

# Speed Management Program



Pedestrian Advisory Council  
July 1, 2019



AUSTIN TRANSPORTATION





Mother  
Grandfather  
Sister  
Brother  
Wife  
Husband



An **Austinite** dies in a traffic crash every five days.



Partner  
Son  
Daughter  
Friend

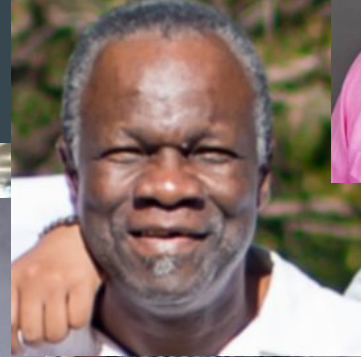


**VISION**  **N**  **ZER**   
Help Austin reach zero traffic deaths



# Years of Life Lost 1348

(Through 6/28/2019)







# 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 Strategic Mobility Plan



Adopted April 11, 2019





# 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.

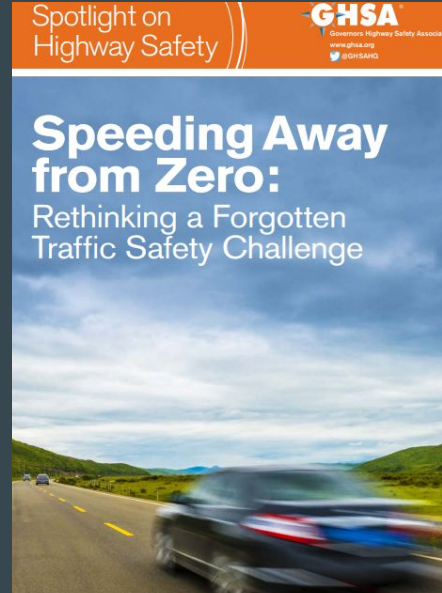
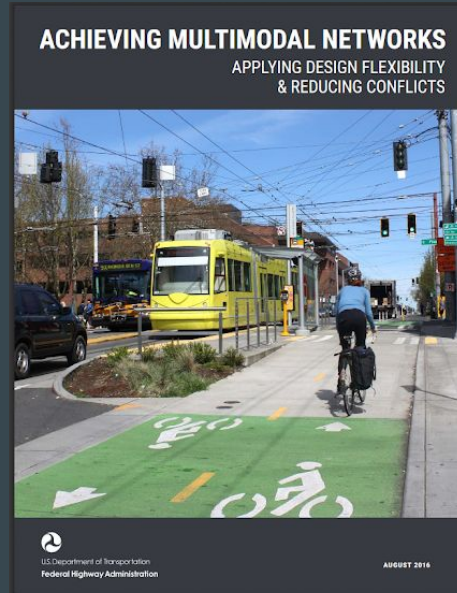
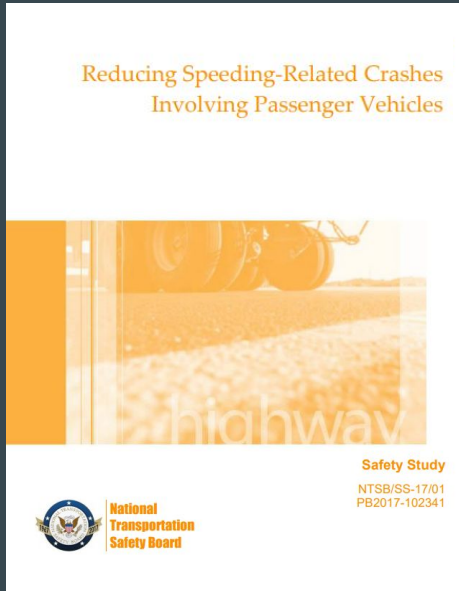
### Speed Management Program

### Transportation Criteria Manual



# Context and Data

## National Research and Guidance



[https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/multimodal\\_networks/fhwahep16055.pdf](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)

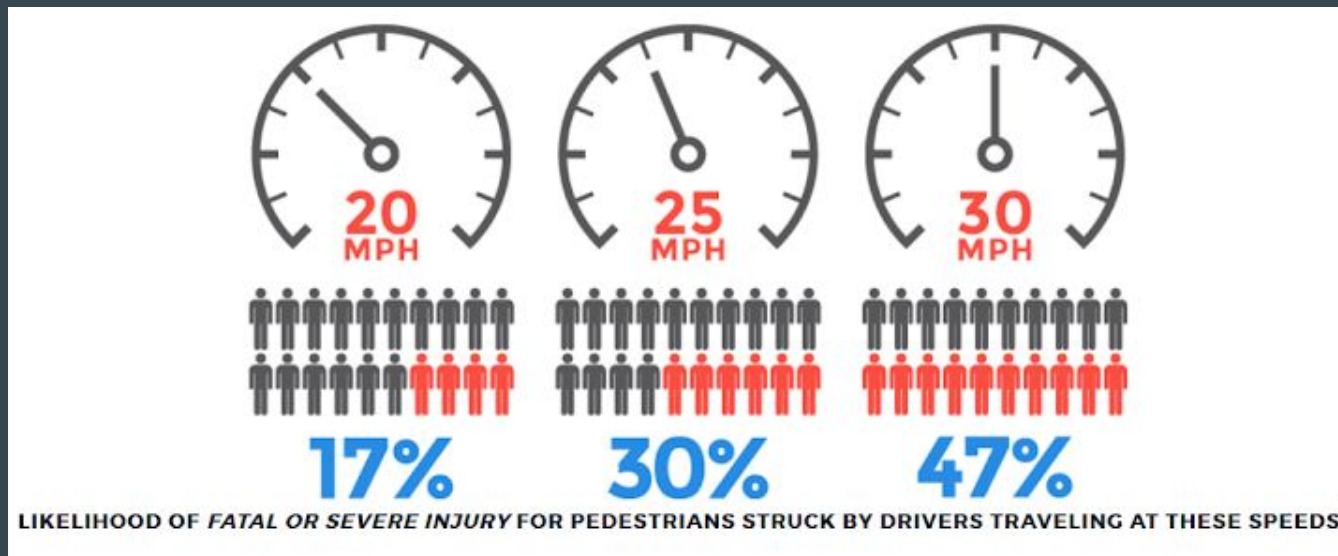
[ghsa.org/sites/default/files/2019-01/FINAL\\_GHSASpeeding19.pdf](https://ghsa.org/sites/default/files/2019-01/FINAL_GHSASpeeding19.pdf)



# 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

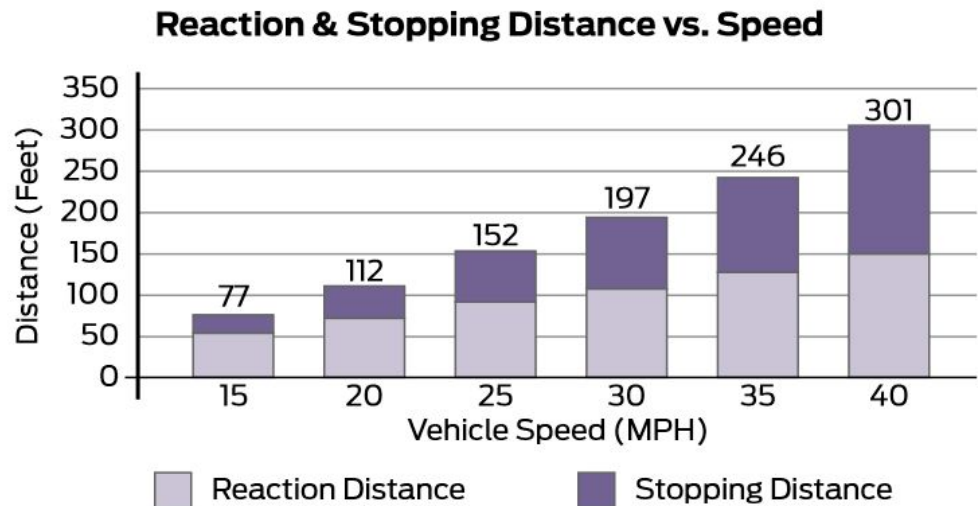
## Speeding Increases Risk

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.



Source: 2012 NACTO Urban Street Design Guide



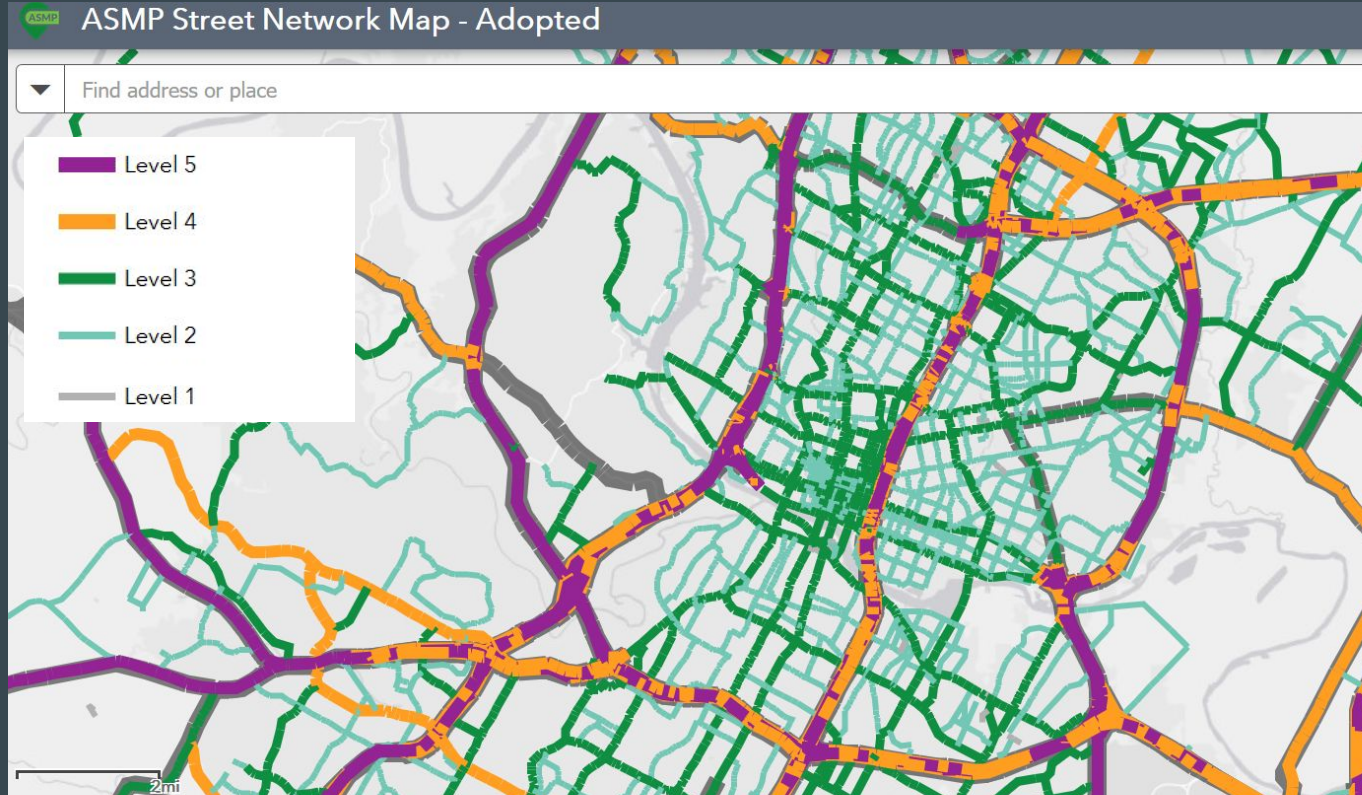
# Context and Data

## 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



# Context and Data





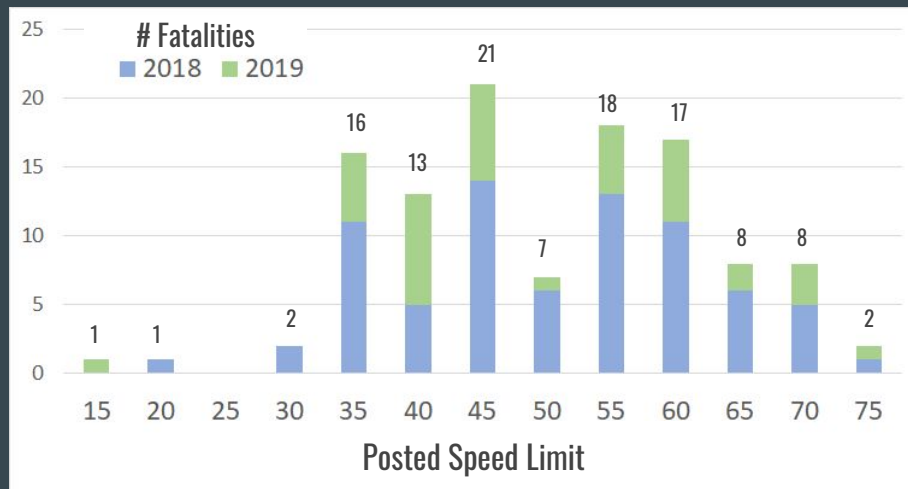
# Context and Data

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



\*including 1 non-APD

Fatalities by Speed Limit  
2018 + 2019 YTD (6.28.19)



# Context and Data

## Rainier Street, Seattle

50 <sup>th</sup> 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% ↓

Source: City of Seattle



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

## 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

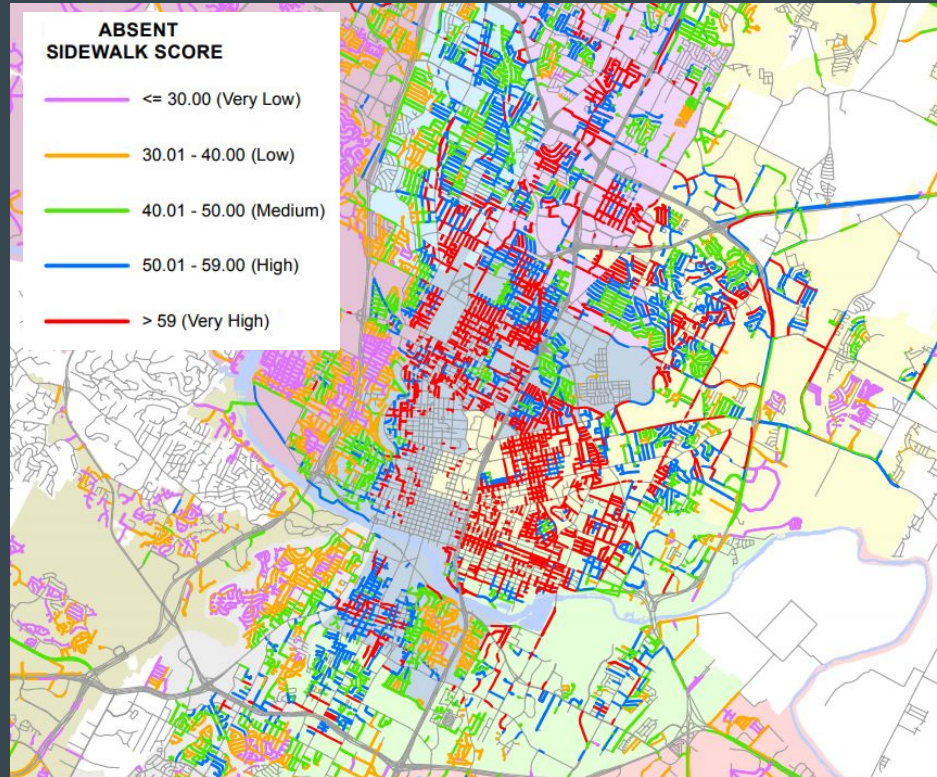
# Speed Management Program

- 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



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





# Speed Management Program

## Process

1. Prioritize all streets into levels
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
- Citations and/or warnings

# Speed Management Program

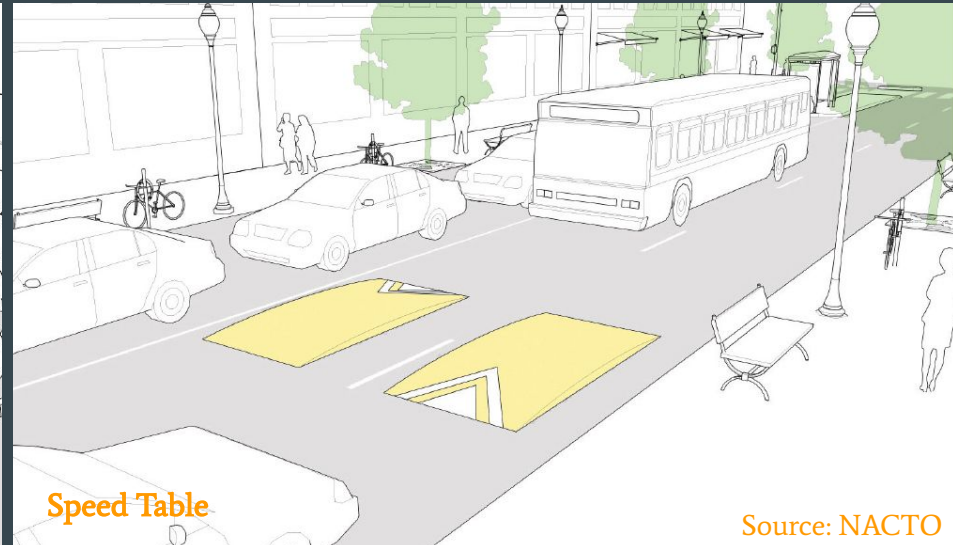
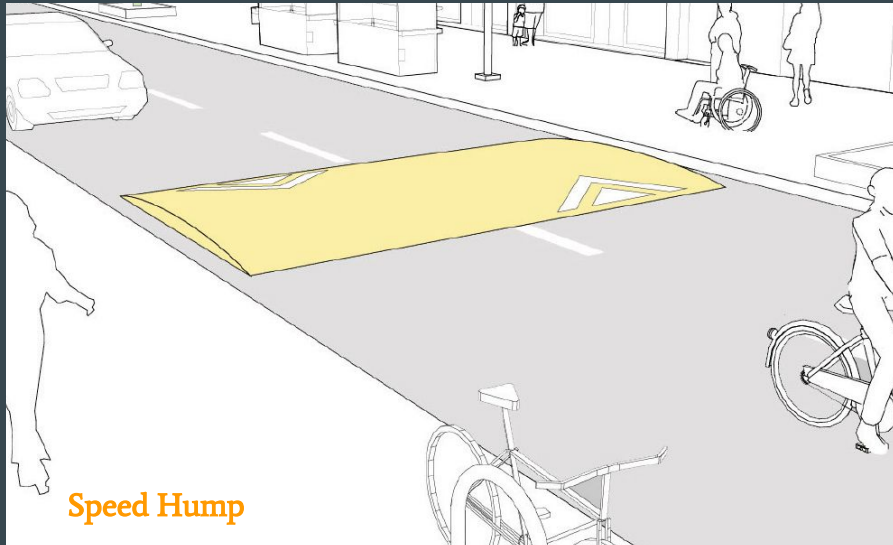
## 3. Risk Characteristics

- 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

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





# 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)



NACTO

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



# 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

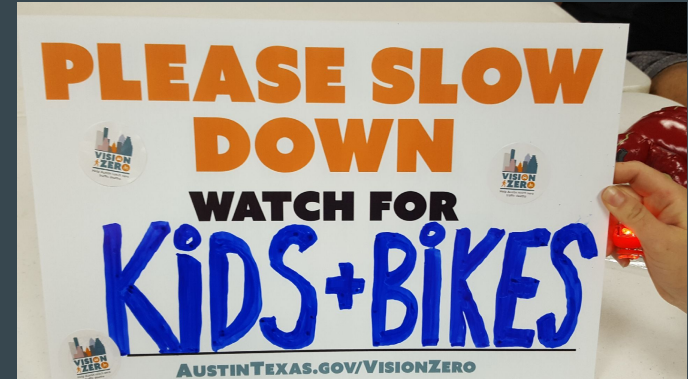




# Speed Management Program

## 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



### Speed Management Program Public Input

**Program Components and Criteria**

Austin Transportation Department is developing a new [Speed Management Program](#) to improve safety and enhance the livability of Austin streets through context-appropriate speed reduction strategies across the city. Austin Transportation Department is seeking input from the Austin community about the details of the measures and solutions to be included in the new program. *This survey will remain open through August 10.*

2. With respect to **crash history** of streets, please rate how each measure should be weighted when prioritizing streets for speed mitigation. ☐

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

[austintexas.gov/speedmanagement](https://austintexas.gov/speedmanagement)



# Next Steps

## Continued Public Engagement

- Boards and Commissions
  - LGBTQ Quality of Life Advisory Commission July 8 7 PM
  - Urban Transportation Commission July 9 5 PM
  - Community Development Commission July 9 6:30 PM
  - Bicycle Advisory Council July 16 6 PM
  - Hispanic/Latino Quality of Life 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

## Report Back to Council

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

