

Improving safety
and walking
conditions in
San Francisco



WALKFIRST

Pedestrian Activity Criteria

PSAC | March 8, 2011



San Francisco
Department of Public Health

SAN FRANCISCO
PLANNING DEPARTMENT



SFMTA | Municipal Transportation Agency

Contents

1. Project Overview

- a) Revised schedule of PSAC hearings

2. Pedestrian Activity: Where walking is important

- a) Existing conditions (revisions based on PSAC comments)
- b) DRAFT criteria and weighting

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	Project Readiness
Goal	Identify places where people walk	Identify most important locations for safety improvements	Identify opportunities to fund and construct pedestrian improvements
Product	Map of key walking streets in SF	Preliminary project list	Preliminary project list

Stay involved!

- Monthly presentations at PSAC
- Focus groups/stakeholder meetings
- Take our survey: available online at walkfirst.sfplanning.org
- 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

Upcoming PSAC presentations

April

- Survey results
- *Pedestrian activity*: **revised** criteria/scoring; **draft** map of key pedestrian streets
- *Pedestrian safety*: pedestrian injury maps; pedestrian safety conditions; **draft** criteria/scoring

May

- *Pedestrian activity*: **revised** map
- *Pedestrian safety*: **revised** criteria/scoring
- *Project readiness*: **draft** criteria

Pedestrian Activity: Where Walking is Important

Pedestrian Activity: Where Walking is Important

- Access/need to walk
 - Auto ownership, non-auto mode share, walking mode share
- Transit ridership
 - Transit network, transit boardings
- Density of people
 - Residential density, job density, retail density
- Pedestrian generators
 - Colleges, public schools, hospitals & clinics, shopping districts, parks, tourist destinations
- Demographics
 - Income, seniors, youth
- Street slope

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 schools, hospitals and clinics, shopping districts, parks, tourist destinations, **senior centers**
- Vulnerable populations
 - Seniors, youth
- Income
- Street slope

Pedestrian Activity – Criteria/Scoring System

Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- Step 2: Determine how to measure each factor; create a score for each category
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

Pedestrian Activity – Criteria/Scoring System

Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- Step 2: Determine how to measure each factor; create a score for each category
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

Pedestrian Activity – Criteria/Scoring System

Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- Step 2: Determine how to measure each factor; create a score for each category
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

Pedestrian Activity – Criteria/Scoring System

- 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 schools, hospitals and clinics, shopping districts, parks, tourist destinations, senior centers
- Vulnerable populations
 - Seniors, youth
- Income
- Street slope

Pedestrian Activity – Criteria/Scoring System

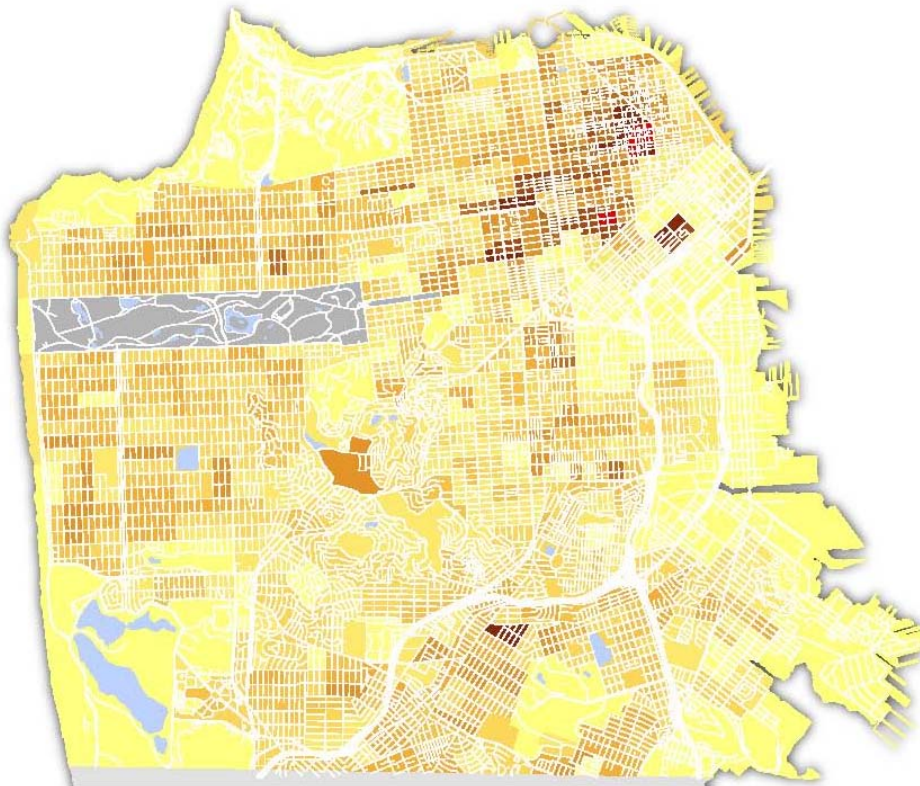
Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- **Step 2: Determine how to measure each factor; create a score for each category**
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

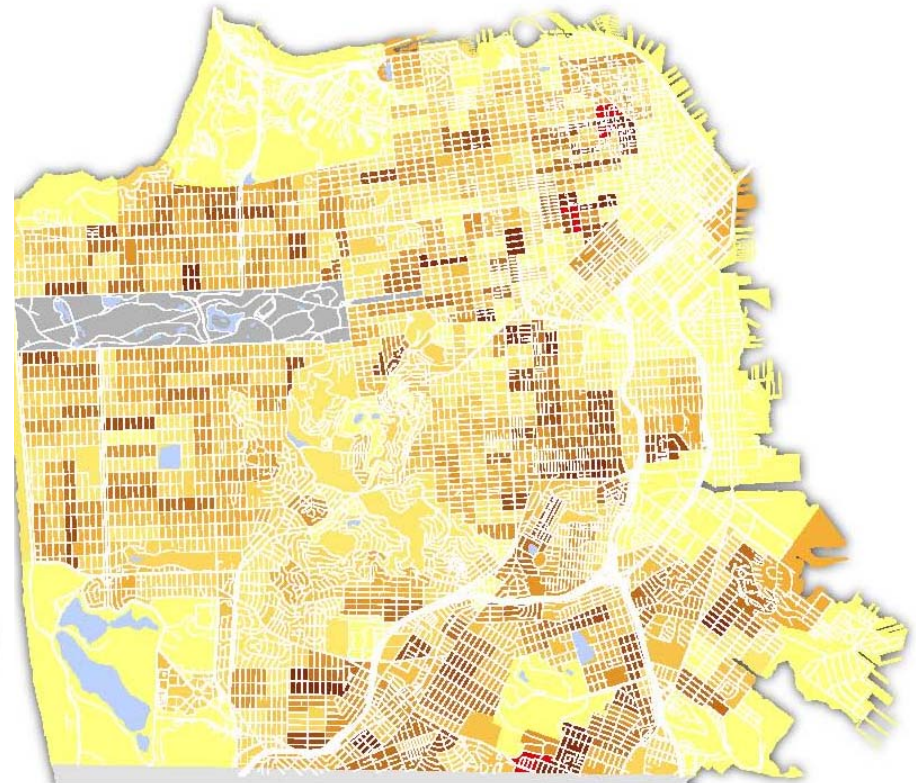
Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Vulnerable Populations (seniors, youth)



of seniors per census block group

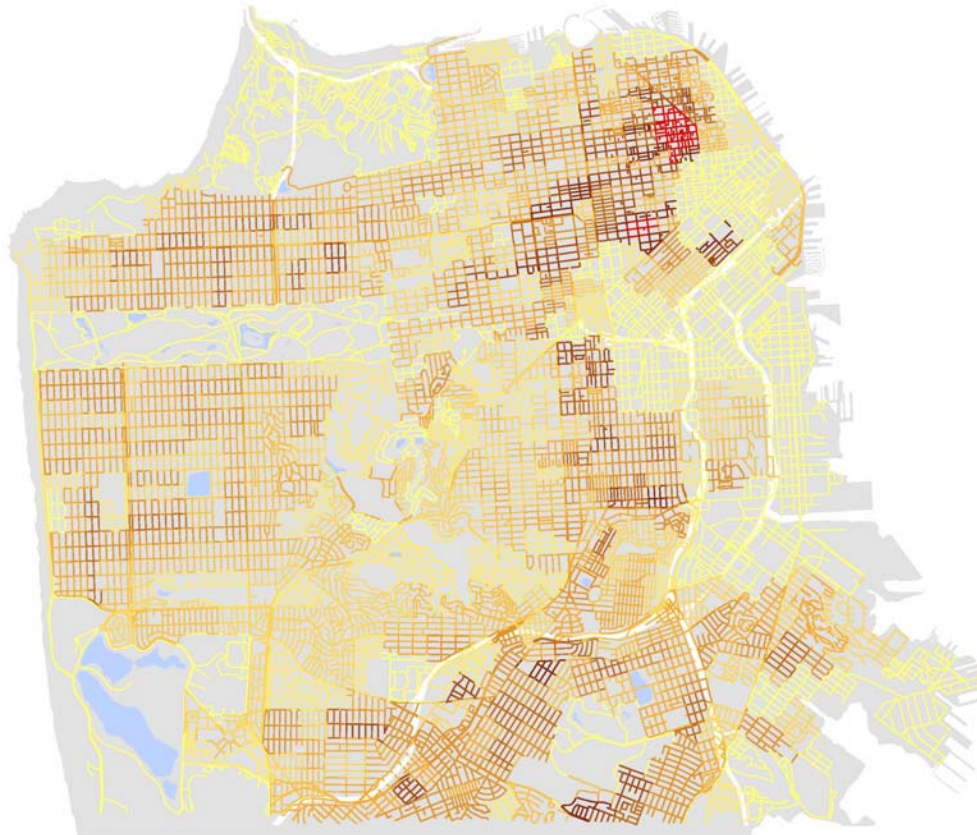


of youth per census block group

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Vulnerable Populations (seniors, youth)

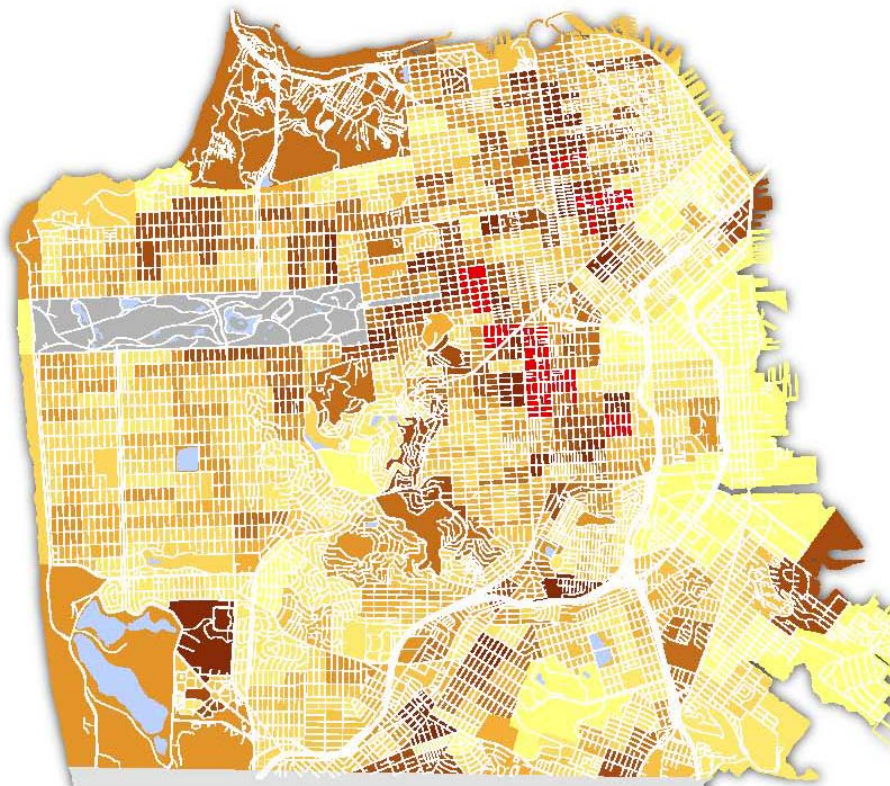


of seniors + # of youth per census block group, ten breaks, applied to street segment

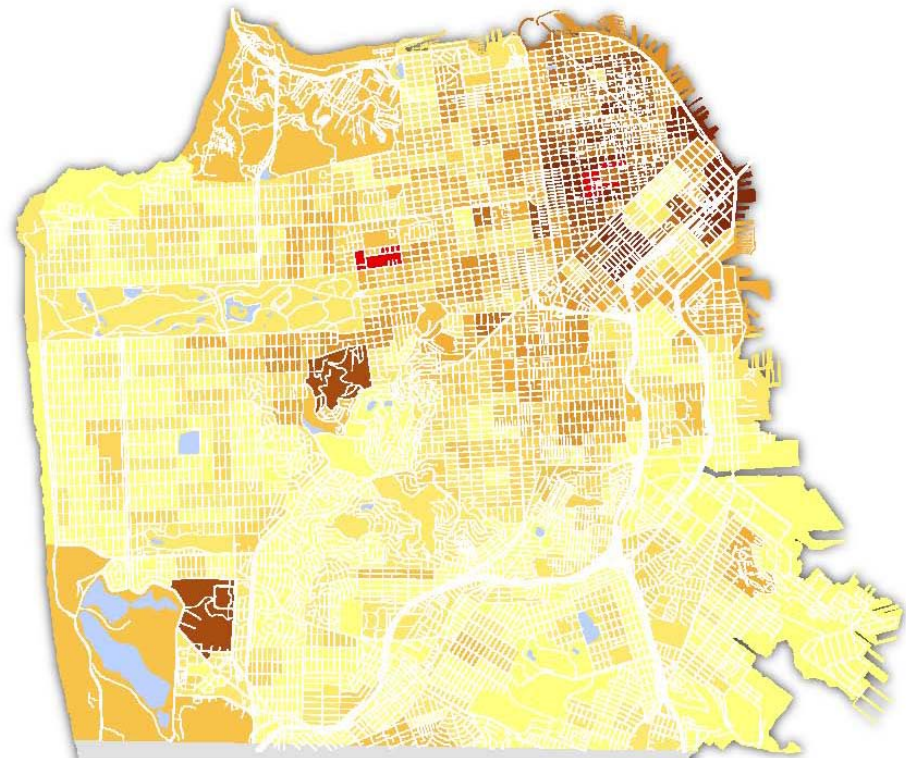
Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Access/Need to Walk (public transit to work, walk to work)



% take public transit to work

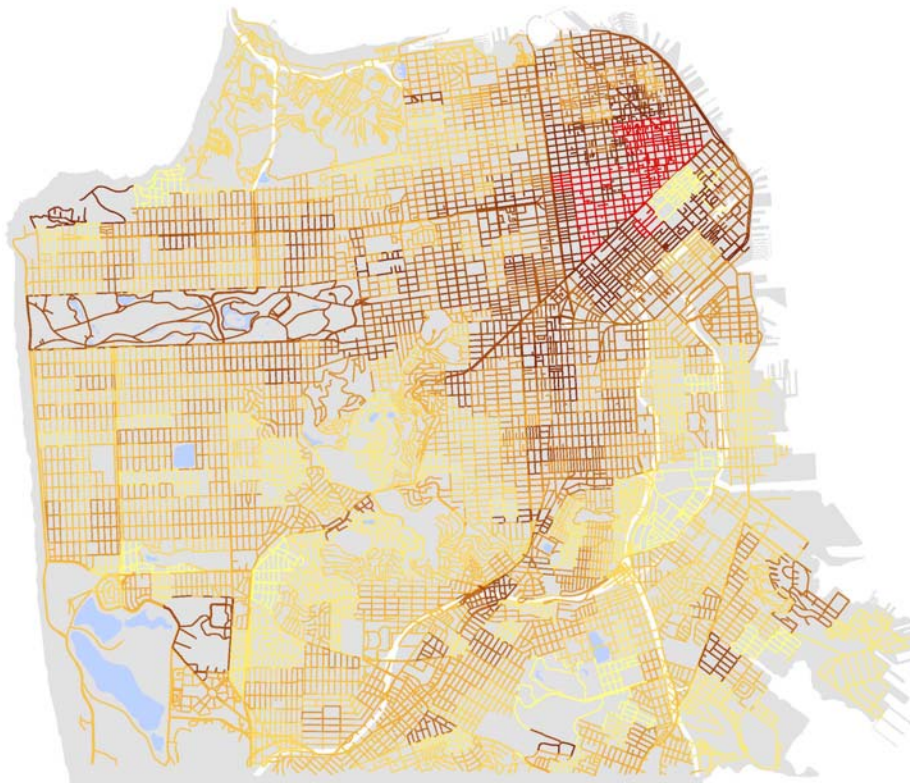


% walk to work

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Access/Need to Walk (public transit to work, walk to work)

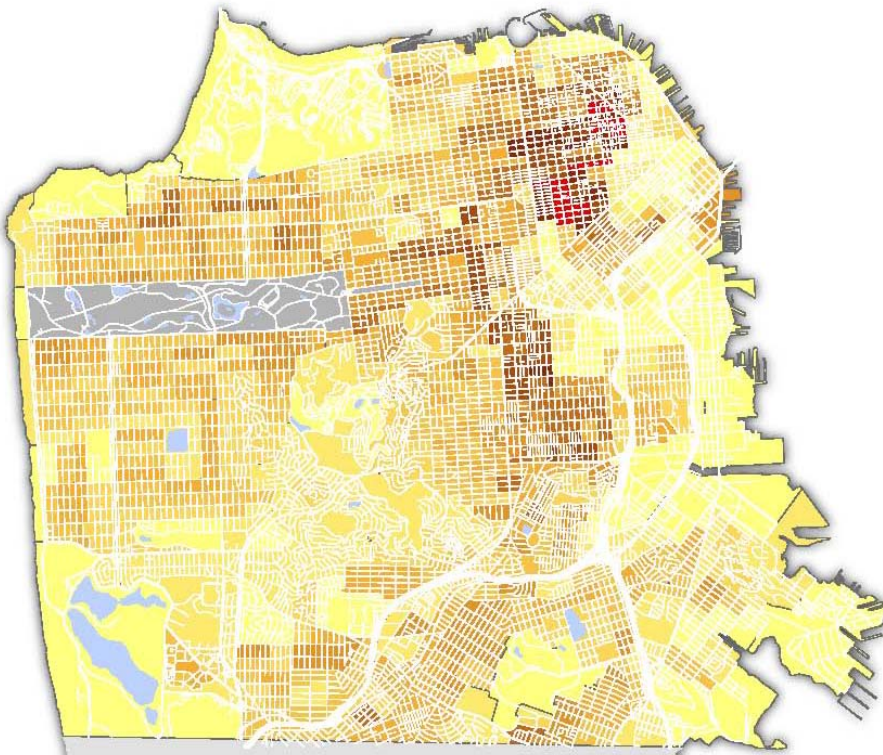


% walk to work + % transit to work, per census block group, ten breaks, applied to street segment

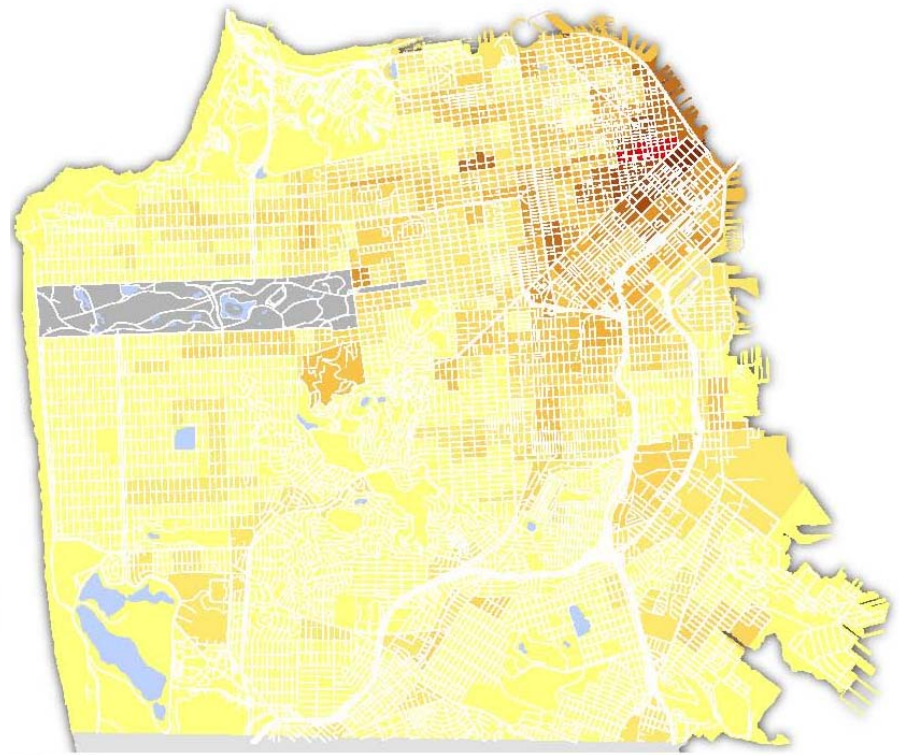
Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Density (population, jobs)



People per acre

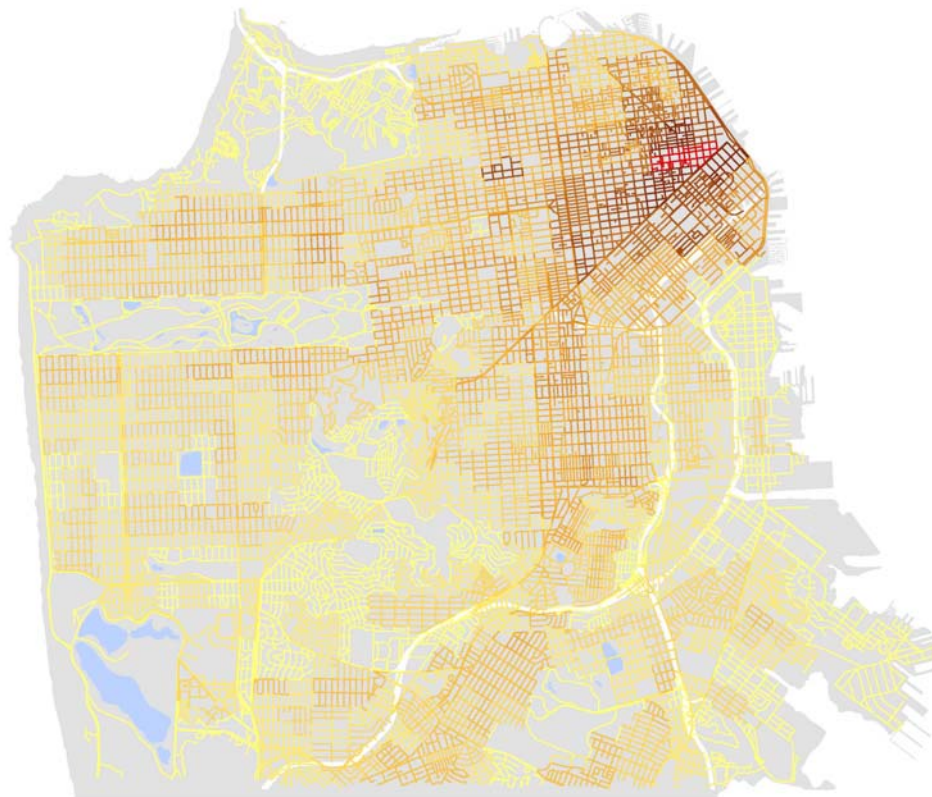


Jobs per acre

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Density (population, jobs)

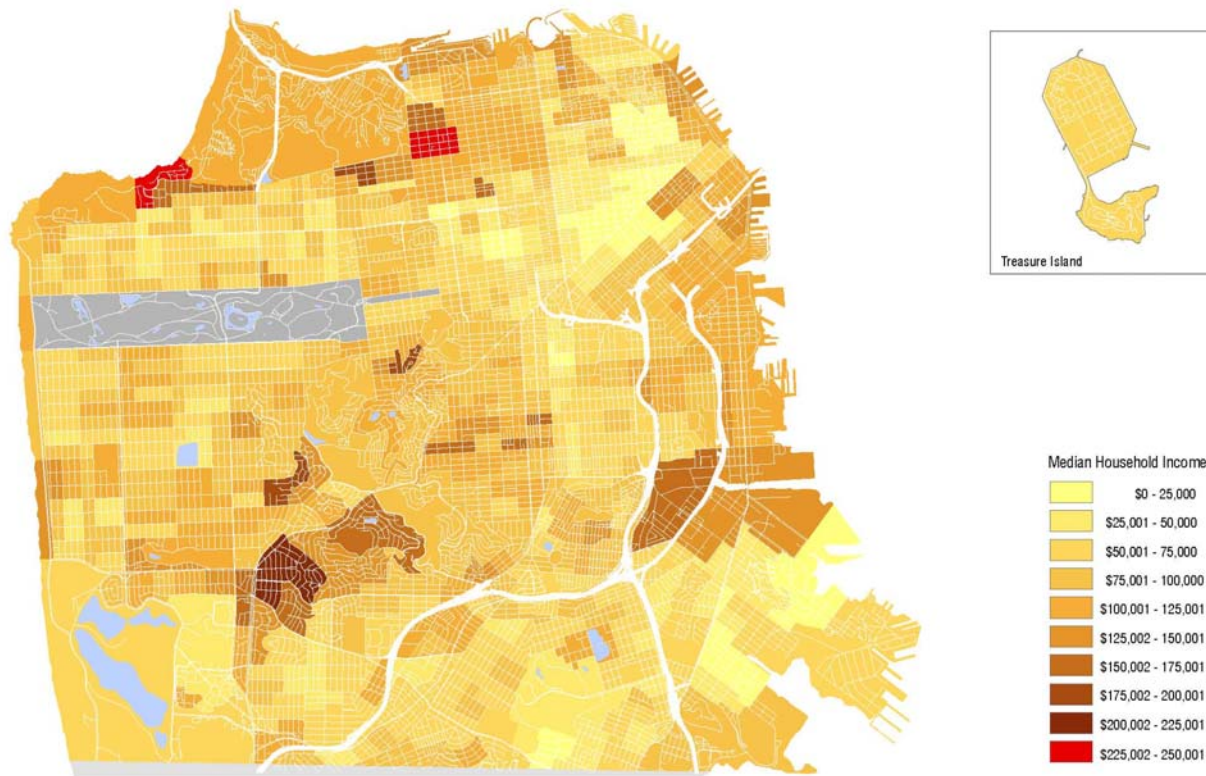


people + # of jobs, per census block group, ten breaks, applied to street segment

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Income



median household income, per census block group, ten breaks

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Income

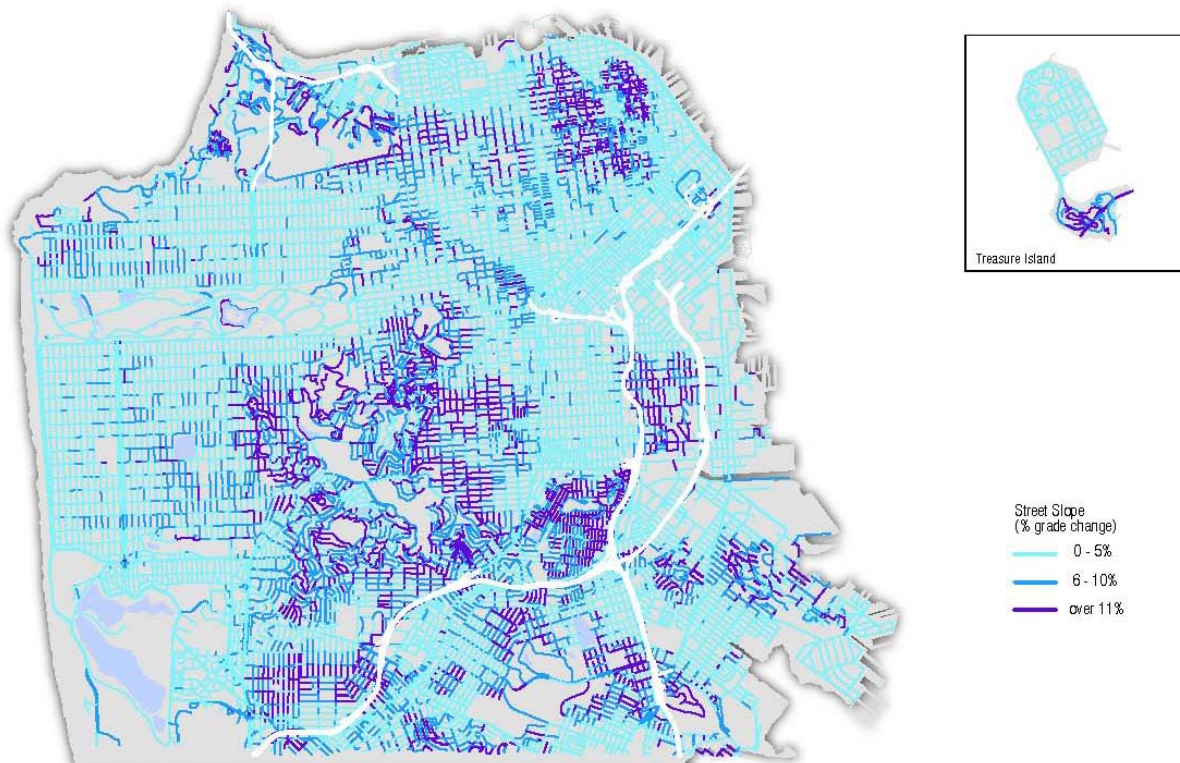


median household income, per census block group, ten breaks, applied to street segment

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Street slope

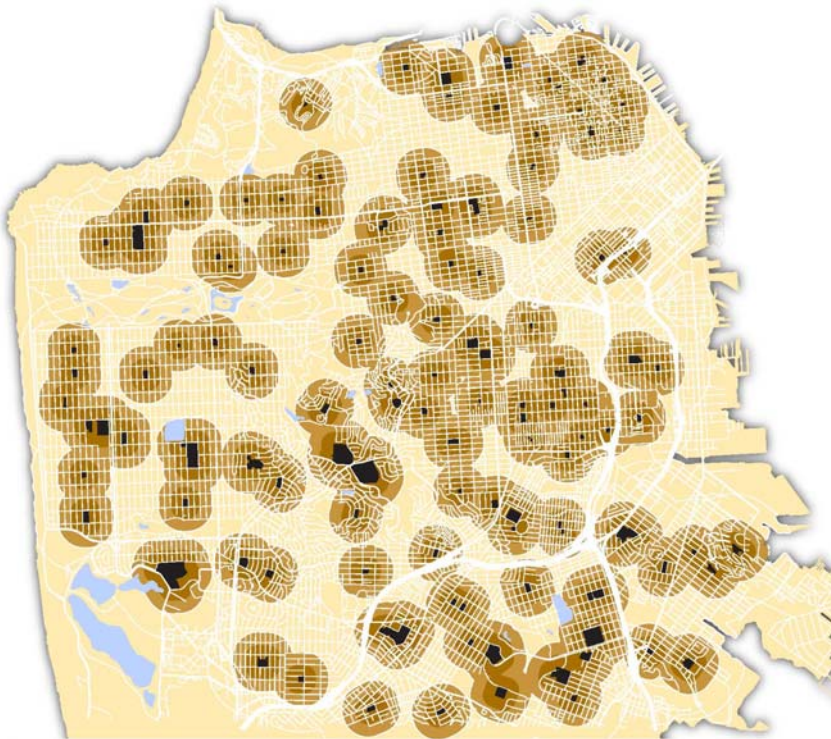


Street slope: 0 to 5%, 5 to 10%, > 10%

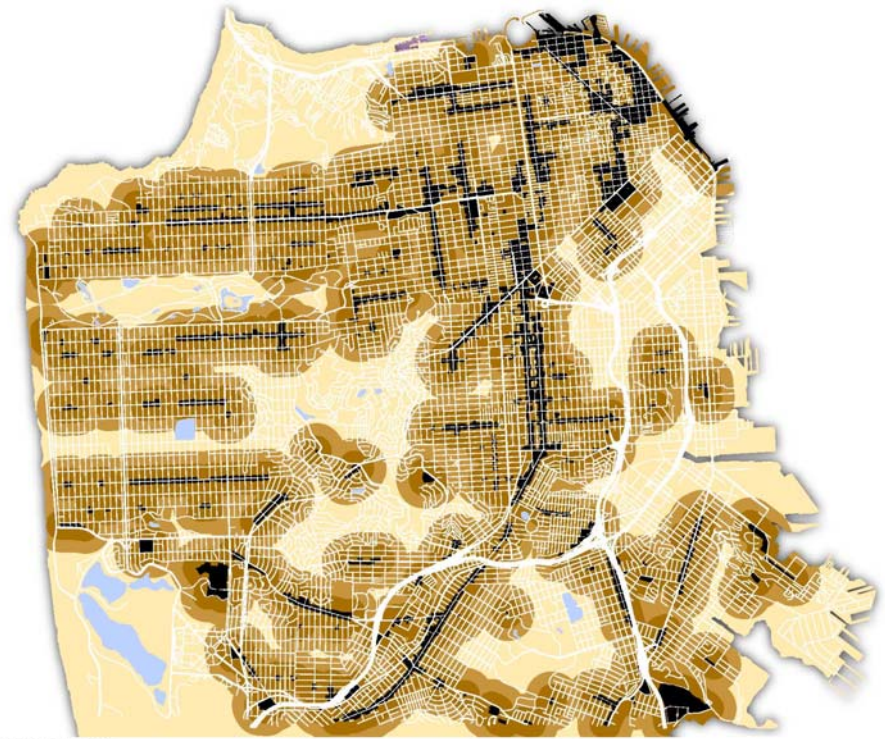
Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Pedestrian Generators (Colleges, public schools, hospitals and clinics, shopping districts, parks, senior centers, tourist destinations)



Public Schools: 1/8 and 1/4 mile buffers



Shopping districts: 1/8 and 1/4 mile buffers

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

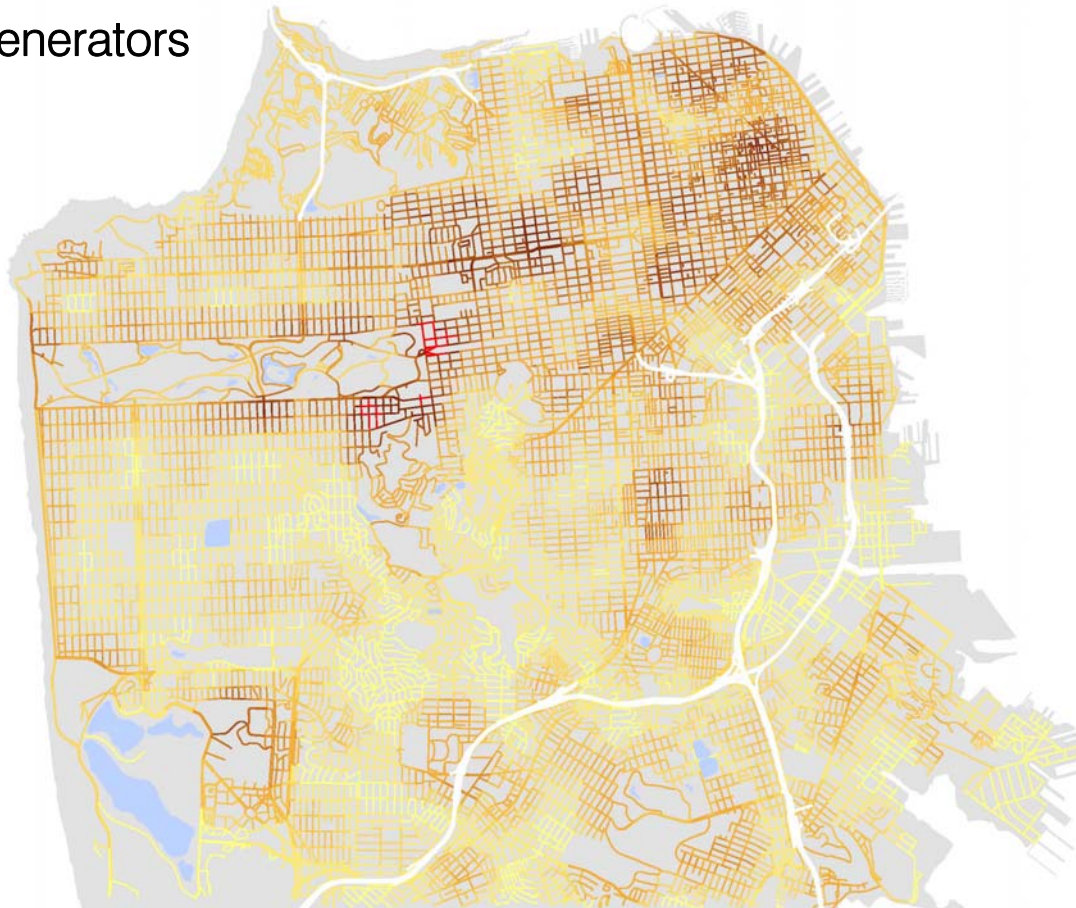
Pedestrian Generators

Scale	< 1/8 mile	< ¼ mile
Regional (e.g. GG Park)	10	7
District (e.g. Alamo Square)	5	3
Local (e.g. Mission Playground)	2	1

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Pedestrian generators



Street segments scored by scale of and proximity to all pedestrian generators, ten breaks

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Transit boardings



Transit stops, by # of daily boardings

Pedestrian Activity – Criteria/Scoring System

Step 2: Determine how to measure each factor; create a score for each category

Transit boardings

Scale	< 1/8 mile	< ¼ mile
Regional (based on # of boardings - TBD)	10	7
District	5	3
Local	2	1

Pedestrian Activity – Criteria/Scoring System

Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- Step 2: Determine how to measure each factor; create a score for each category
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

Pedestrian Activity – Criteria/Scoring System

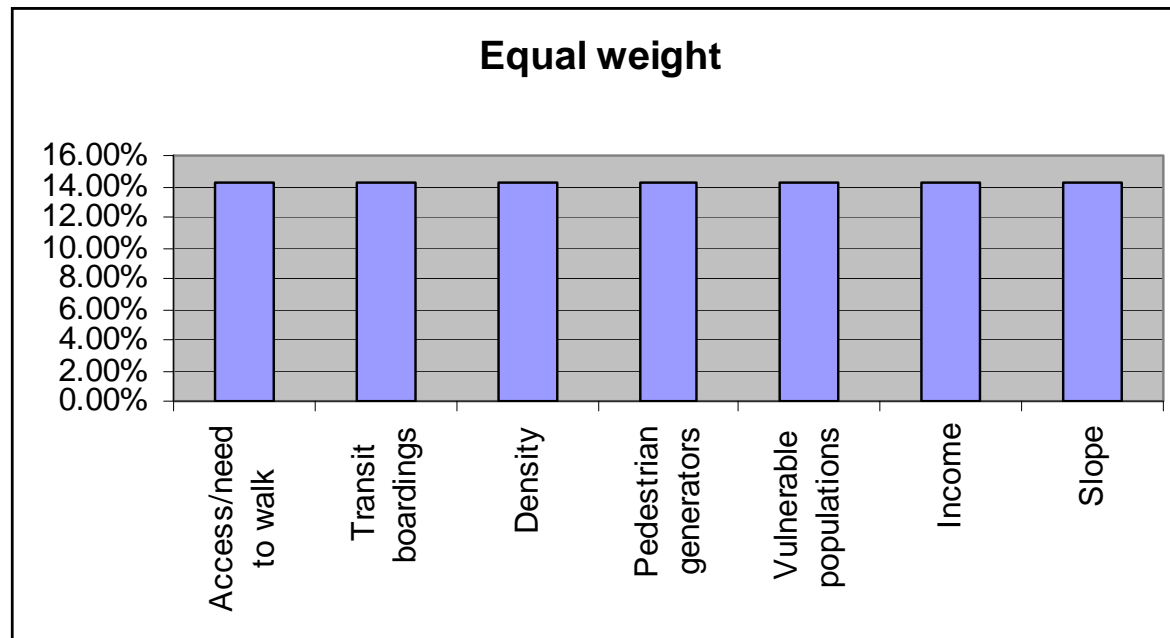
Step 3: Provide relative weights for each category

- Option 1: All categories given equal weight
- Option 2: Relative weights determined by ‘paired comparison’
- Option 3: Modified paired comparison; less extreme peaks and valleys

Pedestrian Activity – Criteria/Scoring System

Step 3: Provide relative weights for each category

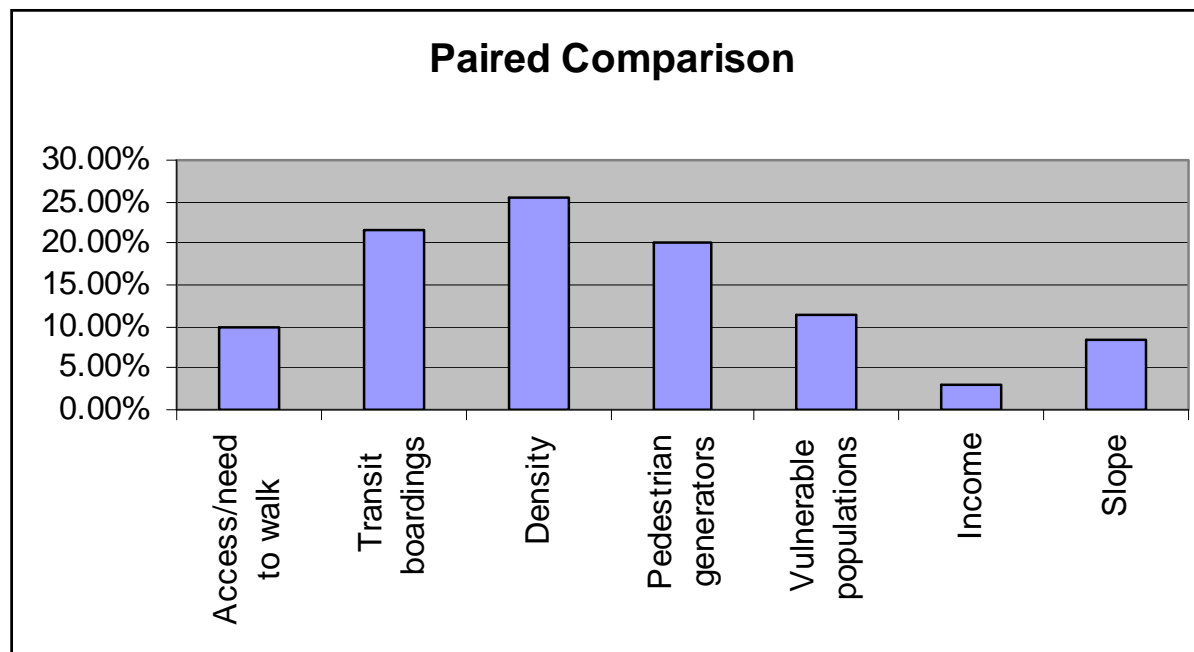
- Option 1: All categories given equal weight
- Option 2: Relative weights determined by 'paired comparison'
- Option 3: Modified paired comparison; less extreme peaks and valleys



Pedestrian Activity – Criteria/Scoring System

Step 3: Provide relative weights for each category

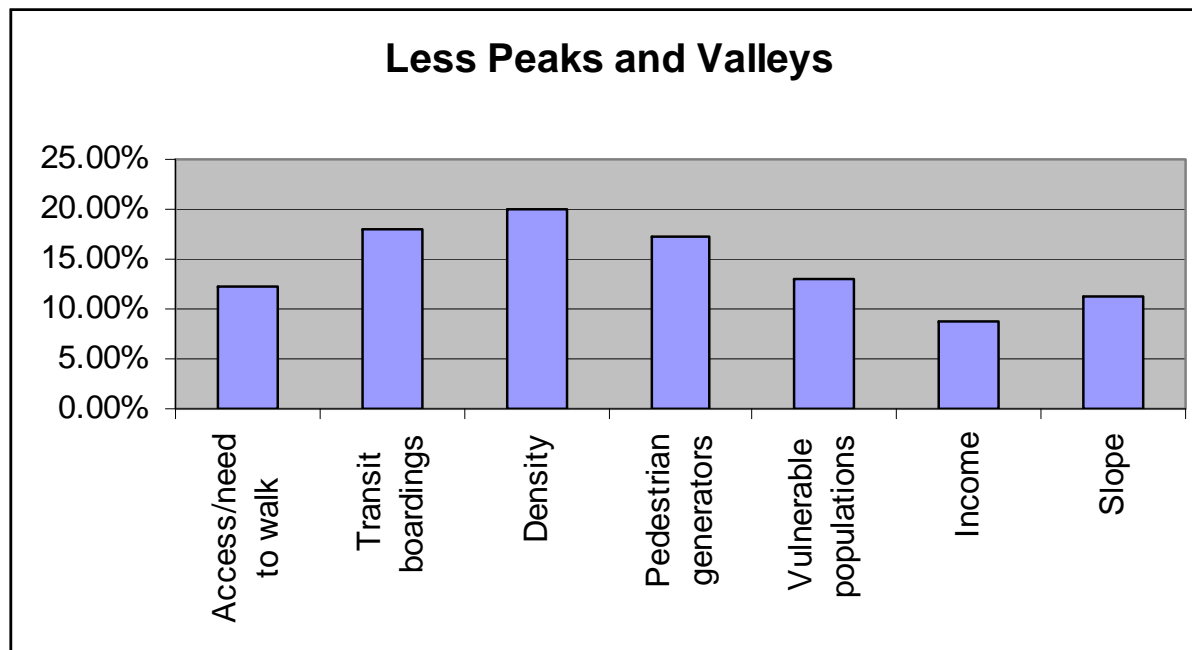
- Option 1: All categories given equal weight
- Option 2: Relative weights determined by 'paired comparison'
- Option 3: Modified paired comparison; less extreme peaks and valleys



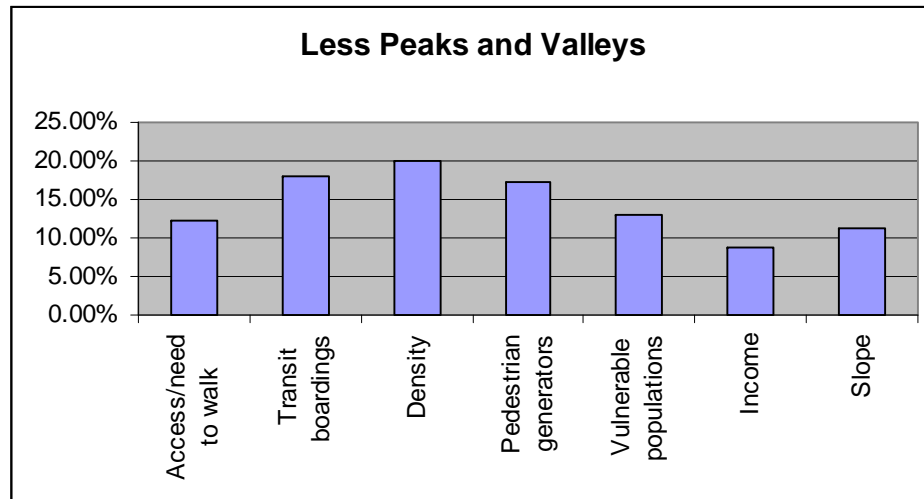
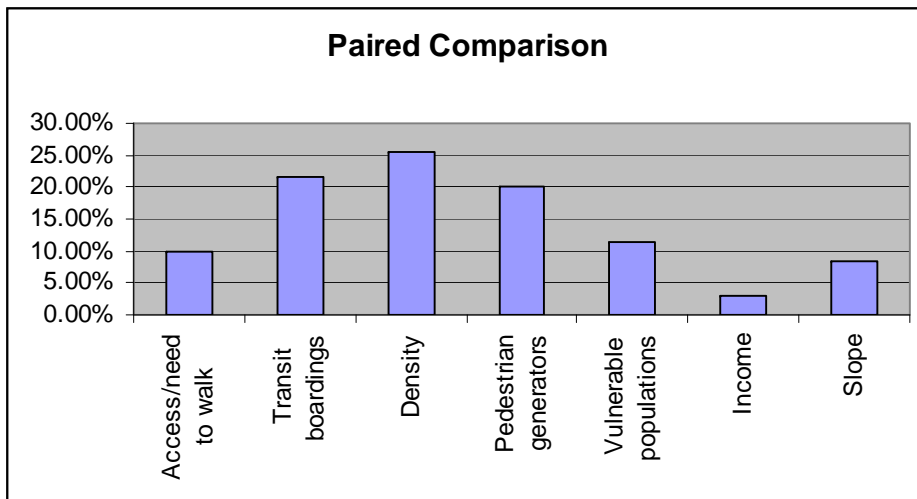
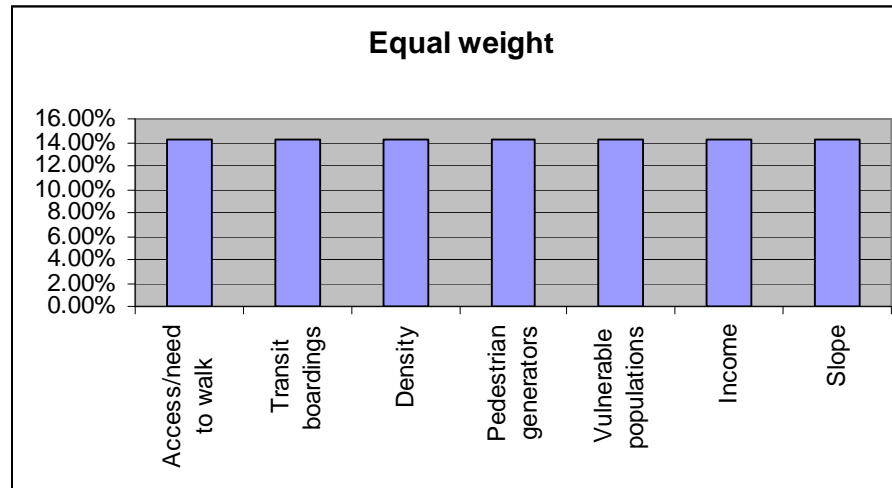
Pedestrian Activity – Criteria/Scoring System

Step 3: Provide relative weights for each category

- Option 1: All categories given equal weight
- Option 2: Relative weights determined by 'paired comparison'
- Option 3: Modified paired comparison; less extreme peaks and valleys



Pedestrian Activity – Criteria/Scoring System



Pedestrian Activity – Criteria/Scoring System

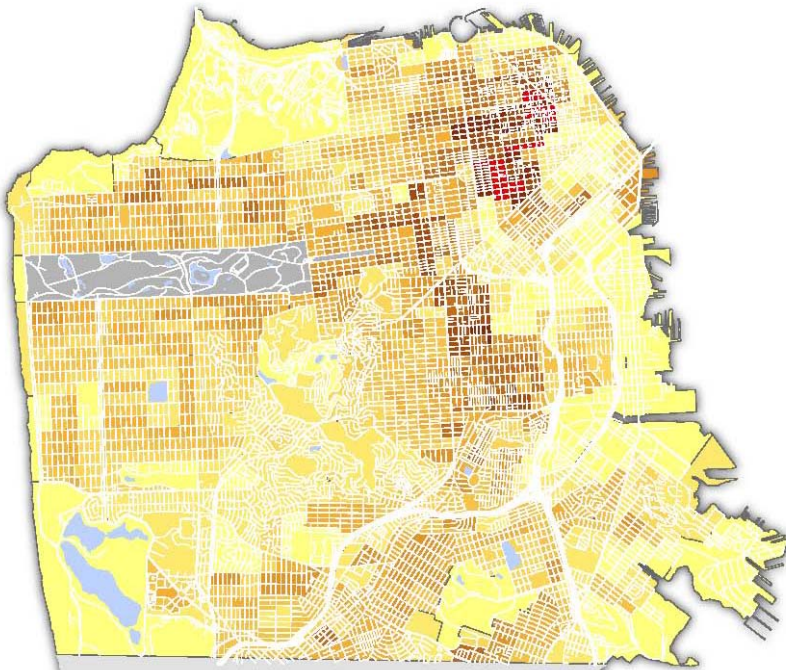
Goal: Identify and map key walking streets in San Francisco

- Step 1: Identify categories of factors that contribute to walking
- Step 2: Determine how to measure each factor; create a score for each category
- Step 3: Provide relative weights for each category
- Step 4: Score each street segment
- Step 5: Refine based on public input and technical judgment
- Step 6: Create a map of key walking streets in San Francisco

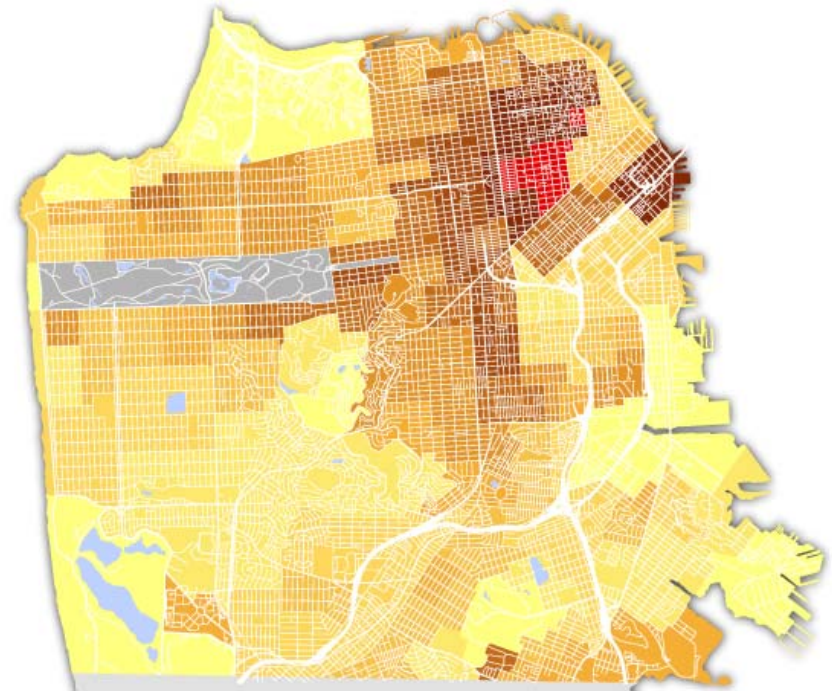
Pedestrian Activity – Criteria/Scoring System

Step 5: Refine based on public input and technical judgment

- Geographic equity; barriers to walking; future conditions



People per acre – present; census block group



People per acre – future (2025 projected); census tract

Thank you!



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



Email us at:
walkfirst@sfgov.org