

An aerial map of Lafayette, Indiana, showing a grid of streets. South Street runs horizontally across the middle of the image. Various commercial and residential buildings are visible, along with green spaces and parking lots. The map is overlaid with large, bold, black text.

Addressing Safety on South Street, Lafayette, Indiana

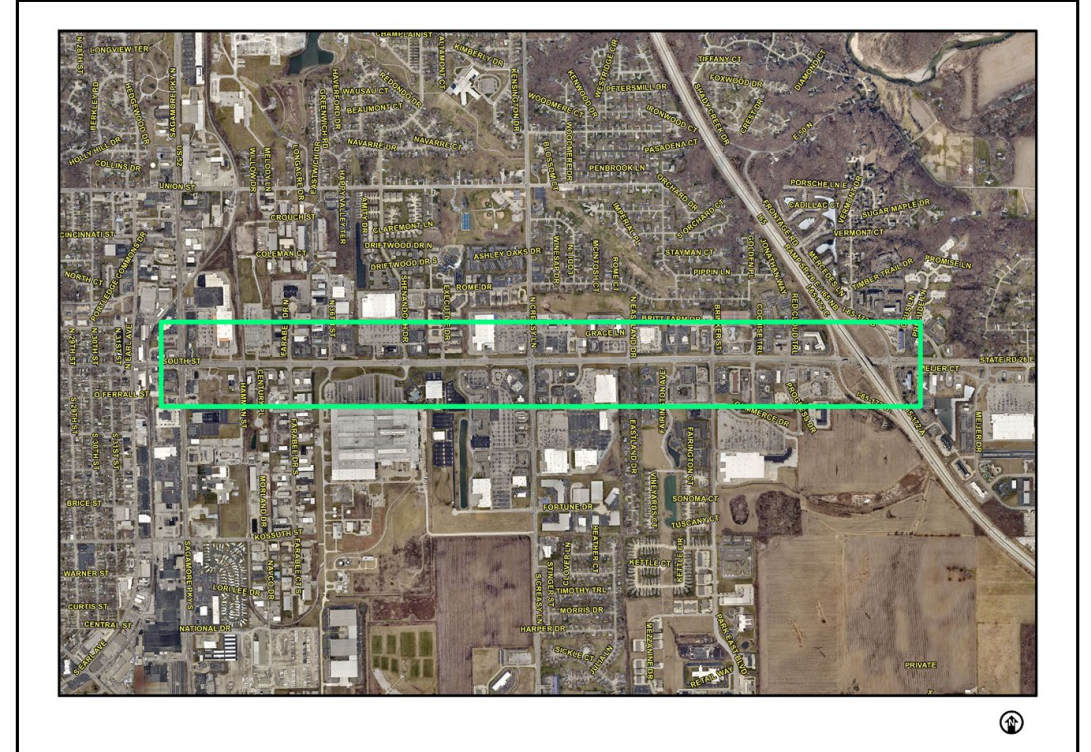
From Concept to Programming Projects

Road Safety Audit - Safe Streets for All - TIP Projects

Area Plan Commission of Tippecanoe County

South Street

- Urban Principal Arterial within Lafayette,
- Was formally SR 26 until March 27, 2012
- Was part of the National Highway System
- Mainly a rural cross section,
- Limited street lighting,
- Very limited sidewalks and trails,
- Three bus routes with 27 bus stops
- 87,619 boardings/deboardings (1/1/2023 - 8/31/23),
- Land Uses: mostly business-related
- 12 Signalized intersections
- 3 Stop controlled intersections
- 13 Driveways
- 7 Frontage road remnants
- South Street:
 - 19,000 (Sagamore Parkway)
 - 35,000 (west of I-65)
 - 29,000 (east of I-65)



Road Safety Audit

- Pre-Field Meeting: October 25, 2023
- Field Visit: November 8, 2023
- Post-Field Meeting: November 17, 2023

Report Located At:

<https://www.tippecanoe.in.gov/DocumentCenter/View/45352/2024-South-Street-Road-Safety-Audit>

Report Includes:

- Background information,
- Existing conditions,
- Overall crash data,
- Intersection analysis,
- 15 Intersections / non-intersection crashes,
- Pre-field meeting notes,
- Attenuator crash analysis, and
- Post-field meeting observations and audit recommendations

South Street Road Safety Audit

Sagamore Parkway to I-65

Area Plan Commission of Tippecanoe County

July 2024



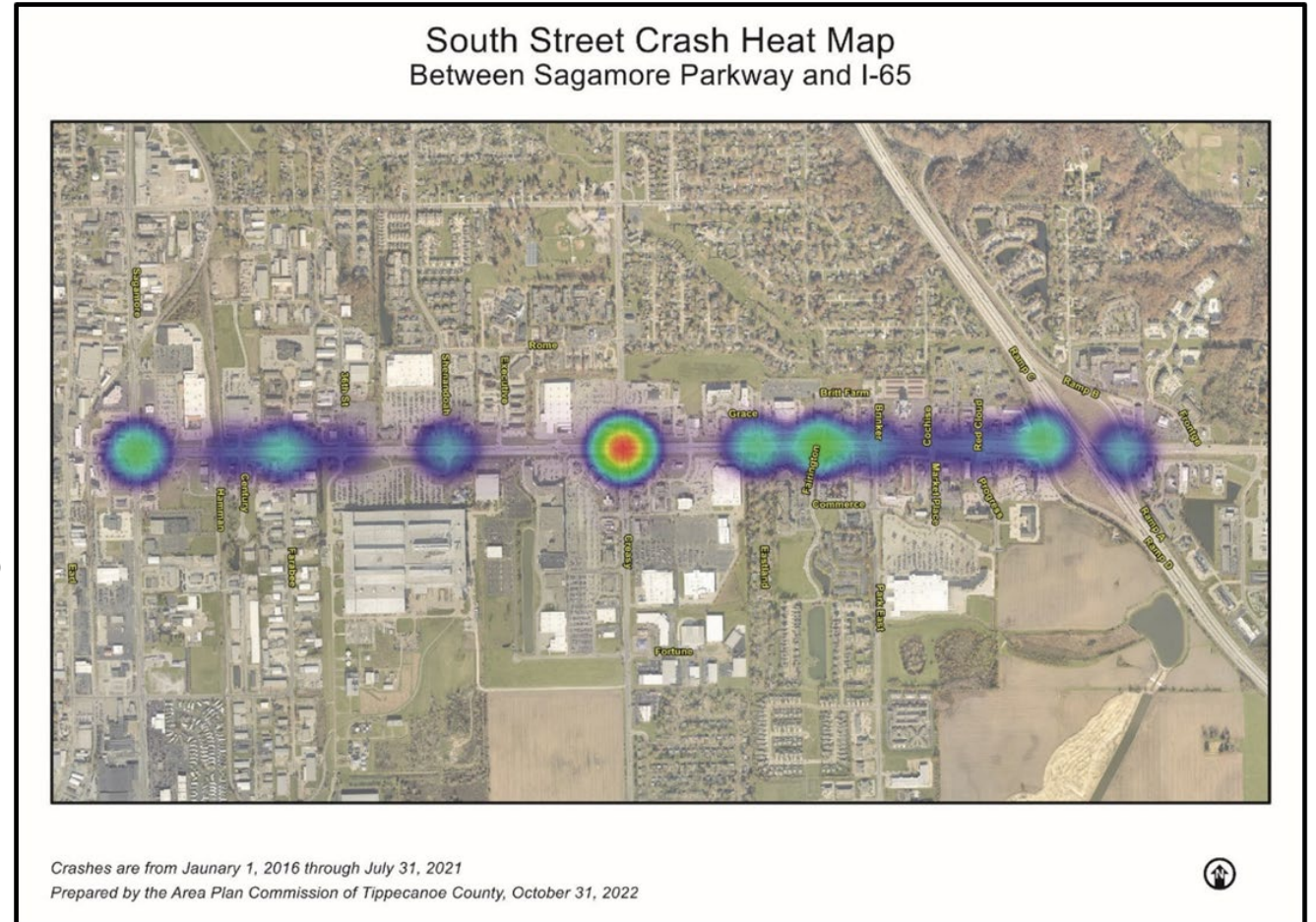
Crash Data, January 1, 2016 - July 31, 2021

Corridor Crash Data

- Number of Crashes: 1,914
- Number of Vehicles Involved: 3,521
- # of Injury Crashes: 297
- # of Injuries: 406
- # of Fatality Crashes: 2
- # of Fatalities: 2
- # of Incapacitating Injury Crashes: 15
- # of Incapacitating Injuries: 17
- # of Deer: 5
- # of Property Damage Only Crashes: 1,616

Crash Data Summarized By

- Overall corridor,
- Pedestrian,
- Bicycle,
- Incapacitating injuries,
- High crash locations,
- Individual intersection (15 intersections & corridor)



Specific Crash Data

Attenuator crash data

Summary		
Condition	Number	Percentage
Daylight	5	10.9%
Dark	38	82.6%
Dawn/Dusk	3	6.5%
Total	46	
Clear	19	41.3%
Cloudy	2	6.5%
Rain	23	50.0%
Fog/Smoke	1	2.2%
Total	46	
Dry	19	41.3%
Wet	25	54.3%
Snow/Slush	2	4.3%
Total	46	

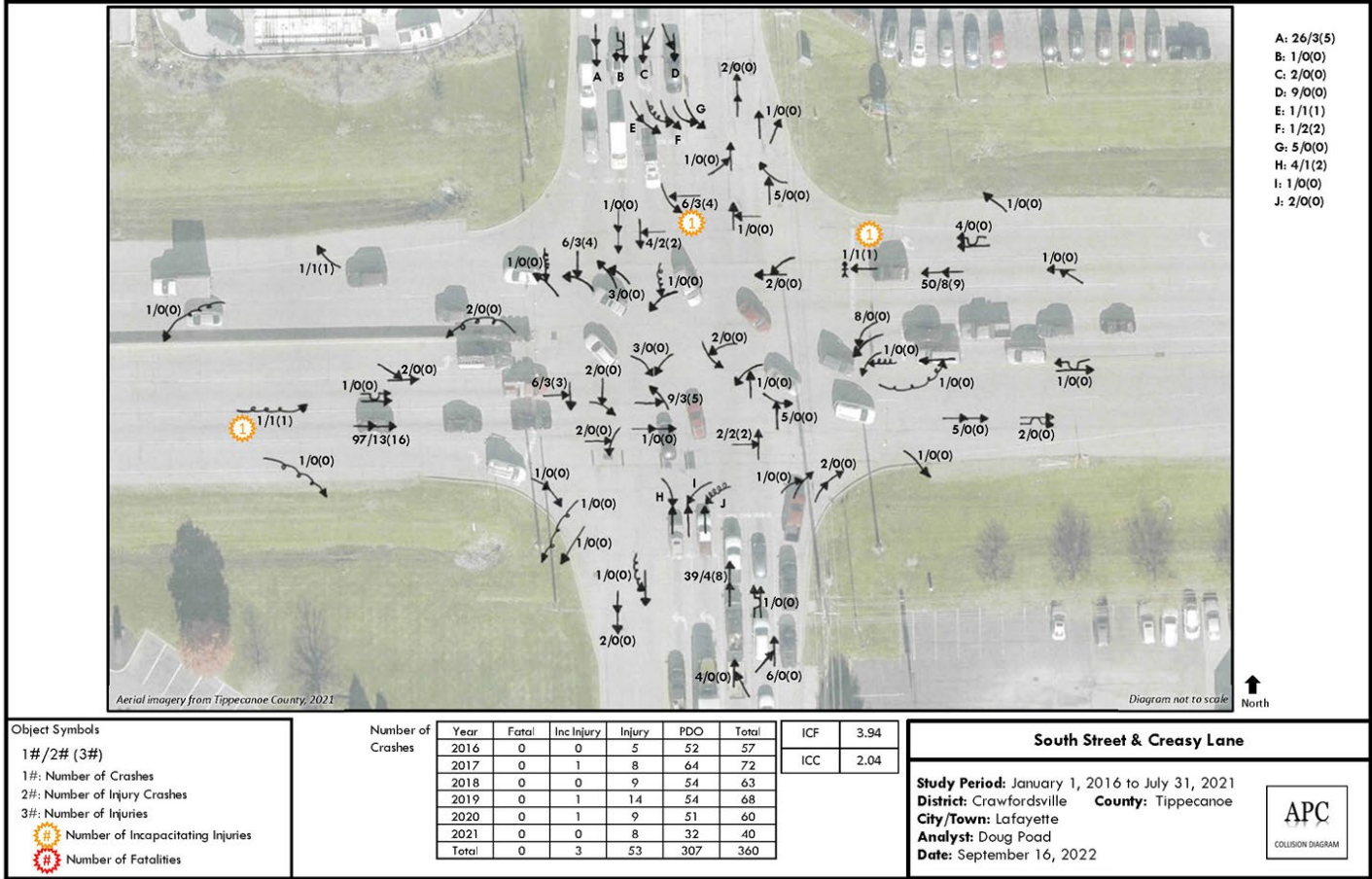
Crashes by Primary Factor	Number	Percent	Rank
Animal/Object in Roadway	0	---	---
Brake Failure or Defective	10	0.5%	14
Cell Phone Usage	4	0.2%	17
Disregard Signal/Reg Sign	149	7.8%	4
Driver Asleep or Fatigued	0	---	---
Driver Distracted – Explained in Narrative	21	1.1%	12
Driver Illness	1	0.1%	21
Engine Failure or Defective	1	0.1%	21
Failure to Yield Right of Way	200	10.4%	3
Follow Too Closely	641	33.5%	1
Improper Lane Usage	131	6.8%	5
Improper Passing	28	1.5%	10
Improper Turning	68	3.6%	6
Lane Marking Obscured	1	0.1%	21
Left of Center	19	1.0%	13
Other (Driver - Explained in Narrative)	30	1.6%	9
Other (Environmental)	0	---	---
Pedestrian Action	5	0.3%	16
Ran Off Road Right	40	2.1%	8
Roadway Surface Conditions	2	0.1%	19
Speed too Fast for Weather Conditions	66	3.4%	7
Tire Failure or Defective	2	0.1%	19
Unsafe Backing	23	1.2%	11
Unsafe Lane Movement	1	0.1%	21
Unsafe Speed	460	24.0%	2
Obstruction Not Marked	4	0.2%	17
Overcorrecting/Oversteering	6	0.3%	15
Wrong Way on One Way	1	0.1%	21

Crashes by Type of Collision	Number	Percent	Rank
Backing Crash	20	1.0%	9
Collision with Animal	0	---	---
Collision with Object in Road	1	0.1%	15
Head on Between Two Motor Vehicles	24	1.3%	8
Left Turn	70	3.7%	4
Left/Right Turn	5	0.3%	12
Non-Collision	3	0.2%	13
Opposite Direction Sideswipe	9	0.5%	10
Other – Explain in Narrative	69	3.6%	5
Ran Off Road	61	3.2%	6
Rear End	1,178	61.5%	1
Rear to Rear	3	0.2%	13
Right Angle	219	11.4%	2
Right Turn	53	2.8%	7
Same Direction Sideswipe	192	10.0%	3
None Reported	6	0.3%	11
Non-Collision	1	0.1%	15

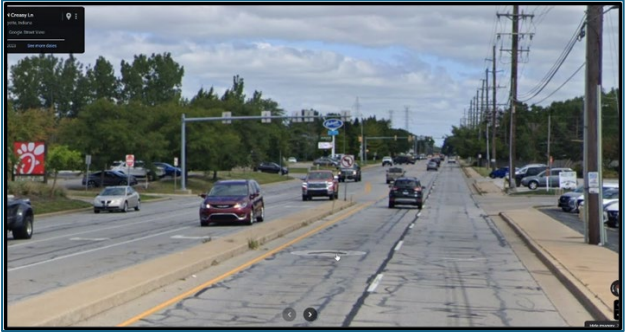
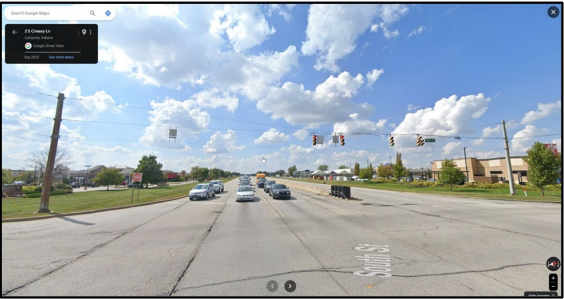
High Incident Crash Locations in Corridor

Location	Number of Crashes	Rank	Crash Type	Injury Crashes	Number of Injuries	Incapacitating Injury	Fatal
I-65 Southbound Ramps	130	1	Southbound to Westbound, Right Turn Rear End	14	18	---	---
Creasy Lane	97	2	Eastbound Rear End (west of intersection)	13	16	---	---
Fairington Avenue	91	3	Eastbound Rear End (west of intersection)	14	17	---	---
Eastland Drive	83	4	Eastbound Rear End (west of intersection)	14	18	---	---
Creasy Lane	50	5	Westbound Rear End (east of intersection)	8	9	---	---
Sagamore Parkway	43	6	Westbound Rear End (east of intersection)	6	8	---	---
Creasy Lane	39	7	Northbound Rear End (south of intersection)	4	8	---	---
Shenandoah Drive	33	8	Eastbound Rear End (west of intersection)	7	11	1	---
I-65 Northbound Ramps	26	9	Eastbound Running into Median	4	5	---	---

Individual Intersection Information



RoadHAT	Number
Fatal and Incapacitating Injury Crashes	0.635
Non-Incapacitating and Possible Injury	2.16
Property Damage Only Crashes	10.82
All Crashes	13.62
Index of Crash Frequency	3.94
Index of Crash Cost	2.04



Creasy Lane & South Street Intersection

West side of Intersection (South Street)

- Entering intersection: Number of lanes: 2 through lanes, 1 left turn lane, and 1 right turn lane
- Three signal heads (1 through, 1 five-head for through/right turn, and 1 left turn)
- Exiting intersection: Number of lanes: 2 through lanes and shoulder
- Rural cross section
- No sidewalks or trails on either side of road
- No pedestrian crosswalk
- Not lighted
- Median Treatment: concrete jersey-style barrier with collapsible attenuator

East side of Intersection (South Street)

- Entering intersection: Number of lanes: 2 through lanes, 2 left turn lanes, 1 right turn lane, and shoulder
- Four signal heads (1 through, 1 five-head for through/right turn, and 2 left turn)
- Exiting intersection: Number of lanes: 2 through lanes and shoulder
- Rural cross section
- No sidewalks or trails on either side of road
- No pedestrian crosswalk
- Not lighted
- No median treatment

North side of Intersection (Creasy Lane)

- Entering intersection: Number of lanes: 1 through lane, 1 through/right turn lane, and 2 left turn lanes
- Four signal heads (2 through and 2 left turn)
- Exiting intersection: Number of lanes: 2 lanes
- Urban cross section
- A sidewalk on east side of road beginning approximately 70 feet from southbound through stop bar
- No pedestrian crosswalk
- Not lighted
- Raised curb median treatment

South side of Intersection (Creasy Lane)

- Entering intersection: Number of lanes: 2 through lanes, 2 left turn lanes, and 1 right turn lane
- Four signal heads (2 left turns and 2 through)
- Exiting intersection: Number of lanes: 2 lanes
- Urban cross section
- A sidewalk on the east side of the road beginning approximately 60 feet from northbound through stop bar
- No pedestrian crosswalk
- Not lighted
- No median treatment

Post-Field Observations and Audit Recommendations

Summarized by Topic

- Street Lighting,
- Signage / Pavement Markings,
- Traffic Signals,
- Left and Right Turns,
- Barriers / Medians,
- Frontage Roads,
- Travel Speeds,
- Access Management,
- Shoulders / Lanes,
- Railroad Crossing,
- Pedestrian and Bicycle Modes,
- Transit Mode,
- At the Creasy Lane Intersection, and
- Overall Corridor

Street Lighting

Observations:

- Insufficient lighting throughout corridor.
- No lighting at various locations along South Street.

Proposed Solutions:

- Install street lighting throughout corridor and especially at all intersections and major driveways.
- Install LED street lighting.

Frontage Roads

Observations:

- Progress/Speedway (south side) and Circle K gas station frontage roads create a traffic mess.
- Frontage Roads and access drives at Marketplace Drive and Cochise Trail cause issues.
- The frontage road in front of Fazoli's and Xfinity Store (Century Place) is too close to intersection.
- The frontage road in front of the VCA Lafayette Animal Hospital (36th Street) is too close to intersection.
- The frontage road in front of Hampton Inn and Crew Carwash (Fairington Avenue) is too close to intersection.
- Frontage road between Brinker Street and Cochise Trail is too close to intersection.
- Frontage road between Park East Boulevard and Marketplace Drive is too close to intersection.

Proposed Solutions:

- Close both frontage roads on Progress Drive and Red Cloud Trail. South of South Street, direct traffic to the driveway further south. That driveway has internal access to the three land uses along South Street. Finish the construction of a backage road just south of the Hilton with a connection to the access road on the eastern side of the land uses. North of South Street, close the frontage roads on both side of Red Cloud Trail and create a backage road to several land uses on both sides.
- Develop alternative access to the Xfinity Store off Century Place.
- Reconfigure parking and access at the animal hospital and Nurses and More and close access road at 36th Street.
- Remove the Hampton Inn and Crew Carwash Frontage Road. Crew Carwash has an existing driveway on Park East Boulevard. Reconstruct a new driveway to Hampton Inn south of the frontage road.
- Close all frontage roads that are close to South Street.
- Construct backage roads to give better access.
- Evaluate each frontage road in depth and develop alternative access.

An aerial map of Lafayette, Indiana, showing a commercial district. South Street runs horizontally across the middle of the image. To the left of South Street, there are several businesses including Target, Chick-fil-A, and Jimmy John's. To the right, there are more commercial buildings and parking lots. The map is overlaid with large, bold, black text.

Addressing Safety on South Street, Lafayette, Indiana

From Concept to Programming Projects

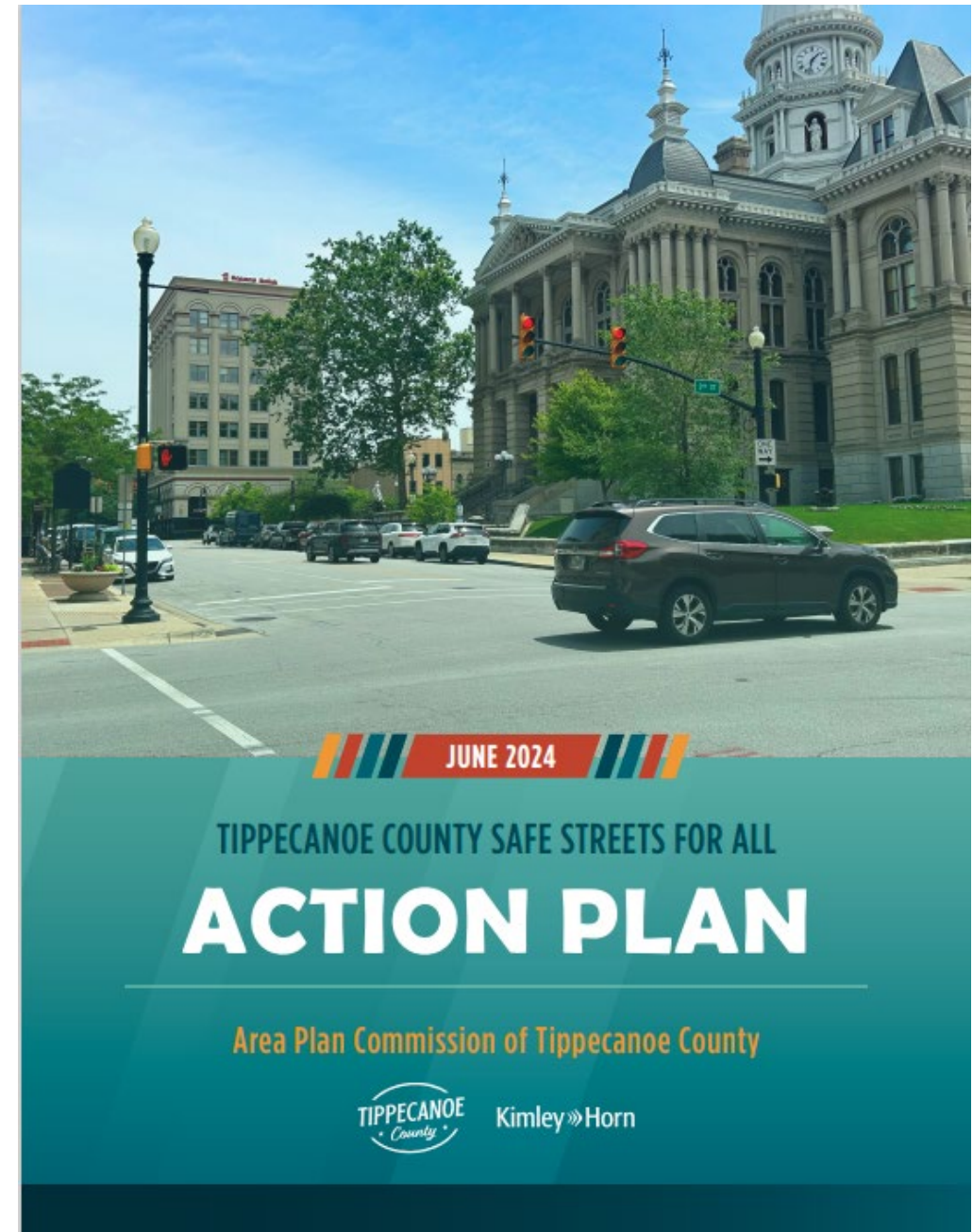
Part 2: Safe Streets for All Application

Safe Streets for All

“The Bipartisan Infrastructure Law (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program, with \$5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries.”

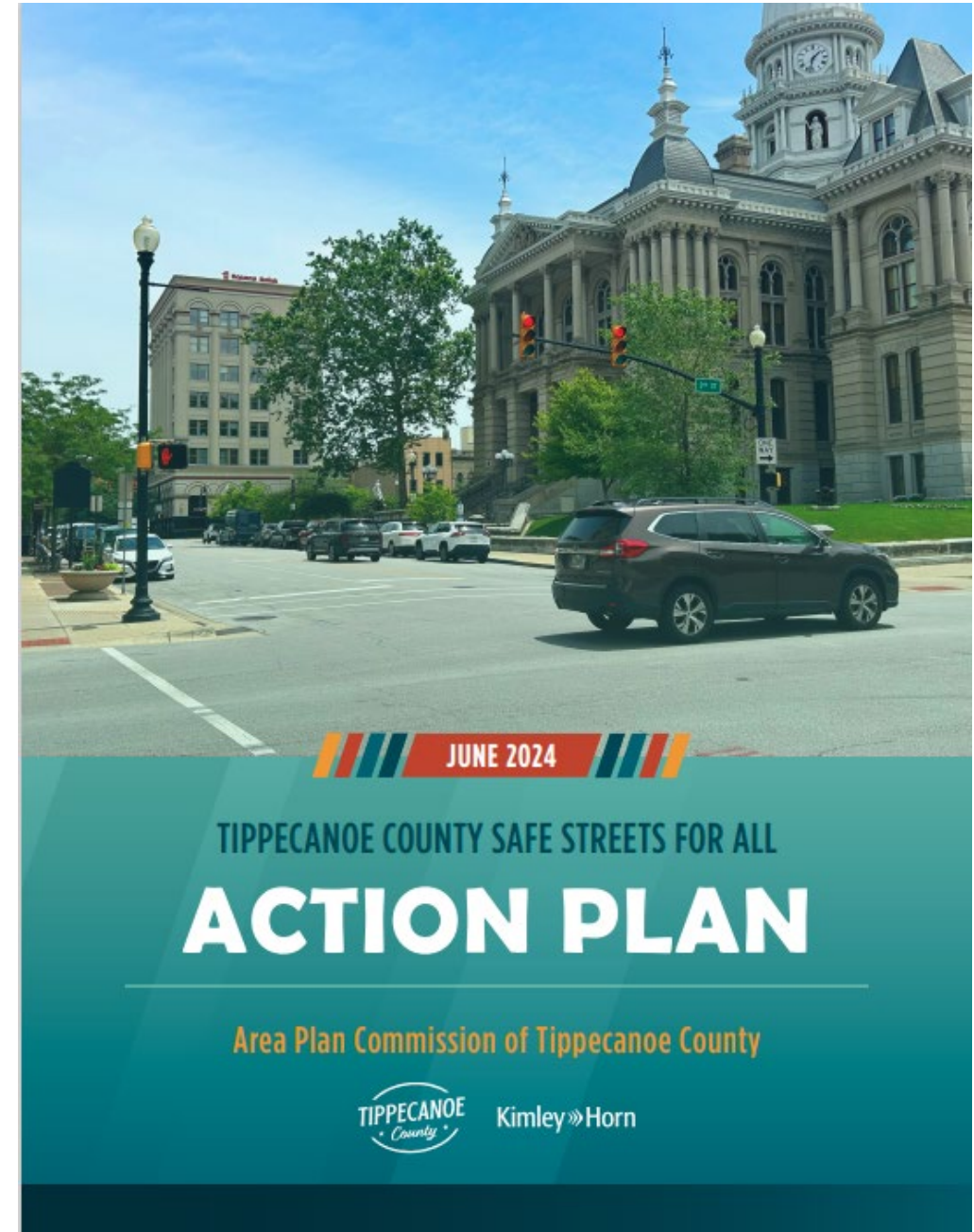
“The SS4A program supports the U.S. Department of Transportation's National Roadway Safety Strategy and our goal of zero roadway deaths.”

Source: <https://www.transportation.gov/grants/SS4A>



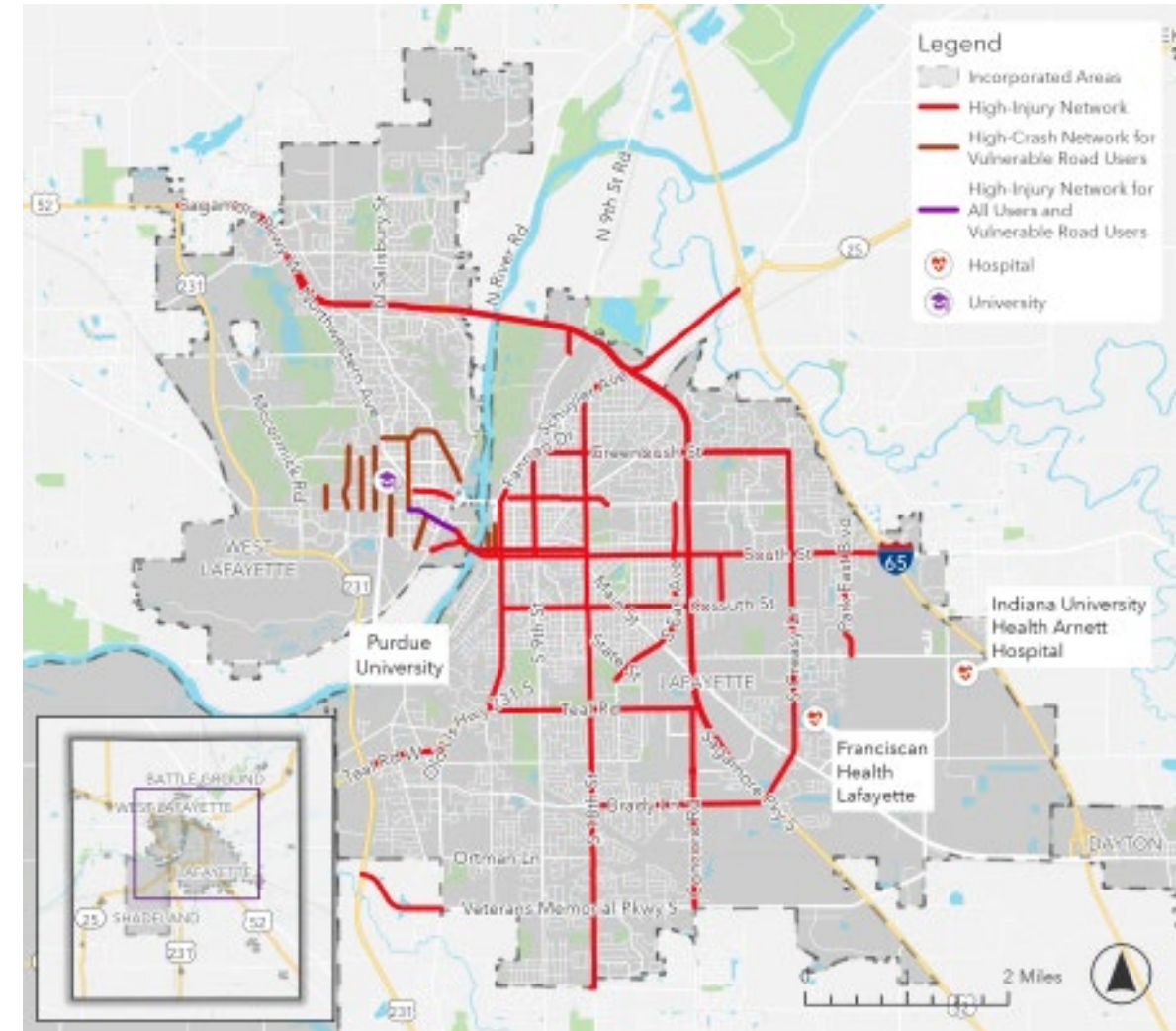
Safety Data

- Able to utilize the data from the Road Safety Audit + other crash analysis work we do
- Crash Locations
- Crash Types
- Injury and Fatality Crash Data
- Vulnerable Road Users Crash Data
- Utilized in-house staff time to process data for the Action Plan



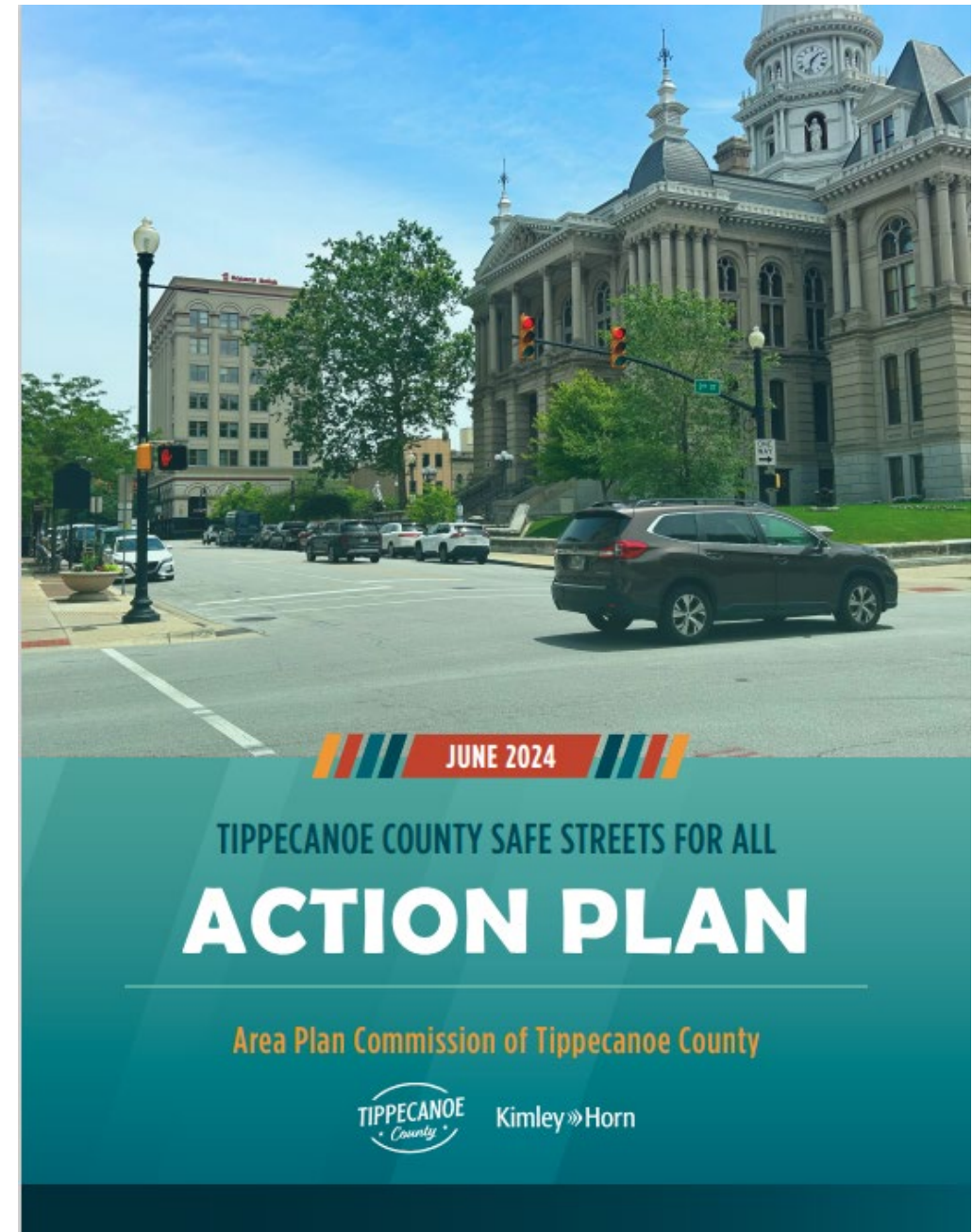
High Injury Network

- Developed by APCTC staff
- Could have paid consultant to create the HIN, but we felt that we had enough expertise to do it in house, and that saved us some money
- Staff researched several different methodologies for creating a High Injury Network, we went with a weighted score method



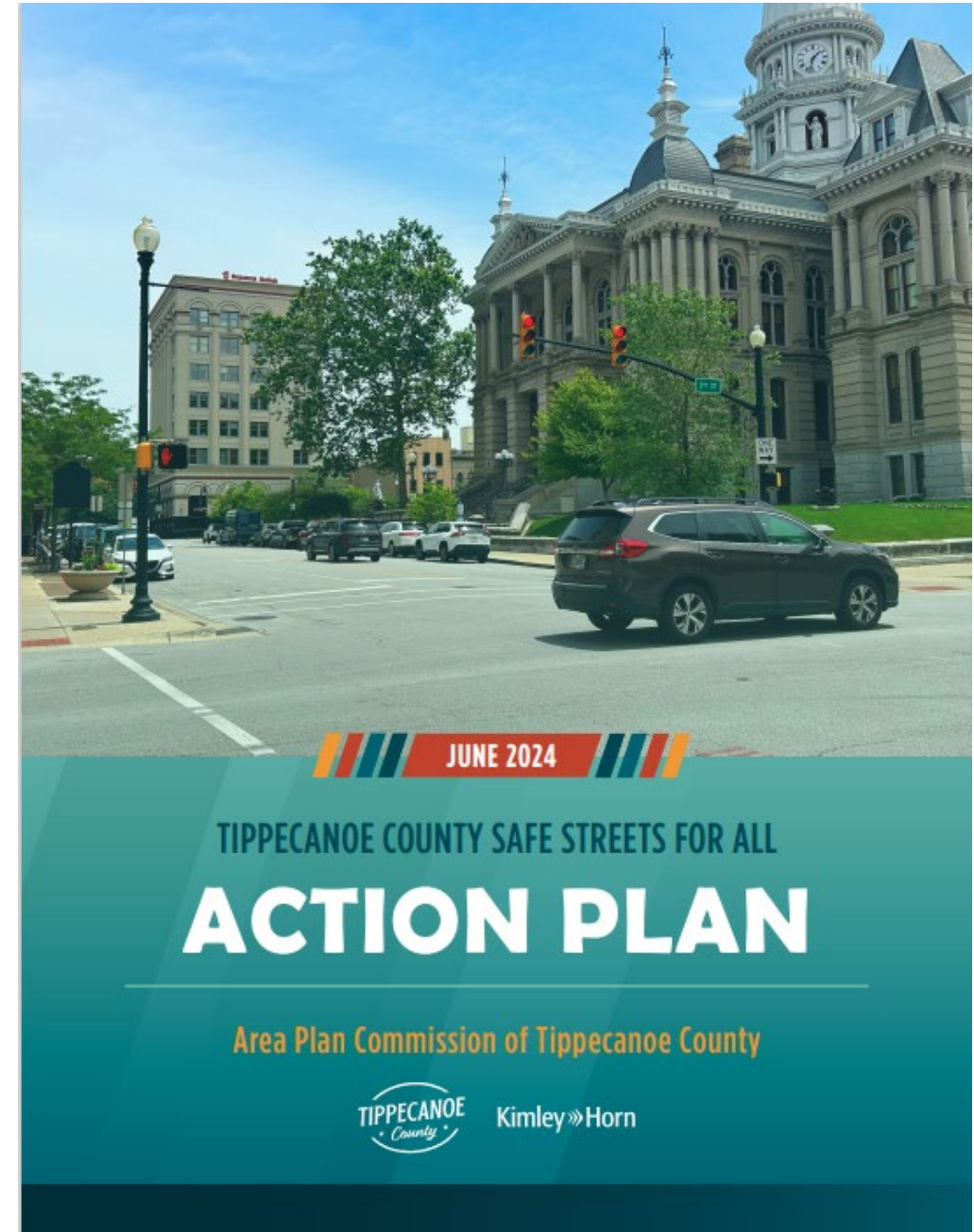
Safety Action Plan

- Adopted June 2024
- Project Scoring Criteria
 - Safety Impact
 - Equity, Engagement, and Collaboration
 - Effective Practices and Strategies
 - Project Readiness
 - Climate and Sustainability
 - Economic Competitiveness
 - Access to Opportunity
- Prepared with Implementation Grant Application in mind



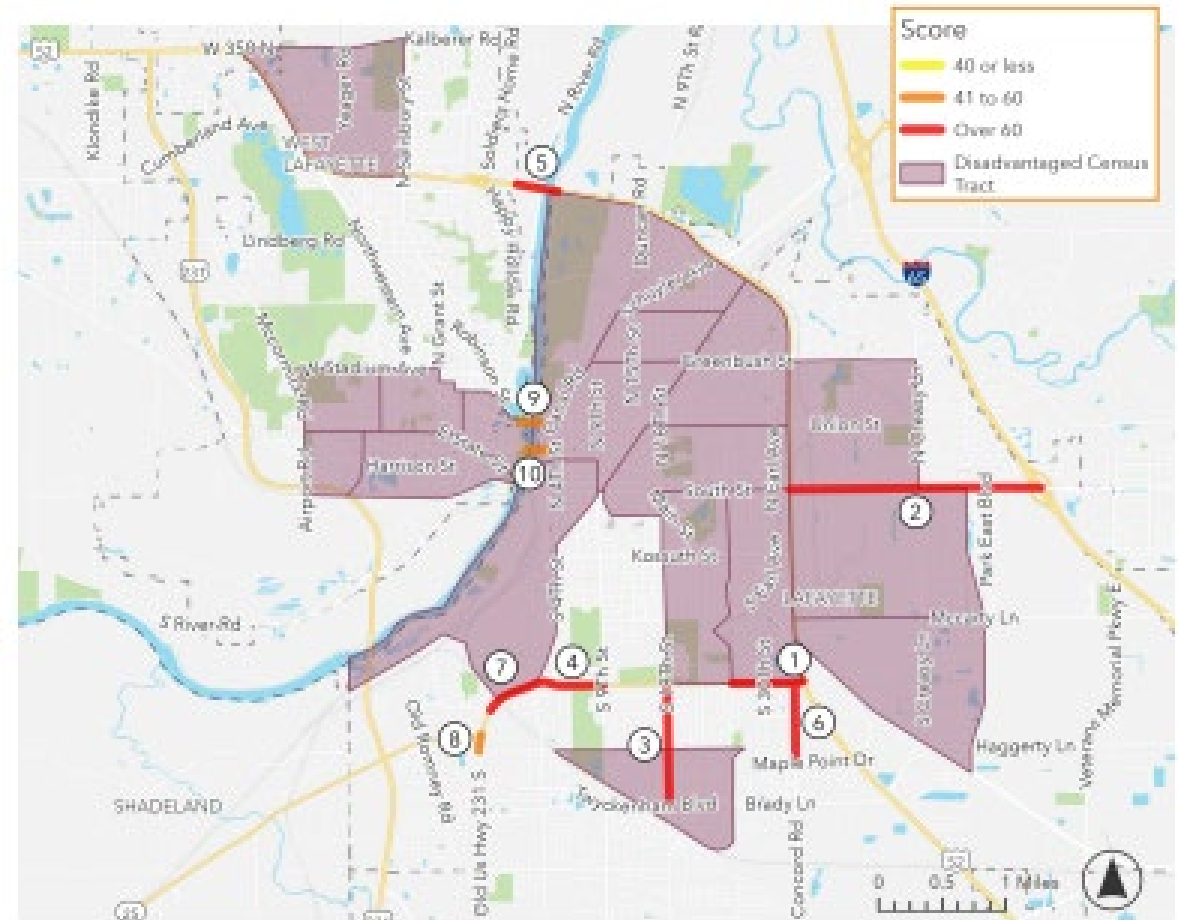
Implementation Grant Application

- Partnered with City of Lafayette
- Could not apply for full corridor (Sagamore to I-65) because of funding, worked with city engineer to determine logical termini for a project that fit the budget for a local match
- Applied for funding for a project along South Street from Century Place to Creasy Lane, waiting to hear back on results of application



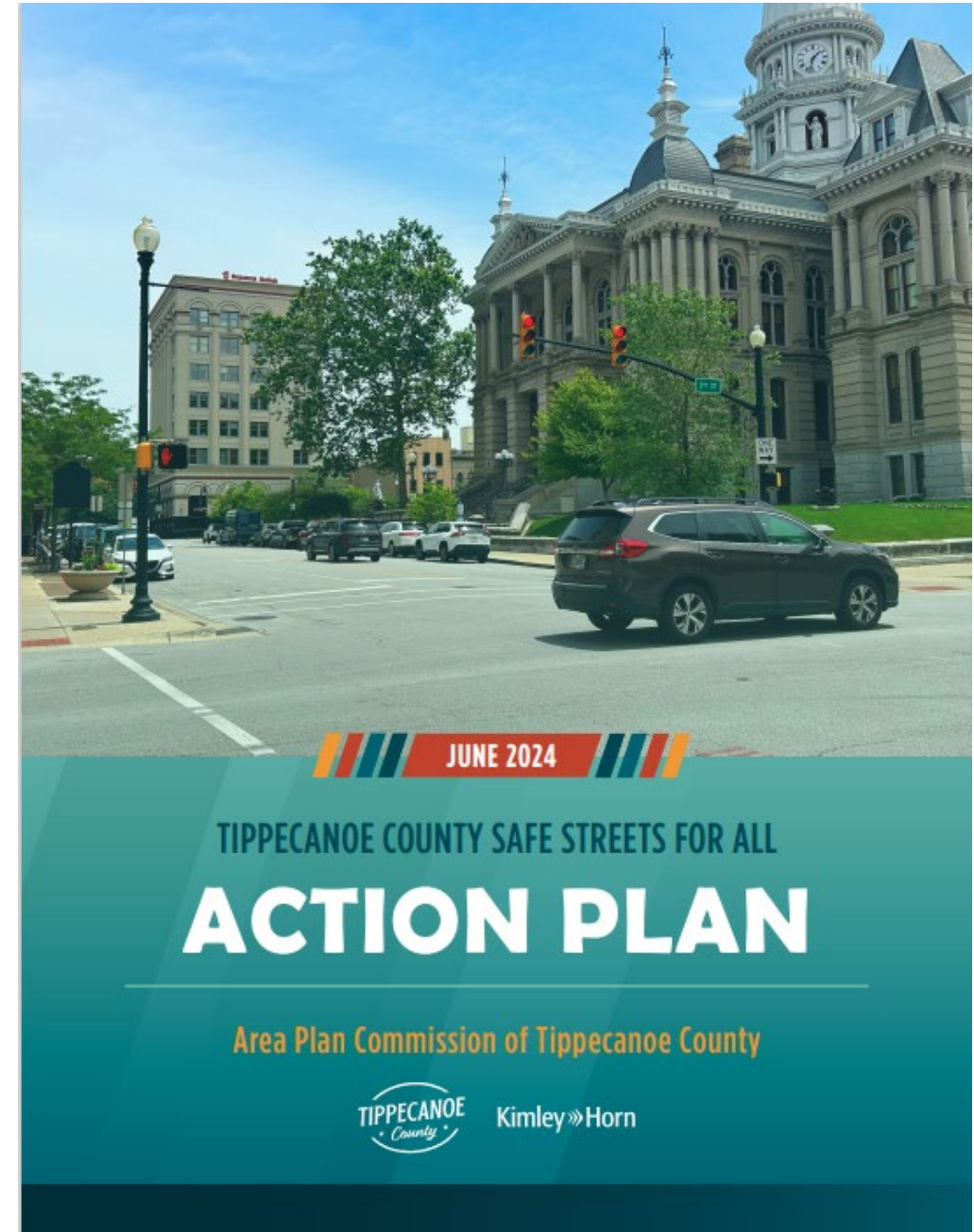
Implementation Grant Application

- What was our most competitive project?
(What would have the best chance of getting funded through SS4A?)
- Identified South Street as a safety priority
 - Road Safety Audit
 - Feedback from public surveys for Metropolitan Transportation Plan
 - City of Lafayette has already started investing in the corridor through transportation projects



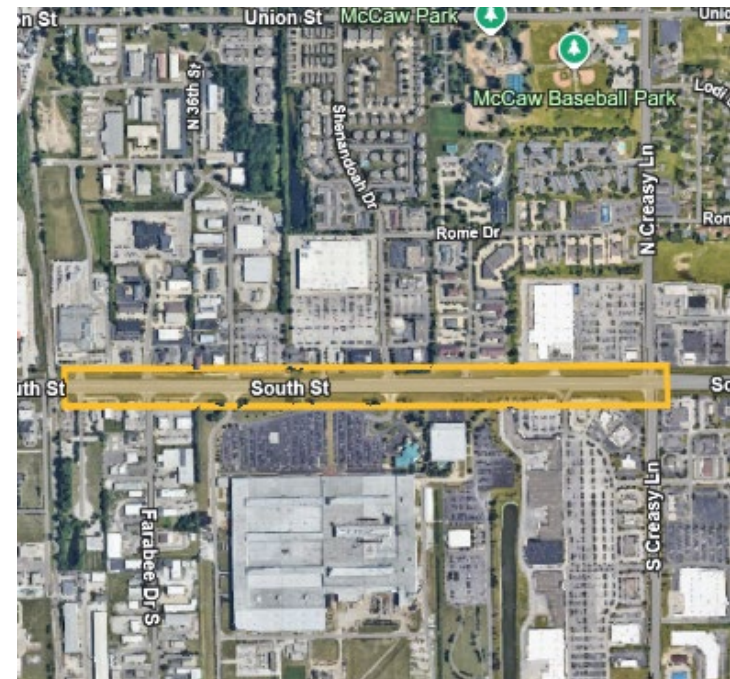
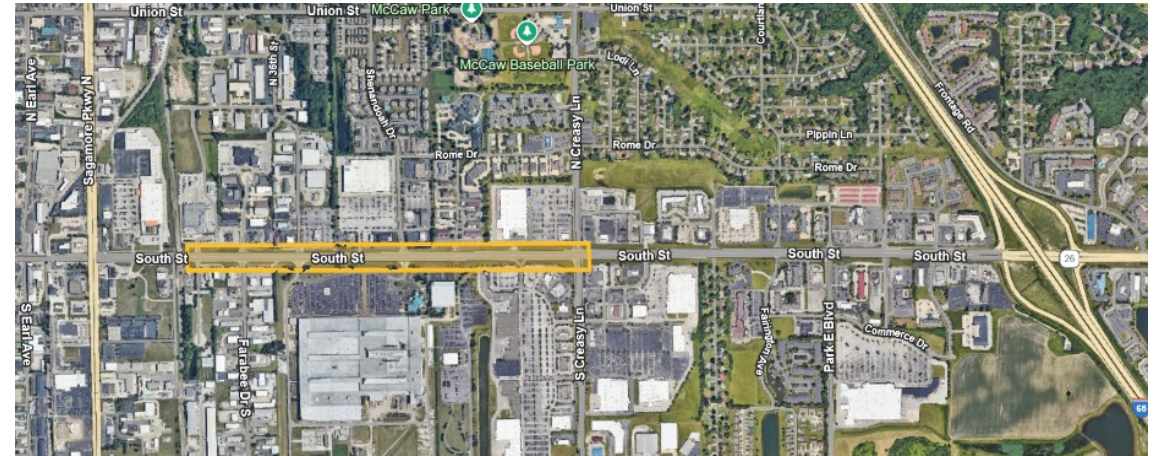
Safety Strategies

- Reducing vehicle speeds
- Removing conflict points at intersections
- Improving vulnerable road user visibility
- Separating vulnerable road users from adjacent vehicle traffic through multiuse pathways and crosswalks



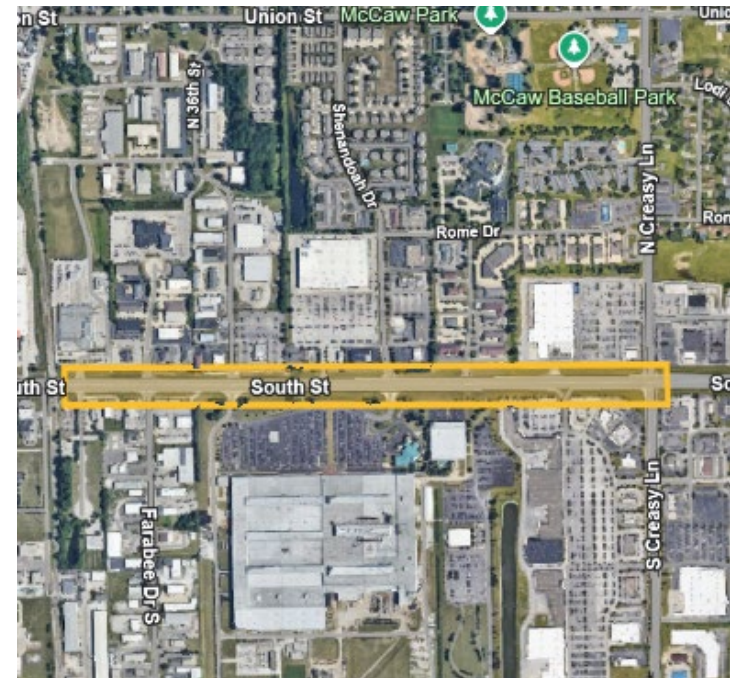
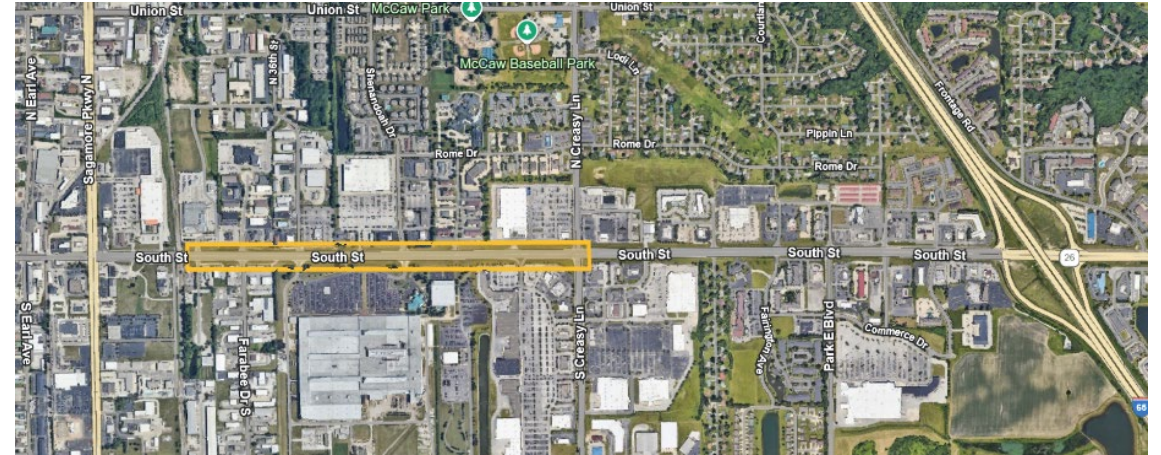
Project Components

- Milling, paving, and wedging
- Multi-use trail (both sides)
- Curb and gutter
- Street Lighting
- Landscaping
- Traffic Signals
- Median Barrier Removal
- Storm Drain Installation (In-Kind Match)
- Total Cost (Design and Engineering included) is just over \$11.5 million



Next Steps

- Will we get SS4A funding?
 - Will impact project timeline
 - How much longer will this funding be available?
- What other funding sources can we use if SS4A doesn't work out?
- Monitoring results
 - Have we improved safety on this corridor? (Would probably require another RSA)
 - What further work is needed?



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Addressing Safety on South Street, Lafayette, Indiana

From Concept to Programming Projects

Part 3: Projects Programmed in TIP

SFY 2026 Transportation Improvement Program

4. South Street Safety Improvements						P.M.: Safety
Multi-use Paths, Improved Ped Crossings, Rail Crossing, Transit Stops, Curb/Gutter & Lighting						
Phase 1, Hamman St - Century PI	CN	L 4,5,13,18	0	2,300,000	2,300,000	2026
Phase 2, Century PI - Creasy Ln	CN	L 4,5,13,18	0	10,000,000	10,000,000	2028
Phase 3, Creasy Ln - Red Cloud	PE	STBG,TA, CR, PRO, HSIP L4,5,13	1,200,000	300,000	1,500,000	2029
2050 MTP: page 42			Total Cost (includes prior to FY 2026) 14,600,000			

Questions?

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