



# **WALKFIRST** Capital Improvement Program:

A framework for pedestrian improvements in  
San Francisco

Presentation to San Francisco MTA Board of  
Directors

1/29/2014



**SAN FRANCISCO  
PLANNING  
DEPARTMENT**



**SFMTA**  
Municipal  
Transportation  
Agency

## San Francisco Pedestrian Strategy

Prepared by the Mayor's  
Pedestrian Safety Task Force

April 2013

### Vision Statement

San Francisco is the most walkable city in North America. People choose to walk because our streets are lively and safe. Our actions to make walking more attractive will lead people to choose to walk for most short trips. This in turn will help create an efficient, effective transportation system and improve the health and well-being of our residents. San Francisco's status as a great walking city will attract visitors and workers from all over the world to enjoy the vibrant street life and build the economy.

### Goals

1. Reduce serious and fatal pedestrian injuries by 25% by 2016 and by 50% by 2021
2. Reduce serious pedestrian injury inequities among neighborhoods
3. Increase walking and reduce short trips (< 1 mile) taken by car by 25% by 2021.
4. Provide high-quality walking environments

### Key Strategies

- Upgrade 44 miles of streets, 5 miles per year through 2021, to improve pedestrian safety and comfort on key walking streets with high rates of pedestrian injury.
- Give extra crossing time at 800 intersections citywide, at least 160 annually
- Re-engineer streets around at least 5 schools and 2 areas with high numbers of senior injuries annually to increase safety
- Update or create at least nine plazas (installing at least one per year) and request proposals for parklets aiming to install 20 annually, pending demand
- Re-open 20 closed crosswalks by 2021
- Plan Green Connections, a citywide network of 140 miles of green streets to help people walk safely to parks and the waterfront, including six conceptual designs by the end of 2013 and build the entire network by 2032
- Upgrade 13,000 curb ramps in the next 10 years
- Install pedestrian countdown signals at 184 intersections by 2021
- Target enforcement of high-risk behaviors (i.e., speeding, red-light running, failing to yield to pedestrians) on high-injury corridors and intersections, and report quarterly on injury collisions and enforcement
- Pursue state legislation for prioritizing sustainable transportation and targeting enforcement (e.g., speed cameras, congestion pricing, vulnerable user laws)

## Director's Working Group

Controller's Office

SFMTA Livable Streets

Planning Department

DPH



Capital Planning

DPW

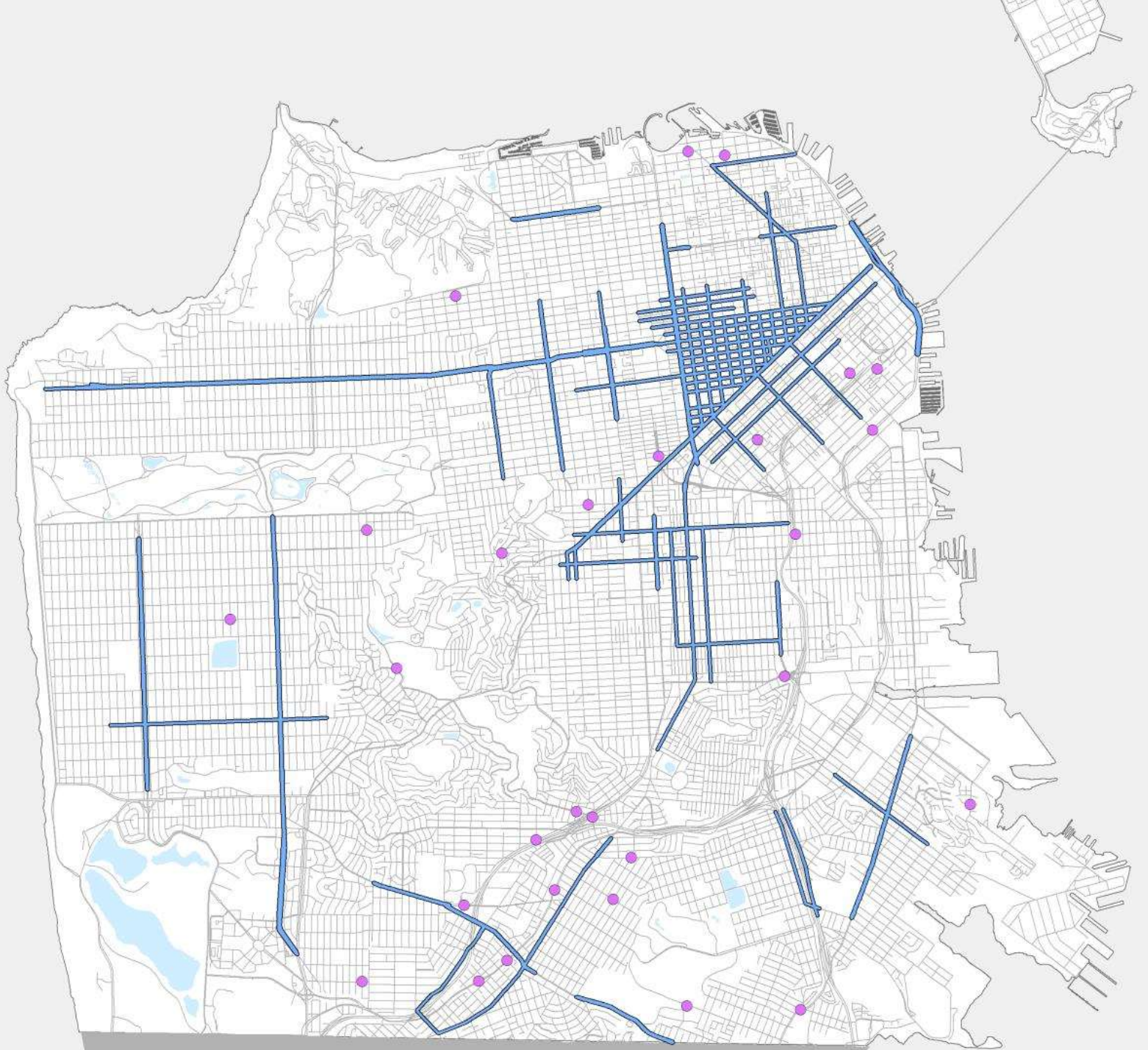
SFCTA

Mayor's Office

SFMTA Technical Experts







## Collision Profiles and Factor Combinations

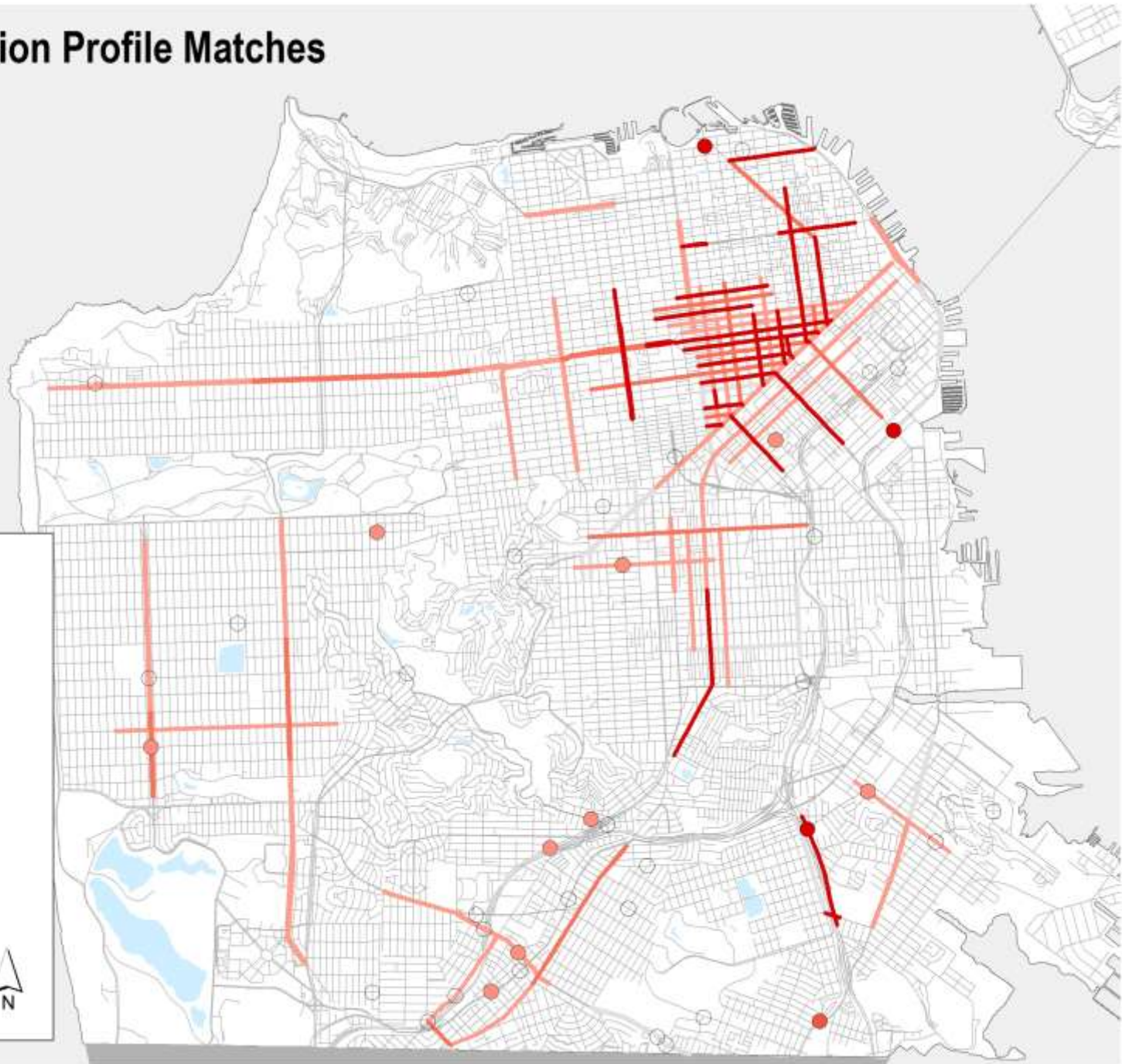
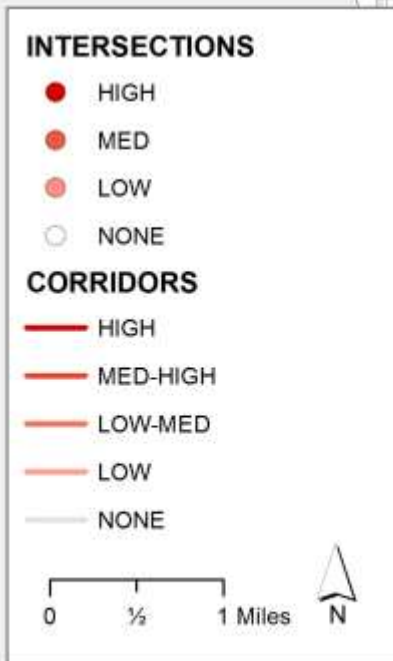
Collision Profile	Factor 1	logic	Factor 2	logic	Factor 3	logic	Factor 4	logic	Factor 5	logic	Factor 6
1 CHILDREN	child victim	AND	near school	OR	census tract with high child concentration	OR	near park				
2 SENIORS	senior victim	AND	near senior center	OR	census tract with high senior						
4A LEFT TURNS AT SIGNALIZED INTERSECTIONS	collision involving left turn				AND	signalized intersection					
5 RIGHT TURNS AT SIGNALIZED INTERSECTION	collision involving right turn	AND	signalized intersection								
7 PEDESTRIAN FACILITIES AT SIGNALIZED INTERSECTION	pedestrian failure to obey traffic signal	AND	signalized intersection	AND	lack of pedestrian countdown signal						
8A COMPLEX INTERSECTIONS	5-leg+	OR	freeway ramps	OR	2 Two-way arterials intersecting						
9A UNCONTROLLED MARKED CROSSWALK ON ARTERIAL	driver failure to yield	AND	marked crosswalk	AND	High Speed	AND	No Traffic Control	OR	Partial Traffic Control		
10a MID-BLOCK WITH CROSSWALK	DRIVER FAILURE TO YIELD ROW	OR	PED FAILURE TO CROSS IN XWALK	AND	MID-BLOCK COLLISIONS	AND	MID BLOCK XWALK = 1	AND	HIGH VEH VOLUME		
11a HIGH SPEED ON BUSY ARTERIAL WITH LOW VEHICLE VOLUME	HIGH SPD	AND	ARTERIAL (2,3)	AND	LOW VEH VOLUME						
11b HIGH SPEED ON BUSY ARTERIAL WITH HIGH VEHICLE VOLUME	HIGH SPD	AND	ARTERIAL (2,3)	AND	HIGH VOLUME						
12 HIGH SPEED ON NON-ARTERIAL STREET	HIGH SPD	AND	DRIVER FAILURE TO YIELD ROW	AND	NON ARTERIAL (4,5)	AND	HIGH VOLUME				
13 PEDESTRIAN BEHAVIOR	PEDESTRIAN VIOLATION (this covers both failure to follow signals and failure to cross in xwalk)										
17C HIGH RISK FACTORS	HIGH VIOLENT CRIME	AND	HIGH VOLUME	AND	HIGH SPD						
18 ALCOHOL USE	DRIVER ALCOHOL	OR	PED ALCOHOL								
19 UNSAFE SPEED	UNSAFE SPEED	OR	SPEED DATA > 30								
20 DRIVER BEHAVIOR	DRIVER FAILURE TO YIELD ROW										



# CHILDREN Collision Profile Matches

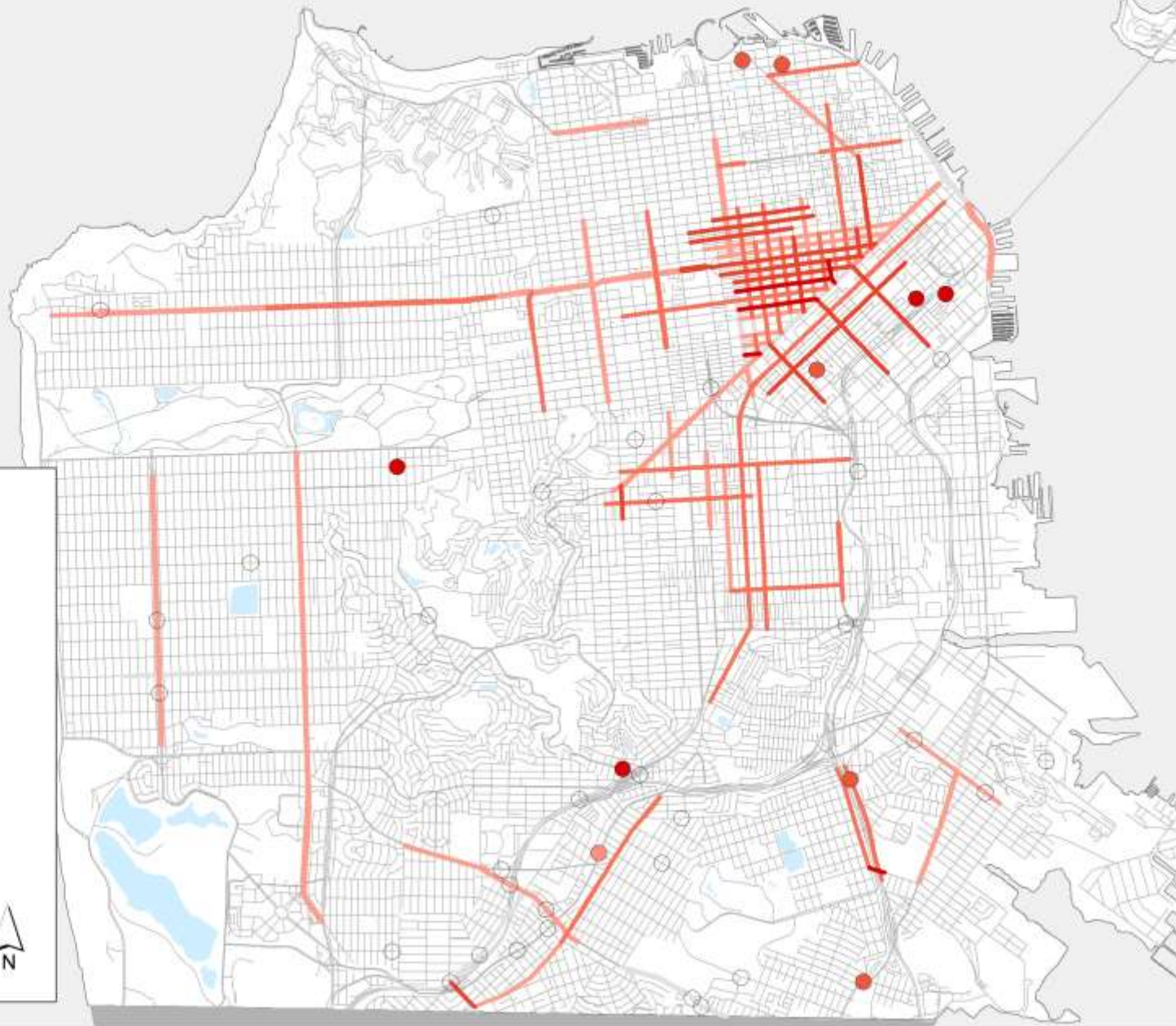
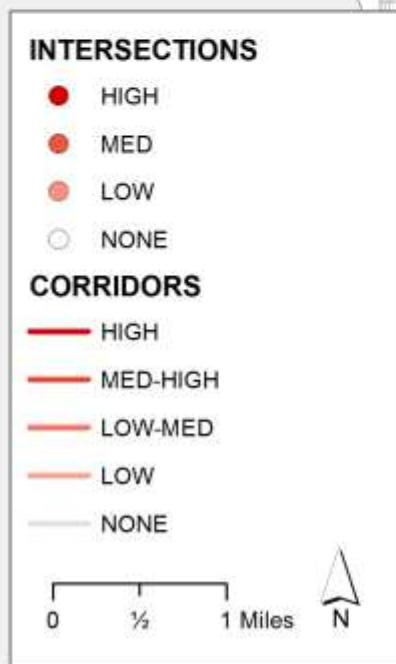


# SENIOR Collision Profile Matches



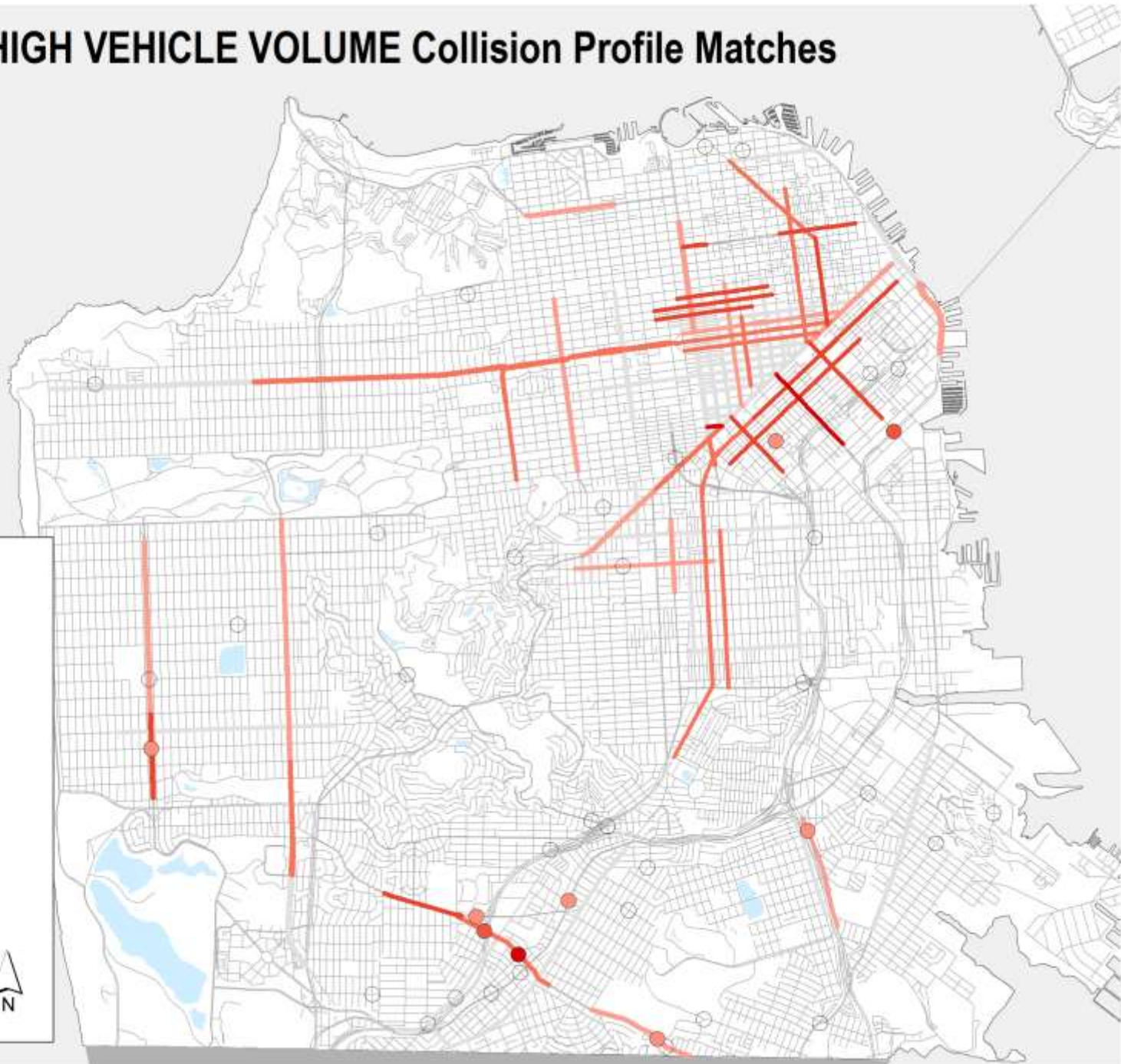
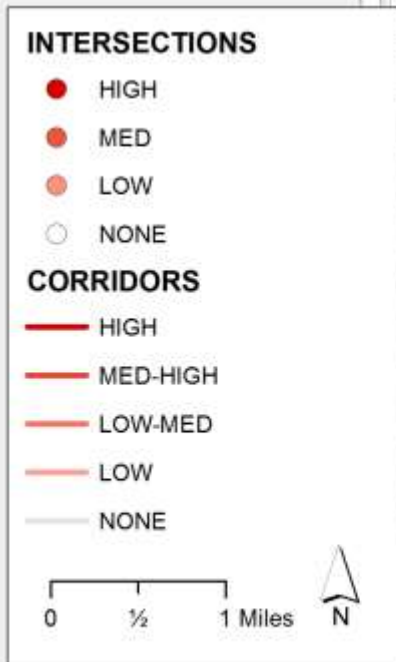


# LEFT TURNS AT SIGNALIZED INTERSECTION Collision Profile Matches

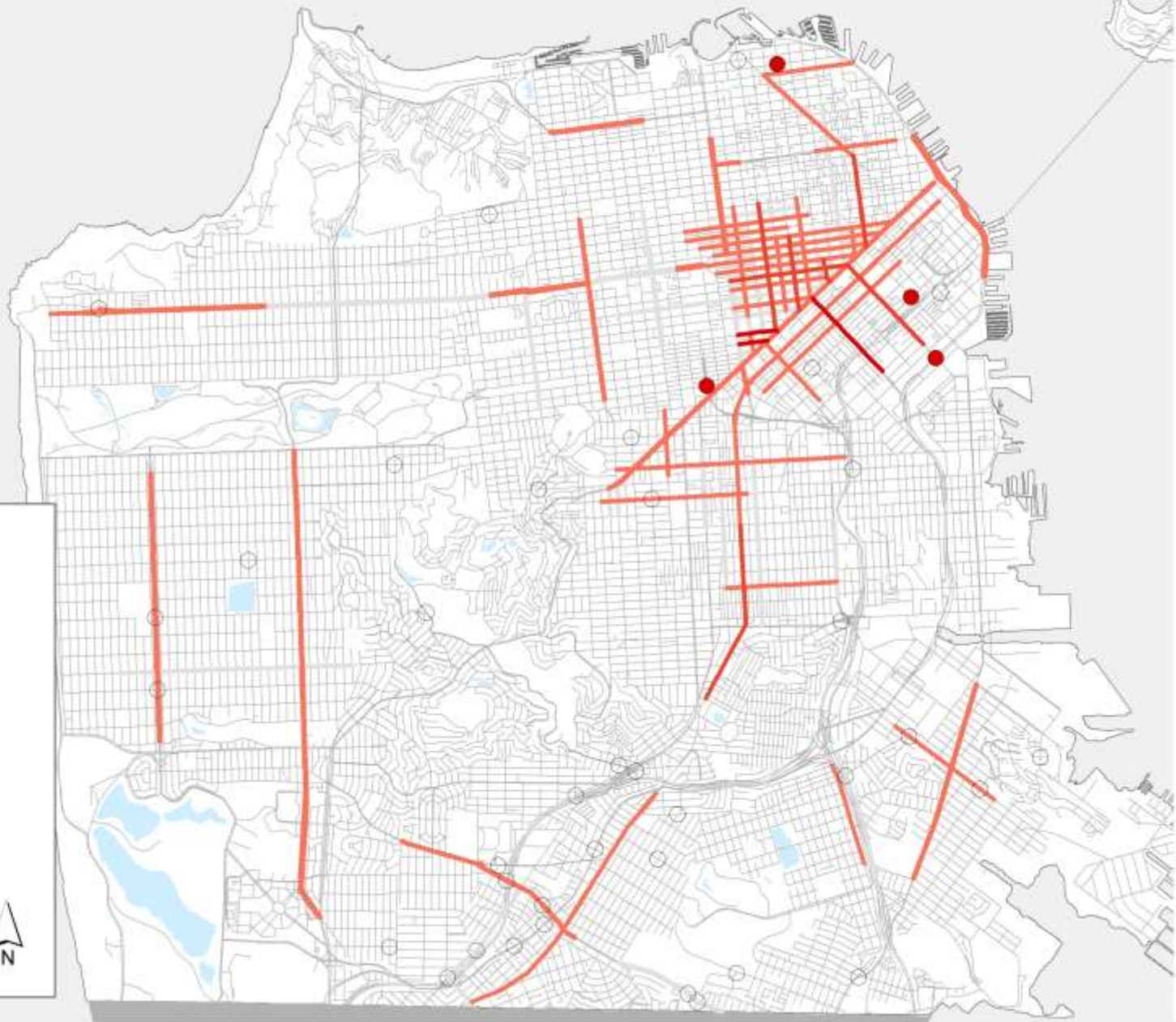
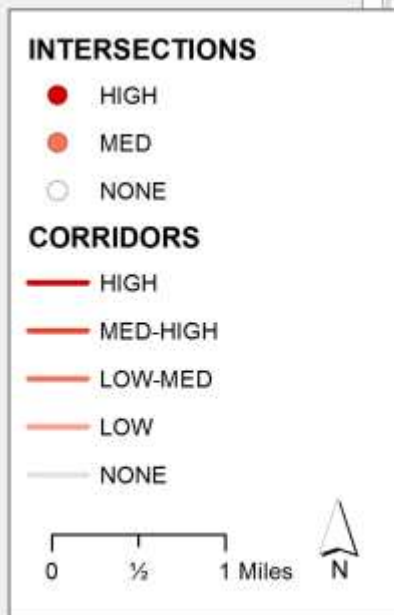




# HIGH SPEED HIGH VEHICLE VOLUME Collision Profile Matches

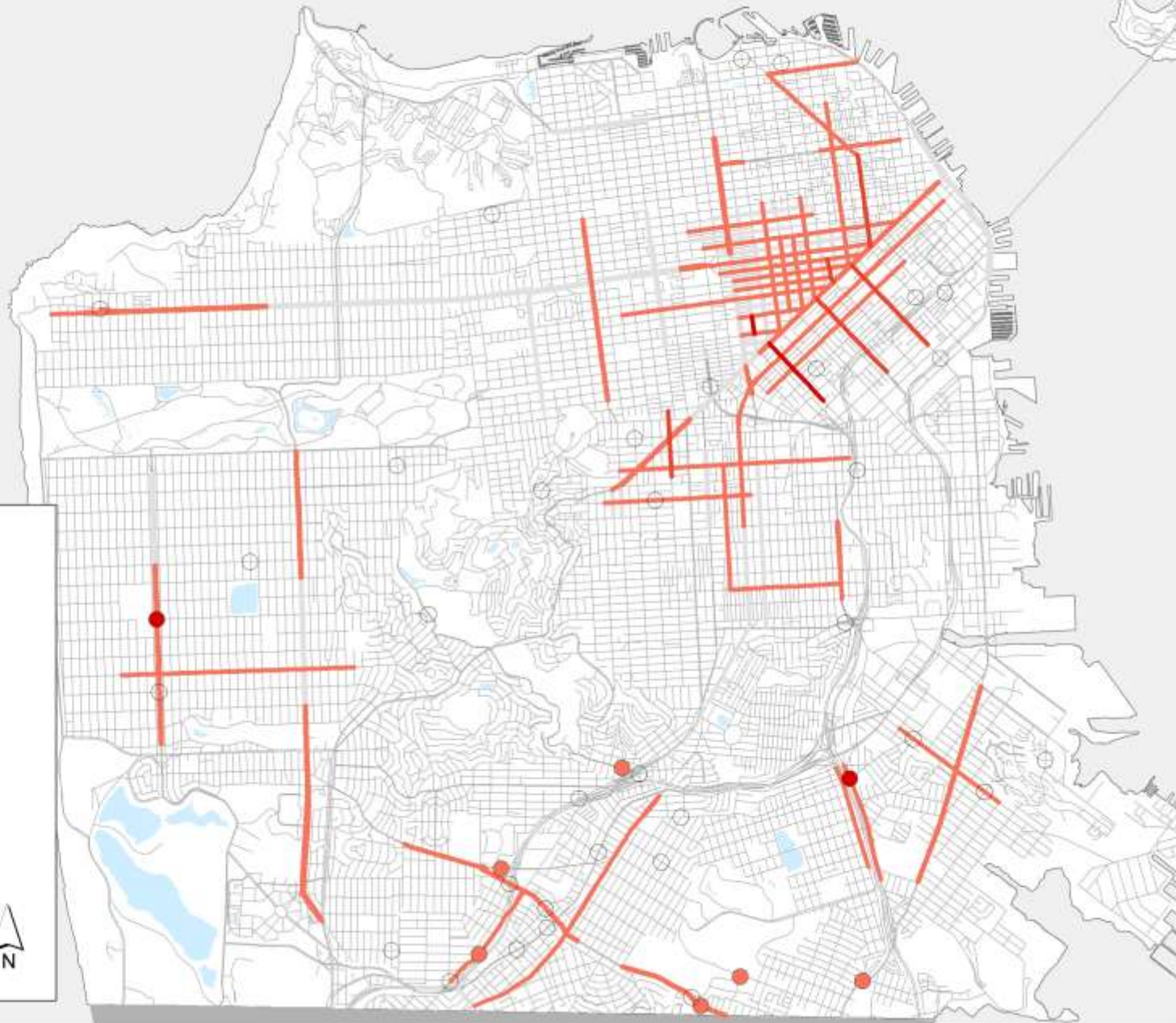
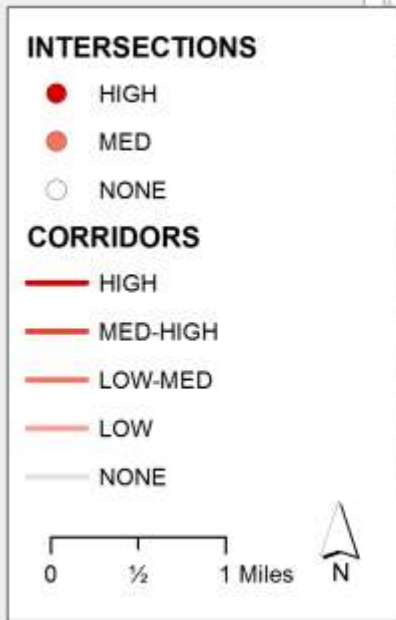


# PEDESTRIAN CROSSING AGAINST SIGNAL Collision Profile Matches





# UNSAFE PEDESTRIAN BEHAVIOR Collision Profile Matches







YOUR SPEED



## Location Scenario

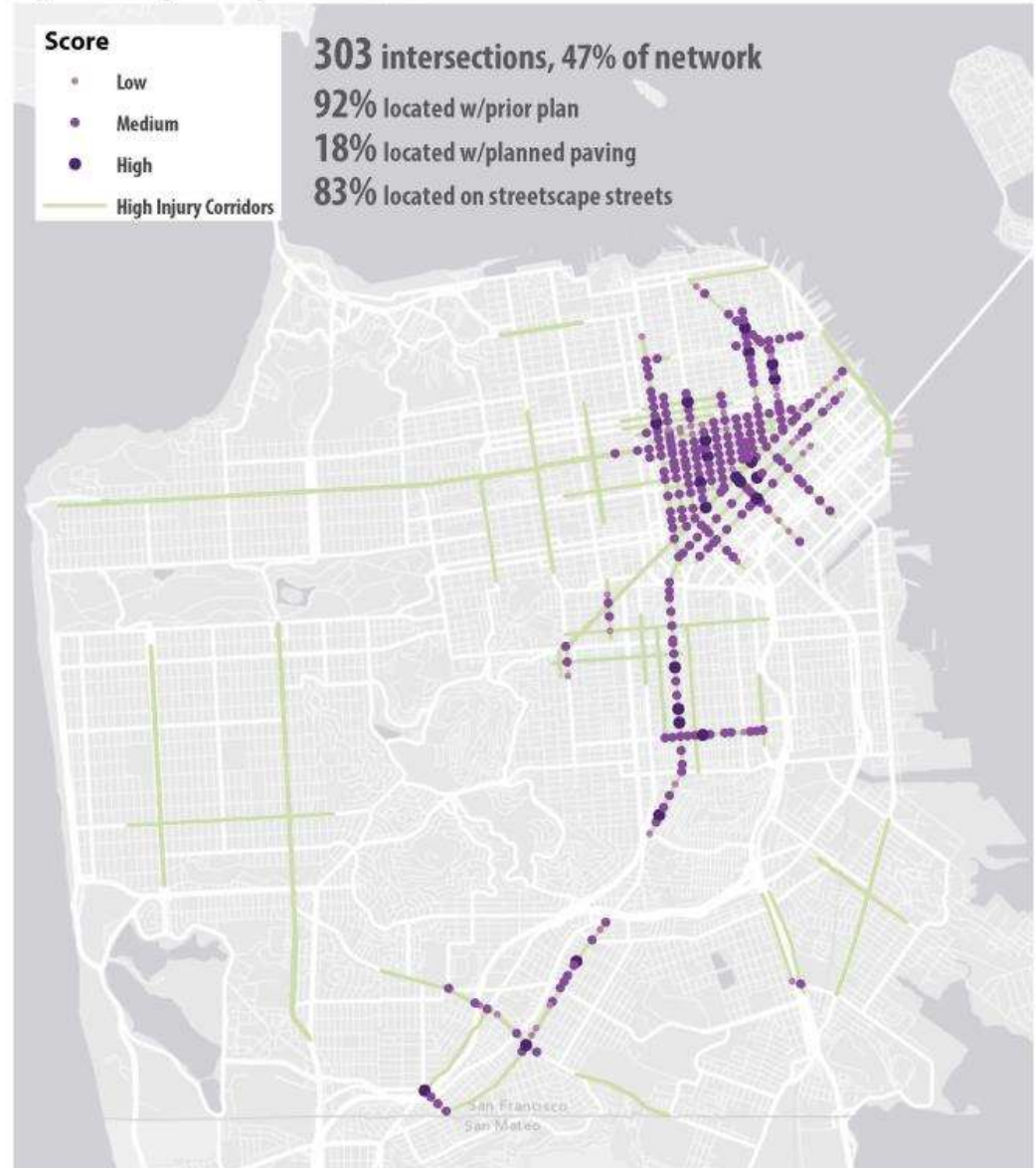
Cost: \$77.8M

Addresses:

- 60% of all injuries on the network
- 56% of severe/fatal injuries
- 43% of injuries to children and older adults

Countermeasures: All

### Injuries Weighted by Prioritization



### Profile Scenario

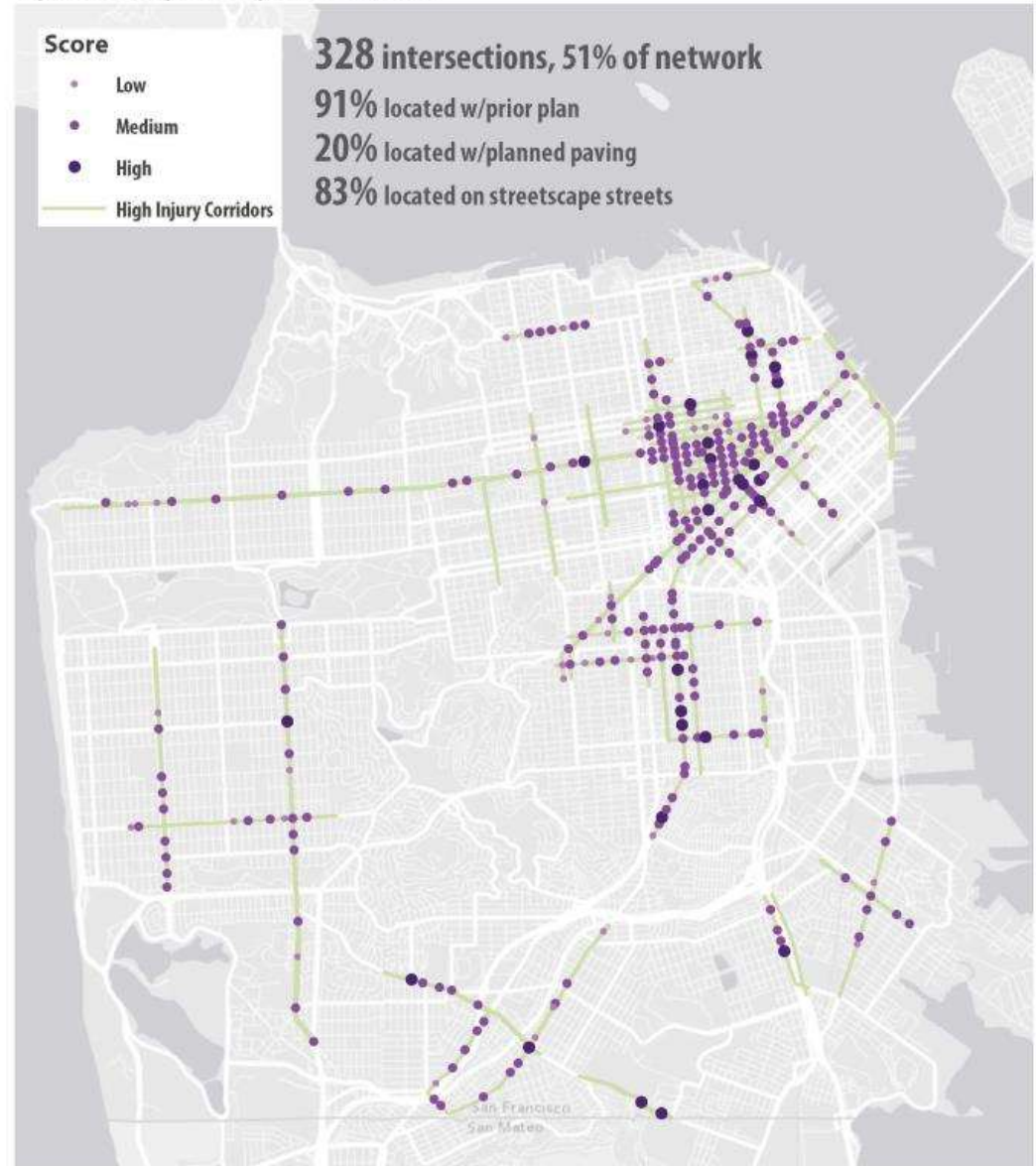
Cost: \$37.9M

Addresses:

- 64% of all injuries on the network
- 68% of severe and fatal injuries
- 57% of injuries to children and older adults

Countermeasures: Most

### Injuries Weighted by Prioritization





## 3 QUICK, CHEAP, EFFECTIVE SCENARIO

### Quick, Cheap, Effective Scenario

Cost: \$6.9M temporary, \$37.9M permanent

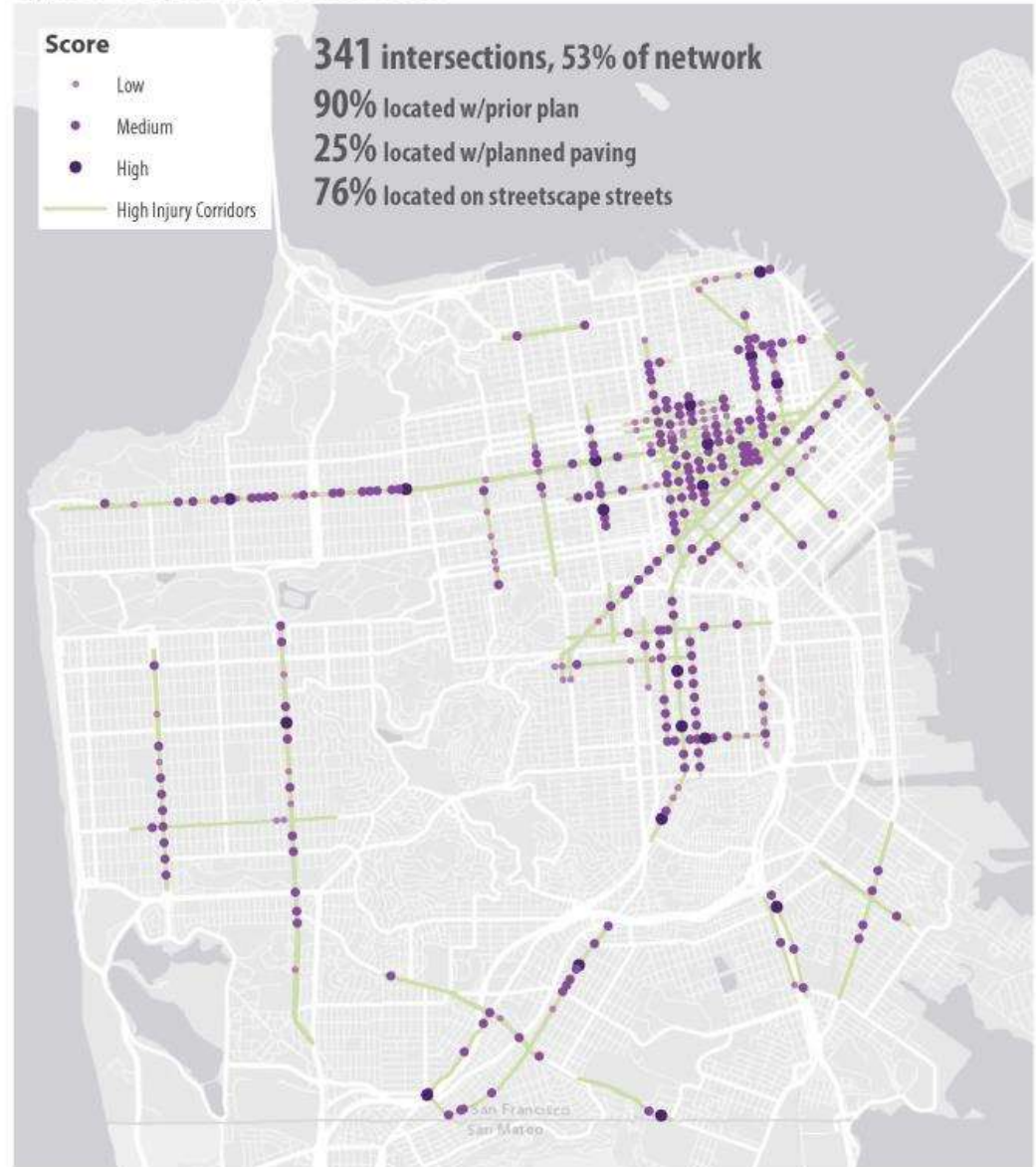
#### Addresses:

- 50% of all injuries on the network
- 51% of severe and fatal
- 54% of injuries to children and older adults

#### Countermeasures:

- Chokers
- Corner bulbs
- Leading pedestrian intervals
- Pedestrian refuge islands
- Radar speed display signs
- Reduced lane widths

#### Injuries Weighted by Prioritization



## Preferred Scenario

Cost: \$8.5M temporary, \$74.4M permanent

### Addresses:

56% of all injuries

71% of severe and fatal injuries

52% of injuries to children and older adults

Countermeasures: Most

