, Bicycle Program Manager

Nick Carr
Damon Curtis
Ryan Dodge
Jose Guadamuz
Heath Maddox
Jessica Manzi
Charles Rivasplata
Raoul Roque
Mike Sallaberry
James Shahamiri
Deirdre Weinberg
Dustin White

FORMER SFMTA STAFF

David Carcia
Bill Lieberman
Peter Tannen

OVERSIGHT COMMITTEE*

David Alumbaugh, San Francisco Planning Department
Maria Ayerdi, San Francisco Office of the Mayor
Jose Cisneros, San Francisco Municipal Transportation Agency
Maria Lombardo, San Francisco County Transportation Authority
Leah Shahum, San Francisco Bicycle Coalition
Dave Snyder, Transportation for a Livable City*

TECHNICAL ADVISORY COMMITTEE*

Paul Bignardi, San Francisco Municipal Transportation Agency
David Burch, Bay Area Air Quality Management District
Suany Chough, San Francisco Municipal Transportation Agency
Mike Ellzey, Golden Gate Park Concourse Authority
Kevin Gonzalvez, San Francisco Fire Department
Dan Hodapp, Port of San Francisco
Adam Leigland, San Francisco County Transportation Authority
Damon Louie, San Francisco Recreation and Parks Department
Tom Martin, San Francisco Police Department
Ricardo Olea, San Francisco Municipal Transportation Agency
Leah Shahum, San Francisco Bicycle Coalition
Peter Straus, San Francisco Municipal Transportation Agency
Joshua Switzky, San Francisco Planning Department
Laura Thompson, ABAG Bay Trail Program
Andrew Thornley, San Francisco Bicycle Advisory Committee
Laura Timothy, BART

SAN FRANCISCO BICYCLE ADVISORY COMMITTEE (BAC) BICYCLE PLAN REVIEW TASK FORCE **

Casey Allen
Marc Brandt
Jerry Ervin
Richard Tilles
Jake Wegmann

SAN FRANCISCO BICYCLE ADVISORY COMMITTEE (BAC)

Andy Bindman (District 1)
Richard Tilles, Secretary (District 2)
Marc Brandt (District 3)

Jared Washkowitz (District 4)
Susan King (District 5)
Jake Wegmann (District 6)
Bert Hill, Chair (District 7)
Jerry Ervin (District 8)
Vacant (District 9)
Rufus J. Davis, Jr., Vice Chair (District 10)
Casey Allen (District 11)

FORMER BAC MEMBERS

Frank Chan
Lisa Estrella
Francisco Hernández
Mark Hotsenpiller
Lionel Shaw
Hitesh Soneji

SAN FRANCISCO BICYCLE COALITION

Mary Brown
David Gartner
Amy Panella
Leah Shahum
Andrew Thornley
Thank you to the numerous SFBC volunteers.

CONSULTANT TEAM

Alta Planning + Design

Mia Birk, Principal-In-Charge
Ian Moore, Project Manager
Arif Khan, Planner
Lev Anderson, Planner*
Daniel Lerch, Assistant Planner

Parisi Associates

David Parisi

Pittman Associates

Donna Pittman

* Denotes the agency representative involved in Bicycle Plan at the time of the first adoption of the 2005 Bicycle Plan

** Denotes the BAC Task Force involved in the review of the Bicycle Plan at the time of adoption of the 2009 Bicycle Plan

CONTENTS

- EXECUTIVE SUMMARYi
- INTRODUCTION Intro-1
 - Overall Plan Goal and Objectives Intro-1
 - San Francisco's Commitment to Bicycling Intro-1
 - Plan Development..... Intro-2
 - San Francisco Land Use and Demographics..... Intro-4
 - The Planning Process..... Intro-11
 - Agency Responsibility for Plan Implementation Intro-12
 - Consistency With State Requirements for Bicycle Plans Intro-16
 - Contents of this Plan..... Intro-17
- 1. BICYCLE ROUTE NETWORK..... 1-1
 - Bicycle Route Network Goal and Objectives..... 1-1
 - Introduction 1-1
 - Existing Bicycle Route Network 1-3
 - Recommended Improvements to the Bicycle Route Network 1-11
 - Bicycle and Transit Policy 1-19
 - Additional City Policies..... 1-24
 - Bicycle Route Network Improvements - Steps for Implementation 1-27
 - Bicycle Route Network Maintenance Standards 1-31
- 2. BICYCLE PARKING 2-1
 - Bicycle Parking Goal and Objectives 2-1
 - Introduction 2-1
 - Bicycle Parking Policies 2-4
 - Residential Buildings..... 2-5
 - Parking Garages 2-6
 - City-Owned and Leased Buildings 2-7
 - Commercial and Industrial Buildings..... 2-8
 - Other On-Site Bicycle Support Facilities 2-10
 - Review of Bicycle Parking Classes 2-10
 - Bicycle Rack Placement 2-13
 - Attended Bicycle Parking 2-16

Bicycle Parking Outreach..... 2-17

3. TRANSIT AND BRIDGE ACCESS..... 3-1

 Transit and Bridge Access Goals and Objectives 3-1

 Introduction 3-1

 Bicycle Access to Transit 3-2

 Bicycle Access to Bridges..... 3-12

4. EDUCATION..... 4-1

 Education Goal and Objectives..... 4-1

 Introduction 4-1

 Educating the General Public 4-2

 Bicycle Safety Outreach..... 4-3

 Targeted Bicycle Education 4-7

 Program Evaluation 4-10

5. ENFORCEMENT AND SAFETY..... 5-1

 Enforcement and Safety Goal and Objectives 5-1

 Introduction 5-1

 Analysis of Motorist and Bicyclist Moving Violations 5-2

 Enforcement and Safety Action Framework..... 5-7

6. PROMOTION..... 6-1

 Promotion Goal and Objectives 6-1

 Introduction 6-1

 Promotion of Bicycle Route Network..... 6-2

 Develop City-Sponsored Bicycle Promotion 6-3

 Bicycle Events..... 6-4

 City Staff Programs and Policies for Bicycle Use..... 6-5

 Bicycle Information Resources: MTC 511 Program 6-6

 Bicycle-Related Businesses..... 6-7

 Bicycle Sharing 6-7

7. GENERAL PLAN AMENDMENTS, ENVIRONMENTAL REVIEW, AND CITYWIDE
COORDINATION 7-1

 General Plan Amendments, Environmental Review, and Citywide Coordination Goal
 and Objectives..... 7-1

 Introduction 7-1

Recommended Transportation Code Amendments	7-6
Coordination with Other Jurisdictions within San Francisco.....	7-8
8. BICYCLE FUNDING	8-1
Bicycle Funding Goal and Objective	8-1
Introduction	8-1
Funding Bicycle Activities	8-4
APPENDIX 1. BICYCLE ROUTE NETWORK MAP.....	APP 1-1
APPENDIX 2. BICYCLE ROUTE NETWORK	APP 2-1
APPENDIX 3. GLOSSARY OF TERMS	APP 3-1

TABLES

Int Table 1: Journey to Work Data	Intro-7
Int Table 2: Travel Time to Work Data	Intro-8
Int Table 3: Agency Responsibility	Intro-13
Int Table 4: Bicycle Transportation Account (BTA) Requirements Checklist	Intro-17
Table 1-1: Existing Bicycle Route Network Facilities	1-3
Table 1-2: Changes to the Existing Bicycle Route Network – Network Relocations	1-8
Table 1-3: Changes to the Existing Bicycle Route Network - Removal of Interim 1997 Network Designations	1-9
Table 1-4: Changes to the Existing Bicycle Route Network – Addition of Network Designation to Existing Facilities	1-10
Table 2-1: Required Number of Bicycle Parking Spaces in Garages for Residential Uses...	2-5
Table 2-2: Required Number of Bicycle Parking Spaces in Parking Garages.....	2-7
Table 2-3: Required Number of Bicycle Parking Spaces in City-Owned and Leased Buildings	2-8
Table 2-4: Required Bicycle Parking Facilities for New and Renovated Commercial Buildings	2-9
Table 2-5: Showers Required in New Buildings	2-10
Table 2-6: Additional Rack Placement Guidelines	2-15
Table 3-1: BART’s Recommended Bicycle Access and Parking Improvements.....	3-5
Table 3-2: Bicycle Access on the Golden Gate Bridge	3-12
Table 5-1: Bicycle/Automobile Collisions in San Francisco Where Motorists Were Most Frequently Assigned Fault	5-4
Table 5-2: Bicycle/Automobile Collisions in San Francisco Where Bicyclists Were Most Frequently Assigned Fault	5-6
Table 5-3: Summary: Most Frequent Bicycle-Related Collisions	5-6
Table 5-4: Summary: Injury Related Bicycle Collisions in San Francisco by CVC Violation	5-14
Table 8-1: Overview of Bicycle Funding Sources.....	8-2

FIGURES

Int Figure 1: San Francisco Overview	Intro-6
Int Figure 2: Bicycle Mode Split by Census Block Group	Intro-10
Figure 1-1: Typical Class I Facility – Bicycle Path or Multi-Use Trail.....	1-4
Figure 1-2: Typical Class II Facility – Bicycle Lane	1-4
Figure 1-3: Typical Class III Facility – Signed Bicycle Route	1-4
Figure 1-4: Existing Bicycle Route Network	1-6
Figure 1-5: Recommended Near-Term and Long-Term Improvements to Bicycle Route Network.....	1-12
Figure 1-6: Near-Term Bicycle Route Network Improvement Clusters.....	1-13
Figure 1-7: Overlap of Existing Bicycle Route Network and Muni Network	1-21
Figure 1-8: Overlap of Existing Bicycle Route Network and Muni Bus-Only Lanes	1-23
Figure 2-1: Existing Bicycle Parking Facilities	2-3

CHART

Chart 5-1: Bicyclist Injury Collisions in San Francisco: 1998-2006 5-2