Improving safety and walking conditions in San Francisco

Prioritizing Walking Improvements

PSAC | May 10, 2011
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
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
<table>
<thead>
<tr>
<th>Category</th>
<th>Pedestrian Activity</th>
<th>Pedestrian Safety</th>
<th>Street and Sidewalk Characteristics</th>
<th>Project Readiness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Identify places where people walk</td>
<td>Identify most important locations for safety improvements</td>
<td>Identify street and sidewalk infrastructure/conditions</td>
<td>Identify opportunities to fund and construct pedestrian improvements</td>
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<tr>
<td><strong>Product</strong></td>
<td>Map of key walking streets in SF</td>
<td>Map of identified areas of improvement for pedestrian safety</td>
<td>Preliminary project list</td>
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### Prioritizing locations for walking improvements

**Ped Safety:** # of injuries and injury rate/crossing

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<th>Ped Activity: Key walking streets and areas</th>
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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
Pedestrian Activity: Where Walking is Important
### Prioritizing locations for walking improvements

**Ped Activity:** Key walking streets and areas

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**Ped Safety:** # of injuries and injury rate/crossing
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

Composite Map 1:
Raw Score, Equal Weights

Category 1: Access / Need to Walk
Category 2: Transit Riderhip
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

SAN FRANCISCO
Composite Map, Natural Breaks 3 Classes
April 27, 2011
Preliminary Map of Key Walking Streets and Areas
Preliminary Map of Key Walking Streets and Areas
Pedestrian Safety and Security: The Conditions Pedestrians Face
## Prioritizing locations for walking improvements

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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**
  
  $(3 \text{ points} \times 2 \text{ Fatal/severe injuries}) + (1 \text{ point} \times 15 \text{ Minor/moderate injuries}) = 21$
  
  - *Ranks in the top 10% of all intersections, so gets 10 points on 1-10 scale*

- **PART 2) Pedestrian Injury RATE Score = 5**
  
  $= \frac{\text{Pedestrian Injury Score}}{\text{Estimated Walk Trips}}$
  
  $= 21 \text{ points} / \text{18.4 million annual pedestrian crossings}$
  
  - *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!

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