



TEXAS
PEDESTRIAN
SAFETY
COALITION

FEHR  PEERS

Dana Weissman

June 15, 2022

A Paradigm Shift for Safety

1

Introduction

2

Safe Streets
for All

3

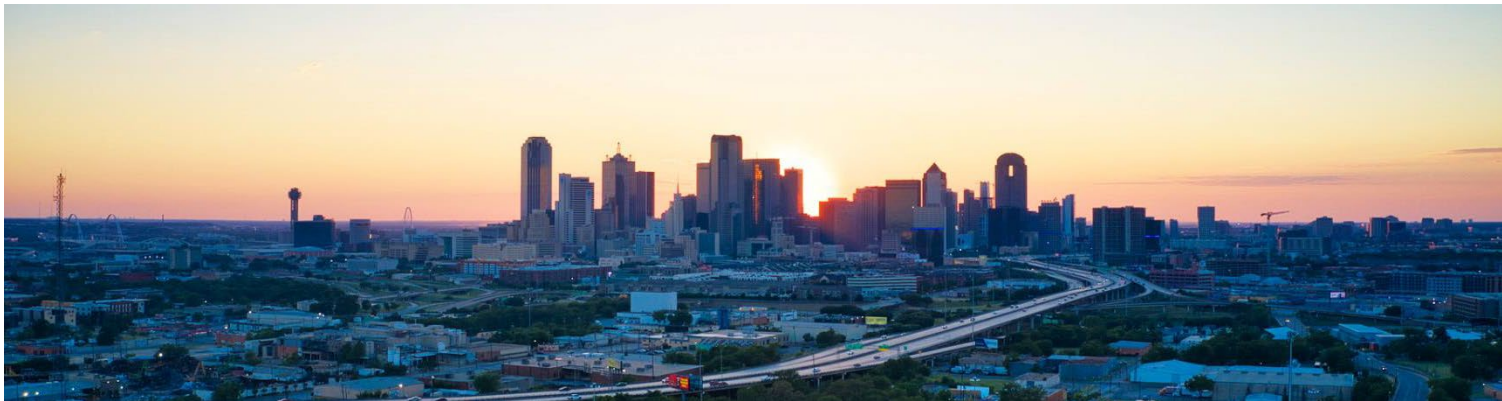
Comprehensive
Safety Action
Plans

4

Example
Project

Introduction

An Introduction to Fehr & Peers



1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

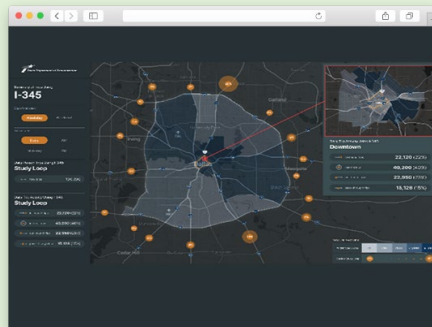
Example
Project

Introduction

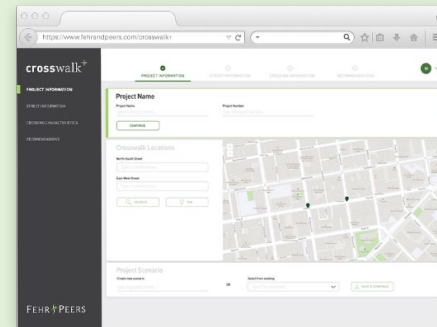
Our Work



Multimodal Travel



Emerging Technology



Research & Development

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Introduction

Discipline Groups

Discipline groups are collaborations among staff across all offices that advance our knowledge and expertise in a specific technical area to simultaneously advance the planning process and create innovative visions and solutions for clients and communities.



Matt Haynes
Autonomous Vehicles



Chelsea Richer
Climate &
Resilience



Taylor McAdam
Community
Engagement



Carrie Modi
Kendra Rowley
Complete Streets



Aaron Gooze
Data Science



Geoff Rubendall
Engineering



Teresa Whinery
Equity



Ron Milam
Forecasting



Charlie Coles
FP Think



Fatemeh Ranaiefar
Freight



Dave Stanek
Operations



John Gard
Parking, Land Use
& Transportation



Dana Weissman
Safety



Nate Conable
Transit



Eric Womeldorff
Transportation
Economics



Cullen McCormick
Visual
Communications

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

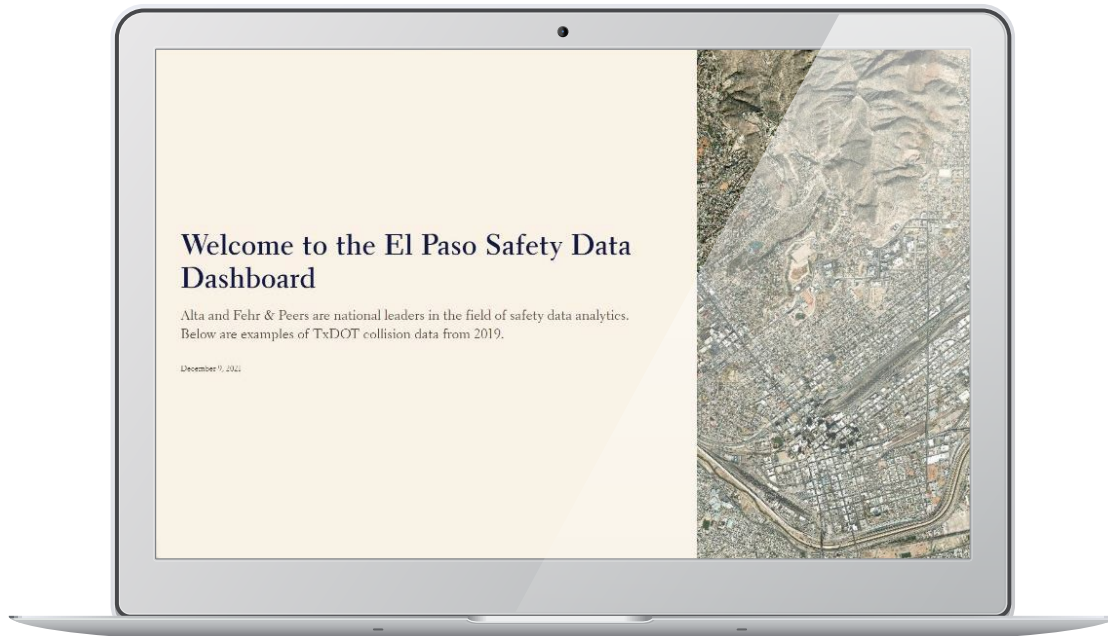
4

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Project

Introduction

Safety Discipline Group

IMPROVE SAFETY OUTCOMES FOR ALL ROADWAY USERS



1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Disclaimer

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Federal Shift in Approach to Safety

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Our Current Reality

Our Current Reality

Traffic fatalities are a public health crisis affecting all road users.

1.25M

Lives lost globally each
year from traffic crashes

Source: World Resources Institute

42,915

Estimated lives lost on
U.S. roads in 2021

Source: NHTSA

7,342

Estimated pedestrians killed
in U.S. traffic crashes in 2021

Source: NHTSA



U.S. Department of Transportation

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

How We Reach Zero



1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

National Roadway Safety Strategy



SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System
is how we get there.

1

Introduction

Safe Streets for All

Safe System Approach

2

Safe Streets
for All

The Safe System approach aims to eliminate fatal and serious injuries for all road users by:



Accommodating human mistakes



Keeping impacts on the human body at tolerable levels

4

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Project

Comprehensive
Safety Action
Plans

1

Introduction

Safe Streets for All

Safe System Abroad

2

Safe Streets
for All



Sweden

Vision Zero

60-70%

Reduction in fatalities
1994-2015

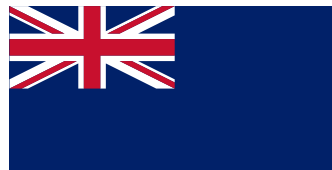


Netherlands

Sustainable Safety

50-60%

Reduction in fatalities
1994-2015



Australia

Safe System

50-60%

Reduction in fatalities
1994-2015



New Zealand

Safer Journeys

50-60%

Reduction in fatalities
1994-2015

4

Example
Project

1

Introduction

2

Safe Streets
for All

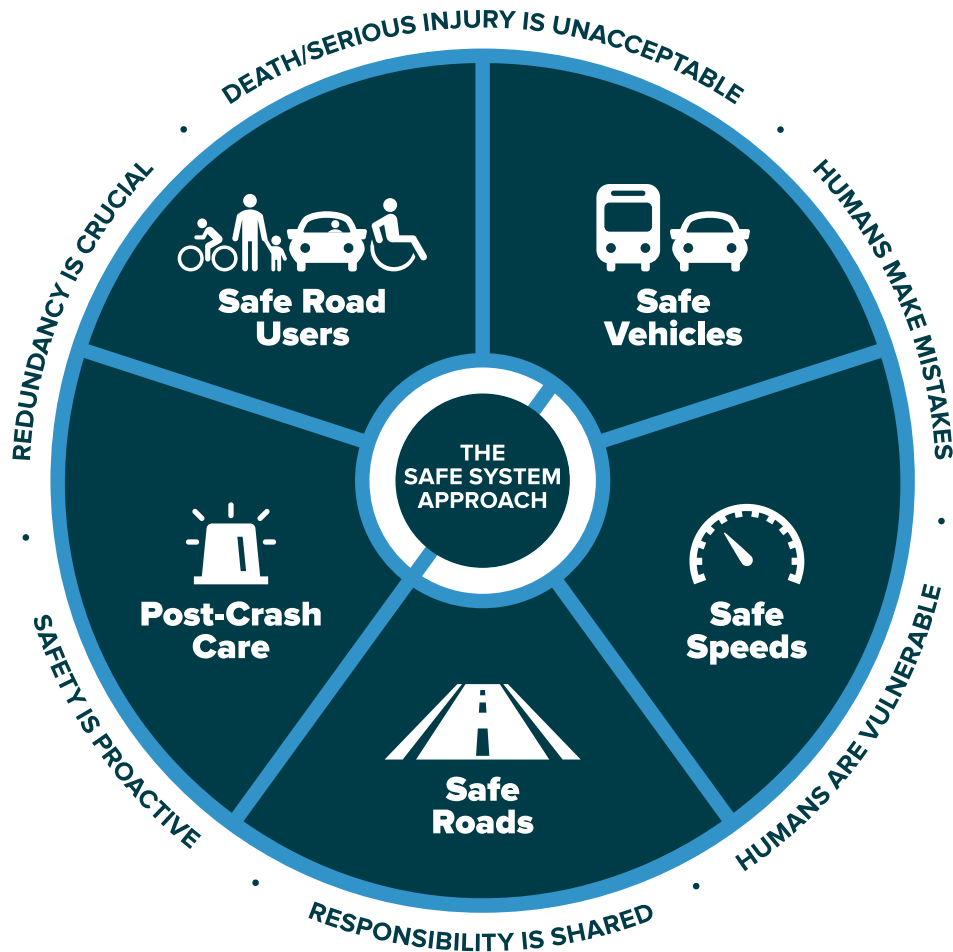
3

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Safety Action
Plans

4

Example
Project

Safe Streets for All Safe System Approach



1

Introduction

2

Safe Streets
for All

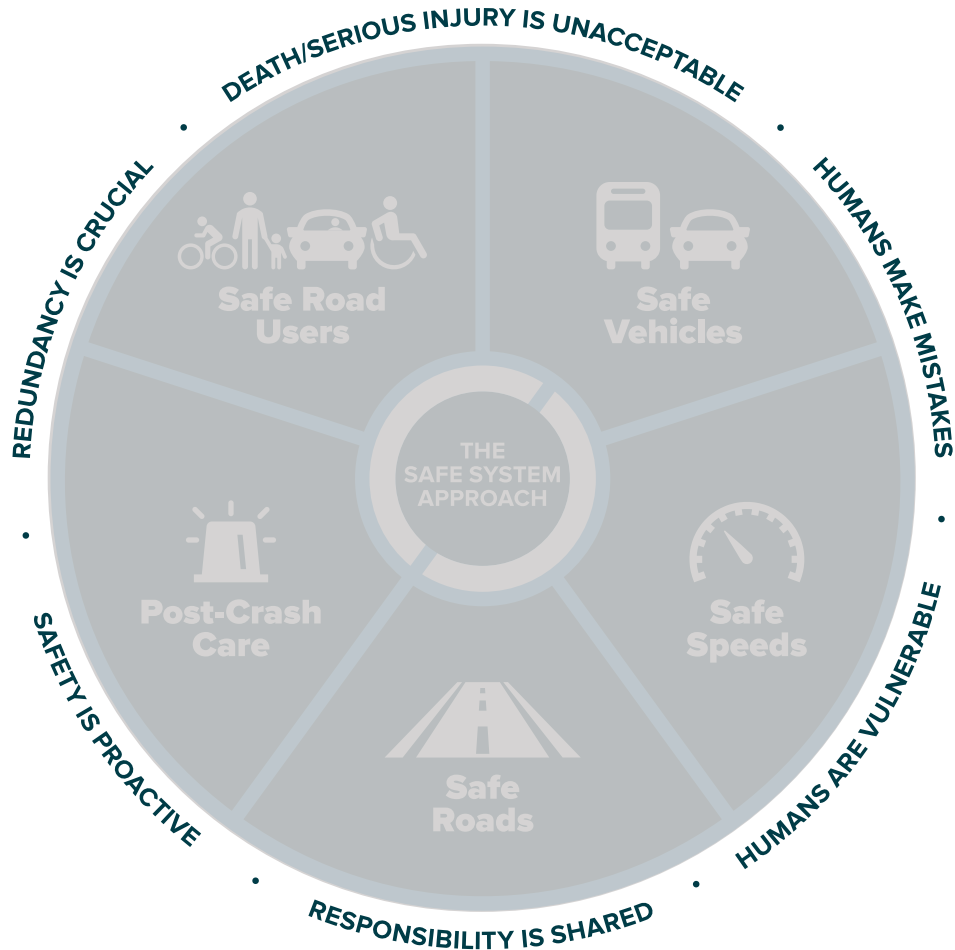
3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All Safe System Approach



1

Introduction

2

Safe Streets
for All

3

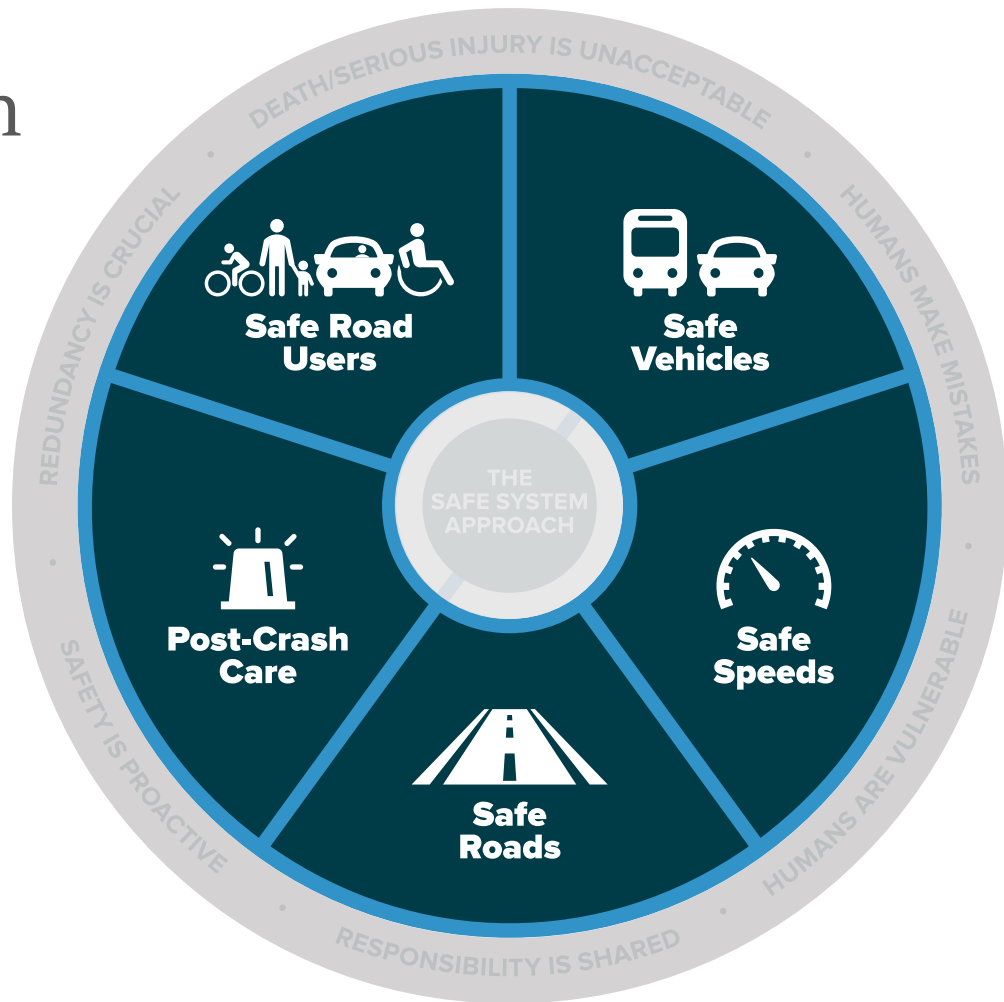
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Safety Action
Plans

4

Example
Project

Safe Streets for All

Five Safe System Elements



1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets & Roads for All (SS4A)

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Safe Streets & Roads for All



Application deadline September 15, 2022

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

A Different Approach

- Prioritizes **safety of people walking**, biking, riding transit and micromobility users
- Prioritizes **safety of underserved communities**
- Addresses problems of **unsafe speeds**
- Invests in **Complete Streets** that serve all road users, especially those outside motor vehicles
- Uses a **Safe System approach** to evolve beyond the traditional E's

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Two Funding Categories

PLANNING (40% of funds)

IMPLEMENTATION (60% of funds)

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Two Funding Categories

PLANNING (40% of funds)

- Funds development or completion of a **Comprehensive Safety Action Plan**
- Funds **supplemental planning** to support or enhance an existing Action Plan

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Two Funding Categories

PLANNING (40% of funds)

- Funds development or completion of a **Comprehensive Safety Action Plan**
- Funds **supplemental planning** to support or enhance an existing Action Plan

IMPLEMENTATION (60% of funds)

- Funds **infrastructure, behavioral, and operational** safety activities identified in an Action Plan

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Comprehensive Safety Action Plan

- High-Injury Network
- Project prioritization based on safety needs and addressing underserved populations
- Community and political buy-in
- Pivot to Safe System approach to roadway safety

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Supplemental Planning

- Speed management plans
- Accessibility and transition plans
- Racial and health equity plans
- Lighting management plans
- Community and stakeholder engagement
- Progress report development
- Pilot projects

1

Introduction

2

Safe Streets for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Safe Streets for All

Implementation

- Applying low-cost roadway safety treatments system-wide
- Identifying and correcting common risks across a network
- Transforming a roadway corridor on the High-Injury Network
- Installing pedestrian safety enhancements and closing network gaps
- Implementing speed management strategies
- Creating safe routes to school
- Promoting adoption of innovative technologies and strategies
- Conducting education campaigns

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Required Elements for SS4A Funding

- Analysis of (1) crash trends, (2) contributing factors, (3) systemic safety challenges, and (4) high-risk locations
- Prioritized set of projects and strategies
- Completion between 2017-2022 and publicly available
- Public commitment to goal of zero fatalities and serious injuries
- Task Force for development, implementation, and monitoring
- Engagement with stakeholders and community
- Equity considerations and analysis
- Benchmarking assessment of existing plans, policies, and standards
- Evaluation and monitoring plan

1

Introduction

2

Safe Streets
for All

3

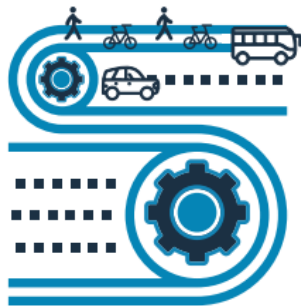
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Safety Action
Plans

4

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Project

Comprehensive Safety Action Plans

Core Elements for Vision Zero



CORE ELEMENTS FOR VISION ZERO COMMUNITIES

Prepared by Vision Zero Network, Institute of Transportation Engineers (ITE), and Fehr & Peers

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Core Elements for Vision Zero

Leadership and Commitment

1. Public, High-Level, and Ongoing Commitment
2. Authentic Engagement
3. Strategic Planning
4. Project Delivery

Safe Roadways and Safe Speeds

5. Complete Streets for All
6. Context-Appropriate Speeds

Data-driven Approach, Transparency, and Accountability

7. Equity-Focused Analysis and Programs
8. Proactive, Systemic Planning
9. Responsive, Hot Spot Planning
10. Comprehensive Evaluation and Adjustment

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Leadership and Commitment

1. **Public, High-Level, and Ongoing Commitment**
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1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Leadership and Commitment

1. Public, High-Level, and Ongoing Commitment
- 2. Authentic Engagement**
3. Strategic Planning
4. Project Delivery

PEOPLE KILLED WHILE WALKING

LOW INCOME 2X AS LIKELY

HIGH INCOME

Governing, 2014

CHILDREN KILLED WHILE WALKING

AFRICAN AMERICAN 2X AS LIKELY

LATINO 40% MORE LIKELY

WHITE

Dangerous by Design, 2011

STREETS WITH SIDEWALKS

HIGH INCOME COMMUNITIES 90%

LOW INCOME COMMUNITIES 50%

Bridging the Gap, 2012

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Safe Roadways and Safe Speeds

5. Complete Streets for All
6. **Context-Appropriate
Speeds**

20
MPH

8%

30
MPH

20%

40
MPH

46%



Likelihood of death for people walking if hit at these speeds

Source: AAA Foundation, Tefft, B.C. (2011)

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Comprehensive Safety Action Plans

Data-driven, Transparency, Accountability

7. Equity-Focused Analysis and Programs
8. **Proactive, Systemic Planning**
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1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

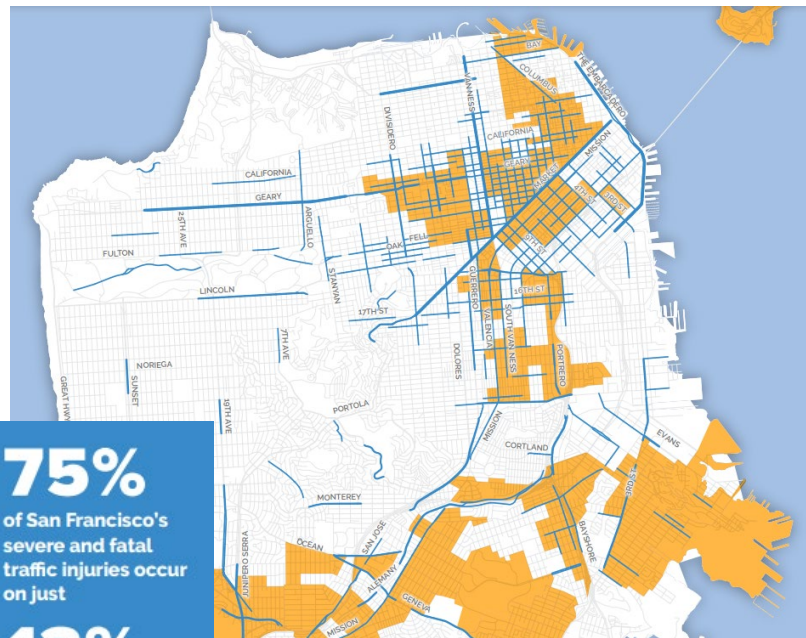
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Example
Project

Comprehensive Safety Action Plans

Data-driven, Transparency, Accountability

7. Equity-Focused Analysis and Programs
8. **Proactive, Systemic Planning**
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1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Pedestrian Safety Project

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

From Planning to Implementation



Bicycle- and pedestrian-
involved crashes represent **14%**
of citywide reported crashes,
and make up **48%** of fatal and
severe injury crashes.

Pedestrian crashes are **five times** as likely to result in a fatality or severe injury compared to citywide crashes.

43% of pedestrian crashes occur at night. Nighttime pedestrian crashes are more than twice as likely to result in a fatality or severe injury.

Bicycle-involved crashes most often involved a **Wrong Side of Road (22%)**, **Automobile Right of Way (21%)**, or **Traffic Signals and Signs (15%)** contributing factor. These three factors were the primary reported crash factor for 62 of the 82 bicycle-involved fatal and severe injury crashes.

RISK FACTORS

Crash risk factors were identified by reviewing the frequency and severity of crashes as they related to intersection and roadway characteristics. The identified crash risk factors for roadways and intersections are summarized below.

ROADWAYS



High-volume
(>20,000 ADT)
major collector and
arterial roadways



Horizontally curved
roadway segments



Roadway
segments near
state facility
interchanges



Roadway segments with
frequent driveway access
(one or more access
points per 500 feet)

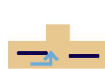
INTERSECTIONS



Horizontally
curved and/
or skewed
approaches to
a signalized
intersection



Straight (tangent),
high-speed (55
mph) approaches
to the intersection



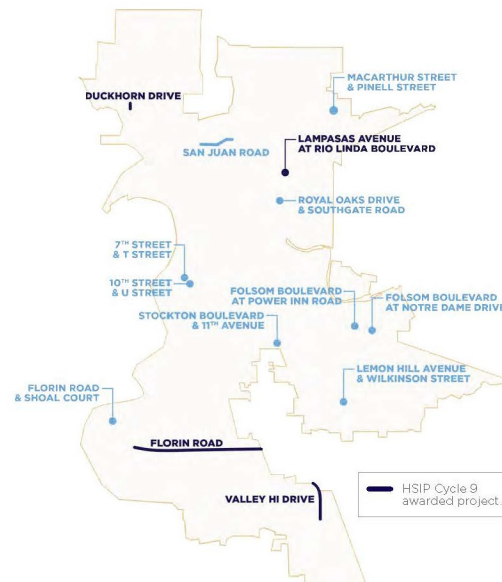
Unsignalized
intersections
with channelized
raised medians
on the major
street



Unsignalized side-street
controlled intersections
on multilane (4 or more
lanes) on the major street



Signalized intersections of
arterials with multiple turn
lanes on approaches



City of Sacramento Vision Zero Action Plan and Systemic Safety Analysis Report

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

Keys to Success

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

Keys to Success

- **Start early!** Identify competitive projects well in advance of grant cycle based on grant scoring criteria; develop projects with input from stakeholders; iterate to arrive at best possible project

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

Keys to Success

- **Start early!** Identify competitive projects well in advance of grant cycle based on grant scoring criteria; develop projects with input from stakeholders; iterate to arrive at best possible project
- Craft a **coherent narrative** that is easy to follow and supported by maps and graphics

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

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- Craft a **coherent narrative** that is easy to follow and supported by maps and graphics
- Understand the grant **evaluation criteria**, and address those directly in the narrative

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

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1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

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- Illustrate that your project has **political and community support**

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

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- Illustrate that your project has **political and community support**
- Emphasize **feasibility and project readiness**

1

Introduction

2

Safe Streets
for All

3

Comprehensive
Safety Action
Plans

4

Example
Project

Example Project

Keys to Success

- **Start early!** Identify competitive projects well in advance of grant cycle based on grant scoring criteria; develop projects with input from stakeholders; iterate to arrive at best possible project
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- Understand the grant **evaluation criteria**, and address those directly in the narrative
- Make your point based on **concrete data and analysis**, rather than conjecture and estimation
- Illustrate that your project has **political and community support**
- Emphasize **feasibility and project readiness**
- If your application is not successful, **request feedback** and try again next cycle



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