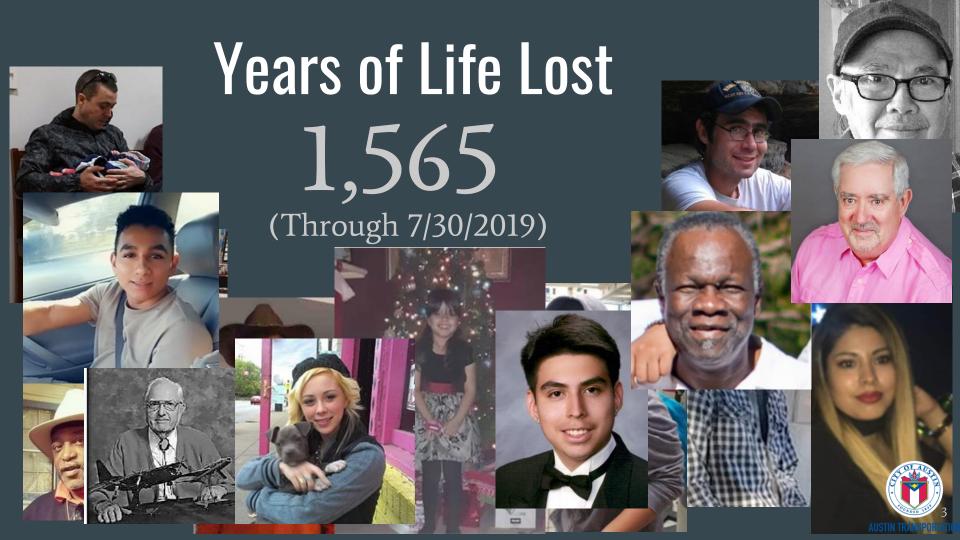
Public Safety Commission August 5, 2019

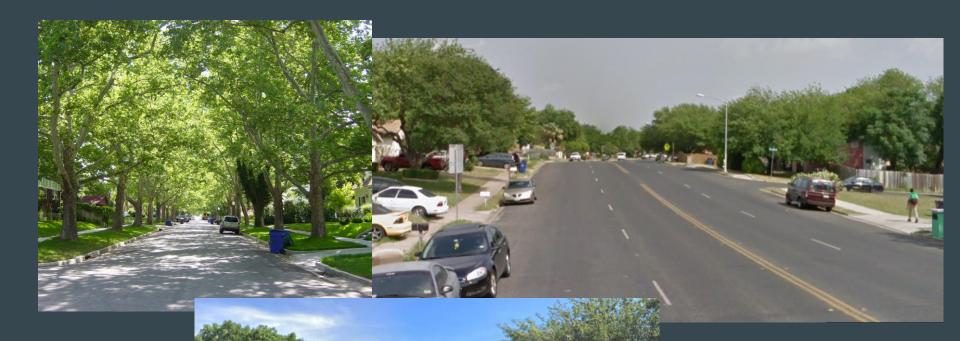














Agenda

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



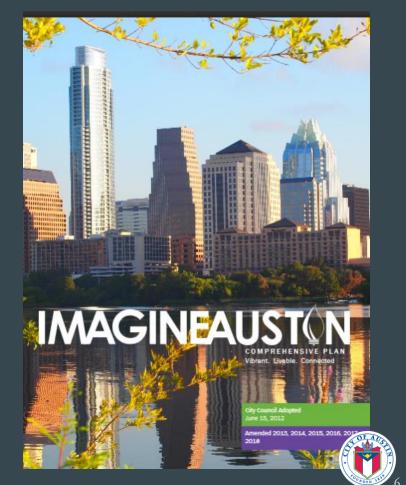
Austin Policy: Imagine Austin

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.

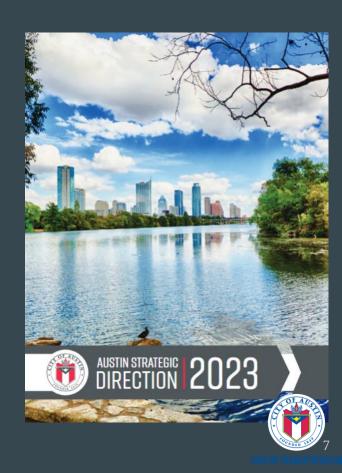


Austin Policy: SD23

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

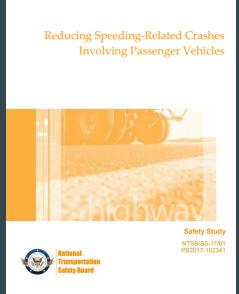
Action 9. Speed management guidelines - Develop a comprehensive data-driven approach to speed management to evaluate systemwide speeds and make recommendations for reforming speed setting methodology, implementing countermeasures to address streets with documented speeding concerns and adopting street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

Speed Management Program

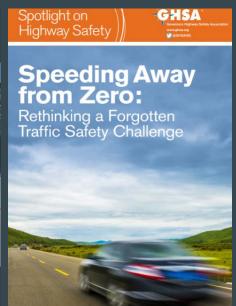
Transportation Criteria Manual

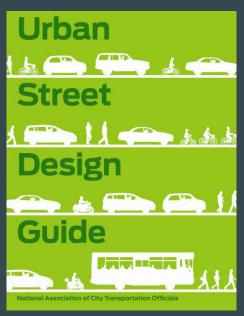


National Research and Guidance









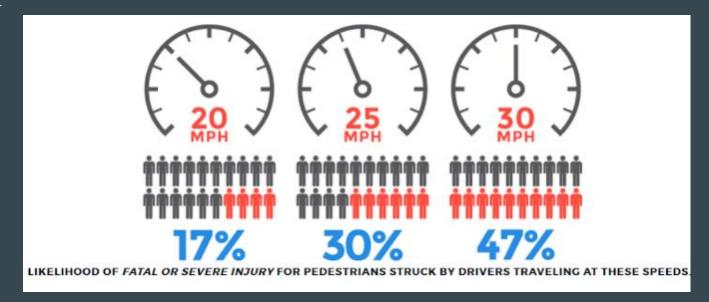
https://www.fhwa.dot.gov/environment/bicycle_pedestria n/publications/multimodal_networks/fhwahep16055.pdf

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

Speeding Increases Risk

1) Increase in crash energy \rightarrow increase in severity of

injury





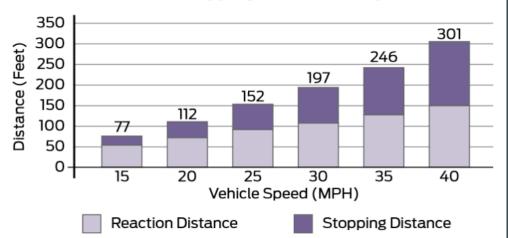
Speeding Increases Risk

- 2) Reaction Distance
- 3) Stopping Distance

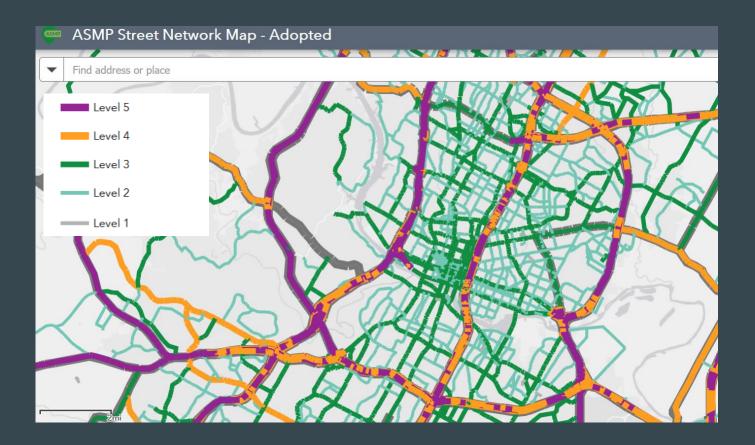
Reaction and Stopping Distance

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

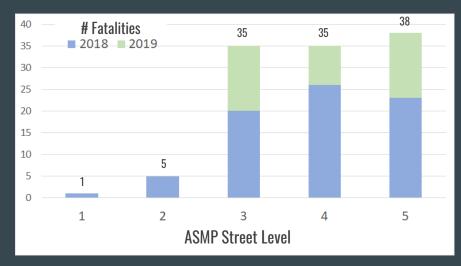
Reaction & Stopping Distance vs. Speed



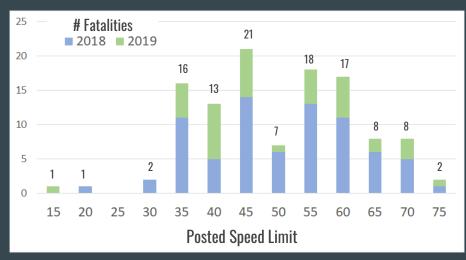




Fatalities by ASMP Street Level 2018 vs 2019 YTD (6.28.19)



Fatalities by Speed Limit 2018 + 2019 YTD (6.28.19)



^{*}including 1 non-APD

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



Source: City of Seattle

Boston: Prima Facie to 25 mph





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.



Local Area Traffic Management (2012 - 2017)

- All funded projects were on levels 1 & 2
- ~600 eligible applications received and analyzed
- Process
 - O 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.



Key Changes from Local Area Traffic Management Program

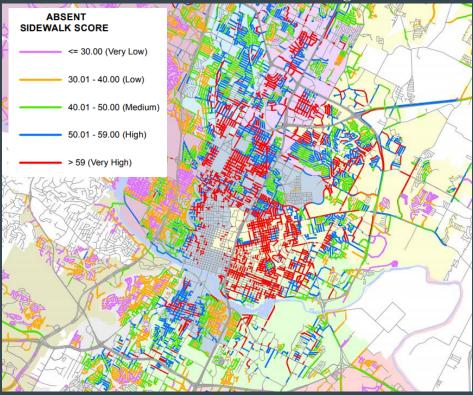
- Includes all street types throughout the City
- Uses data-driven approach to identify highest priority streets
- Reorients criteria and weighting towards reducing high end speeds and serious injury/fatality reduction
- Utilizes lower-cost strategies and ramps up as appropriate
- Reflects national policy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



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



Citywide prioritization



e.g. Sidewalk Plan



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



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



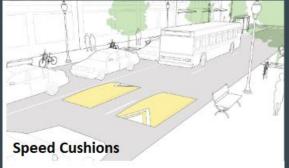
- 3. Risk Characteristics
 - Street width
 - Prevalence of on-street parking
 - Driveway spacing and density
 - Distance between signals
 - Presence of sidewalks
 - o Presence of or plan to include an all ages/abilities bicycle facility
 - Land use context (type, Imagine Austin Activity Center, etc.)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

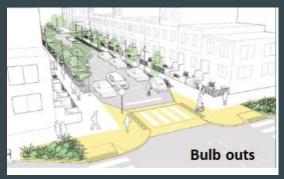


Potential engineering treatments

Source: NACTO















Potential engineering treatments

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







Additional strategies

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





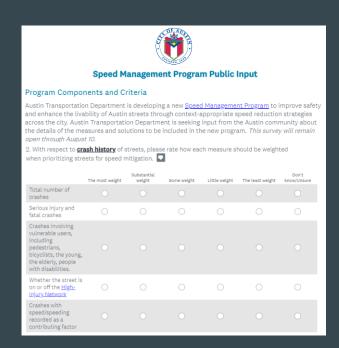
Speed Limit Changes

- 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



Feedback/Input

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



austintexas.gov/speedmanagement



Next Steps

Boards and Commissions

- Completed 6 presentations, 3 open houses, 2 back-to-school events
- Planned: African American Resource Advisory Commission August 6, 5:30 PM

Report Back to Council - Late August

- Final Update on Proposed Speed Management Program
- Public Engagement
- Fiscal Year 2020 Budget Requests



Questions/Comments