

Improving safety
and walking
conditions in
San Francisco



Prioritizing Walking Improvements

PSAC | May 10, 2011



San Francisco
Department of Public Health

SAN FRANCISCO
PLANNING DEPARTMENT



SFMTA | Municipal Transportation Agency

Contents

1. Focus groups
2. Prioritizing locations for walking improvements
3. Pedestrian activity
 - Draft map of key pedestrian streets
4. Pedestrian safety
 - Criteria for scoring pedestrian safety needs

Project Purpose

The project's goal is to improve walking conditions in San Francisco, and encourage walking as a way of getting around the city.

The WalkFirst project will **identify** where people walk, and **prioritize** how to make safety improvements to best serve pedestrians. This is important in order to best make use of limited funding.





Project Deliverables

- Map of key walking streets in San Francisco
- Method for prioritizing the most important safety improvements
- Preliminary list of pedestrian safety upgrades
- Draft policies to guide City decisions about pedestrian safety and walking conditions
- Examples of street designs to improve the walking environment



WALKFIRST

Focus Groups

Senior Action Network: *April 21, 2011*

General comments

- Most people said they walk for exercise.
- A large portion of the discussion centered around safety from crime
- Quality and conditions of sidewalks was another main concern.

Participant priorities

- Safety (from both crime and traffic) very high up on the list.
- Accessibility issues were also big concerns for many.
- Aesthetic issues (views, trees) were a lower priority

The Arc: *April 29, 2011*

General comments

- Concern about safety
- Often not enough time to cross the street.
- Like the new yellow curb ramps and the audible signals for crossing.

Participant priorities

- Improvements to the sidewalk, smoother sidewalks with no cracks or breaks
- Longer crossing times

Additional focus groups

- Lighthouse for Blind and Visually Disabled – scheduling date and time
- Independent Living Resource Center – June 3rd

Prioritizing Locations for Walking Improvements



Category	Pedestrian Activity	Pedestrian Safety	Street and Sidewalk Characteristics	Project Readiness
Goal	Identify places where people walk	Identify most important locations for safety improvements	Identify street and sidewalk infrastructure/conditions	Identify opportunities to fund and construct pedestrian improvements
Product	Map of key walking streets in SF	Map of identified areas of improvement for pedestrian safety	Preliminary project list	Preliminary project list

Prioritizing locations for walking improvements

Ped Safety: # of injuries and injury rate/crossing

Ped Activity: Key walking streets and areas	Ped Safety: # of injuries and injury rate/crossing		
	<i>High:</i> ranks in top 1/3 of ped safety needs	<i>Medium:</i> ranks in next 1/3	<i>Low:</i> ranks in last 1/3
	<i>High:</i> identified as key walking street or area (primary)	High	High
	<i>Medium:</i> identified as key walking street or area (secondary)	High	Medium
<i>Low:</i> not identified	High	Medium	Low
	High	Low	Low

Prioritizing locations for walking improvements

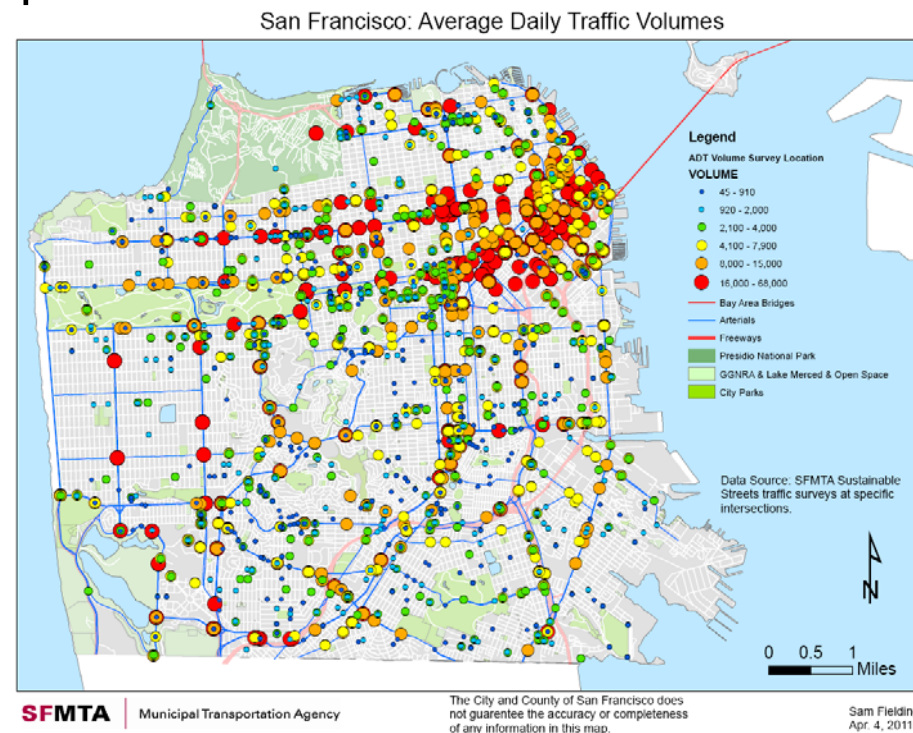
- In priority locations, we will also consider the following factors to determine appropriate types of improvements:
 - Street type and function
 - Street and sidewalk characteristics
 - Project readiness
 - Equity

Street type and function

- Street type per Better Streets Plan (land use and transportation characteristics)
- Role in transportation network (e.g. transit route, bike route, etc.)

Current Street and Sidewalk Characteristics

- Presented example maps at last PSAC meeting
- 6 categories:
 - Traffic control devices
 - Street designs and streetscape
 - Walking space and buffers
 - Traffic characteristics
 - Traffic calming features
 - Accessibility



Project Readiness

- How efficiently and quickly can improvements be made?
- Factors:
 - Potential for coordination with other construction project(s)
 - Part of a community-vetted plan (area plan, capital plan, etc.)
 - Funding status
 - Costs
 - Capital
 - Life cycle, including maintenance

Equity and Public Participation

- How fair and reflective are the public and policymaker preferences for improvements?
- Factors:
 - Geographic distribution
 - Addresses special needs of vulnerable users (i.e., seniors, people with disabilities, youth)
 - Public input



WALKFIRST

Pedestrian Activity: Where Walking is Important

Prioritizing locations for walking improvements

Ped Safety: # of injuries and injury rate/crossing

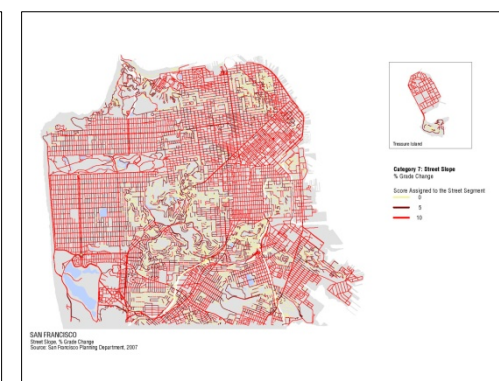
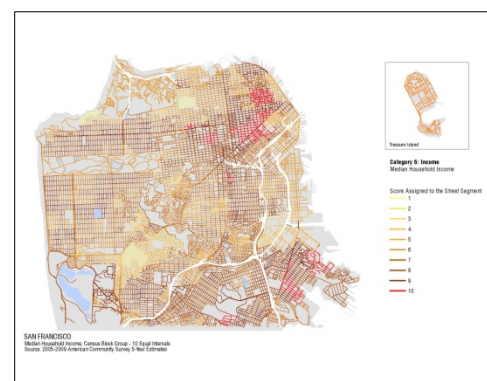
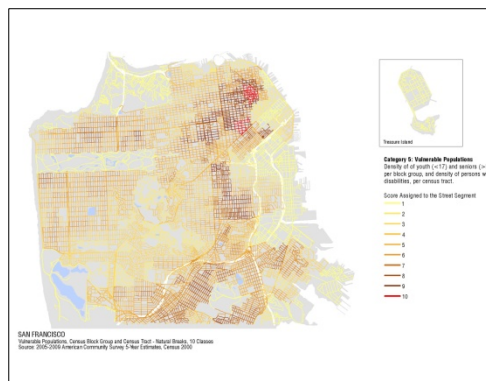
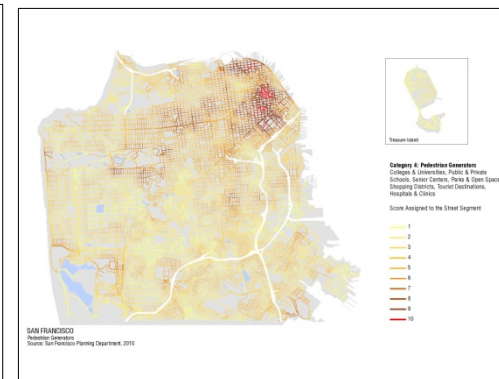
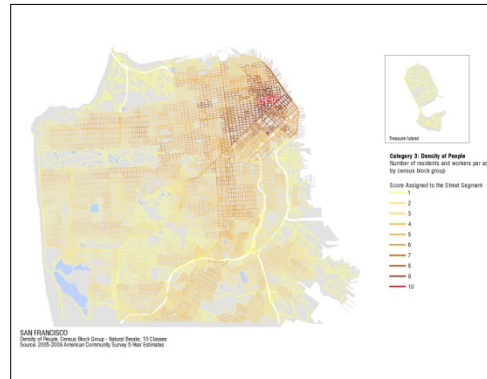
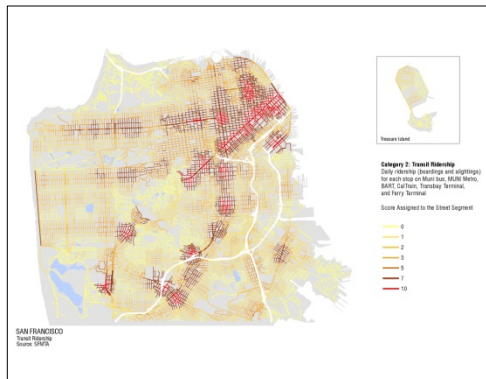
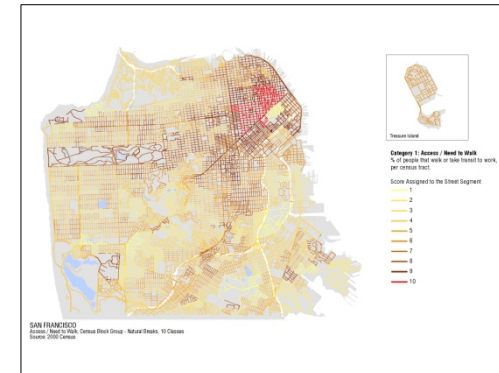
Ped Activity: Key walking streets and areas	Ped Safety: # of injuries and injury rate/crossing		
	<i>High:</i> ranks in top 1/3 of ped safety needs	<i>Medium:</i> ranks in next 1/3	<i>Low:</i> ranks in last 1/3
<i>High:</i> identified as key walking street or area (primary)	High	High	Medium
<i>Medium:</i> identified as key walking street or area (secondary)	High	Medium	Low
<i>Low:</i> not identified	High	Low	Low

Pedestrian Activity: Where Walking is Important

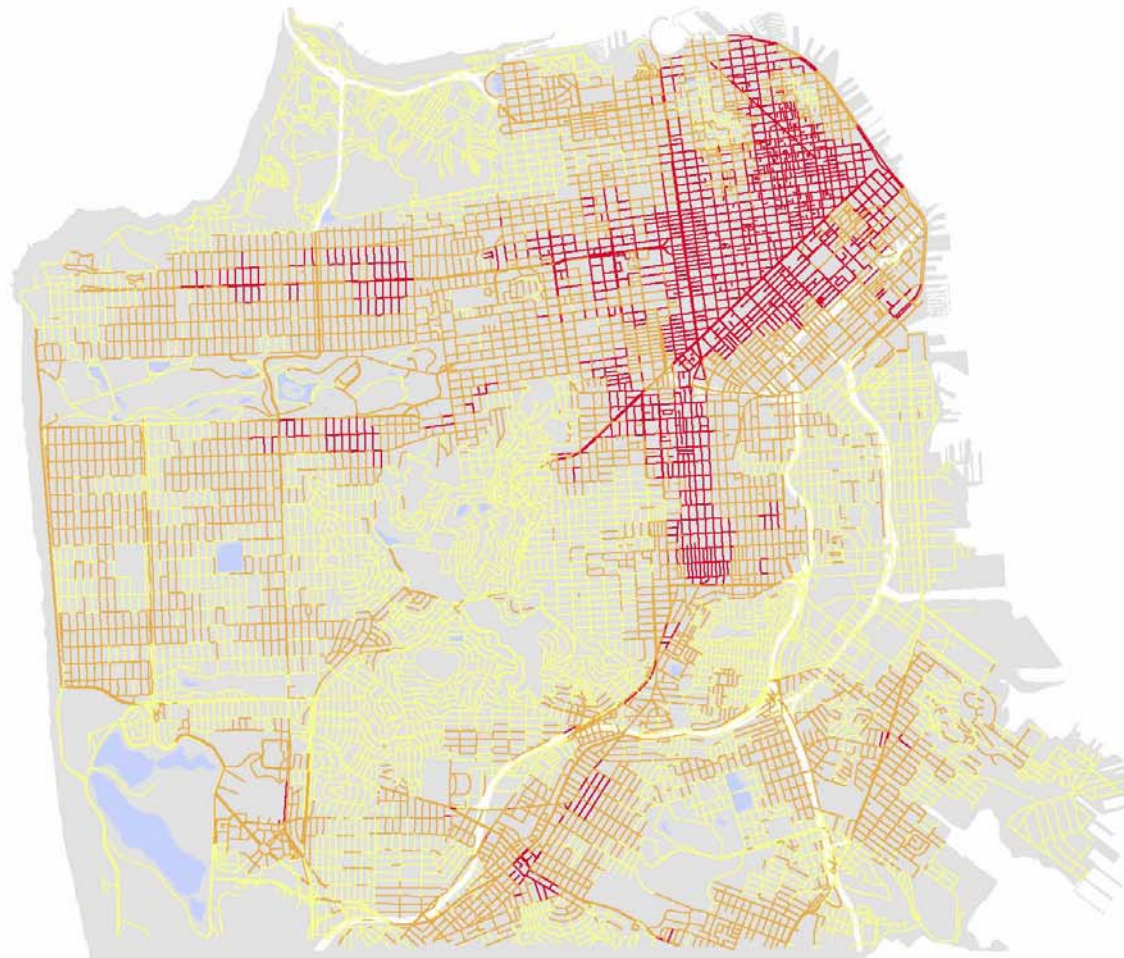
- Access/need to walk
 - Transit mode share, walking mode share
- Transit ridership
 - Daily transit boardings
- Density of people
 - Residential density, job density
- Pedestrian generators
 - Colleges, public & private schools, hospitals and clinics, shopping districts, parks, tourist destinations, senior centers, service providers to persons with disabilities
- Vulnerable populations
 - Seniors, youth, persons with disabilities
- Income
- Street slope

Pedestrian Activity:

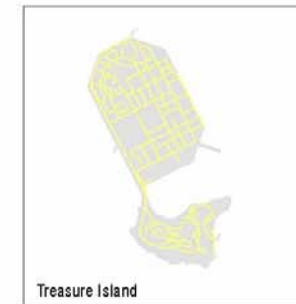
Category Maps with Street Segment Score 1-10



Composite map of pedestrian activity factors



SAN FRANCISCO
Composite Map, Natural Breaks 3 Classes
April 27, 2011



Composite Map 1:
Raw Score, Equal Weights

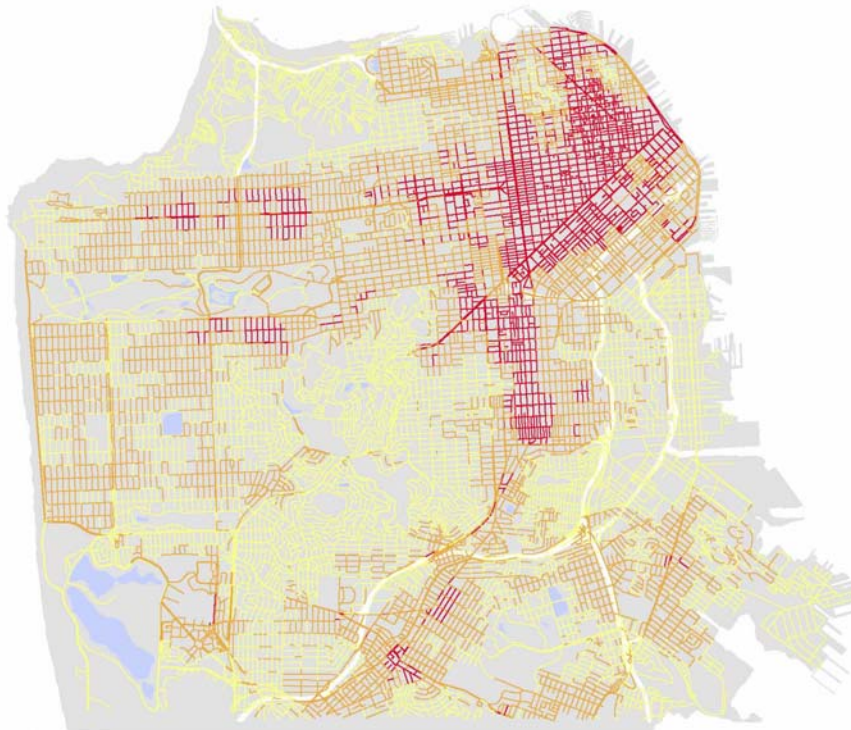
Category 1: Access / Need to Walk
Category 2: Transit Ridership
Category 3: Density of People
Category 4: Pedestrian Generators
Category 5: Vulnerable Populations
Category 6: Income
Category 7: Street Slope

Street Segment Score
Low: 7 - 29
Medium: 30 - 43
High: 44 - 68

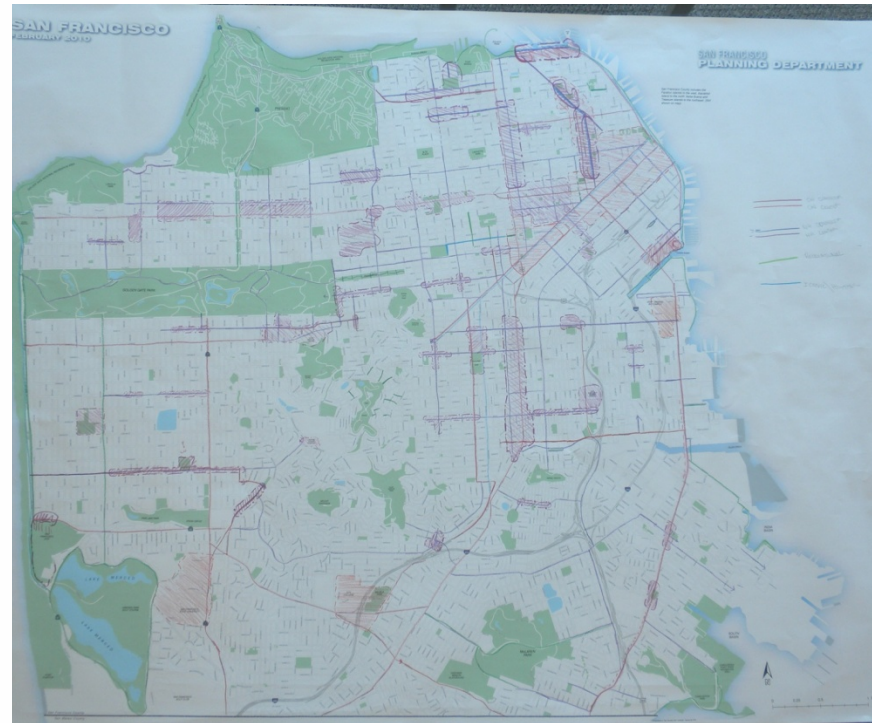
Preliminary Map of Key Walking Streets and Areas



Preliminary Map of Key Walking Streets and Areas



SAN FRANCISCO
Composite Map, Natural Breaks 3 Classes
April 27, 2011





WALKFIRST

Pedestrian Safety and Security: The Conditions Pedestrians Face

Prioritizing locations for walking improvements

Ped Safety: # of injuries and injury rate/crossing

Ped Activity: Key walking streets and areas	Ped Safety: # of injuries and injury rate/crossing		
	<i>High:</i> ranks in top 1/3 of ped safety needs	<i>Medium:</i> ranks in next 1/3	<i>Low:</i> ranks in last 1/3
<i>High:</i> identified as key walking street or area (primary)	High	High	Medium
<i>Medium:</i> identified as key walking street or area (secondary)	High	Medium	Low
<i>Low:</i> not identified	High	Low	Low

Pedestrian Safety Score

- Initially to Include:
 - Pedestrian injuries and fatalities at intersections and corridors
 - Severity weighted
 - Fatal and severe injuries weighted 3X
 - Combination of absolute # of injuries and rate per walk trip
- Will Be Overlaid on Key Pedestrian Streets to Select Priority Locations
- Can Be Refined and Expanded

Pedestrian Safety Score (Example)

- 6th & Market had 18 reported pedestrian-involved collisions in most recent 5-year period
- **PART 1) Pedestrian Injury Score = 10**
 - = (3 points x 2 Fatal/severe injuries) + (1 point x 15 Minor/moderate injuries) = 21
 - *Ranks in the top 10% of all intersections, so gets 10 points on 1-10 scale*
- **PART 2) Pedestrian Injury RATE Score = 5**
 - = Pedestrian Injury Score / Estimated Walk Trips
 - = 21 points / 18.4 million annual pedestrian crossings
 - *Ranks in the middle of all intersections, so gets 5 points on 1-10 scale*
- **OVERALL SCORE – under development**

**for illustrative purposes only - to be refined*

Crime and Personal Security

- Personal Security Concerns Influence Pedestrian Behavior
 - e.g., crossing to avoid street corner activity or using alternative streets
- Will Be Considered in Selecting and Prioritizing Potential Physical Improvements
- Will Not Be Combined with Traffic-Related Ped Safety Scoring
- Some Improvements Should Directly Affect Crime Levels
 - e.g., street lighting affecting nighttime crime
- Other Improvements May Affect Crime Levels by Encouraging “Eyes on the Street”

Upcoming PSAC presentations

June

- Prioritizing locations: revised guidelines
- Pedestrian safety: revised methodology
- Selected case study examples

July

- Preliminary capital project list
- Document outline

Stay involved!

- Monthly presentations at PSAC
- Focus groups/stakeholder meetings
- Join the mailing list for updates: send an email to walkfirst@sfgov.org



For more information visit:
<http://walkfirst.sfplanning.org>



Email us at:
walkfirst@sfgov.org

Thank you!



For more information visit:
<http://walkfirst.sfplanning.org>



Email us at:
walkfirst@sfgov.org