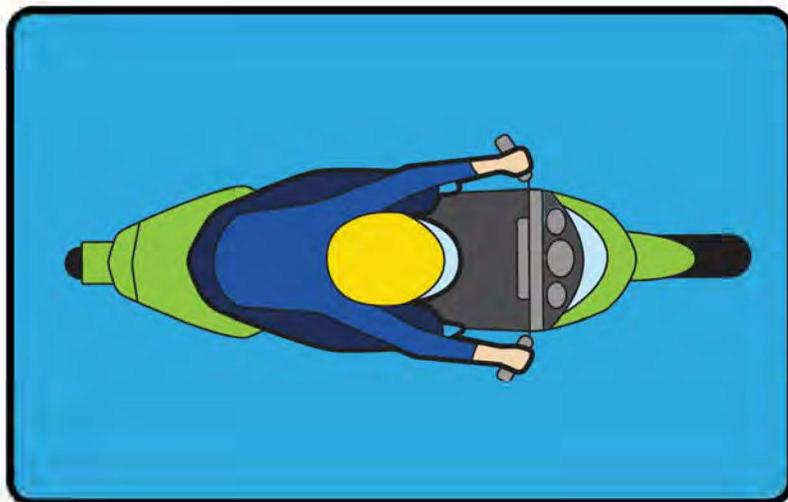
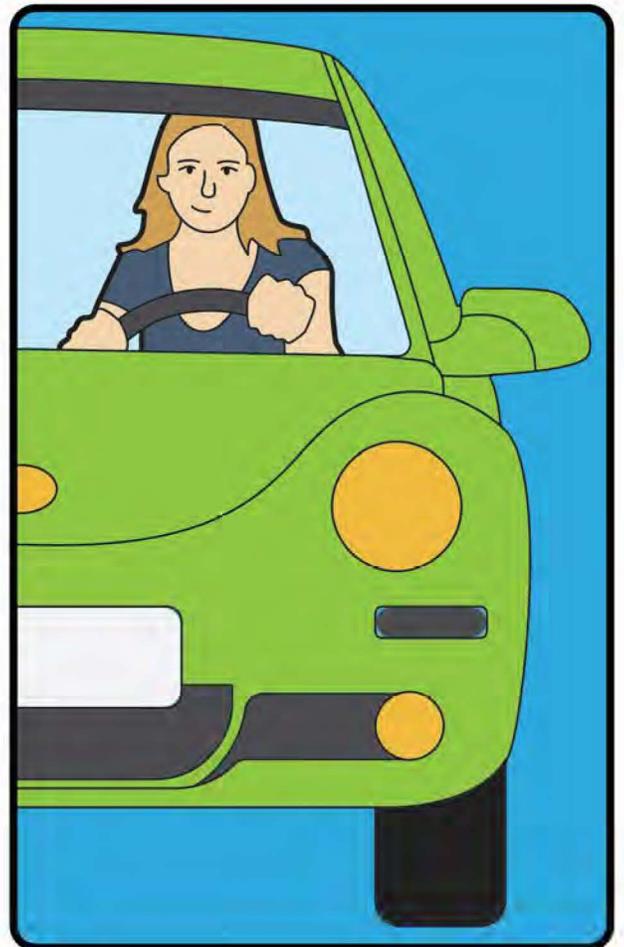
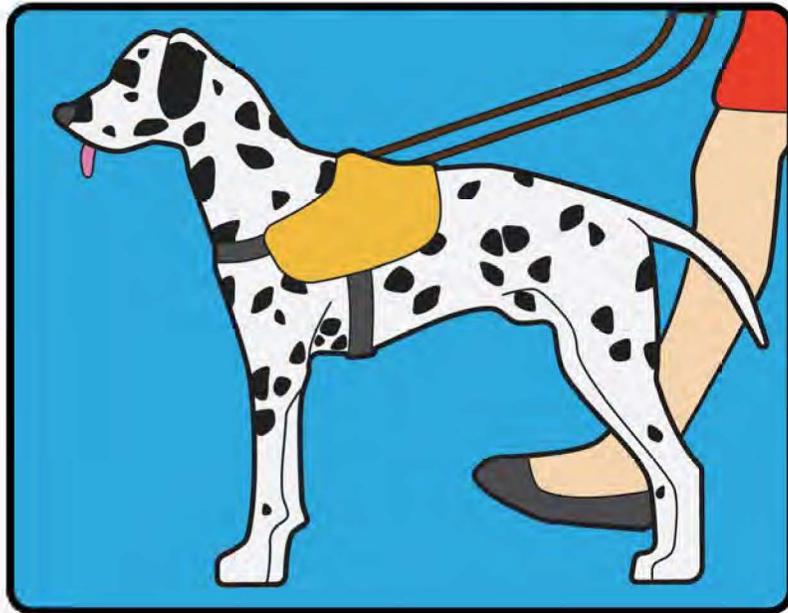


BLOOMINGTON

# SAFE STREETS FOR ALL



*DISCLAIMER: Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.*

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# List of Abbreviations

**ACS:** American Community Survey

**DUI:** Driving Under the Influence

**FHWA:** Federal Highway Administration

**FI:** Fatal or Injury (all injury severities)

**FSI:** Fatal or Serious Injury

**HIN:** High Injury Network

**HPN:** High Priority Network

**HRN:** High Risk Network

**INDOT:** Indiana Department of Transportation

**PCSi:** Proven Safety Countermeasure initiative

**PHB:** Pedestrian Hybrid Beacon

**RRFB:** Rectangular Rapid Flashing Beacon(s)

**SRTS:** Safe Routes to School

**USDOT:** United States Department of Transportation

**VPD:** Vehicles Per Day

**VRU:** Vulnerable Road User (includes Pedestrians or Bicyclists)

# Acknowledgments

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# **Bloomington is committed to making our streets safer for everybody.**

The City of Bloomington is a city with vibrant neighborhoods, diverse and hardworking residents, a large university, and a thriving downtown. While Bloomington already has a lot to offer residents and is continually attracting new ones, we know that there is still work to do to make our roadways safer for all those that travel on our roadways, whether on foot, bike, in a vehicle, or on transit.

Between the years 2019-2023, there were 10,391 crashes on Bloomington's streets; 443 of these crashes resulted in either a life-changing injury or death. These crashes, notably, are more than a statistic to track. These crashes forever impact families, friends, and neighbors throughout Bloomington. As a community, we do not accept these crashes as status quo. We are ready to commit to being a better and safer community. We are ready to change.

This Safety Action Plan documents what is happening now and what we commit to do to increase the safety for everybody on all of Bloomington's streets. This plan includes implementable recommendations that we will carry out with community partners and advocates. This plan is our roadmap to our main priority - achieving the goal of zero deaths or serious injuries on our roads by 2039.

**We are committed to safer streets in Bloomington.  
Join us.**

Sincerely,

Kerry Thomson

Mayor, City of Bloomington

**Between 2019 and 2023, there were 443 fatal or life-altering crashes on Bloomington's streets.**

These crashes have permanent and, often, devastating impacts on families, friends, and neighbors throughout the City. As such, the City of Bloomington is committed to implementing projects, programs, and policies that will work to reduce and, eventually, eliminate all serious and fatal crashes from our roadways to ensure that everybody using the City's streets – whether walking, biking, driving, or taking transit – can always reach their destinations safely. Our vision is:

**Zero traffic deaths and serious injuries by 2039.**

# | Background

This Safety Action Plan (SAP) is Bloomington's roadmap to achieving our ambitious vision and should be used by City staff, elected officials, community advocates, residents, businesses, and all Bloomington residents committed to safer streets. This Plan includes four major sections:

- **Finding Our Focus.** In creating this Safety Action Plan, the City of Bloomington is joining cities across the country and the world in working to eliminate serious injuries and fatalities from our roadways. This section introduces the concepts of Vision Zero and the Safe Systems Approach, solidifies the relationship between safer streets and equity, and reviews past efforts in the region to improve roadways safety.
- **Setting the Stage.** This section provides an overview of what has historically happened and what is currently happening on our roadways, and how existing policies, programs, and projects impact people throughout the region. This section includes both quantitative and qualitative information about current conditions with a crash data analysis and information gathered through extensive public engagement efforts.
- **Getting to ZERO.** This section lays out programs, policies, and projects that aim to eliminate serious injuries and fatalities on Bloomington's streets by 2039. This section also outlines how these elements should be prioritized in order to be efficient, opportunistic, and effective.
- **Tracking Progress.** This section outlines how the City will measure whether our roadways are becoming safer for all using performance measures, annual reporting, and a crash data dashboard.

# Finding Our Focus

**Bloomington is joining an ever-growing number of cities throughout the country and world who are committed to eliminating transportation-related fatalities and serious injuries on their streets.** This momentum started with the Vision Zero movement and is founded in the Safe Systems Approach.

## Vision Zero

Vision Zero is a values-based philosophy that was developed in Sweden in the late 1990s that states that traffic deaths and serious injuries in our transportation systems are avoidable and unacceptable. The Vision Zero movement is one of the first large-scale efforts to look at traffic crashes as a systemic issue, versus blaming individual users. Vision Zero also pivoted from the acceptance of death and serious injuries as just the “cost” of having an efficient transportation system to stating that absolutely nobody should be killed or injured on our streets due to traffic-related causes.

While the Bloomington SAP is not, officially, a Vision Zero effort, much of this plan, its content, and recommendations align with Vision Zero philosophies and actions. More information about Vision Zero can be found at <https://visionzeronetwork.org/>.

## Safe Systems Approach

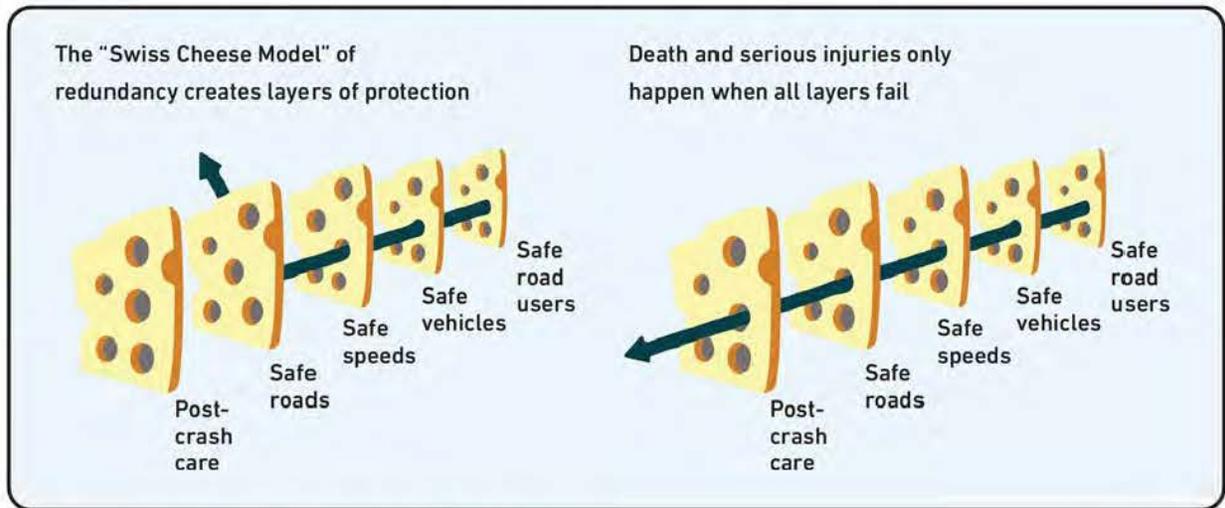
The Safe Systems Approach is founded in the belief that humans are human - people will not always behave perfectly, won't always follow the rules, and may make bad decisions on the roadways. The Safe Systems Approach confronts this reality by creating a multi-faceted system that acknowledges the many contributors to roadway safety outcomes – safe road users, post-crash care, safe roads, safe vehicles, and safe speeds – and works to create safety in redundancy.

This redundant approach means that even if one of these players “fails,” there will be multiple other players ready and waiting to ensure that the situation remains safe. For example, if an individual chooses to drive at excessive speeds, the design of the roadway (narrow lanes, separation between vehicles and pedestrians, speed humps, etc.) or other factors are likely to keep all roadway users safe.

The Safe System Approach is comprised of the following elements:

- **Safe Roads** – Design roadway environments to mitigate human mistakes and account for injury tolerance, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- **Safe Speeds** – Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.

- **Safe Vehicles** – Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact on both occupants and non-occupants.
- **Safe Road Users** – Encourage safe, responsible driving and behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.
- **Post-Crash Care** – Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.



The Safe Systems Approach has six key principles:

- 1. Death and serious injury are unacceptable.** Although no crashes are desired, the Safe System approach focuses on eliminating crashes where people die or are seriously injured.
- 2. Humans make mistakes.** There is no perfect person, so human error should be expected and anticipated. Human mistakes should not result in life-changing injuries or death.
- 3. Humans are vulnerable.** Human bodies are subject to the laws of physics. They can only withstand so much force before a serious injury or death occurs.
- 4. Responsibility is shared.** Eliminating deaths and serious injuries on our roadways is a team effort. Elected officials, planners, engineers, vehicle designers, police, healthcare providers, emergency medical services, and people traveling need to work together to create a safe roadway network.
- 5. Safety is proactive.** Planners, engineers, and roadway designers know the factors that make streets safe or unsafe – a crash should not need to happen to prove that an area is unsafe. Best practices and research should be used to proactively identify and address dangerous locations.
- 6. Redundancy is crucial.** Even if one part of the transportation system fails, redundancy will be in place to make sure the transportation system stays safe for all users.

# Road Safety & Equity

Transportation is a key element of people's daily lives that not only allows them to access their day-to-day needs and activities, but also serves as a place for the community to gather and socially interact. Additionally, transportation systems are complex and comprehensive, often overlapping with other systems, such as housing, land use, utilities, law enforcement, and climate efforts.

Policies and practices surrounding these systems can create inequitable transportation access for black, indigenous, and people of color (BIPOC) communities, those who are low income, and other marginalized groups, often due to a lack of representation and institutional power. Decades of racist policies and planning practices have long-standing and detrimental impacts to these communities in cities across the country.

Nationally, these practices have led specific demographic groups to disproportionately suffer the burdens of transportation systems, and many of these same national trends have likely affected demographically disadvantaged portions of the Bloomington community as well. Some of these burdens include higher exposure to pollution, public health and climate impacts, higher concentrations of traffic crashes, service gaps and inadequate infrastructure, and divisive highway construction. Local governments, like Bloomington, are responsible for reversing these practices and implementing planning practices and policies that respond to the needs of all people.

In developing this Plan, the City was intentional in ensuring the process used and the recommendations that were developed for the plan support the creation of a future equitable transportation network. Specifically, the planning process and the resulting plan was founded in the following principles:

- **Communities of Interest should participate in and influence transportation decision-making and outcomes.** Communities of Interest are defined as areas with populations that have a higher density of eight equity indicators: BIPOC, low-income households, people with disabilities, people with low English proficiency, children, elderly adults, students, and limited vehicle access.
- **One's race, income, physical ability, gender, age, and other demographic characteristics should not determine their safe access** to jobs, healthcare, childcare, education, public amenities, recreation, and quality food.
- **A person's race, income, physical ability, gender, age, and other demographic characteristics should not correlate with negative transportation-related outcomes** related to health, safety, or climate.
- **Safe and adequate sidewalks, bikeways, and trails should be accessible for and welcoming** to people of all cultural backgrounds, ages, and to people with disabilities.
- **The way a person gets around (mode) should not correlate with negative safety or health outcomes, disproportionate climate impacts, or limited access to opportunities.** Planning, maintenance, and funding efforts for different transportation modes, like walking, bicycling, micromobility, driving, carpooling, or public transportation should be prioritized in Communities of Interest first while considering community goals and overall system needs.

- **Public investments, safety improvements, and other transportation policies and programs in areas vulnerable to displacement should be paired with anti-displacement strategies** to empower residents to stay in their homes, encourage small businesses to remain in place, and strengthen the character of the community or neighborhood.

More information about how and why equity is foundational to this Safety Action Plan can be found in **Appendix A: Safe Streets for All Equity Framework.**



Crosswalk at Walnut Street and 6th Street

# What We've Already Done

This Plan is a major step in demonstrating the City of Bloomington's commitment to safer streets for all its residents. That said, this is not the first time the City or the region has created a plan, actions, policies, or programs that address roadway safety. The following table highlights many of Bloomington's past efforts and the roadway safety topics they touched upon.

Document Name	Safety Vision or Goals	Safety Data	Safety Actions	Equity	Roadway Design/ Countermeasures	Projects/ Priority Corridors	Funding/ Implementation
City of Bloomington Transportation Plan	x	x	x	x	x	x	x
City of Bloomington Comprehensive Plan	x		x	x			
City of Bloomington Climate Action Plan	x		x	x	x		x
City of Bloomington Bicycle and Pedestrian Transportation and Greenways System Plan	x	x	x	x	x	x	x
Bloomington, Indiana TDM Program Plan					x		x
City of Bloomington Right-of-Way Permitting					x		
City of Bloomington Capital Improvement							x
City of Bloomington Zoning Districts							
City of Bloomington Unified Development Ordinance							
City of Bloomington Boards and Commissions Structure							
City of Bloomington Traffic Calming and Greenways Program	x	x	x	x	x	x	x
City of Bloomington Scooter Guidelines	x		x			x	
City of Bloomington Sidewalk Repair Assistance Program	x		x			x	x
BMCMPPO Transportation Improvement Program					x	x	x
BMCMPPO Complete Streets Policy	x		x	x	x		x
Indiana Safe Routes to School Guidebook	x	x	x	x	x		x

Table 1: Summary of Actions and Considerations within Reviewed Documents

# | Setting The Stage

**There are many factors that contribute to how safe a city's streets are – design, operation, and user behaviors all play important roles and must be understood in order to make them better.** This section describes the results of these factors on Bloomington's roads today using both quantitative and qualitative measures – a crash analysis and extensive public feedback, respectively. These methods were used to understand what the data says about what's happening on our streets.

## Crash Analysis

Crash data is one of the best tools we have to understand how and where people are severely injured or killed while traveling on Bloomington's streets. If the crash is reported to police, a report is generated that details crash characteristics like the location, contributing crash factors, and demographic information such as the gender and age of those involved.

The crash analysis conducted for Bloomington used data from the Indiana Department of Transportation (INDOT) for the most recent five years (2019 through 2023). It should be noted that while the data is the best available, it represents crashes that are reported to local law enforcement agencies, which makes it an incomplete picture because some crashes may not be reported (due to avoiding interactions with law enforcement, especially for those with past negative interactions with police, such as People of Color). Additionally, the report may not be accurate – severity may be underreported because the reporter may not have medical training, and some factors (such as speed or the reasons for the crash) are challenging to determine after the crash has happened. That said, crash data, while imperfect, is a valuable starting point in understanding current conditions. The following are key takeaways from Bloomington's crash analysis.

**Vehicle-only crashes are the most common, but the risk of serious injury or death is much higher for crashes involving people walking, biking, or rolling.** Only 4% of total crashes involve somebody walking, biking, or rolling, but over 38.5% of fatal crashes and 24% of serious injury crashes involve people using these modes.

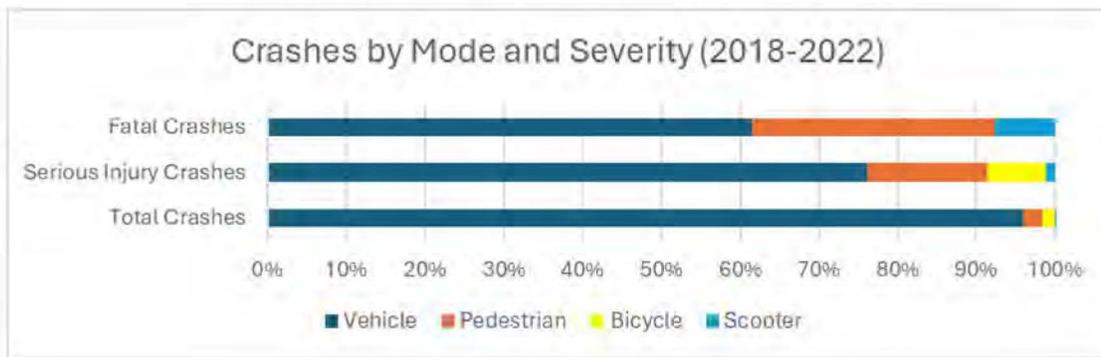


Figure 2. Crashes by Mode and Severity, 2019-2023

**The majority of fatal or serious injury crashes occurred on arterial streets and state highways. There were 262 fatal or serious injury crashes on arterial streets or state highways (60% of all fatal or serious injury crashes). Arterial streets and state highways make up only 20% of the City’s roadway mileage. Figure 9 shows the classification of all streets in Bloomington for reference.**

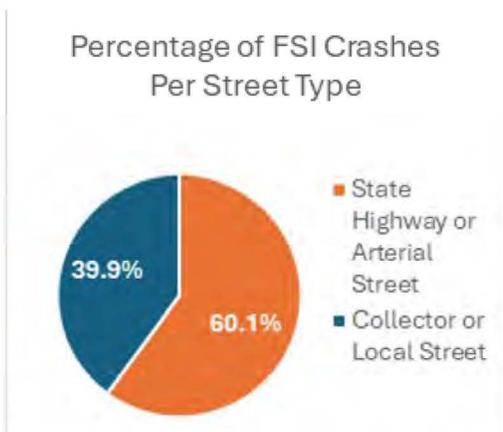


Figure 3. Percentage of FSI Crashes by Type of Street/ Highway

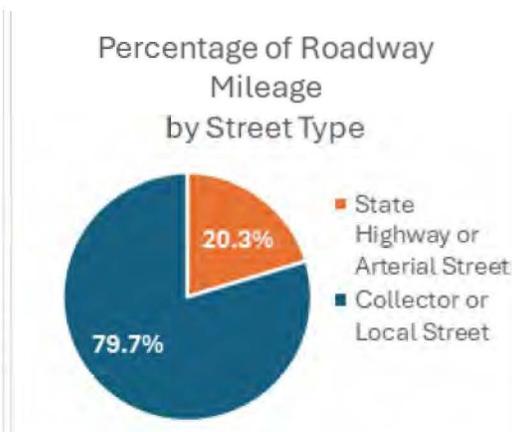


Figure 4. Percentage of Streets by Type of Street/ Highway

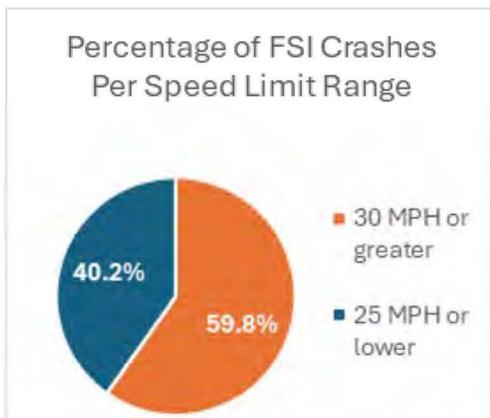


Figure 5. Percentage of FSI Per Speed Limit Range



Figure 6. Percentage of Roadway Mileage Per Speed Limit Range

# Fatal and Serious Injury Crashes 2019-2023

## Legend

Crashes, 2019-2023

- Fatal
- Serious Injury

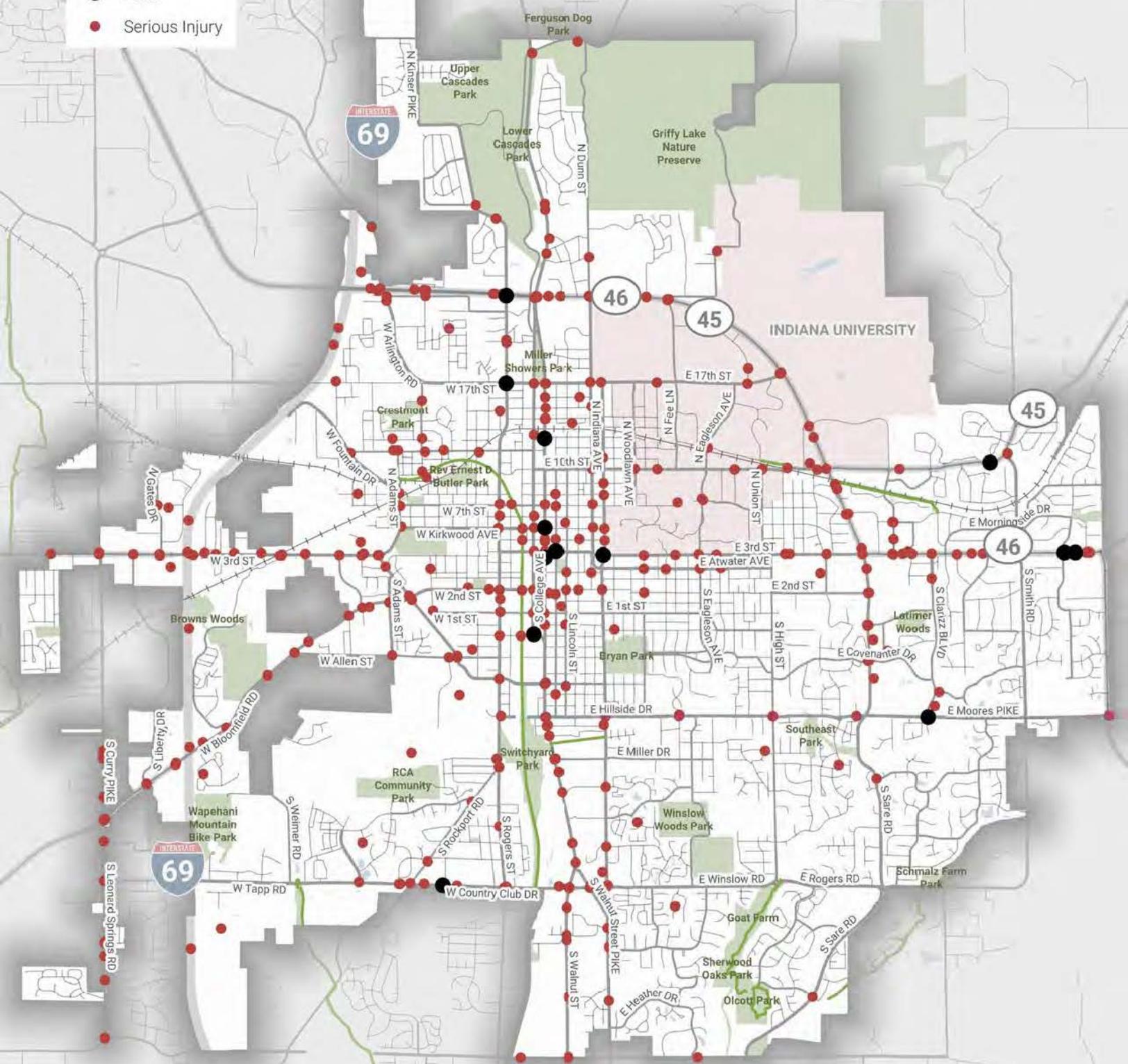


Figure 7. Location of Fatal or Serious Injury Crashes, 2019-2023

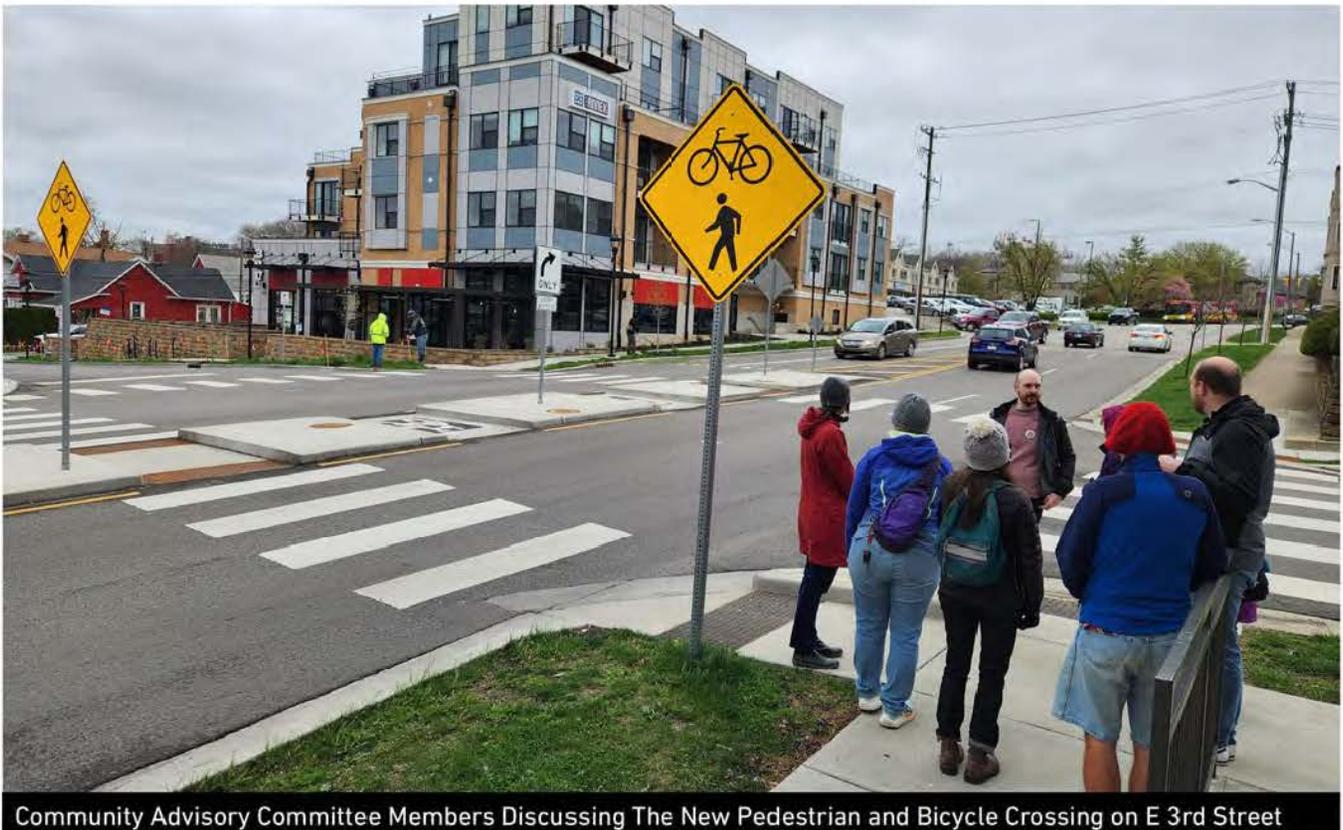


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The streets in Bloomington with the largest clusters of fatal and serious injury crashes are:

- State Highway 45/46 (aka the Bypass)
- West 3rd Street
- East 3rd Street
- North Kinser Pike
- College Avenue
- Walnut Street
- South College Mall Road
- West Country Club Road/East Winslow Drive
- North and South Indiana Avenue
- Bloomfield Road
- Leonard Springs Road

These streets tend to have speed limits of 30, 35, 40, or 45 MPH and tend to have four or more lanes if they are two-way or two or more lanes if they are one-way. All of these streets are either INDOT state highways or City-owned arterials. Figure 8 and Figure 9 on the following pages show the speed limit and functional class of streets in Bloomington.



Community Advisory Committee Members Discussing The New Pedestrian and Bicycle Crossing on E 3rd Street

# Street Functional Class

## Legend

### Street Functional Class

- Freeway
- State Highway
- Arterial
- Collector
- Local

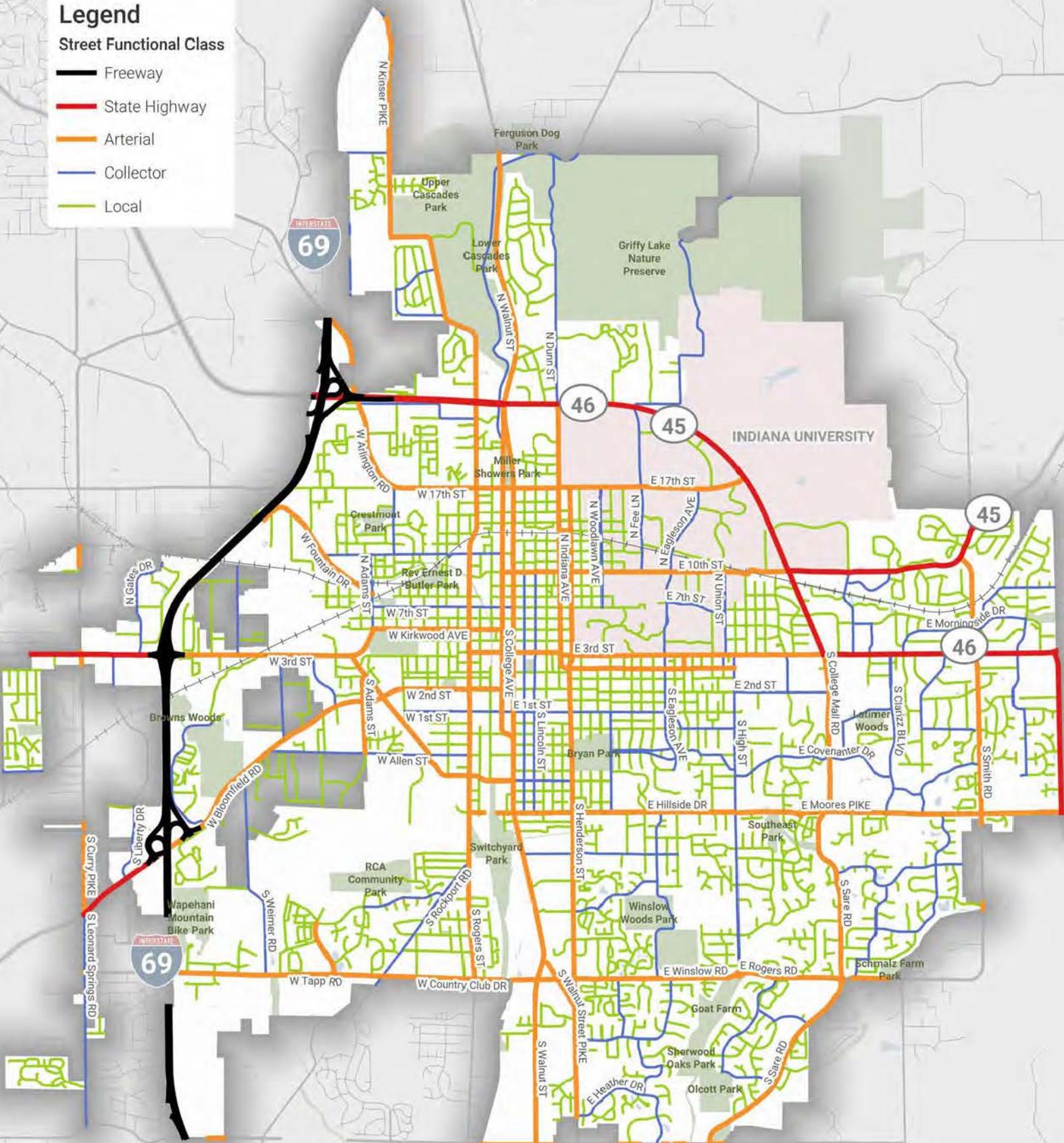


Figure 9. Functional Class of Streets in Bloomington

NOTE: Note: Functional classifications shown above are not intended to override those provided in the Transportation Plan.

**Rear-end and right angle crashes (“T-bone crashes”) are the leading fatal and serious injury crash types for people driving on Bloomington’s streets.** “Failure to Yield the Right of Way” was the most common leading contributing factor for these same crashes. For crashes involving pedestrians or people riding scooters, “other” is the most common listed crash type. This crash type typically has more detailed information listed in the narrative of the crash report, however, this data was not available in the crash dataset used for analysis.

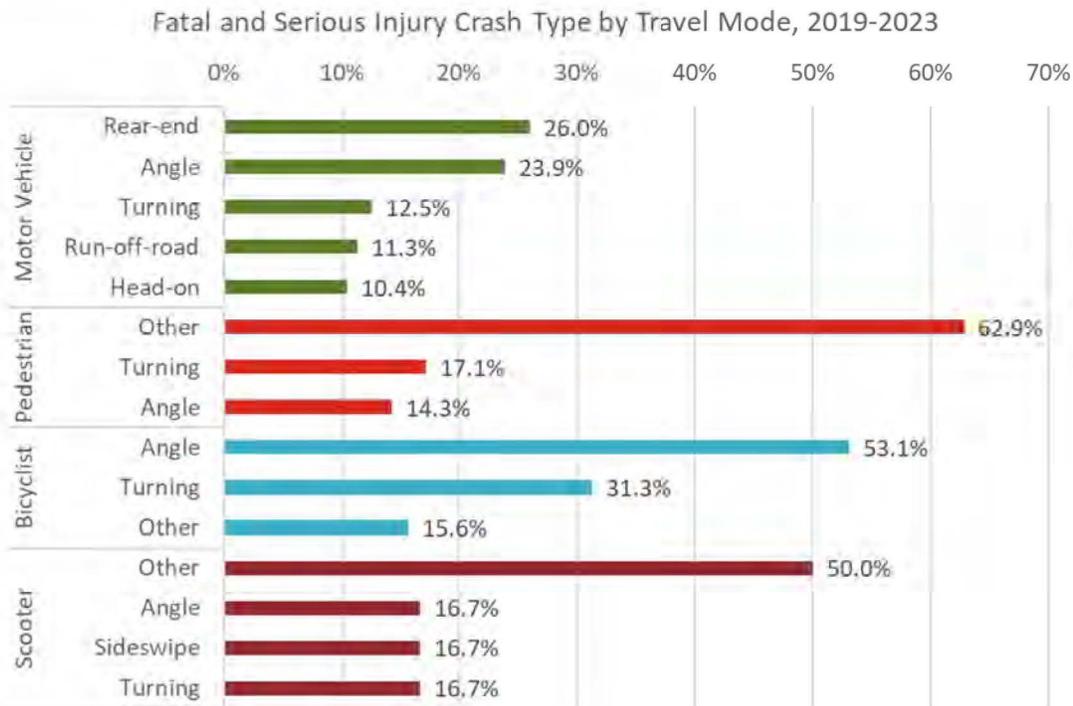


Figure 10. Crash Type by Mode of Travel for Fatal and Serious Injury Crashes, 2019-2023

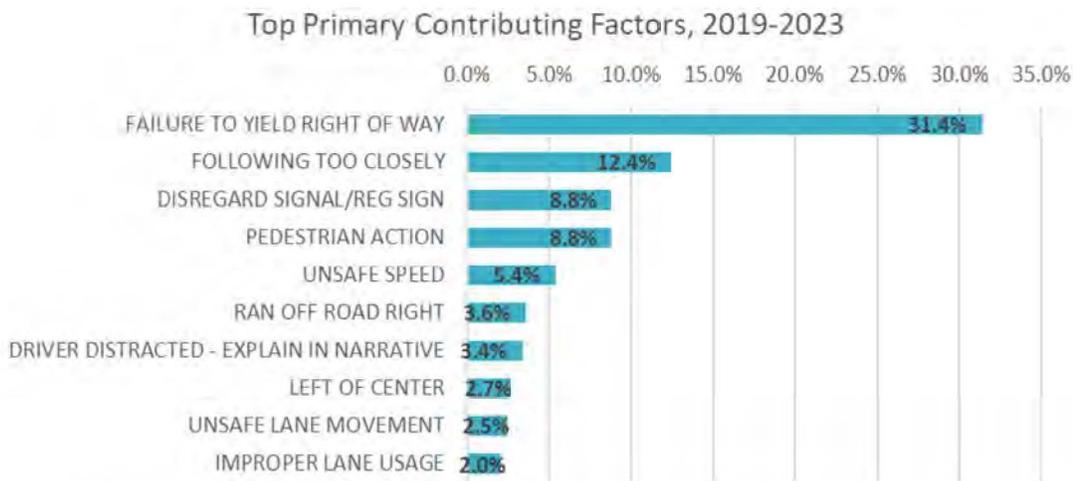
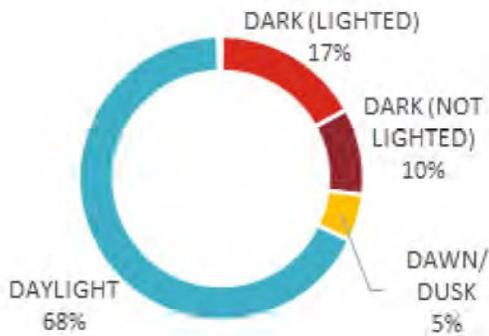


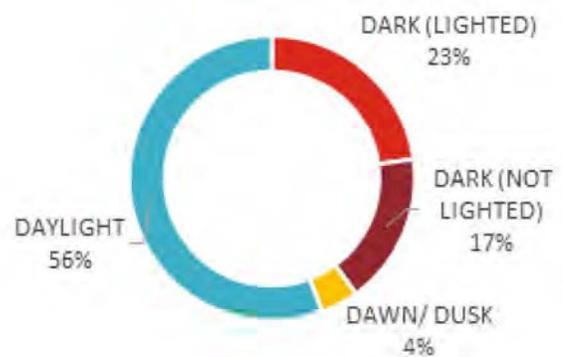
Figure 11. Top Primary Contributing Factors for Fatal and Serious Injury Crashes, 2019-2023

**40% of fatal and serious injury crashes from 2019-2023 that involved a pedestrian were at night.** This follows national crash trends in which darkness commonly elevates risk, especially for pedestrians, due to reduced visibility and increased vehicle speeds at night, among other reasons.

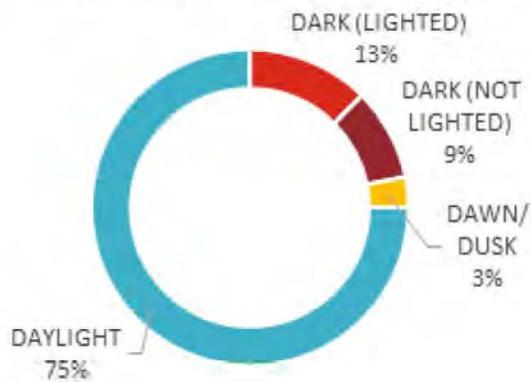
FSI Crashes Involving Only Motor Vehicles



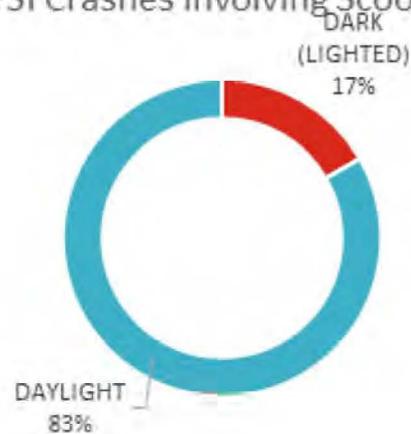
FSI Crashes Involving Pedestrians



FSI Crashes Involving Bicyclists



FSI Crashes Involving Scooters



# High Injury Network

The City of Bloomington developed a High Injury Network to determine where to focus transportation safety projects in the future in order to reach zero fatal or serious injury crashes.

A High Injury Network is a map of streets that have the highest frequency of fatal and serious injury crashes. These locations are candidates for safety improvements as part of a data-driven, reactive safety program. By targeting these high injury locations with the Safe Systems Approach, we can be sure that our investments will produce strong results for our road users.

## Method

High Injury Networks were created using fatal and serious injury (FSI) crashes from the years 2019 through 2023. Roads were analyzed using a sliding windows analysis. A sliding windows analysis uses a 1/2 mile “window,” that “slides” in 1/10 mile increments, counting the crashes that fall within that window by crash score and assigning a score to each 1/10 mile segment as shown in Figure 12 below. Crashes which occurred near intersections were assigned to all intersection approaches within 30 feet to account for corridor patterns that traverse intersections.

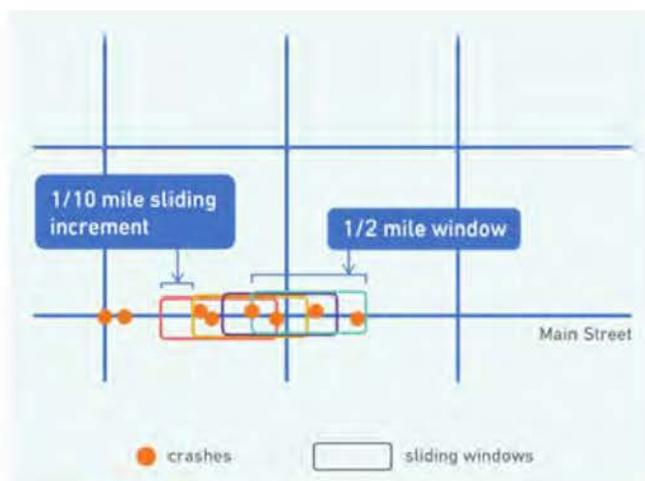


Figure 12. High Injury Network - Sliding Windows Analysis

## Results

All analysis results are summarized in the following maps. Each map below visualizes the top 15% of crash locations based on their respective scores. The scores are calculated for the 2019 through 2023 study period, showing a segment length-weighted average of FSI crashes on each roadway segment using a sliding window approach. This smooths the crash data, allowing us to interpret crashes, which occur at discrete locations along continuous roadways. Results are summarized in a series of maps as follows:

- **All Mode FSI Crash Score:** Total number of fatal or serious injury crashes of any mode. (Figure 12)
- **Motor Vehicle FSI Crash Score:** Total number of fatal or serious injury crashes involving only motor vehicles. (Figure 13)
- **Pedestrian FSI Crash Score:** Total number of fatal or serious injury crashes involving pedestrians. (Figure 14)
- **Bicyclist FSI Crash Score:** Total number of fatal or serious injury crashes involving bicyclists. (Figure 15)
- **Scoter FSI Crash Score:** Total number of fatal or serious injury crashes involving people riding scooters. (Figure 16)
- **Vulnerable Road User FSI Crash Score:** Total number of fatal or serious injury crashes involving pedestrians and bicyclists. (Figure 17)

### Some of the top High Injury Network corridors include:

- State Route 45/46
- East 3rd Street
- West 3rd Street
- Walnut Street
- College Avenue
- West Country Club Drive

# High Injury Network - All Modes

## Legend

High Injury Network Limited to Top 15% of Scoring for All Modes

Darker linework reflects higher (worse) scoring

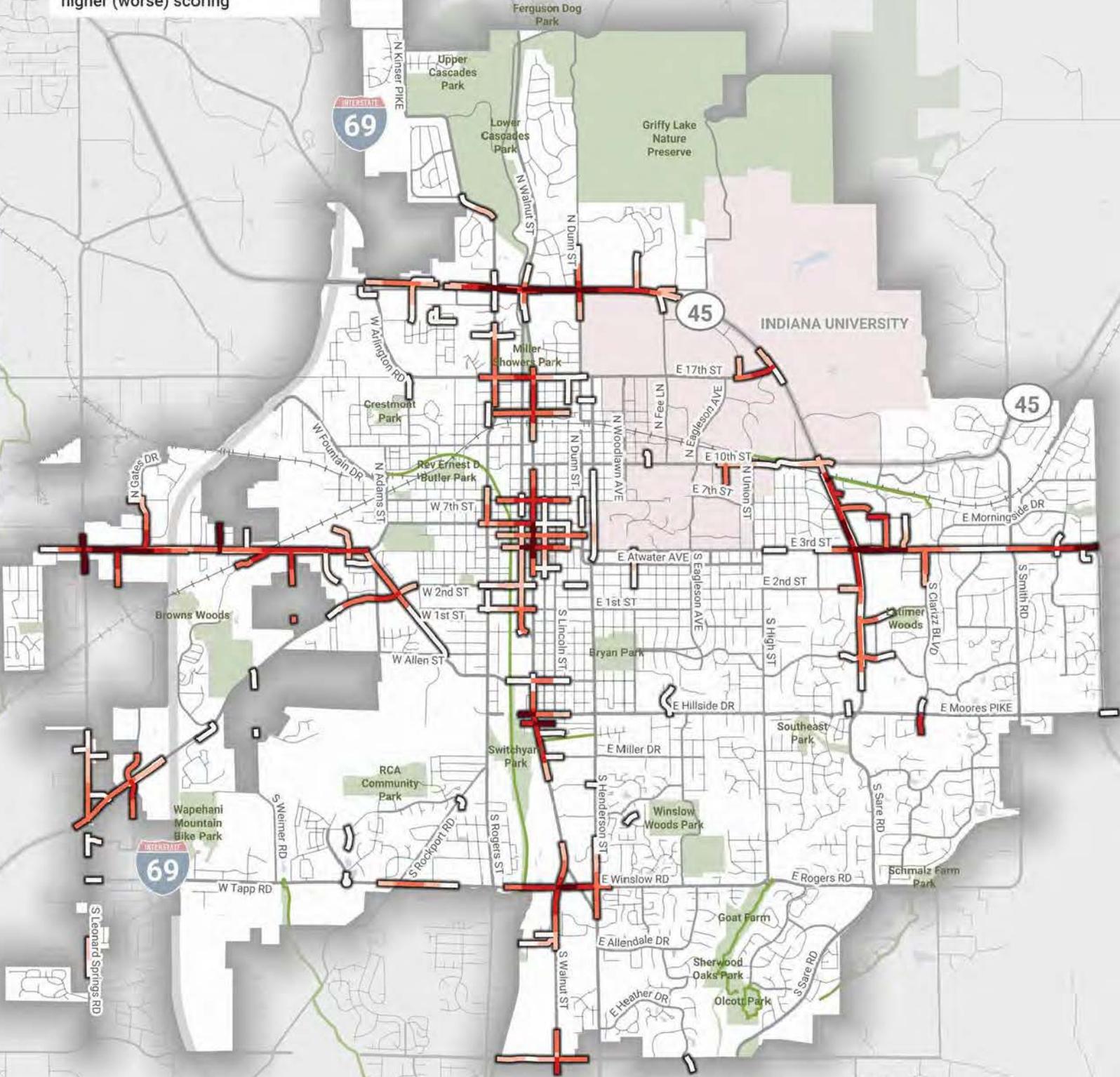


Figure 12. High Injury Network - All Modes

# High Injury Network - Motor Vehicle Crashes Only

## Legend

High Injury Network Limited to Top 15% of Scoring for Crashes Involving Only Motor Vehicles

Darker linework reflects higher (worse) scoring

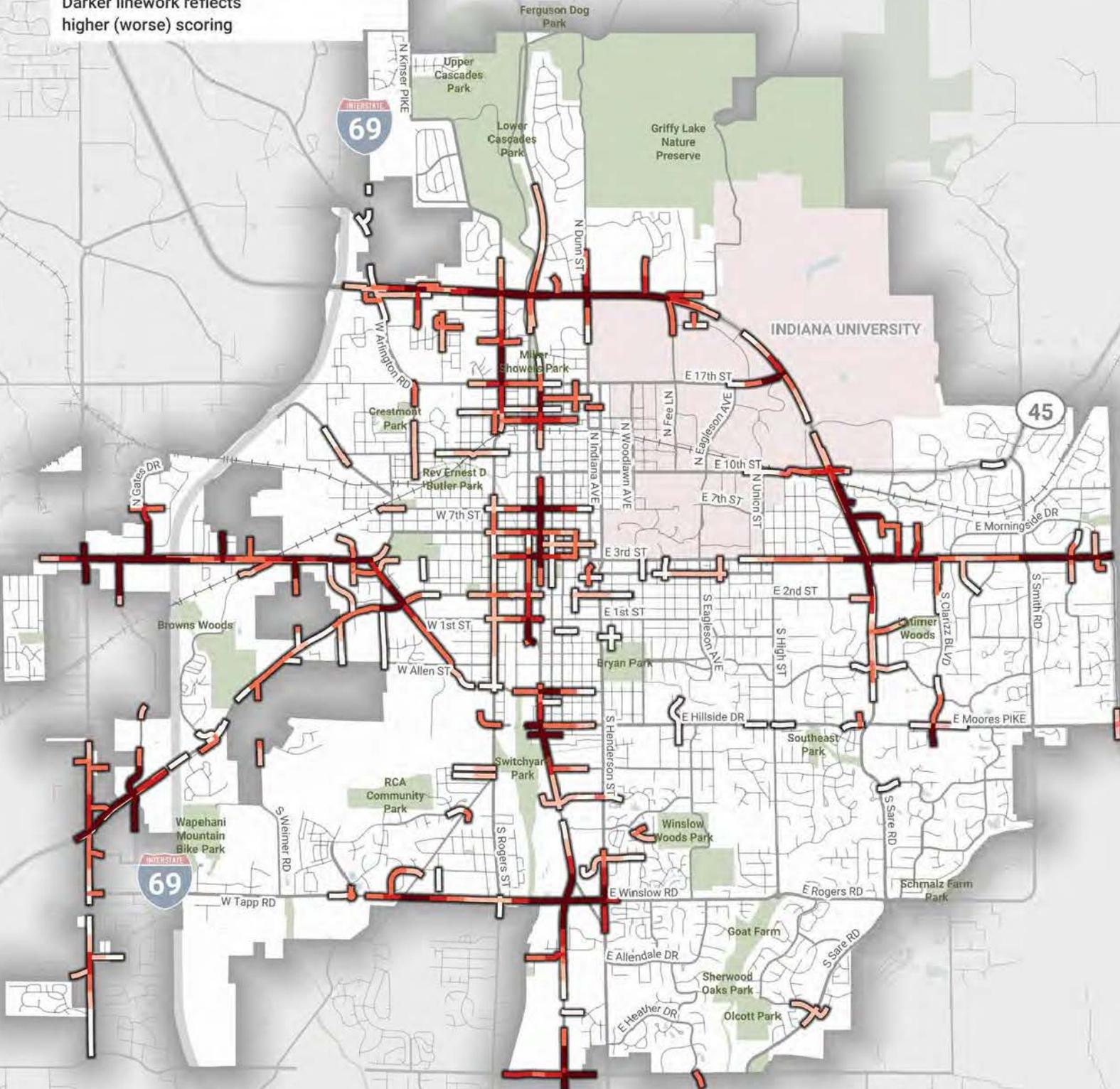


Figure 13. High Injury Network - Motor Vehicle Crashes



# High Injury Network - Pedestrian Crashes

## Legend

High Injury Network Limited to Top 15% of Scoring for Crashes Involving Pedestrians

Darker linework reflects higher (worse) scoring

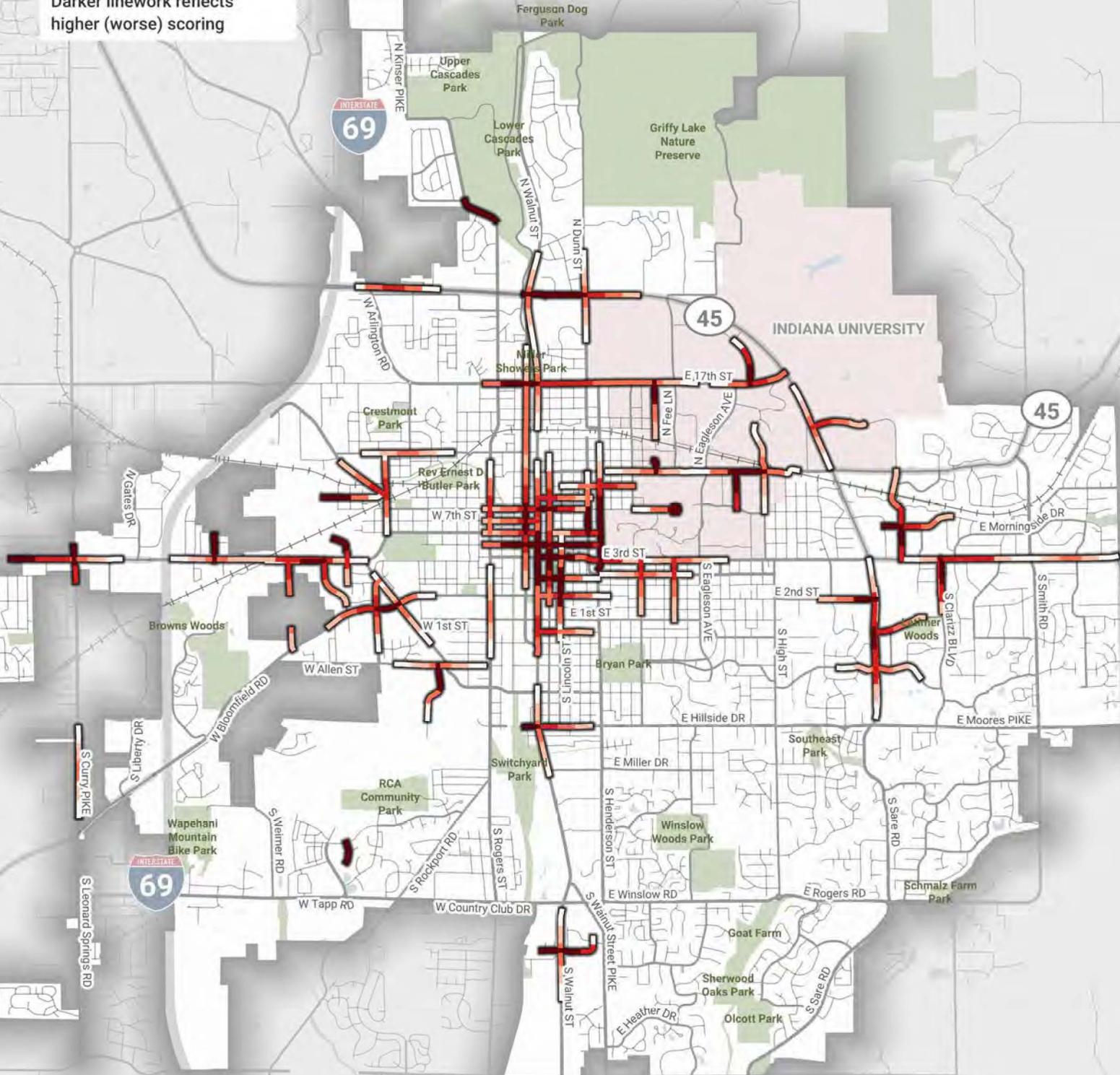


Figure 14. High Injury Network - Pedestrian Crashes



# High Injury Network - Bicyclist Crashes

## Legend

High Injury Network Limited to Top 15% of Scoring for Crashes Involving Bicyclists

Darker linework reflects higher (worse) scoring

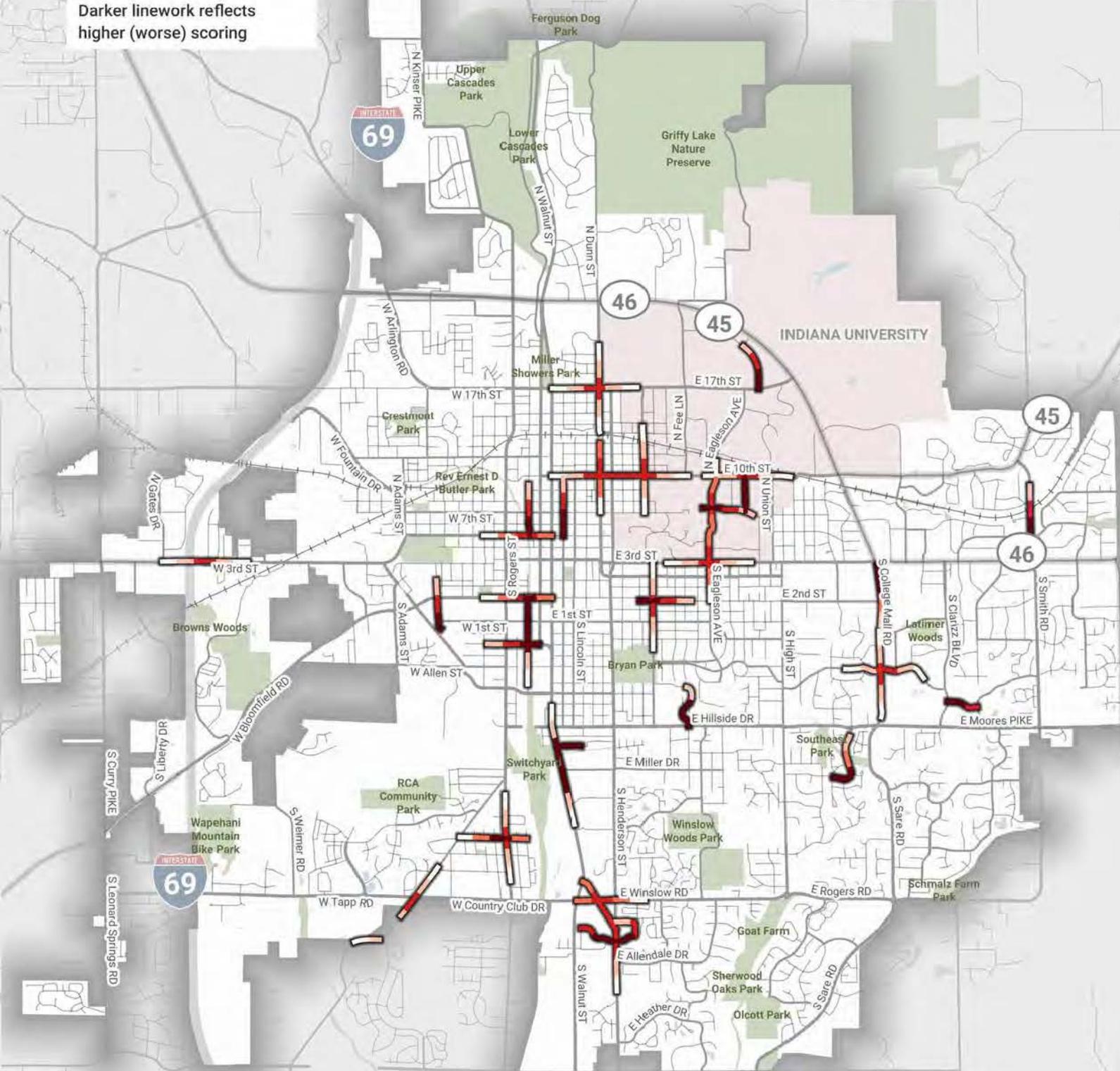


Figure 15. High Injury Network - Bicyclist Crashes



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# High Injury Network - Scooter Crashes

## Legend

High Injury Network Limited to Top 15% of Scoring for Crashes Involving Scooters

Darker linework reflects higher (worse) scoring

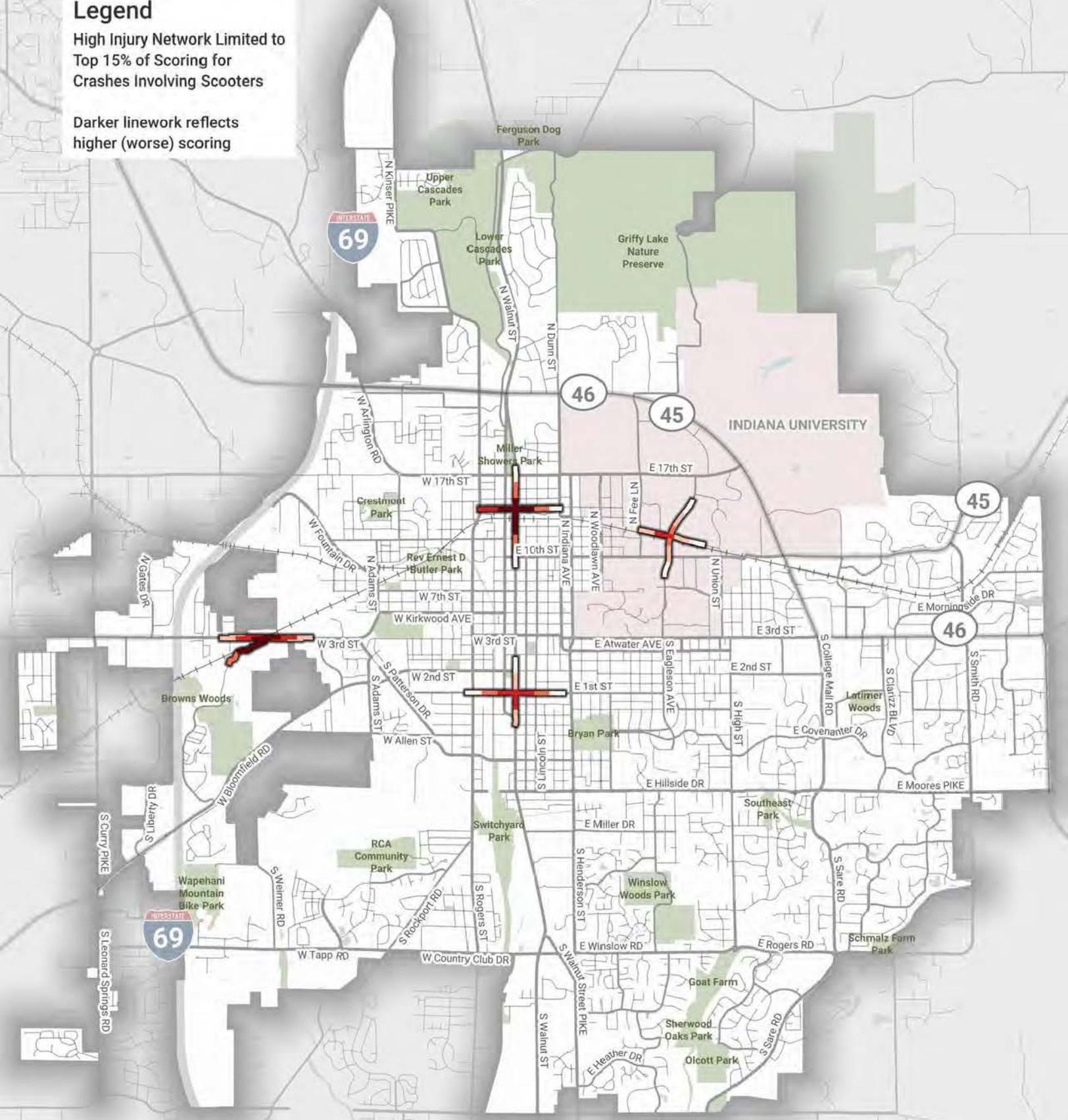


Figure 16. High Injury Network - Scooter Crashes



# High Injury Network - Vulnerable Road User (Pedestrian, Bicyclist, and Scooter)

## Legend

High Injury Network Limited to  
Top 15% of Scoring for  
Crashes Involving Vulnerable Road Users

Darker linework reflects  
higher (worse) scoring

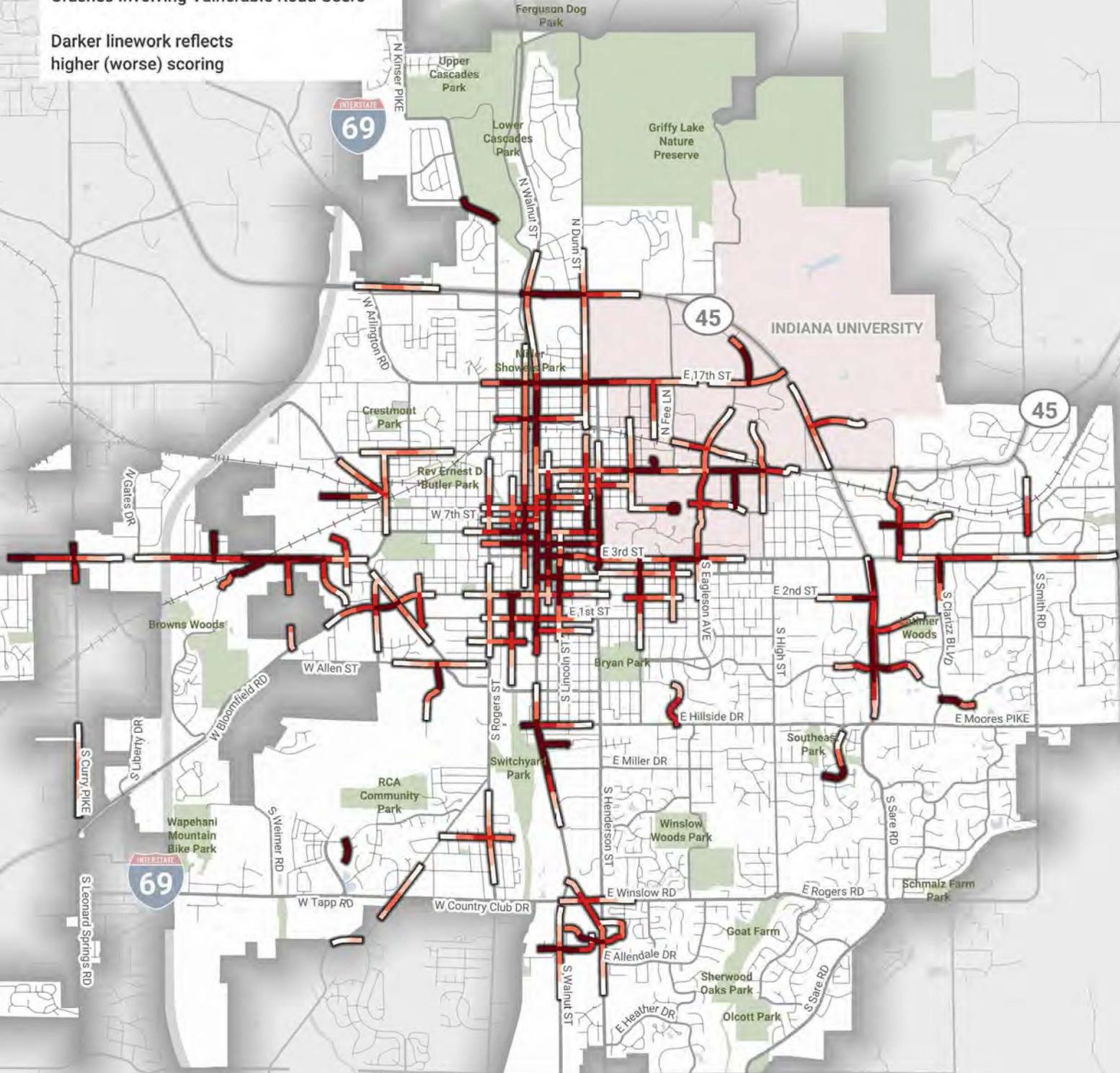


Figure 17. High Injury Network - Vulnerable Road Users  
(Pedestrian, Bicyclist, and Scooter)



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# High Risk Network

In addition to the High Injury Network analysis, which looks backwards in time at the locations of crashes historically, the City of Bloomington also developed a High Risk Network (HRN). High Risk Network analysis highlights roads that have similar designs, land use patterns, or population characteristics with roads on the High Injury Network. In other words, the High Risk Network is a proactive, systemic assessment of where fatal and serious injuries are likely to occur in the region. These roads are candidates for safety improvement as part of a data-driven, proactive safety program. This is a key aspect of the Systemic Safety Approach which requires agencies to think critically about where crashes could occur in the future based on systemic risk – even if very few or no severe crashes have occurred in those locations in the past.

## Method

For this High Risk Network analysis, roadways were analyzed using the facility profile analysis methodology, which identifies unique combinations of roadway design and contextual attributes which correlate with elevated crash risk. The analysis produces a risk score for each roadway segment based on the frequency of crashes observed at similar facilities across the study area, representing the average number of crashes at comparable facilities during the study period. All facilities are categorized into one of five tiers based on their relative risk score, namely Critical, High, Medium, Low, and Minimal. Attributes considered in the analysis include:

- **Roadway Class:** Major Road (functional class of minor arterial and above or major/primary local roads) or Minor Road (all others).
- **Lane Configuration:** Two-lane or Multilane.
- **Setting:** Urban or Rural context.
- **Traffic Volume:** Average annual daily traffic (<1,000 vehicles per day (vpd), 1,000-10,000 vpd, or 10,000+ vpd).
- **Speed Category:** Posted speed limit ( $\leq 30$  MPH, 35-45 MPH, or 50+ MPH).
- **Percent Zero Vehicle Households:** Percent of households within the census block group which have zero vehicles.
- **Percent of Residents in Poverty:** Percent of population within the census block group at or below 2X the poverty level.
- **Percent Younger Residents:** Percent of population within the census block group below the age of 18.
- **Percent Older Residents:** Percent of population within the census block group age 65 years or older.

- **Percent Disabled Residents:** Percent of population within the census block group with a disability.
- **Housing Cost Burden:** Percent of households within the census block group which spend more than 30% of income on housing.
- **Transportation Access:** Equitable Transportation Communities data transportation access subcomponent score.

## Results

The analysis results are shown in a map in Figure 18. This map visualizes the Critical and High tier facilities. These streets have a higher average fatal and serious injury crash per mile rate than other streets in Bloomington.



A Recently-Constructed Pedestrian and Bicyclist Crossing at the Walnut and Allen St Intersection



# Voices of Bloomington

People's feelings and opinions around street safety are formed through a combination of personal experience, conversations and stories within their communities, and perceptions. It's invaluable to understand these feeling and thoughts about street safety because any recommendation or project that results from this plan will aim to not only factually improve the safety of Bloomington's streets, but also increase people's feelings of safety as they walk, bike, roll, ride a scooter, drive, or take transit around the city.

A wide variety of public engagement opportunities were provided to gather residents' thoughts and opinions on transportation safety in Bloomington as part of this project. Over 400 residents submitted more than 1,000 unique responses via an interactive webmap, and nearly 2,000 additional residents participated in a one-week citywide public participation blitz that included 13 pop-up stations, three evening events, eight classroom visits, walking tours, and public meetings at various locations throughout the City. These strategies were designed to hear from a wide variety of Bloomington's residents, with intentional efforts made to get feedback from those that are overrepresented in traffic crashes but often underrepresented in public engagement efforts – youth and seniors, low-income individuals, people who walk and bike, and People of Color.

This public outreach was complemented by a project steering committee that was made up of members of different City commissions (Parking, Community Accessibility, Bicycle and Pedestrian Safety, and Traffic), City Council, and MPO staff. Project staff met with this group regularly during the project at key decision points to get feedback and recommendations for going forward. More detail on the engagement efforts can be found in **Appendix B: Public Engagement Overview**.

While the project team had various conversations on a wide array of topics during our engagement effort, a few important themes stood out that were invaluable as we created this plan's recommendations:

- **Distracted driving and people driving too fast were, by far, the top two factors that make people feel unsafe on Bloomington's streets.** These factors were followed by people not yielding at intersections and the lack of safe places for bicyclists. It should be noted, however, that different locations resulted in different distributions of responses. For example, at a pop-up held at Tri-North Middle School, a much higher percent of participants selected "fear of physical or verbal harassment" as one of their top concerns. This variation is likely due to middle school students mostly being on foot, bike, or scooter and, in general, feeling threatened by adults.

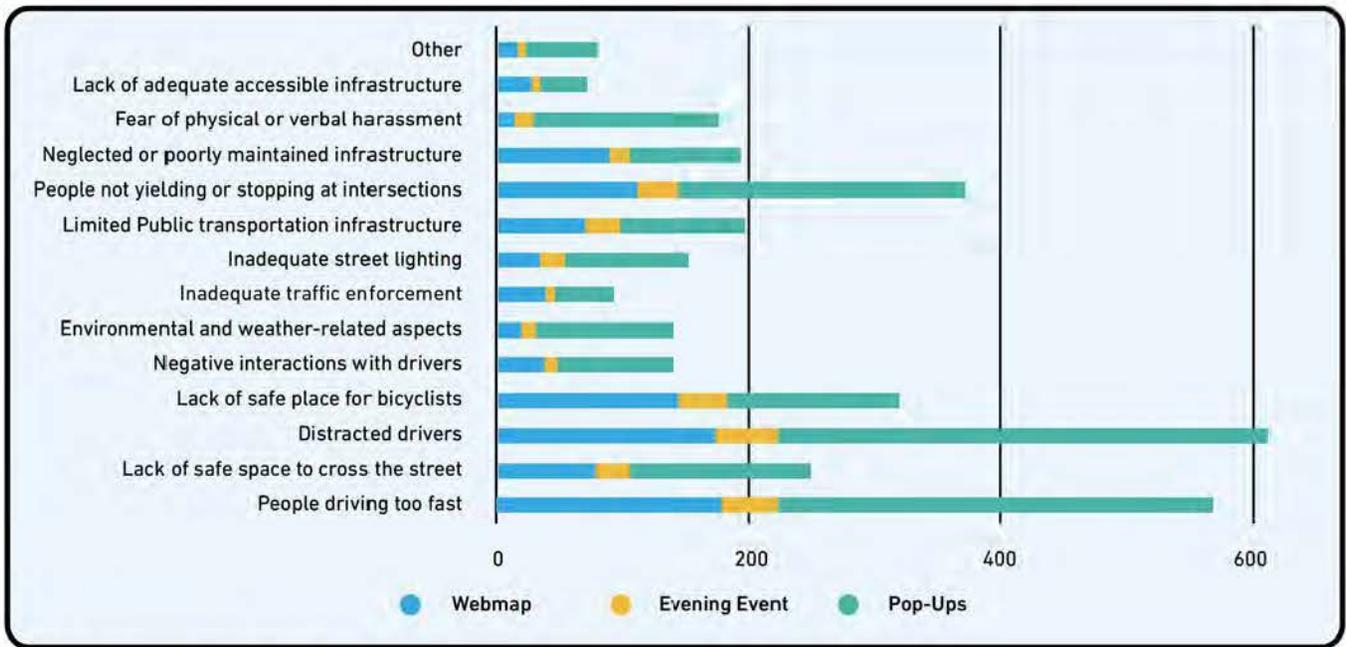


Figure 19. Responses to "What are the top three things that make you feel unsafe on Bloomington's Streets?"

• **Residents think it is very important to invest in a safe and comfortable transportation system.** Nearly all participants answered "very important" to our posed question. Very few selected "not important" as their answer.

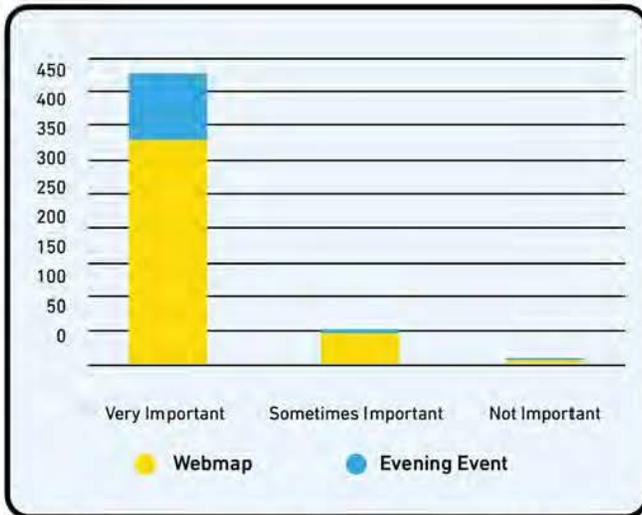


Figure 20. Responses to "How important do you think it is to invest in a safe and comfortable transportation system in Bloomington?"

• **Most residents are willing to make trade-offs for the sake of safety** That said, many participants admitted that they don't usually drive at or below the speed limit which shows that people are in support of safety, in theory, but may need more than a speed limit to encourage them to drive at safe speeds.

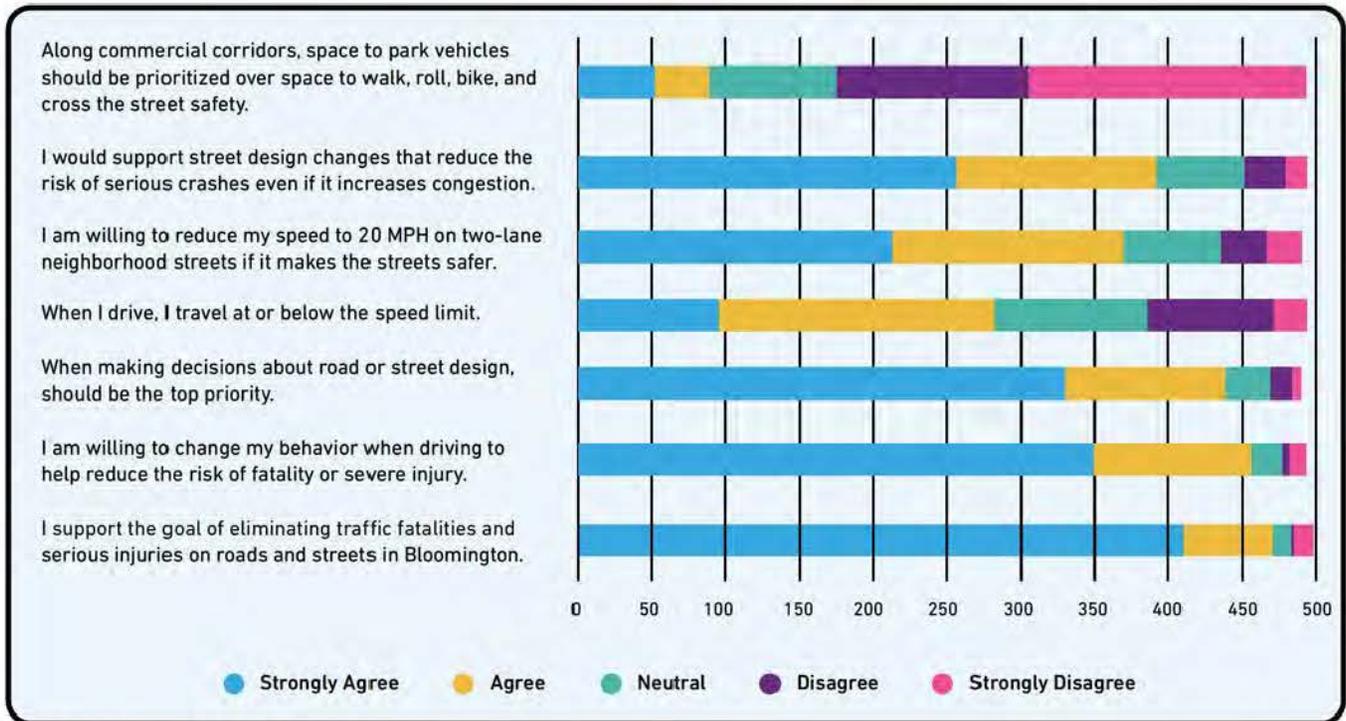


Figure 21. Results to trade-off questions

• **The feelings of safety differ dramatically depending on how one navigates the City.** In general, respondents felt safe while driving or on transit. Walking was the next "safest," with a very small amount of respondents saying it feels "very unsafe." Feelings of safety dramatically dropped from there with less than a quarter of people feeling safe while biking or in a wheelchair. Notably, nobody responded that they felt "very safe" on a scooter.

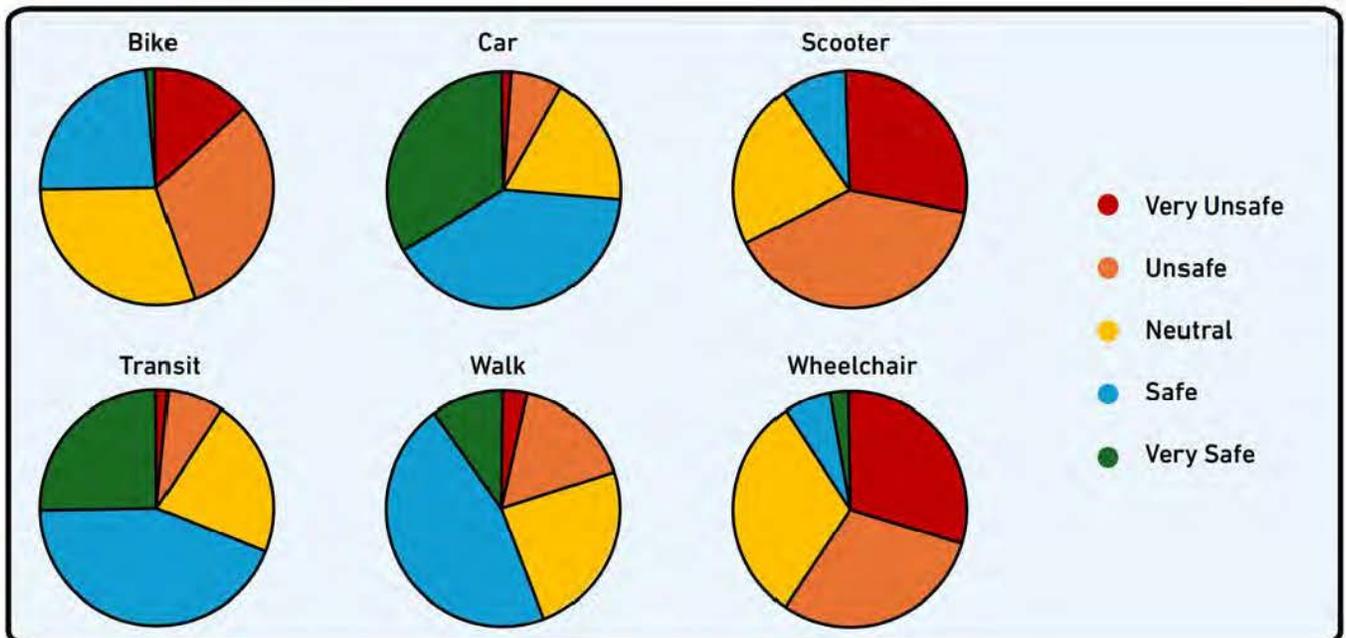


Figure 22. Responses to "Generally, how safe do you feel traveling around Bloomington walking, rolling, biking, scooting, driving, or taking transit?"

• **More separation between modes makes everybody feel safer.** Respondents that walk or bike want more separation between them and vehicles, better maintained facilities, and more sidewalks, bicycle lanes, or trails in the community. For people biking, more secure bicycle parking and better wayfinding were also common selections. For pedestrians, participants selected better lighting and more accessible infrastructure as items that would make them feel safer.

Interestingly, participants selected “more space separating people bicycling from car traffic” and “better road maintenance” as the top two items that would make them feel safer while driving, which is nearly identical to the responses of pedestrians and bicyclists. Reducing driving speeds using speed bumps or lane reductions, and better or more visible signs were the next most common answers.

For transit riders (which had less responses than questions for walking, rolling, biking, and driving), participants highlighted improvements at transit stops, especially adding more pedestrian crossings and/or signals near stops. Adding more shelters was the second most common choice, followed by the desire to increase lighting around transit stops.

What would make you feel safer when walking or rolling?	# of Responses
More space separating people walking from car traffic	402
More sidewalks or trails	267
Better maintenance of sidewalks and trails	241
Better lighting of sidewalks, trails, and roads	176
More accessible infrastructure (curb-ramps, wheelchair access, wider sidewalks, etc.)	113
Additional signs or signals at intersections	94
Additional police presence	51
Other	48
Better wayfinding so I know where to go	21

What would make you feel safer when biking?	# of Responses
More space separating people bicycling from car traffic	243
More bicycle lanes or trails in the community	236
Better maintenance of bicycle lanes and trails	136
More secure bicycle parking	91
Additional signs or signals at intersections	82
Better lighting of trails and roads	73
Other	44
Better wayfinding so I know where to go	26
Additional police presence	19

What would make you feel safer when driving?	# of Responses
Better road maintenance	235
More space separating people bicycling from car traffic	219
Increased street lighting	153
Reducing driving speeds using speed bumps or reducing the number of lanes	134
Lowering speed limits	130
Better or more visible signs so I know where to go	106
Other	78
Additional police presence	64
Increasing the number of traffic signals	36

What would make you feel safer when taking transit?	# of Responses
Adding more shelters at transit stops	151
Increasing lighting around transit stops	145
Having more pedestrian crossings and/or signals near transit stops	133
More route information so I know where to go	117
Additional signs or signals at intersections	82
Better lighting of trails and roads	73
Other	44
Better wayfinding so I know where to go	26
Additional police presence	19



Community Members Discussing Their Safety Concerns at a Pop-Up Location

• **The presence of walking and cycling facilities, such as sidewalks, bicycle lanes, and crossings, make a location feel safe. Fast driving speeds are the top reason areas feel unsafe.** Respondents feel safe near the B-Line Trail or 7-Line, and other places where there are many other pedestrians and bicyclists (e.g. Switchyard Park, Bryan Park, Kirkwood Ave.). Respondents identified arterial and collector roadway segments (such as College Avenue, Walnut Street, and East 3rd Street) and areas where a higher degree of bicycle and pedestrian traffic occurs (adjacent to downtown and Indiana University) as areas where they feel unsafe.

"This Location is Safe Because"	Count	"This Location is Unsafe Because"	Count
There are bicycle lanes or space for bicyclists	79	People drive too fast	392
There are sidewalks	74	Drivers do not pay attention	324
There are a lot of other people walking or biking	66	There are no safe places for people walking, biking, or rolling to cross the street	219
People drive at the speed limit or slower	41	There are no bicycle lanes or space for bicyclists	189
There are safe crossings	40	There are no or inadequate sidewalks	189
Drivers are paying attention	35	Other (please specify below)	185
There is good lighting at night for pedestrians or bicyclists	22	There are too many cars on the road	177
Other (please specify below)	18	I have experienced personal safety or harassment at this location	110
		There is not enough lighting at night for pedestrians or bicyclists	84
		There is not enough lighting at night for driving	45
Total	375	Total	1,914

Table 2. Summary of safe and unsafe location webmap attributes



Community Members Noting Safe and Unsafe Locations at a Public Open House

# | Getting To Zero

**It's one thing to know what the issues are and where they are happening. It's another thing to know what to do and how to act. Bloomington is ready to act.**

This section outlines the commitments the City of Bloomington will do to make our streets safer for everybody. The actions are organized into four categories:

- Funding and Staffing
- Community Engagement and Equity
- Policies, Processes, and Government Structure
- Safety Studies and Infrastructure

The tables on the following pages have prioritized the actions associated with these categories into three timeframes:

1. Immediate or Short Term (2024-2027)
2. Medium Term (2028-2034)
3. Long Term (2035-2039)

Each action includes an interim goal year, identified lead(s), and resources needed to complete the action. These actions and strategies should be reviewed and revised regularly to ensure that Bloomington's goal to eliminate fatal and serious injury roadway crashes by 2039 will be achieved.

These strategies and implementation actions will only occur when and where appropriate based on further analysis, engineering design, and environmental assessment. Implementation will also be dependent on staffing, financial, partnership development, and other constraints so while the City will make every effort to implement the following actions, other contributing factors will need to be accounted for. **Additional staffing hires and significant investment in infrastructure planning and construction funding levels will be needed to meet the City's goal.**

Please note that all costs and funding amounts shown in the following section are estimated costs using 2024 dollars. Amounts should be taken as a starting point for budgeting purposes only and should be updated by City staff for inflation and for the exact scope developed for each item. Additional information and assumptions listed are given to assist the City with future scoping and delivery items only. The team developing this Action Plan is not responsible for the accuracy of the numbers provided herein.

# Immediate or Short Term Action Items (2024-2027)

## Funding & Staffing

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
FS1	Increase City engineering, planning, and public works staffing levels to support implementation of safety improvements	2025	Engineering, Planning, Administration	Additional staffing (see items noted for additional staffing)
Additional information: <ul style="list-style-type: none"> <li>Consider hiring permanent staff in place of consultants to reduce estimated costs reported elsewhere in this document.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
FS2	Establish permanent local funding for safety and speed studies, low-cost implementation projects, and regular maintenance of safety infrastructure	2025	Engineering, Planning, Administration	"Funding (Suggest to start with \$500,000 in 2025)"
Additional information: <ul style="list-style-type: none"> <li>Revisit funding levels as projects are designed and implemented. Safety infrastructure is defined as infrastructure related to safety enhancement demonstration projects (such as flexible delineators, paint, hardened centerlines, and removable speed humps) and permanent direct safety implementation items (such as RRFBs, crosswalk signing, and pavement markings).</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
FS3	Evaluate individual property owner contributions for sidewalk maintenance, traffic calming, street reconstructions, and other safety improvements	2025	Engineering, Planning, Public Works, Administration	Consider funding shifts to other sources, such as City tax levy
Additional information: <ul style="list-style-type: none"> <li>Currently, individual-fronting property owners contribute funding toward improvement projects (sometimes referred to as "special assessments"). This funding mechanism may be inequitable, particularly toward lower- and fixed-income residents, and may contribute to lack of public momentum for needed projects.</li> <li>Adjusting funding for projects to the community at-large (via tax levy) or to a region of the community (via transportation improvement districts or similar, if allowed by the state) decreases financial strain on particular properties when projects occur on adjacent roadways, and it allows more users who benefit from the improvement to share the cost.</li> </ul>				

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
FS4	Establish transparent Capital Investment Plan funding programming process	2025	Engineering, Planning, Public Works, Administration	None
<p>Additional information:</p> <ul style="list-style-type: none"> <li>• Currently, there is not a transparent, data-driven process for prioritizing Capital Improvement Plan.</li> <li>• Utilize the project prioritization in this report combined with infrastructure maintenance and preservation needs to develop funding levels and Capital Improvement Plan.</li> <li>• Include regular funding for maintenance and replacement of safety infrastructure, sidewalks, trails, and bikeways.</li> </ul>				

## Community Engagement & Equity

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
CEE1	Develop a Community Engagement Plan for safety implementation projects	2025	Engineering, Planning, Administration	Planning staff; potential extra funding for compensation of community partners
<p>Additional information:</p> <ul style="list-style-type: none"> <li>• Integrate language that communicates safety goals into public outreach.</li> <li>• Establish regular targeted outreach to various neighborhood and civic groups to collect feedback on transportation safety issues (examples include neighborhood groups, advocacy organizations, IU students and staff, and religious organizations).</li> <li>• Utilize existing events to promote safety messaging and collect feedback (examples include Bloomington Community Farmers' Market, annual City festivals, etc.).</li> <li>• Include set goals, engagement strategies, community partners, engagement timelines, and methods for integrating feedback into the project.</li> <li>• Establish a scale to determine dollar amount or impact level that requires certain strategies.</li> <li>• Establish a system to communicate materials to the public virtually (via website, social media, email newsletter, etc.), printed (at daily destinations, in the right of way, at public buildings, etc.), and in media (newspapers, online alternative news sources, television, radio, etc.) to all types of transportation users.</li> <li>• Provide materials in other languages (Spanish at a minimum and consider other languages as needed)</li> <li>• Consider creation of a program to involve community members, groups, and organizations in conducting and participating in engagement efforts.</li> <li>• Consider establishing community ambassadors to employ for engagement efforts, and establish funding source to provide fair compensation and necessary resources for ambassadors.</li> <li>• Collaborate with local groups and advocates for walking, biking, and vulnerable road user groups to expand the reach of SS4A efforts, including collaborating to host events that promote and advocate for walking, biking, rolling, or taking transit.</li> </ul>				

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
CEE2	Invest in a public communication campaign to shift culture toward multimodal travel and educating transportation users about safety in all modes of travel	2026	Engineering, Planning, Transportation Demand Manager, Administration	Planning staff
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Includes education about crash factors, safety data, benefits aside from traffic safety (such as physical health, personal safety, air quality, economic and health disparities, etc.).</li> <li>Includes information and training to local media around understanding crash data, minimizing victim blaming, and high-level understanding of SS4A efforts.</li> </ul>				

## Policies, Processes, and Government Structure

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS1	Create an Advisory Transportation Commission to review and approve all transportation facility projects, including safety implementation projects	2024	Planning, Engineering	Additional staffing may be required to coordinate commission duties
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Intended to provide a single commission review process for transportation projects to streamline City business and to create accountability for review of safety in each project.</li> <li>This committee should review all public- or private-led projects by any City department, other governmental agency, property owner, developer, utility, or other party that has a project that affects the City's transportation system. Review must include analysis of safety impacts (during construction and following construction) and provide recommendation for approval, modification, or denial to deciding body or staff.</li> <li>Submitting party should provide analysis of potential alternatives for all transportation facility projects that includes Safe Systems Approach, Vision Zero, Complete Streets, and Safe Routes to School analysis for all studied alternatives. Document this analysis in a Safe Systems Approach design alternatives report to include within a project's Engineer's Report (or similar) that is included in the project review and approvals process.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS2	Analyze City staff and department structure to provide holistic response to safety needs and realize efficiencies in staff and other resources.	2025	Planning, Engineering, Public Works, Administration	None
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Intended to determine if existing government structure is effective at championing study and implementation of safety in the City's transportation system or if combining or restructuring departments (particularly the Planning and Transportation, Engineering, and Public Works departments) will result in a more efficient and effective delivery of the action items in this report.</li> </ul>				

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS3	Modify existing fatal crash analysis structure	2025	Engineering (development); Engineering, Planning, Fire, Police (participation)	Additional staff position (engineering) to review data, coordinate meetings, and report findings
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Schedule a regular (monthly or quarterly as needed) meeting with engineering, planning, fire, police, EMS, other jurisdictions (INDOT, Monroe County), and public health professionals to discuss methods for improving data collection, analyze contributing factors, and identify potential short- and long-term solutions to address crash causes.</li> <li>Expand to include serious injury crashes as staffing allows.</li> <li>Provide brief report on crash data and findings to Advisory Transportation Committee (see PPGS1).</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS4	Develop and/or revise City standard details for driveways, sidewalks, bikeways, etc. that integrate Safe Systems Approach design principles	2025	Engineering	Funding (\$50,000 estimated consultant cost)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Add standard details for sidewalks, driveways, bikeways, RRFBs, traffic signals, safety countermeasures provided in <b>Appendix C: Proven Safety Countermeasures</b>, etc. that currently do not exist but contribute to safety for all transportation users.</li> <li>Revise existing details (such as pavement markings) to reflect latest safety research and data. For example, increase lane line striping to 6" width and default to continental/block, "ladder", or other high-visibility crosswalk striping.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS5	Revise land use and zoning standards to support transportation safety	2025	Planning	Planning staff
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Promote redevelopment and new development that encourages slow vehicle speeds, mode shift to non-personal vehicle transportation, and funds adjacent transportation safety projects.</li> <li>Utilize development opportunities to meet other goals, such as filling in sidewalk gaps, intersection improvements, and road diets.</li> <li>Utilize proactive land use planning, such as small area plans, to inform potential developers of future land use intent.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS6	Develop appropriate truck turning standards and evaluate existing roadway system for excessive curb radii	2025 (development), 2027 (evaluation)	Engineering	Additional Engineering staff

<p>Additional information:</p> <ul style="list-style-type: none"> <li>Evaluate appropriate design vehicles and accommodation/control vehicles for various street typologies from the 2019 Transportation Plan and surrounding land use context.</li> <li>Identify areas with excessive curb radii, roadway/lane widths, etc. based on AutoTURN or other truck turning software following established design and control vehicle standards.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS7	Enhance robustness of crash data by improving quality and consistency of crash reporting and by collaborating with EMS, hospital, and trauma facilities to identify instances of potential crash underreporting	2026	Planning, Police, Engineering, Fire	Staff member to facilitate coordination and communication
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Historical crash data for Indiana has been challenging to analyze and compare.</li> <li>Historically marginalized communities may avoid reporting injury crashes to law enforcement but likely will seek medical attention for injuries.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS8	Identify criteria or universal adoption of signal-related pedestrian and bicycle safety improvements	2026	Engineering	Funding (\$5,000 estimated consultant cost)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Examples include No Turn on Red, Leading Pedestrian and/or Bicycle Intervals, Pedestrian Scrambles, and Rest-In-Red.</li> <li>Prioritize implementation in high priority areas and all new signal installations.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS9	Evaluate transit availability, routing, incentives, and usage to promote mode shift from personal vehicles to transit	2027	Planning, Transit, Transportation Demand Manager	Funding (\$250,000 estimated consultant cost for evaluation)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Consider additional incentives, such as free or reduced fares to select groups or all riders, to encourage transit usage during events and for commuting.</li> <li>Continue to promote transit usage for City employees, and consider expanding further to additional employers.</li> <li>Study proactive expansion of the transit system through additional routes and/or reducing headways to enhance desirability of transit usage, including mid-day, night, and weekend service.</li> <li>Enhance accessibility of system (shelters, boarding zones) to ensure availability to all users regardless of physical ability.</li> <li>Increase potential for mode shift away from personal vehicles and toward transit, reducing system kinetic energy and helping the City meet climate goals.</li> <li>Focus first on filling gaps in the sidewalk network between ends of two existing sidewalks before adding sidewalks to areas where they do not currently exist.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed

PPGS10	Prepare an annual report highlighting progress made toward zero deaths/serious injuries goal, and present to City Council and Advisory Transportation Commission	2025	Planning	Funding (\$5,000 estimated consultant cost to establish report template)
Additional information:				
<ul style="list-style-type: none"> <li>Also post to City website, social media, and in locations accessible to the public.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS11	Explore establishing a citywide 20 mph speed limit and/or slower speed zones in school areas	2025	Planning	Funding (\$5,000 estimated consultant cost for background information report)
Additional information:				
<ul style="list-style-type: none"> <li>Other slower speed zones, such as neighborhood slow zones, may also be considered as part of this effort.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS12	Identify and develop prioritization plan for eliminating sidewalk and bikeway gaps and reducing barriers to use	2026	Planning	Funding (\$25,000 estimated consultant cost to complete)
Additional information:				
<ul style="list-style-type: none"> <li>Use available city data and public input to prioritize improvements.</li> <li>Projects along roadways with a high number of VPD and higher vehicle speeds should be given greater priority in the prioritization plan.</li> <li>Incorporate criteria similar to those used in the 2022 Sidewalk Evaluation Matrix developed by the Council Sidewalk Committee.</li> <li>Prioritize construction of at least one side of sidewalk where none currently exist and to fill in gaps in existing sidewalks.</li> <li>Where available right of way and roadway geometrics allow, provide physical horizontal and vertical separation between roadway and sidewalk/bikeway.</li> <li>Increase potential for mode shift away from personal vehicles and toward active transportation, reducing system kinetic energy and helping the City meet climate goals.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS13	Analyze sight distance and visibility of all roadway users at intersections and midblock crossings	2027	Engineering	Additional Engineering staff

Additional information:

- Coordinate with Public Works staff to remove any barriers to sight distance within the City's control (such as low-hanging tree branches and vegetation).
- Develop a list of items within the property of others (such as private property owners) and items by others within City right-of-way (such as utility poles and boxes) that block visibility. Begin coordination with such parties to remove such obstacles.
- Update City code to include clear sight distance requirements.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS14	Train all planning, engineering, and other appropriate staff in Safe Systems Approach topics to ensure a culture of safety among City staff charged with implementation of the adopted goal	2026	Planning (development)	Funding (\$10,000 estimated consultant cost for developing training materials and one round of delivery)

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS15	Develop Safe Routes to School Program for all public and private preschools, elementary schools, middle schools, and high schools within City limits	2026	Planning	Funding (\$75,000 estimated consultant cost for developing plan)

Additional information:

- Intended to provide extra prioritization to improvements within school walksheds.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS16	Evaluate equity in application records and project selection process in existing City programs	2026	Planning	Funding (\$25,000 estimated consultant cost for analysis)

Additional information:

- Includes Sidewalk Repair Assistance program, Traffic Calming program, Neighborhood Greenways program, and others as needed.
- Conduct outreach to confirm Priority communities have the resources to apply to these programs, and provide resources as needed to address any barriers or shortfalls for these communities.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS17	Develop list of City advocacy items targeted toward state decision-makers and pursue lobbying or other advocacy for these items	2025	Planning	Lobbyist

Additional information:

- Examples include support for automated speed enforcement camera authorizing legislation, automated red light enforcement authorizing legislation, and expansion of extraterritorial zoning to include approval of transportation facility construction standards.

## Safety Studies and Infrastructure

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SS11	Undertake corridor-wide safety analysis and project planning efforts on at least one large (greater than 1 mile) corridor or multiple smaller corridors per year	2025-2039	Planning	Funding (Cost varies by corridor; suggest beginning with \$250,000 per year adjusted for inflation)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Suggested to follow prioritization scoring within this report. The top 4 scoring corridors that are not currently under evaluation at the time of this report (excluding INDOT highway corridors) are: <ul style="list-style-type: none"> <li>E/W 3rd Street (Jackson Street to SR 46)/Atwater Avenue (Dunn Street to Mitchell Street)</li> <li>College Mall Road (E 3rd Street to Covenant Drive)</li> <li>W 3rd Street (I-69 to Kirkwood Avenue)</li> <li>Dunn Street (E 3rd Street to E 10th Street)</li> </ul> </li> <li>Prioritization may be adjusted to take advantage of adjacent land use changes, additional public and private funding (grants, partnerships, etc.), projects initiated by other jurisdictions (such as INDOT), and other factors as deemed advantageous by City staff.</li> </ul>				

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SS12	Study appropriate rapid-implementation, low-cost safety countermeasures at all intersections along the High Priority Network, and design and implement countermeasures at half of the High Priority Network intersections as appropriate	2025 (study); 2026 (design and implementation)	Engineering	Funding (Cost varies by int.; suggest budgeting \$500,000 per intersection for planning and design, \$1,600,000 for implementation)

Additional information:

- Assumes that not all intersections on the High Priority Network will be appropriate for rapid-implementation countermeasures.
- Assumes paint/post type curb extensions at 4 corners of a typical intersection or median refuge island on 4 legs of a typical intersection at approximately 150 intersections. Estimate does not include adjustments to traffic signals (head moves, additional heads, timing adjustments, left-turn phasing changes, etc.). Estimate assumes no ADA improvements are triggered with rapid-implementation measures, no modifications needed to public or private utilities, and no right of way or easement purchases required. Minor adjustments to signing (such as additional no parking signing) included, but larger scale replacement of signing (such as replacement of all stop signs at the intersection) not included.



Rapid Implementation Pedestrian Crossing With Curb Extensions Recently Installed at College Ave and 14th St

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI3	Conduct before and after analysis of safety improvements, especially rapid-implementation improvements, to assess effectiveness and refine existing and future applications	2026 (development), Ongoing (implementation)	Engineering	Intern or EIT position to do analysis and develop report on results

Additional information:

- Intended to evaluate both past permanent countermeasure installation to ensure effectiveness and to evaluate rapid-implementation items to determine whether to install on a permanent basis.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI4	Pursue funding (or procure locally) and design permanent safety countermeasures at up to 50 intersections (to be constructed in action item SSI2).	2027	Engineering	Funding (Approx. design cost \$750,000) and additional Engineering staff to administer

Additional information:

- Assumed to be designed with local funding (typically, federal grant funding does not cover design work prior to execution of a grant agreement).
- To be constructed in medium-term action item SSI19.
- Assumes treatments limited to retrofit type items such as curb extensions or pedestrian refuge crossings and any minor utility adjustments required by such improvements.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI5	Initiate discussion with INDOT regarding improvements to state highway facilities	2025	Engineering, Planning	None

Additional information:

- This item is only for coordination and discussion with INDOT. Corridor study, design, and construction of improvements assumed in medium-term and long-term action items.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI6	Design sidewalk and bikeway gap closures up to identified funding level	2027	Engineering	Funding (Suggest \$500,000) and additional Engineering staff to administer

Additional information:

- This item is only for design of closure of sidewalk and/or bikeway gaps. Construction will follow in medium-term and long-term action items.
- Use prioritization plan in PPGS12 to determine which gaps to design.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI7	Implement lighting improvement program for intersection visibility and personal safety	2027 (development); Ongoing (implementation)	Engineering, Planning, Public Works	Funding (\$150,000 estimated consultant cost for analysis; suggest \$250,000 annually for implementation) and additional Engineering staff to administer

Additional information:

- May require UDO update to allow for appropriate lighting types and levels.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI8	Develop Road Safety Audit materials, checklists, etc. for use in execution of proactive and reactive Road Safety Audits, and conduct Road Safety Audits on at least 2 additional 1-mile corridors by the goal year	2027	Engineering	Funding (\$10,000 estimated consultant cost for development of materials; \$200,000 for conducting audits)

Additional information:

- Staff time also required to participate in Road Safety Audit process.
- Road Safety Audit materials could be repurposed from existing materials readily available developed by others.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI9	Develop long-range capital planning (10+ years, ideally through safety goal year) to coordinate safety improvements with other capital needs (such as pavement preservation and underground utility replacements) to achieve future project cost savings	2026	Planning, Engineering, Public Works, Parks, Administration, Office of The Controller	None

Additional information:

- Significant additional study may be needed to project City infrastructure preservation and replacement needs in the future if such information does not currently exist (would require significant additional funding for study).

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI10	Complete design and construct College Avenue/Walnut Street project	2027 (Design) 2030 (Construction)	Engineering	Design and construction funding (to be determined based on cost estimate for the project)

Additional information:

- 48 • Secure local and/or federal funding to construct identified improvements to College Avenue and Walnut Street.

# Medium Term Action Items (2027-2034)

## Policies, Processes, and Government Structure

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS18	Catalyze redevelopment of land use along HPN corridors from unsupportive to supportive of safety enhancement and multimodal mobility	2030 (first corridor), Ongoing thereafter	Planning	Further analysis needed of funding or other resources
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Exact mechanisms to catalyze land use shifts to be determined based on corridor. Examples could include zoning changes, tax increment financing, public or non-profit land banking, etc.</li> <li>Goal year does not indicate that land use on a corridor will completely change by the goal year but rather all redevelopment incentives are in place and redevelopment has begun occurring along the corridor.</li> </ul>				



Compact Intersections with Buildings Close To The Street Make Walking More Comfortable

## Safety Studies and Infrastructure

Continuation of Short-Term Items:				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI1 (Cont.)	Undertake corridor-wide safety analysis and project planning efforts on at least one large (greater than 1 mile) corridor or multiple smaller corridors per year	2025-2039	Planning	"Funding (Cost varies by corridor; suggest beginning with \$250,000 per year adjusted for inflation)"
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI3 (Cont.)	Conduct before and after analysis of safety improvements, especially rapid-implementation improvements, to assess effectiveness and refine existing and future applications	2026 (development), Ongoing (implementation)	Engineering	Intern or EIT position to do analysis and develop report on results
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI7 (Cont.)	Implement lighting improvement program for intersection visibility and personal safety	2027 (development); Ongoing (implementation)	Engineering	Funding (Suggest \$250,000 annually for implementation)
New Medium-Term Action Items:				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI11	Implement annual program for addressing sight distance issues beyond those easily correctable by Public Works staff	2028-2039	Engineering	Funding (Suggest \$200,000 annually)
Additional information:				
<ul style="list-style-type: none"> <li>Intended to provide funding to move utility poles/boxes, landscaping, and other items that are obscuring necessary sight triangles at intersections.</li> <li>Revisit funding annually to determine appropriate budget level to complete removal of sight obstructions by zero deaths and serious injuries goal year.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI12	Reanalyze High Injury Networks every 5 years per SS4A program requirements	2029	Planning	Funding (\$50,000 estimated consultant cost)
Additional information:				
<ul style="list-style-type: none"> <li>Estimate includes only reanalysis of the High Injury Network and project management. Cost does not include full redevelopment of a new SS4A Action Plan.</li> </ul>				

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI13	Construct designed sidewalk and bikeway gaps in item SSI6	2028	Engineering	Funding (Approx. \$3.5 million construction and engineering cost)
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI14	Design additional sidewalk and bikeway gap projects per funding level budgeted	2028 (begin); Ongoing thereafter	Engineering	Funding (Suggest \$200,000 annually)

**Additional information:**

- City staff should evaluate budgeted amount to determine if it is adequate to achieve the goal of closing all sidewalk and bikeway gaps by the zero fatalities and serious injuries goal year. Adjust budget as needed.
- This action item is intended to be a standalone project apart from other action items in this list, such as reconstructions of priority corridors.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI15	Lead corridor studies, preliminary, and final design of improvements to INDOT facilities (one per year beginning in 2029)	2029 (begin)	Planning, Engineering	Additional information needed to determine funding levels (INDOT cost participation, scope of improvements, etc.); Suggested budgeting \$1 million per year starting in 2029

**Additional information:**

- Assumption that City will need to lead the project development process but follow INDOT policies, procedures, etc.
- Refine budget amount when scope of improvements are identified.
- Funding amounts listed assume INDOT does not participate in cost sharing for these corridor studies and design efforts.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI16	Complete preliminary and final design on projects with corridor studies developed in SSI1 at a rate of at least one per year. Construct with available local, partnership, and/or grant funding as available and applicable	2028 (begin)	Engineering	Funding levels to be scoped through corridor planning efforts
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Exact funding amounts cannot be estimated at this time due to unknowns of project scope, termini, timing, etc.</li> <li>Per mile costs for resurfacing and reconstruction costs can be based on past bid experience or on general resources such as the Status of the Nation's Highways, Bridges, and Transit report produced by FHWA. See Exhibit A-6 in 25th edition of the Status of the Nation's Highways, Bridges, and Transit for FHWA assumed costs per lane mile as of the time of creation of this report. Typical design costs range from 10% to 15% or more depending on complexity and scale of the project.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI17	Perform one additional 1-mile or longer Road Safety Audit per year (or multiple smaller corridors)	2028 (begin)	Engineering	Funding (Suggest \$100,000 annually)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Evaluate funding amount annually to ensure funding levels contribute to meeting zero fatal and serious injury goal.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI18	Revisit prioritization of improvements annually based on funding, design constraints, High Injury Network updates, coordination with other projects, additional funding sources, etc.	2028 (begin), Ongoing thereafter	Planning	None
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Flexibility is encouraged if conditions, analysis, funding sources, etc. change over time.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI19	Construct permanent safety countermeasures designed in item SSI4	2028	Engineering	Funding (Approximate construction cost: \$5 million)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>Suggested to pursue SS4A Implementation Grant funding to achieve this action item.</li> </ul>				

# Long Term Action Items (2035-2039)

## Policies, Processes, and Government Structure

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS18	Catalyze redevelopment of land use along HPN corridors from unsupportive to supportive of safety enhancement and multimodal mobility	2030 (first corridor), Ongoing thereafter	Planning	Further analysis needed of funding or other resources
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
PPGS19	Confirm zero fatal and serious injury goal met or adjustment to goal. If goal is not met, reanalyze and adjust action plan items as needed to support expedited progress toward new goal	2039	Planning	Funding (\$250,000 to complete new SS4A Action Plan if needed)
<p>Additional information:</p> <ul style="list-style-type: none"> <li>• Goal should strive to be met as much as possible. Adjustment of goal should only be necessary if unforeseen conditions arise to make goal unattainable in the time period forecasted.</li> </ul>				

## Safety Studies and Infrastructure

Continuation of Medium-Term Action Items:				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI1 (Cont.)	Undertake corridor-wide safety analysis and project planning efforts on at least one large (greater than 1 mile) corridor or multiple smaller corridors per year	2025-2039	Planning	"Funding (Cost varies by corridor; suggest beginning with \$200,000 per year adjusted for inflation)"
Additional information:				
<ul style="list-style-type: none"> <li>Reevaluation of rate of corridor studies is encouraged in approximately year 2035 to determine if rate of studies and construction is sufficient to meet zero fatalities and serious injuries goal.</li> </ul>				
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI3 (Cont.)	Complete preliminary and final design on projects with corridor studies developed in SSI1 at a rate of at least one per year. Construct with available local, partnership, and/or grant funding as available and applicable	2028 (begin)	Engineering	Funding levels to be scoped through corridor planning efforts
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI7 (Cont.)	Implement lighting improvement program for intersection visibility and personal safety	Ongoing (implementation)	Engineering	Funding (Suggest \$250,000 annually)
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI16 (Cont.)	Complete preliminary and final design on projects with corridor studies developed in SSI1 at a rate of at least one per year. Construct with available local, partnership, and/or grant funding as available and applicable	2028 (begin)	Engineering	Funding (Suggest \$100,000 annually)
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI17 (Cont.)	Perform one additional 1-mile or longer Road Safety Audit per year (or multiple smaller corridors)	2028 (begin)	Engineering	Funding (Suggest \$100,000 annually)
ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI18 (Cont.)	Revisit prioritization of improvements annually based on funding, design constraints, High Injury Network updates, coordination with other projects, additional funding sources, etc.	Ongoing	Engineering	None

# Safety Countermeasure Toolkit

To achieve zero roadway fatalities and serious injuries by 2039, the City of Bloomington will need to comprehensively address roadway safety issues in the region, starting with the priority corridors in Figure 25 and priority intersections in Figure 26. FHWA's Proven Safety Countermeasures are specific design or operational changes to streets that have been proven nationally to improve safety. Selection and design of safety countermeasures on every street project in the city should be decided through the lens of the Safe System Approach, so that if a crash occurs it will likely not result in a fatal or serious injury. Safety countermeasures should not be compromised or simplified during the design or construction phases. These modifications can reduce the level of safety for all road users.

A set of cut sheets describing each Safety Countermeasure are included in [Appendix C: Proven Safety Countermeasures](#).

## High Priority Corridors & Intersections

The actions defined in the previous sections will help to institutionalize the practices, policies, and programs that will make Bloomington's streets safer for all residents. These actions will be complemented by on-the-ground safety improvement projects that will be designed using Safe Systems Approach principles and the Safety Countermeasures Toolkit, and informed by the crash factors we identified as part of our crash analysis and creation of the High Risk Network.

Eventually, the City hopes to address all the High Risk Network issues with improved design and practices, but we need to start somewhere. Using information from the crash analysis, community input, and best practices, the following corridors were selected as "Priority Corridors," meaning the City will focus on improving these roadways in the near term.

The streets and intersections shown on the priority corridors and priority intersections were scored using a combination of the following factors:

### Intersections:

- Vehicle-only High Injury Network: calculated as amount of vehicle-only FSI crashes / highest intersection amount of vehicle-only FSI crashes X 20 points
- Vulnerable Road User High Injury Network: calculated as amount of VRU FSI crashes / highest intersection amount of VRU FSI crashes X 25 points
- High Risk Network:
  - One or more roadway legs on Critical All-Users High Risk Network: 20 points
  - One or more roadway legs on High All-Users High Risk Network: 10 points
  - No roadway legs on High or Critical All-Users High Risk Network: 0 points
  - Intersections with roadway legs on both High and Critical All-Users High Risk Network received 20 points
- Equity (Bloomington MPO Environmental Justice Mapping)
  - Intersection bordering or within "High Concentration of EJ Populations": 15 points
  - Intersection bordering or within "Medium-High Concentration of EJ Populations": 7.5 points
  - Other intersections: 0 points
- Public Input (Online Webmapping + In-Person Safety Week Activities)

- Intersection received 6+ negative comments: 20 points
- Intersection received 4-5 negative comments: 15 points
- Intersection received 2-3 negative comments: 10 points
- Intersection received 1 negative comment: 5 points
- Intersection received no negative comments: 0 points
- All intersections with one or more INDOT-controlled legs separated from prioritization scoring
- Maximum score possible: 100 points
- Maximum score achieved: SR 45/46 at College Avenue/Walnut Street (82 points)
- Maximum score achieved at City-controlled intersection: College Avenue and W 3rd Street (68 points)
- Scoring tiers:
  - Highest: Scores above 40
  - High: Scores between 26 and 40
  - Medium: Scores between 18 and 25
  - Medium-Low: Scores between 1 and 17
  - Low: Intersections not scored assumed to be low due to not being on high injury or high risk networks
- Other corridors: 0 points
- Public Input (Online Webmapping + In-Person Safety Week Activities)
  - Greater than 20 negative comments per mile: 20 points
  - 15-20 negative comments per mile: 15 points
  - 8-14 negative comments per mile: 10 points
  - >0-7 negative comments per mile: 5 points
  - Corridor received no negative comments: 0 points
- All INDOT-controlled corridors separated from prioritization scoring
- Maximum score possible: 100 points
- Maximum score achieved: E/W 3rd Street (Rogers Street to SR 46) (80 points)
- Scoring tiers:
  - Highest: Scores above 50
  - High: Scores between >34 and 50
  - Medium: Scores between >24 and 34
  - Medium-Low: Scores between >0 and 24
  - Low: Corridors not scored assumed to be low due to not being on high injury or high risk networks

### Corridors:

- Vehicle-only High Injury Network: calculated as max segment vehicle-only FSI crash score / highest max segment vehicle-only FSI crash score X 20 points
- Vulnerable Road User High Injury Network: calculated as max segment VRU FSI crash score / highest max segment VRU FSI crash score X 25 points
- High Risk Network:
  - Roadway corridor on Critical All-User High Risk Network: 20 points
  - Roadway corridor on High All-User High Risk Network: 10 points
  - Roadway corridor not on Critical or High All-User High Risk Network: 0 points
- Equity (Bloomington MPO EJ Mapping)
  - Corridor bordering or within "High Concentration of EJ Populations": 15 points
  - Corridor bordering or within "Medium-High Concentration of EJ Populations": 7.5 points

Figure 25 and Figure 26 show the priority corridors and intersections grouped by highest, high, medium, and medium-low priority. Streets that are a priority but are owned by INDOT are labeled "INDOT" jurisdiction. These streets will likely have a different process for implementing safety countermeasures than City-owned streets that requires additional coordination and time to implement.

Corridors and intersections not noted as high priority in the following figures should still be analyzed for safety improvements with other projects (such as pavement preservation or reconstruction projects) as they arise.

# Strategies and Projects Prioritization: Priority Corridors

## Legend

Weighted scores of corridors within the study area

- █ Highest
- █ High
- █ Medium
- █ Medium-Low
- █ INDOT Jurisdiction

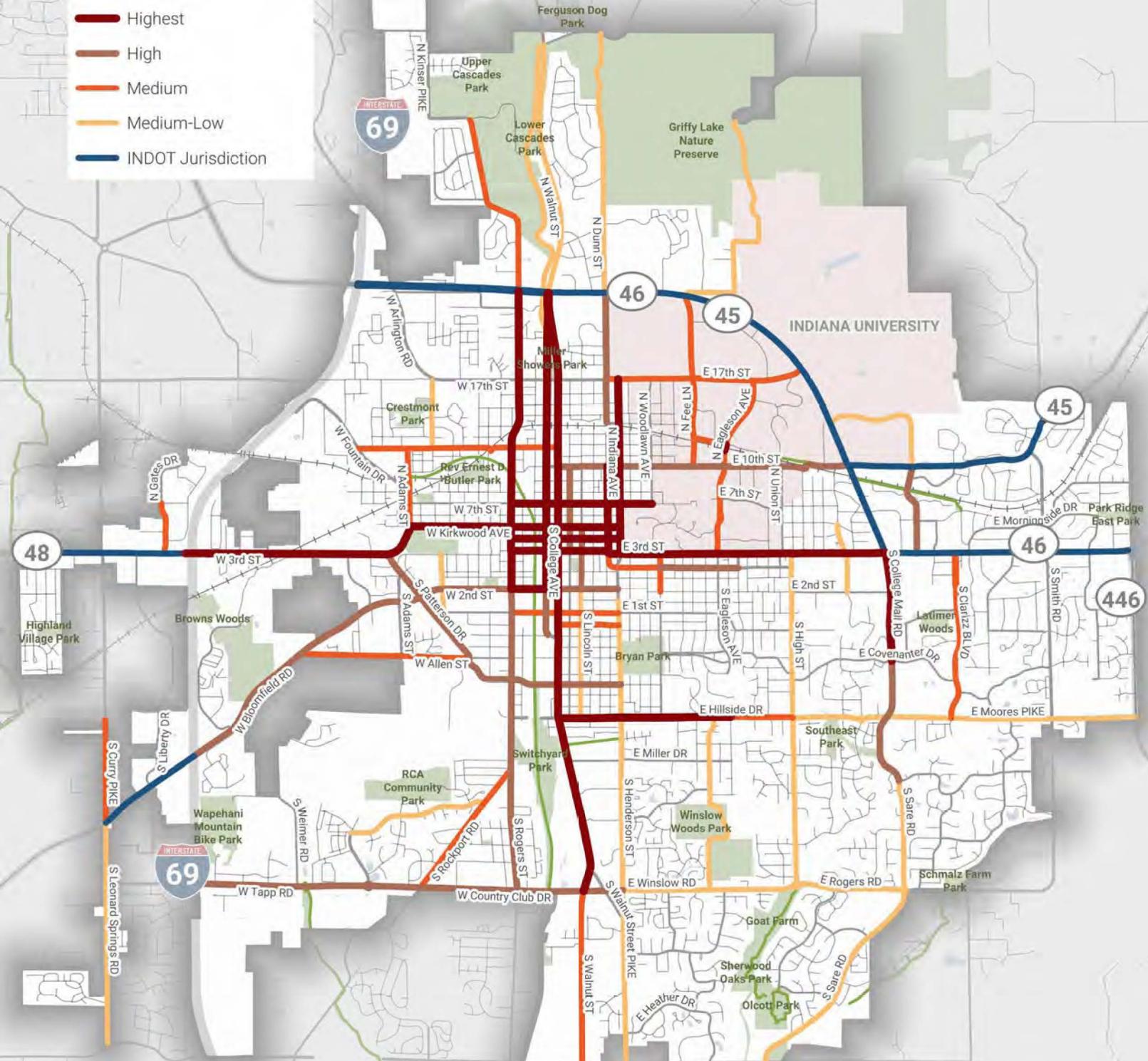


Figure 25. Priority Corridors for Safety Countermeasures

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# Strategies and Projects Prioritization: Priority Intersections

## Legend

Weighted scores of intersections within the study area

- Highest
- High
- Medium
- Medium-Low
- INDOT Jurisdiction

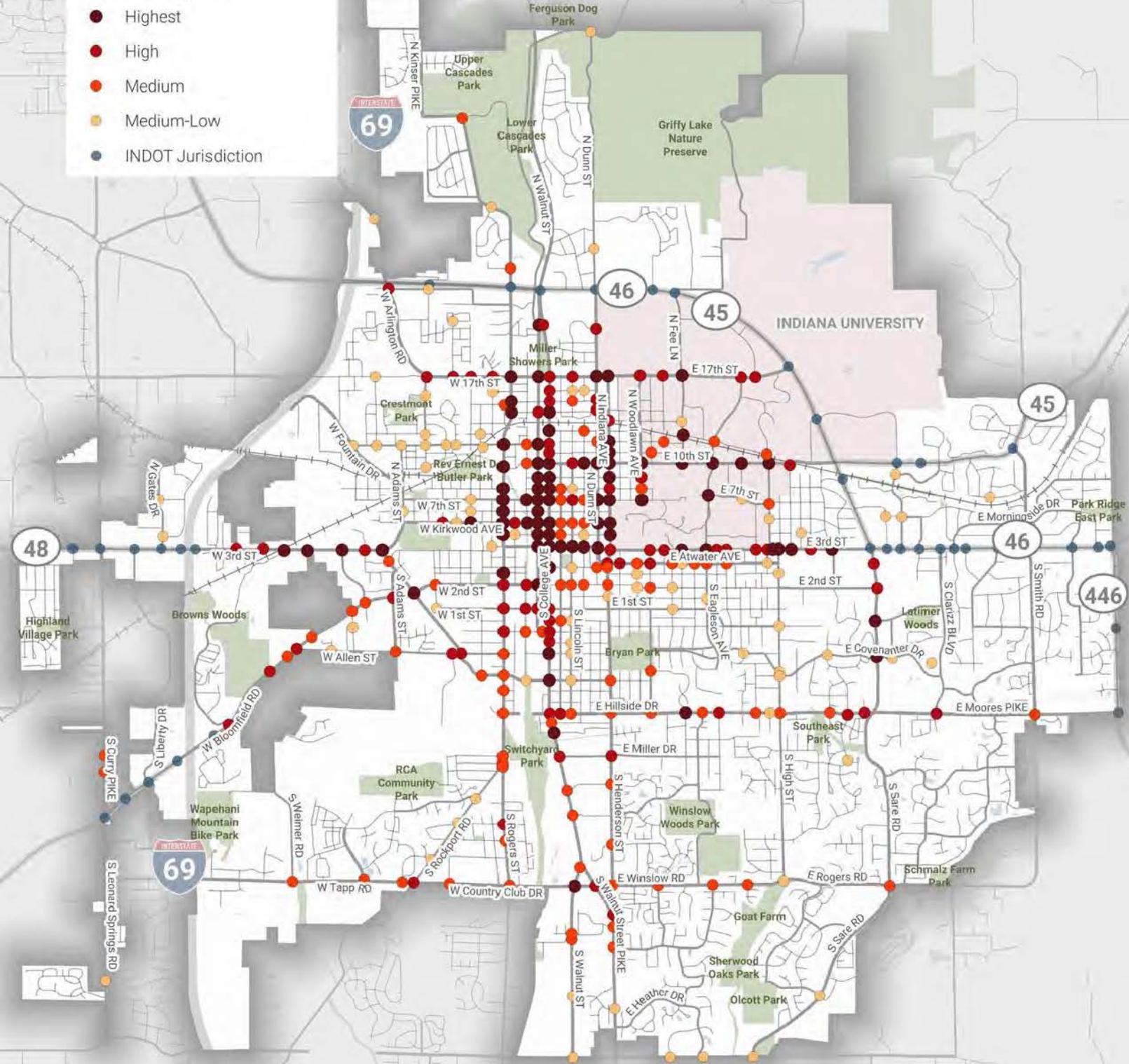


Figure 26. Priority Intersections for Safety Countermeasures

# Progress & Moving Forward

**This plan is full of actions, strategies, and projects that will help reduce fatal and serious injuries on Bloomington’s roadways. However, this plan needs to be embraced, discussed, emphasized, implemented, and reinforced every day as decisions are made, projects are built, and people move around the community.**

The actions, strategies, and projects described in this plan are a transformative step for Bloomington and may not come naturally or easily. Thus, it is important to track what is (and, perhaps, isn't) happening and how (or if) actions are resulting in safer streets so the plan can be modified to ensure success.

## Performance Measures & Annual Reporting

It is essential that there are regular public conversations about Bloomington’s roadway safety and progress toward zero deaths and serious injuries. To institutionalize these conversations, the City will produce an annual report that will be posted on their website and publicized through its main communication channels. The annual report should include performance measures based on data from the Safety Action Plan and countermeasures listed in Appendix C: Proven Safety Countermeasures. The following performance measures should serve as the minimum starting point for annual reporting, as they are expected to have the greatest impact:

Performance Measure
Number of fatal and serious injury crashes
Number of fatal and serious injury crashes involving people walking, biking, or rolling
Number of crashes involving speeding
Number of crashes involving distracted driving
Number of crashes involving driving under the influence (DUI)
Number of rapid implementation intersection safety projects completed
Number of miles of speed management projects completed on HIN streets
Number of action items started
Number of action items completed
Location and number of street segment and intersection improvements (including non-motorized transportation) made on the High Priority Network
Number of road diet/road reconfiguration projects completed
Number of intersection reconstruction projects completed
Number of roundabouts completed
Dollar amount invested in infrastructure improvements along the High Priority Network as a percentage of all transportation projects

# Crash Data Dashboard

A crash data dashboard has been developed for Bloomington to help City staff, stakeholders, and residents easily see and understand crash trends, patterns, and factors around the City. The dashboard will help track progress towards Bloomington's goal of zero deaths and serious injuries by 2039 by providing data on what types of crashes are occurring, where and when they are occurring, and how performance measures are trending.

This dashboard will be updated annually to ensure that what is shown is reflective of the current situation. We encourage this dashboard to be used as an important tool in future conversations about roadway safety in Bloomington. The dashboard can be found at <https://bton.in/SS4Aw>.

## Moving Forward

The creation of this plan was an extensive effort involving elected officials, City staff, Advisory Committees, advocates, community stakeholders, and Bloomington residents. The success of this plan will rely on all these groups and individuals to work together to meet our shared goal of eliminating fatalities on Bloomington's streets by 2039.

**Let's continue this work together into the future. Advocating for and acting on roadway safety for all of Bloomington's residents is everybody's responsibility. Together, we will make our roads safer and save lives.**