

Improving safety
and walking
conditions in
San Francisco



Pedestrian Activity & Safety

PSAC | April 12, 2011



San Francisco
Department of Public Health

SAN FRANCISCO
PLANNING DEPARTMENT



SFMTA | Municipal Transportation Agency

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 - c) Draft criteria



WALKFIRST

Project Overview

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



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



WALKFIRST

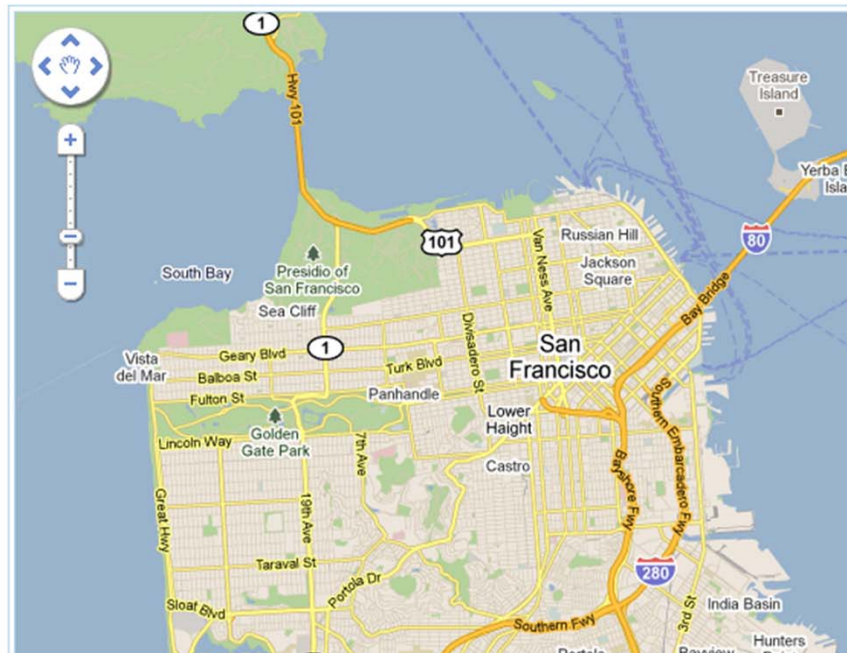
Online Survey Results

WalkFirst Survey Results

- On-line Survey available February 8 - March 25, 2011
- 386 responses received

Part 1: Neighborhood Walking Routes

1. Please use the map below to identify the walking routes that you typically use. Feel free to identify as many routes as you like. If you do not wish to use the map [Click HERE](#).

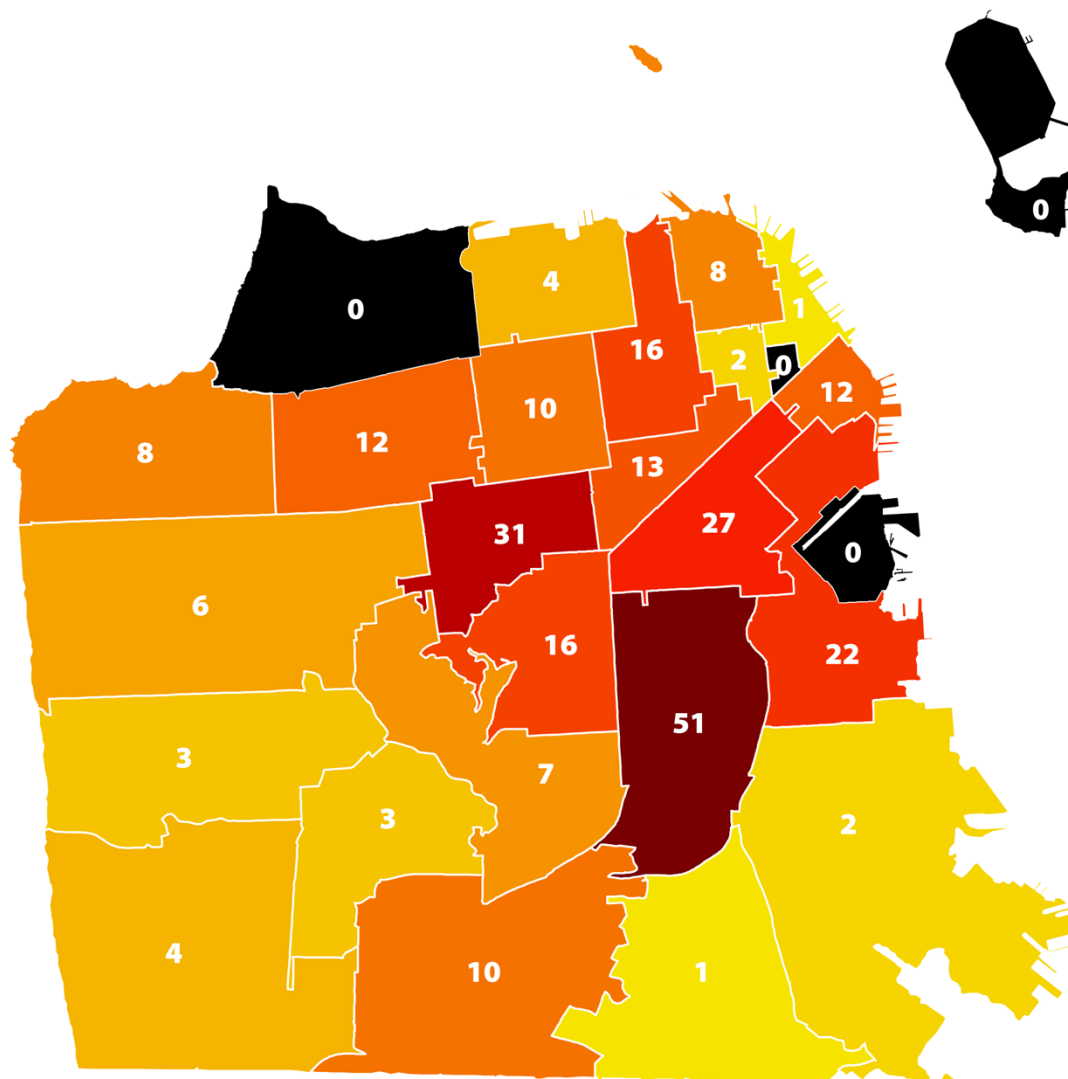


Instructions:

- Click on the map to start the route.
- Route Start (select **one**):
 - ☐ Home
 - ☐ Work
 - ☐ Shopping
 - ☐ School
 - ☐ Transit Stop
 - ☐ Recreation
 - ☐ Other
- Click again at every bend or corner.
- Click on the map to end the route.
- Destinations (select all that apply):
 - ☐ Home
 - ☐ Work
 - ☐ Shopping
 - ☐ School
 - ☐ Transit Stop
 - ☐ Recreation
 - ☐ Other

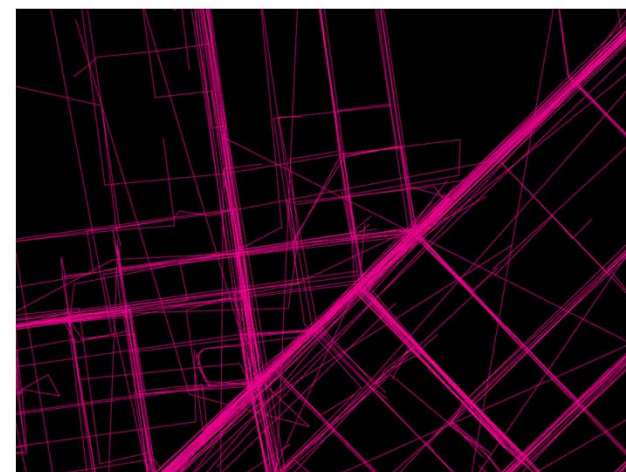
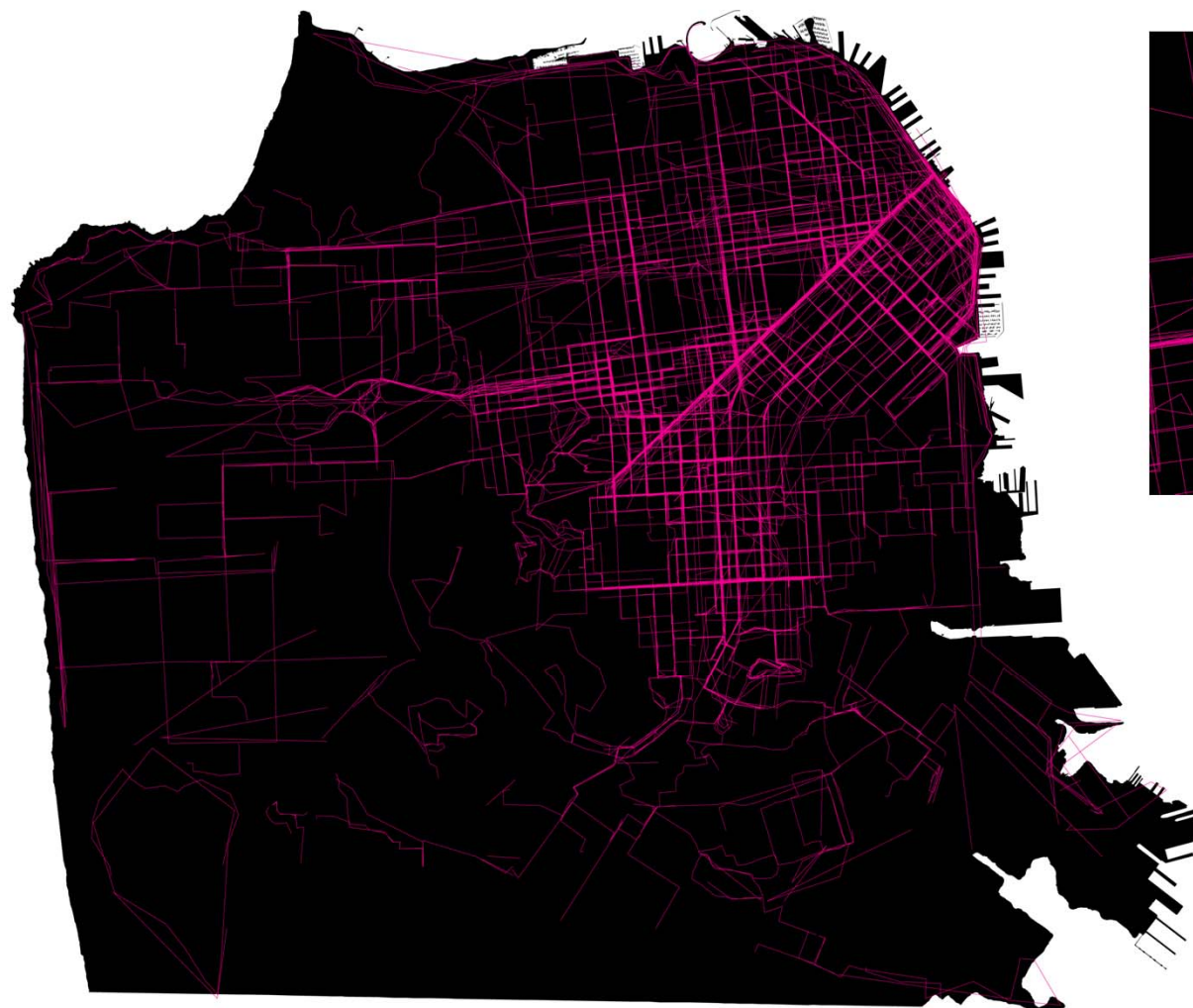
Survey Results:

Location of survey respondents by zip code



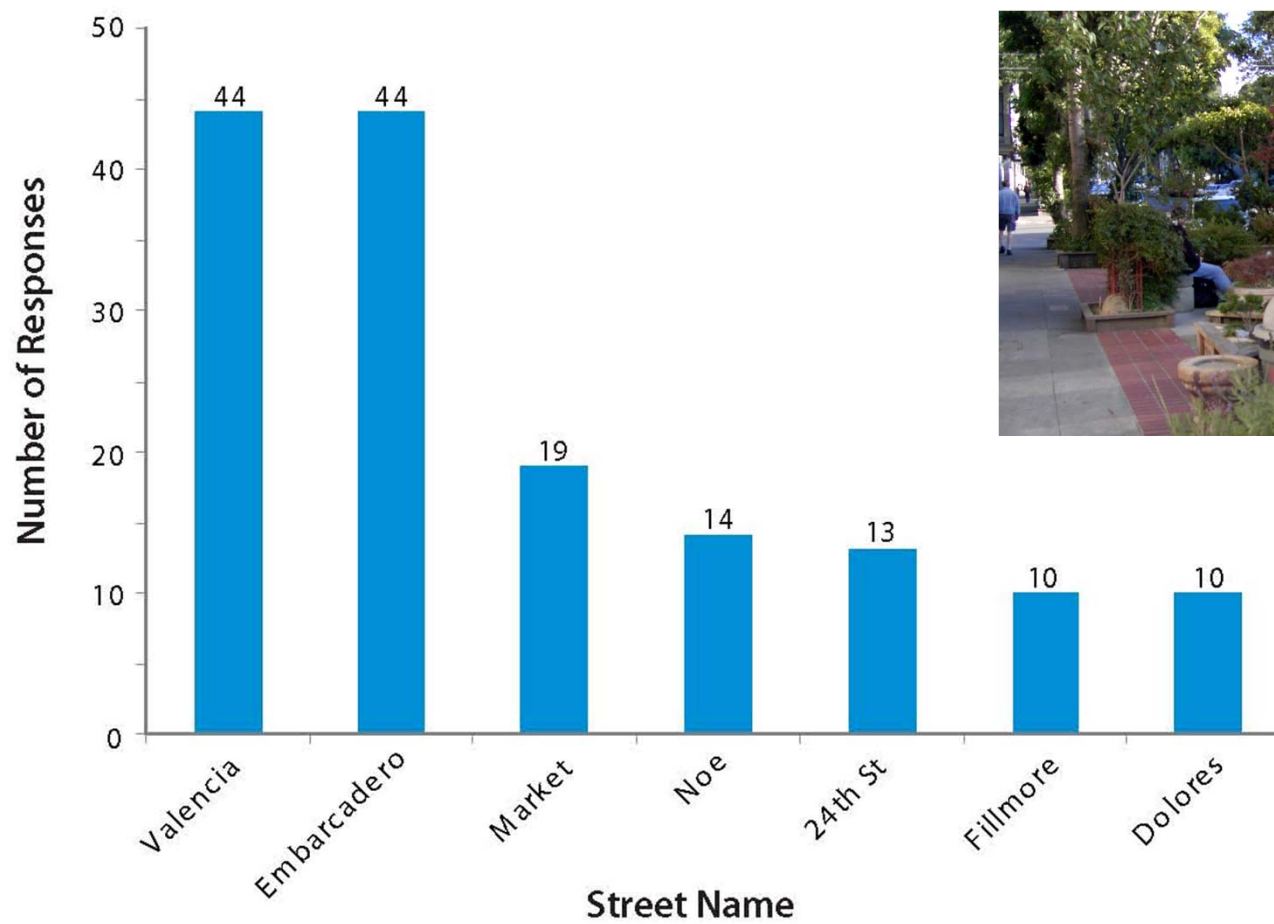
Survey Results:

Please use the map to identify the walking routes that you typically use



Survey Results:

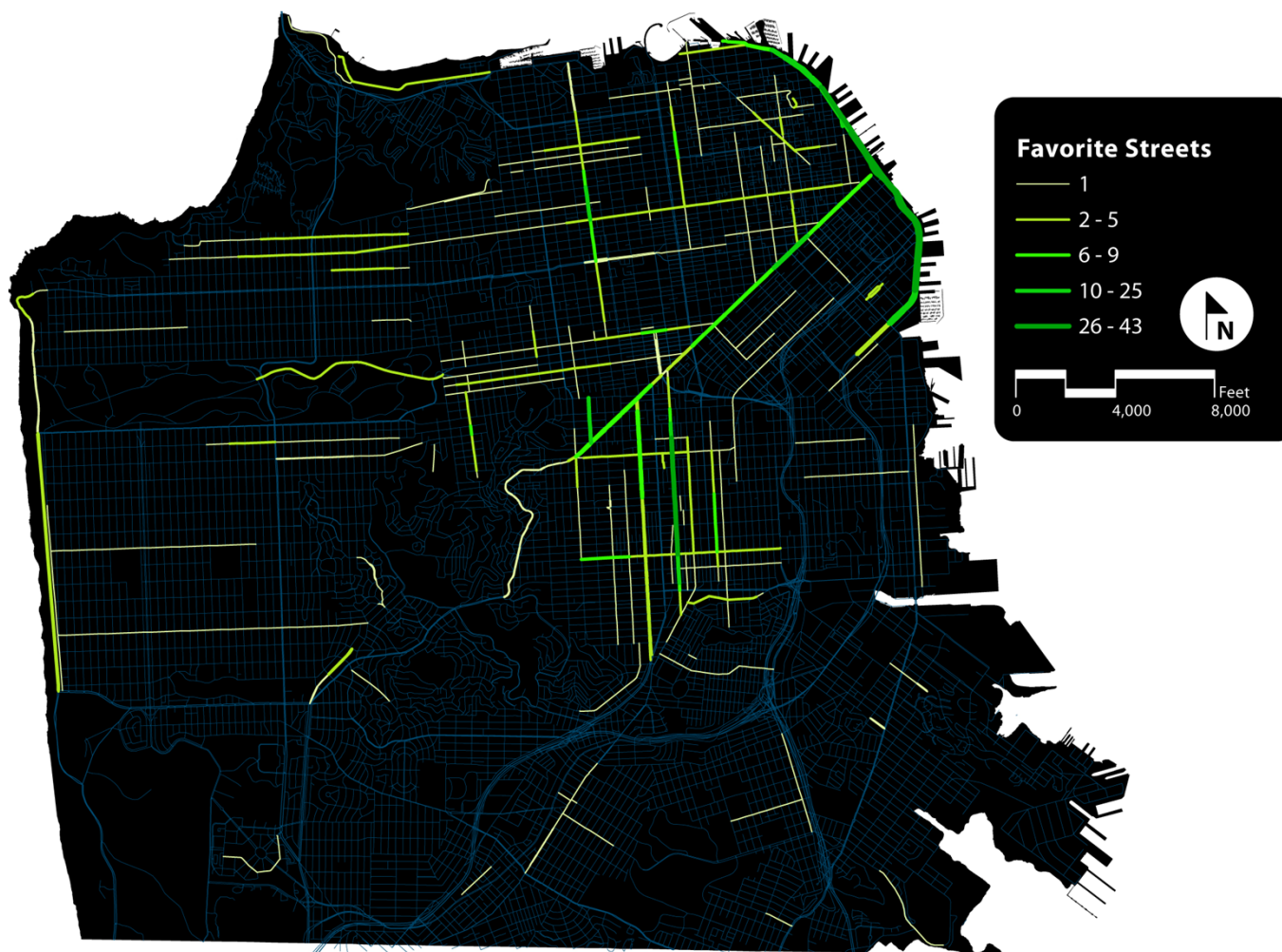
In San Francisco, which street is your favorite to walk on?



**Only streets receiving ten or more responses are shown here.*

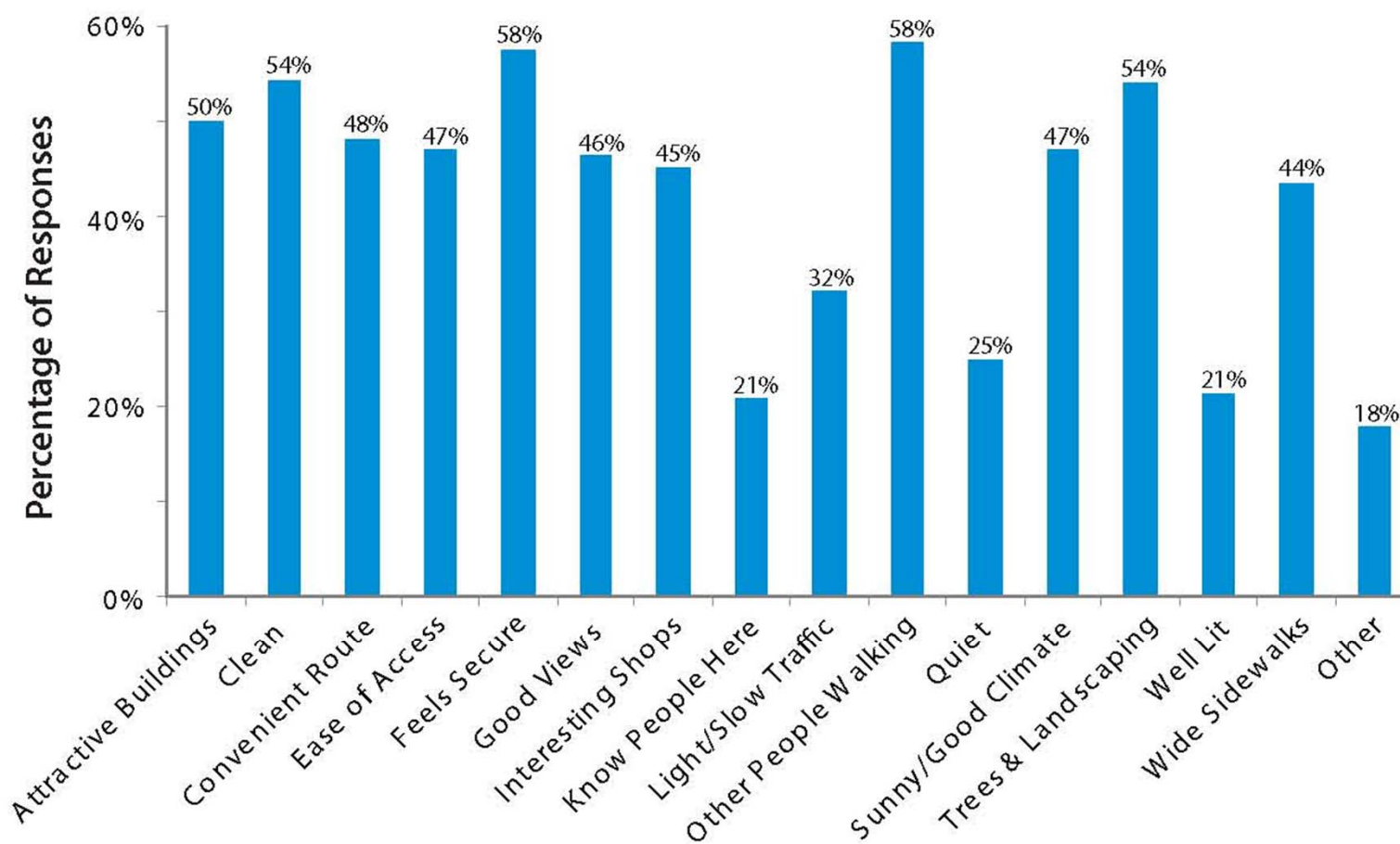
Survey Results:

In San Francisco, which street is your favorite to walk on?



Survey Results:

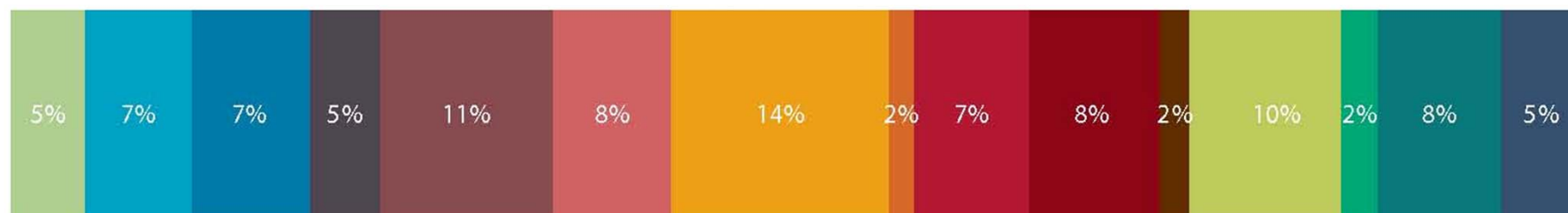
Why is this street your favorite?



**Respondants were able to select multiple options.*

Survey Results:

Of the reasons selected, which one is the most important?



Attractive Buildings

Clean

Convenient Route

Ease of Access

Feels Secure

Good Views

Interesting Shops

Know People Here

Light/Slow Traffic

Other People Walking

Quiet

Trees & Landscaping

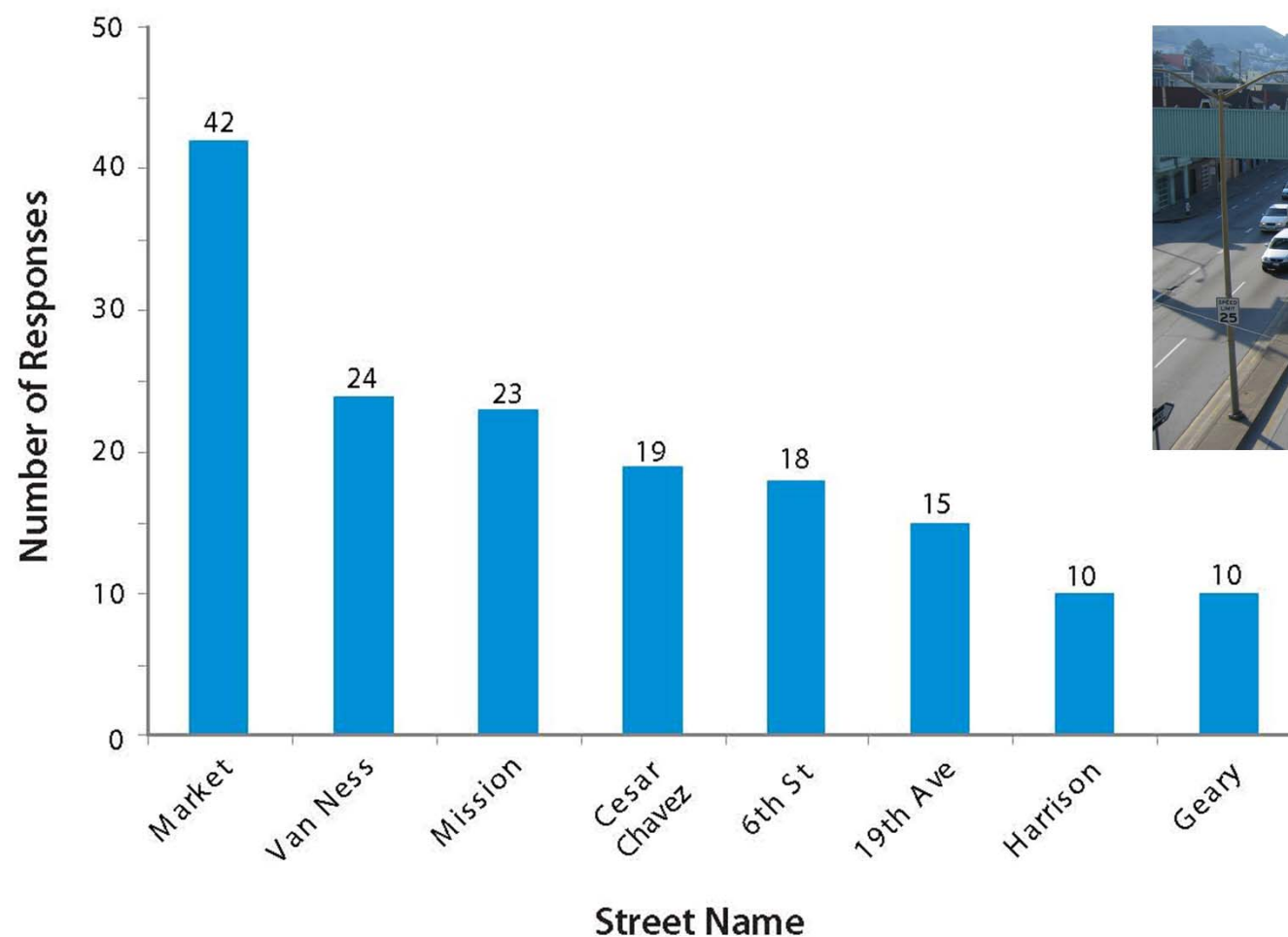
Sunny/Good Climate

Wide Sidewalks

Other

Survey Results:

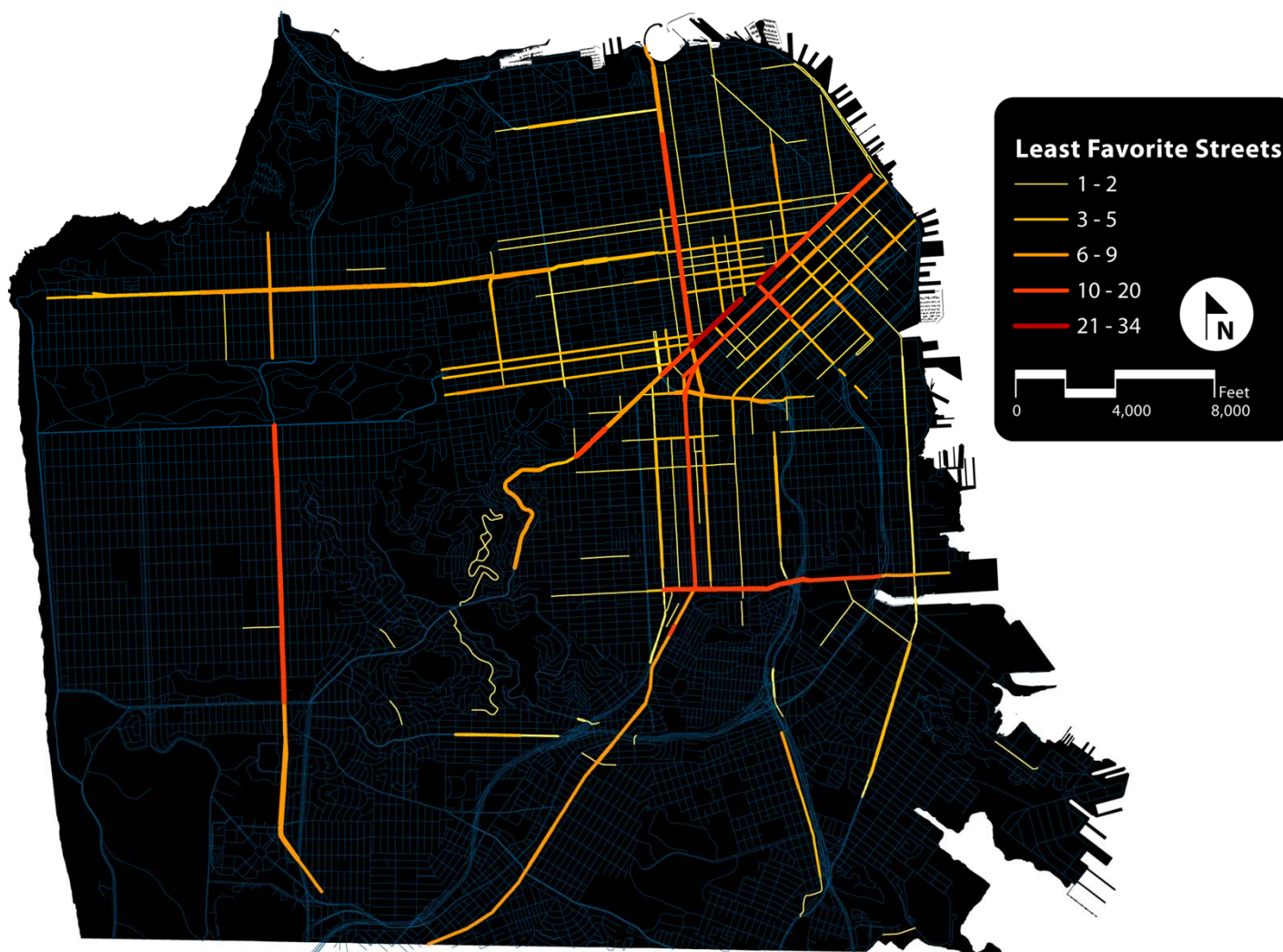
In San Francisco, which street is your least favorite street to walk on?



**Only streets receiving ten or more responses are shown here.*

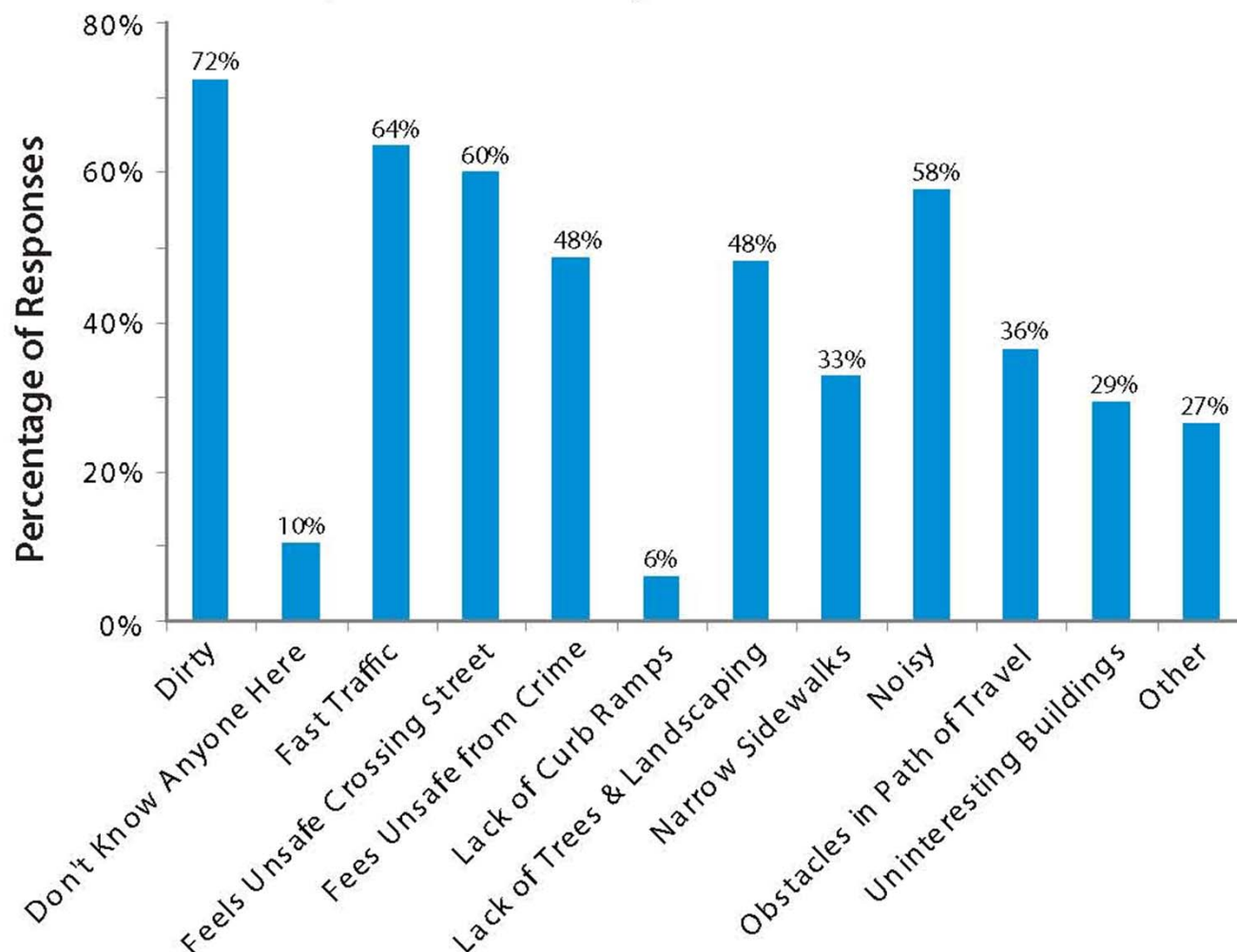
Survey Results:

In San Francisco, which street is your least favorite street to walk on?



Survey Results:

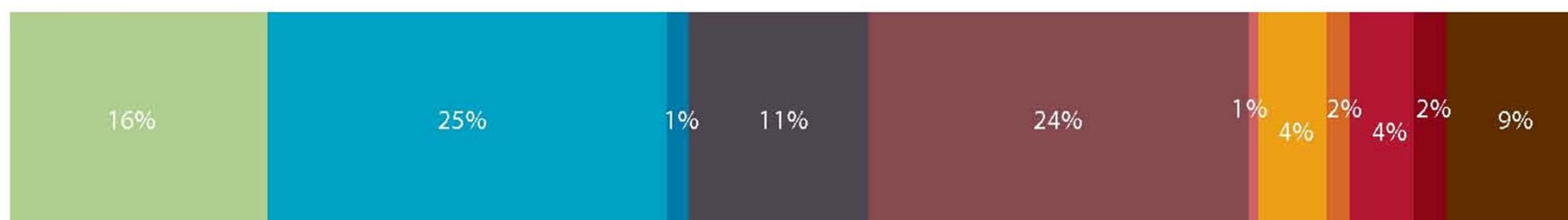
Why is this street your least favorite?



**Respondants were able to select multiple options.*

Survey Results:

Of the reasons selected, which one is the most important?



Dirty (garbage, graffiti, etc.)
Fast Traffic
Noisy
Feels Unsafe Crossing Street

Feels Unsafe from Crime
Lack of Curb Ramps
Narrow Sidewalks
Lack of Trees & Landscaping

Obstacles in Path of Travel
Uninteresting Buildings
Other



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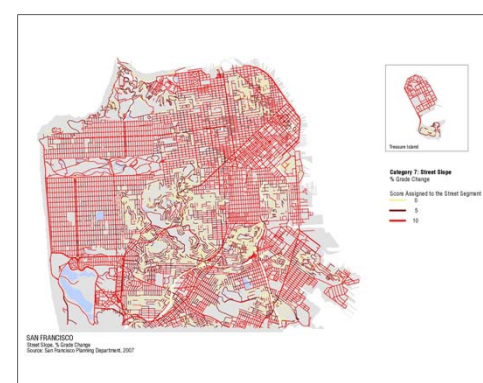
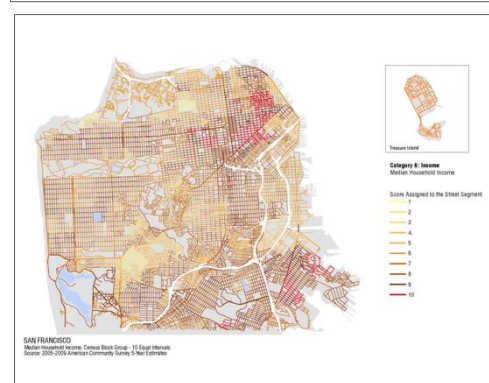
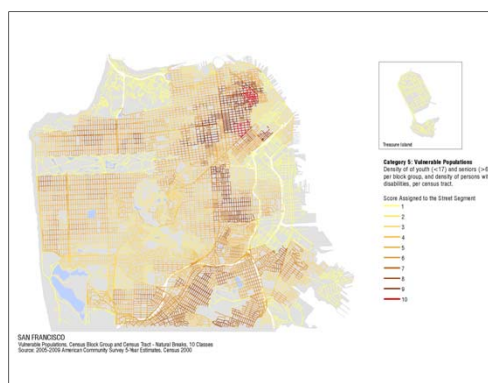
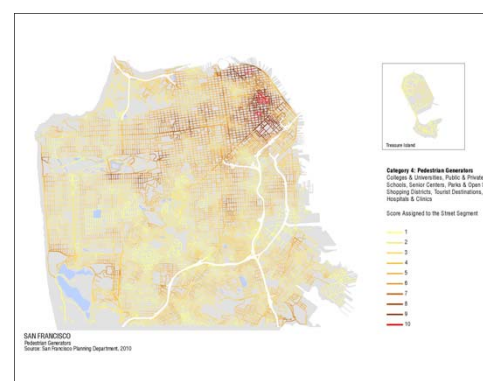
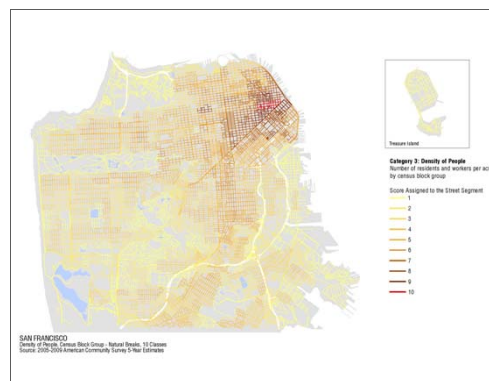
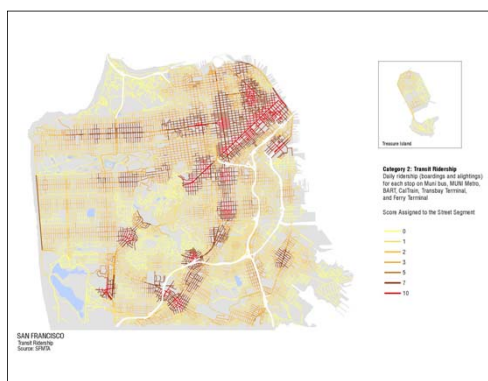
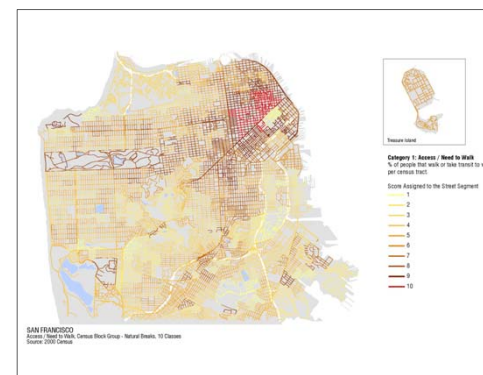
Pedestrian Activity: Where Walking is Important

Pedestrian Activity: Where Walking is Important - **REVISED**

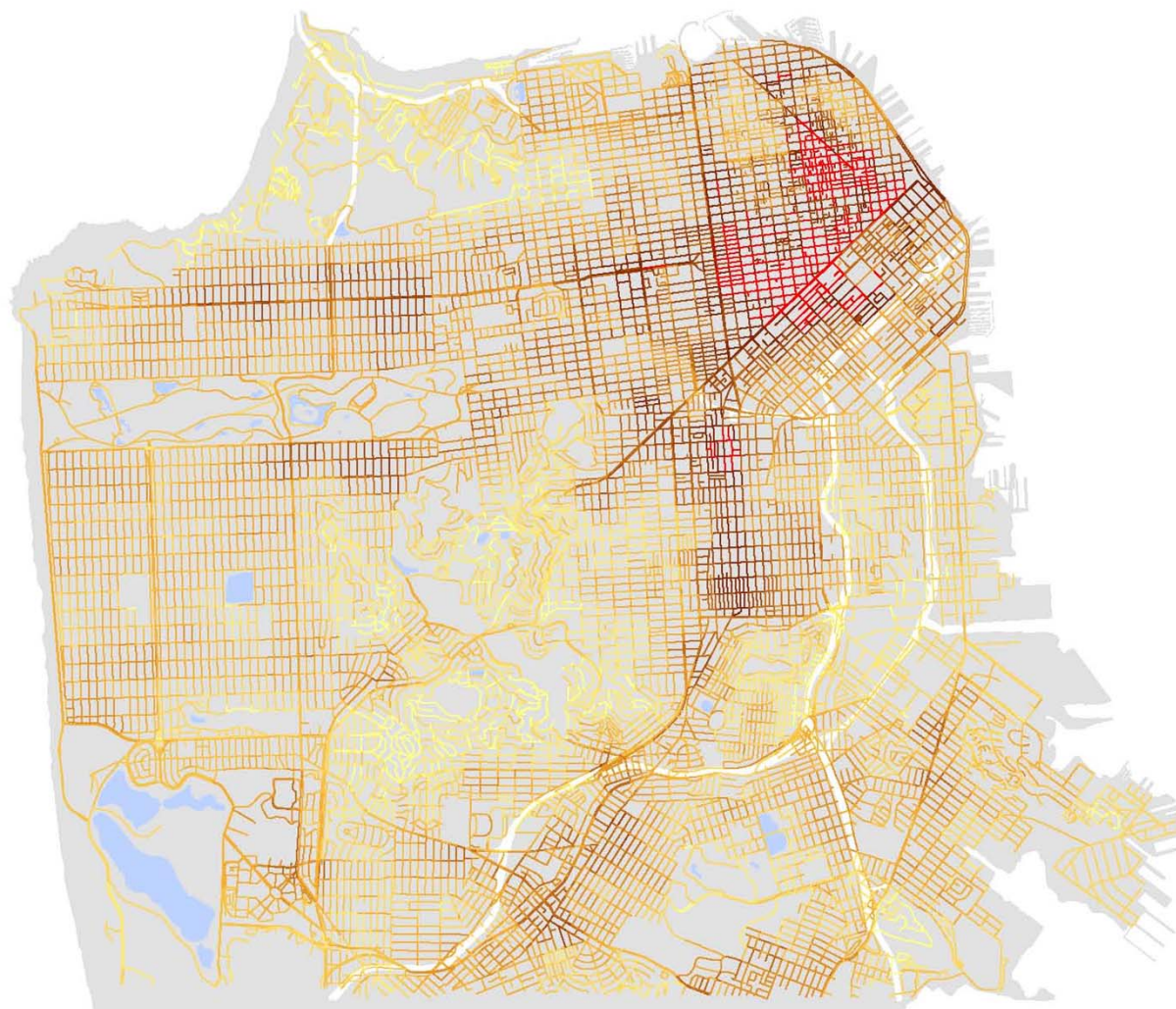
- Access/need to walk
 - Transit mode share, walking mode share
- Transit ridership
 - Daily transit boardings
- Density of people
 - Residential density, job density
- Pedestrian generators
 - Colleges, public & **private** schools, hospitals and clinics, shopping districts, parks, tourist destinations, 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



SAN FRANCISCO
Composite Map 1
April 1, 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

- 7 - 15
- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 35
- 36 - 40
- 41 - 45
- 46 - 50
- 51 - 55
- 56 - 68

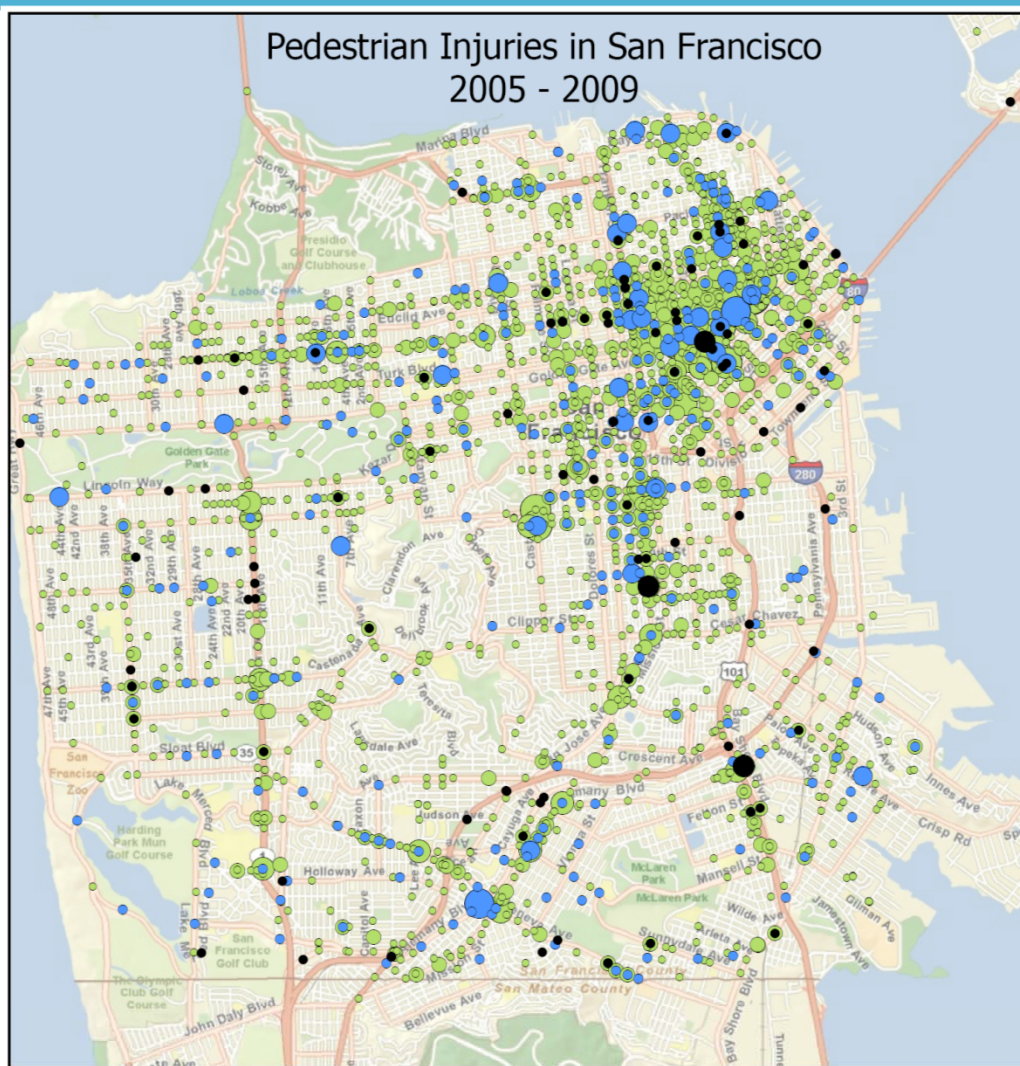


WALKFIRST

Pedestrian Safety and Security: The Conditions Pedestrians Face

Pedestrian Safety Needs & Conditions: Draft Criteria

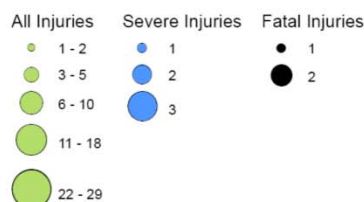
- Pedestrian Safety & Security
 - Pedestrian Injuries & Severity by Location
 - Pedestrian Collision Rate per Crossing
 - Crime – Assaults, Homicide, Robberies, and Sex Crimes



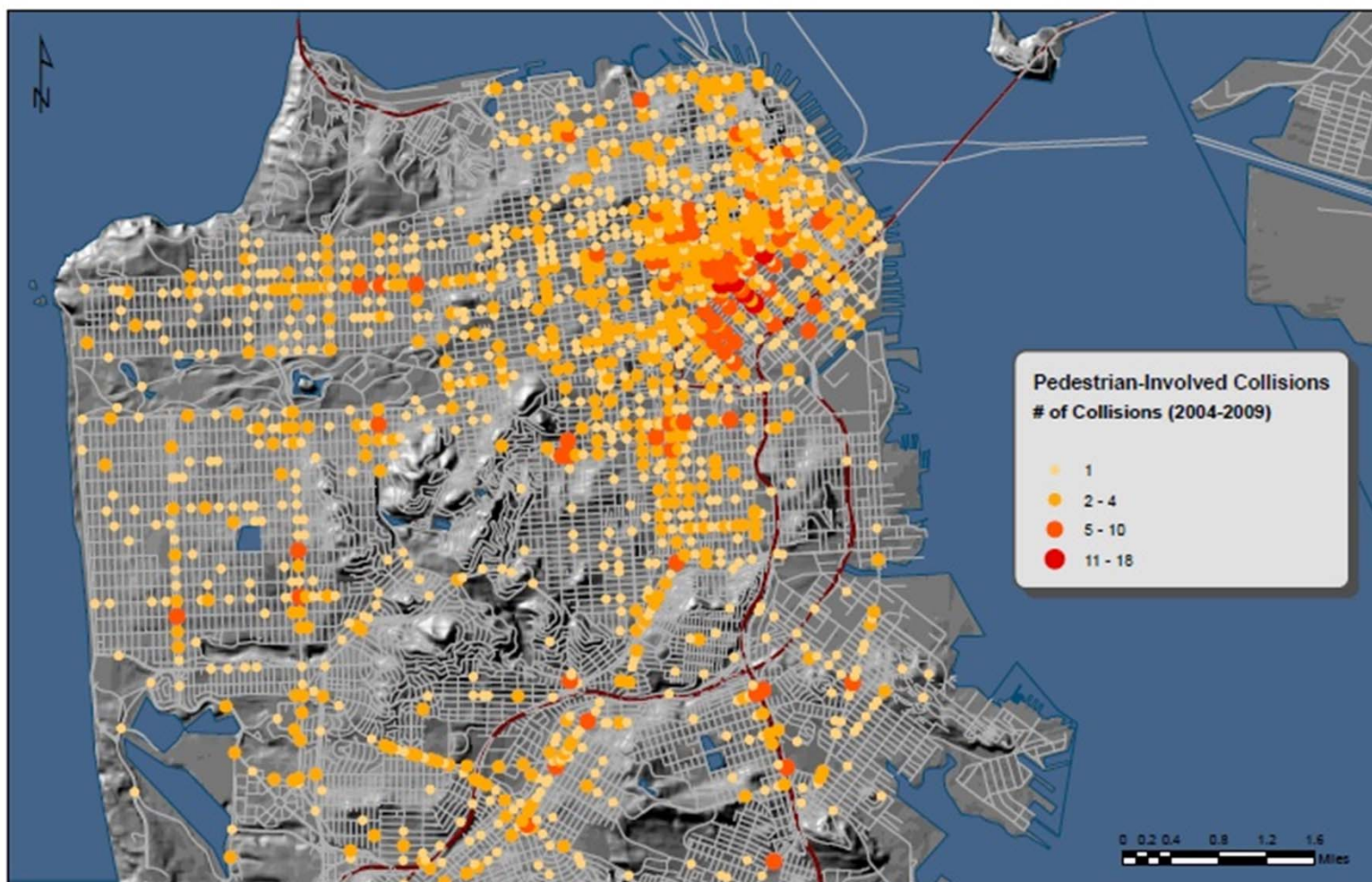
Number of Pedestrian Injuries and Severity

All collisions are geocoded to the nearest intersection.

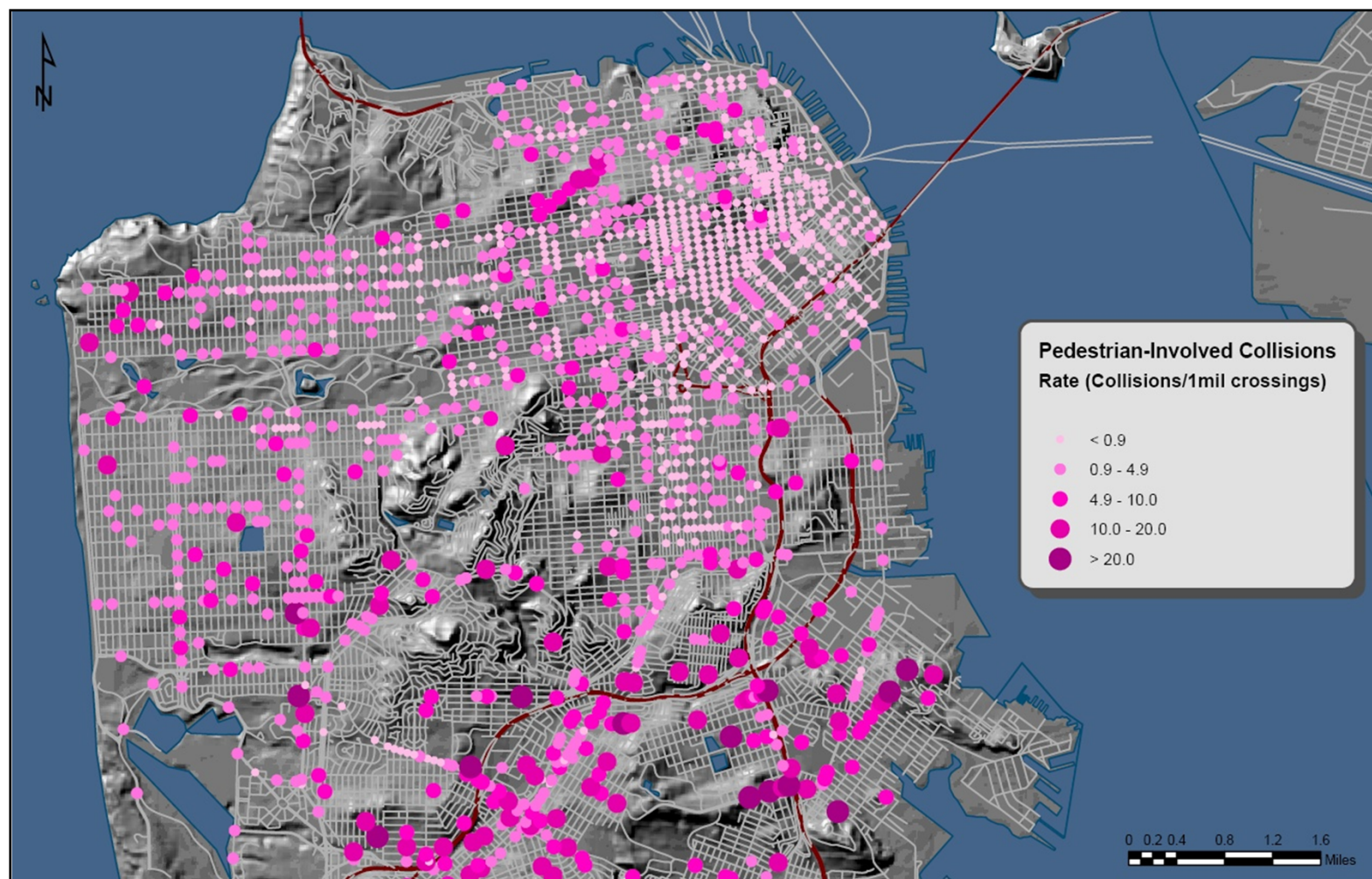
The City and County of San Francisco (CCSF) does not guarantee the accuracy, adequacy, completeness or usefulness of any information. CCSF provides this information on an "as is" basis without warranty of any kind, including but not limited to warranties of merchantability or fitness for a particular purpose, and assumes no responsibility for anyone's use of the information.



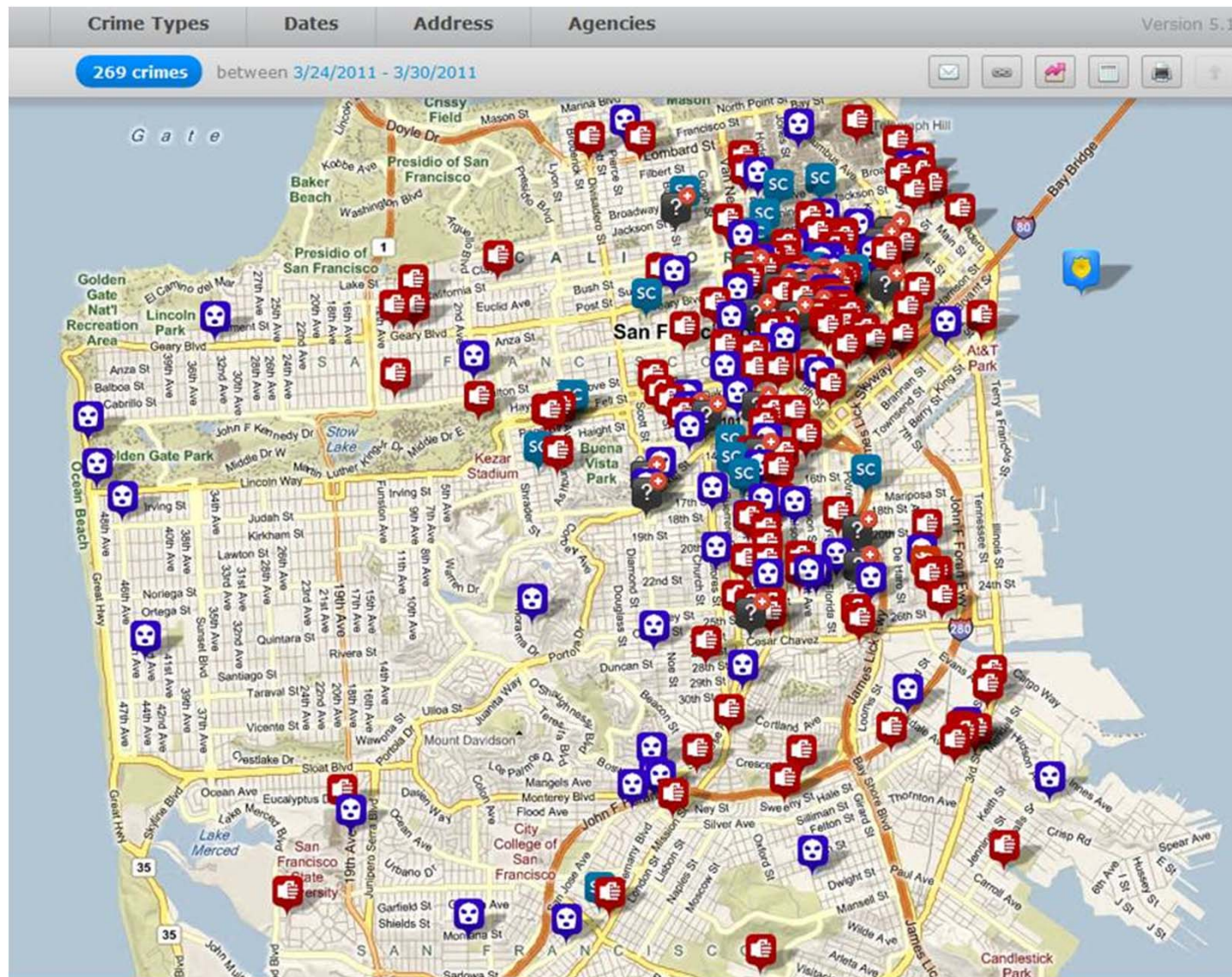
Number of Pedestrian-Involved Collisions



Rate of Pedestrian-Involved Collisions



Locations for Crime – Assaults, homicide, robberies, sex crimes



Street and Sidewalk Characteristics: The Conditions Pedestrians Face

Pedestrian Safety Needs & Conditions: Draft Criteria

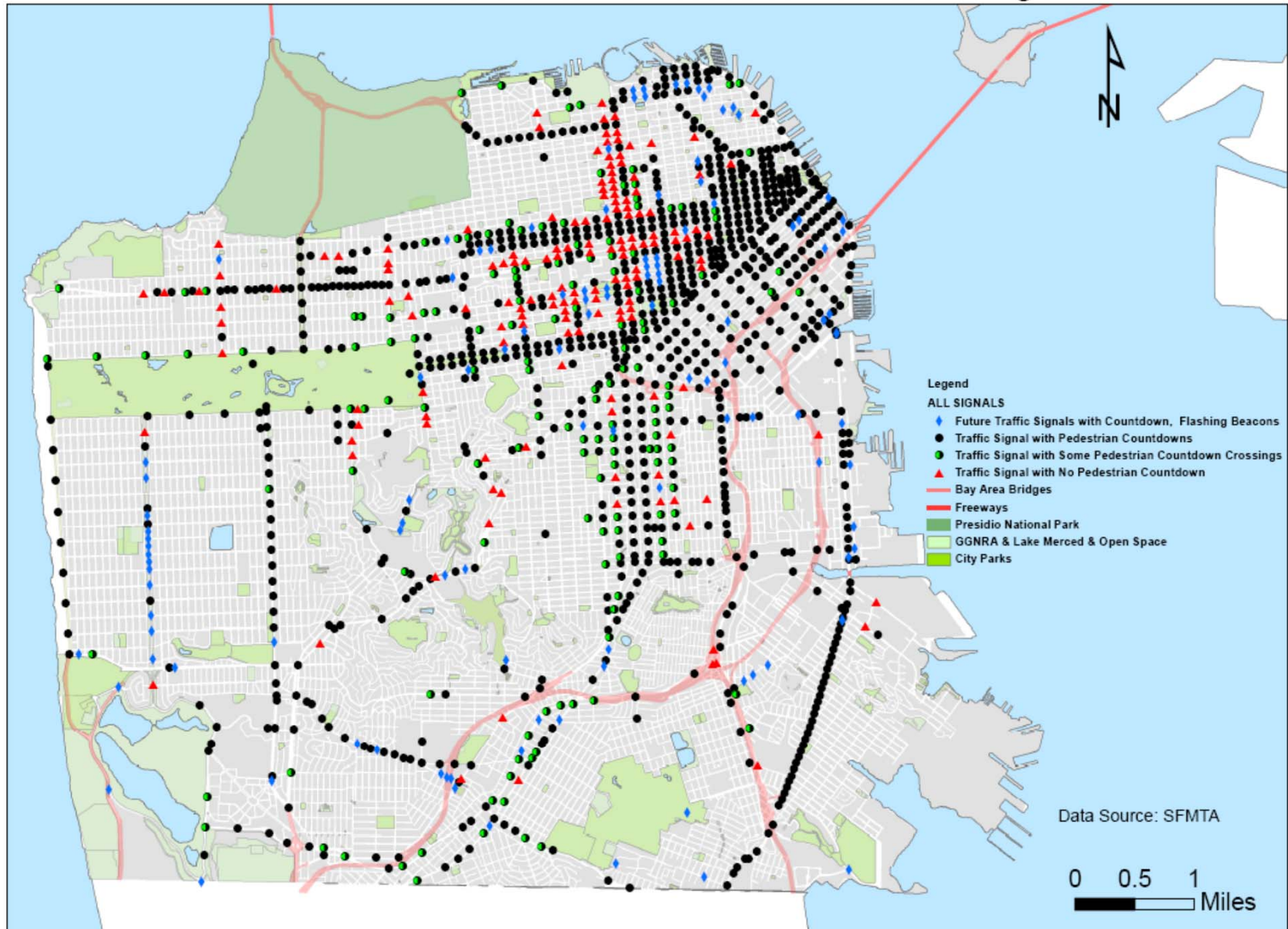
■ Street and Sidewalk Characteristics

- **Traffic Control Devices**
 - Stop Signs
 - Traffic & Pedestrian Signals
 - Continental Crosswalks, In-Pavement Crosswalk Lights
 - Ped Scramble Phasing
- **Street Designs & Streetscape**
 - Street Crossing Distance
 - Street Lighting
 - Street Trees
 - Intersection & Driveway Spacing
 - One-Way Streets
 - Street Functional Type
- **Walking Space & Buffers**
 - Sidewalk Width
 - Bike lanes
 - Planting strip
 - On-street parking

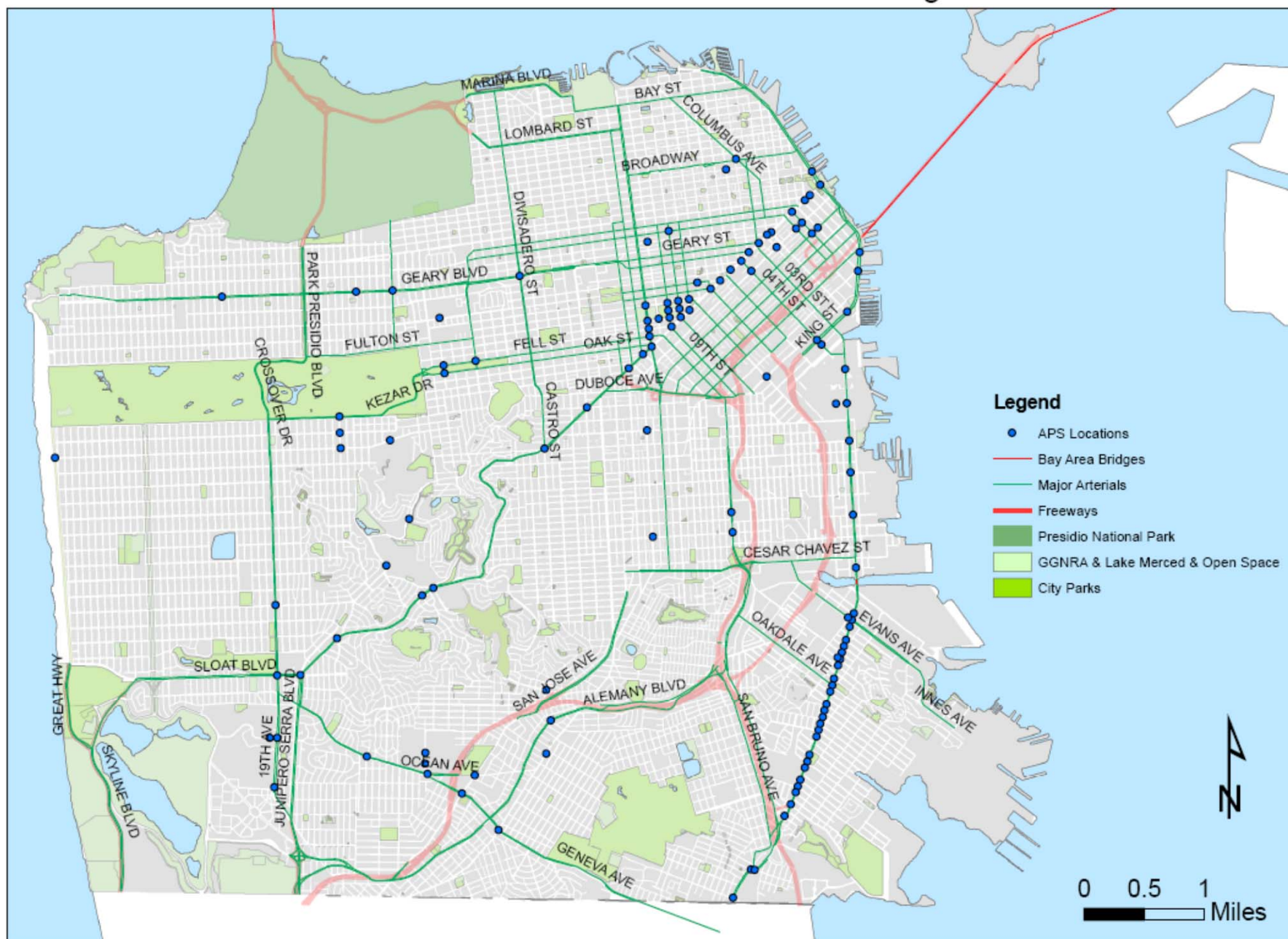
Pedestrian Safety Needs & Conditions: Draft Criteria

- **Street and Sidewalk Characteristics**
 - **Traffic Characteristics**
 - Traffic Volumes
 - Speeds: Posted Limit
 - Speeds: 85th Percentile Actual Speeds
 - **Traffic Calming Features**
 - Speed Humps
 - Bulbouts
 - Chicanes/Circles/Median Refuge Islands
 - Area Plans
 - **Accessibility**
 - Accessible Pedestrian Signals
 - Missing Sidewalks
 - Curb Ramps
 - Facilities to Cross Barriers

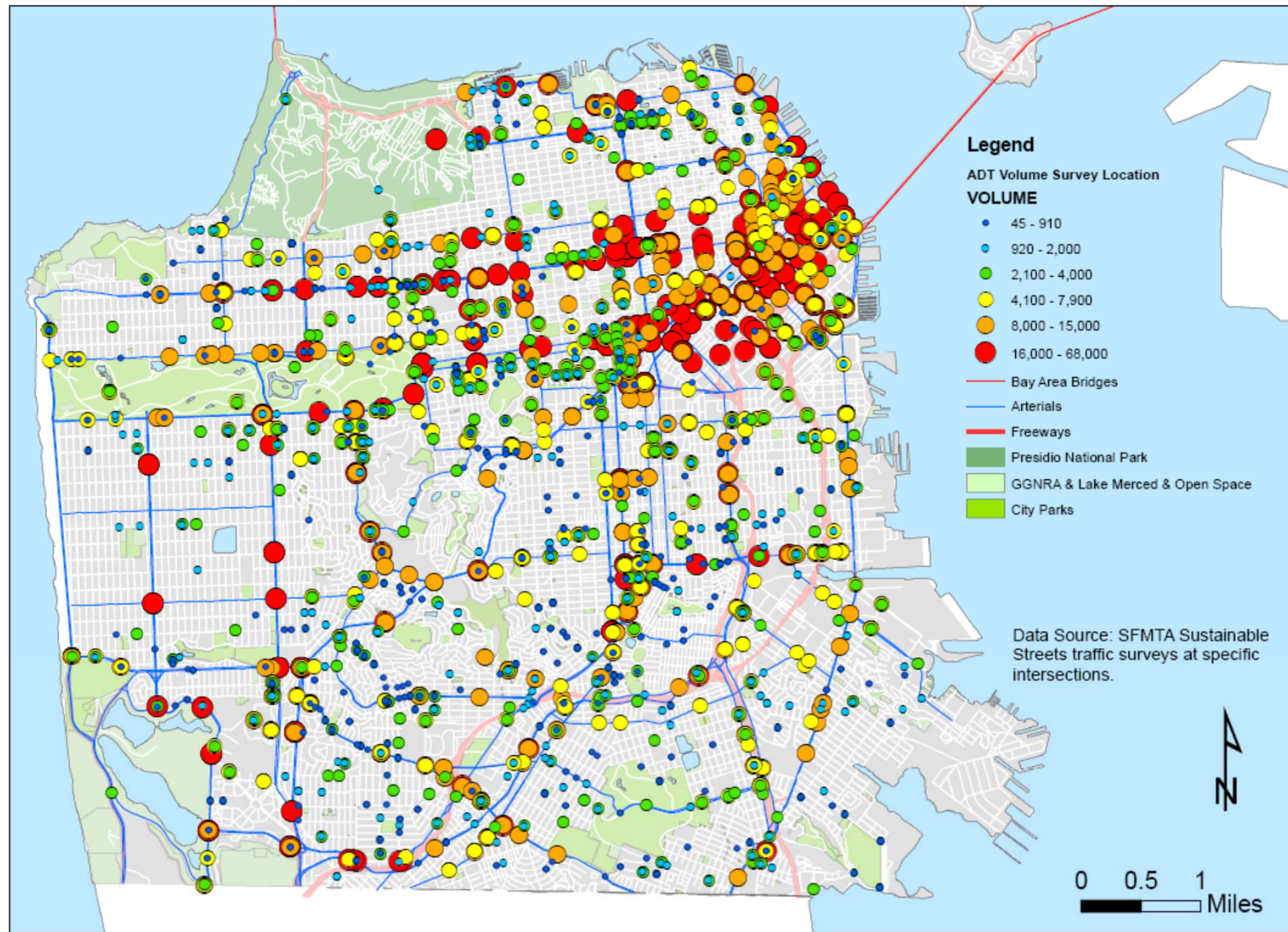
San Francisco: Installed Pedestrian Countdown Signals

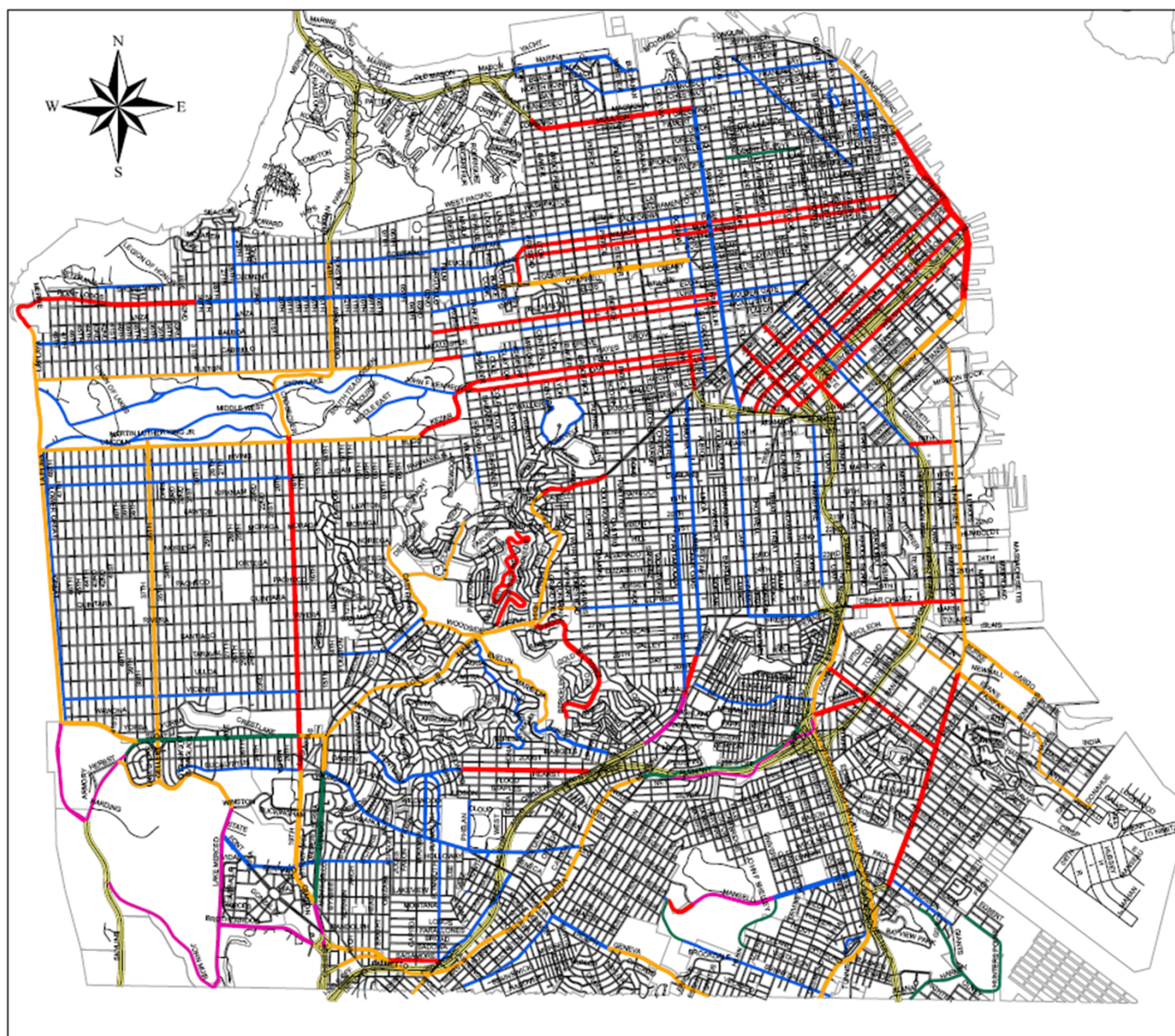


San Francisco: Accessible Pedestrian Signals



San Francisco: Average Daily Traffic Volumes





SPEED LIMITS

San Francisco, CA 2009

SPEED LIMITS

- De Facto (CVC)
- 25
- 30
- 35
- 40
- 45
- Other Highway

De facto speed limit refers to the standard speed limits set by the California Vehicle Code (CVC). The speed limit is 25 MPH for most residential and commercial streets.

Map does not include any speed limits less than 25 MPH.



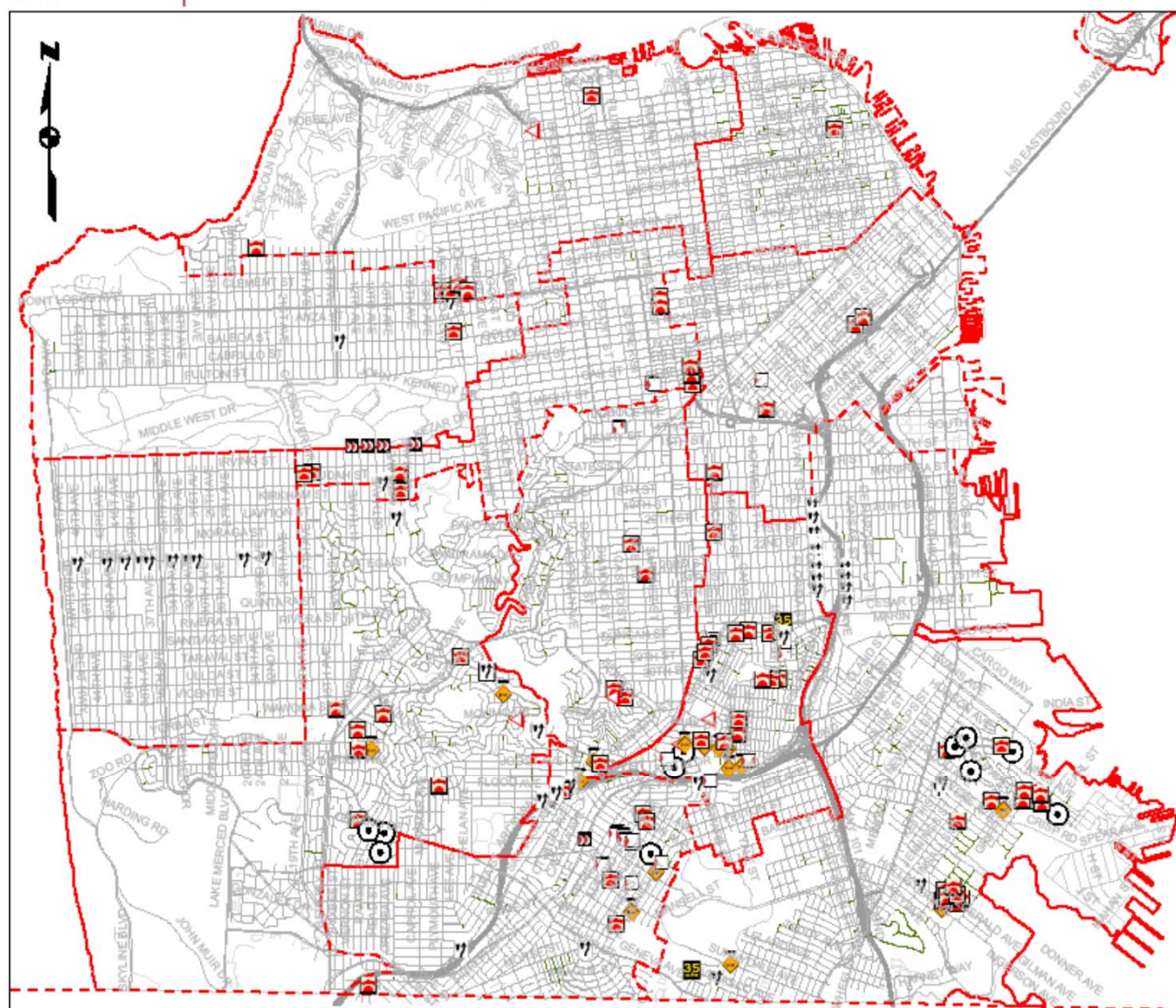
SFMTA | Municipal Transportation Agency

Disclaimer: The City and County of San Francisco does not guarantee the accuracy or completeness of any information provided.

SOURCE: Basemap - Department of Public Works
Speed limit layer - Department of Parking and Traffic
Traffic Engineering












Prepared by - Ricardo Olea
Updates & Revisions by - Tamam Abdallah

Last Modified:	January 7, 2009
Comments:	



Traffic Calming Program

Installed Measures

-  Bulb-out
-  Channelization
-  Chicane
-  Choker
-  Diverter
-  Median Extension
-  Speed Radar Sign
-  Speed Hump
-  Speed Cushion
-  Traffic Circle
-  Traffic Island

Prepared 3/15/2010

Pedestrian Safety

- **Safety Level** to be rated based on:
 - Severity-weighted number of pedestrian injuries (absolute number) **AND**
 - Pedestrian injury rate (per estimated no. of pedestrian crossings)
- **Street and Sidewalk Characteristics** to be considered in selecting and prioritizing specific capital improvements

Upcoming PSAC presentations

May

- *Pedestrian activity*: **revised** composite maps; **draft** map of key pedestrian streets
- *Pedestrian safety*: **revised** criteria and maps
- *Project readiness*: **draft** criteria

June

- *Project readiness*: **revised** criteria
- Guidelines for prioritizing and selecting projects
- Selected case study examples

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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