SHSP Pedestrian Safety EA Team Meeting



August 5, 2019

Agenda

- Welcome
- Texas Statewide Pedestrian Safety Coalition
- SHSP Website
 - Preview Upcoming Changes
 - Inventory Survey
 - Traffic Safety Calendar
- Upcoming One-Day Forums
- Law Enforcement Training on Pedestrian & Bicycle Laws
- Strategies, Countermeasures, and Action Plans



Texas Statewide Pedestrian Safety Coalition

Texas Statewide Pedestrian Safety Forum

- August 22nd; 8:00am 4:00pm
- Norris Conference Center Austin
- Full, but waitlist available
- Coalition Meeting

 September 7, 2019
- Pedestrian Safety Clearinghouse



SHSP Website

www.texasshsp.com

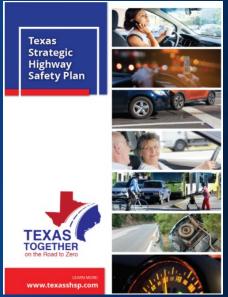
Updates:

- New Design Preview
- Inventory Survey
- Traffic Safety Calendar

Next Steps:

- Interactive SHSP website
- Searchable Inventory of Programs & Projects





New Website Design Preview **Home Page**

Texas Strategic Highway Safety Plan

HOME

EMPHASIS AREAS

STRATEGIES CONTACT







What do distracted, impaired, and speeding drivers, older road users, pedestrians, and lane departure and intersection crashes have in common?

They are the seven areas of greatest concern related to Texans dying or being seriously injured on our roadways.

Click to learn more



What can we do about it?



Click on the icons below to learn what you can do and what others are doing to address these issues.

New Website Design Preview Strategies Page EXAMPLE



New Website Design Preview Countermeasures Page EXAMPLE



New Website Design Preview Action Plan Page EXAMPLE

Distracted Driving	Distracted driving is a growing concern in Texas.		
DESCRIPTION	FATALITIES AND CONTRIBUTING WHERE SERIOUS INJURIES FACTORS CRASHES OCCUR DEMOGRAPHICS STRATEGIES		
SHSP Home — Emphasis Areas	s—Distracted Driving — Strategies — Strategy 1 — Countermeasures — Education About Dangers — Action Plans		
ACTION PLAI	NS		
Education—D	Pangers Countermeasure Action Plan		
Description	Educate the public with age-specific messages (pre-teen to adult) about the dangers of distracted driving through the media, schools, car dealers, community events, and employers, and test the effectiveness of using personal stories/tragedies to impact teens and middle school students' behaviors.		
Steps for Implementation	 Develop age-specific messages crafted into public service announcements (PSAs) for targeted media (i.e., PSAs for pre-teen/teen radio stations and media geared to that age group; PSAs for older adults to appropriate media). (Participating organizations: TxDOT, Distracted Driving Area Emphasis Team, and marketing firm) Identify appropriate media targeted to each age group. (Participating organizations: TxDOT and marketing firm) Develop and print materials and information that can be used as resource material or handouts at various events, meetings, businesses, etc. (Participating organizations: TxDOT and marketing firm) Establish a clearinghouse to provide information to interested parties; identify additional champions to market and promote messages and materials to individuals and companies, automobile associations/manufacturers/car dealers, and other organizations for community events; and provide educational materials, messages, and handouts to Texas regional education centers for distribution to schools in each region. (Participating organizations: TxDOT and marketing firm) 		
Participating Organizations	See above for each step, in addition to probation officers, courts, media, parents, and school systems.		
Effectiveness	***** Cost to Implement \$\$\$\$\$ Time to Implement Long		
Barriers	 Limited funding. Cohesive organized effort. Legislative roadblocks. Public pushback. State agencies. Buy-in from different age groups. Cultural issues. 		

New Website Design Preview Programs and Project List EXAMPLE

Distracted Driving Programs

Emphasis	Areas
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×Distracted Driving

Search for Keywords ...

36 results

AAA Annual Traffic Safety Summit

Organization:

AAA Texas

Description:

Focus on a traffic safety issues such as distraction, drunk, drugged and drowsy driving.

Contact:

Kara Thorp

thorp.kara@aaa-texas.com

5123834342

Alcohol & Other Drug Awareness

Organization:

AgriLife Extension/Brazos Valley Injury Prevention Coalition

Description:

Alcohol awareness programs in the TxDOT Bryan District

SHSP Inventory Survey

- Statewide database of safety projects/programs
 - Baseline survey last fiscal year
 - Short update survey
 - Emailed out on July 18
 - SHSP Website click "Tell Us What You're Doing"
 - Handed out at one-day forums
 - EA team help promote completion of the project/program survey
 - Help populate tracking tool



Strategic Highway Safety Plan (SHSP) Inventory of Safety Projects and Programs

We are collecting information on existing safety projects and programs within Texas as part of the State's Strategic Highway Safety Planning effort. This information will be used to identify a base level of safety activity, identify gaps d.

Name:		Position/Title:
	E-Mail:	
May we post your contact	information on the SHSP websit	e? Yes No
Project or Program Name	2:	
Project or Program Webs	ite:	
	sentence description of the ke up this project or program.	What are the primary goals or objectives of this project or program?
Distracted Driving	Pedestrian Safety	issue categories? Select all that apply. Motorcycle Safety
Impaired Driving Intersection Safety Older Road Users	Roadway & Lane Depart Speeding Bicycle Safety	ures Occupant Protection Other Safety Category Please specify:
City. Please specify: County. Please specify Region. Please specify State. Please specify: Native American Terri Other. Please specify:	n does this project or program ta /: tory. Please specify:	rget? Select all that apply.
Number of intersection Number of miles treat Number of officer-hou Number of people train Number of people cor Number of crashes or	this project or program implement ns treated. How many?	

What is the current status of this project or program?

Planned, but not started. Anticipated start date: Underway. Anticipated completion date:

Ongoing (Annual Program) : _

Complete, no current activity. Completion date:

Completed forms may be emailed to s-schrank@tti.tamu.edu or mailed to Stacey Schrank, TTI, Center for Transportation Safety, 3135 TAMU, College Station, TX 77843-3135.

SHSP Calendar

Traffic safety calendar

- Campaigns
- Coalition meetings
- Conferences
- Forums
- Training opportunities

One-Day Emphasis Area Forums

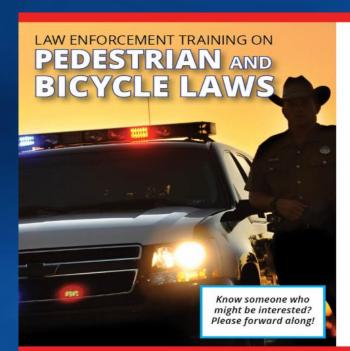
Roadway Departures

- Wed., August 14; 1:00 PM 5:00 PM
- TTI Headquarters (RELLIS), Bryan
- Distracted Driving
 - Thurs., August 15; 1:00 PM 5:00 PM
 - TTI Headquarters (RELLIS), Bryan



FREE Law Enforcement Training on Pedestrian and Bicycle Laws

- Two sessions
 - Thursday, August 15 or Friday August 16
 - TTI Headquarters RELLIS Campus in Bryan, Texas
 - o via Webex
- Texas Commission of Law Enforcement (TCOLE) certification credits will be available.
- Registration link on SHSP website calendar



Register now!

e invite you to participate in a training for law enforcement on pedestrian and bicycle laws to be held in person at TTI Headquarters in Bryan, or via Webex.

DATES:

Thursday, August 15, 2019 10:00 a.m. – 11:00 a.m.

Friday, August 16, 2019 10:00 a.m. – 11:00 a.m.

LOCATION:

TTI Headquarters Building Room 1124 1111 RELLIS Pkwy, Bryan, TX



Covered in the Course

- The increasing number of bicycle and pedestrian related crashes and a review of the crash data.
- Knowledge, skills, and abilities to conduct enforcement for bicyclist and pedestrian safety.
- Knowledge, skills, and abilities to accurately complete crash reports for bicyclist and pedestrian related crashes.
- Different bicyclist and pedestrian crash scenarios and how they should be reported.
- The importance of enforcing bicyclist and pedestrian safety and motivational strategies for increasing it.
- Texas Transportation Code definitions of the rights and responsibilities for bicyclists and pedestrians.

Strategies: Pedestrian Safety Emphasis Area

Strategy Number	Description
1	Improve driver and pedestrian safety awareness and
	behavior.
2	Reduce pedestrian crashes on urban arterials and local
	roadways.
3	Improve pedestrians' visibility at crossing locations.
4	Improve pedestrian networks.
5	Improve pedestrian-involved crash reporting.
6	Establish vehicle operating speeds to decrease crash
	severity.
7	Develop strategic pedestrian safety plans tailored to local
	conditions.

Strategy #1Improve driver and pedestrian safety awareness and
behavior.

Focus	Number	Description	Action Plan
Unintended	1A	Educate motorists on appropriate actions if they	
pedestrians		become stranded on a freeway or high-speed	
		roadway to reduce crashes with unintended	v
		pedestrians on high-speed roadways.	
Driver	1B	Provide driver and pedestrian safety messages and	
awareness		education. Provide high-visibility enforcement related	\checkmark
		to pedestrian safety issues.	
Impaired	1C	Reduce crashes involving impaired and distracted	
pedestrians		pedestrians. (Adapt impaired-driving messages to	
		impaired walking and biking.)	
Impaired	1D	Implement a campaign about drugged and drunk	
pedestrians		walking. Identify alternatives to impaired	
		walking such as transit, taxis, and transportation	
		network companies (e.g., Uber and Lyft). Work with	
		Teens in the Driver's Seat (a high-school-age program)	
		and U in the Driver's Seat (a college-age program) to	
		create awareness around walking and biking issues	
		for young drivers and pedestrians.	

Strategy #2Reduce pedestrian crashes on urban arterials and
local roadways.

Focus	Number	Description	Action Plan
Safe distance	2A	Research the distance needed between safe pedestrian crossings.	\checkmark
Design for pedestrians	2B	Implement pedestrian-oriented design treatments at high-volume pedestrian activity locations.	\checkmark
Pedestrian intervals	2C	Use leading or exclusive pedestrian intervals at signalized intersections (i.e., pedestrian walk signals activate prior to parallel green), high-volume pedestrian-use signaled intersections, and pedestrian push-button locations.	
Policies and programs	2D	Develop and implement a program to assist cities and other agencies to develop policies and implement projects that address common pedestrian crash types.	\checkmark
Traffic control	2E	Disseminate information and training on the effectiveness and appropriateness of pedestrian traffic control measures.	
Urban form	2F	Disseminate information on the connection between urban form (driveway density, setbacks, pedestrian scale, frontage road design speeds, etc.) and safety outcomes. Encourage incorporation into local land use planning and review.	
Every Day Counts	2G	Disseminate information on FHWA's Every Day Counts Safe Transportation for Every Pedestrian for countermeasures for improving pedestrian safety.	

Strategy #3 Improve pedestrians' visibility at crossing locations.

Focus	Number	Description	Action Plan
Nighttime visibility	3A	Improve nighttime visibility of pedestrians.	\checkmark
	3B	Merged with 3a	

Focus	Number	Description	Action Plan
Transportation	4A	Incorporate pedestrian considerations in transportation	
plans		plans.	v
Policy—levels	4B	Develop policies to analyze pedestrian levels of service,	
of service		delay, and network connectivity as part of project	
		development. Develop and disseminate a complete streets	
		policy support guide with model policy and implementation	
		information for local agencies and MPOs.	
Safe crossings	4C	Ensure opportunities for crossing arterials/highways safely.	
		Consider the overall pedestrian network and travel desire	
		lines. Consider setting standards or guidelines for the	
		distance between safe crossings given land uses, densities,	
		and roadway function. Provide safe crossings of freeways.	
Connected	4D	Create connected pedestrian networks and remove barriers	
networks		to pedestrian travel (pedestrian over/underpasses and	
		crossings to overcome physical barriers).	

Focus	Number	Description	Action Plan
Crash type	5A	Work to include crash typing in pedestrian crash reporting. Use the Pedestrian Crash Analysis Tool (PBCAT) for categories on crash typing.	
Definition of pedestrian crashes	5B	Add fields to the standard crash report form (CR-3) to better define pedestrian crashes and provide additional detail on the specifics of each crash. This includes those needed to use the PBCAT and develop law enforcement roll-call videos on the need for and uses of pedestrian crash data.	\checkmark

Strategy #6Establish vehicle operating speeds to decrease crash
severity.

Focus	Number	Description	Action Plan
Target speeds— pedestrians	6A	Encourage use of target speeds that consider pedestrians, land use, and the roadway context (e.g., a target speed of 35 mph or less on arterials). Other examples are to provide design flexibility guidance for techniques to reduce operating speeds on surface streets; encourage use of tree-lined medians, bicycle lanes, and safe and attractive pedestrian crossings and walkways; and support use of traffic calming for local streets.	\checkmark
Target speeds— all users	6B	Design new roadways for a target speed appropriate for the adjacent environment and safety of all users rather than for a design speed intended to maximize motor vehicle speeds.	\checkmark

Strategy #7Develop strategic pedestrian safety plans tailored to
local conditions.

Focus	Number	Description	Action Plan
Pedestrian Safety Action Plans	7A	Develop Pedestrian Safety Action Plans (PSAPs) in urbanized areas. Identify and create funding sources.	\checkmark
State Action Plan	7B	Develop a Pedestrian State Action Plan.	\checkmark

Unintended Pedestrians Countermeasure (1A) Action Plan

Educate motorists on appropriate actions if they become stranded on a freeway or high-speed roadway to reduce crashes with unintended pedestrians on high-speed roadways.

Element	Description
Steps for Implementation	 Develop a public service announcement campaign for both motorists and pedestrians. This includes developing campaign materials including audio, television, social media, dynamic message sign messages, and potential giveaways. Implement the campaign using a data-driven approach to identify designated outreach regions and time frames. Expand courtesy patrol programs. Develop service levels (service hours, services provided, and call times). Determine how to dispatch and receive calls (new facility, new phone lines, and new dispatch equipment). Purchase equipment, and hire and train staff.
Participating	TxDOT, regional mobility agencies, metropolitan planning organizations (MPOs), toll authorities, and
Organizations	county and city agencies
Effectiveness	** to ***
Cost to Implement	\$\$ to \$\$\$
Time to Implement	Medium
Barriers	 Concise messaging of what to do (to get out or not get out of the car because of things such as fire). Manual on Uniform Traffic Control Devices (allowable dynamic message sign messages). What is the hook? How to make this interesting? Funding. Educating people on availability of services and how to contact agencies for those services. Availability of employee or staff pool.

Notes:

- 1. Stay in the vehicle and call for help (Steer It and Clear It).
- 2. Consider policies for, and enforcement of, moving over and/or encouragement for motorists to move over and away from stranded cars and roadside pedestrians (safe passing law). Examples are expansion of the move over/slow down law, safe passing laws such as the San Antonio ordinance, and proposed statewide legislation.

Driver Awareness Countermeasure (1B) Action Plan

Provide driver and pedestrian safety messages and education. Provide high-visibility enforcement related to pedestrian safety issues.

Element	Description
Steps for Implementation	 Identify educational materials and campaigns for pedestrians and motorists (e.g., Walk.Bike.Safe, Look Out Texans, Watch for Me—North Carolina). Identify an agency or group to lead the pedestrian safety campaigns. Identify common traffic violations by motorists and pedestrians. Identify target locations where behaviors are prevalent (high-volume pedestrian areas such as schools, social activities, and bus stops). Develop a partnership with law enforcement agencies to provide high-visibility enforcement of targeted behaviors. (Also, reward those who are following the rules.) Work to incorporate information on motorist and pedestrian responsibilities into driver training materials and manuals. Work to revise the driver's license test to include a pedestrian-related question or questions. Work to incorporate pedestrian safety information in required defensive driving classes.
Participating Organizations	DPS and other law enforcement agencies; municipal, county, and regional transportation agencies; pedestrian advocates; driver training providers; engineers; public health agencies; and city planners
Effectiveness	**
Cost to Implement	\$ to \$\$
Time to Implement	Medium
Barriers	 Finding local champions. Obtaining law enforcement buy-in. Finding sustained funding. Changing driver training and testing requirements. Changing defensive driving training requirements.

Safe Distance Countermeasure (2A) Action Plan

Research the distance needed between safe pedestrian crossings.

Element	Description
Steps for Implementation	 Develop a research problem statement regarding the maximum desirable distance between safe pedestrian crossings. (Participating organization: TTI) Submit problem statements to potential funding sources. (Participating organizations: TxDOT, TTI, and city agencies) Conduct a research project to investigate the distance between pedestrian crossings. (Participating organizations: TxDOT and TTI) Disseminate information from the research project. (Participating organization: TxDOT) Based on guidance from TxDOT, FHWA, TTI, and others, identify roadway sections potentially in need of safe pedestrian crossing retrofits; develop a prioritized ranking of these locations for retrofitting to increase safety. (Participating organizations: local jurisdictions) Incorporate this prioritized list into existing planning and funding decision-making processes. (Participating organizations: local jurisdictions)
Participating Organizations	See above for each step.
Effectiveness	**
Cost to Implement	\$
Time to Implement	Short
Barriers	Funding.
	Engineering acceptance of findings.

Note: Develop criteria for the maximum desirable distances between safe crossing opportunities for different roadway classifications. Consider FHWA materials on Safe Transportation for Every Pedestrian (STEP), level-of-service calculations for all users at signalized intersections, and the typical distance a pedestrian will walk before crossing the street at an unsignalized location. The recommendations may vary by functional classification (e.g., arterial versus local street) and by context (e.g., rural versus urban core). The recommendations may also vary by treatment type (e.g., traffic control signal or pedestrian hybrid beacon versus markings and sign only with no supplemental beacons).

Design for Pedestrians Countermeasure (2B) Action Plan

Implement pedestrian-oriented design treatments at high-volume pedestrian activity locations.

Element	Description
Steps for	1. Compile and disseminate methods to identify characteristics of, or locations with, higher pedestrian
Implementation	 risk. (Participating organizations: TxDOT, MPOs, and local transportation and police agencies) 2. Identify locations with higher probability for pedestrian crashes based on characteristics, risk, and public input. (Participating organizations: TxDOT, MPOs, local governments, community organizations, school districts, transit agencies, and neighborhoods) 3. Identify appropriate lead organization(s). (Participating organizations: TxDOT and local governments) 4. Identify suitable treatment(s). Review available pedestrian design guidelines and practices in Texas, in the United States, and internationally. (Participating organizations: TxDOT and local agencies) 5. Identify and secure funding. (Participating organizations: TxDOT, MPOs, and local agencies) 6. Implement the treatment. (Participating organizations: TxDOT and local agencies) 7. Educate the public about the treatment. (Participating organizations: TxDOT, MPOs, and local agencies) 8. Evaluate the efficacy of the treatment.
	(Participating organizations: TxDOT and local partners)
Participating	See above for each step.
Organizations	
Effectiveness	***
Cost to Implement	\$\$
Time to Implement	Medium to long
Barriers	 Funding. Engineering acceptance of treatments. Political will. Public support and education.

Policies and Programs Countermeasure (2D) Action Plan

Develop and implement a program to assist cities and other agencies to develop policies and implement projects that address common pedestrian crash types.

Eloment	
Element	Description
Steps for	1. Build awareness by documenting the extent of the pedestrian fatality and injury issue in the
Implementation	local area.
	(Participating organizations: TxDOT, FHWA, MPOs, and city agencies)
	2. Document and disseminate information about existing programs in Texas, in the United States,
	and internationally.
	(Participating organizations: TxDOT, FHWA, MPOs, and research agencies)
	3. Provide information on STEP. Identify local leaders.
	(Participating organizations: TxDOT, FHWA, and local organizations and advocacy groups)
	4. Develop the program. Target motorists and pedestrians.
	(Participating organizations: TxDOT, FHWA, MPOs, city agencies, and local organizations and
	advocacy groups)
	5. Identify partners in the local area.
	(Participating organizations: TxDOT, local agencies, community safety and assistance
	organizations, neighborhoods, school districts, transit agencies, medical community, law
	enforcement, and business entities that generate pedestrian activity)
	6. Implement the program.
	(Participating organizations: local agencies)
	7 1 0
	(Participating organizations: TxDOT and local agencies)
Participating	See above for each step.
Organizations	
Effectiveness	**
Cost to Implement	\$
Time to Implement	Medium to long
Barriers	Funding.
	Political will.
	 Public support and education.
	Lack of champions.

Nighttime Visibility Countermeasure (3A) Action Plan

Improve nighttime visibility of pedestrians.

Element	Description
Steps for Implementation	 Identify locations and conditions where nighttime visibility of pedestrians is a concern (e.g., bus stops and high-nighttime-activity areas). Identify suitable treatments. (See examples in the note below.) Identify and secure funding. Implement the treatments. Educate the public on looking for pedestrians at night and being visible while walking. Evaluate the efficacy of the treatments and share information with stakeholders.
Participating Organizations	TxDOT, local agencies, MPOs, news media, school districts, community safety and assistance organizations, AARP, injury prevention associations, utility (lighting) companies, transit agencies, and research agencies
Effectiveness	**
Cost to Implement	\$\$
Time to Implement	Medium
Barriers	 Funding. Public support and education. Coordination between groups and agencies.

Note: Examples are use of visible/reflective clothing by pedestrians, pedestrian-illuminating lighting on urban corridors, midblock crosswalk lighting in accordance with FHWA guidance, and smart lighting to illuminate when pedestrians are detected. Identify target audiences for information dissemination.

Transportation Plans Countermeasure (4A) Action Plan

Incorporate pedestrian considerations in transportation plans.

Element	Description
Steps for	1. Inventory existing pedestrian facilities.
Implementation	 Review existing transportation plans, and revise plans to incorporate appropriate features where needed. Prioritize locations for improvements based on gaps, transit routes, and community input. Secure funding for improvements.
	5. Design projects.
	6. Construct improvements.
	7. Develop public education materials and disseminate them.
Participating	TxDOT, government agencies, consultants, contractors, and public
Organizations	
Effectiveness	**
Cost to	\$\$
Implement	
Time to	Short to medium
Implement	
Barriers	Public.
	Politics.
	Amount of space to work in.

Notes:

1. Prioritize pedestrian safety and considerations for mobility and accessibility in the context of land use and roadway environment.

2. Prioritize improvements to fill gaps in networks and crossings within ¼ mile of bus stops and ½ mile of other mass transportation.

3. Provide appropriate features along the pedestrian network (wide shoulders, sidewalks, pedestrian crossing treatments, and pedestrian refuge islands).

Definition of Pedestrian Crashes Countermeasure (5B) Action Plan

Add fields to the CR-3 to better define pedestrian crashes and provide additional detail on the specifics of each crash. This includes those needed to use the PBCAT and develop law enforcement roll-call videos on the need for and uses of pedestrian crash data.

Element	Description
Steps for Implementation	 Gather requirements, and identify minimum and desirable data elements. Prepare cost estimates and prioritize elements. Test with law enforcement and TxDOT staff. Update forms, develop a communications plan, and revise training. Implement.
Participating Organizations	TxDOT, law enforcement agencies, and PBCAT analysts
Effectiveness	**
Cost to Implement	\$\$
Time to Implement	Medium
Barriers	 Funding. Contract. Standardization of data.

Target Speeds—Pedestrians Countermeasure (6A) Action Plan

Encourage use of target speeds that consider pedestrians, land use, and the roadway context (e.g., a target speed of 35 mph or less on arterials). Other examples are to provide design flexibility guidance for techniques to reduce operating speeds on surface streets; encourage use of tree-lined medians, bicycle lanes, and safe and attractive pedestrian crossings and walkways; and support use of traffic calming for local streets.

Element	Description
Steps for Implementation	 Work with a diverse set of jurisdictions, including TxDOT districts—as well as diverse stakeholders including those representing people with disabilities, pedestrians, business districts, low-income communities, and transit providers—to explore benefits and barriers to implementation of slower target speed concepts. Draw from the National Association of City Transportation Officials and American Association of State Highway and Transportation Officials guidance for designing urban streets with appropriate speeds, the recent Florida Department of Transportation design manual overhaul, and the Netherlands Sustainable Safety Approach—including the concept of management of kinetic energy. (Participating organization: TxDOT)
	 Provide guidance regarding the ability to set speed limits based on the target speed concept (e.g., USLimits2). (Participating organizations: FHWA and TxDOT)
	 Consider potential changes to Sec. 545.356 of the Transportation Code, "Authority of Municipality to Alter Speed Limits," to allow cities to use target speed limits and remove unintended barriers to implementation of safe neighborhood streets. (Participating organizations: Texas Legislature and governor)
	4. Implement pilot programs to develop pilot arterial and collector slow zones and other safe design speed pilots across the state in various jurisdictions and various overlapping bureaucracies. (Participating organizations: city and county agencies, Texas Legislature, and governor)
	 Evaluate the effectiveness and how to spread effective treatments of pilot slow zones and other safe design speed treatments. (Participating organizations: city agencies and TxDOT)
	6. Write guidance on road design to achieve target speed based on lessons learned, best practices, and proven countermeasures.
	 (Participating organizations: city agencies and TxDOT) 7. Build and retrofit streets with target speeds that consider pedestrians, land use, and the roadway context. (Participating organizations: city and county agencies, Texas Legislature, and governor)

Target Speeds—Pedestrians Countermeasure (6A) Action Plan (continued)

Encourage use of target speeds that consider pedestrians, land use, and the roadway context (e.g., a target speed of 35 mph or less on arterials). Other examples are to provide design flexibility guidance for techniques to reduce operating speeds on surface streets; encourage use of tree-lined medians, bicycle lanes, and safe and attractive pedestrian crossings and walkways; and support use of traffic calming for local streets.

Element	Description
Participating Organizations	See above for each step.
Effectiveness	***
Cost to Implement	\$
Time to Implement	Medium to long
Barriers	 Misperception that congestion or commuter delay is a bigger problem than crashes, when crashes in fact impose a much higher cost on Texans. (References: Farm and City [http://www.farmandcity.org/2017/09/05/how-much-do-traffic-crashes-cost-the-people-of-texas-a-162-billion/] and U.S. Department of Transportation

Target Speeds—All Users Countermeasure (6B) Action Plan

Design new roadways for a target speed appropriate for the adjacent environment and safety of all users rather than for a design speed intended to maximize motor vehicle speeds.

Element	Description
Steps for Implementation	 Design pilot urban arterials with target speeds of 35 mph or less, pilot local streets with target speeds of 30 mph or less, and pilot neighborhood streets with target speeds of 20 mph, according to National Association of City Transportation Officials and American Association of State Highway and Transportation Officials guidance. (Participating organizations: local jurisdictions) Implement design changes on local and neighborhood streets using interim, low-cost street redesign strategies to achieve safe vehicle operating speeds. (Participating organizations: local jurisdictions) Monitor vehicle speeds before and after implementation of interim design changes. (Participating organizations: local jurisdictions) Integrate safe target speeds into street hierarchy and design manuals, such that all new street construction and retrofits incorporate the benefits of pedestrian-compatible target speed design. (Participating organizations: local jurisdictions) Study costs and benefits of pedestrian-compatible target speed implementations across the state. (Participating organizations: TxDOT and various research institutions)
Participating	See above for each step.
Organizations	
Effectiveness	***
Cost to	\$
Implement	
Time to	Medium to long
Implement	

Target Speeds—All Users Countermeasure (6B) Action Plan (continued)

Design new roadways for a target speed appropriate for the adjacent environment and safety of all users rather than for a design speed intended to maximize motor vehicle speeds.

 Barriers Misperception that congestion or commuter delay is a bigger problem than crashes when crashes in fact impose a much higher cost on Texans. (References: Farm and City [http://www.farmandcity.org/2017/09/05/how-much-do-traffic-crashes-cost-the:people-of-texas-a-162-billion/] and U.S. Department of Transportation [https://www.transportation.gov/sites/dot.gov/files/docs/briefing-room/305216/infrastructure-initiative-booklet.pdf].) Public perception of the need for speed and lack of understanding of how safe, multimodal streets can provide greater access, shorter trips, and even quicker vehicle trips when crashes are avoided. Institutional inertia, which will require leadership, taking concerns seriously, and working through issues, to allow the possibility of arriving at results that may seem heretical to many dedicated professionals at various levels of the transportation system. Lack of local experience with pedestrian-compatible operating speeds—in terms of users, decision makers, and practitioners. Interpretations of the 85th percentile rule, which some might perceive conflicts with this. Texas laws. Texas law bars cities from using 20-mph speed limits on neighborhood streets. Sec. 545.356 of the Transportation Code requires difficult reporting requirements that some cities say are impossible to meet and thus are seen as a limiting factor for establishing 25-mph speed limits, which this section is intended to allow. Some cities believe that target and design speeds cannot be set lower than the speed limit, essentially creating a de facto lower limit on the safety of designs at the 30-mph design speed. Reasonable interpretations of this sentence from the TxDOT Procedures for Establishing Speed Zones: "New or reconstructed roadways (and roadway sections) should be designed to accommodate operating speeds consistent with the roadway's highest anticipated posted speed limit based on the roadway's initial or ultimate function." <th>Element</th><th>Description</th>	Element	Description
		 Misperception that congestion or commuter delay is a bigger problem than crashes when crashes in fact impose a much higher cost on Texans. (References: Farm and City [http://www.farmandcity.org/2017/09/05/how-much-do-traffic-crashes-cost-the-people-of-texas-a-162-billion/] and U.S. Department of Transportation [https://www.transportation.gov/sites/dot.gov/files/docs/briefing-room/305216/infrastructure-initiative-booklet.pdf].) Public perception of the need for speed and lack of understanding of how safe, multimodal streets can provide greater access, shorter trips, and even quicker vehicle trips when crashes are avoided. Institutional inertia, which will require leadership, taking concerns seriously, and working through issues, to allow the possibility of arriving at results that may seem heretical to many dedicated professionals at various levels of the transportation system. Lack of local experience with pedestrian-compatible operating speeds—in terms of users, decision makers, and practitioners. Interpretations of the 85th percentile rule, which some might perceive conflicts with this. Texas laws. Texas law bars cities from using 20-mph speed limits on neighborhood streets. Sec. 545.356 of the Transportation Code requires difficult reporting requirements that some cities say are impossible to meet and thus are seen as a limiting factor for establishing 25-mph speed limits, which this section is intended to allow. Some cities believe that target and design speeds cannot be set lower than the speed limit, essentially creating a de facto lower limit on the safety of designs at the 30-mph design speed. Reasonable interpretations of this sentence from the TxDOT Procedures for Establishing Speed Zones: "New or reconstructed roadways (and roadway sections) should be designed to accommodate operating speeds consistent with the roadway's highest

Pedestrian Safety Action Plans Countermeasure (7A) Action Plan

Develop PSAPs in urbanized areas. Identify and create funding sources.

Element	Description
Steps for Implementation	 Encourage Texas MPOs, cities, and counties to study pedestrian safety and develop PSAPs, but allow a local broader set of options that include coordination with Vision Zero Action Plans, other safety plans, or active transportation plans (identified solely as PSAPs in further steps). (Participating organizations: FHWA, MPOs, and city and county agencies) Develop regional and local PSAPs. (The first wave is FHWA focus cities/regions.) (Participating organizations: FHWA, MPOs, and local agencies) Work with MPOs to use existing funding flexibilities to implement PSAP action items and for additional PSAP development. (Participating organizations: FHWA, MPOs, TxDOT, Texas Transportation Committee, and advocates) Explore opportunities for funding to encourage wider-spread adoption of PSAPs. (Participating organizations: MPOs, advocates, TTI, and Texas Legislature) Implement PSAP action items. (Participating organizations: MPOs and local agencies) Evaluate effectiveness and report to stakeholders. Consider the ability to scale to additional communities. (Participating organizations: TxDOT and TTI)
Participating	See above for each step.
Organizations	
Effectiveness	*** (PSAPs are FHWA's lead intervention for cities with high levels of pedestrian fatalities and serious injuries. Cities with PSAPs include New York City, San Francisco, Los Angeles, San Antonio, Austin, and Fort Worth.)
Cost to Implement	\$ to \$\$
Time to Implement	Medium to long

Pedestrian Safety Action Plans Countermeasure (7A) Action Plan (continued)

Develop PSAPs in urbanized areas. Identify and create funding sources.

Element	Description
Element Barriers	 Description Local champions, who may be reluctant to identity safety areas of concern or to commit to additional physical infrastructure, or who may lack the staff capacity to take on additional planning activities. Cities' and MPOs' need for executive leadership support or champions, which ensure plans can be completed and implemented. Need for funding (but minimal compared to potential impact). Need for a balanced approach to transportation considering all modes (solutions that benefit all modes). Lack of understanding of pedestrian danger/risk and complete multimodal safety performance
	 (pedestrian fatalities make up more than 25% of traffic fatalities in urban areas). Collaboration and cooperation required by broad groups of jurisdictions and levels of government. Disagreements about effective pedestrian safety strategies (which are also opportunities for this program).

State Action Plan Countermeasure (7B) Action Plan

Develop a Pedestrian State Action Plan.

Element	Description
Steps for Implementation	 Gain members with a diverse group of advocates. Develop a statewide pedestrian action plan. Incorporate goals of other plans, taking local plans into consideration when appropriate. Develop a coalition to distribute the plan to local areas throughout the state. Establish a funding stream. Collect and monitor data continually.
Participating Organizations	TxDOT, TTI, municipalities, law enforcement agencies, advocacy agencies, emergency response agencies, and engineers
Effectiveness	The statewide plan is a further refinement of the emphasis area included in the Strategic Highway Safety Plan. The plan will incorporate effective countermeasures.
Cost to Implement	\$
Time to Implement	Medium
Barriers	 Funding for local implementation. Maintaining and increasing momentum. Cost reimbursement. Retirees leaving organizations without leaving lessons learned or transferring knowledge. Government limitations with state funding; members of coalitions may lobby the legislature for more funding. Bringing in important stakeholders possibly through a pedestrian advisory committee. Difficulty in reaching the target population. Difficulty in evaluation. It is unclear how many entities have adopted local plans based on a statewide plan.