

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE



Source: left, right - @Getty Images, middle - FHWA

Increasing Safety and Visibility for all Pedestrians



U.S. Department of Transportation
Federal Highway Administration



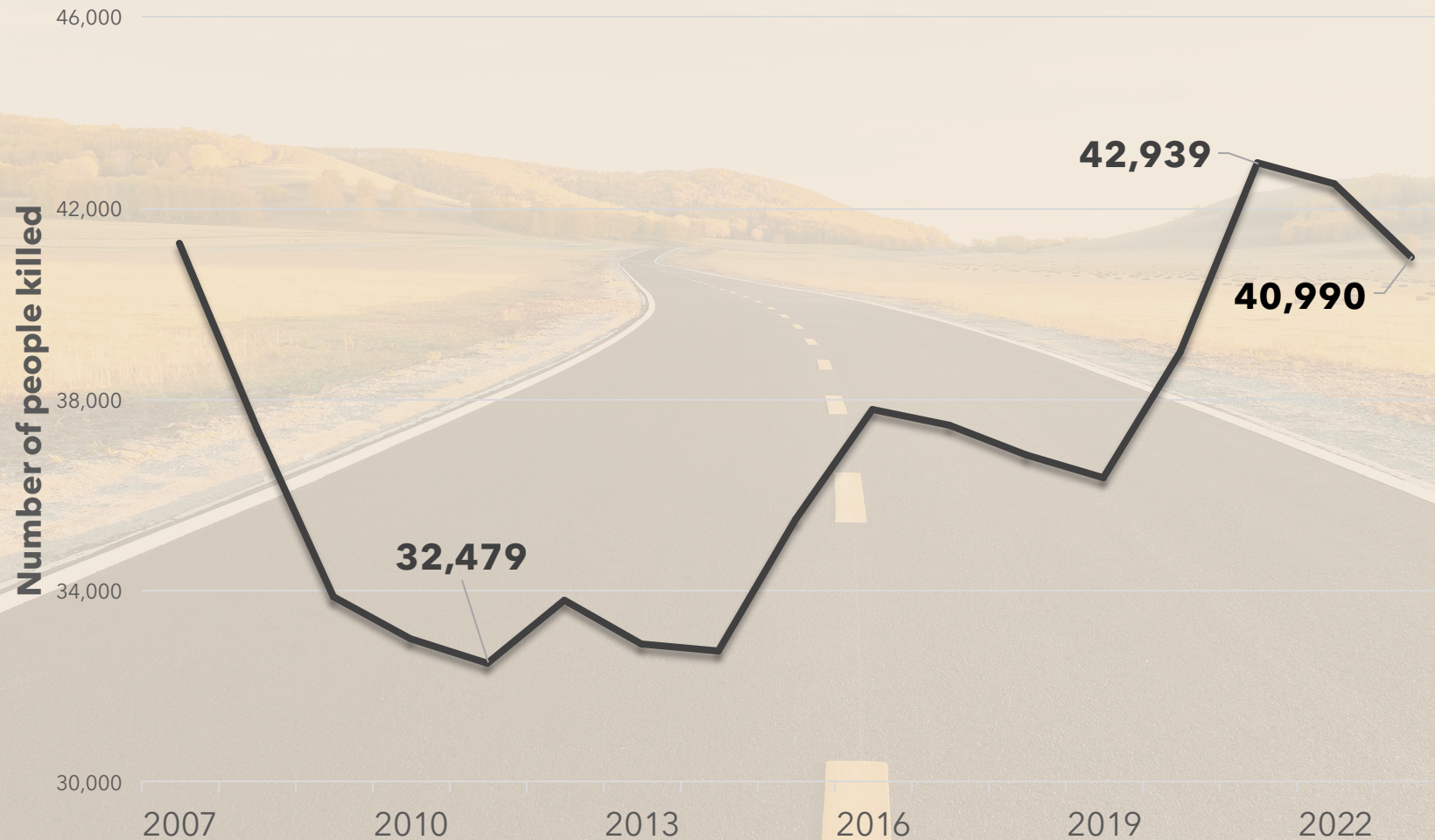
May 2nd, 2024

Disclaimers



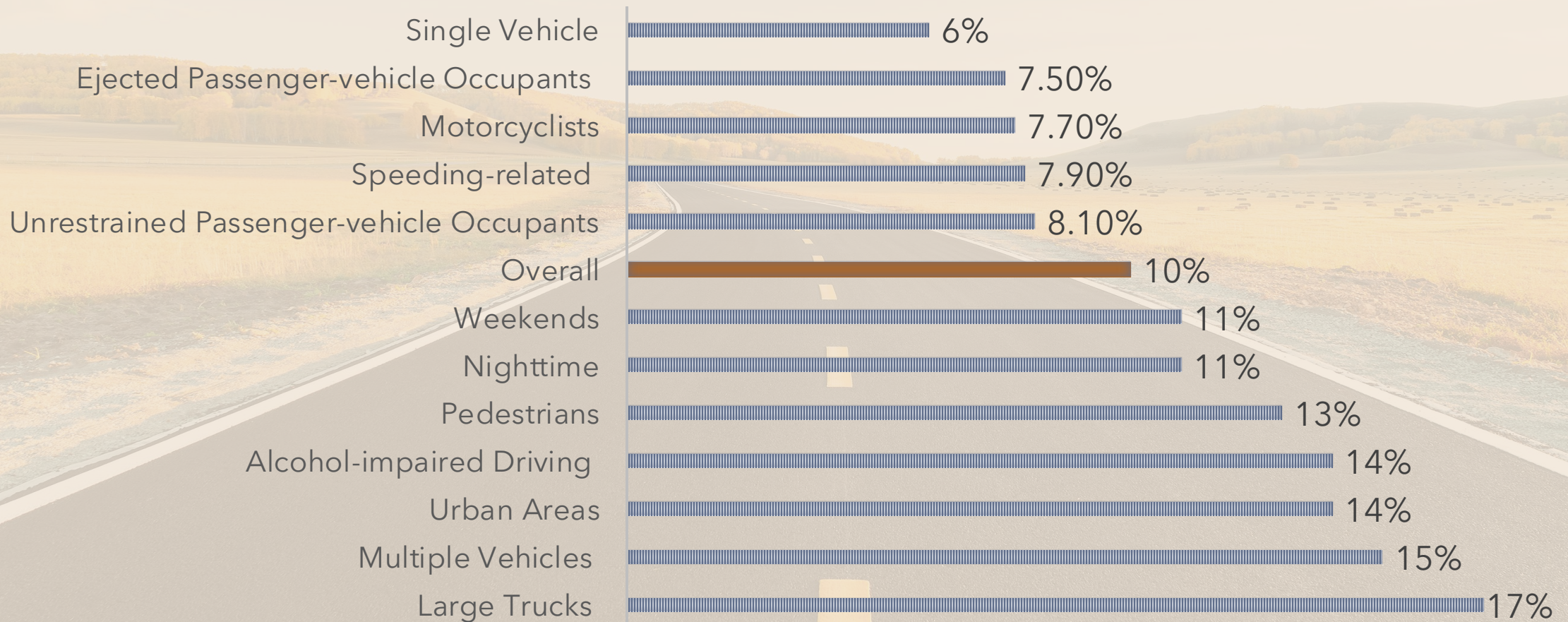
- ✦ Except for any statutes or regulations cited, the contents of this presentation do not have the force and effect of law and are not meant to bind the States or the public in any way. This presentation is intended only to provide information regarding existing requirements under the law or agency policies.
- ✦ The U.S. Government does not endorse products or manufacturers. Trademarks or manufacturers' names appear in this presentation only because they are considered essential to the objective of the presentation. They are included for informational purposes only and are not intended to reflect a preference, approval, or endorsement of any one product or entity.
- ✦ All traffic control devices installed by an agency must be compliant with FHWA's Manual on Traffic Control Devices (MUTCD). For certain treatments which are not MUTCD-compliant, an agency may request an experimentation waiver from FHWA to allow its installation. Only after this waiver is obtained should a non-compliant treatment be installed. For full information on the experimentation waiver request process, please refer to the relevant page on the MUTCD website here (<https://mutcd.fhwa.dot.gov/condexper.htm>).
- ✦ Unless otherwise indicated, FHWA is the source for all images in this presentation.

40,990 people died on America's Roads in 2023*

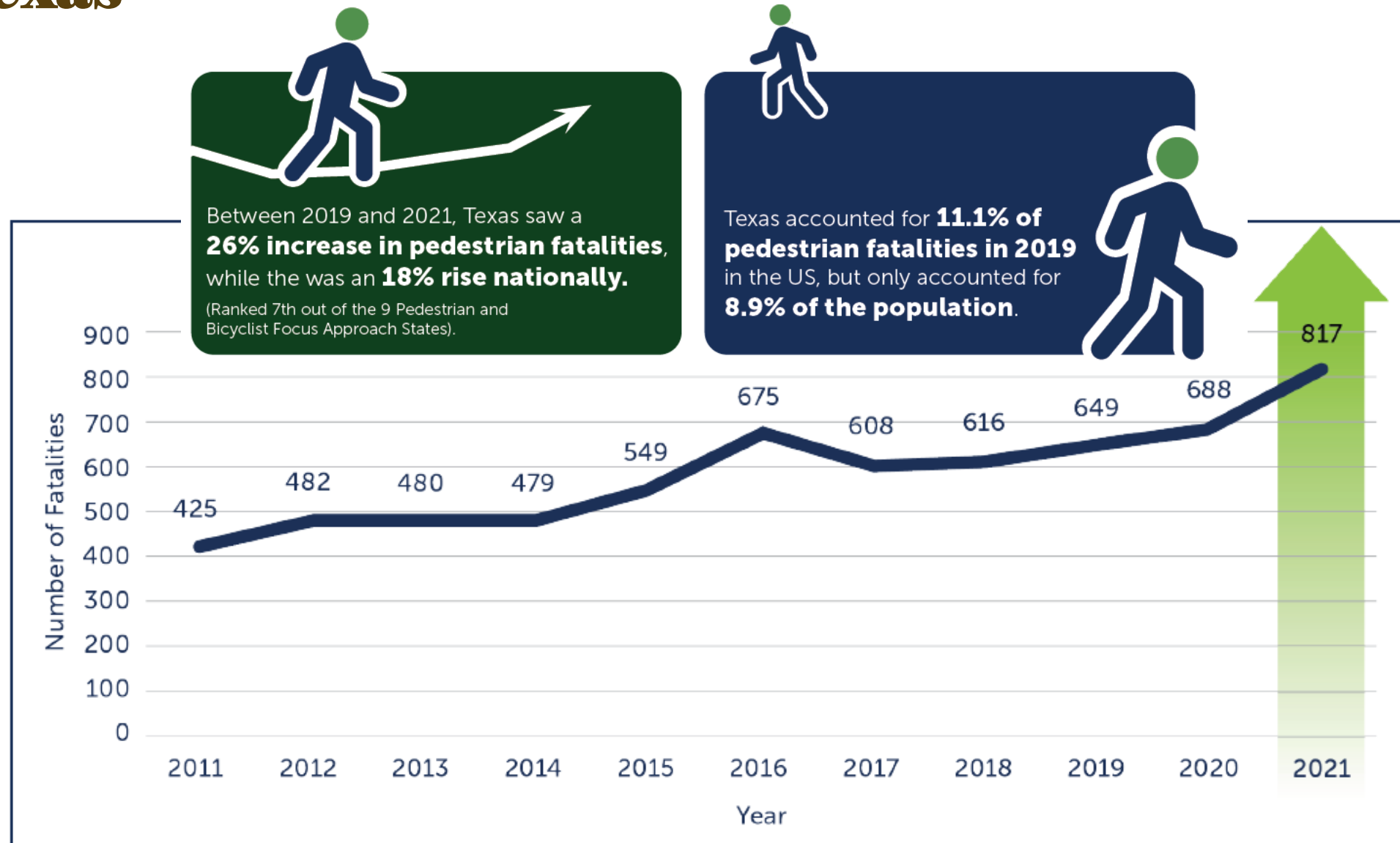


*NHTSA (2024) Early Estimate of Motor Vehicle Traffic Fatalities in 2023

Increases in Traffic Fatalities Between 2020 and 2021



Texas



Source: NHTSA Fatal Analysis Reporting System



National Roadway Safety Strategy

U.S. DOT's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets.

Sets a vision and goal for the safety of the Nation's roadways

Adopts the Safe System Approach to guide our safety actions

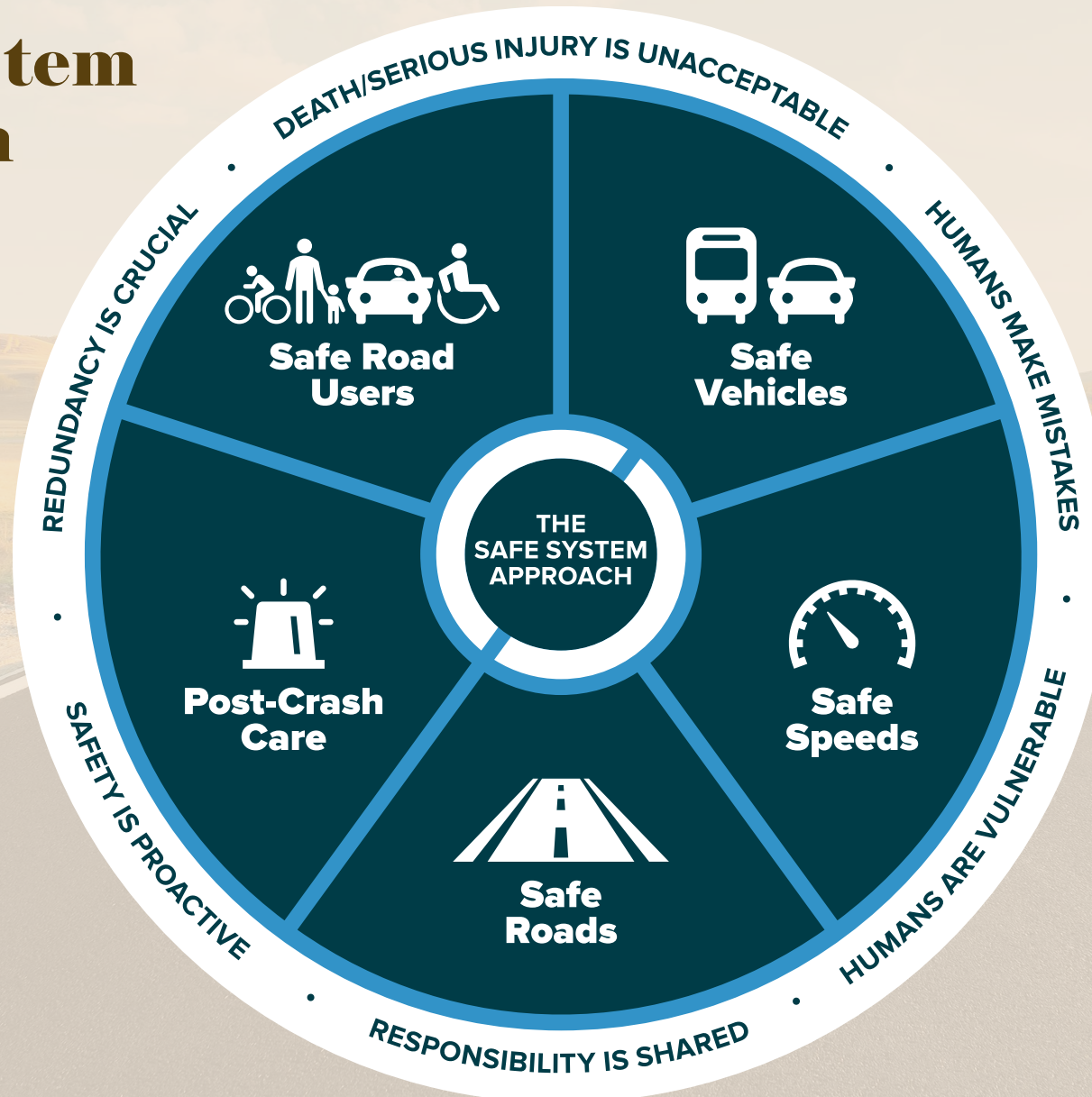
Identifies new priority actions and notable changes to existing practices that target our most significant and urgent problems

The Safe System Approach


Death/serious injury
is unacceptable


Humans make
mistakes


Humans are
vulnerable




Responsibility is
shared


Safety is proactive


Redundancy
is crucial

Safe System Elements Create Redundancy

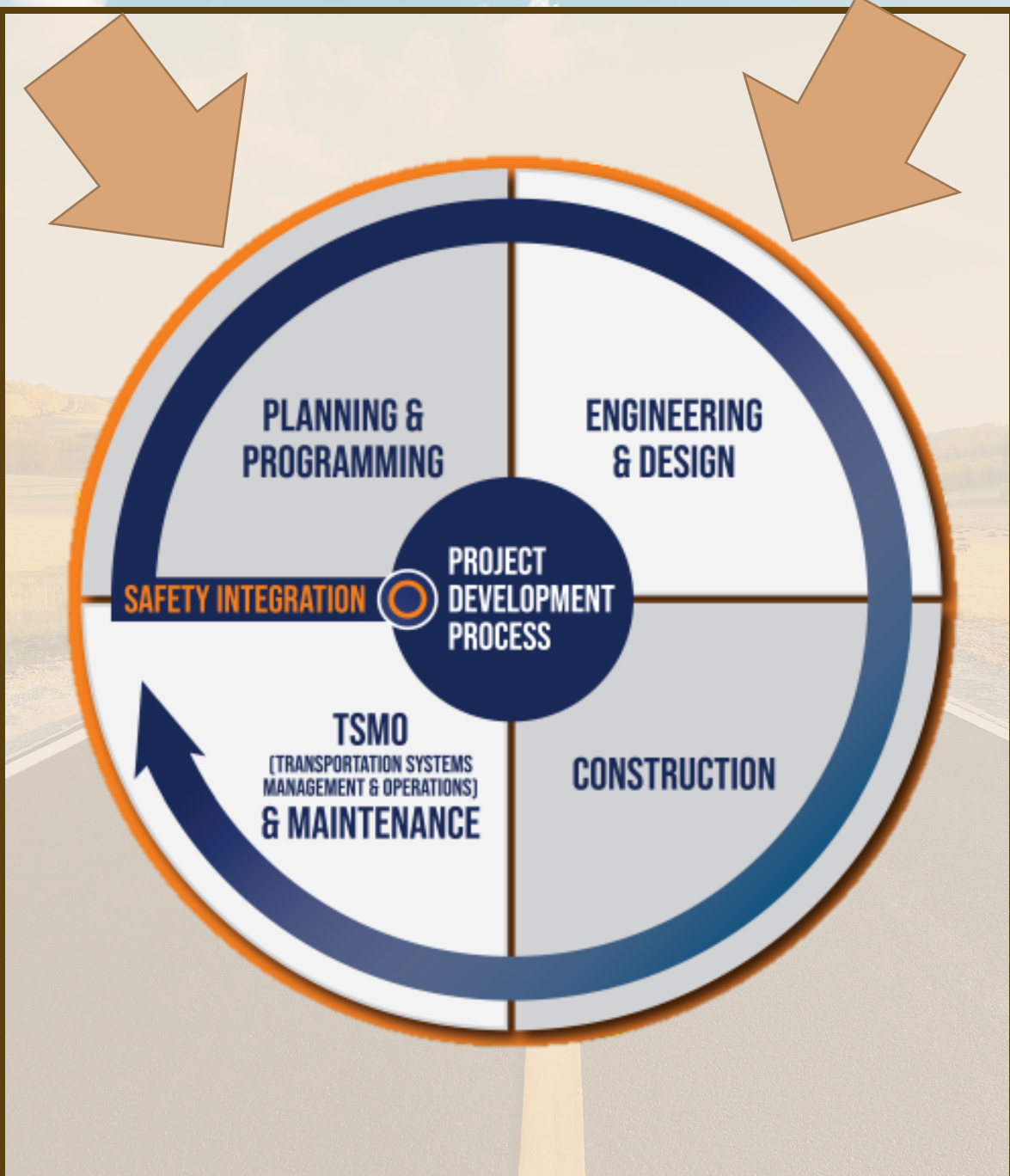
The "Swiss Cheese Model" of redundancy creates layers of protection

Death and serious injuries only happen when all layers fail



Adapted from James Reason's model for analyzing accident causation
<https://royalsocietypublishing.org/doi/10.1098/rstb.1990.0090>

Image Source: FHWA



Safety is proactive

Safety is proactive: Transportation agencies should use proactive and data-driven tools to identify and mitigate latent risks in the system, rather than waiting for crashes to occur and reaction afterwards.



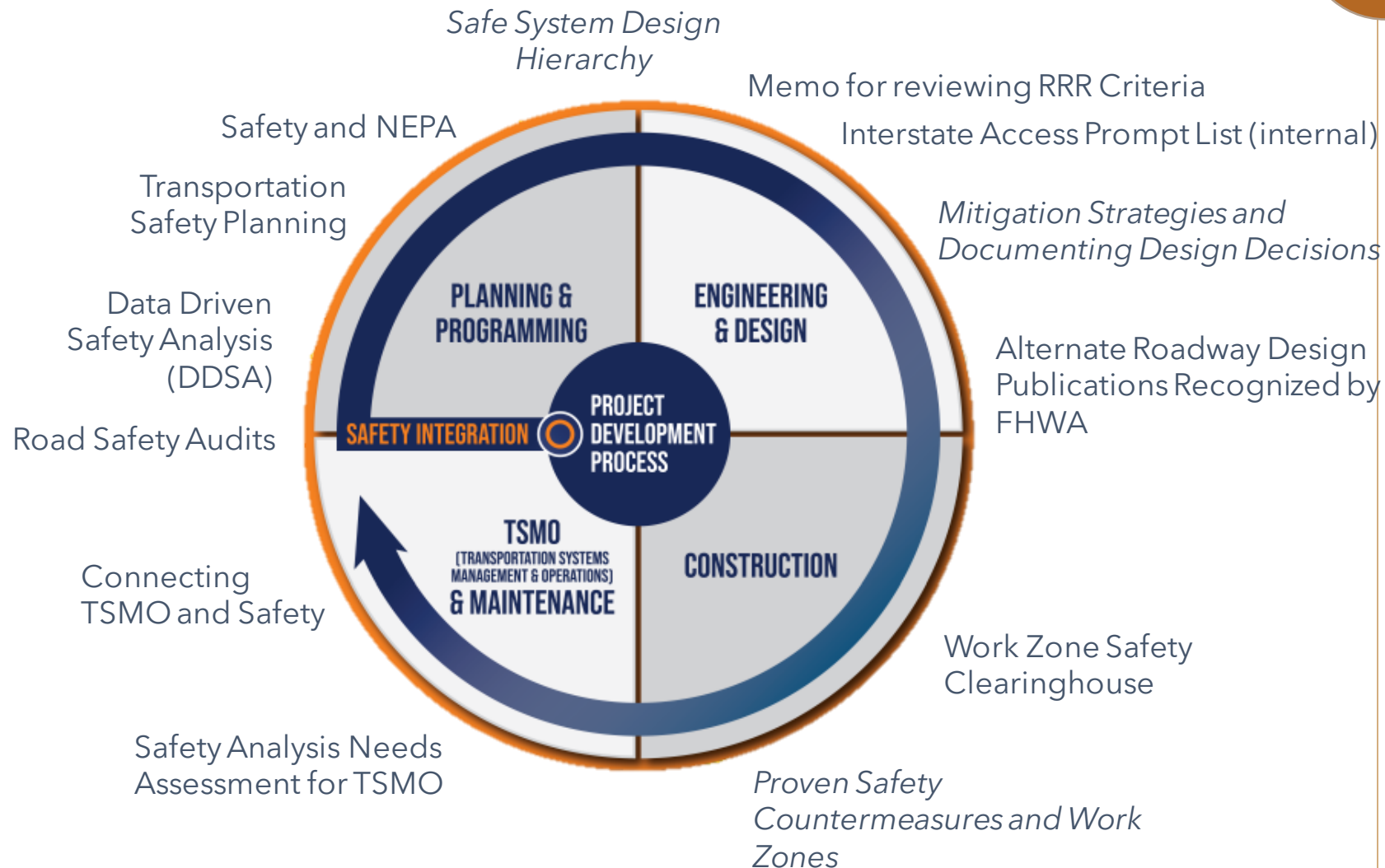
Identify risks



Eliminate (i.e. "Design Out") or Mitigate risks

FHWA has numerous technical resources to integrate safety in all project development phases

Use this code to connect to specific safety resources



Organizational Safety Culture & Programmatic Safety Integration

Performance-based Design and Evaluation of Interchanges - NHI online (NEW!)

Prioritizing Safety in All Programs and Projects

ITE Integration of Safety in the Project Development Process and Beyond

- 
- System Managers
 - Planners, designers, builders, operators, maintenance workers
 - Vehicle manufacturers
 - Law enforcement personnel
 - Traffic Incident Management personnel
 - System users

AND

**FHWA in our role in
stewardship and oversight of
the Federal transportation
program on behalf of the
American people**

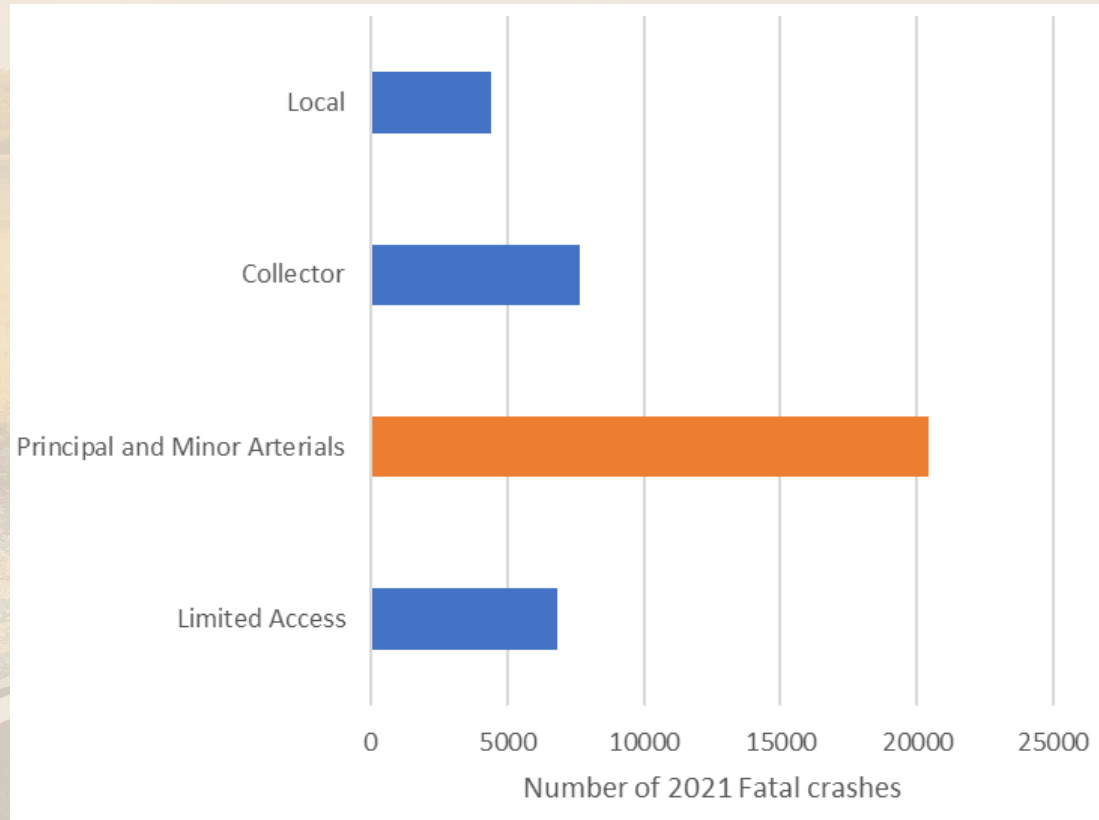
**Safety is a
shared
responsibility**

ZERO IS OUR
GOAL



A SAFE SYSTEM IS HOW WE GET THERE

Types of roadways: arterials are deadly



The graphic features a blue circular frame containing an aerial view of a road intersection with cars. The text 'SAFE SYSTEM DESIGN HIERARCHY' is prominently displayed in white, bold, sans-serif font. Below it, the subtitle 'EFFECTIVELY REDUCING ROADWAY FATALITIES AND SERIOUS INJURIES' is in a smaller, white, sans-serif font. At the bottom left, the U.S. Department of Transportation Federal Highway Administration logo is visible. At the bottom center, the 'ZERO IS OUR GOAL' logo is shown, with 'ZERO' in large yellow letters and 'IS OUR GOAL' in smaller white letters. Below this, the tagline 'A SAFE SYSTEM IS HOW WE GET THERE' is written in small white text. A large black arrow with a white outline points from the top right towards the graphic.

SAFE SYSTEM DESIGN HIERARCHY

EFFECTIVELY REDUCING
ROADWAY FATALITIES
AND SERIOUS INJURIES



U.S. Department of Transportation
Federal Highway Administration

ZERO IS OUR
GOAL

A SAFE SYSTEM IS HOW WE GET THERE

"... introduces the Safe System Design Hierarchy as a tool to characterize engineering and infrastructure-based countermeasures and strategies relative to their alignment with the goal of eliminating fatalities and serious injuries to support implementation of a Safe System Approach."

Safe System Design Hierarchy

**TIER
1** REMOVE SEVERE
CONFLICTS



**TIER
2** REDUCE VEHICLE
SPEEDS

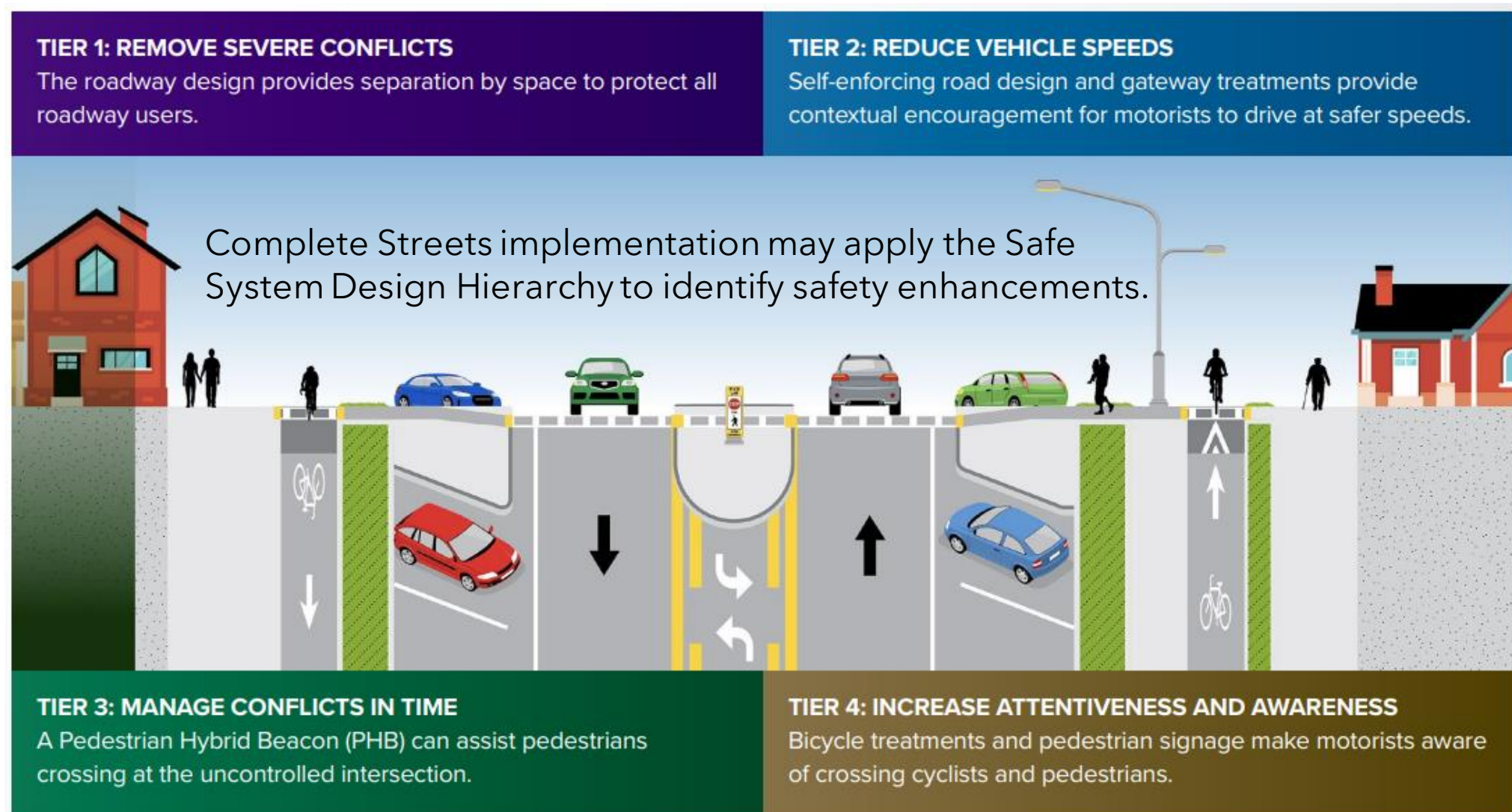
**TIER
3** MANAGE CONFLICTS
IN TIME



**TIER
4** INCREASE ATTENTIVENESS
AND AWARENESS



HOW CAN THE HIERARCHY ADVANCE COMPLETE STREETS EFFORTS?



Transportation agencies are strongly encouraged to consider widespread implementation of **Proven Safety Countermeasures** to accelerate the achievement of local, State, and National safety goals.

SPEED MANAGEMENT



Speed Safety Cameras



Variable Speed Limits



Appropriate Speed Limits for All Road Users

ROADWAY DEPARTURE



Wider Edge Lines



Enhanced Delineation for Horizontal Curves



Longitudinal Rumble Strips and Stripes



SafetyEdgeSM



Roadside Design Improvements at Curves



Median Barriers

INTERSECTIONS



Backplates with Reflective Borders



Corridor Access Management



Left- and Right-Turn Lanes at Two-Way Stop-Controlled Intersections



Reduced Left-Turn Conflict Intersections



Roundabouts



Systemic Application of Multiple Low Cost Countermeasures at Stop-Controlled Intersections



Yellow Change Intervals

PEDESTRIAN/BICYCLIST



Crosswalk Visibility Enhancements



Bicycle Lanes



Rectangular Rapid Flashing Beacons



Leading Pedestrian Interval



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacons



Road Diets (Roadway Reconfiguration)



Walkways

CROSSCUTTING



Pavement Friction Management



Lighting



Local Road Safety Plans



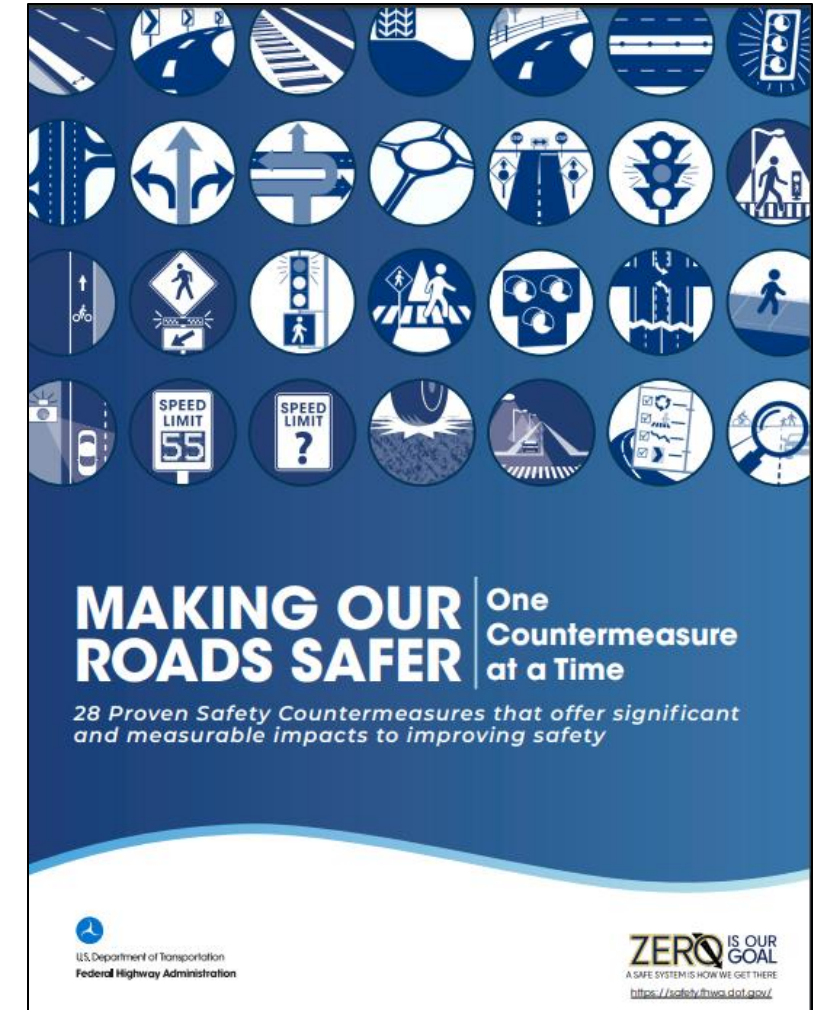
Road Safety Audits

Source: FHWA

“Double-down” on what works

History of the Proven Safety Countermeasure initiative (PSCi)

- Version 1 debuted in 2008
 - First “proven safety countermeasures” totaled 9
 - Envisioned as a means to boost systemic implementation.
- Version 2 released in 2012
 - Updated four of original nine
 - Added five new countermeasures for a total of 14
- Version 3 released in 2017
 - Added six new countermeasures for a total of 20
 - Developed new informational one-pagers and a booklet-style handout
- Version 4 released in 2021
 - Added eight new countermeasures and updated one for a total of 28
 - Enhanced functionality of webpages and updated all one-pagers



Source: FHWA



Solutions With Significant Crash- reduction Potential

2021 Fatalities by Percent	Crash Type	Proven Safety Countermeasures That Can Reduce Crashes
50%	Roadway Departures	<ul style="list-style-type: none">• Median Barriers: 97%• Rumble Strips: 51-64%
27%	Intersections	<ul style="list-style-type: none">• Roundabouts: 82%• Managing Corridor Access: 31%
29%	Speeding	<ul style="list-style-type: none">• Speed safety cameras: 47%• Variable speed limits: 51%
20%	Pedestrians & Cyclists	<ul style="list-style-type: none">• Sidewalks: 89%• Adding bicycle lanes: 49%

Source: FARS 2021 Annual Report File; FHWA Proven Safety Countermeasures

PSCs – Pedestrian/Bicyclist



Bicycle Lanes



Crosswalk Visibility Enhancements



Leading Pedestrian Interval



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacons



Rectangular Rapid Flashing Beacons (RRFB)



Road Diets (Roadway Reconfiguration)



Walkways

Crosswalk Visibility Enhancements



Crosswalk Visibility Enhancements



- ✦ Improved intersection lighting
 - Place luminaires in forward locations
- ✦ High visibility crosswalks
 - Consider at all midblock and uncontrolled crossings
 - Use inlay or thermoplastic tape (instead of paint or brick)
- ✦ Advance Yield or Stop signage and markings
 - 20-50 feet in advance of marked crosswalk
 - Stop bar or Yield markings
 - Better sight lines to reduces multi-threat crashes
- ✦ See MUTCD for information on crosswalk markings ([Chapter 3C](#)) and in-street signing ([Sections 2B.19 and 2B.20](#))
- ✦ Table 1 of *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*

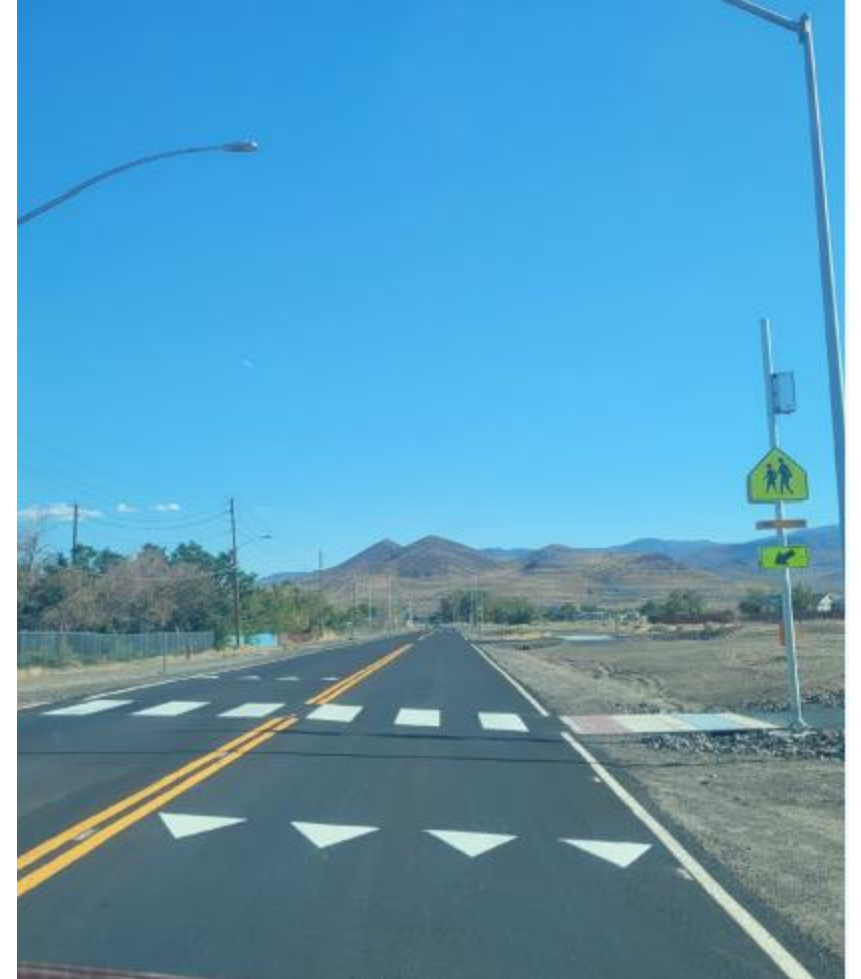


Source: FHWA

Effectiveness



- ✦ Intersection lighting
 - Up to **42% reduction** in pedestrian crashes (CMF ID 436)
- ✦ High-visibility crosswalks
 - Up to **40% reduction** in pedestrian injury crashes (CMF ID 4123)
- ✦ Advance yield or stop markings and signs
 - Up to **25% reduction** in pedestrian injury crashes (CMF ID 9017)



Source: FHWA

Leading Pedestrian Interval



Leading Pedestrian Interval (LPI)



- ✦ Provides pedestrians 3-7 second head start in crosswalk
- ✦ Reduce conflicts between pedestrians and vehicles
- ✦ Improve visibility of pedestrians in the crosswalk
- ✦ Increased likelihood of driver yielding
- ✦ Enhanced safety for slower moving pedestrians
- ✦ Agencies that prioritize intersections, consider the following factors:
 - Crash history
 - Pedestrian crossing volumes
 - Vulnerable populations
 - One-way streets or at T-intersections
 - Intersection Visibility
- ✦ Very low cost – only require adjustments to the signal
- ✦ MUTCD [Section 4I.06](#)



Source: FHWA

Effectiveness



- Up to **13% reduction** in pedestrian-vehicle crashes at intersections (CMF ID 9918)



Source: City of Toronto



Source: FHWA

Case Studies and Resources



Case Studies

- City of Austin (TX) – implemented LPIs at 110 of 135 downtown signalized intersections
 - Level of effort (12 person-hours)
 - Survey: 87% felt safer crossing at an intersection with an LPI, 60% more likely to use a crosswalk knowing it has an LPI
- Seattle DOT (WA) – policy requires evaluation of LPI for all new signals and all signal maintenance
 - Installed 527 LPIs (50% of traffic signals citywide as of 1/1/23)
 - 48% reduction in pedestrian turning collisions and 34% reduction in fatal and serious injury pedestrian collisions

Resources

- [Safe Transportation for Every Pedestrian \(STEP\) – LPI Tech Sheet](#)
- [STEP Educational Video](#)
- [PEDSAFE – LPI](#)
- [NACTO Urban Street Design Guide](#)
- [Caltrans – Implementation Guidelines](#)



Source: Seattle DOT

Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Source: City of Charlotte, NC

- Reduces overall crossing length and exposure to vehicle traffic when crossing a multilane road
- Allows pedestrians to cross one direction of traffic at a time
- Minimum 4' wide, though preferable 8' wide
- Supplement with a high-visibility crosswalk
- Highly desirable for midblock pedestrian crossings on roads with 4+ travel lanes, speed limits greater than 35 mph, and vehicle volumes greater than 9,000 vehicles per day
- Applications
 - Mid-block crossings.
 - Approaches to multilane intersections.
 - Areas near transit stops or other pedestrian-focused sites.



- ✦ Median with Marked Crosswalk
 - Up to **46% reduction** in pedestrian crashes (CMF ID 175)
- ✦ Pedestrian Refuge Island
 - Up to **56% reduction** in pedestrian crashes (CMF ID 175)



Source: www.pedbikeimages.org

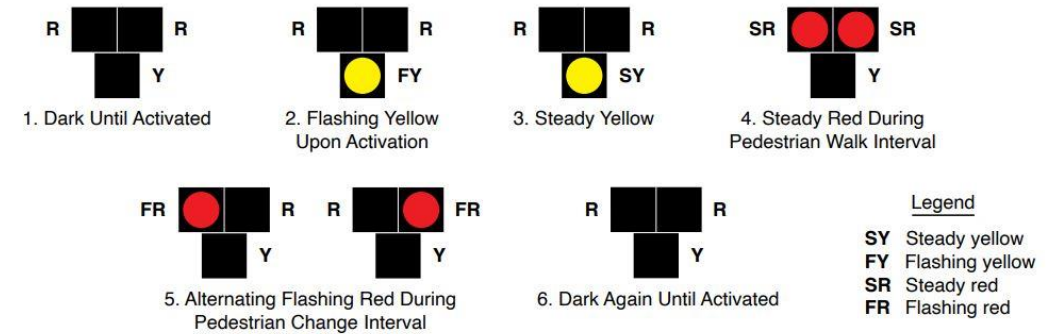
Pedestrian Hybrid Beacons



Pedestrian Hybrid Beacons



- When activated, the beacon displays a sequence of flashing and solid lights that indicate the pedestrian walk interval and when it is safe for drivers to proceed
- Assigns right of way and provides positive stop control
- Must also include a marked crosswalk and pedestrian countdown signal
- Mid-block Crossings and Uncontrolled Intersections on roads with 3+ travel lanes, speed limits greater than 35 mph, and vehicle volumes greater than 9,000 vehicles per day
- MUTCD [Chapter 4J](#)



Source: MUTCD



Source: FHWA

Effectiveness



- ✦ Up to **55% reduction** in pedestrian crashes (CMF ID 9020)
- ✦ Up to **29% reduction** in total crashes (CMF ID 2911)
- ✦ Up to **15% reduction** in fatal and serious injury crashes (CMF ID 2917)



Source: FHWA

Rectangular Rapid Flashing Beacons



Rectangular Rapid Flashing Beacons (RRFBs)



- Pedestrian-actuated conspicuity enhancement
- Used at uncontrolled, marked crosswalks
 - Effective at multilane crossings with speed limits less than 40 mph
- Supplements Pedestrian, School, or Trail Crossing post-mounted warning signs
- Solar-powered or hard wired
- For any approach, two RRFBs are required, one on left-side and one on right-side of roadway
 - If used on divided highway, should be installed on left-side of median if practical, rather than far left-side of roadway
- MUTCD [Chapter 4L](#)



Source: Peter Eun

Effectiveness



- ✦ Up to **47% reduction** in pedestrian crashes (CMF ID 9024)
- ✦ Up to **98% increase** in motorist yielding rates



Source: VHB

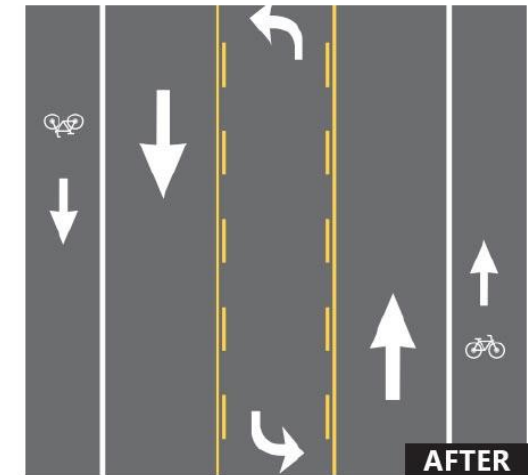
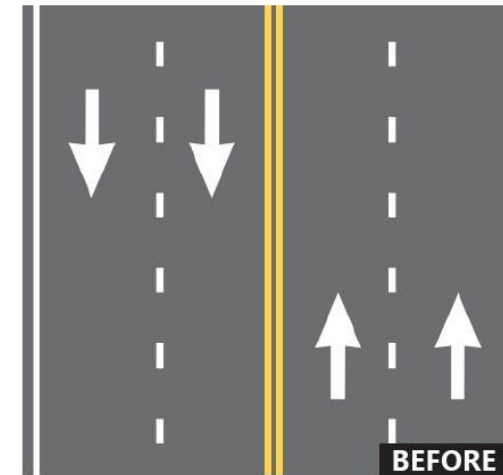
Road Diets (Roadway Reconfiguration)



Road Diets (Roadway Reconfiguration)



- ✦ Typically involves converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane (TWLTL)
- ✦ Reduce crossing distances and exposure
- ✦ Traffic calming and more consistent vehicle speeds
- ✦ Promote Complete Streets
- ✦ Provide space for installing pedestrian refuge islands, bicycle lanes, on-street parking, or transit stops
- ✦ Low-cost when planned with pavement overlay



Source: FHWA



↙ 4-Lane to 3-Lane, Road Diet Conversions

- Up to **19% reduction** in total crashes (urban areas) (CMF ID 5554)
- Up to **47% reduction** in total crashes (suburban areas) (CMF ID 2841)
- Up to **37% reduction** in injury crashes (CMF ID 11231)



Source: Leidos

Walkways



Walkways



Source: Chester County

Pedestrian Walkway

- Continuous way designated for pedestrians
- Typically located outside of the road right-of-way and/or not directly adjacent to a street



Source: Ohio DOT

Shared Use Path

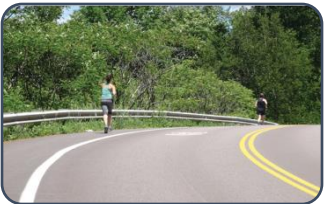
- Bikeway or pedestrian walkway physically separated from motor vehicle traffic by space or barrier
- Within roadway right-of-way or within an independent right-of-way



Source: FHWA

Sidewalk

- Dedicated space intended for use by pedestrians that is safe, comfortable, and accessible to all
- Physically separated from the roadway by a curb or unpaved buffer space



Source: FHWA

Paved/Roadway Shoulder

- Paved area for pedestrians and bicyclists to use next to the roadway
- Shoulder is delineated by pavement markings
- Used in rural or suburban areas where other walkway types are not feasible

Considerations

- Along both sides of roadways in urban areas, particularly near schools and transit locations.
- Seek direct and connected networks (avoid gaps and abrupt changes)

Effectiveness



✦ Paved Shoulders

- Up to **71% reduction** in crashes involving pedestrians walking along roadways.



Source: FHWA

✦ Sidewalks

- Up to **65-89% reduction** in crashes involving pedestrians walking along roadways.



Opportunity for Widespread Deployment



- ✦ **67%** of pedestrian fatalities in 2021 occurred where **no sidewalks** were indicated on the crash reports.
- ✦ Many jurisdictions have sidewalks that are not functionally acceptable, too narrow, or missing along major streets.



Source: FHWA



Yellow Change Intervals



Yellow Change Intervals



- ✦ Warn drivers of impending change in right-of-way assignment
- ✦ Proper Timing is important
 - See the MUTCD Section 4F.17
- ✦ Interval timing should consider:
 - Speed of approaching and turning vehicles
 - Driver perception-reaction time
 - Vehicle deceleration
 - Intersection geometry
- ✦ Automated traffic signal performance measures (ATSPMs)
 - Continuous performance monitoring capability
 - Modify timing based on actual performance, without requiring expensive modeling or data collection



Source: FHWA

Effectiveness



- ✦ Up to **36-50% reduction** in red light running
- ✦ Up to **8-14% reduction** in total crashes (CMF ID 380)
- ✦ Up to **12% reduction** in injury crashes (CMF ID 384)



Source: FHWA

PSCs – Crosscutting



Lighting



Local Road Safety Plans



Pavement Friction Management



Road Safety Audit

Local Road Safety Plans



Local Road Safety Plans (LRSP)



- Framework for identifying, analyzing, and prioritizing safety improvements
- Engages multiple stakeholders
- Uses data-driven approach
- Results in a list of issues, risks, actions, and improvements
- LRSP Do-It-Yourself website



Source: FHWA

Effectiveness



➤ Agencies have experienced the following benefits after LRSP implementation

- **25% reduction** in county road fatalities in Minnesota.
- **17% reduction** in fatal and serious injury crashes on county-owned roads in Washington.
- **35% reduction** in severe curve crashes in Thurston County, WA.



Source: Nevada County (CA)



Source: Elmore County (AL)

Road Safety Audit



Road Safety Audit (RSA)



- Formal safety performance examination
 - What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
 - What opportunities exist to eliminate or mitigate identified safety concerns?
- Independent, multidisciplinary team
- Can be performed at any point in the project development process
- Concludes with formal report



Source: FHWA

Effectiveness



10-60%

Reduction in total crashes



Source: FHWA

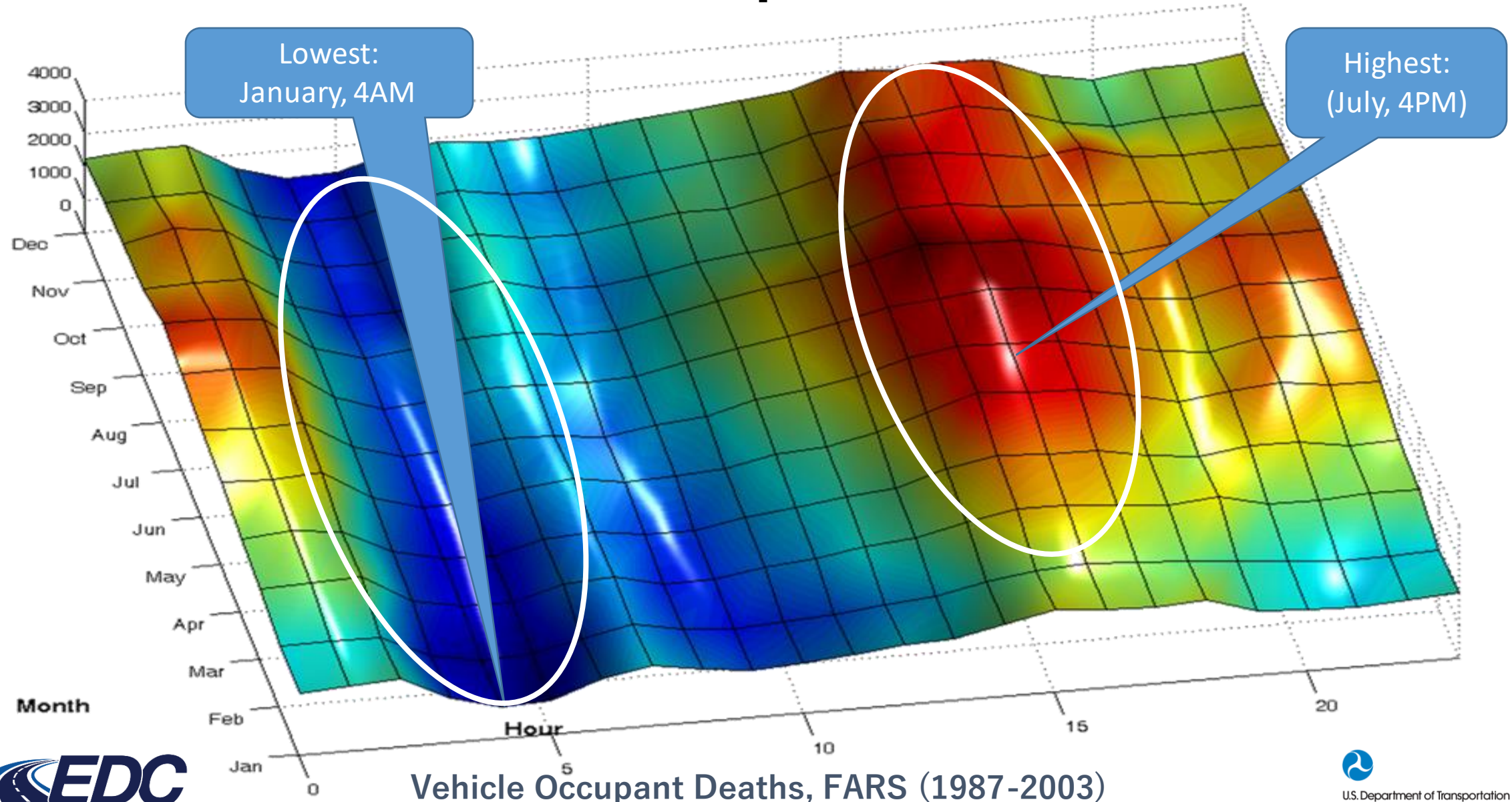


Source: FHWA

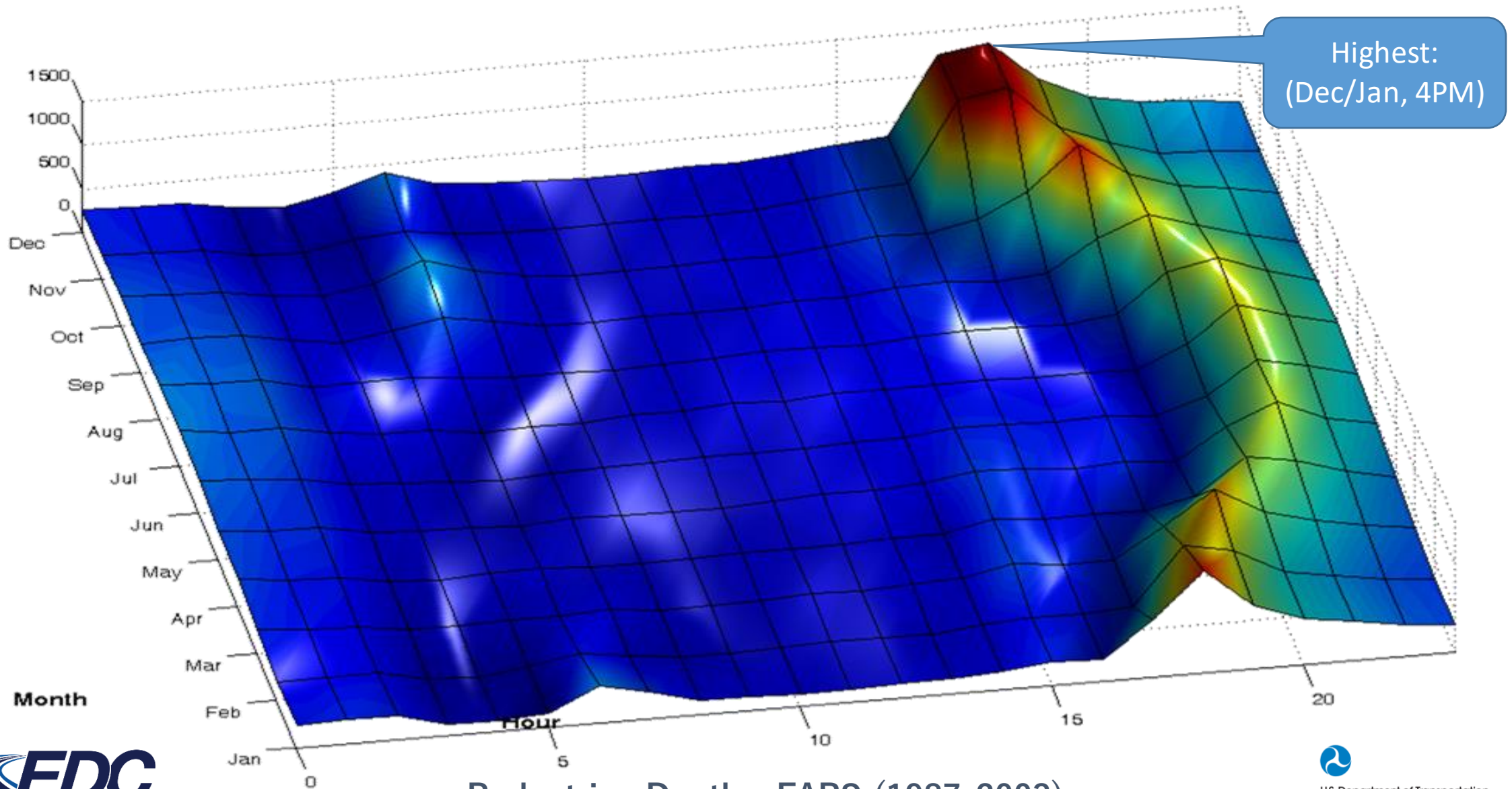
Lighting



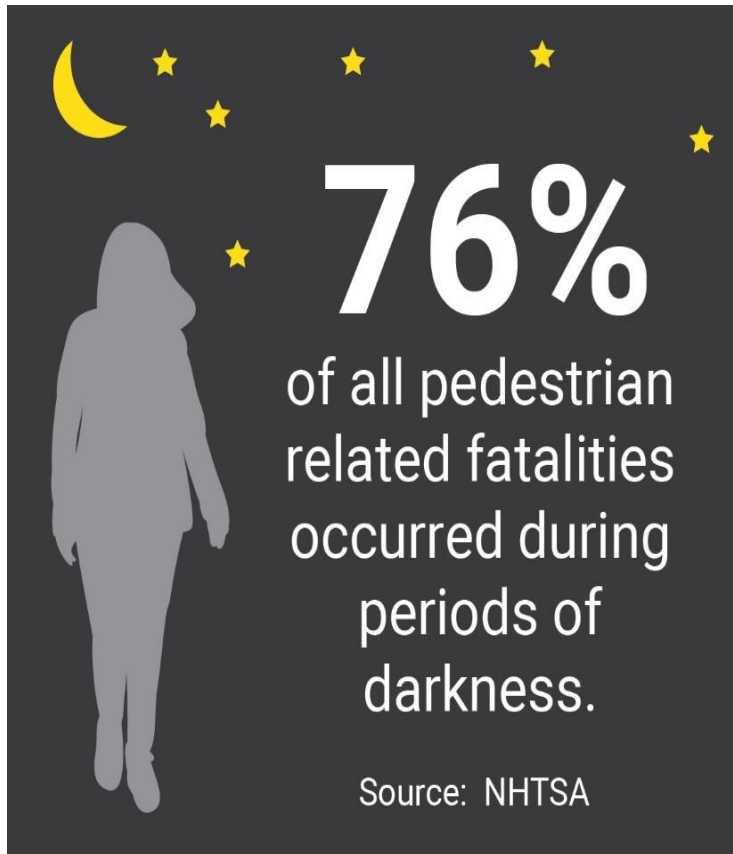
Motor Vehicle Crashes – Implications of Darkness



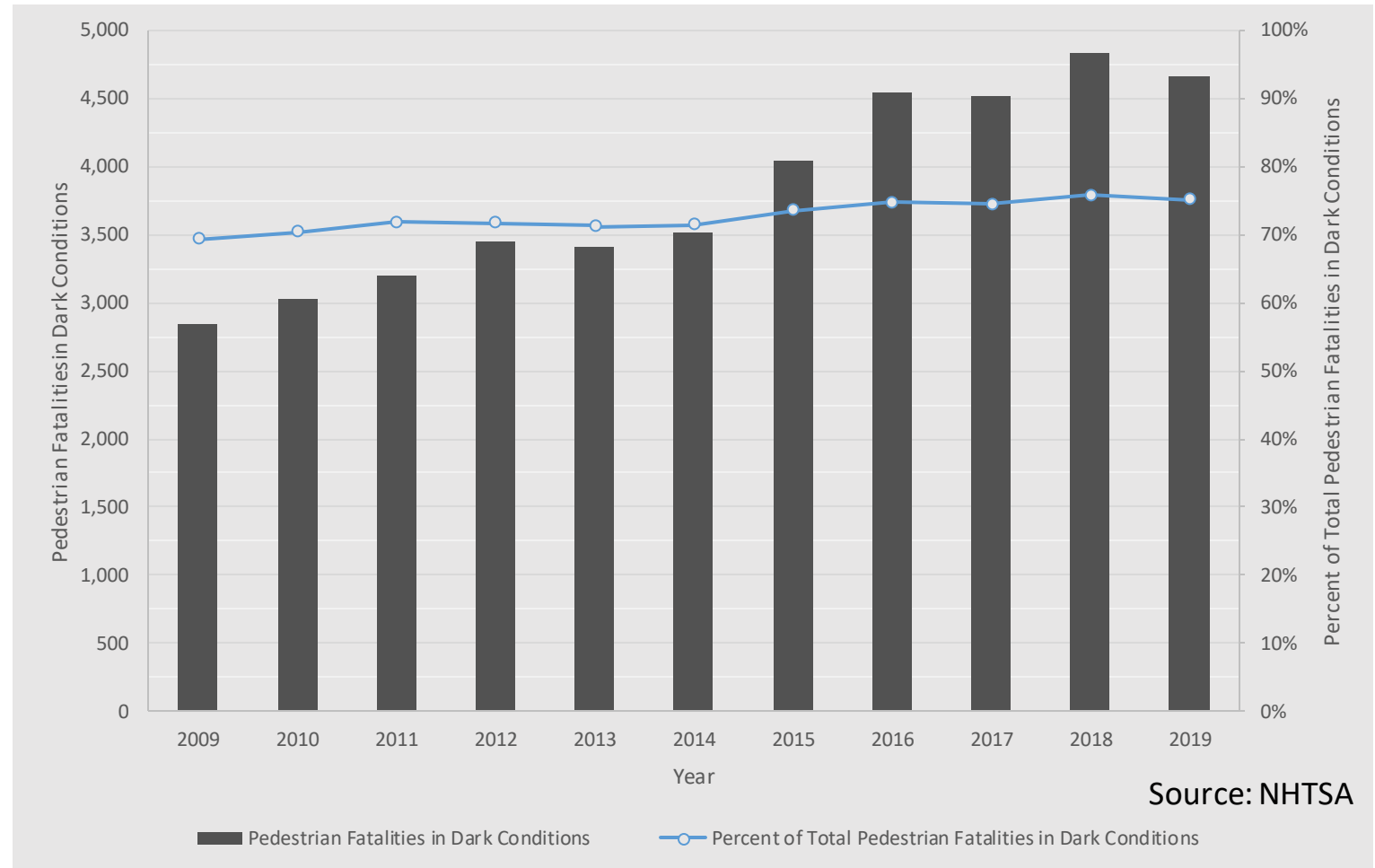
Pedestrian/Vehicle Crashes – Implications of Darkness



Pedestrian Fatalities in Dark Conditions



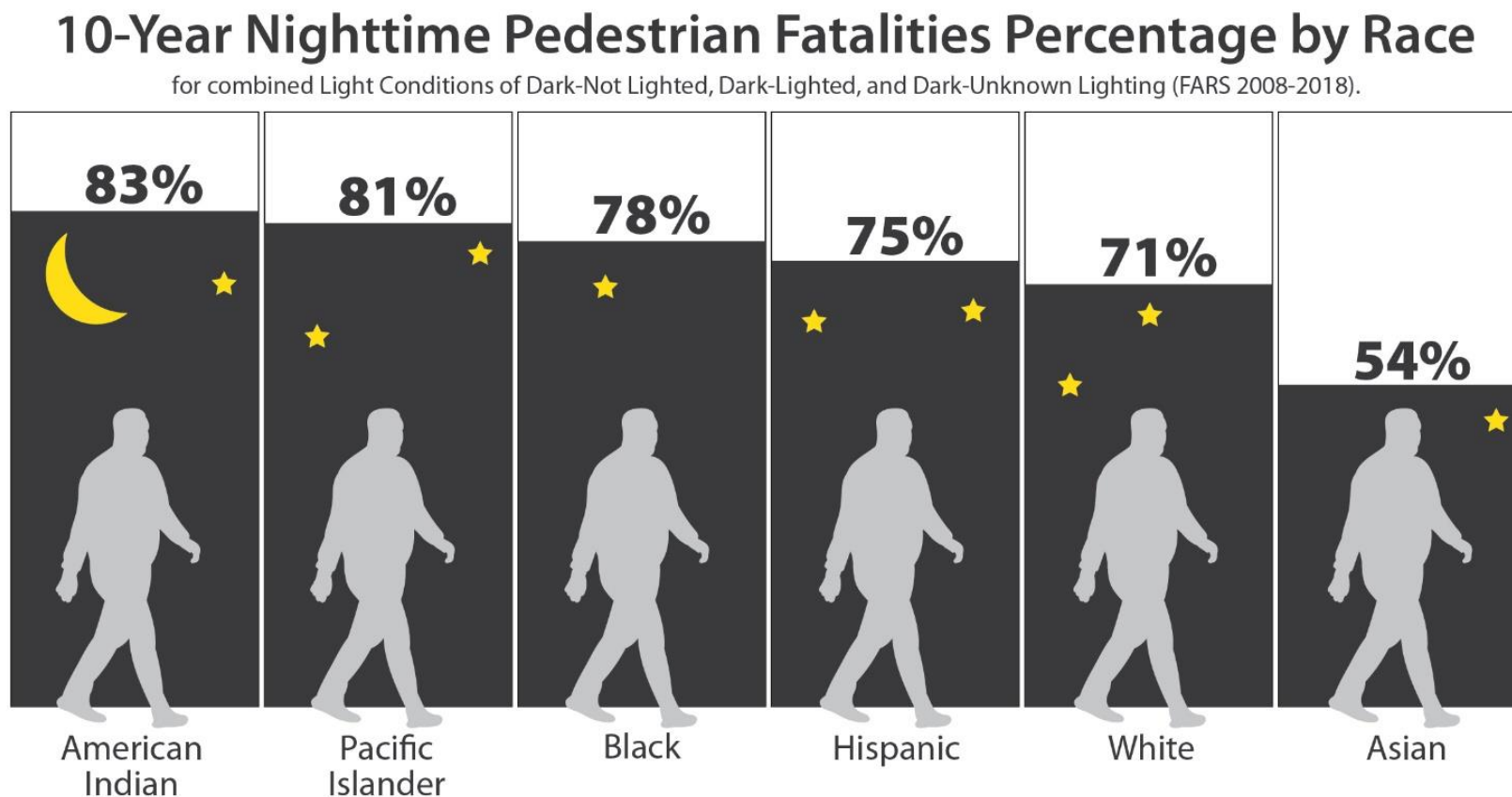
Graphic. Infographic for nighttime pedestrian fatalities.



Dark condition pedestrian fatalities/year and dark condition pedestrian fatalities/year as a percentage of total pedestrian fatalities

Figure 5 [Pedestrian Lighting Primer \(dot.gov\)](https://www.fhwa.dot.gov/pedestrian/lighting/primer/)

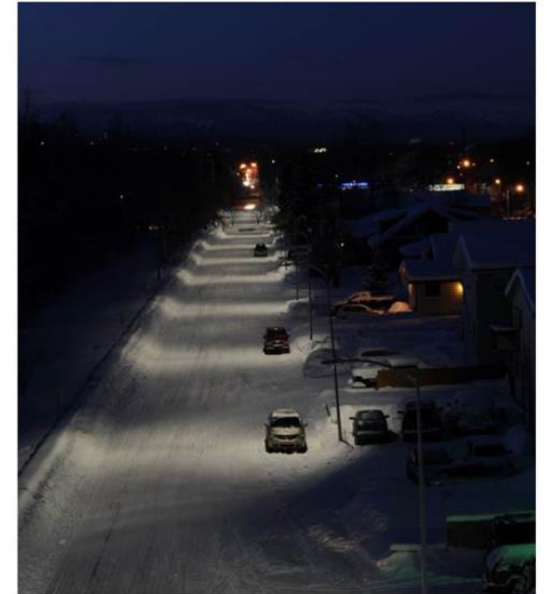
Equity and Nighttime



Source: NHTSA FARS (2008–2018)

FHWA's EDC 7 Approach

- Apply cost-effective and proven lighting and traffic control device countermeasures with known safety benefits to reduce fatalities for all road users.
- Improve nighttime visibility to safely connect people to community resources and essential services

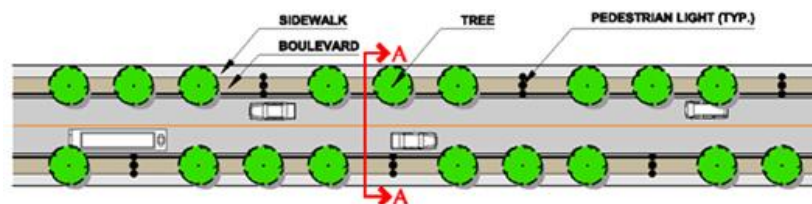


EDC-7 Nighttime Visibility for Safety

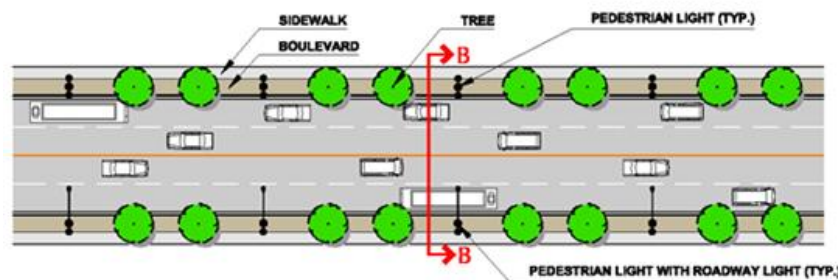
- Focus on locations with known crash history and/or near target locations such as near schools, activity centers, parks, entertainment, transit stops etc.
- Improvements include:
 - Enhanced conspicuity of traffic control devices
 - Geometric enhancements
 - Well-designed lighting



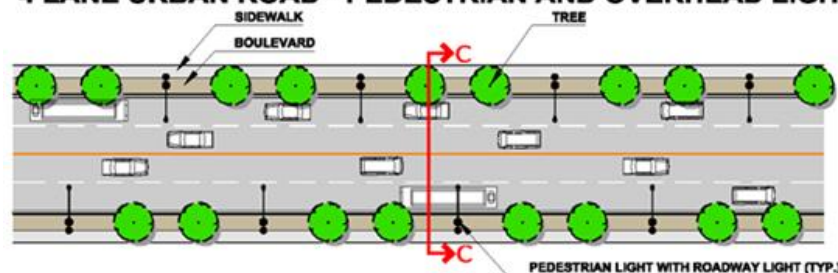
Urban Streetscape Design



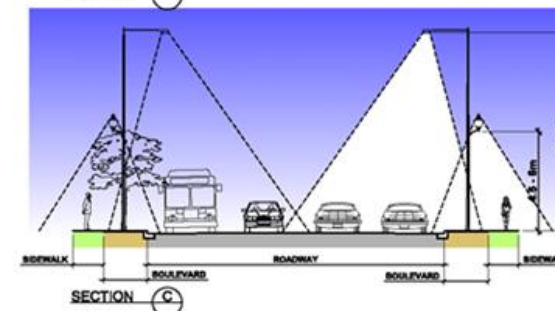
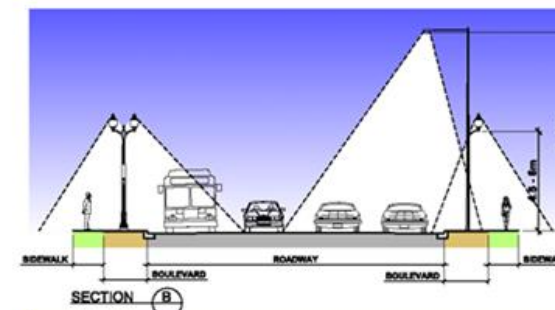
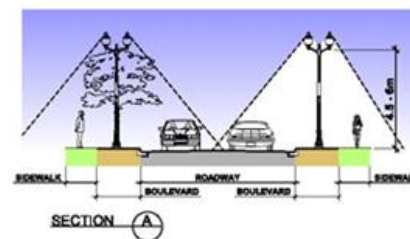
2 LANE URBAN ROAD - PEDESTRIAN LIGHT OPTION



4 LANE URBAN ROAD - PEDESTRIAN AND OVERHEAD LIGHT



4 LANE URBAN ROAD - PEDESTRIAN AND OVERHEAD LIGHTS, BOTH SIDES



Effectiveness



- ✦ Intersections – Urban, suburban, and rural signalized and unsignalized
 - Up to **42% reduction** in nighttime injury pedestrian crashes at intersections (CMF ID 436)
 - Up to **33-38% reduction** in nighttime intersection crashes (CMF IDs 2376 and 433)
- ✦ Segments – Rural and Urban highways
 - Up to **28% reduction** in nighttime injury crashes on urban highways (CMF ID 193)

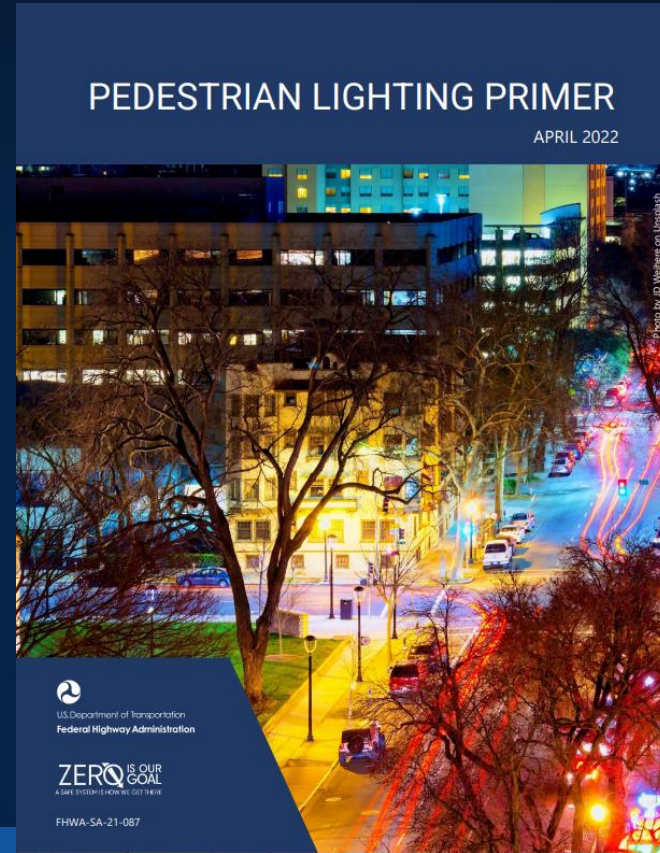
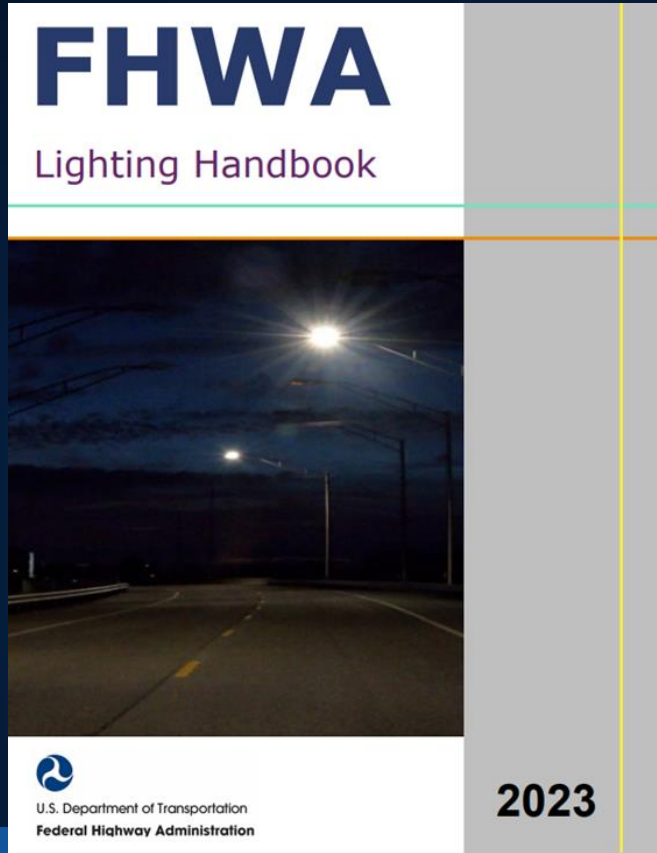


Source: WSDOT



Source: FHWA

Access FHWA Lighting Resources



Tools for Practitioners

<https://highways.dot.gov/safety/proven-safety-countermeasures>

United States Department of Transportation
U.S. Department of Transportation
Federal Highway Administration

Search

About FHWA Programs Resources Newsroom

FHWA Highway Safety Programs

Home / Safety / Proven Safety Countermeasures

Proven Safety Countermeasures

FHWA's Proven Safety Countermeasures Initiative (PSCI) is a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries on our Nation's highways. Transportation agencies are strongly encouraged to consider widespread implementation of PSCs to accelerate the achievement of local, State, and National safety goals. These strategies are designed for all road users and all kinds of roads—from rural to urban, from high-volume freeways to less traveled two-lane State and county roads, from signalized crossings to horizontal curves, and everything in between. Each countermeasure addresses at least one safety focus area – speed management, intersections, roadway departures, or pedestrians/bicyclists – while others are crosscutting strategies that address multiple safety focus areas. [Search Proven Safety Countermeasures.](#)

Speed Management

[Appropriate Speed Limits for All Road Users](#)

Pedestrian/Bicyclist

[Bicycle Lanes](#)

[Medians and Pedestrian Refuge Islands in Urban and Suburban Areas](#)

[Road Diets \(Roadway Configuration\)](#)

Proven Safety Countermeasures Filter Tool and Keyword Search

All 28 PSCs are listed at the bottom of the page in alphabetical order. Answer one or more of the following questions to obtain a tailored listing of potential PSCs for the location of interest. Users may select multiple answers for each question. After checking the desired box(es), click "Apply", then the list of PSCs will update at the bottom of the page to match the query. Click "Reset" to remove all filters or keywords and return to the default display of all 28 PSCs. Select a countermeasure name to learn more including a description, safety effectiveness, context, application, cost, and considerations for implementation.

Roadway Area Type	Roadway Classification	Focus Area
Urban Suburban Rural	Freeway Highway Arterial Collector Local	Speed Management Pedestrian/Bicyclist Roadway Departure Intersections Crosscutting
Average Annual Daily Traffic Vehicular Volume	Problem(s) to be Addressed	Crash Type(s) Being Targeted
Low (< 2,000) Medium (2,000-15,000) High (> 15,000)	Inadequate Visibility, Con Excessive Vehicular Confl Congestion Excessive Speeds Non-Compliance (yielding No Separation of Users Vulnerable Users not Cor Driver Inattention (distrac	Angle Left-Turn Right-Turn Rear End Pedestrian/Bicyclist Head On Run-Off-Road/Single Vehi Sideswipe, same direction
Search PSCs by Keyword(s) <input type="text"/>		
<input type="button" value="Apply"/>		



Source: FHWA

Source: FHWA

Funding PSCs

FUNDING SAFETY FOR ALL.

FHWA encourages implementation of projects and programs that improve safety, equity, and accessibility for all road users. Take the first step toward exploring federal funding opportunities for your Complete Streets Network.

Federal Transit Administration Grant Programs

National Highway Performance Program

Surface Transportation Block Grant Program

Bridge Replacement and Rehabilitation Program

Highway Safety Improvement Program

Congestion Mitigation and Air Quality Improvement Program

Bridge Investment Program

Transportation Alternatives

Carbon Reduction Program

Tribal Transportation Program

Metropolitan Planning Funds

PROTECT

Railway-Highway Crossing Program

Statewide Planning and Research

Recreational Trails Program

Bridge Formula Program

Railroad Rehabilitation & Improvement Financing

TIFIA Program

Federal Lands and Tribal Transportation Programs

Tribal Transportation Program Safety Fund
ATTAIN

RAISE Discretionary Grants

INFRA Grants

Safe Streets and Roads for All Grants

Transit Oriented Development

Reconnecting Communities Pilot Program

Areas of Persistent Poverty Program

National Scenic Byways Program

Active Transportation Infrastructure Investment Program



FUNDING SAFETY FOR ALL.

FHWA encourages implementation of projects and programs that improve safety, equity, and accessibility for all road users. Take the first step toward exploring federal funding opportunities for your Complete Streets Network.

<u>Federal Transit Administration Grant Programs</u>	<u>Tribal Transportation Program</u>	<u>Tribal Transportation Program Safety Fund</u>
<u>National Highway Performance Program</u>	<u>Metropolitan Planning Funds</u>	ATTAIN
<u>Surface Transportation Block Grant Program</u>	<u>PROTECT</u>	<u>RAISE Discretionary Grants</u>
<u>Bridge Replacement and Rehabilitation Program</u>	<u>Railway-Highway Crossing Program</u>	<u>INFRA Grants</u>
<u>Highway Safety Improvement Program</u>	<u>Statewide Planning and Research</u>	<u>Safe Streets and Roads for All Grants</u>
<u>Congestion Mitigation and Air Quality Improvement Program</u>	<u>Recreational Trails Program</u>	<u>Transit Oriented Development</u>
<u>Bridge Investment Program</u>	<u>Bridge Formula Program</u>	<u>Reconnecting Communities Pilot Program</u>
<u>Transportation Alternatives</u>	<u>Railroad Rehabilitation & Improvement Financing</u>	<u>Areas of Persistent Poverty Program</u>
<u>Carbon Reduction Program</u>	<u>TIFIA Program</u>	<u>National Scenic Byways Program</u>
	<u>Federal Lands and Tribal Transportation Programs</u>	<u>Active Transportation Infrastructure Investment Program</u>

Interested in learning more? Visit the FHWA Complete Streets Funding site: <https://highways.dot.gov/complete-streets/make-complete-streets-default-approach>. In addition to funding, FHWA provides guidance, technical assistance, and other resources to improve safety in projects, policies, and procedures.

2023

You have the Data and Tools to Save Lives



Proven Safety Countermeasures

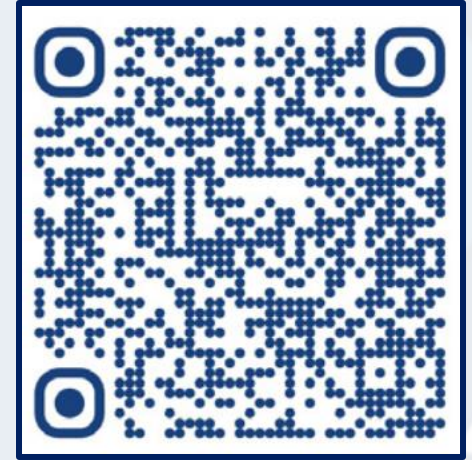
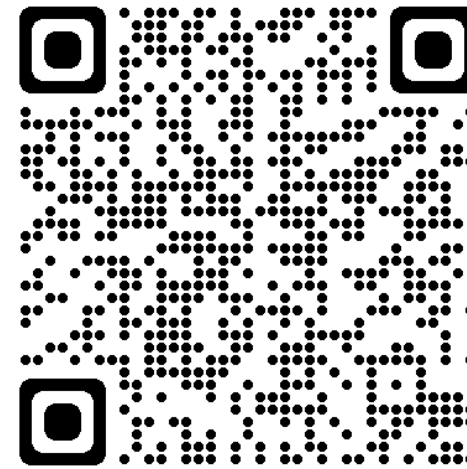
ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE



Thank You!

Amelia (Millie) Hayes, P.E., PTOE, RSP₂₁
FHWA Texas Division Office
(512) 536-5972
amelia.hayes@dot.gov

George Merritt
FHWA Resource Center
(404) 895-0250
George.Merritt@dot.gov



SCAN ME!



U.S. Department of Transportation
Federal Highway Administration

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE