



Speed Management Briefing:

Recommended Speed Limit Modifications for Urban Core, Residential, and Downtown Streets

Council Mobility Committee | May 28, 2020



AUSTIN TRANSPORTATION



Help Austin reach zero
traffic deaths

Engineering Recommendation

Based on a comprehensive traffic engineering study, the Office of the City Traffic Engineer has determined that roadway speeds across a wide range of roadways in Austin should be reduced to achieve safe and prudent speeds

- Urban Core Arterials
- Neighborhood Streets
- Downtown Streets

Briefing Agenda

- Speed Management Program Overview
- Engineering Study Methodology
- Detailed Findings and Recommendations
 - Urban Core Study
 - Residential & Downtown Core Streets
- Next Steps

Speed Management Program

Mission:

- Improve safety and enhance the livability of Austin streets
- Implement context-appropriate speed reduction strategies

Objective:

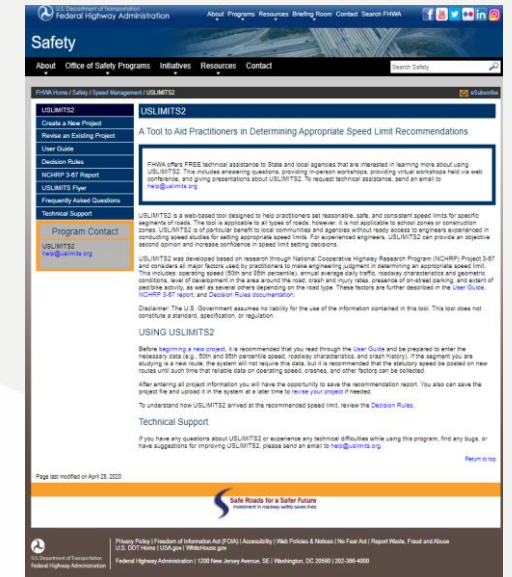
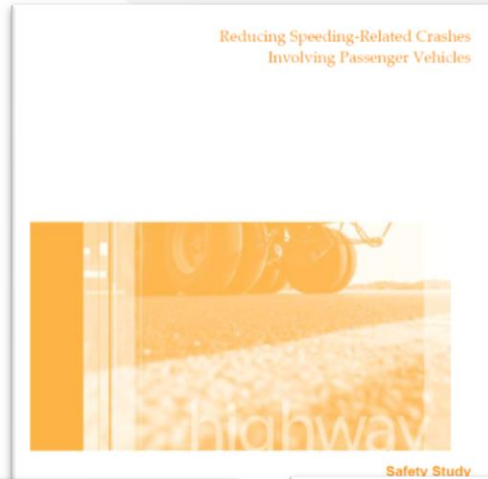
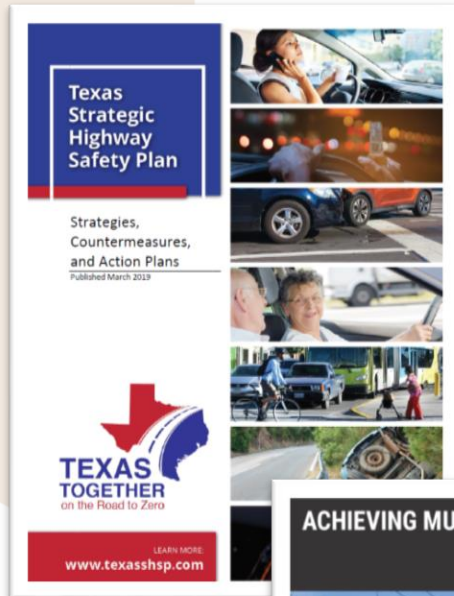
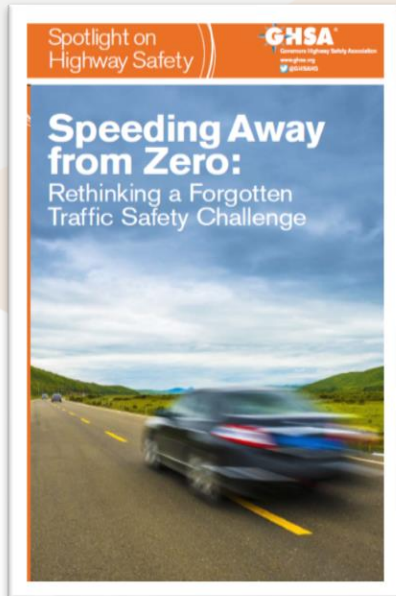
- Reduce the likelihood of serious injury and fatal crashes
- Reduce egregious speeding on all street levels

Speed Management Program

- Speed is one of four behaviors which contribute to most of the fatal crashes
- Speeding is the primary contributing factor in ~1/4 of Austin traffic fatality crashes
- 3,107 Years of Life Lost (2019)



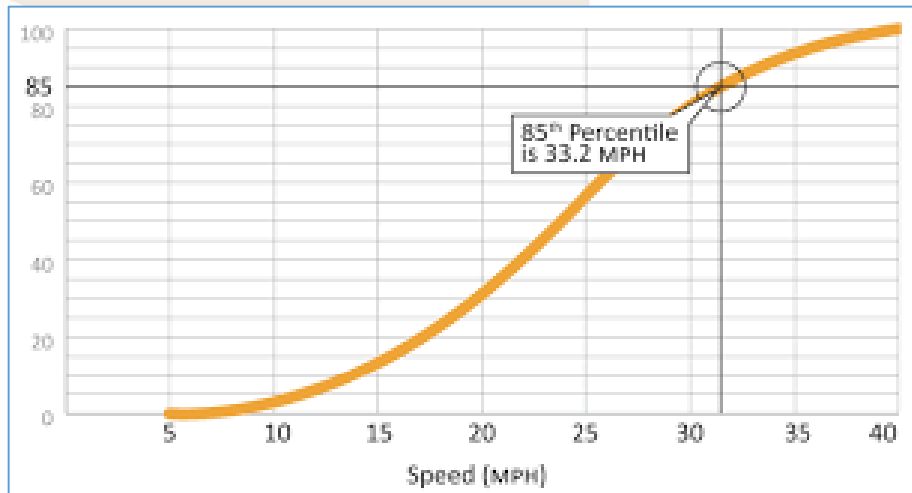
Review of Best Practices



Engineering Study Methodology

Historical Engineering Approach → Expert Systems (USLIMITS2)

85th Percentile Speed as
Primary Input



Source: FHWA



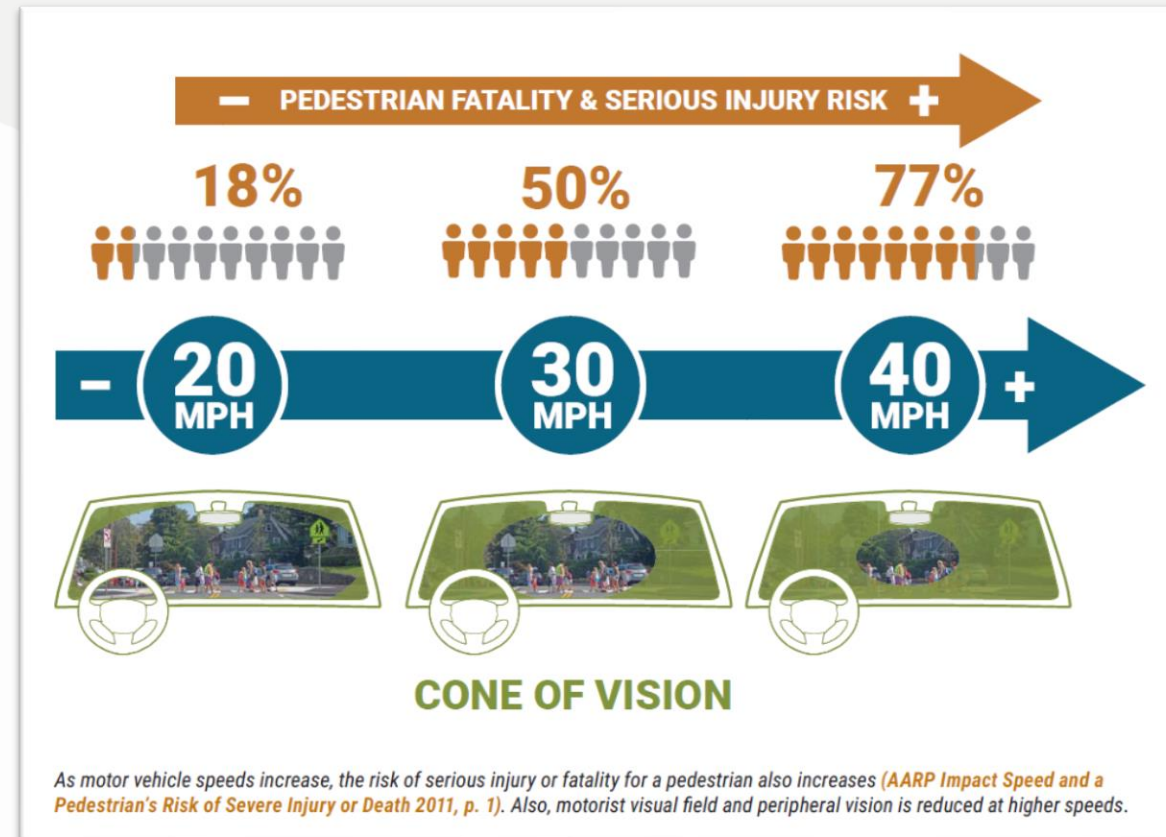
15 Different Inputs

- 50th percentile speed
- Driveway Density
- Traffic Controls
- Adjacent Land Use
- Bike/Ped Activity
- Crash History
- Plus Others

Urban Core Study

Process

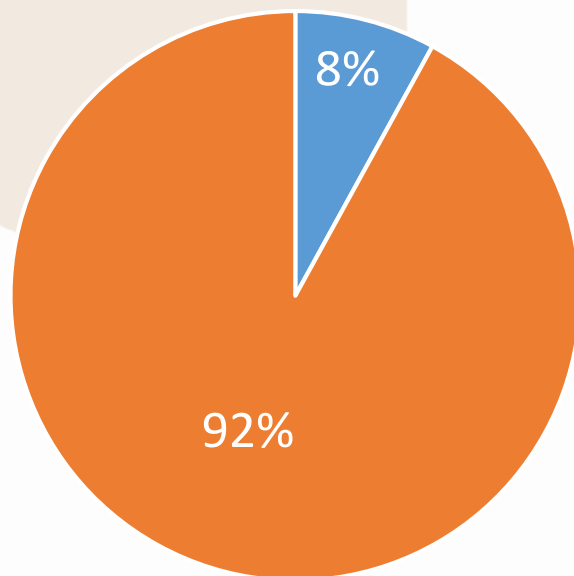
- Office of the City Traffic Engineer can recommend speed limit modifications based on an engineering study
- Texas Transportation Code, Section 545.356, and City of Austin Code, Chapter 12
- Focused on streets with greater operating speeds
- Collected data on 80% Urban Core Network



Urban Core Study

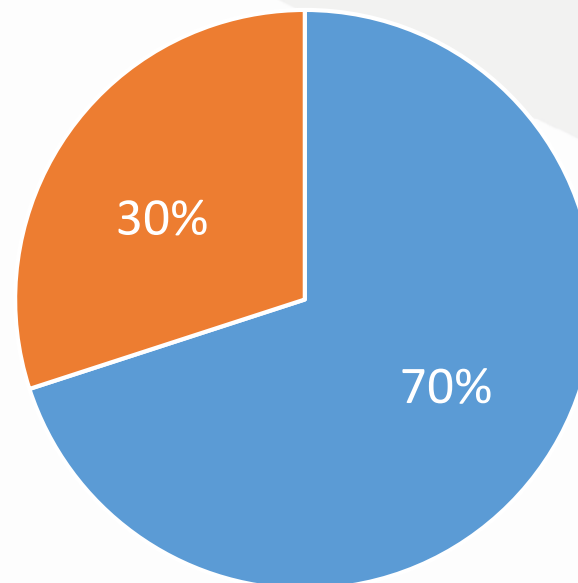
High Injury Network

Street Network



■ High-Injury ■ All Others

Representation by Serious injuries & Fatalities

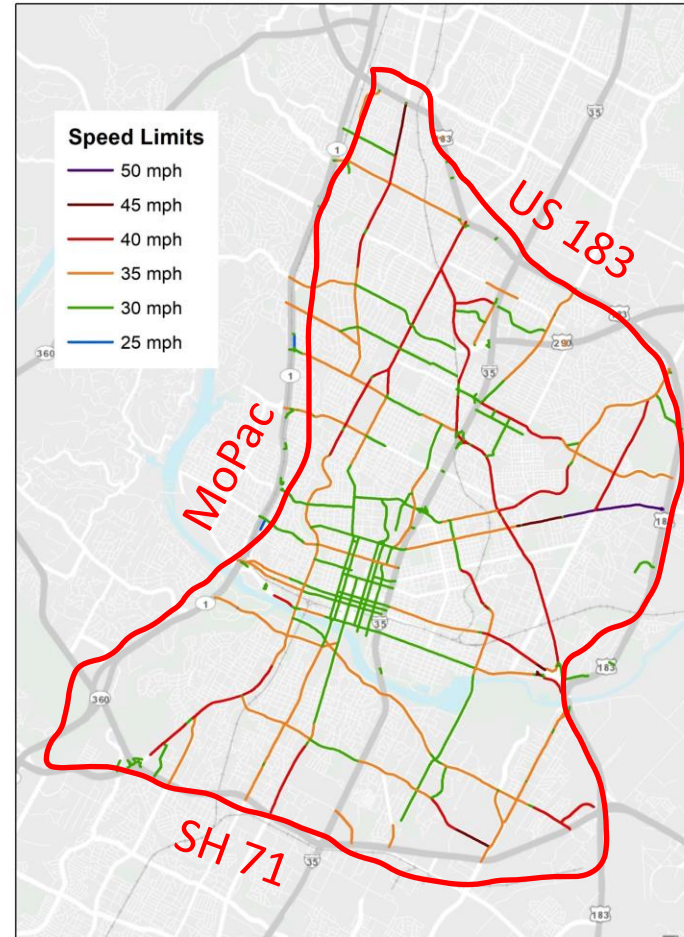
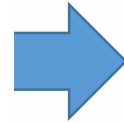
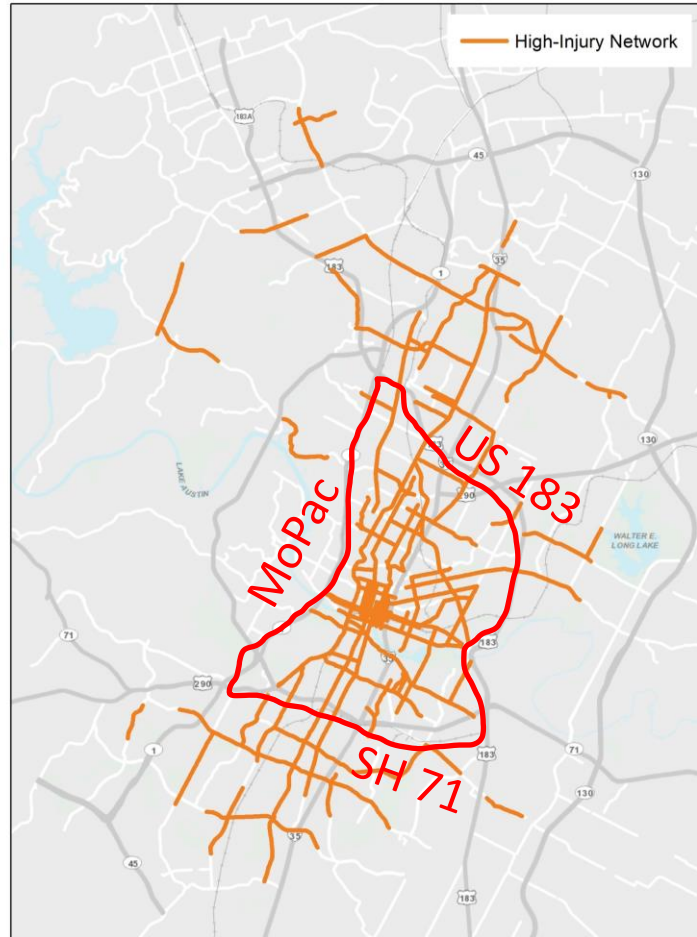


■ High-Injury ■ All Others

*High Injury Network developed in 2019 based on data from 2013-2017

Urban Core Study

High-Injury Network / Study Boundaries



Urban Core Study

Prior Council Action

Street Name	Prior Posted Speed	New Posted Speed
Airport Boulevard (IH-35 to Glissman Road)	45/50 MPH	40 MPH
Cameron Road (US 290 to Park Center Drive)	40 MPH	35 MPH
Grove Boulevard (Riverside Dr. to Montopolis Dr.)	45 MPH	40 MPH
Lamar Boulevard (Barton Skyway to SH71)	45 MPH	40 MPH
Montopolis Drive (Riverside Drive to Burleson Road)	45 MPH	35 MPH
Pleasant Valley Road (Webberville Rd. to Riverside Dr.)	45 MPH	35 MPH
Riverside Drive (Crossing Place to SH 71)	40/45 MPH	35/40 MPH
Stassney Lane (Teri Road to Burleson Road)	45/55 MPH	35/50 MPH

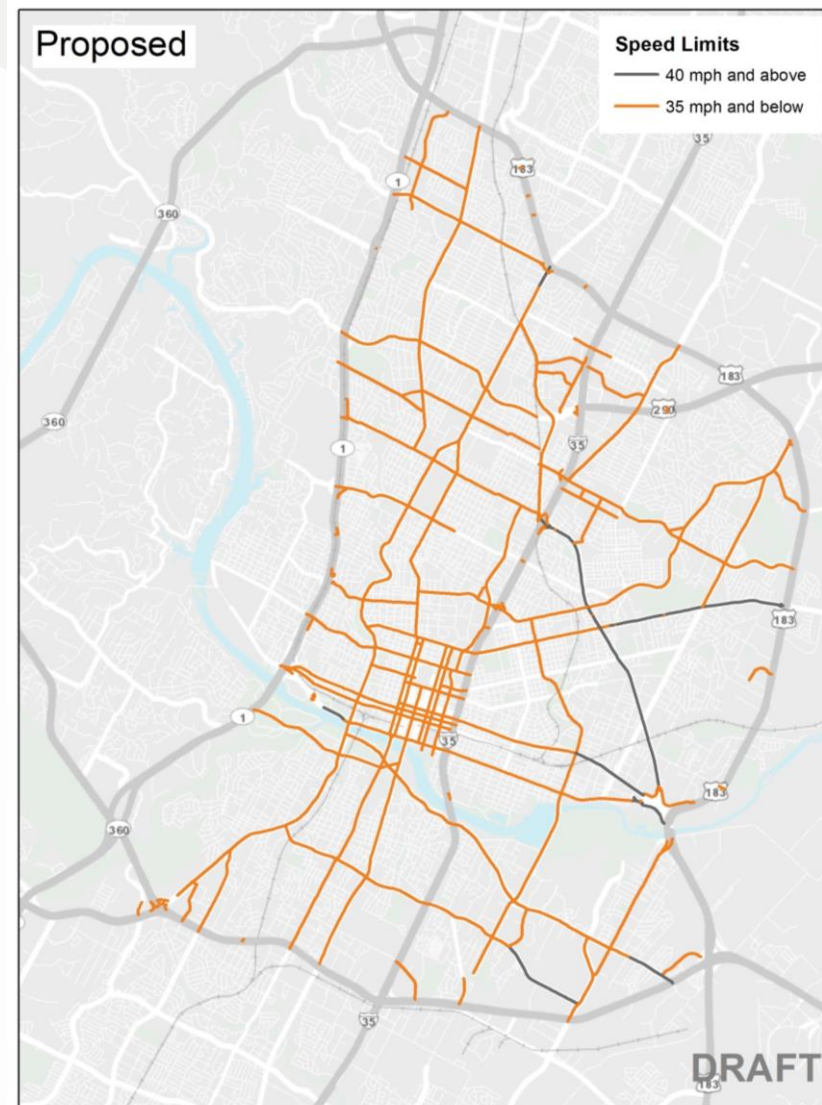
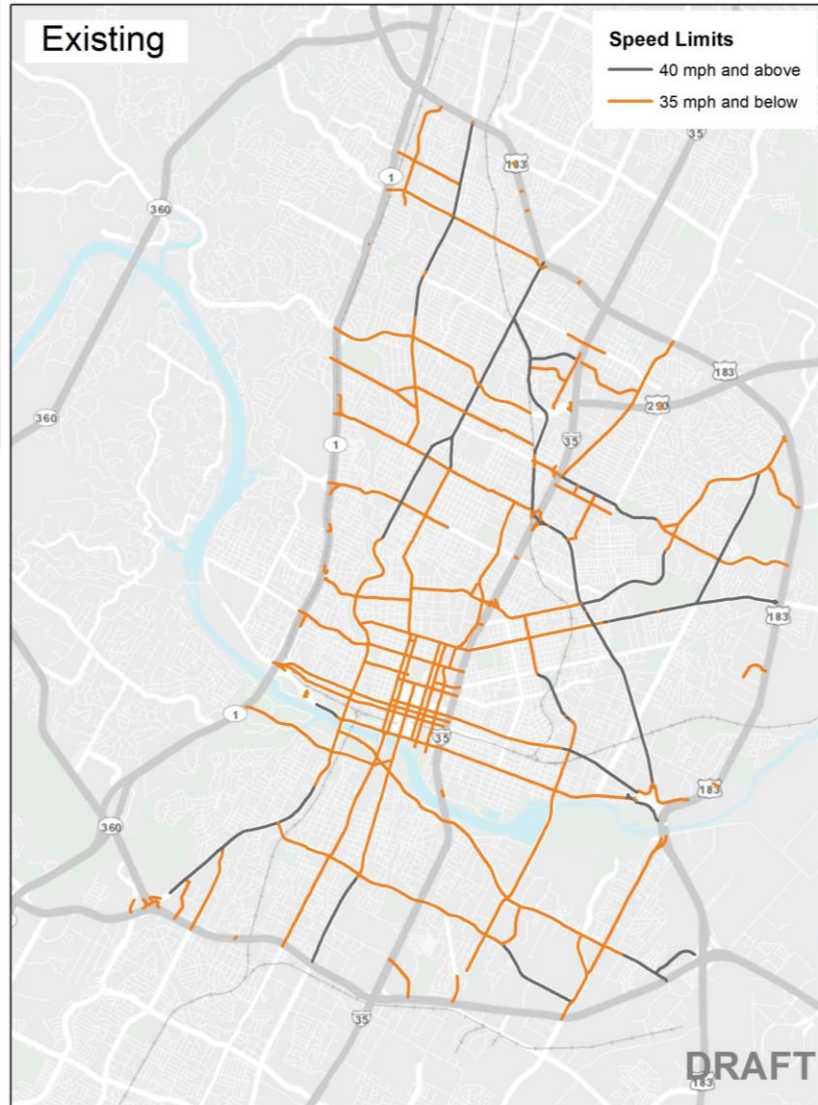
(Ordinances passed September 19, 2019)

Urban Core Study: Findings & Recommendations

- Office of the City Traffic Engineer has determined a 35 mph speed limit should be established in the Urban Core, with the following exceptions:

Street Name	Prior Posted Speed	New Posted Speed
7 th Street (Brushy Street to Pleasant Valley Drive)	35/40 MPH	30 MPH
7 th Street (Shady Lane to Airport Boulevard)	45 MPH	40 MPH
51 st Street (IH-35 to Berkman Drive)	40 MPH	30 MPH
Cesar Chavez Street (Shady Lane to Airport Boulevard)	45 MPH	40 MPH
Cesar Chavez Street (Lamar Boulevard to San Antonio Street)	35 MPH	30 MPH
Lamar Boulevard (Cesar Chavez Street to MLK Jr. Boulevard)	35 MPH	30 MPH
Manor Road (IH-35 to Berkman Drive)	35/40 MPH	30 MPH
Martin Luther King Jr. Boulevard (J.J. Seabrook Drive to US 183)	50 MPH	45 MPH
Oltorf Street (Alvin Devane Boulevard to Montopolis Drive)	45 MPH	40 MPH

Urban Core Study: Findings & Recommendations



Residential Streets and Downtown Core

Process

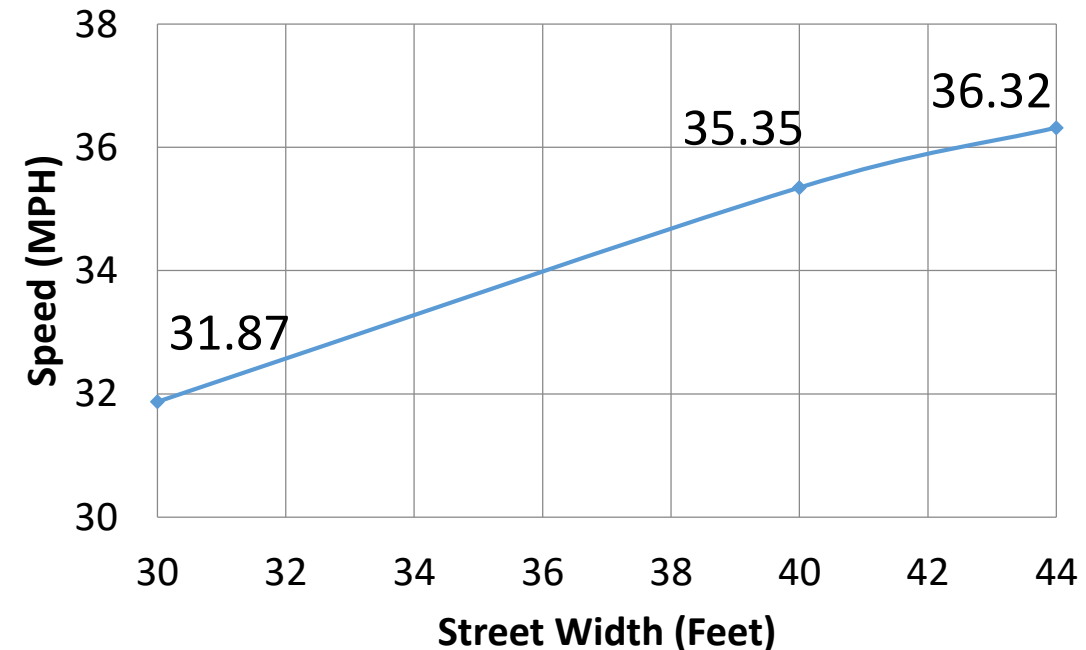
- Office of the City Traffic Engineer can recommend speed limit modifications based on an engineering study
- Texas Transportation Code, Section 545.356, and City of Austin Code, Chapter 12
- **Residential streets:** non-arterial (non-major) streets with some portion of adjacent front- or side-facing residential land use
- Sampled data on ~600 streets and calculated statistical values for ~100 to determine how the built environment influences prevailing speeds

Residential Streets and Downtown Core

Findings

- Speeds increase in a nearly linear relationship to street width
- Speeds are most influenced by on-street parking utilization, conflicts from driveways, and visual cues from adjacent front-facing residences
- Street widths less than 36 feet cause yield-flow operation

Prevailing Speed as a Function of Street Width



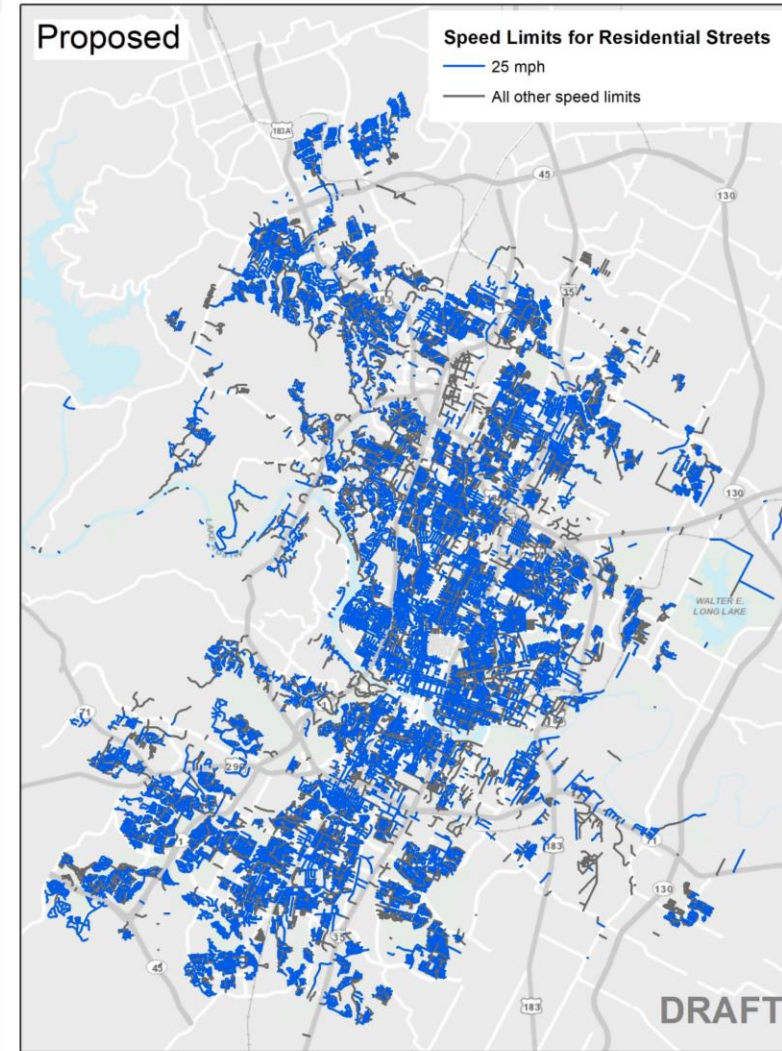
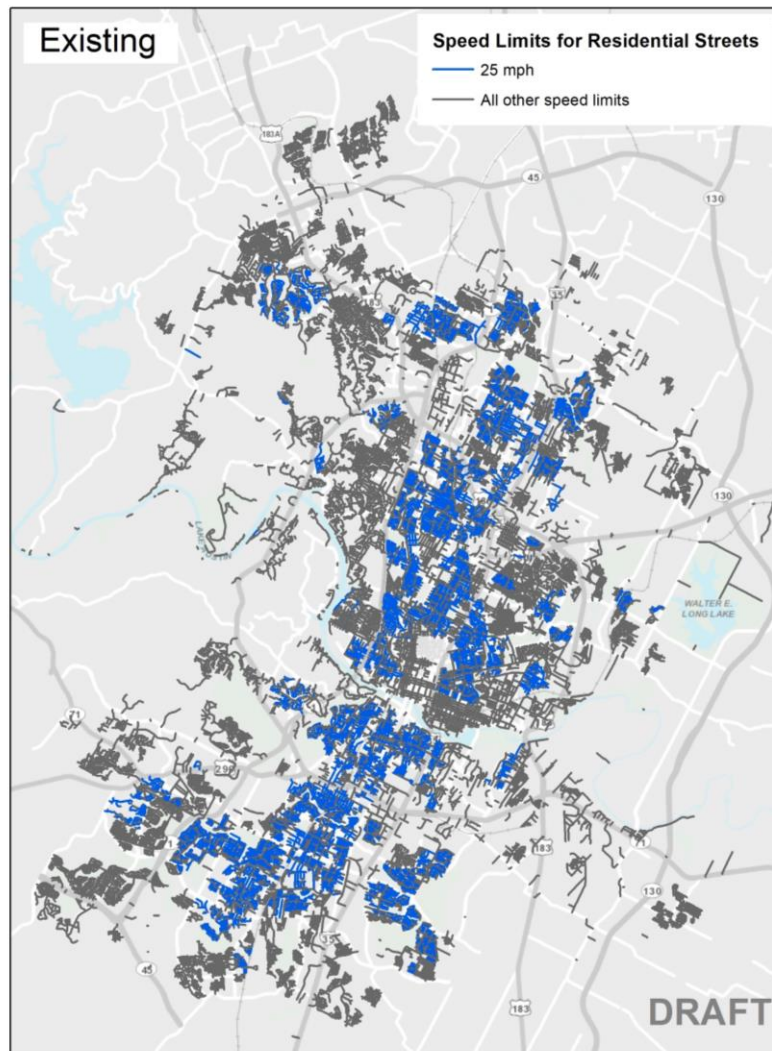
Residential Streets and Downtown Core

Recommendation 1

- Residential Streets 36 feet or less in width
 - **Establish a citywide speed limit of 25 mph**
 - Based on determination this is a safe and prudent speed by means of this engineering evaluation
- Residential Streets between 36 feet and 40 feet in width
 - **Establish a speed limit of 25 mph if determined to be reasonable and prudent**
 - Would be based on subsequent individual evaluation or by implementation of appropriate speed mitigation measures

Residential Streets and Downtown Core

Recommendation 1



Residential Streets and Downtown Core

Findings

- ATD studied residential streets with existing speed limits greater than 30 mph or widths greater than 36 feet
- ATD considered each residential street to determine whether more safe and prudent speed limits should be set consistent with other residential streets of similar operating characteristics

Residential Streets and Downtown Core

Recommendation 2

- Lower the speed limits on eighteen (18) specific residential streets to be consistent with others having similar operating characteristics and which do not meet with criteria under Recommendation 1.
- Streets and recommended speed limits:
 - Beckett Rd: 35
 - Berkman Dr: 30
 - Bilbrook Pl: 30
 - Bull Creek Rd: 30
 - Deer Ln: 30
 - Duval St: 30
 - Exchange Dr: 35
 - Exposition Blvd: 30
 - Hancock Dr: 30
 - Jones Rd: 30
 - La Crosse Ave: 35
 - Latta Dr: 35
 - Manor Rd: 30
 - McCarty Ln: 30
 - Oak Springs Dr: 30
 - Parker Ln: 30
 - Lakeshore Blvd: 30
 - St. Johns Ave: 30

Residential Streets and Downtown Core

Findings

- Downtown core is bounded by N Lamar Boulevard, E/W Martin Luther King Jr Boulevard, IH-35 Southbound Frontage Road, and Lady Bird Lake
- Much of the downtown core of the City was built on a grid layout with consistent block lengths
- Operation is typically controlled by traffic signals set at a progression speed or all-way stop signs
- Streets have consistent, and generally slower, prevailing speeds less than the nominally posted speed limit of 30 mph



AUSTIN TRANSPORTATION



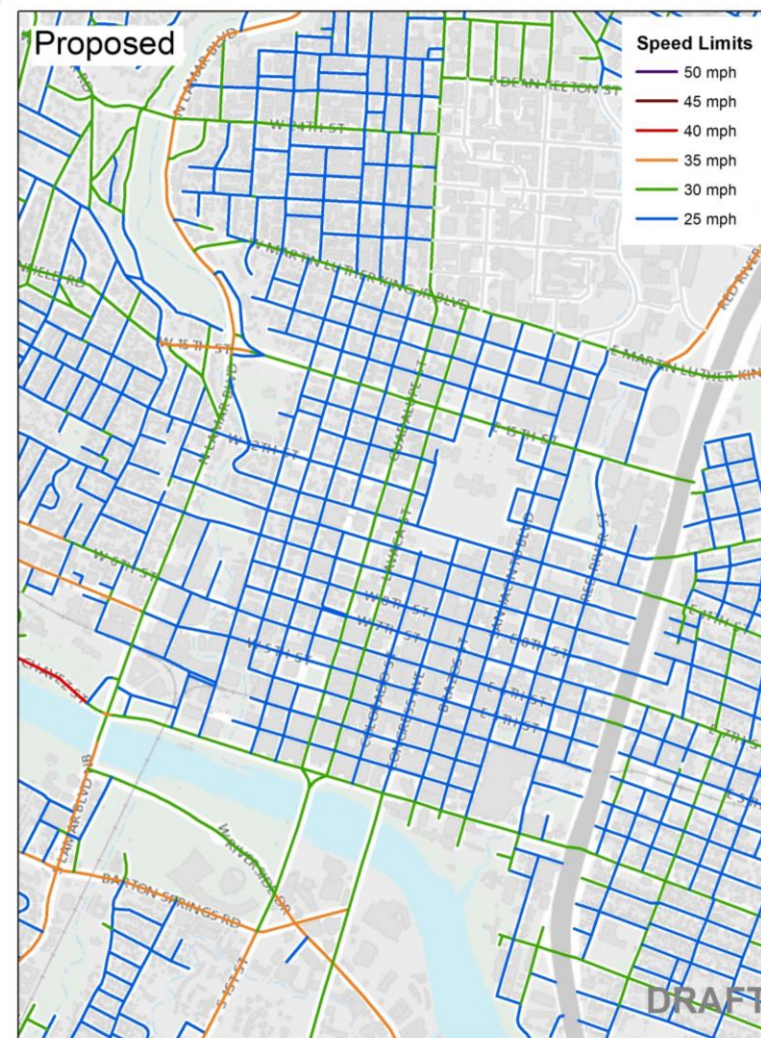
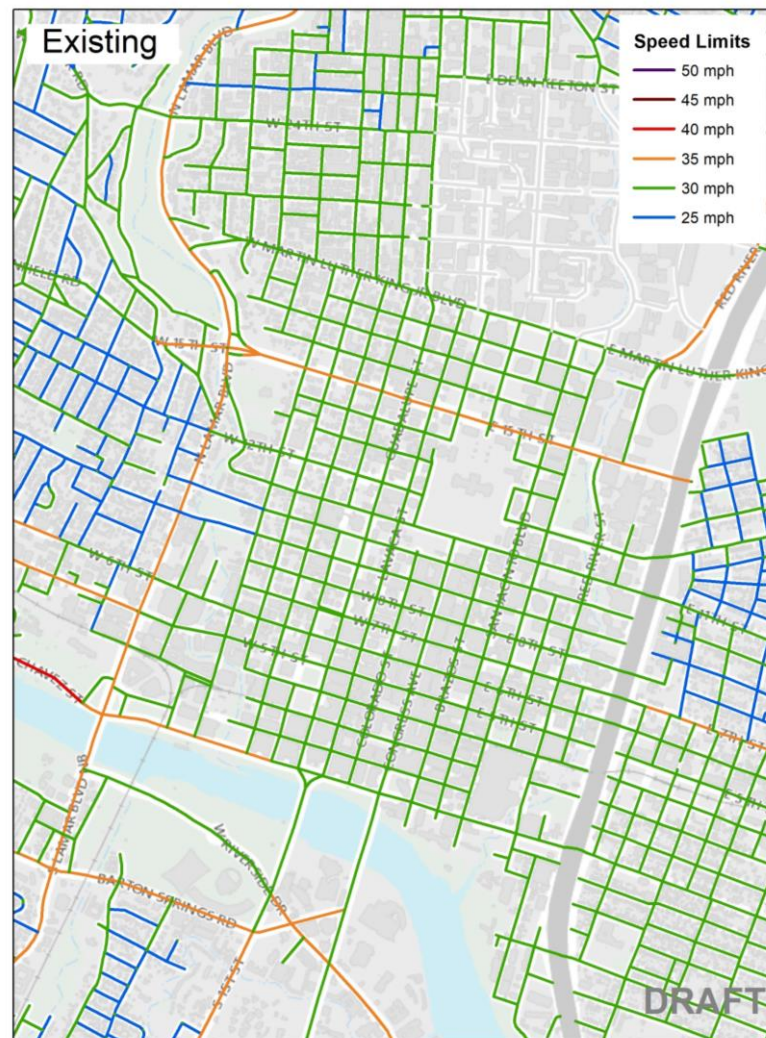
Residential Streets and Downtown Core

Recommendation 3

- Set a speed limit of 25 mph on the Downtown Street network bounded by N Lamar Boulevard, E/W Martin Luther King Jr Boulevard, IH-35 Southbound Frontage Road, and Lady Bird Lake
- Streets to remain at 30 mph include N Lamar Boulevard, Guadalupe Street, Lavaca Street, and E/W Martin Luther King Jr Boulevard
- Streets to lower from 35 mph to 30 mph include E/W 15th Street and E/W Cesar Chavez Street
- Traffic signal timings should be reviewed and set to 25 mph progression speed where possible

Residential Streets and Downtown Core

Recommendation 3



Next Steps

Public Process

- May 15 – Urban Transportation Commission (Briefing and discussion)
- May 28 – Mobility Committee (Briefing and discussion)
- June 11 – City Council Meeting (Ordinance posted for approval)



Sign Installation Plan

Public Awareness Effort



Questions

Eric Bollich, P.E., PTOE
Acting Assistant Director
Austin Transportation
eric.bollich@austintexas.gov
512.974.7767

Anna Martin, P.E., PTOE
Assistant Director
Austin Transportation
anna.martin@austintexas.gov
512.974.7105

Lewis Leff
Transportation Safety Officer
Austin Transportation
lewis.leff@austintexas.gov
512.974.6421

Rob Spillar, P.E.
Director, Austin Transportation
rob.spillar@austintexas.gov
512.974.2488

austintexas.gov/departments/speed-management