



VISION ZERO PECOS

ZERO TRAFFIC DEATHS BY 2050

S|S
4|A

SAFE STREETS FOR ALL

VISION ZERO
Traffic deaths are PREVENTABLE
Humans make MISTAKES
Prevent FATAL & SEVERE CRASHES
SYSTEMS approach
Saving lives is NOT EXPENSIVE

FORESITE group

PECOS TEXAS
Town of Pecos City

March 4th, 2026

SS4A STAKEHOLDER MEETING 4: COUNTERMEASURES

FORESITE group

AGENDA

1. Introductions
2. Where we are in the process
3. Countermeasures explained
4. High Injury Network (HIN)
5. HIN solutions (Projects)
6. Next Steps

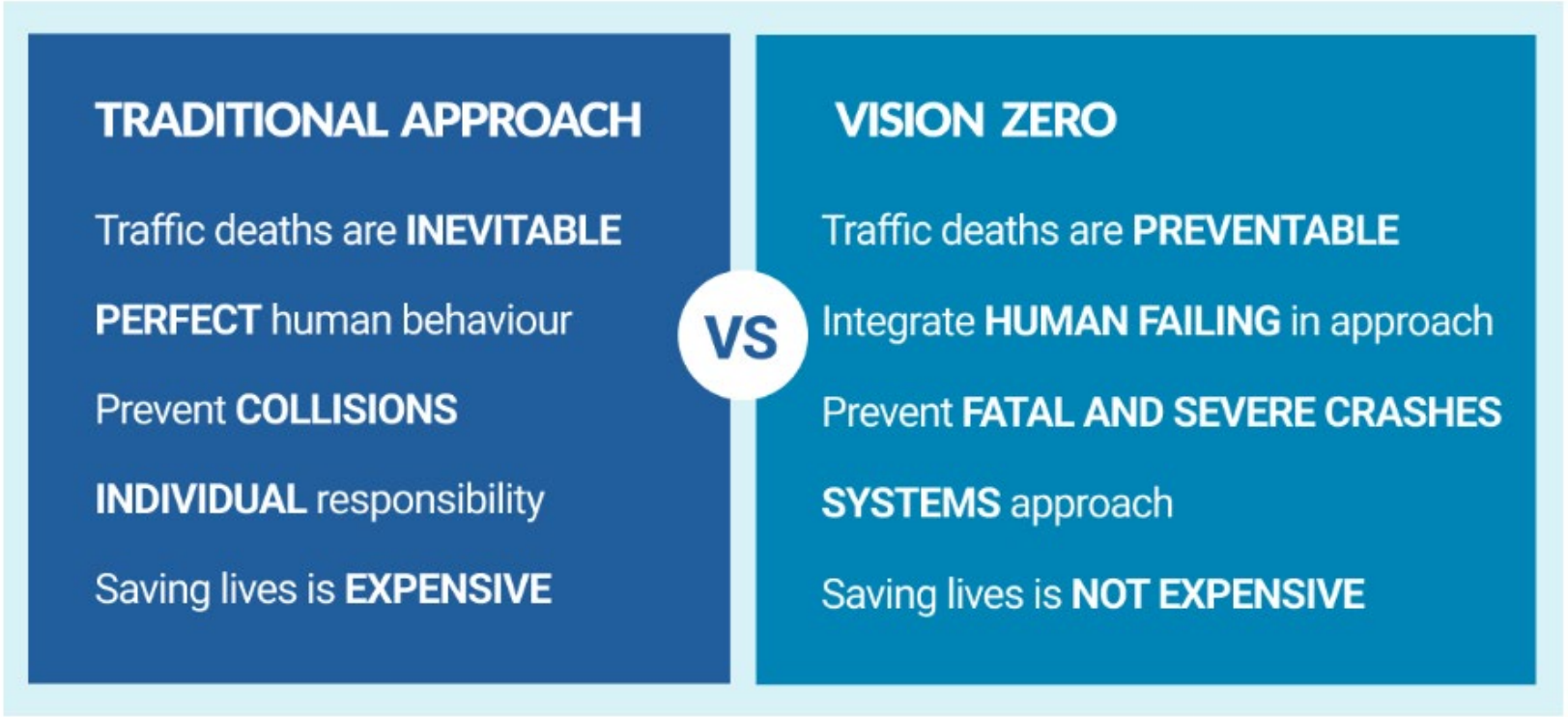


PROCESS STATUS



WHAT IS VISION ZERO?

- Strategy to eliminate all traffic fatalities and severe injuries
- Over 42,000 Americans are killed or severely injured every year
- A new approach to safety is needed:
  - Safe People
  - Safe Speeds
  - Safe Roads



WHAT ARE WE TRYING TO SOLVE?



Speed



Clear driver expectation



Reduce conflict points

USDOT FHWA COUNTERMEASURES

What are Countermeasures?

FHWA's countermeasures are **strategies** that can offer significant, measurable impacts as part of any agency's data-driven, systemic approach to improving safety. Each countermeasure addresses **speed management, intersections, roadway departures, or pedestrians/ bicyclists— along with crosscutting strategies that address all four safety focus areas.**

CRASH MODIFICATION FACTORS (CMFs)

What are CMFs?

A crash modification factor (CMF) is a numerical value used to compute the **expected number of crashes reduced** after implementing a **countermeasure** on a road or intersection. FHWA's countermeasures use the CMFs to demonstrate projected future impact.

Example: Lighting improvements can reduce crashes up to:

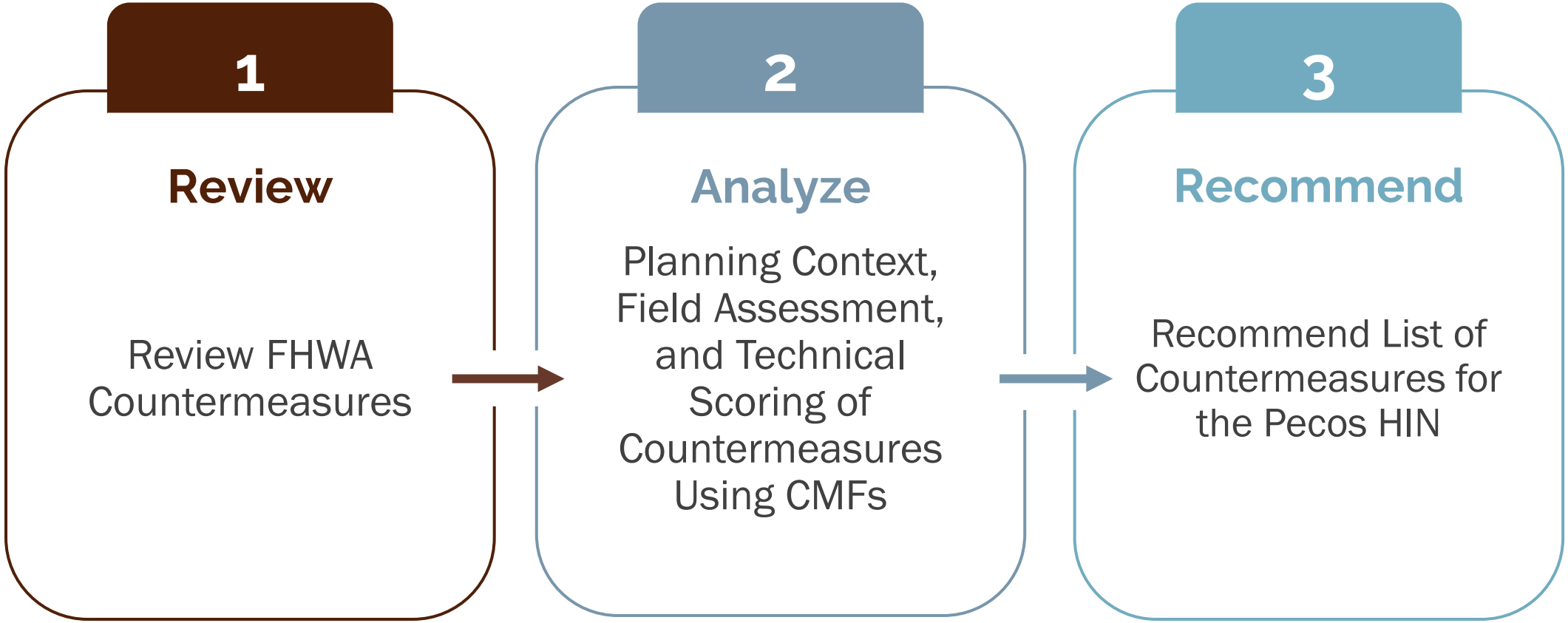


42%
for nighttime injury pedestrian crashes at intersections.

33-38%
for nighttime crashes at rural and urban intersections.

28%
for nighttime injury crashes on rural and urban highways.

COUNTERMEASURE ASSESSMENT PROCESS



RECOMMENDED COUNTERMEASURES

Speed Management

- Residential Speed Limits
- Dynamic Speed Monitoring

Visibility

- Lighting Enhancements
- Advance Warning Signs
- Retroreflective Backplates

Traffic Control

- Lane Delineation with Raised Pavement Markers
- Lane Markings
- Access Management and Median Barriers
- Roundabouts
- New Signal
- Protected Turn Light
- Convert to All-Stop

Active Transportation

- High Visibility Crosswalks
- Leading Pedestrian Intervals
- High-Intensity Activated Crosswalk (HAWK) Signals
- Rectangular Rapid Flashing Beacons (RRFB)

RECOMMENDED COUNTERMEASURES

Speed Management

Residential Speed Limits

Texas law allows cities to reduce residential speed limits to 25 or 20 mph by ordinance and traffic studies.



Dynamic Speed Monitoring

Helps control approach speeds on long arterials where run-off-road or rear-end crashes are linked to high-speed crashes.



RECOMMENDED COUNTERMEASURES

Visibility

Advance Warning

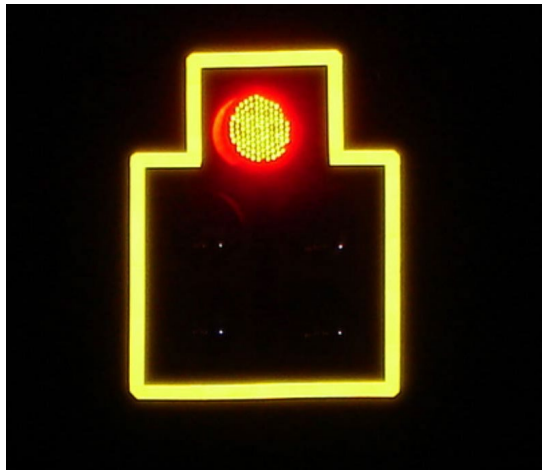
Warn approaching drivers of downstream stops or queues, reducing high-speed rear-end crashes.





Retroreflective Backplates

Improves signal visibility in both day and night conditions, reducing rear-end and red-light-related crashes.



Lighting Enhancements

Addresses nighttime and pedestrian crashes by improving driver visibility of lanes, signals, and crosswalks.

BEFORE



AFTER

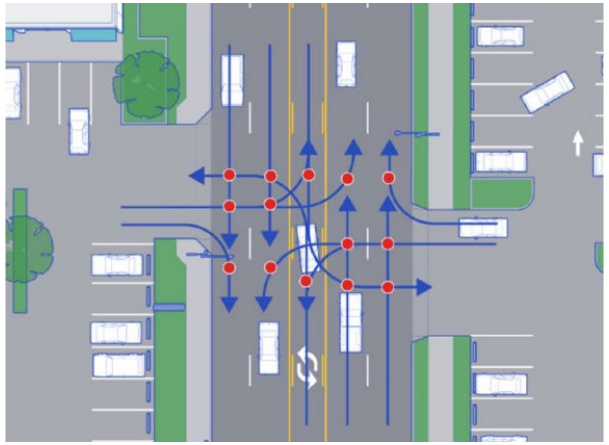


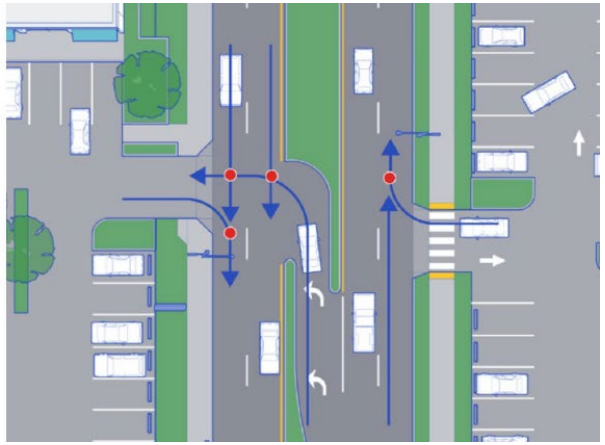
RECOMMENDED COUNTERMEASURES

Traffic Control

Access Management and Median Barriers

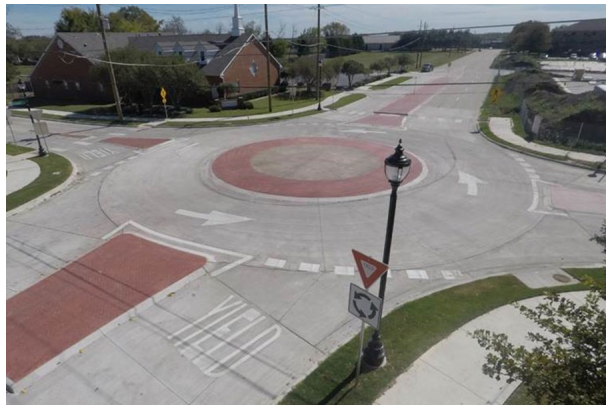
Reduces angle collisions caused by frequent turning movements near intersections.





Roundabouts

Improves safety and efficiency by lowering speeds and reducing turning conflicts





RECOMMENDED COUNTERMEASURES

Traffic Control

Lane Delineation with Raised Pavement Markers

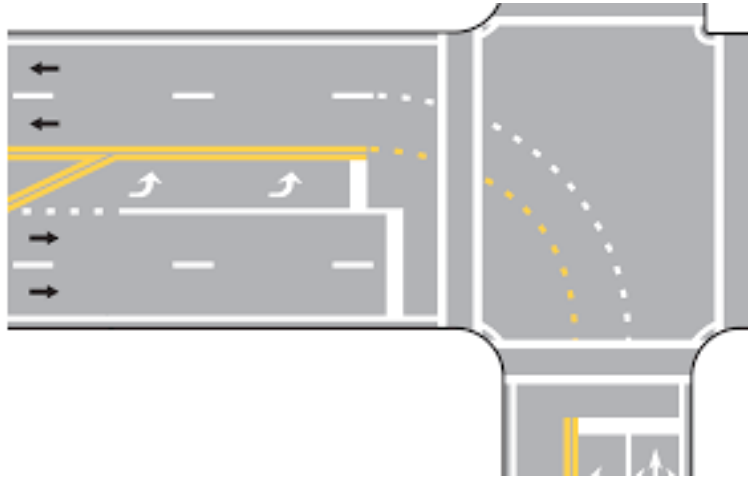
Clarify lane location with pavement markings and raised markers





Lane Markings

Clarify turning movements at intersections



RECOMMENDED COUNTERMEASURES

Traffic Control

Stop Bars

Emphasize traffic stop location with on-street pavement markings



Clarify Yield at Stop Signs

Warn stopping traffic that crossing traffic does not stop



RECOMMENDED COUNTERMEASURES

Traffic Control

New Traffic Signals

Convert stop-controlled intersection to traffic-signal control



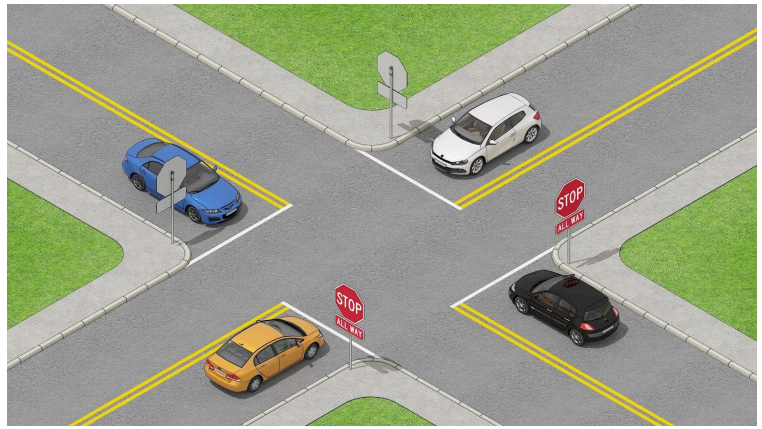
Protected Turn Light

Addresses left-turn and angle crashes by eliminating risky gap acceptance and improving clarity for turning drivers.



Convert to All-Stop

Convert a two-way stop intersection to all-way



RECOMMENDED COUNTERMEASURES

Active Transportation

High-Visibility Crosswalks or Raised Crosswalk

Multiple design solutions such as reflective pavement tape, contrasting color, raised crossings, in-roadway warning lights, etc.



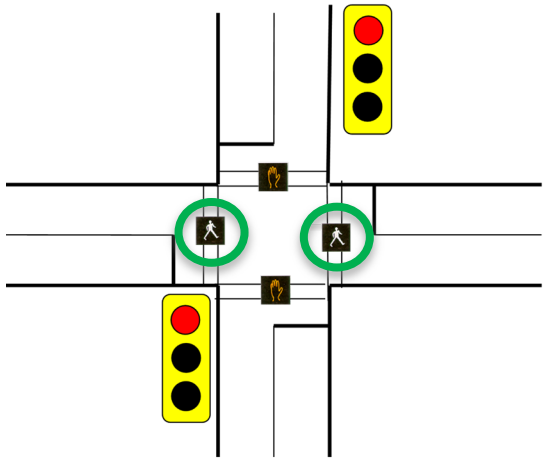




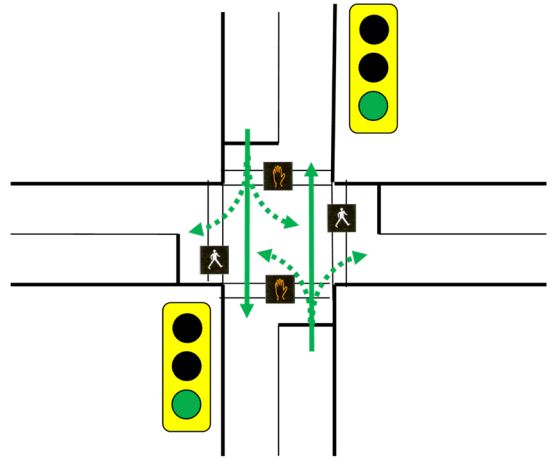


Leading Pedestrian Intervals

Improves pedestrian crossing time by allowing pedestrians to enter the crosswalk before vehicles are given green indication



Sequence 1



Sequence 2

RECOMMENDED COUNTERMEASURES

Active Transportation

High-Intensity Activated Crosswalk (HAWK) Signals

Improves pedestrian and bicycle safety by stopping traffic to allow protected crossing



Rectangular Rapid Flashing Beacons (RRFB)

Enhances pedestrian crossing visibility and increases driver awareness at uncontrolled, marked crosswalks.



Applying the Countermeasure Recommendations

PECOS HIGH INJURY NETWORK (HIN)

Corridors

1. Cedar Street (285)
2. East 3rd Street (Business 20)
3. West Walthall Street
4. South Eddy Street
5. West 3rd Street (Business 20)
6. South Bickley Avenue (17)
7. County Road 204
8. Western Avenue (County Road 201)
9. South Country Club Drive
10. South Frontage Road
11. West County Road (County Road 116)
12. State Highway 17 (South of Bickley Avenue)
13. East 7th Street
14. West 7th Street
15. South Ash Street
16. East 12th Street
17. East 4th Street
18. West 8th Street
19. N Hickory St
20. S Elm Street
21. North Pecos Dr
22. Pinehurst Street
23. East 13th Street
24. Orange Street
25. 285 (South Segment)
26. E D Street



PECOS HIGH INJURY NETWORK (HIN)

Intersections

1. Cedar Street (285) @ E D Street
2. Cedar Street (285) @ East 3rd Street (Business 20)
3. Cedar Street (285) @ East 4th Street
4. Cedar Street (285) @ East 7th Street
5. Cedar Street (285) @ East 12th Street
6. Cedar Street (285) @ East 13th Street
7. Cedar Street (285) @ West Walthall Street
8. Cedar Street (285) @ Pinehurst Street
9. Cedar Street (285) @ County Road 116
10. East 3rd Street (Business 20) @ S Elm Street
11. East 3rd Street (Business 20) @ South Ash Street
12. East 3rd Street (Business 20) @ Orange Street
13. South Eddy Street @ West 7th Street
14. South Eddy Street @ West 8th Street
15. South Eddy Street @ W Walthall St
16. County Road 204 @ South Bickley Avenue (17)
17. Hickory Street @ N Pecos Drive West
18. S Ash St @ E 4th St



Cedar Street (285)

2020 – 2025 FATAL & SERIOUS CRASHES **7**

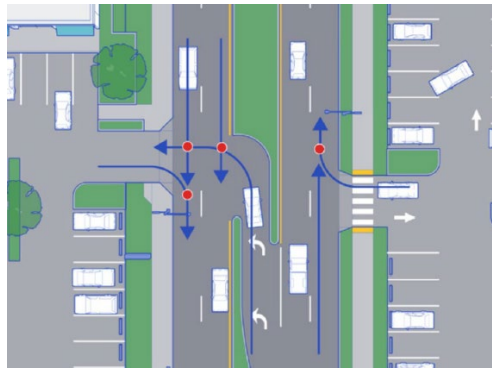
REDUCTION IN FATAL & SERIOUS CRASHES OVER 5 YEAR PERIOD **37%**

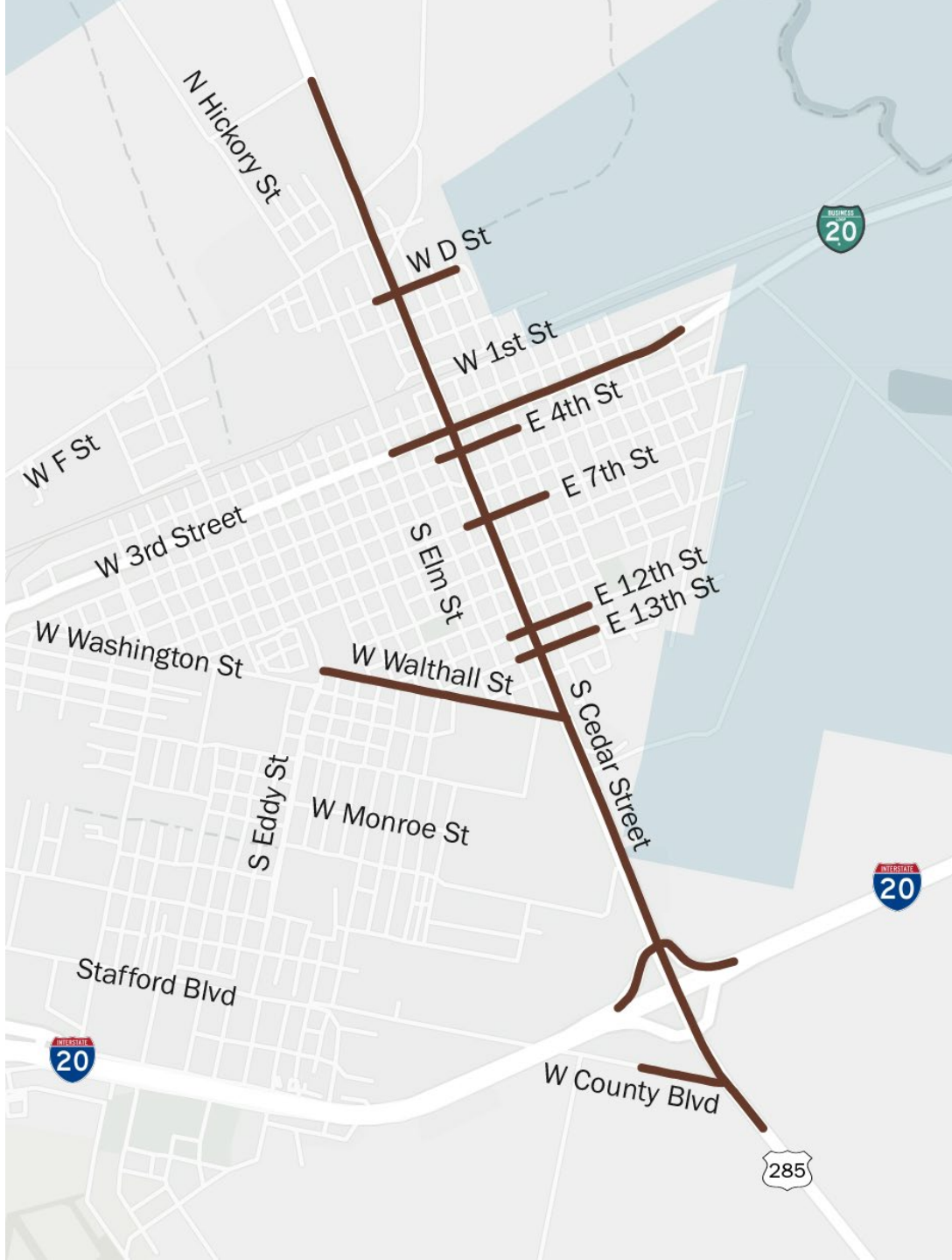
Top Crash Types:

- Angle
- Head-on
- Sideswipe

Corridor Recommended Countermeasures:

- Access Management – center median with turn lanes at signalized intersections Street Lighting
  - ❖ Recommendation from Reeves County CSAP
- Sidewalk Connectivity
- Dynamic Speed Monitoring





Cedar St (285) @ East D St

1 2020 – 2025
FATAL & SERIOUS CRASH

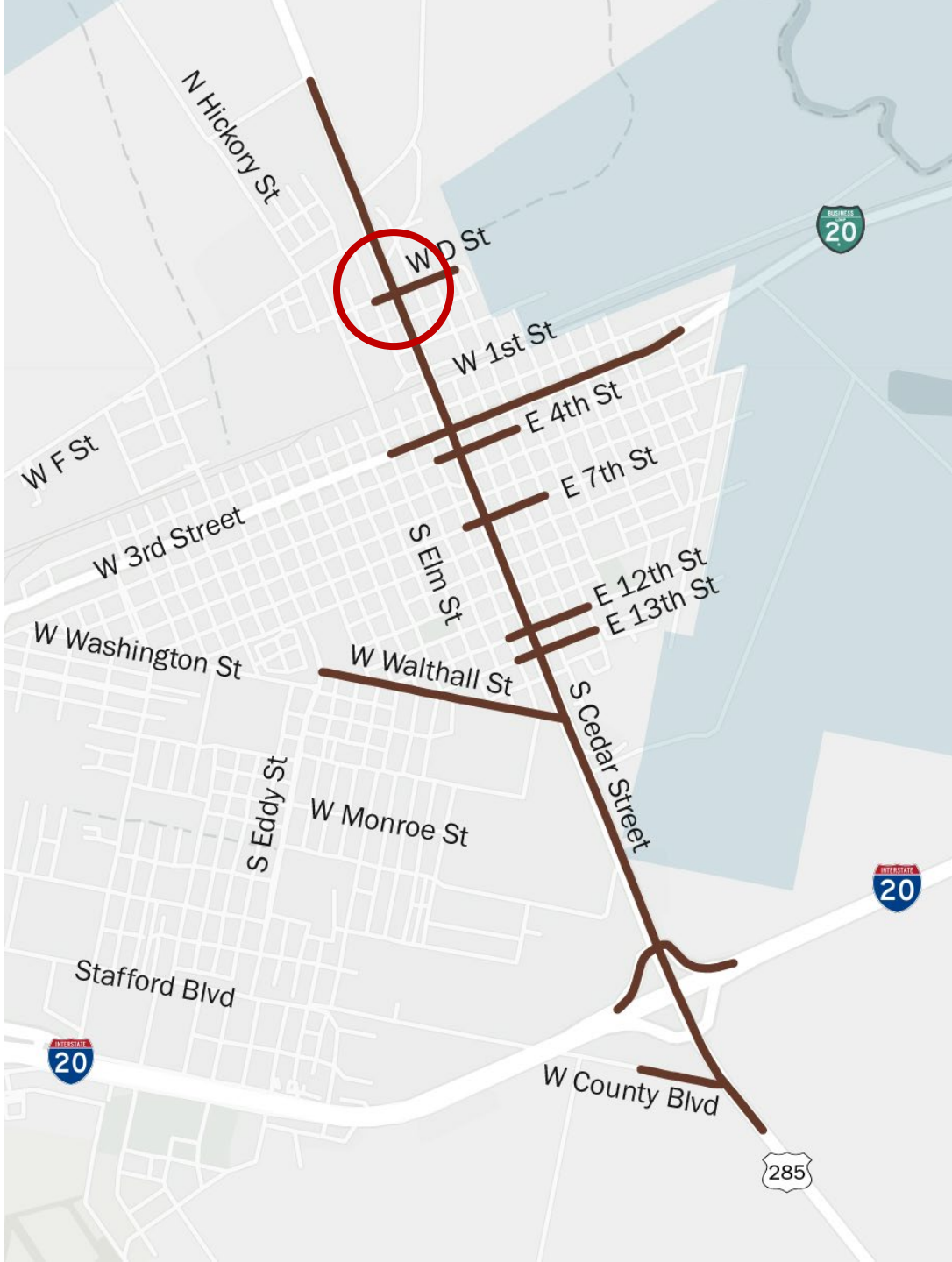
Top Crash Types:

- Angle
- Not a Collision with a Motor Vehicle
- Rear-end

Intersection Recommended Countermeasures:

- Street Lighting Upgrade
- High-Visibility Crosswalks (All Way)
- Pedestrian HAWK Signal





Cedar St (285) @ 3rd St (Business 20)

1 2020 – 2025
FATAL & SERIOUS CRASH

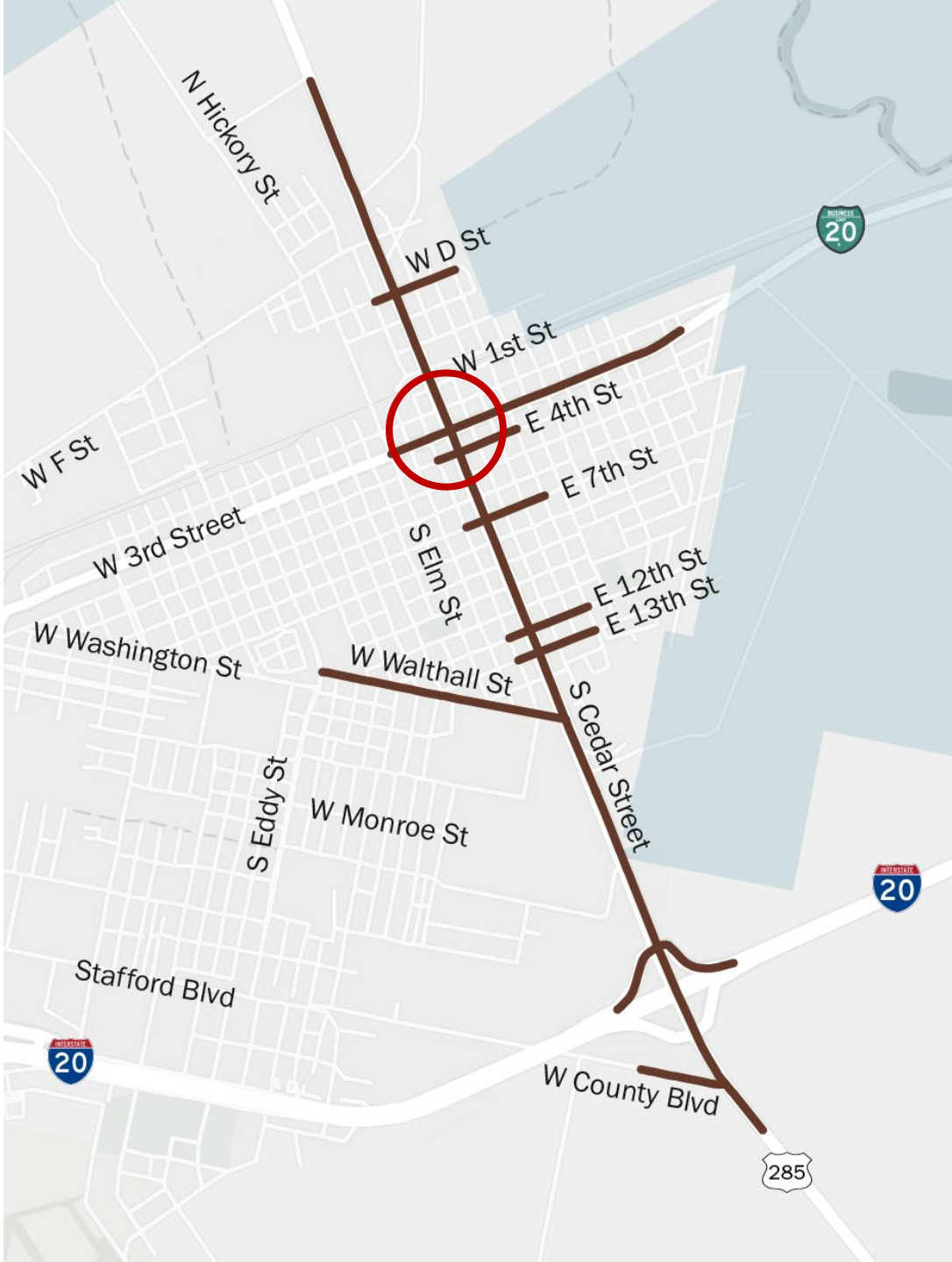
Top Crash Types:

- Not a Collision with a Motor Vehicle
- Angle

Intersection Recommended Countermeasures:

- Retroreflective Backplates
- High-Visibility Crosswalks
- Leading Pedestrian Interval
- Lane Markings
- Protected Turn Light (3rd onto 285)





Cedar St (285) @ W Walthall St

0 2020 – 2025
FATAL & SERIOUS CRASHES

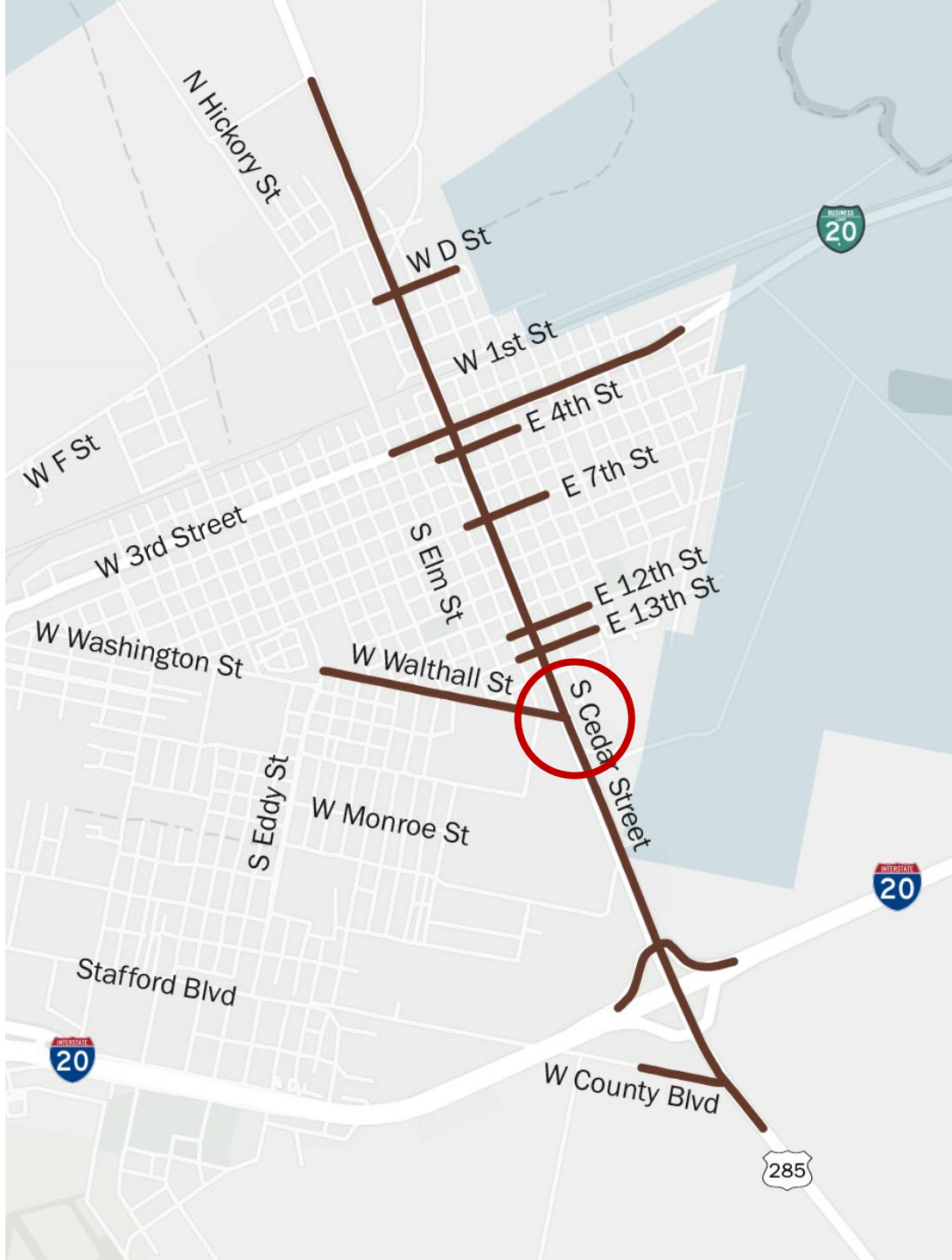
Top Crash Types:

- Angle
- Sideswipe Same Direction

Intersection Recommended Countermeasures:

- Traffic signal – signal timing adjustments for events
- High-Visibility Crosswalks
- Street Lighting





East 3rd Street (Business 20)

2020 – 2025 FATAL & SERIOUS CRASHES **3**

REDUCTION IN FATAL & SERIOUS CRASHES OVER 5 YEAR PERIOD **44%**

Top Crash Types:

- Angle
- Head-on
- Not a Collision with a Vehicle

Corridor Recommended Countermeasures:

- Street Lighting
- Sidewalk Connectivity
- Dynamic Speed Monitoring



E 3rd St (Business 20) @ S Ash St

1 2020 – 2025
FATAL & SERIOUS CRASH

Top Crash Types:

- Sideswipe Same Direction

Intersection Recommended Countermeasures:

- High-Visibility Crosswalks (on minor road)
- Lighting Upgrades





S Ash St @ E 4th St

1 2020 – 2025
FATAL & SERIOUS CRASH

Top Crash Types:

- Angle

Intersection Recommended Countermeasures:

- Add 4-way Stop Sign
- High-Visibility Crosswalks (all way)
- Lighting Upgrades





Eddy St

2020 – 2025 FATAL & SERIOUS CRASHES **3**

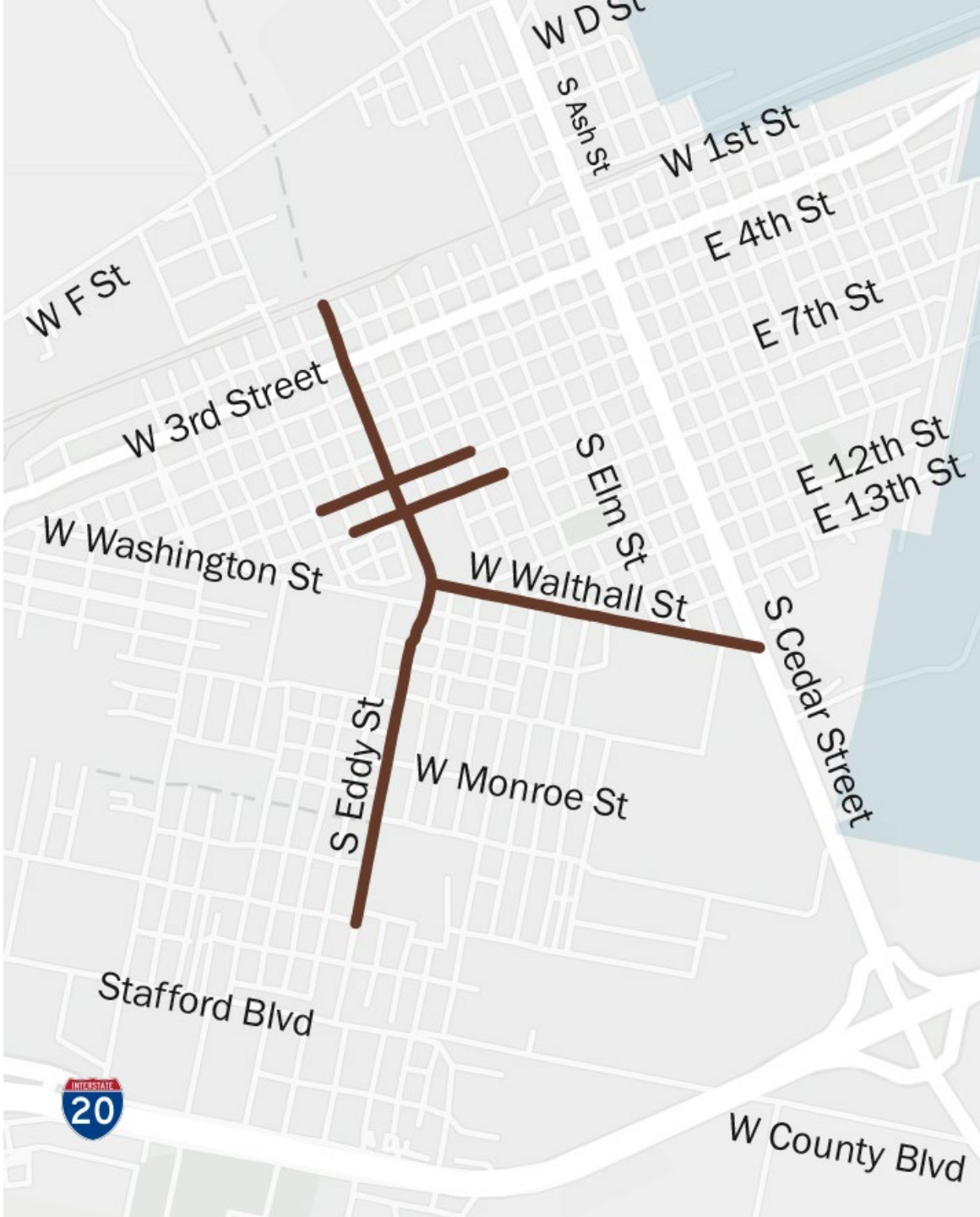
REDUCTION IN FATAL & SERIOUS CRASHES OVER 5 YEAR PERIOD **16%**

Top Crash Types:

- Angle
- Not a Collision with a vehicle

Corridor Recommended Countermeasures:

- Street Lighting
- Dynamic Speed Monitoring
- Sidewalk Connectivity



Eddy Street @ W 7th St

0 2020 – 2025
FATAL & SERIOUS CRASHES

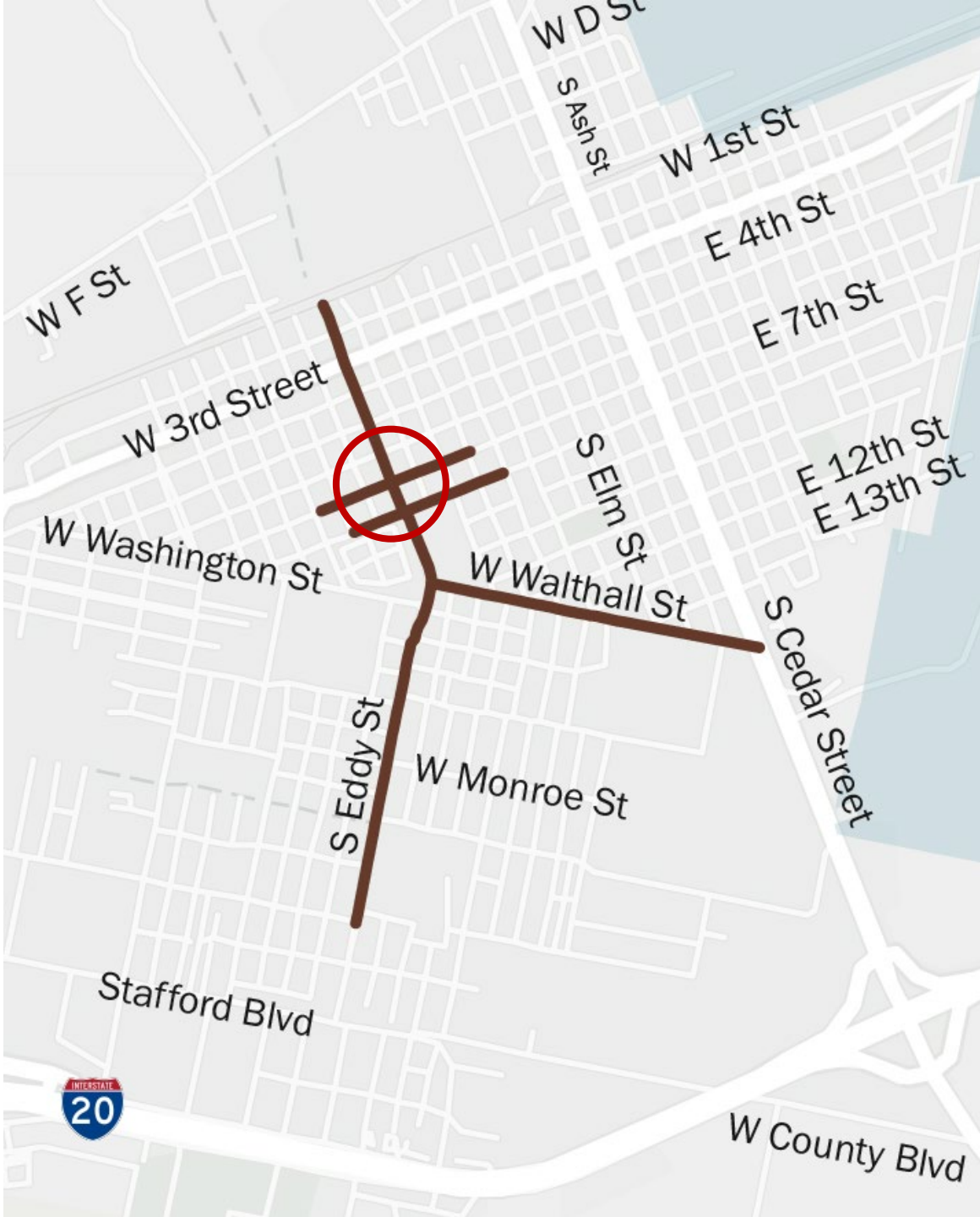
Top Crash Types:

- Angle
- Head-on

Intersection Recommended Countermeasures:

- New Neighborhood Roundabout - Convert from 4-Way Stop
- High-Visibility Crosswalks





Eddy Street @ W Walthall St

1 2020 – 2025
FATAL & SERIOUS CRASH

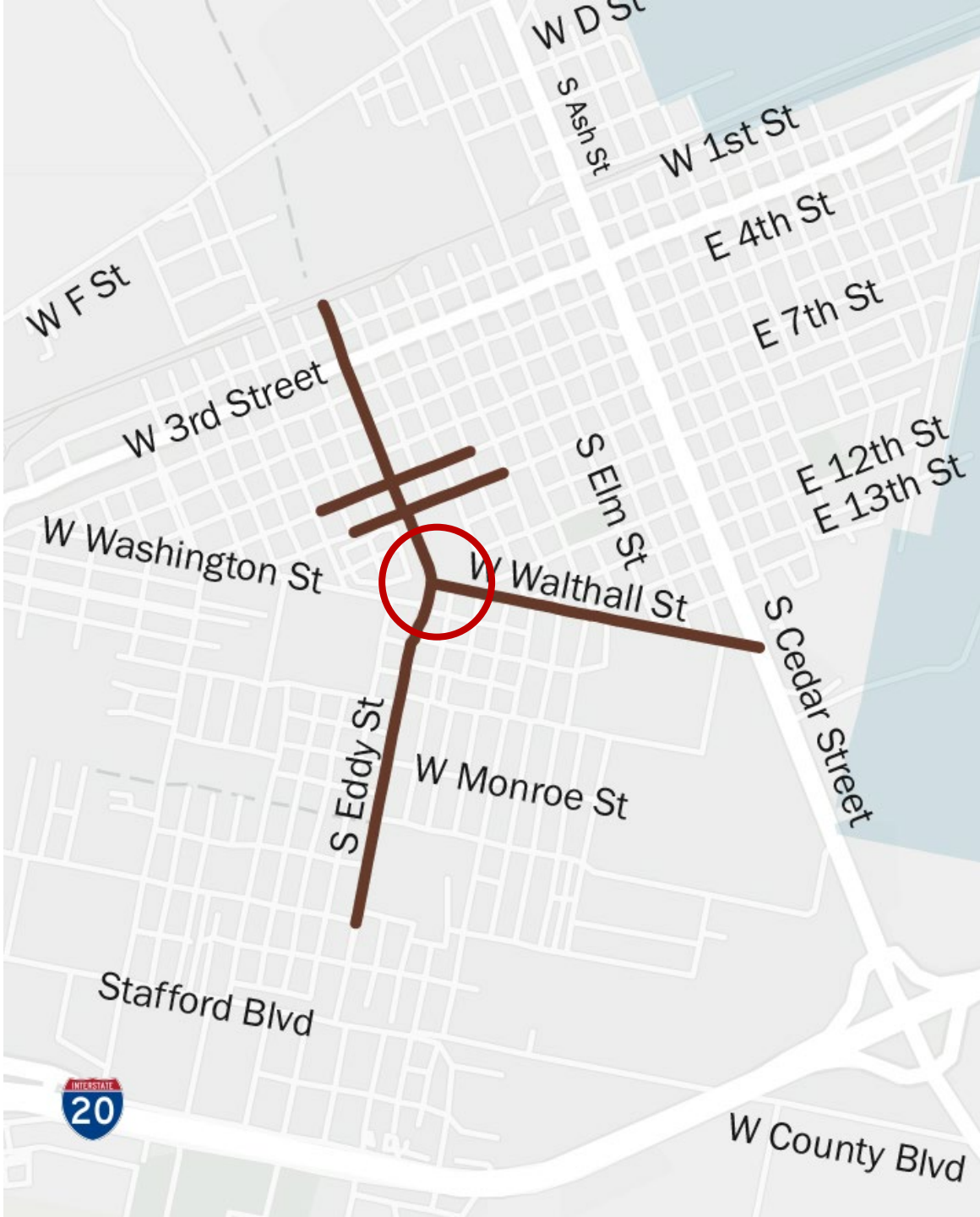
Top Crash Types:

- Angle
- Head-on

Intersection Recommended Countermeasures:

- New Traffic Signal
- High-Visibility Crosswalks at new light
- Lighting Upgrades
- Lane Marking





Roundabout Example

W Washington St @ 6th Street

Intersection Recommendation

- Neighborhood Traffic Circle





Next Steps

- **Survey 2**
  - Marketing and Distribution
- **Next Public Meeting**
  - March 31 Civic Center 11:30am – 1pm & 5pm – 7pm
- **April Stakeholder Meeting: Putting the Pieces Together**
  - April 1, Annex II Building, 5:30pm
- **Council Adoption**
  - April 23rd



QUESTIONS/DISCUSSION





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ZERO TRAFFIC DEATHS BY 2050

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