



Understanding the Vision behind 'Zero' Traffic Fatality Frameworks:

A Teleconference for Active Transportation Program (ATP) Awardees and Other Pedestrian and Bicycle Safety Practitioners

We will begin at 10:00 am



Caltrans ATRC

- ATRC provides resources utilizing a combination of subject experts from Caltrans, California Department of Public Health, California State University Sacramento, and various other Non-Infrastructure, Safe Routes to School, and Infrastructure experts.
- ATRC exists to support Caltrans Active Transportation Program (ATP) awardees at the local and regional levels.

Today's Speakers

- **Leah Shahum**, Founder and Director, Vision Zero Network
- **Megan Wier**, Director, Program on Health, Equity & Sustainability, San Francisco Department of Public Health, and Co-Chair, San Francisco Vision Zero Task Force
- **Victoria Custodio** (Facilitator), ATRC Non-Infrastructure Technical Assistance Team Lead, Safe and Active Communities Branch, California Department of Public Health

Learning Objectives

- Understand the fundamentals/principles of Vision Zero
- Learn how Vision Zero relates to and differs from traditional traffic safety approaches
- Learn how Vision Zero and ATP efforts have been strategically leveraged to advance both local and state active transportation safety goals

Background/Context

- State of California Transportation and Traffic Safety Agencies have integrated *Toward Zero Death* into Strategic Management Plans and Strategic Highway Safety Plans.
- Vision Zero has primarily been an international, U.S national, and local city initiative to-date.
- ATP funds local cities, including some who are co-branding their ATP-funded projects as Vision Zero efforts.
- Recent approved bill AB-2363 requires a new *Zero Traffic Fatalities Task Force* to examine priorities and practices for legislative consideration.

Quick Poll of Attendees

- In which field do you work?
- Engineering
- Planning
- Public Health
- Law Enforcement
- Other

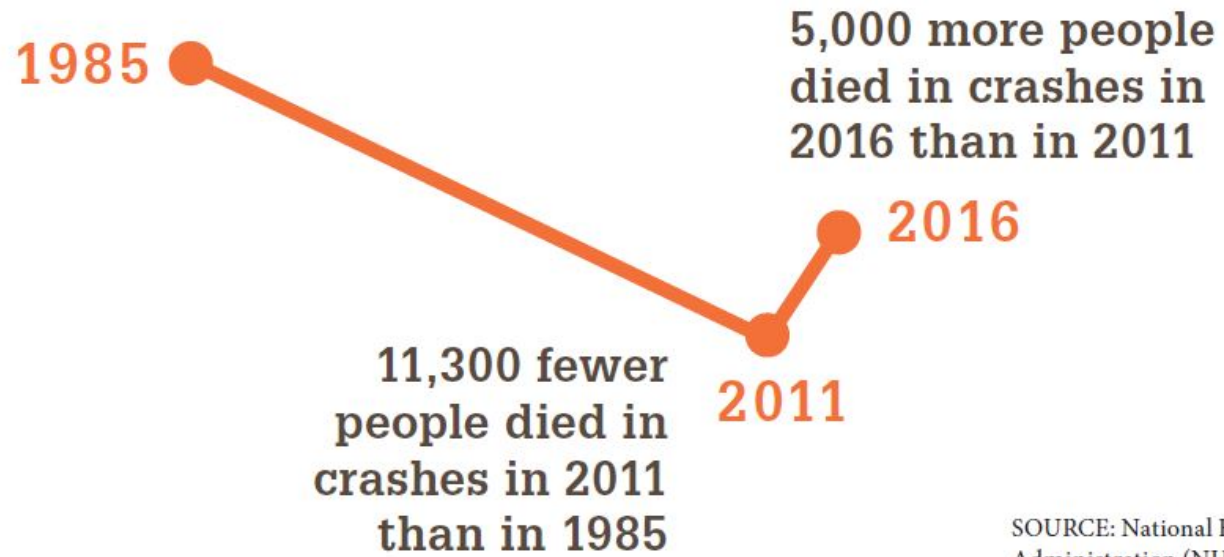
Welcome, Leah and Megan!



Vision Zero: Moving from Vision to Action



VISION44NETWORK



SOURCE: National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS).

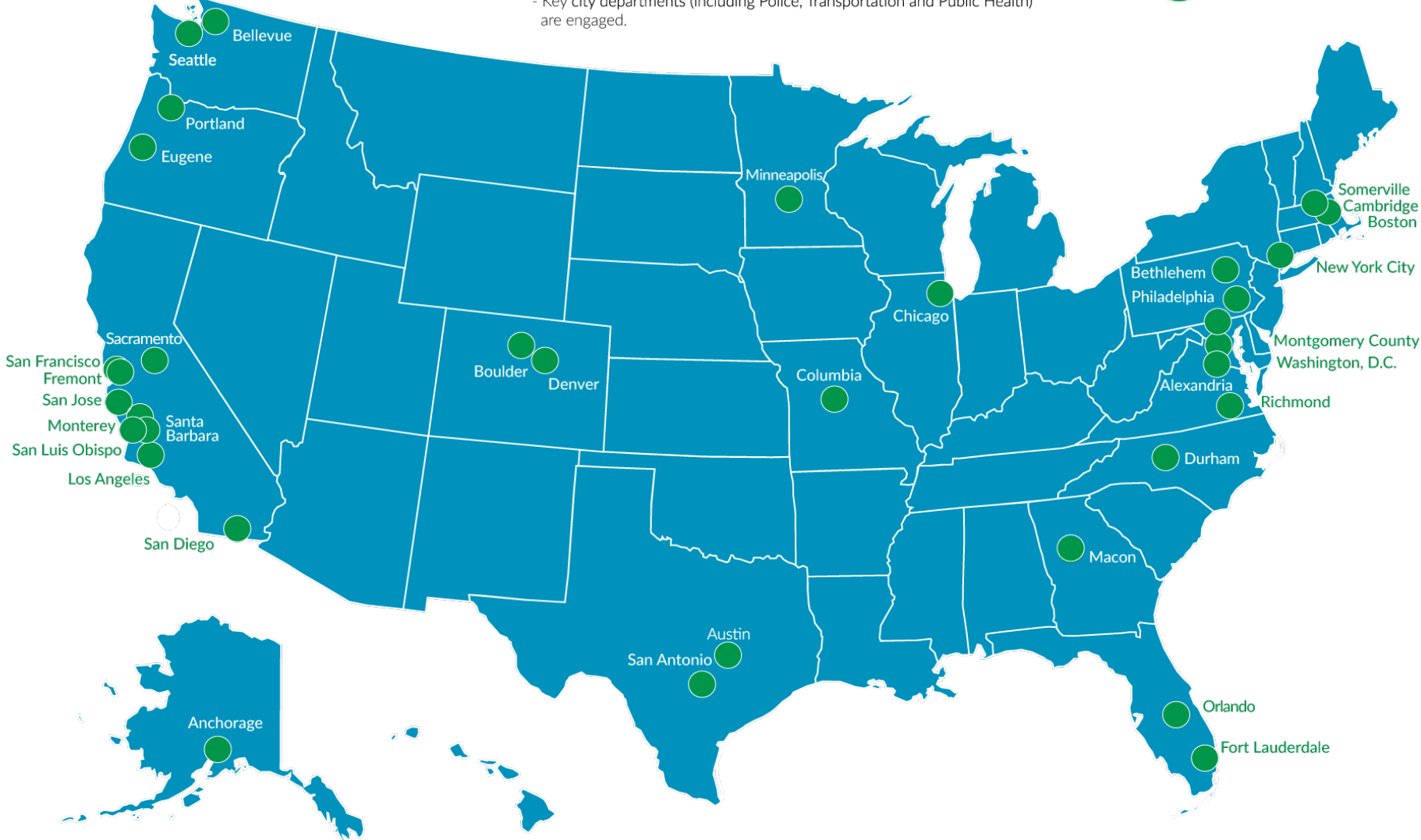


VISION44RNETWORK

Vision Zero Cities

A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.





Acknowledges that traffic losses are *preventable*

Takes *systems approach* to prevention

Is data-driven

Not all E's are created equal

Leadership = essential!

VISION 44:0 NETWORK

CRASH

ACCIDENT

VISION 440 NETWORK



Acknowledges that traffic losses are *preventable*

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VISION 44:0 NETWORK

The Spectrum of Prevention

Influencing Policy & Legislation

Changing Organizational Practices

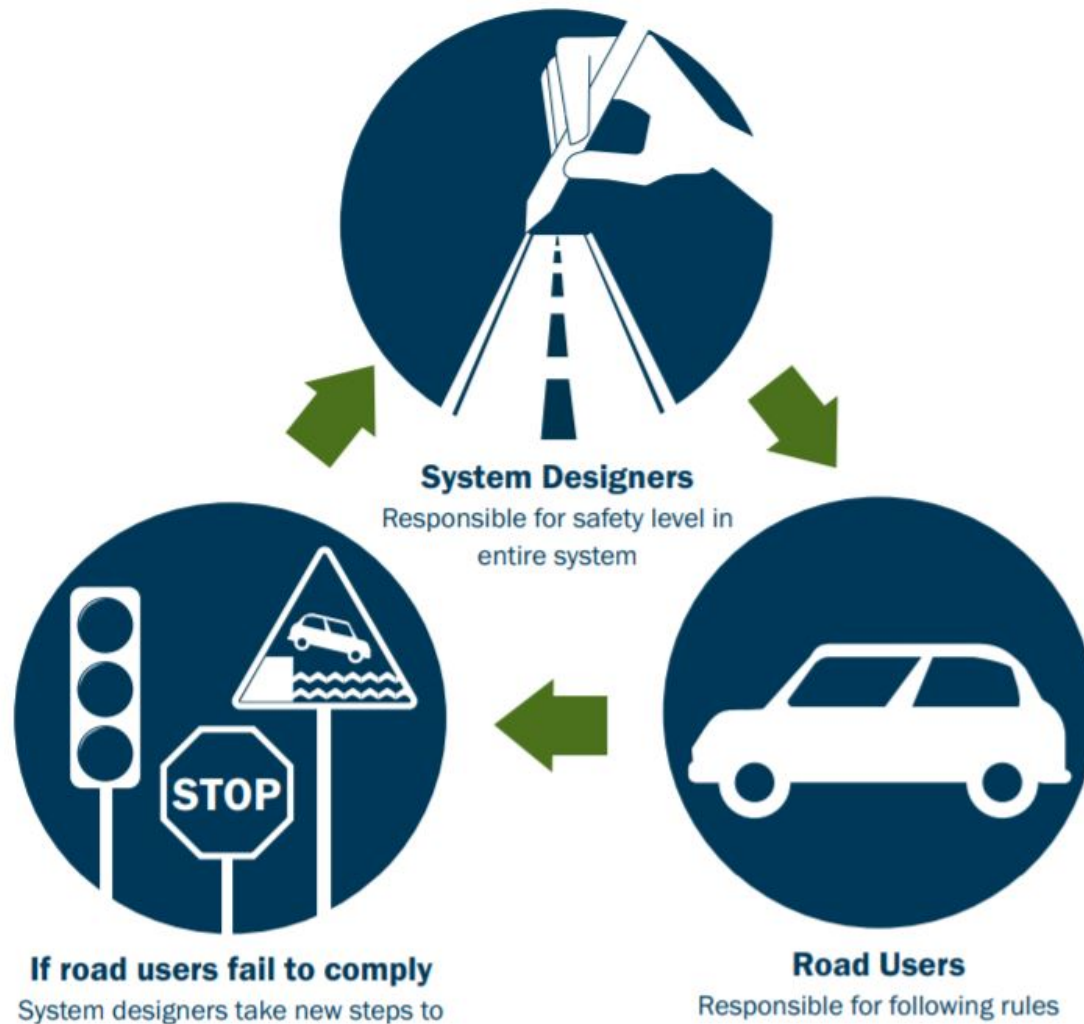
Fostering Coalitions & Networks

Educating Providers

Promoting Community Education

Strengthening Individual Knowledge & Skills

Vision Zero Ethical Platform



VISION 44:0 NETWORK



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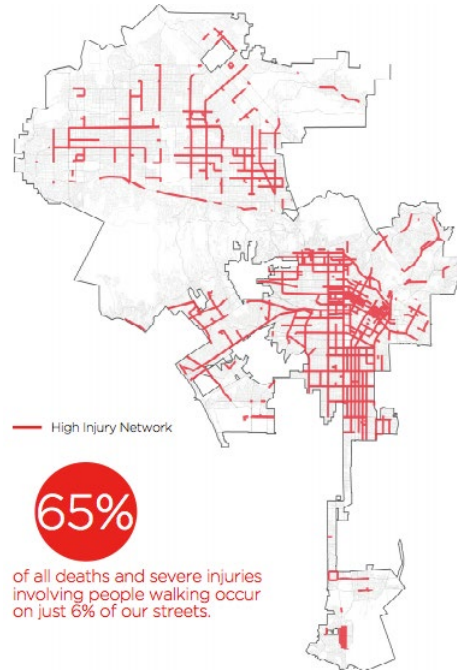
Not all E's are created equal

Leadership = essential!

VISION 44:0 NETWORK

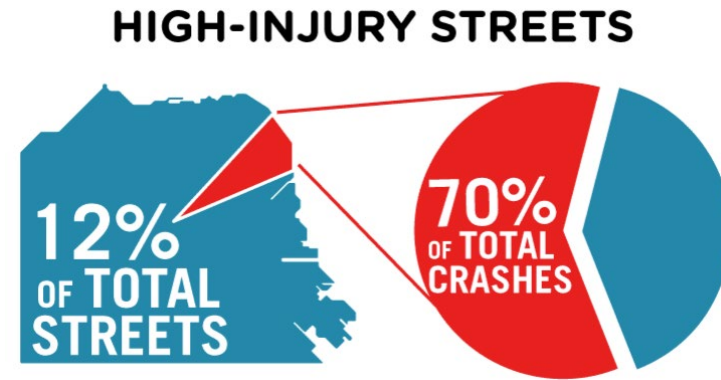
Data: Death and serious injury concentrated on small % streets

Los Angeles



of all deaths and severe injuries involving people walking occur on just 6% of our streets.

San Francisco



Denver

50% of Denver's traffic fatalities occur on just 5% of our streets.

Data: Not all Communities' Safety is Treated Equitably

People Killed While Walking by Income



Governing, August 2014

© 2015 Safe Routes to School National Partnership

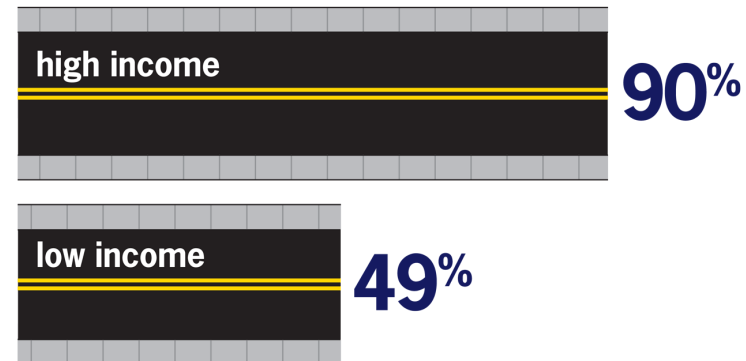
People Killed While Walking by Race



Governing, August 2014

© 2015 Safe Routes to School National Partnership

Communities with Sidewalks



Bridging the Gap, *Income Disparities in Street Features that Encourage Walking*, 2012

© 2015 Safe Routes to School National Partnership

Safe Systems, *not traffic stops*





Acknowledges that traffic losses are *preventable*

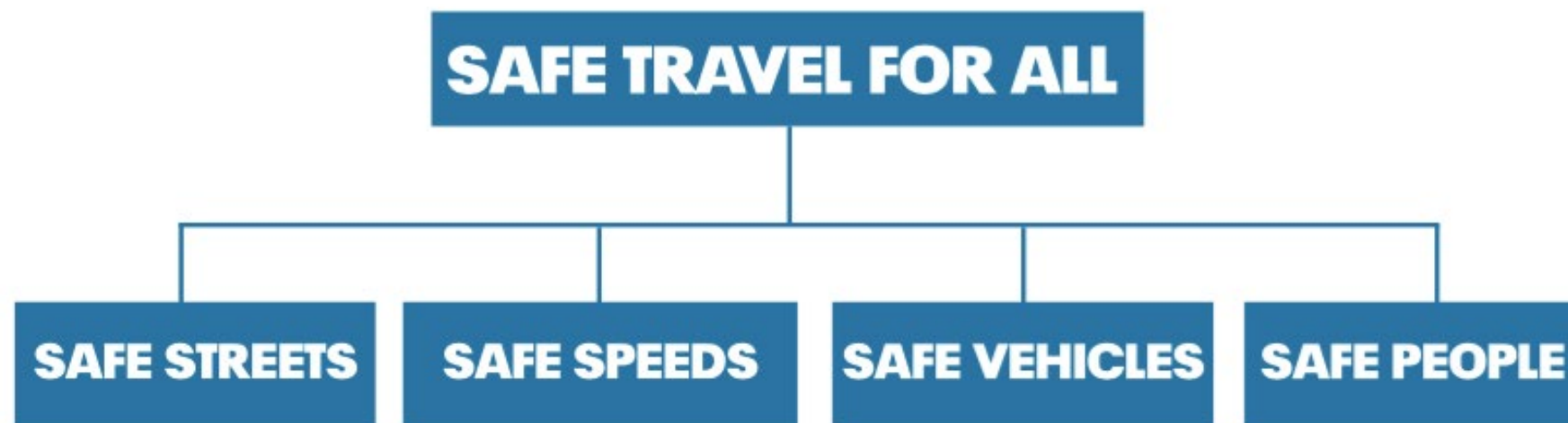
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VISION 44:0 NETWORK



VISION 44:0 NETWORK

Focus on Roadway Redesign & Managing Speed



VISION 440 NETWORK



VISION 440 NETWORK



VISION 4 IR NETWORK



VISION 440 NETWORK



VISION 44: NETWORK



VISION 44:0 NETWORK



Vision Zero Success = Managing Speed for Safety

A yellow hexagonal outline containing the text 'SAFE STREET DESIGN'. 'SAFE' and 'STREET' are in blue outline font, and 'DESIGN' is in solid blue font.

SAFE
STREET
DESIGN

A yellow hexagonal outline containing the text 'SAFE SPEED LIMITS'. 'SAFE' and 'LIMITS' are in blue outline font, and 'SPEED' is in solid blue font.

SAFE
SPEED
LIMITS

A yellow hexagonal outline containing the text 'AUTOMATED SPEED ENFORCEMENT'. 'AUTOMATED' and 'ENFORCEMENT' are in blue outline font, and 'SPEED' is in solid blue font.

AUTOMATED
SPEED
ENFORCEMENT

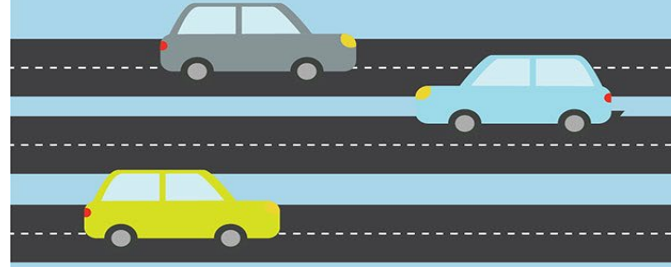
VISION 44:0 NETWORK

Fremont, CA

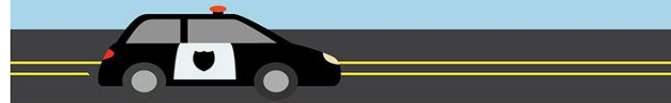


VISION 440 NETWORK

SPEEDING
FATALITY RATES
ON LOCAL ROADS ARE



3X
HIGHER



THAN ON HIGHWAYS

VISION 4 ZERO NETWORK

SOURCE: INSURANCE INSTITUTE FOR HIGHWAY SAFETY, IIHS.ORG

VISION 4 ZERO NETWORK

SPEED CAMERA PROGRAMS



ON LOCAL ROADS

COULD HAVE PREVENTED
>22,000
DEATHS OR INJURIES
NATIONWIDE IN 2015



VISION44RONETWORK

SOURCE: INSURANCE INSTITUTE FOR HIGHWAY SAFETY, IIHS.ORG

NYC



VISION44RONETWORK



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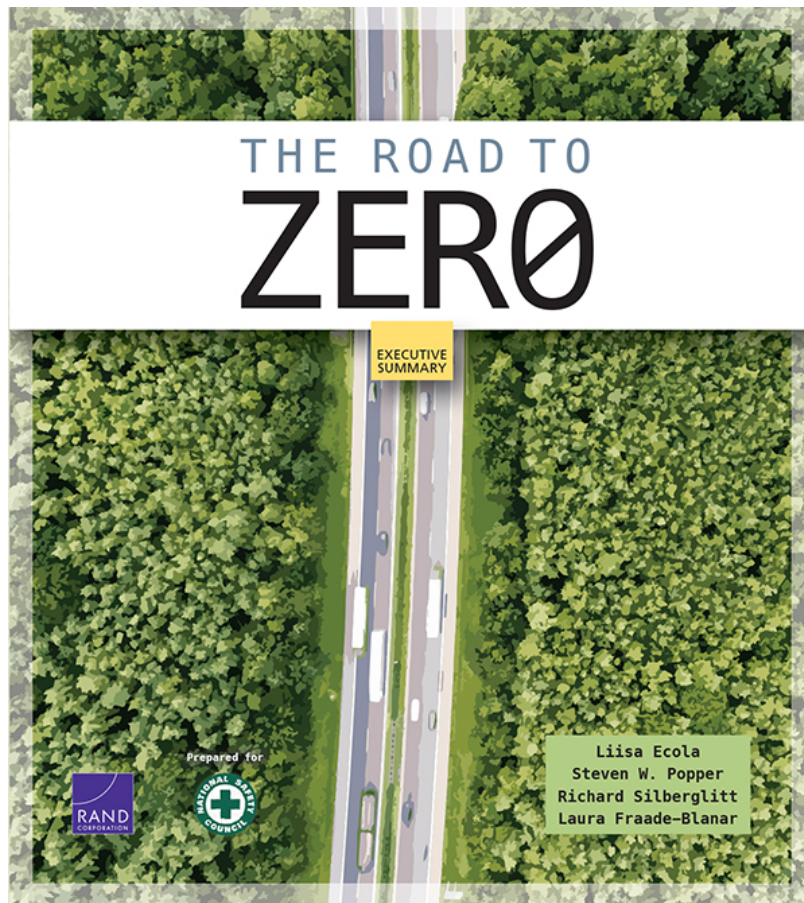
VISION 44:0 NETWORK



VISION 440 NETWORK

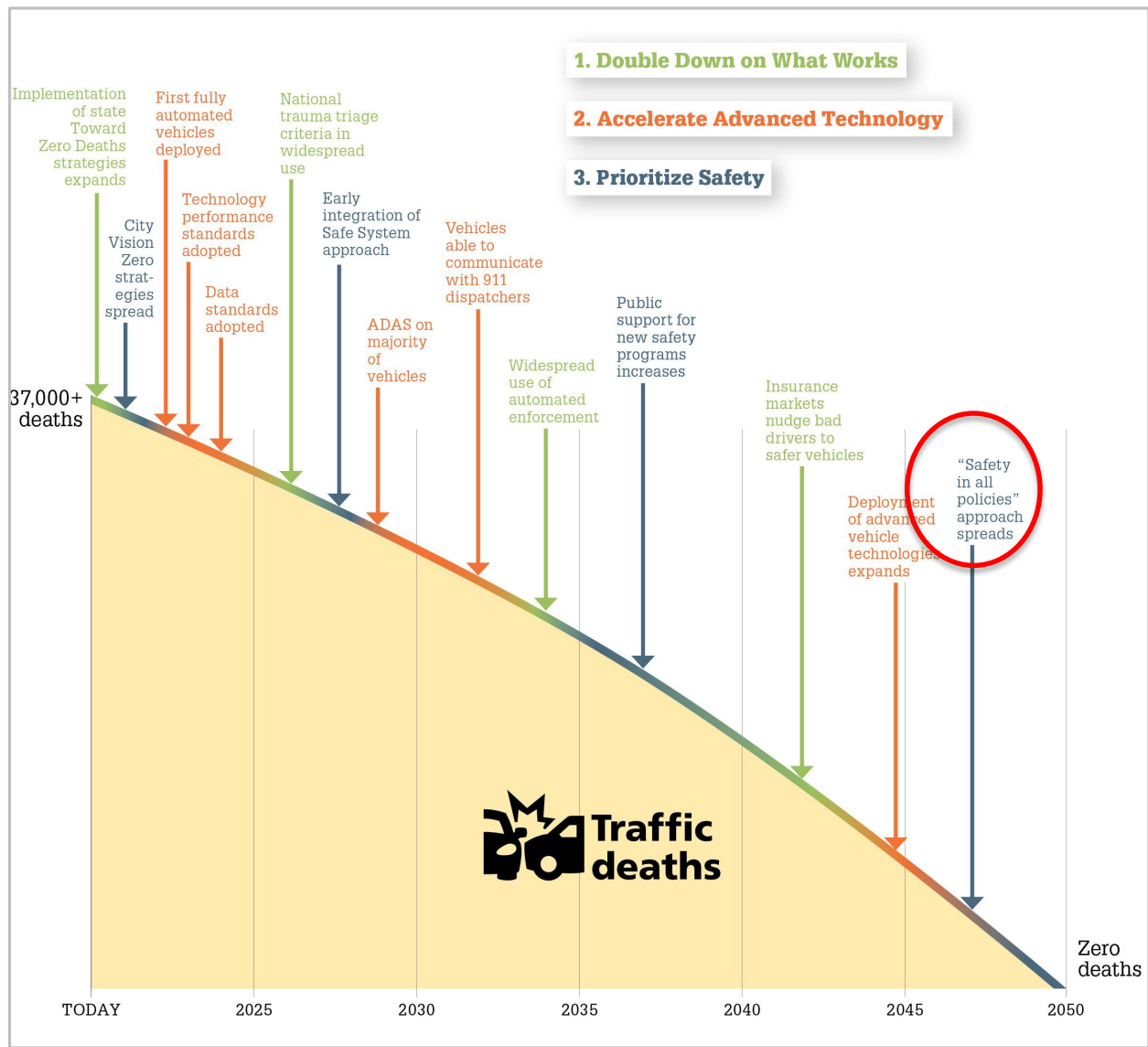
Road to Zero Report, April 2018

www.visionzeronetwork.org/roadtozero



Safe Systems approach =
Turning traditional thinking on its head – instead of seeing humans as the offenders, responsible for most crashes because of their bad habits, planners and engineers began thinking that the system itself should be safe.

ROAD TO ZERO



- 1. Double Down on What Works
- 2. Accelerate Advanced Technology
- 3. Prioritize Safety

Double Down on What Works

Accelerate Advanced Technology

Prioritize Safety

Safety in All Policies



Contact

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VISION 44:0 NETWORK



Through Vision Zero SF we commit to working together to prioritize street safety and eliminate traffic deaths in San Francisco.

VISION ZERO SF: LEADING WITH DATA TO SAVE LIVES AND ADVANCE EQUITY

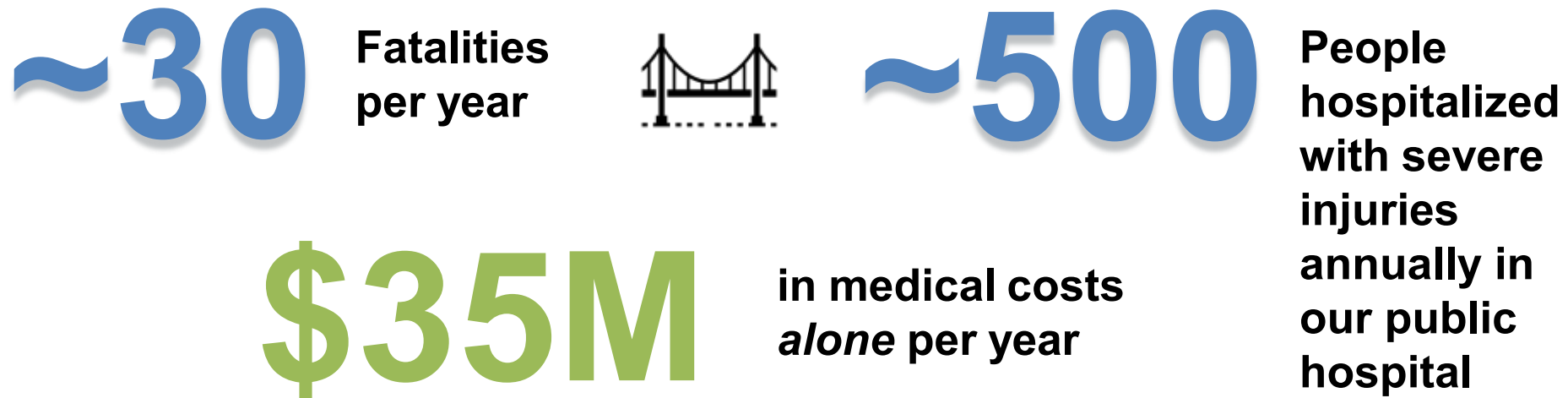


POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

October 26, 2018

Active Transportation Resource Center Webinar

TRAFFIC INJURY IN SAN FRANCISCO: A PUBLIC HEALTH PROBLEM



On average, City Trauma Surgeons respond to a serious traffic injury **every 17 hours**.

~50% of the patients seen at **Zuckerberg San Francisco General's Trauma Center** *are people injured in traffic collisions.*

IN MEMORIAM



Sofia Liu, Age 6

Thursday, February 13, 2014

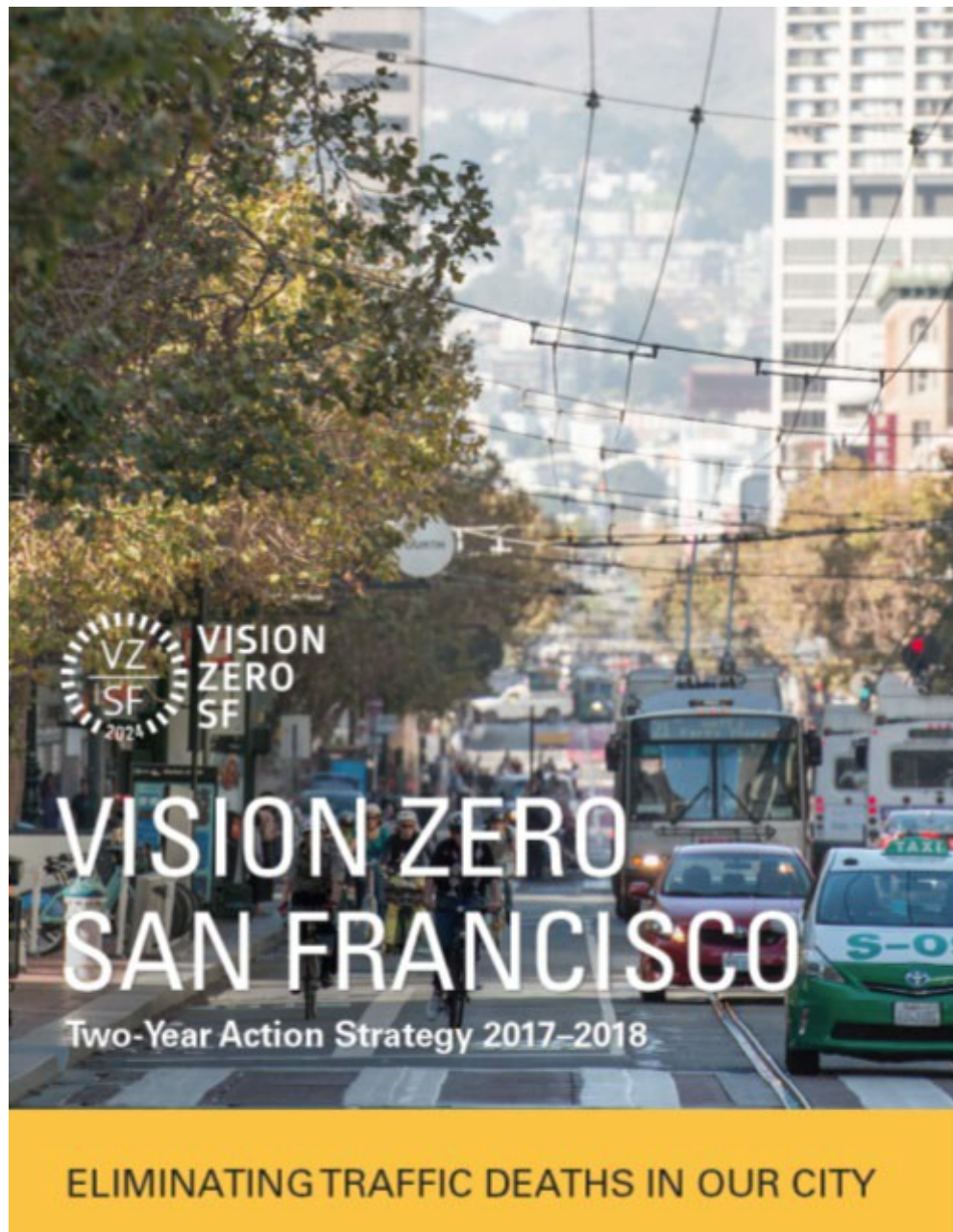
18 Comments

Supes, SFPD, SFMTA Stand With Crash Victims and Advocates at City Hall

by Aaron Black

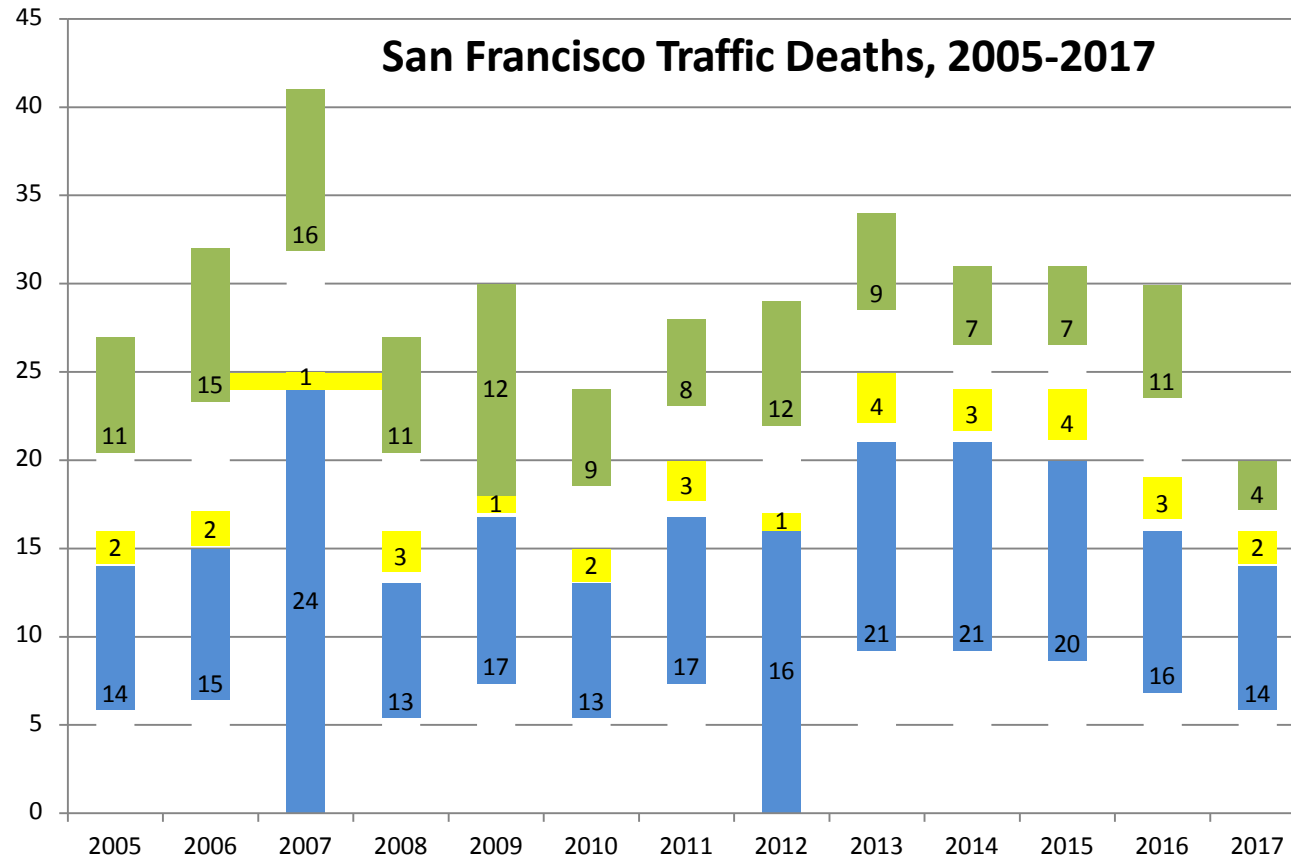


Crash survivor Monique Porsandeh speaks alongside Walk SF Executive Director Nicole Schneider and city officials holding the names of those killed by drivers. Photos: Walk SF



- In 2014, the City and County of San Francisco adopted Vision Zero as a policy.
- **Vision Zero** is the city's commitment to creating safer, more livable streets with the goal of **eliminating all traffic fatalities and reducing severe injuries.**

TRAFFIC DEATHS IN SAN FRANCISCO



Lowest number of deaths in recorded history

Downward trend for pedestrian deaths since 2014

- People Killed in Vehicles
- People Killed While Biking
- People Killed While Walking

NOTE: 2005-2012 deaths from SWITRS data, restricting to San Francisco City Streets jurisdiction, including streets that intersect with freeways (i.e., fatalities occurring at freeway ramps in the City jurisdiction). 2013 traffic deaths from SFPD. 2014-2017 traffic deaths reported using the Vision Zero Traffic Fatality Protocol based on data from the Office of the Medical Examiner and SFPD; includes deaths involving light rail vehicles not routinely reported in SWITRS.

2017 TRAFFIC DEATHS

People Walking: 70% of people killed

Seniors: 50% of pedestrian deaths

Driver Failure to Yield and Unsafe Speed: Violations in >50% of deaths

Concentrated on the **Vision Zero High Injury Network**

Transportation Authority Vision Zero Committee

Community & City Vision Zero Task Force

San Francisco Vision Zero

Data Systems

Legislative Agenda

Safe Streets

Engineering complete streets projects

Traffic calming in neighborhoods

Safe People

Educating and raising awareness about street safety

Enforcing traffic laws

Safe Vehicles

Using technology to ensure a safe system



SAN FRANCISCO PLANNING DEPARTMENT



DATA TO ADVANCE CORE VZ PRINCIPLES

Core Principles



Prevention



Saving Lives



Equity



Safe Streets

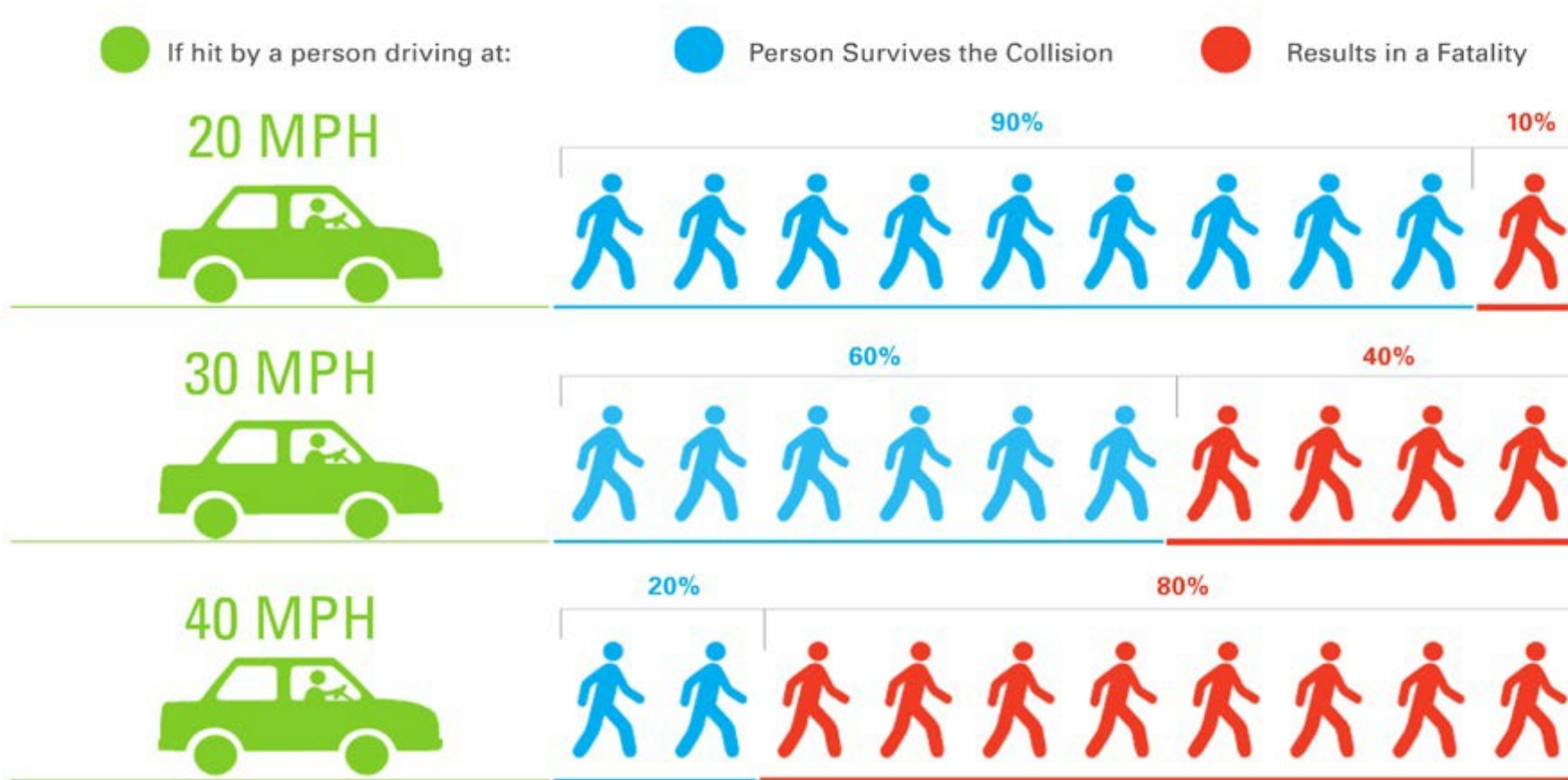


Safe People and
Safe Vehicles



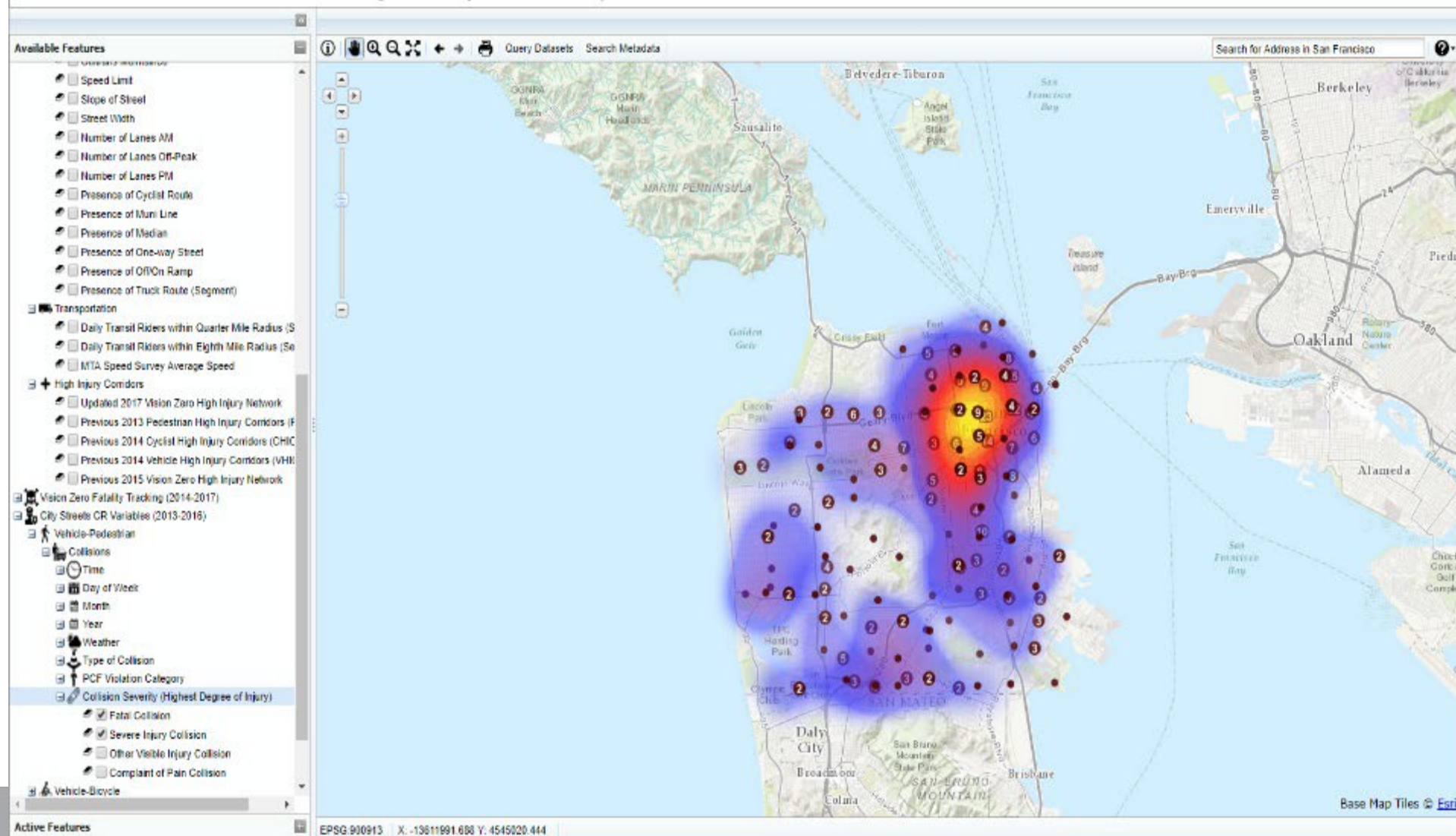
Speed

SPEED IS THE MAJOR PREDICTOR OF SURVIVAL AND INJURY SEVERITY



SPATIAL DATA SYSTEMS FOR MONITORING, EVALUATION AND ANALYSIS

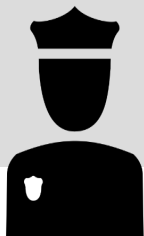
TransBASE: Linking Transportation Systems to Our Health



COMPREHENSIVE INJURY SURVEILLANCE FOR MONITOR EVALUATION AND ANALYSIS

Standard Practice: Police Reported Injury Collisions

- Detailed data about **crash characteristics**
- Little data on injury severity (4 levels of injury severity classification)
- *Underreporting of injuries*
 - 21% underreporting of pedestrian injuries (Sciortino et al 2005); African Americans less likely in police records
 - 27% underreporting of cyclist injuries (Lopez et al 2012)



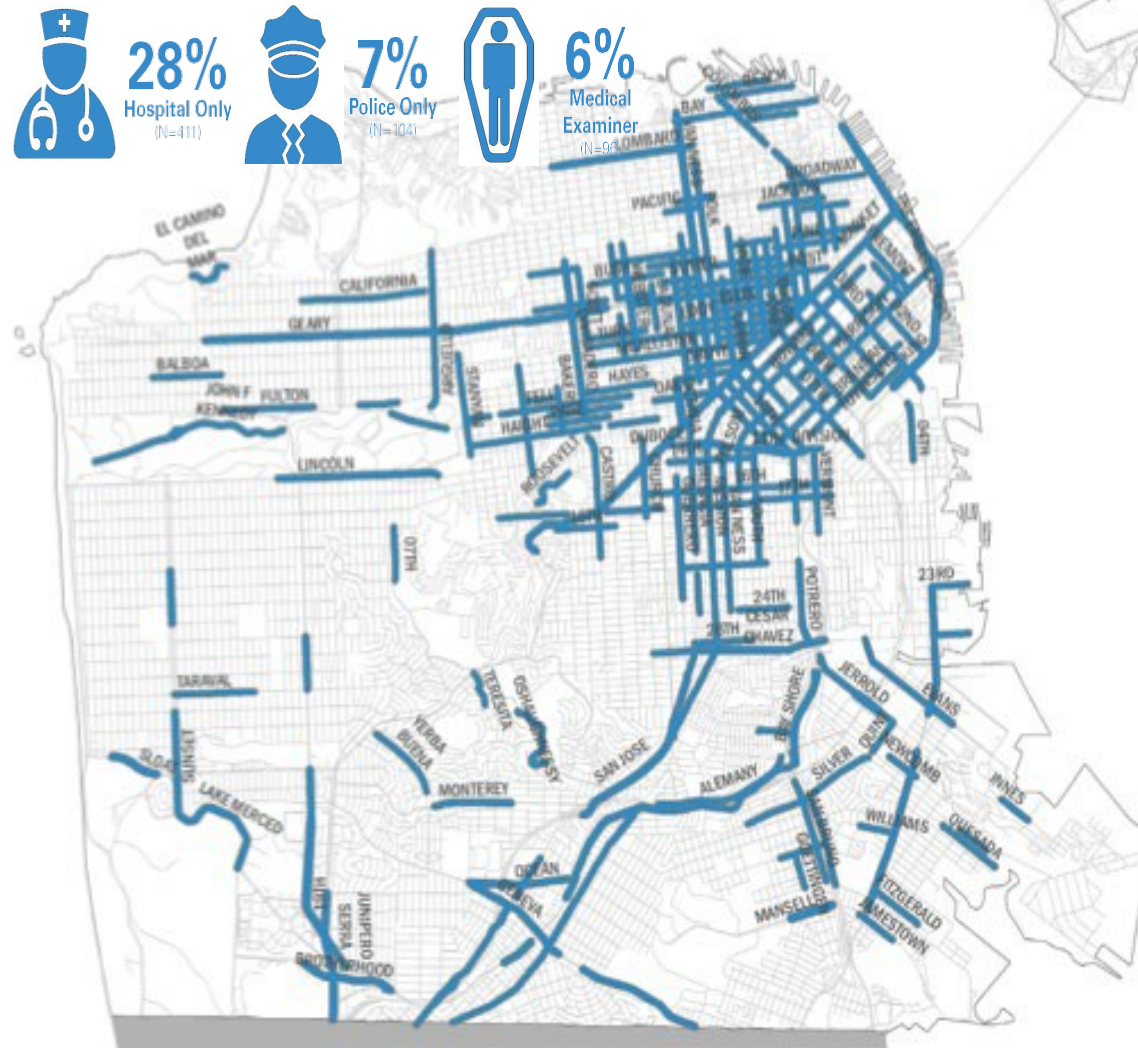
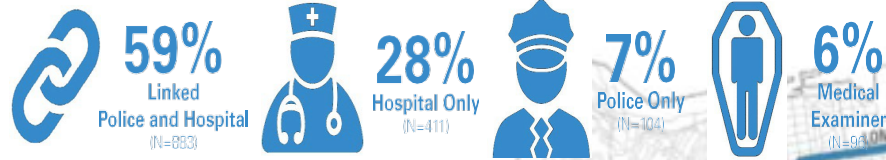
Unintentional Injury: Hospital Medical Records

- Improved **injury severity assessment** and detailed health outcome data
- Comorbidities (**mental illness, hypertension, etc**)
- **Disability** status
- Demographics (**race/ethnicity, insurance type**)
- **Homelessness**
 - *Little data on cause, injury location*
 - Mechanism of injury code
 - No location info
 - No cause of crash info



2017 HIGH INJURY NETWORK

SEVERE AND FATAL INJURY DATA BY SOURCE (2013-2015)



13%
of the city's
street miles



75%
of all severe and
fatal injuries



77%
of pedestrian severe
and fatal injuries



71%
of cyclist severe
and fatal injuries



75%
of vehicle severe
and fatal injuries



61%
of all transportation-
related injuries

N = 1,494 severe and fatal transportation-related injuries.

SFPD = San Francisco Police Department collision reports, 2013-2015.

ZSFG = Zuckerberg San Francisco General Hospital data linked to Emergency Medical Services data, 2013-2015.

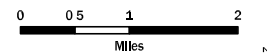
FOCUSING IMPROVEMENTS ON THE HIGH INJURY NETWORK

33.7 miles of
engineering
improvements
on the *High
Injury Network*
in 2017

Traffic Safety Improvements: San Francisco, California
Preliminary Analysis - 2017 Completed Citywide
Safety Improvement Mileage

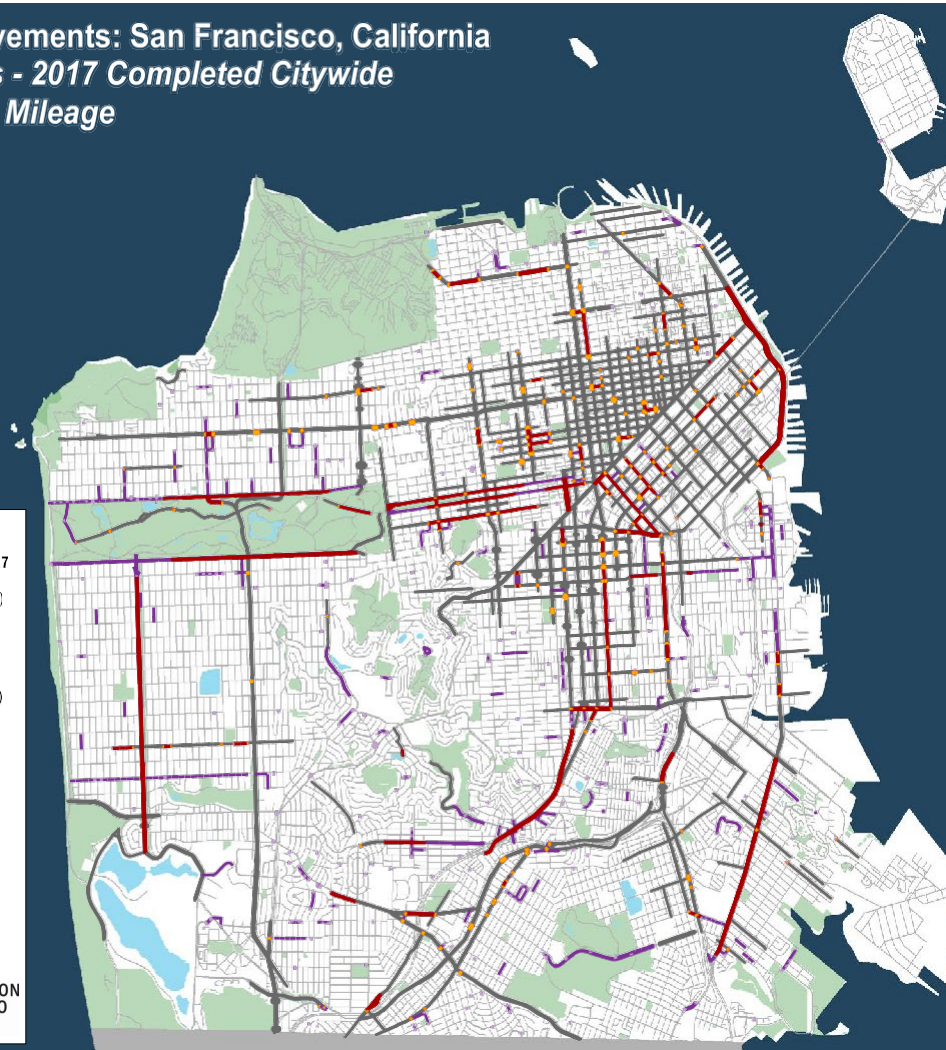
Total Miles Improved Citywide: 76.9
Total Miles Improved on High Injury Network: 33.7

- Intersection Spot Improvement (Complete)
On Network: 7.0 Miles
- Street Segment Improvement (Complete)
On Network: 26.7 Miles
- Intersection Spot Improvement (Complete)
Off Network: 14.7 Miles
- Street Segment Improvement (Complete)
Off Network: 28.5 Miles
- Original (2014) and Updated (2017)
Vision Zero High Injury Network



Source: SFDPH 2017; SFMTA 2017;
SFDPW 2017

City and County of San Francisco
Department of Public Health
Environmental Health Section

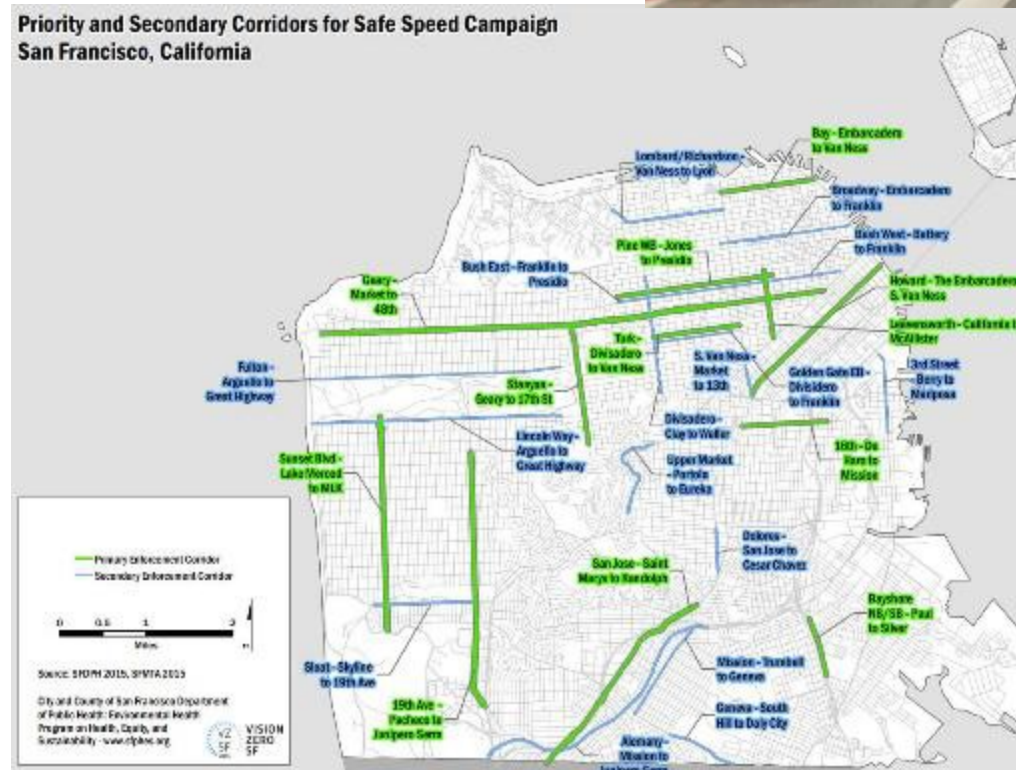


TARGETING SAFE SPEEDS EDUCATION AND ENFORCEMENT CAMPAIGN

An Active Transportation Program (ATP) Project



Priority and Secondary Corridors for Safe Speed Campaign
San Francisco, California

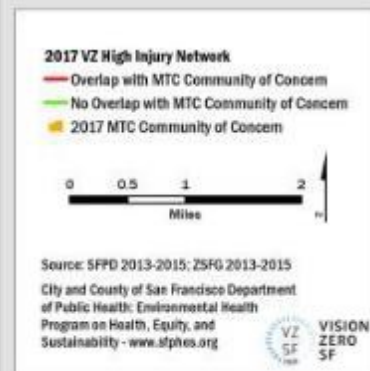


FOCUSING IMPROVEMENTS IN VULNERABLE COMMUNITIES

Vision Zero High Injury Network: 2017 Update - Communities of Concern
San Francisco, California

31% of Surface Streets

51% of the High Injury Network



DEEPENING COMMUNITY ENGAGEMENT TO ADDRESS INJURY INEQUITIES



Allocate adequate time and financial resources needed to partner with or engage vulnerable groups.



Conduct outreach through existing events that historically under-represented communities attend.

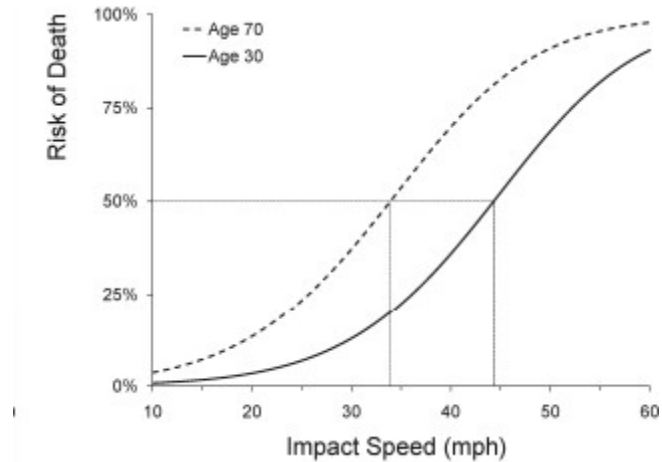
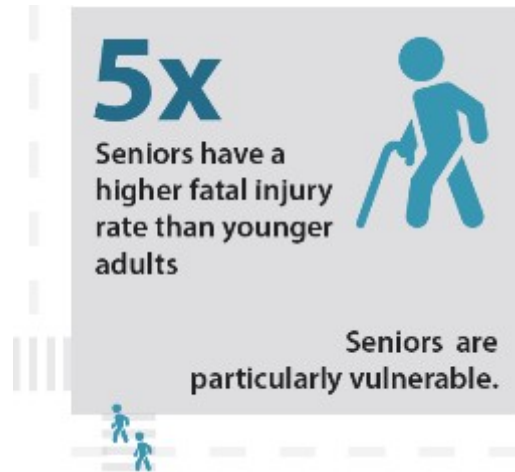


SAFE ROUTES TO SCHOOLS



An Active Transportation Program (ATP) Project

SENIORS ARE AT INCREASED RISK OF DEATH AND SEVERE INJURY - AT ANY GIVEN SPEED



Average death risk for a **70-year-old pedestrian** similar to that for a **30-year-old pedestrian struck at a speed 11.8 mph faster**

PEOPLE WITH DISABILITIES ALSO OF PARTICULAR CONCERN



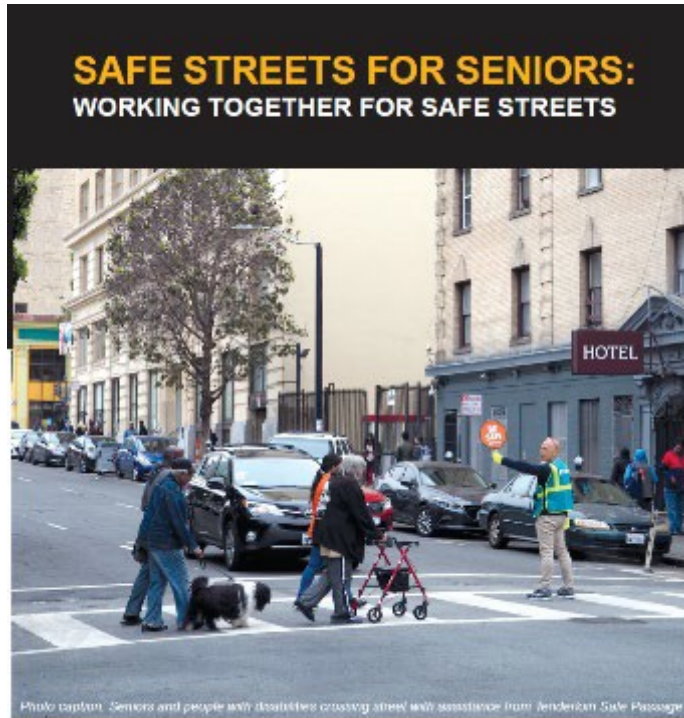
~**6%** of people admitted to the Zuckerberg SF General Hospital's Trauma Center for transportation-related injury recorded as **having a mobility, visual, or hearing disability**

~**60%** of those injured **use a mobility aid: Wheelchair, Walker, Cane**

~**70%** of those injured were **people walking**

>50% are also **seniors aged 65+**

SAFE STREETS FOR SENIORS: EDUCATION AND COMMUNITY ENGAGEMENT



- **Multi-lingual presentations to seniors and service providers** on Vision Zero, how to get involved, and how to stay safe
- Funding **community based organizations** to conduct in-depth education and outreach in their neighborhoods
- Over **1300 seniors and staff** at **over 40 locations** to date

SFMTA POLICY CHANGE - INCREASE IN PEDESTRIAN CROSSING TIME CITYWIDE



Seniors and People with Disabilities: Injuries to People Walking

Injury Segments in Priority Areas

Injury Segments in Priority Areas: ¾ of severe/fatal injuries

- **57%** on the **VZ High Injury Network**
- **35%** on **Traffic Calm-able Streets**

- Injury Segment~
- Injury Segment in Priority Area~
- Priority Area*^

*Attractors include senior centers, public libraries, public health facilities, and other locations that provide services to seniors or people with disabilities such as paratransit, food, or health care.

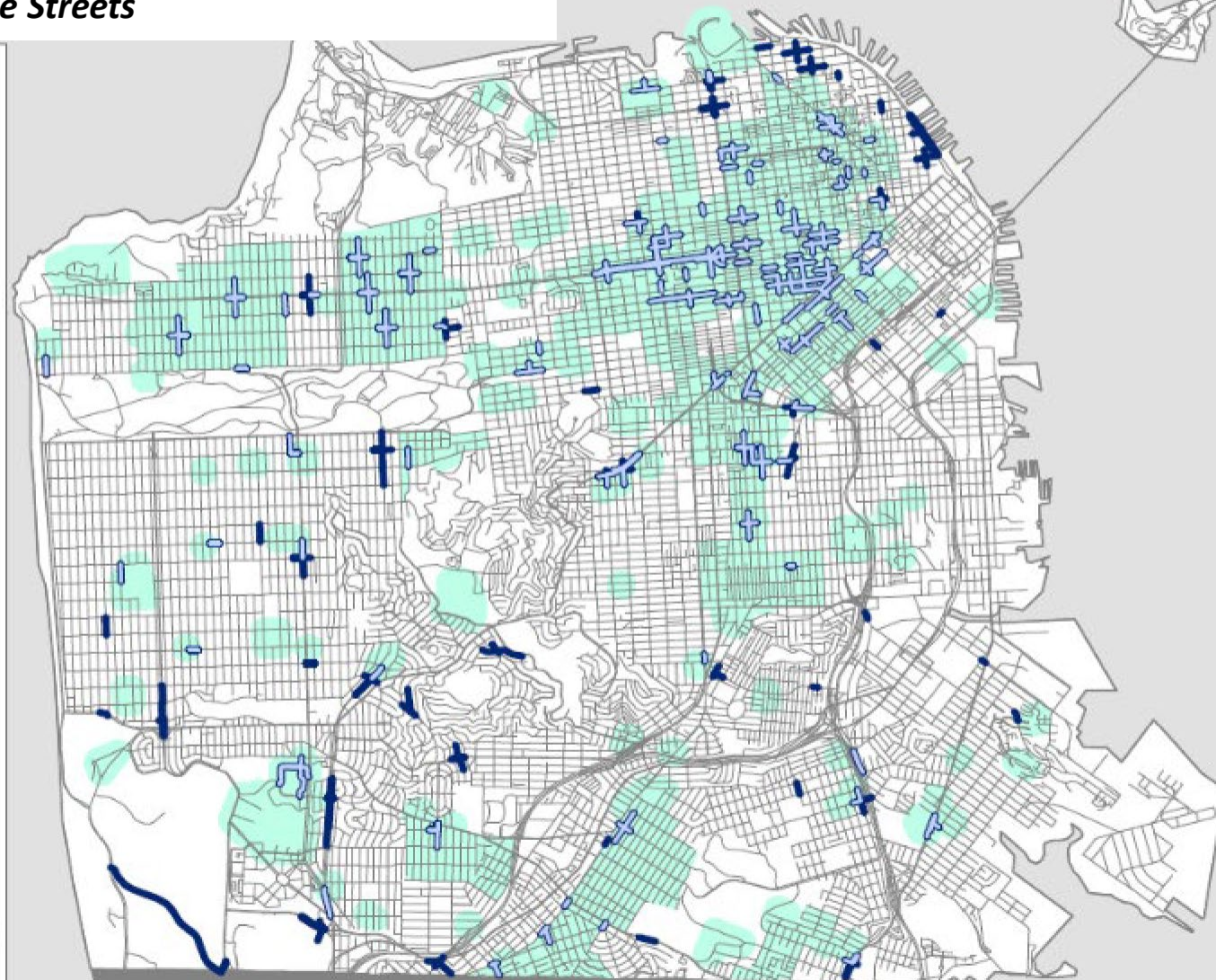
^Density is the top third of census tracts with residents that are senior (age 65+), person with disability, or fulfill both criteria from ACS 2011-2015 data and normalized by square mile.

~Priority segments were derived from the Traffic Injury Surveillance System (TISS) 2013-2015 dataset. Segments with at least 1 severe/killed or 3 non-fatal/severe injuries involving a senior or person with disability. Priority Area Segments are within 500ft of an attractor, or within a high senior and/or person with disability census density area.

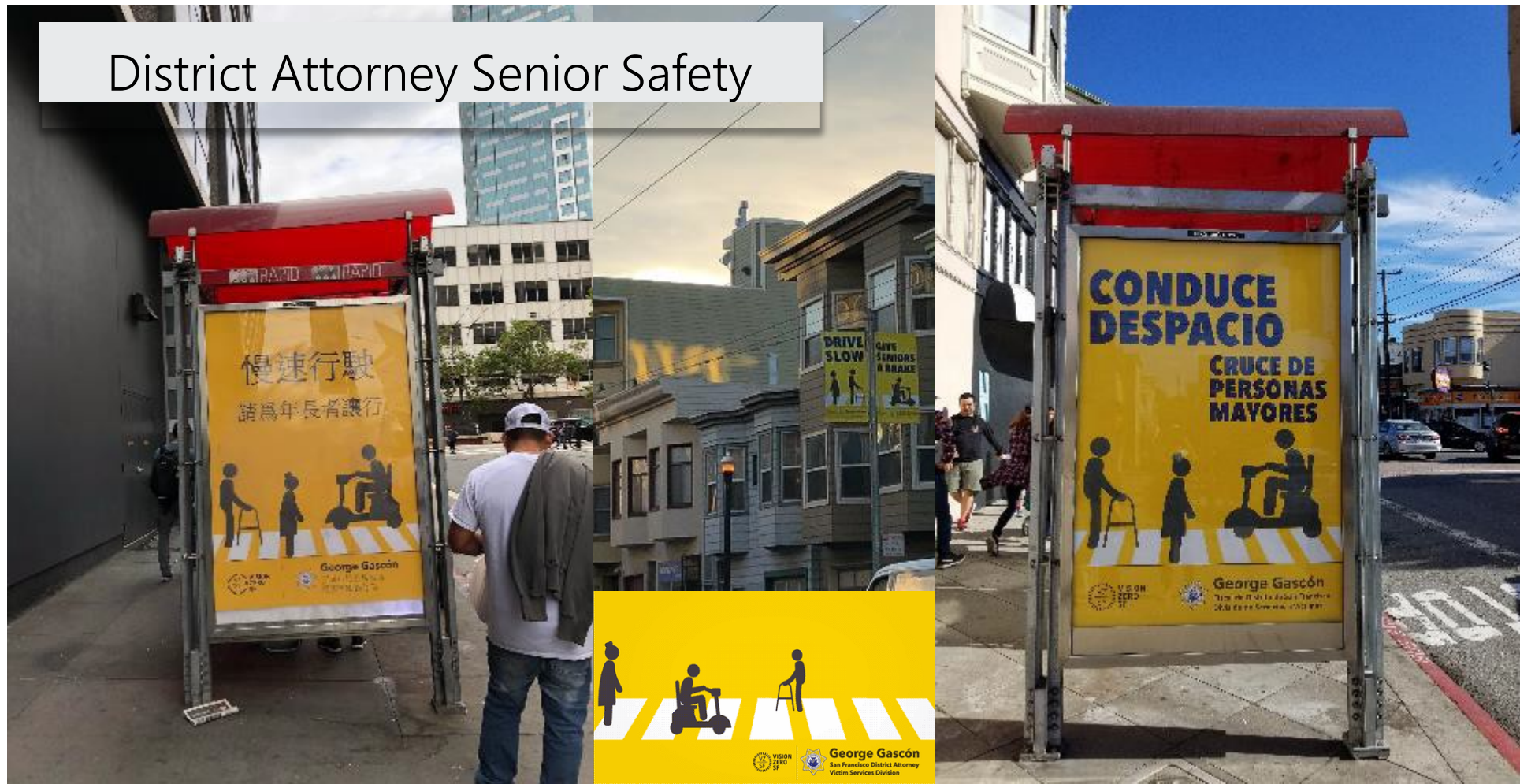


Sources: San Francisco Police Department (SFPD) collision reports, 2013-2015;
Zuckerberg San Francisco General (ZSFG) Hospital data linked to Emergency Medical Services data, 2013-2015;
Office of the Medical Examiner, San Francisco (OME) traffic fatality reports, 2013-2015
Data Pull Date: 6/4/2017 from the Traffic Injury Surveillance System (TISS)

City and County of San Francisco Department of Public Health: Environmental Health Program on Health, Equity, and Sustainability - www.sfphe.org



District Attorney Senior Safety



ADVANCING EFFECTIVE POLICY: AUTOMATED SPEED ENFORCEMENT

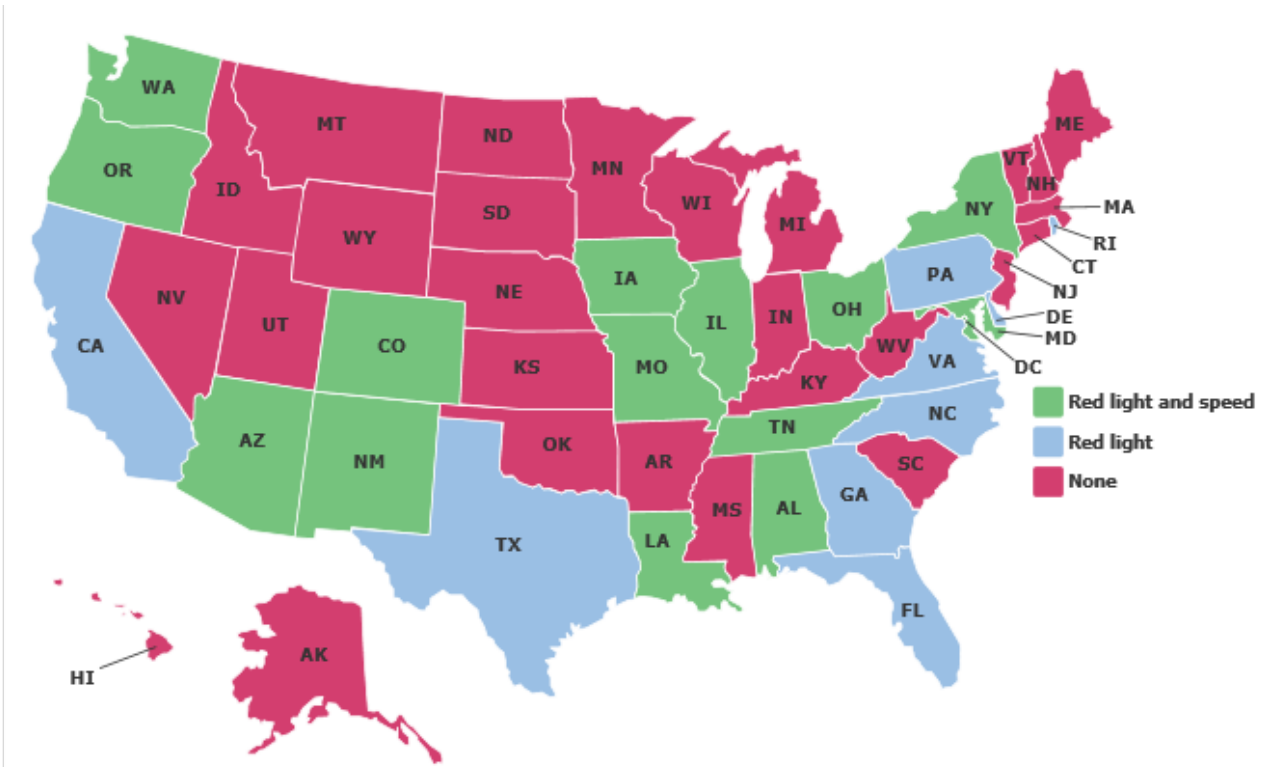
142 COMMUNITIES IN 15 STATES + DC

Portland
53%
Reduction in fatalities

Denver
28%
Decrease in average speed

Chicago
31%
Decrease in the # of violators
per passing vehicle

New York City
13%
Decrease in collisions with injuries
near cameras sites



ADVANCING EFFECTIVE POLICY



AUTOMATED SPEED ENFORCEMENT

ZERO IS THE ONLY ACCEPTABLE NUMBER



San Francisco Bay Area

Families for Safe Streets

Acknowledgements

**San Francisco Department of Public Health
Zuckerberg San Francisco General Hospital
San Francisco Municipal Transportation Agency
San Francisco Police Department
San Francisco District Attorney's Office
San Francisco Office of the Medical Examiner
San Francisco Fire Department
American Medical Response
King-American Ambulance Company
San Francisco County Transportation Authority
San Francisco Department of Public Works
San Francisco Planning Department**

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SFHEALTHEQUITY.ORG
VISIONZEROSF.ORG**

Questions for our presenters?

(please use the [Q&A](#) function)



Zero Traffic Fatalities Task Force

To read approved legislation, visit

<https://leginfo.legislature.ca.gov/>

*Enter **AB-2363** in Quick Bill Search Tool*

Your feedback is important!

- Upon the conclusion of this webinar, please complete the **Survey Gizmo** to provide your feedback on today's webinar.
- We will also ask whether you have interest in receiving additional technical assistance.

ATP Resources

- **ATRC Resources:** <http://caatpresources.org>
- **ATP non-infrastructure questions,** email atsp@cdph.ca.gov
- **California Transportation Commission ATP Guidance and List of Projects** <http://www.catc.ca.gov/programs/atp/>
- **Caltrans ATP Delivery Requirements for ATP Awardees**
<http://www.dot.ca.gov/hq/LocalPrograms/atp/>

Thank You, Speakers!

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