

Speed Management Program



Bicycle Advisory Council
July 16, 2019



AUSTIN TRANSPORTATION





**Mother
Grandfather
Sister
Brother
Wife
Husband**



An Austinite dies in a traffic crash every five days.



**Partner
Son
Daughter
Friend**



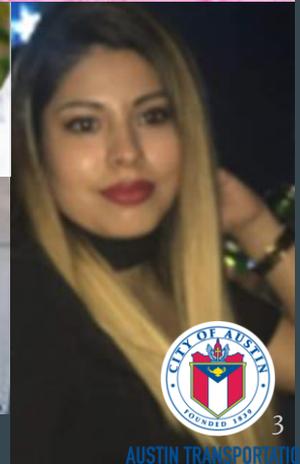
VISIONZER
Help Austin reach zero traffic deaths



Years of Life Lost

1,440

(Through 7/10/2019)





Agenda

1. Austin Policy
2. Context and Data
3. Speed Management Program Framework
4. Seeking Feedback/Input
5. Next Steps



Austin Policy: Imagine Austin

Land Use and Transportation

- P11. Promote complete street design that includes features such as traffic calming elements, street trees, wide sidewalks, and pedestrian, bicycle, and transit access throughout Austin, considering the safety needs of people of all ages and abilities.
- P14. Promote safer routes to schools for students of all ages.
- P45. The City commits itself to eliminating transportation related deaths and serious injuries through a holistic Vision Zero approach.

Health and Human Service Policies

- P25. Increase sidewalks and bicycle lanes in neighborhoods to create safer routes to schools, parks, and transit stops.



Austin Policy: SD23

Strategic Direction 2023: Mobility Outcome

Strategies

1. Promote a communitywide culture of safe driving through education and enforcement focused on behaviors most contributing to injuries and fatalities, (speeding, impaired driving, distracted driving, and failure to yield) as defined by our community's Vision Zero initiative.



Austin Policy: ASMP

Austin Strategic Mobility Plan

Safety Culture

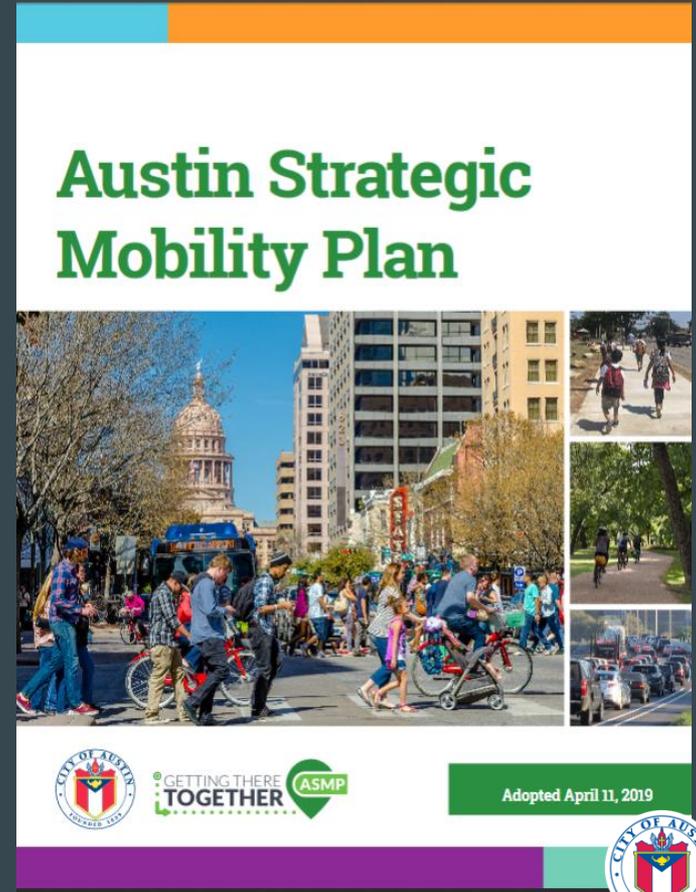
- Prioritize the protection of human life over all else in the planning, design, and operation of Austin's transportation network

Designing for Safety

- Manage for safe speeds
- Minimize the potential for conflicts between transportation network users
- Improve the ability of all transportation users to see and be seen
- Minimize the safety risks of highways

Safe Behaviors

- Strategically implement education and enforcement initiatives around the top contributing factors of serious injury and fatal crashes
- Align penalties for traffic violations with the severity of the offense based on traffic safety impacts



Austin Policy: ASMP

Austin Strategic Mobility Plan

Designing for Safety

Action 9. Speed management guidelines - Develop a comprehensive data-driven approach to speed management to evaluate systemwide speeds and make recommendations for reforming speed setting methodology, implementing countermeasures to address streets with documented speeding concerns and adopting street design guidelines that help achieve targeted operating speeds systemwide.

Speed Management Program

Transportation Criteria Manual



Context and Data

National Research and Guidance

Reducing Speeding-Related Crashes Involving Passenger Vehicles



Safety Study
NTSB/SS-17/01
PB2017-102341



National Transportation Safety Board

ACHIEVING MULTIMODAL NETWORKS
APPLYING DESIGN FLEXIBILITY & REDUCING CONFLICTS



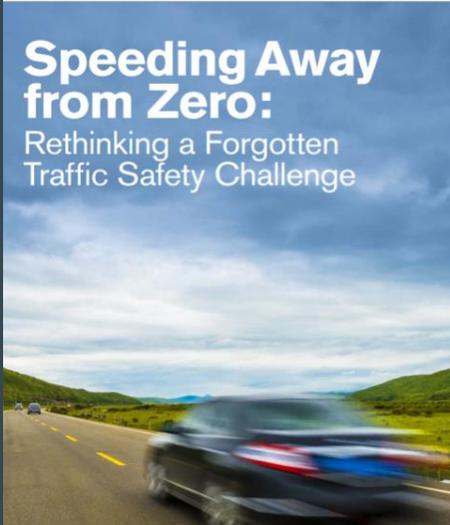
U.S. Department of Transportation
Federal Highway Administration

August 2016

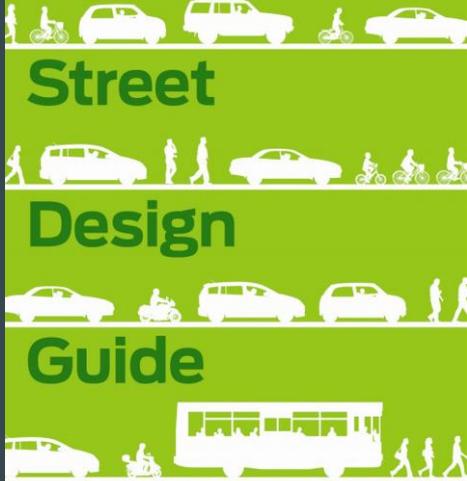
Spotlight on Highway Safety



Speeding Away from Zero:
Rethinking a Forgotten Traffic Safety Challenge



Urban Street Design Guide



National Association of City Transportation Officials

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/fhwahep16055.pdf

<https://nacto.org/publication/urban-street-design-guide/>

[ntsb.gov/safety/safety-studies/Documents/SS1701.pdf](https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf)

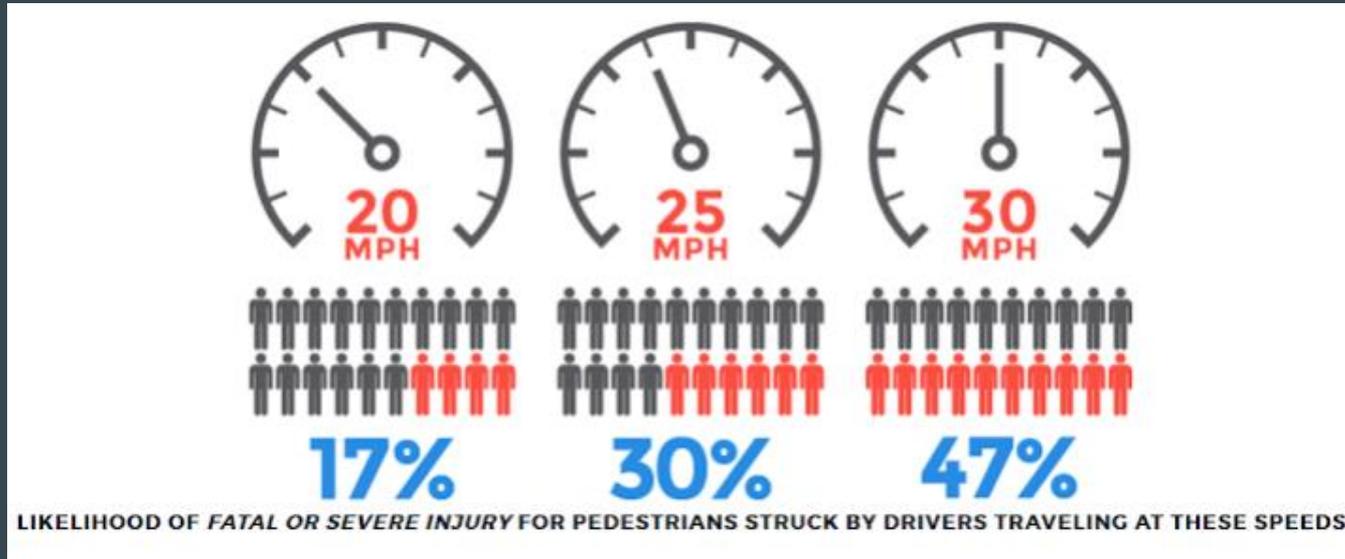
ghsa.org/sites/default/files/2019-01/FINAL_GHSASpeeding19.pdf



Context and Data

Speeding Increases Risk

1) Increase in crash energy → increase in severity of injury



Source: Tefft, Brian C. Impact Speed and a Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety, Washington DC, September, 2011



Context and Data

Speeding Increases Risk

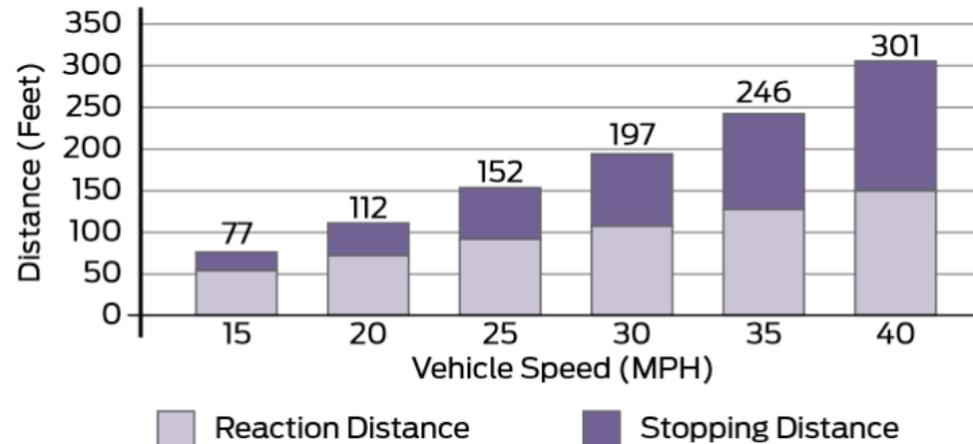
2) Reaction Distance

3) Stopping Distance

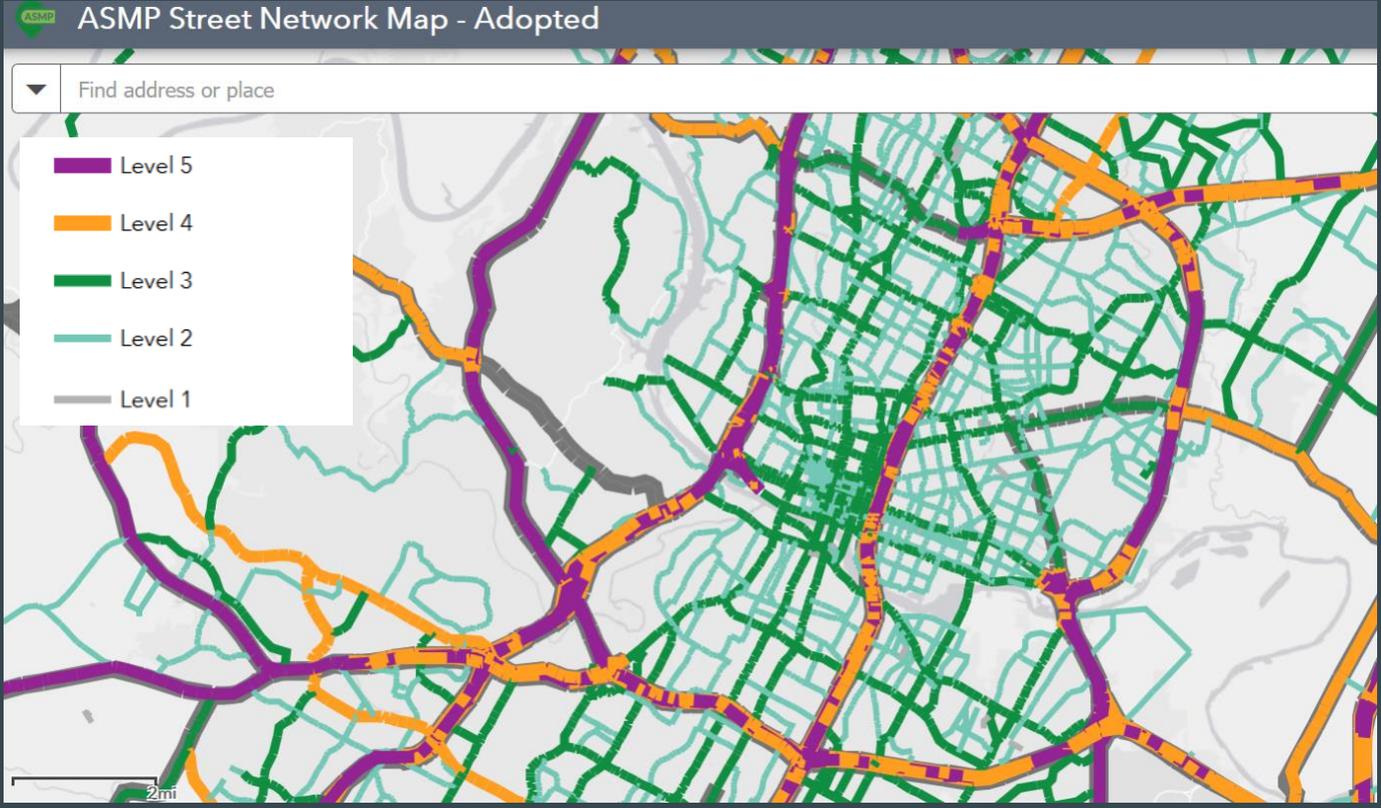
Reaction and Stopping Distance

The amount of distance a driver takes to react and come to a stop increases with increasing speeds.

Reaction & Stopping Distance vs. Speed

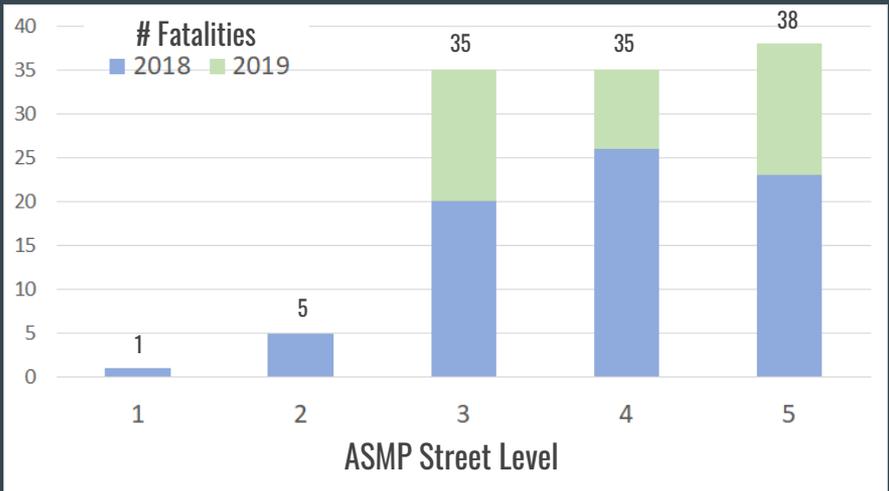


Context and Data

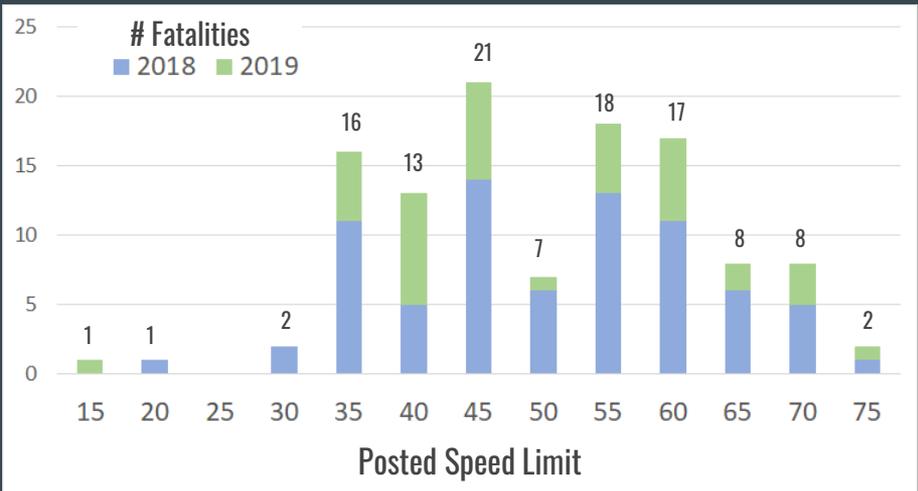


Context and Data

Fatalities by ASMP Street Level 2018 vs 2019 YTD (6.28.19)



Fatalities by Speed Limit 2018 + 2019 YTD (6.28.19)



*including 1 non-APD

Context and Data

Rainier Street, Seattle

50 th Percentile Speed			
	2015 (30 MPH speed limit)	2016 (25 MPH speed limit)	Change
Northbound	33.4 MPH	28.0 MPH	-16.2% ↓
Southbound	33.5 MPH	30.0 MPH	-10.4% ↓
Speeders (percent speeding)			
Northbound	84.1%	40.0%	-52.4% ↓
Southbound	82.4%	59.3%	-28.0% ↓
Top End Speeders (drivers exceeding 40 mph)			
Northbound	4.1%	0.8%	-80.5% ↓
Southbound	6.2%	1.7%	-72.6% ↓



Before



After



Context and Data

Boston: Prima Facie to 25 mph

25 IN BOSTON

Effective January 9, 2017, Boston's default speed limit is 25 mph.

[GET INVOLVED](#) [DOWNLOAD AND SHARE](#) [WHY WE'RE MAKING THE CHANGE](#) [WHAT WE'RE DOING](#)

FINES FOR SPEEDING



Mayor Martin J. Walsh and Transportation Commissioner Gina N. Fiandaca have worked with the City Council to lower the default speed limit in the City of Boston from 30 mph to 25 mph.

Reducing the default speed limit from 30 mph to 25 mph helps make the City safer for people of all ages and abilities who are walking, driving, and bicycling on our streets. The new, lower speed limit is an early accomplishment for Vision Zero, Mayor Walsh's commitment to end traffic deaths and serious injuries by 2030. Data show when you're driving at or below 25 mph, you are less likely to be severely injured or killed in a traffic crash.

After Boston lowered the default speed limit to 25 mph, the estimated odds of a vehicle

- exceeding 35 mph
↓
fell 29.3%
- exceeding 30 mph
↓
fell 8.5%
- exceeding 25 mph
↓
fell 2.9%

Source: Vision Zero Network



Speed Management Program

Objective: to improve safety and enhance the livability of Austin streets through context-appropriate speed reduction strategies. This means reducing the likelihood of serious injury and fatal crashes as well as reducing egregious speeding on all street levels.

Speed Management Program

Local Area Traffic Management (2012 - 2017)

- All funded projects were on levels 1 & 2
- ~600 eligible applications received and analyzed
- Process
 - Application, petition, analysis, ranking
- Criteria
 - Most points typically given for number of vehicles over 35 MPH, evidence of support (EOS)
 - Crash factors included but relatively few points given, severity not considered



Speed Management Program

Key Changes from Local Area Traffic Management Program

- Includes all street types throughout the City
- Uses data-driven approach to identify highest priority streets
- Reorients criteria and weighting towards reducing high end speeds and serious injury/fatality reduction
- Utilizes lower-cost strategies and ramps up as appropriate
- Reflects national policy guidance on speed limit setting methodologies

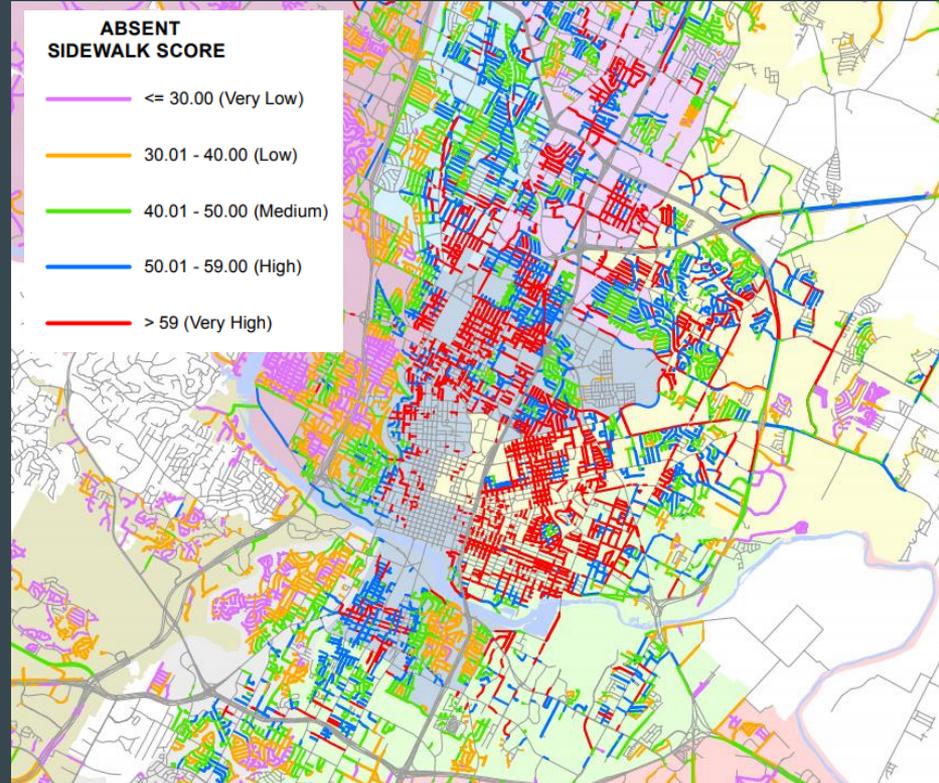
Speed Management Program

- Data and Information
- Toolkit of Engineering Countermeasures
- Methods for Setting Speed Limits
- Holistic Approach: Education and Enforcement
- Coordination with Other Programs
- Equity
- Evaluation

Speed Management Program

Citywide prioritization

e.g. Sidewalk Plan



Speed Management Program

Process

1. Prioritize all streets into priority levels/tiers
 - Speed Profile, Crash History, Risk Characteristics
2. For the highest priority streets - identify potential strategies appropriate for the context and based on available funding
3. Host community meetings
 - Meeting 1: review the data and discuss strategies being considered
 - Meeting 2: review feedback, perform interdepartmental reviews of final designs as necessary, then meet with community members to consult on final planned approach
4. Implement Projects

Speed Management Program

Factors

1. Speed Profile

- Total number and percentage of vehicles traveling 10+ mph over targeted/posted speed limit
- 50th, 85th, 95th, etc. percentile speeds

2. Crash History

- Total number of crashes
- Serious injury and fatal crashes
- Crashes involving vulnerable users

Speed Management Program

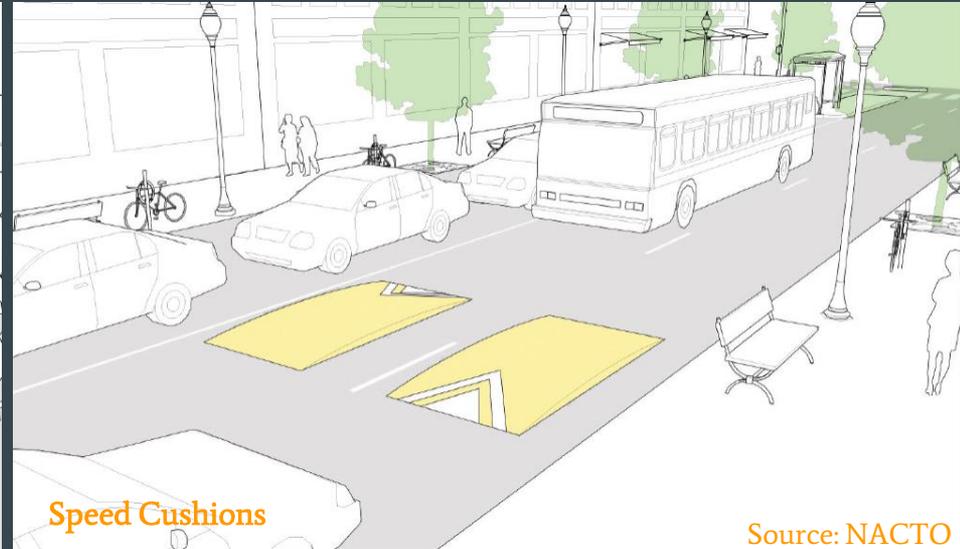
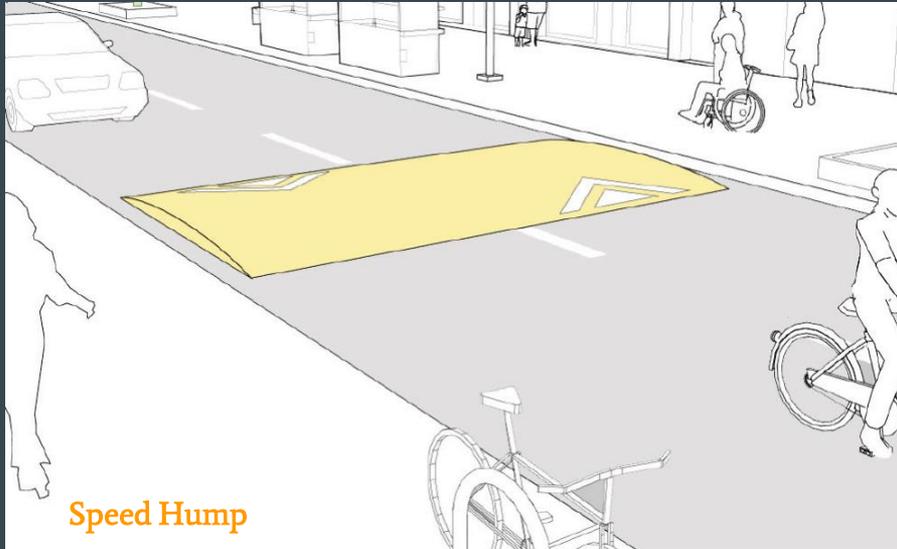
3. Risk Characteristics

- Street width
- Prevalence of on-street parking
- Driveway spacing and density
- Distance between signals
- Presence of sidewalks
- Presence of or plan to include an all ages/abilities bicycle facility
- Land use context (type, Imagine Austin Activity Center, etc.)
- “Institutional” factor (proximity to special destinations like schools, parks, transit)

Speed Management Program

Potential engineering treatments

- Asphalt speed cushions, speed humps, speed tables



Source: NACTO

Speed Management Program

Potential engineering treatments

- Chicanes or mini roundabouts



Objective | Key Changes | Elements | Prioritization | **Strategies**



Speed Management Program

Potential engineering treatments

- Gateway treatments (bulb outs, rain gardens)



Speed Management Program

Potential engineering treatments

- Dynamic Speed Display Devices or other speed-activated signs



Objective | Key Changes | Elements | Prioritization | **Strategies**

Speed Management Program

Potential engineering treatments

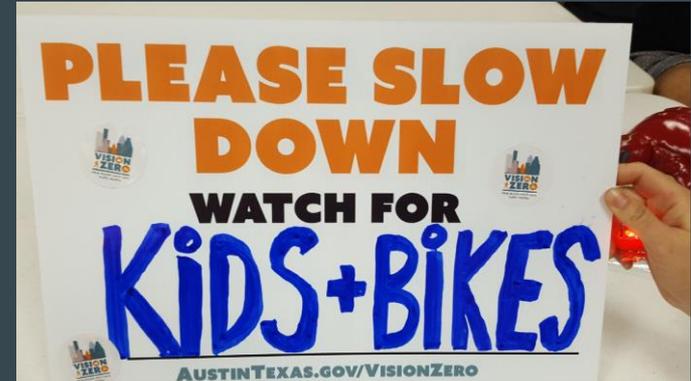
- Alternative treatments: colored pavement, experimental markings, optical speed bars



Speed Management Program

Additional strategies

- Yard signs for safe neighborhood speeds
- Education and outreach
- Speed limit changes
- Enforcement
 - Speed awareness zones
 - Consider new approaches



Speed Management Program

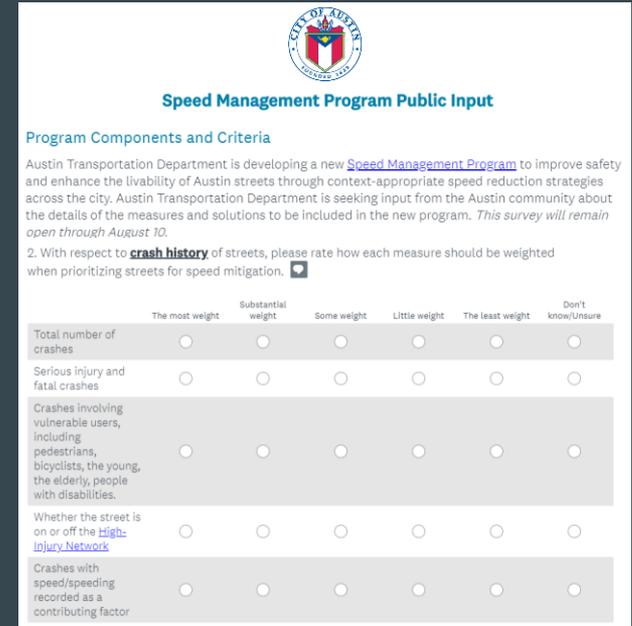
Speed Limit Changes

- Engineering study OR
- Council ordinance finding prima facie speed limit is “unreasonable or unsafe”
 - Publish on City website and report to TxDOT the citations, warnings, and crashes related to speeding

Speed Management Program

Feedback/Input

- Prioritization measures
 - Criteria
 - Weighting
- Strategies
 - Potential engineering treatments, countermeasures
 - Alternative solutions



The screenshot shows a survey form titled "Speed Management Program Public Input" from the City of Austin. It includes a section for "Program Components and Criteria" with a paragraph of introductory text and a question asking respondents to rate how each measure should be weighted based on crash history. Below the text is a table with seven columns representing weight categories and five rows of crash-related criteria.

	The most weight	Substantial weight	Some weight	Little weight	The least weight	Don't know/Unsure
Total number of crashes	<input type="radio"/>					
Serious injury and fatal crashes	<input type="radio"/>					
Crashes involving vulnerable users, including pedestrians, bicyclists, the young, the elderly, people with disabilities.	<input type="radio"/>					
Whether the street is on or off the High-Injury Network	<input type="radio"/>					
Crashes with speed/spending recorded as a contributing factor	<input type="radio"/>					

austintexas.gov/speedmanagement



Next Steps

Continued Public Engagement

- Boards and Commissions

- Hispanic/Latino Quality of Life Commission July 23 6:30 PM
- Public Safety Commission August 5 4:00 PM
- African American Resource Advisory Commission August 6 5:30 PM

- Public Meetings

- Carver Branch Library July 25th 5:00 PM to 7:30 PM
- Milwood Branch Library July 31st 4:00 PM to 6:30 PM
- Southeast Branch Library August 3rd 10:30 AM to 12:30 PM



Next Steps

Report Back to Council

- Late August - Final Speed Management Program
- Fiscal Year 2020 Budget Requests



Questions/Comments