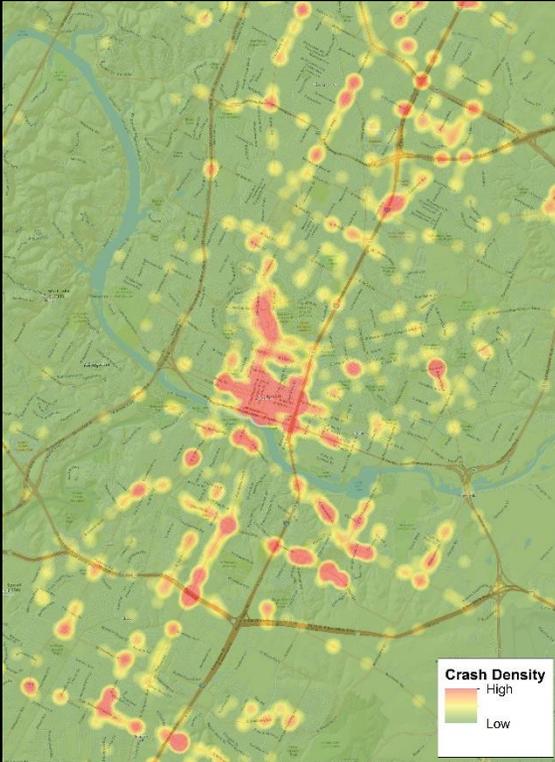


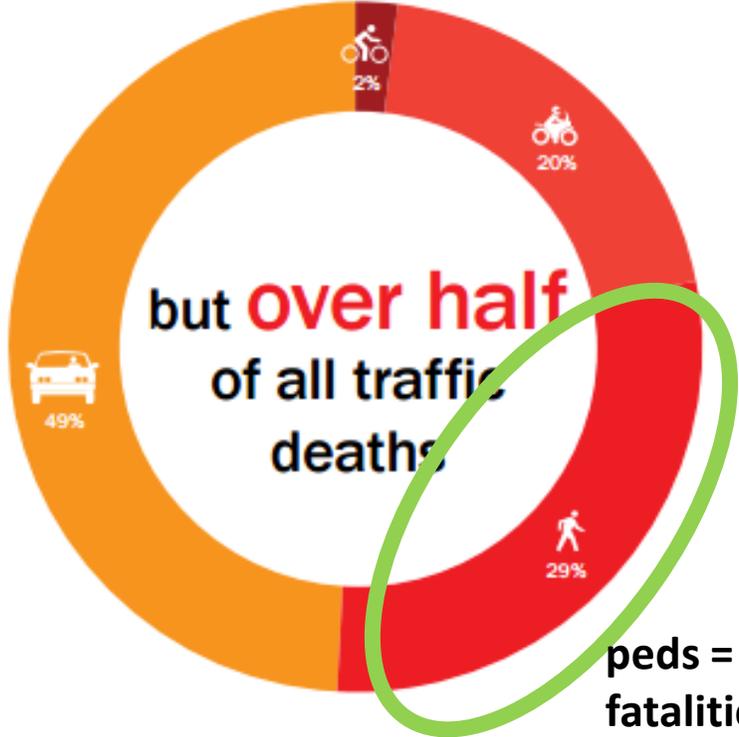
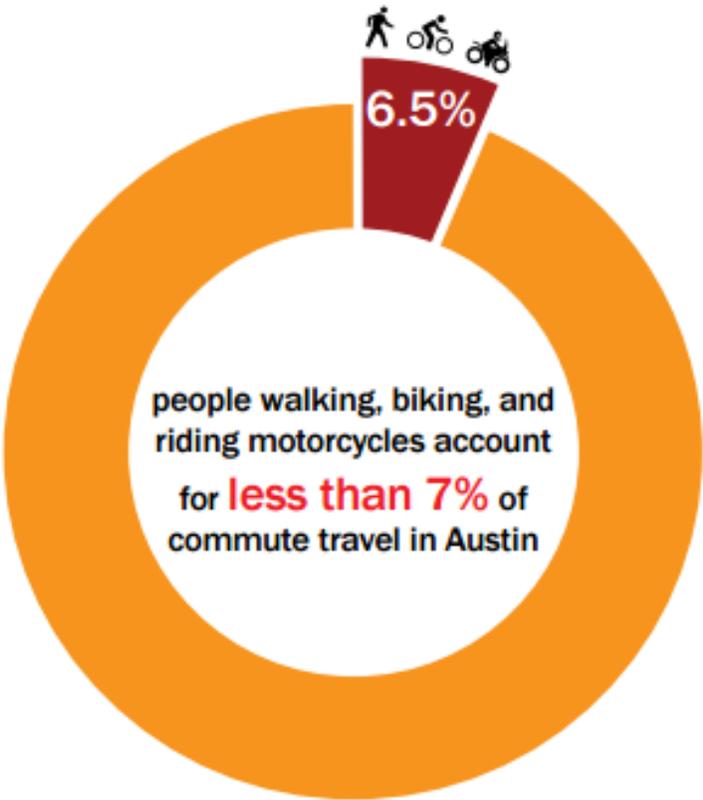
Austin Pedestrian Safety Action Plan

Pedestrian Advisory Council – Project Subcommittee

November 30th, 2016



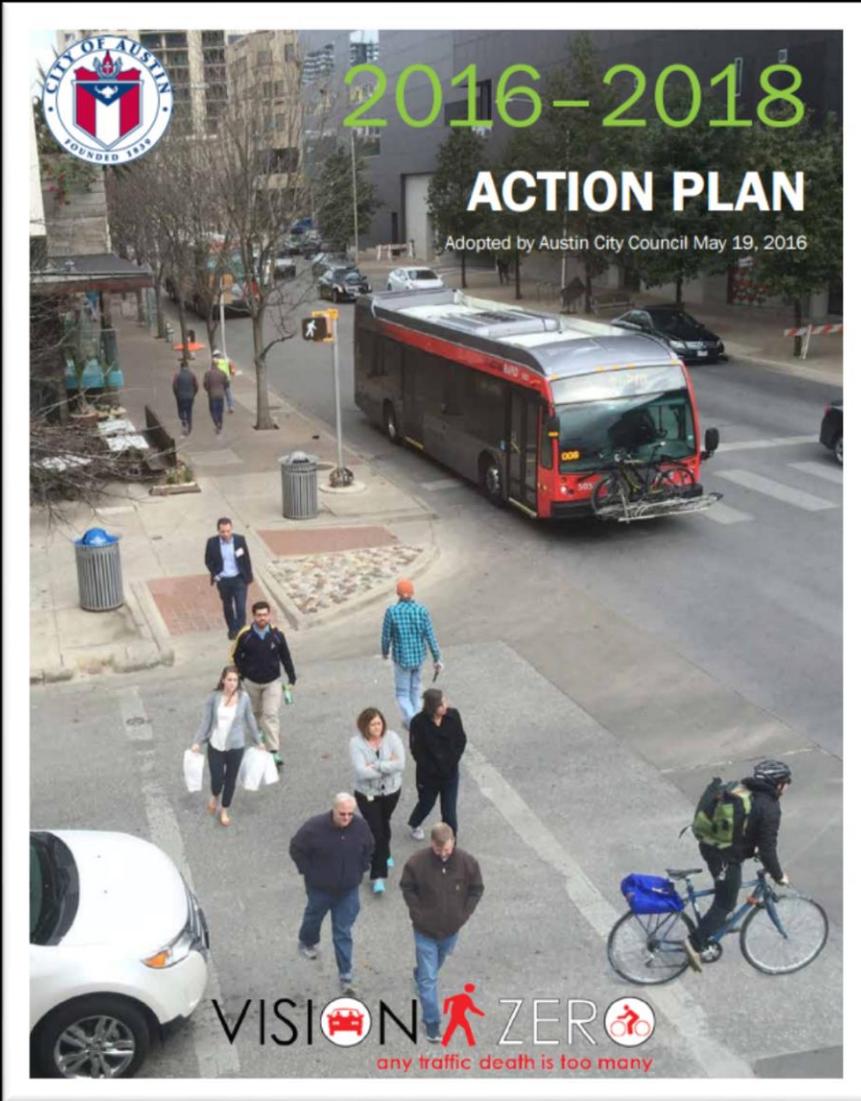
Austin PSAP



Source: American Community Survey Journey to Work Data (2013 5-year aggregate) and City of Austin Traffic Safety Data.

Austin PSAP

A component of the Vision Zero Action Plan



Policy Actions

- | | |
|----|--|
| 48 | Develop action plans for vulnerable user groups and coordinate these more specific plans with the Vision Zero Action Plan. |
|----|--|

Engineering Actions

- | | |
|----|--|
| 17 | Enhance the current City Ordinance (§12-1-26, Pedestrians On Certain Roadways) for areas unsafe to pedestrians |
| 20 | Direct engineering, enforcement, and education resources to high injury and fatal crash hotspot locations. |

Evaluation Actions

- | | |
|---|---|
| 5 | Coordinate a data-driven procedure (and enhance tools as necessary) to prioritize high crash locations based on industry best practices and to focus limited resources. |
| 6 | Incorporate TXDOT datasets to analyze, map, and/or improve for better understanding of factors contributing to fatal and serious injury crashes. |
| 7 | Create a platform and/or process to better share data, including geospatial data and maps, across City departments and agencies that are affected by transportation safety. Create a platform to share anonymized information and maps with the public. |
| 9 | Continue analysis of victims and suspects involved in fatal crashes, including demographics, to target education, enforcement efforts, and policy changes. |

Austin Pedestrian Safety Action Plan

plan objectives

- 1** Support the Vision Zero Action Plan by developing a **holistic strategy for addressing pedestrian safety** through engineering, education, enforcement and encouragement strategies;
- 2** Utilize crash data to gain a detailed understanding of the frequency, location and causes of pedestrian-related crashes, with a **focus on serious injuries and fatalities**;
- 3** **Identify and prioritize intersections and corridors with unsafe pedestrian conditions** for further study and implement appropriate countermeasures at these locations;
- 4** Identify and prioritize areas **with latent pedestrian demand** that could benefit from safer crossings (i.e. Safe Routes to Schools, proximity to transit, Imagine Austin Activity Centers, etc.);
- 5** Develop a framework for **evaluating the effectiveness of pedestrian safety countermeasures in Austin** and for reporting these results;
- 6** **Develop an ADA Transition Plan** for crossings and signals as part of the PSAP.

Austin PSAP

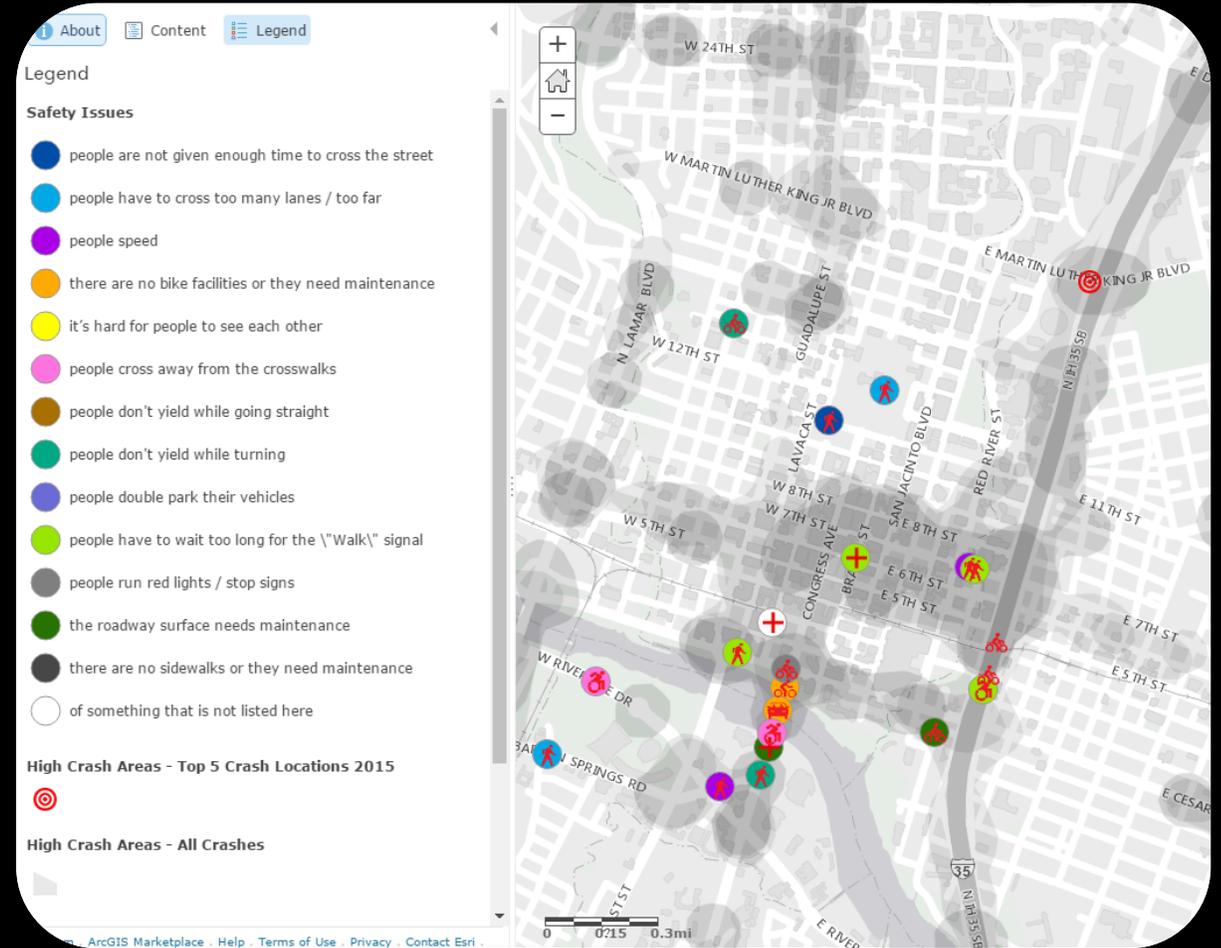
contents

1. Letter from Director of Transportation
2. Table of Contents
3. Executive Summary
4. Introduction/Narrative
5. Crash Analysis
6. Priority Pedestrian Safety Networks
 - High Crash Network
 - High Risk Network
 - High Demand Network
7. Action Plan/Implementation Strategies
 - Engineering
 - Enforcement
 - Education/Encouragement
 - Land Use/Site Design
 - Other policies
 - Partners
 - Funding
8. Appendix A: ADA Transition Plan for Crossings and Signals

Austin PSAP

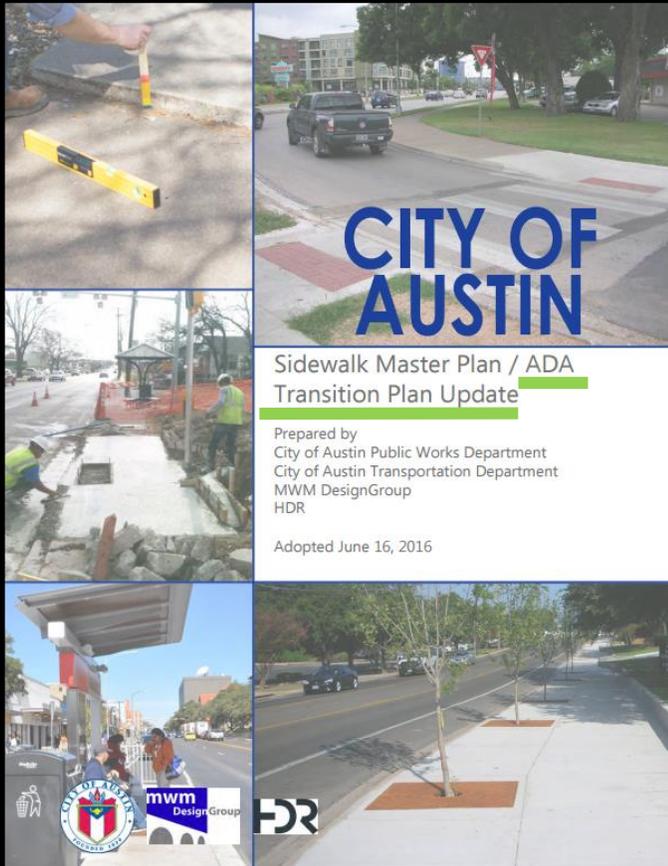
public outreach

- Internal Advisory Group: ATD Departments
- Vision Zero Task Force
 - PAC representation
- One-on-one coordination with regional partners
 - e.g. TxDOT, Cap Metro, CAMPO
- Pedestrian Safety Workshop
 - Spring 2017
- Vision Zero Mapping Tool



Austin PSAP

ADA Transition Plan for Crossings and Signals



“Any project for construction or alteration of a facility that provides access to pedestrians must be made accessible to persons with disabilities.”

42 U.S.C. §§ 12131 - 12134; 28 CFR §§ 35.150, 35.151; Kinney v. Yerusalim, 9 F.3d 1067 (3d Cir. 1993), cert. denied, 511 U.S. 1033 (1994). (9-12-06)”

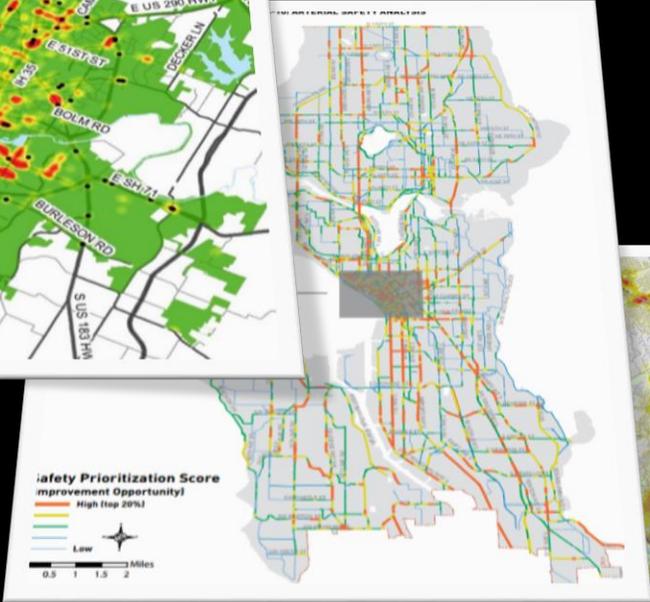
Table 5-7: Existing Sidewalk and ADA Transition Plan Program 10-year Target		
Target	Implementation Schedule	Estimated Annual Budget
Achieve 95% functionality for very high and high priority sidewalks and Achieve 55% functionality for citywide sidewalk network	10 years	\$15 million per year ¹

Austin PSAP

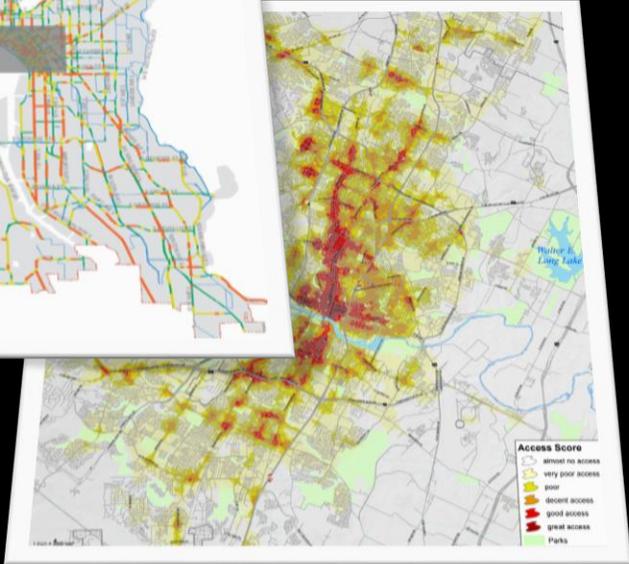
prioritization



High Crash Network



High Risk Network



High Demand Network

Austin PSAP

prioritization

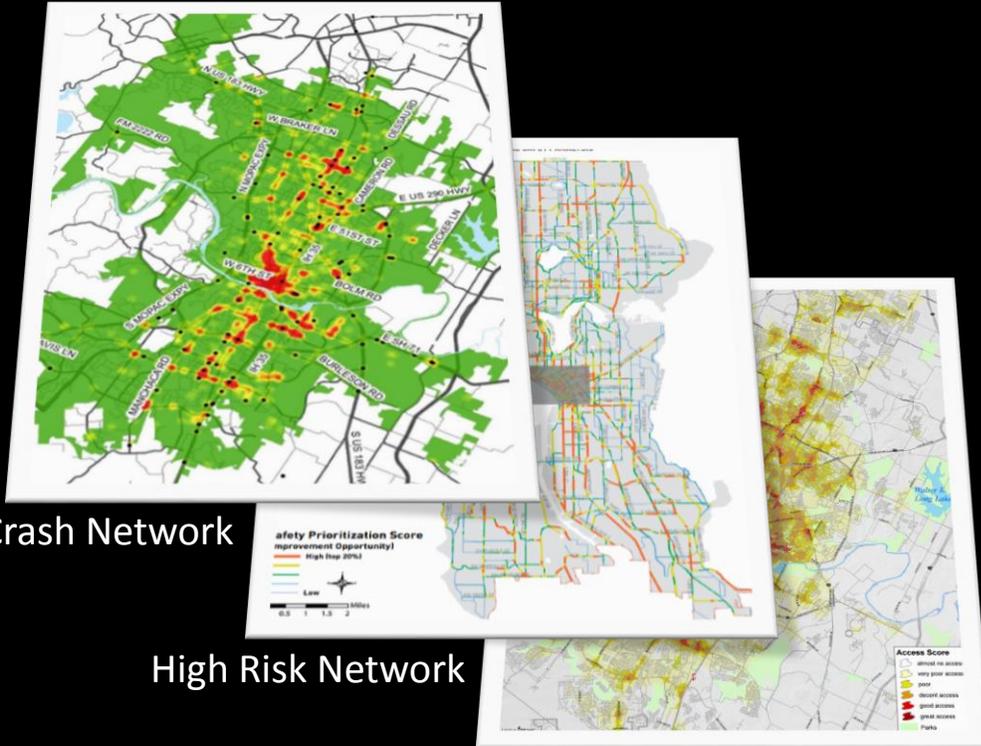
Example Goal:

Proactively identify and implement pedestrian safety treatments at X number of locations per year:

x# of low-cost/medium-cost treatments at High Crash locations

x# of low-cost/medium-cost treatments at High Risk locations

x# of low-cost/medium-cost treatments at High Demand locations



High Crash Network

High Risk Network

High Demand Network

Austin PSAP

Action Plan/Implementation Strategies

Focus Areas

Engineering

Enforcement

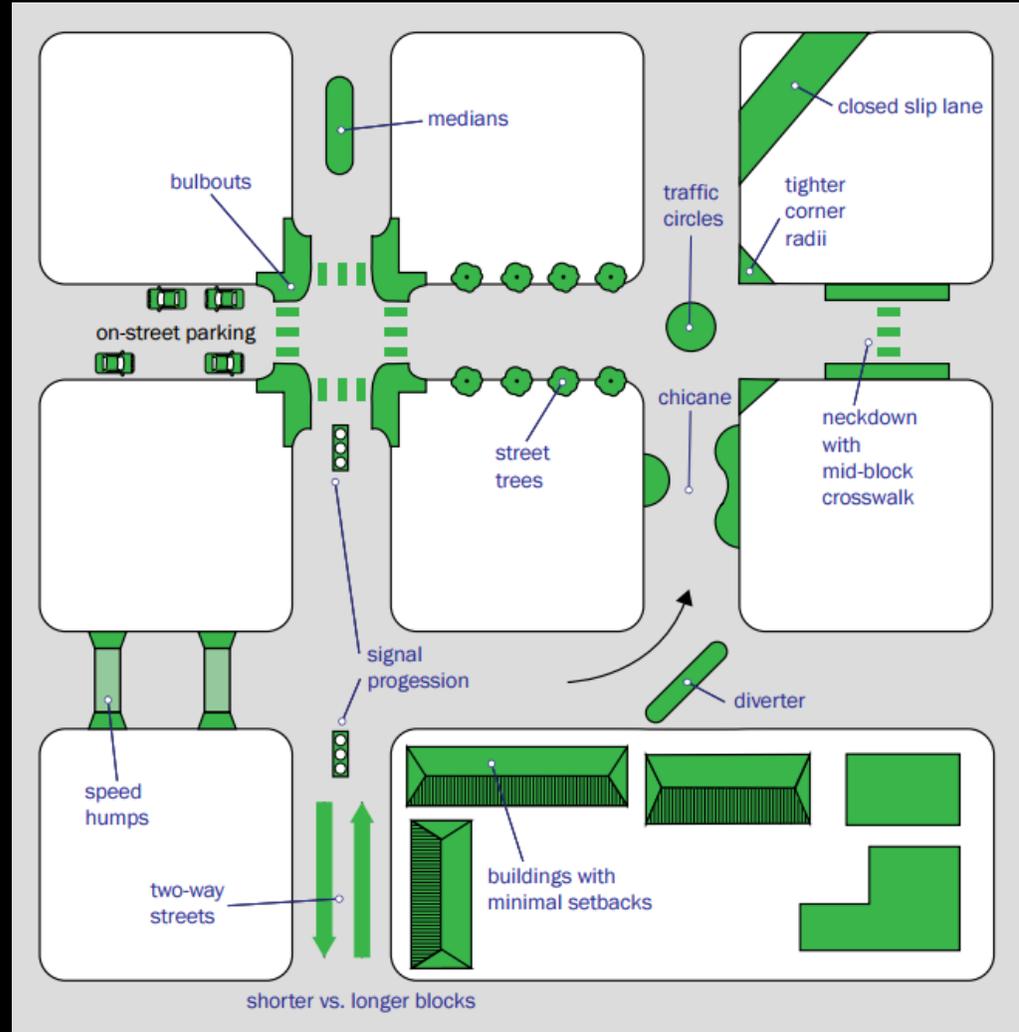
Education/Encouragement

Land Use + Site Design

Partners + Funding

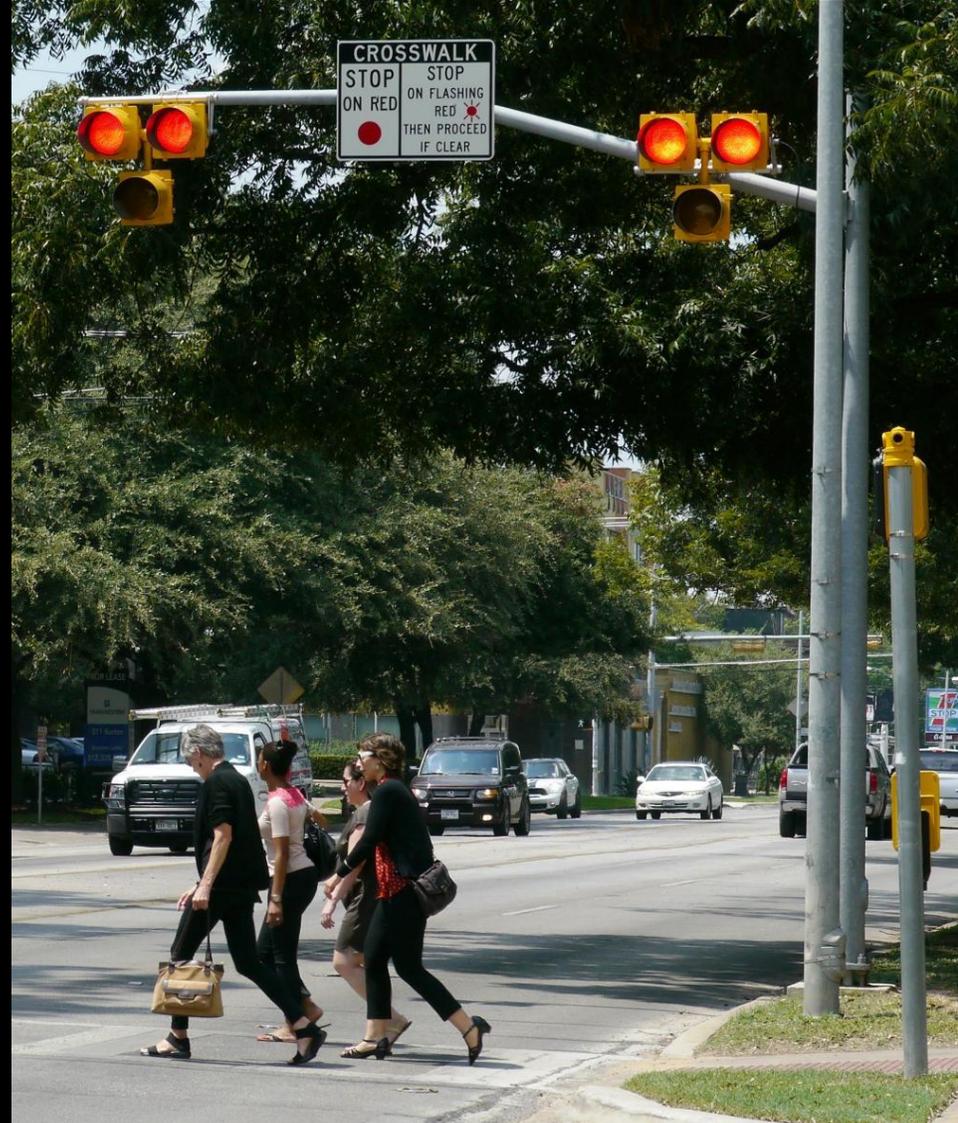
Evaluation

Other policies



Austin PSAP

Engineering: Pedestrian Crossing Criteria



Austin PSAP

Engineering: Pedestrian Crossing Criteria



Austin PSAP

Engineering: Pedestrian Crossing Criteria



Austin PSAP

Engineering: Pedestrian Crossing Criteria



Austin PSAP

Engineering: Pedestrian Crossing Criteria

CROSSWALK DESIGN BY ROADWAY TYPE*												
VEHICLE ADT > 4,000 - 9,000			VEHICLE ADT > 9,000 - 12,000			VEHICLE ADT > 12,000 - 15,000			VEHICLE ADT > 15,000			
<30 MPH	35 MPH	40+ MPH	<30 MPH	35 MPH	40+ MPH	<30 MPH	35 MPH	40+ MPH	<30 MPH	35 MPH	40+ MPH	
TWO LANES	●	●	●	●	●	●	●	●	●	●	●	●
THREE LANES WITH RAISED MEDIAN	●	●	●	●	●	●	●	●	●	●	●	●
THREE LANES WITHOUT RAISED MEDIAN	●	●	●	●	●	●	●	●	●	●	●	●
MULTILANE WITH RAISED MEDIAN	●	●	●	●	●	●	●	●	●	●	●	●
MULTILANE WITHOUT RAISED MEDIAN	●	●	●	●	●	●	●	●	●	●	●	●

* All crossings must be scoped by an engineer to ensure recommended treatment is appropriate and ADA ramps and illumination are in place.

- Marked Crosswalk
- Marked Crosswalk, island or curb extensions, enhanced signing and striping
- Marked Crosswalk and enhanced/active warning (islands and RRFB's)
- Marked Crosswalk and pedestrian hybrid or full signal

Austin PSAP

crash analysis

Objective 1: Characterize **Victim Characteristics**

- Who is involved in pedestrian crashes/injuries/fatalities?

Objective 2: Map **High Crash Network** (Hot Spots) of pedestrian serious injuries and fatalities

- Answers the question, *where are serious pedestrian crashes occurring?*

Objective 3: Identify and quantify **High Risk Factors** associated with pedestrian crashes, serious injuries and fatalities

- Answers the *what, when, why, and how of pedestrian crashes.*
- e.g. roadway characteristics, contributing factors, previous movement, etc.

Objective 4: Map **High Risk Network** based on top roadway risk factors

- Answers the question, *what streets are prone to serious pedestrian crashes (but may not appear in the crash history)?*

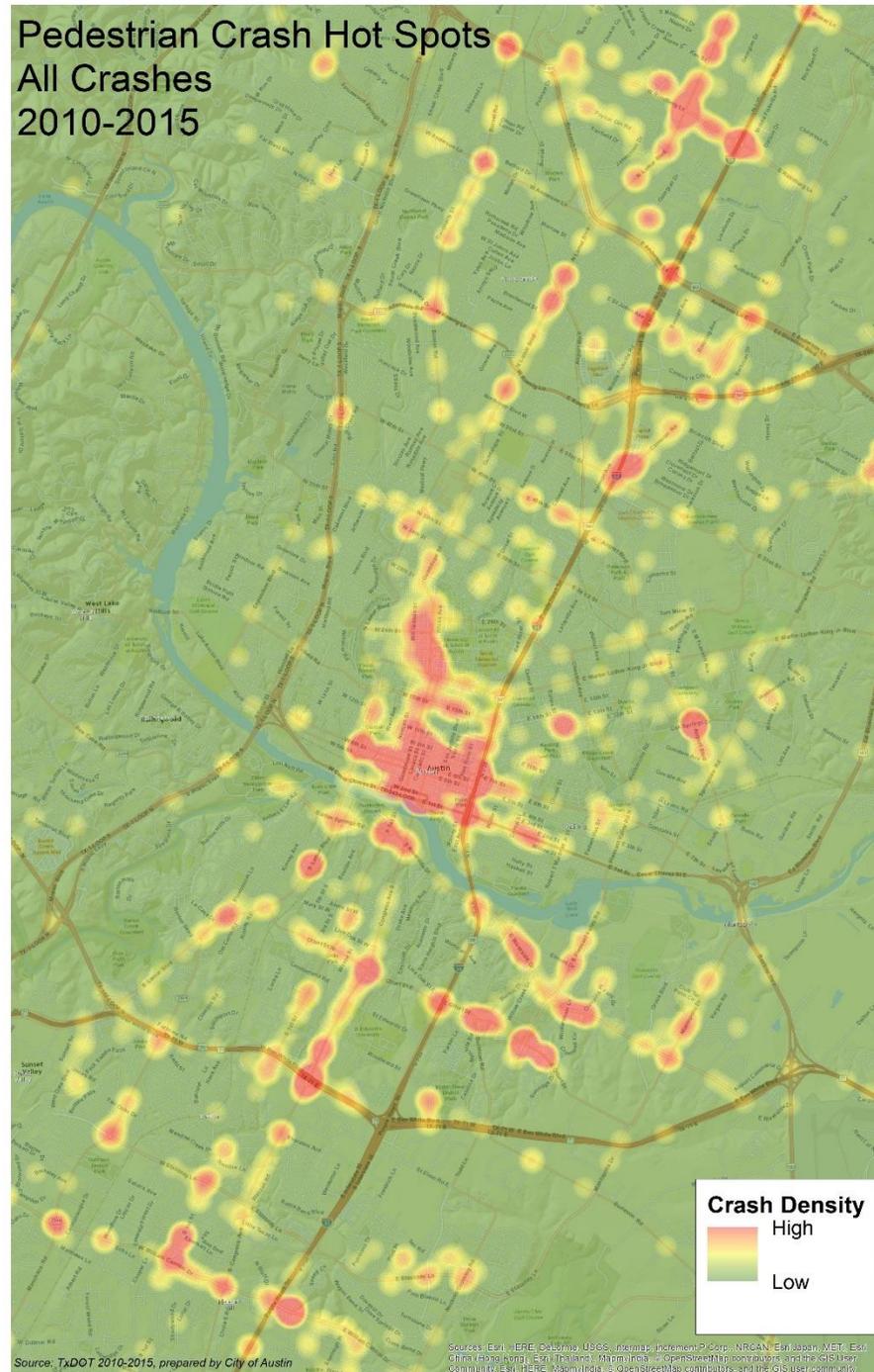
Objective 5: Map **High Demand** locations

- Map areas where a safer pedestrian realm might serve latent pedestrian demand
- Answers the question, *how can we help achieve citywide objectives through a safer pedestrian environment?*

Austin PSAP

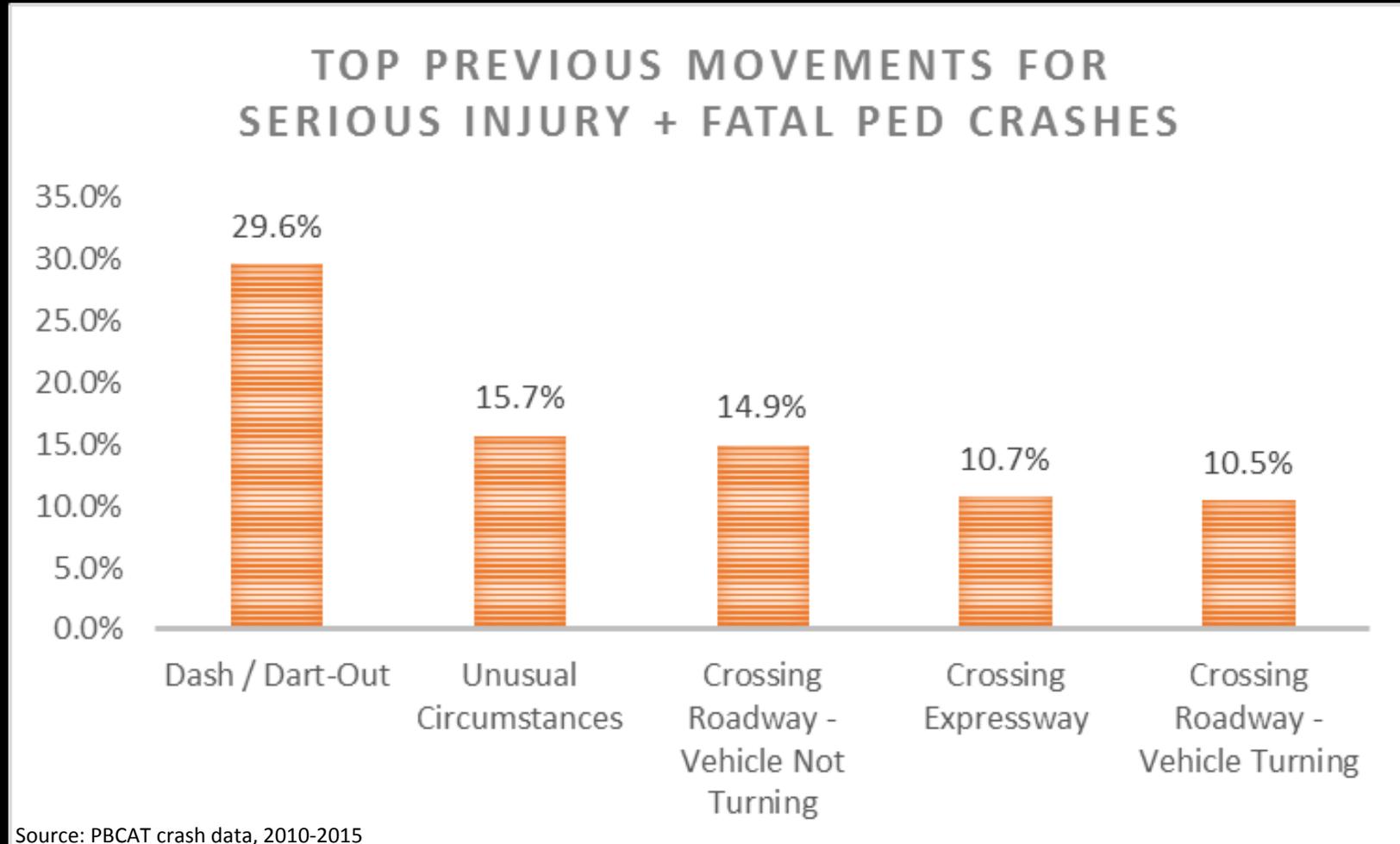
Preliminary Crash Analysis

Pedestrian Crash Hot Spots
All Crashes
2010-2015



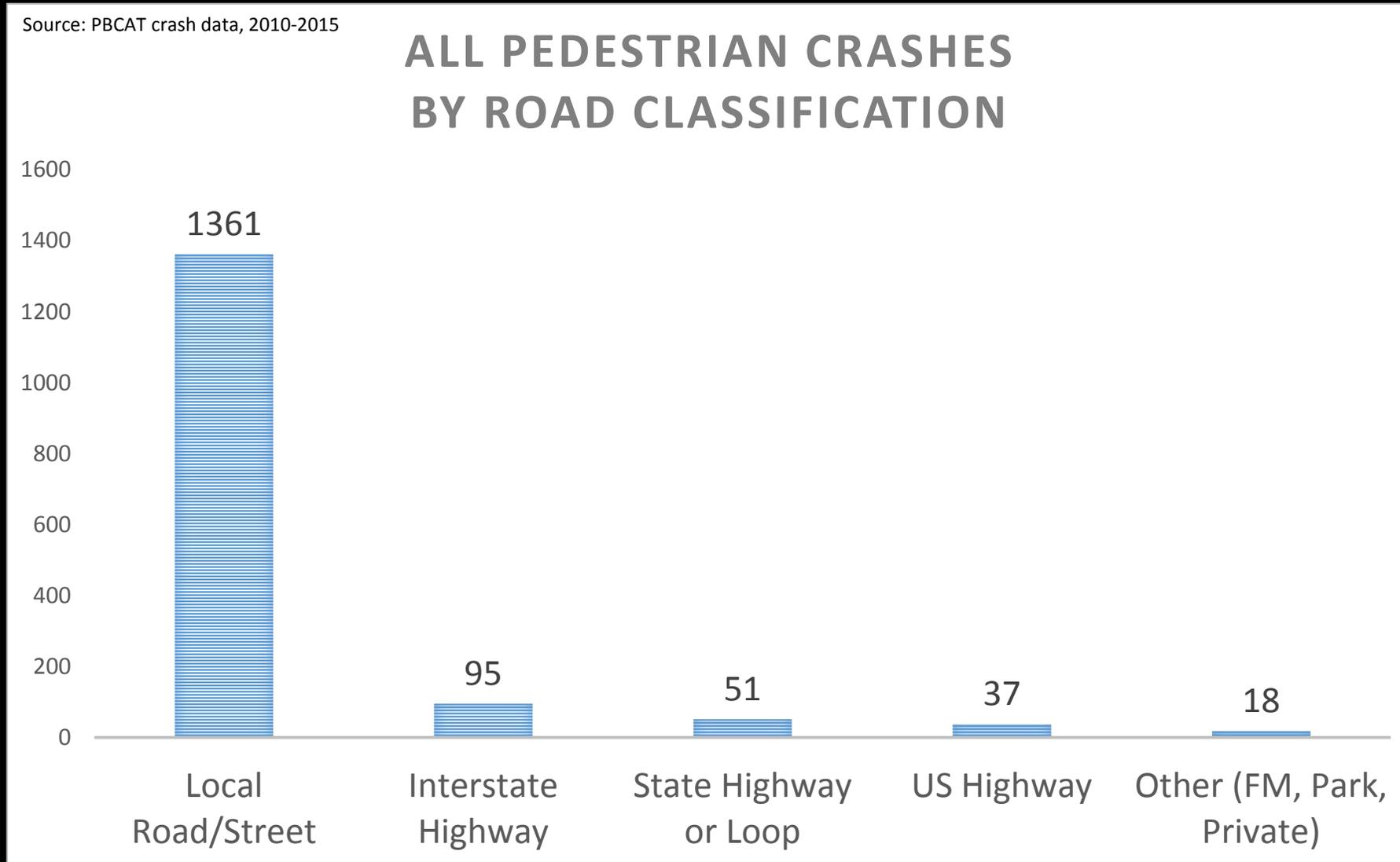
Austin PSAP

Preliminary Crash Analysis



Austin PSAP

Preliminary Crash Analysis

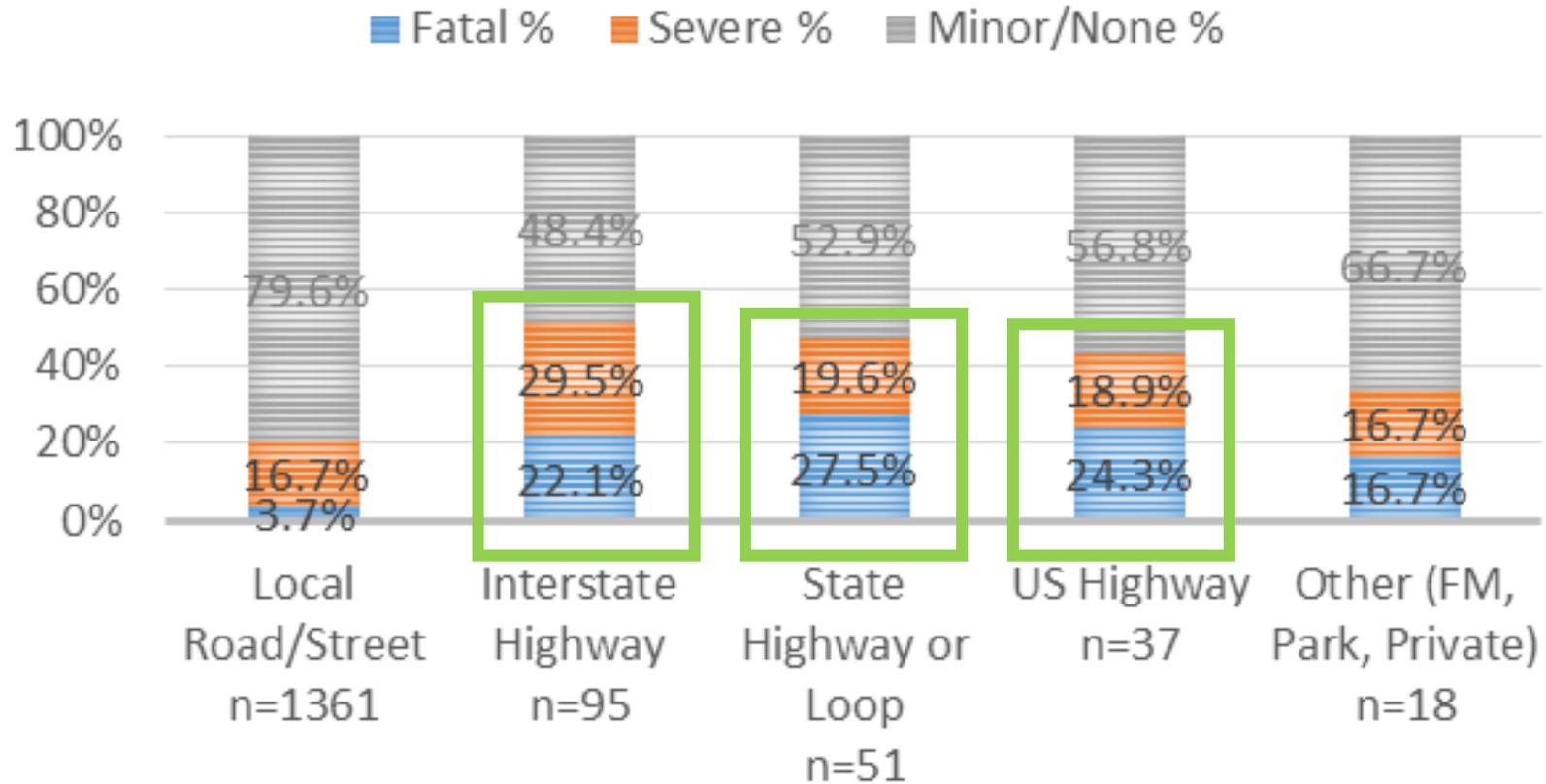


Austin PSAP

Preliminary Crash Analysis

Source: PBCAT crash data, 2010-2015

CRASH SEVERITY BY ROAD CLASSIFICATION



Austin PSAP

Preliminary Crash Analysis

Presence of Sidewalks



All KAB Crashes (n =1,116) by Sidewalk Presence and Severity

	#KAB	#Fatal (K)	#KA	Prob K	Prob KA
Sidewalk Present	867	30	231	3.5%	26.6%
Sidewalk Absent	144	41	84	28.5%	58.3%
Not Applicable	105	17	67	16.2%	63.8%
Total	1116	88	382	7.9%	34.2%

Source: PBCAT crash data, 2010-2015

K = killed
A = incapacitating injury
B = non- incapacitating injury

Austin PSAP

Preliminary Crash Analysis

Presence of Lighting



All Crashes, by lighting conditions and severity									
Source: PBCAT crash data, 2010-2015									
Condition	All	K	SI	K+SI	%Total	%K	%K+SI	Prob K	Prob KSI
Daylight	846	16	110	126	54.2%	16.3%	33.8%	1.9%	14.9%
Dark, Lighted	483	50	118	168	30.9%	51.0%	45.0%	10.4%	34.8%
Dark, Not Lighted	132	29	27	56	8.5%	29.6%	15.0%	22.0%	42.4%
Dawn/Dusk	48	2	10	12	3.1%	2.0%	3.2%	4.2%	25.0%
Unknown	53	1	10	11	3.4%	1.0%	2.9%	1.9%	20.8%
Grand Total	1,562	98	275	373	100%	100%	100%	6.3%	23.9%

K = killed

SI = seriously injured

Austin PSAP

Preliminary Crash Analysis

Time of Day

Percent of Crashes, by time of day

Time of Day	% of Ped Crashes	% of KSI Crashes	% of Fatal Crashes
12AM-3AM	10.7%	16.7%	19.4%
3AM-6AM	2.7%	4.4%	10.7%
6AM-9AM	10.7%	8.9%	12.6%
9AM-12PM	8.7%	5.7%	2.9%
12PM-3PM	11.3%	5.5%	1.9%
3PM-6PM	19.9%	13.8%	4.9%
6PM-9PM	23.4%	22.9%	23.3%
9PM-12AM	12.7%	22.1%	24.3%

Crash Severity Probability, by time of day

Time of Day	% of Ped Crashes	Probability KSI	Probability K
12AM-3AM	10.7%	35.8%	11.2%
3AM-6AM	2.7%	37.8%	24.4%
6AM-9AM	10.7%	19.0%	7.3%
9AM-12PM	8.7%	15.1%	2.1%
12PM-3PM	11.3%	11.1%	1.1%
3PM-6PM	19.9%	15.9%	1.5%
6PM-9PM	23.4%	22.5%	6.1%
9PM-12AM	12.7%	40.1%	11.8%

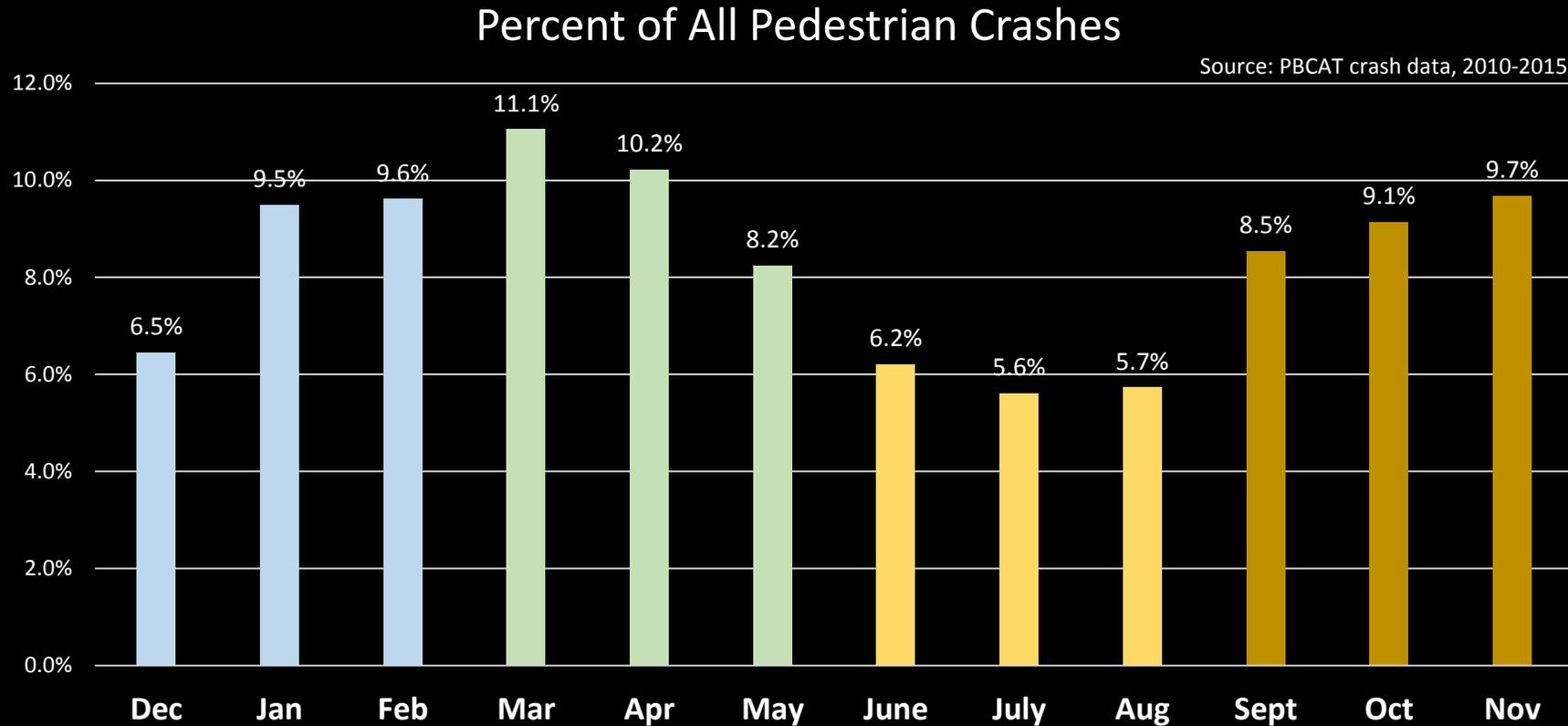
Source: PBCAT crash data, 2010-2015

K = killed
SI = seriously injured

Austin PSAP

Preliminary Crash Analysis

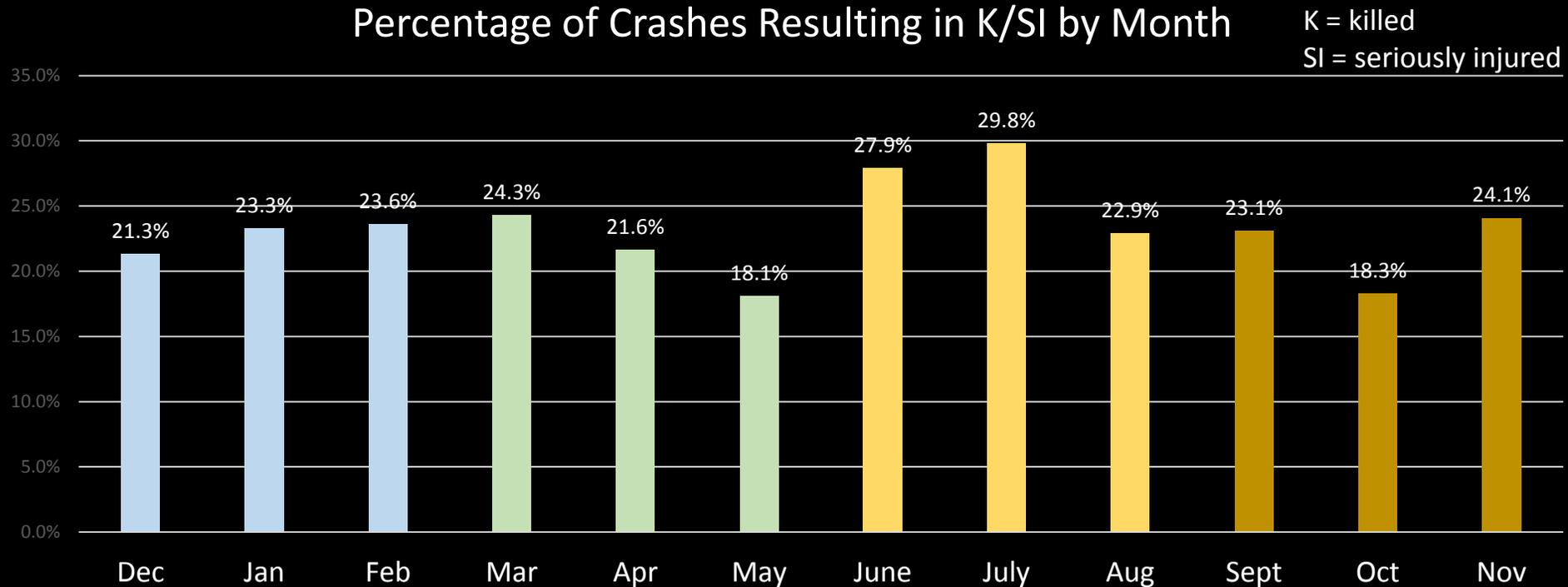
Time of Year



Austin PSAP

Preliminary Crash Analysis

Time of Year



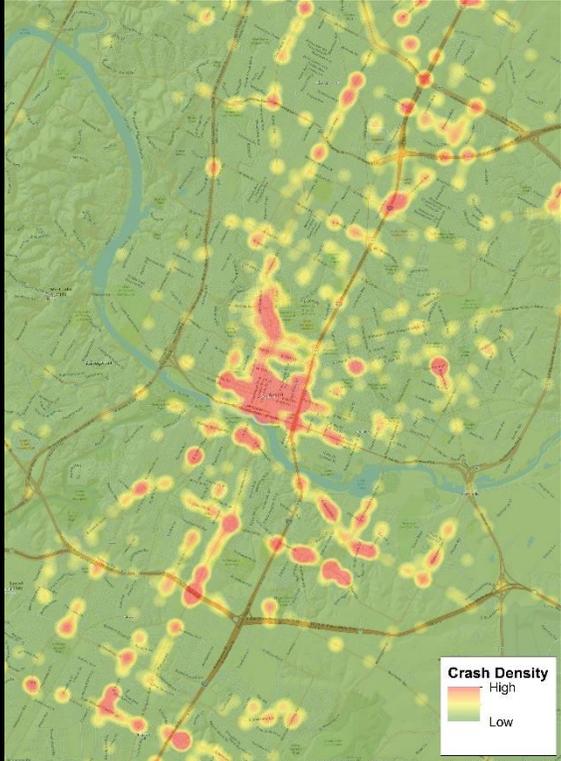
Source: PBCAT crash data, 2010-2015

Austin Pedestrian Safety Action Plan

Pedestrian Advisory Council Project Subcommittee

November 30th, 2016

Questions?



Austin PSAP

crash analysis

Objective 1: Characterize **Victim Characteristics**

- Who is involved in pedestrian crashes/injuries/fatalities?

Objective 2: Map **High Crash Network** (Hot Spots) of pedestrian serious injuries and fatalities

- Answers the question, *where are serious pedestrian crashes occurring?*

Objective 3: Identify and quantify **High Risk Factors** associated with pedestrian crashes, serious injuries and fatalities

- Answers the *what, when, why, and how of pedestrian crashes.*
- e.g. roadway characteristics, contributing factors, previous movement, etc.

Objective 4: Map **High Risk Network** based on top roadway risk factors

- Answers the question, *what streets are prone to serious pedestrian crashes (but may not appear in the crash history)?*

Objective 5: Map **High Demand** locations

- Map areas where a safer pedestrian realm might serve latent pedestrian demand
- Answers the question, *how can we help achieve citywide objectives through a safer pedestrian environment?*