BLOOMINGTON TRAFFIC COMMISSION AGENDA October 23, 2024 4:30 P.M. –In-person and Virtual Hybrid meeting City Hall, Council Chambers Online link: <u>https://bloomington.zoom.us/j/6359441221</u> Meeting ID: 635 944 1221 Passcode: COBPT

Dial in: +1 312 626 6799 US (Chicago)

I. Call to Order

II. Approval of Minutes A. None

III. Communications from Commission

IV. Public Comment*

V. Reports from Staff

- A. 180 Day Order: 23-01 All-way stop control at 7th Street and Dunn Street. – Andrew Cibor, PE, PTOE, Engineering Department
- B. 180 Day Order: 24-01 No parking on the south side of W 8th Street from the alley east of Rogers Street to the B-line. *Andrew Cibor, PE, PTOE, Engineering Department*
- C. 180 Day Order: 24-02 2 hour limited parking zone (any time) on the north side of E Wylie Street from S Walnut Street to S Washington Street.
 Andrew Cibor, PE, PTOE, Engineering Department
- D. 180 Day Order: 24-03 A 2 hour limited parking zone (8AM to 5PM) on both sides of S Westplex Avenue from W 3rd Street to the cul-de-sac north of W 3rd Street. – *Andrew Cibor, PE, PTOE, Engineering Department*
- E. Engineering Traffic Fatality Report Andrew Cibor, PE, PTOE, Engineering Department
- F. Safe Streets and Roads for All (SS4A) Safety Action Plan Review *Ryan Robling, Planning and Transportation Department*

VI. Old Business*

- VII. New Business*
- VIII. Adjournment

Next meeting – November 20, 2024 – City Council Chambers

*Action Requested/Public comment prior to any vote (limited to five minutes per speaker)

Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call (812) 349-3429 or e-mail <u>human.rights@bloomington.in.gov</u>.

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Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- To make and enforce temporary regulations;

|X|

1 9 8

To make and enforce experimental regulations;

- To make and enforce regulations necessary to deal with emergencies; and/or
- To make and enforce regulations necessary to deal with special conditions.

In the fall of 2021, all-way stop control was removed from the intersection of 7th Street and Dunn Street in coordination with the multimodal 7-Line project. In the new configuration, 7th Street is free-flow and only Dunn Street has a stop sign. This Request originated from a review of crash data along the corridor and a 7-Line project status report that was requested by the City's Bicycle & Pedestrian Safety Commission, Traffic Commission, and other community members. The crash data for the intersection of 7th Street and Dunn Street shows a significant increase in intersection related crashes that are susceptible to correction with the installation of all-way stop control. In order to reduce crash risk at this intersection, it will be converted back to all-way stop control. Implementation of this change requires installation of appropriate pavement markings and signs. This proposed change was supported by the Bicycle & Pedestrian Safety Commission at their March 2023 meetings. After careful review and consideration the Request has been granted and the following actions will be implemented:

Install all-way stop control at the intersection of 7th Street and Dunn Street.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

Effective Date: 4/12/2023 **Expiration Date:** 4/1/2025

<u>10/4/2024</u> Date

*Reissued on 10/4/2024 to extend expiration from 10/3/2024 to 4/1/2025 under the 180-day Orders Policy.

Case Number: 23-01

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

 \times

To make and enforce temporary regulations;



To make and enforce experimental regulations;

To make and enforce regulations necessary to deal with emergencies; and/or

To make and enforce regulations necessary to deal with special conditions.

This request originated from the Parking Department after noticing some vehicles are parking on the south side of W 8th Street and close to the crosswalk for the B-line. The Ellis apartments removed two drive cuts next to their property at 411 W 8th St and built a new continued curb along the south side of W 8th Street. Modifying parking is necessary to maintain adequate line of sight for the B-line users and to make sure there is adequate lane clearance between traffic and parked vehicles on the north side of the street. After careful review and consideration the request has been granted to:

No Parking will be permitted on the south side of W 8th Street from the alley east of Rogers Street to the B-Line. No Parking signage will be installed to communicate this requirement.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

10/4/2024

Effective Date: 10/10/2024 **Expiration Date:** 4/8/2025

Case Number: 24-01

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- To make and enforce temporary regulations;
- To make and enforce temporary regulations;
- To make and enforce experimental regulations;
- To make and enforce regulations necessary to deal with emergencies; and/or
- To make and enforce regulations necessary to deal with special conditions.

This request originated through coordination with the Police, Public Works, and the Planning & Transportation Departments to address reoccurring issues on the 100 block of E Wylie Street. Parking is currently prohibited on the south side of Wylie between Walnut and Washington but there are no parking restrictions on the north side of Wylie. After careful review and consideration the request has been granted to:

A 2 hour limited parking zone (any time) will be established on the north side of E Wylie Street from S Walnut Street to S Washington Street. Corresponding traffic signage will be installed to communicate this requirement.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

10/4/2024 Date

Effective Date: 10/10/2024 **Expiration Date:** 4/8/2025

Case Number: 24-02

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- To make and enforce temporary regulations;
 - To make and enforce experimental regulations;
 - To make and enforce regulations necessary to deal with emergencies; and/or
 - To make and enforce regulations necessary to deal with special conditions.

This request originated through coordination with the Police, Public Works, and the Planning & Transportation Departments to address reoccurring issues on S Westplex Ave north of 3rd Street. Currently there are no codified parking controls along this facility and the City has received numerous inquiries about instituting parking regulations to address observed long-term parking. After careful review and consideration the request has been granted to:

A 2 hour limited parking zone (8AM to 5PM) and no parking zone (5PM to 8AM) will be established on both sides of S Westplex Avenue from W 3rd Street to the culde-sac north of W 3rd Street. Corresponding traffic signage will be installed to communicate this requirement.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

Expiration Date: 4/8/2025

<u>10/4/2024</u> Date

Effective Date: 10/10/2024

Case Number: 24-03

City of Bloomington Safe Streets and Roads for All Safety Action Plan

DRAFT

October 2024

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.

Table of Contents

| List of Abbreviations and Acronyms | ł |
|--|---|
| Acknowledgements | 5 |
| Bloomington City Staff | 5 |
| Community Advisory Committee | 5 |
| Consultant Team | 5 |
| Background | , |
| |) |
| Vision Zero |) |
| Safe Systems Approach11 | |
| Road Safety and Equity | 2 |
| What We've Already Done | 3 |
| SETTING THE STAGE | ŀ |
| Crash Analysis | 5 |
| High Injury Network | 3 |
| Voices of Bloomington | 2 |
| GETTING TO ZERO | , |
| Immediate or Short Term Action Items (2024-2026) | 3 |
| Medium Term Action Items (2027-2034) | , |
| Long Term Action Items (2035-2039) |) |
| Safety Countermeasure Toolkit | l |
| High Risk Network Priority Corridors and Intersections | 3 |
| TRACKING PROGRESS AND MOVING FORWARD | 5 |
| Performance Measures and Annual Reporting | , |
| Crash Data Dashboard | 3 |
| Moving Forward |) |

List of Abbreviations and Acronyms

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 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 Pedestrian or Bicyclists)

Acknowledgements

Bloomington City Staff

Ryan Robling, Planning Services Manager Karina Pazos, Long Range Planner Hank Duncan, Bicycle and Pedestrian Coordinator Andrew Cibor, City Engineer

Community Advisory Committee

Ann Edmonds, Bicycle & Pedestrian Safety Commission Ben Dalton, Parking Commission Casey Guarino, Council for Community Accessibility Emma Williams, Human Rights Commission Greg Alexander, Traffic Commission Jaclyn Ray, Bicycle & Pedestrian Safety Commission Jillian Kinzie, Plan Commission, MPO Policy Committee Kate Rosenbarger, City Council District II Representative Sarah Ryterband, Traffic Commission, MPO Citizens Advisory Committee

Consultant Team



Dean Chamberlain, Project Manager Jaz Warren, Equity Framework Lead and Planner Drew Parker, Deputy Project Manager Sara Schooley, Engagement Lead and Plan Compilation Sarah Skolaski, Designer and Outreach Support Cassandra Slack, Report Design and Layout

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 (SAP) 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,

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, 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

9

Bloomington is joining an ever-growing number of cities throughout the county 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 will keep all roadway users safe.

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, 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.

Figure 1. "Swiss Cheese Model" of crash causation, Source: FHWA

Road Safety and 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, law enforcement, and climate efforts.

Policies and practices surrounding these systems can create inequitable transportation access for 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.

These practices have led specific demographic groups to disproportionately suffer the burdens of transportation systems. 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.
- 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.
- 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.
- 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 <mark>Appendix</mark> <mark>X. Safe Streets for All Equity Framework.</mark>

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.

Table 1: Summary of Actions and Considerations within Reviewed Documents

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

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, as well as what people think is happening and their thoughts on how to make the situation safer for everybody.

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 or serious injury of 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 street and state highways. There were 262 fatal or serious injury crashes on arterial streets or state highways (59% 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 5. Percentage of Streets by Speed Limit

Figure 6. Percentage of FSI Crashes by Speed Limit

DRAFT October 2024 Figure 7. Location of Fatal or Serious Injury Crashes, 2019-2023



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

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.

18

Figure 8. Speed Limits of Streets in Bloomington



Figure 9. Functional Class of Streets in Bloomington



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

Top Primary Contributing Factors, 2019-2023



40% of fatal and serious injury crashes 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.



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

The crash dataset used to create the High Injury Network was fatal and serious injury (FSI) crashes from the years 2019 through 2023. Roads were analyzed using a sliding window-type analysis approach with a step size of 0.1 miles and a window size of 0.5 miles, producing smoothed crash frequencies. Crashes which occurred near intersections were assigned to all intersection approaches within 10 meters to account for corridors patterns that traverse intersections.

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, summarizing the total number of crashes on each roadway segment 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)
- Scooter 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

DRAFT October 2024 Figure 12. High Injury Network - All Modes



DRAFT October 2024 Figure 13. High Injury Network - Motor Vehicle Crashes



DRAFT October 2024 Figure 14. High Injury Network - Pedestrian Crashes





Figure 16. High Injury Network - Scooter Crashes



DRAFT October 2024 Figure 17. High Injury Network - Vulnerable Road Users (Pedestrian and Bicyclist)



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 (≤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.
DRAFT October 2024 Figure 18. High Risk Network - Facility Profile Analysis



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, 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 (Plan, Parking, Community Accessibility, Human Rights, Bicycle and Pedestrian Safety, and Traffic), City Council, and MPO staff. Project staff meet 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 X.

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 is it 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. Reponses 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.





• 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 pedestrians' 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?

| 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?

| 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?

| 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?

| 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 |

 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 St.). Respondents identified arterial and collector roadway segments, such as College Avenue, Walnut Street, and East 3rd Street where a higher degree of bicycle and pedestrian traffic occurs, particularly 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 |

Table 2. Summary of safe and unsafe location webmap attributes

| "This Location is Safe Because" | Count | "This Location is Unsafe Because" | Count |
|---------------------------------|-------|--|-------|
| | | 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 |

GETTING TO ZERO

37

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 five categories:

- Communication and Integration into Existing City Business.
- Design Standards and Data.
- Project Programming, Development, and Funding.
- Government Committees and Structure.
- Project Prioritization.

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

- 1. Immediate or Short Term (2024-2026)
- 2. Medium Term (2027-2034)
- 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 the 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 that following actions, other contributing factors will need to be accounted for.

Immediate or Short Term Action Items (2024-2026)

Communication and Integration Into Existing City Business

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|---|-----------------------|------------------------------|
| CI1 | Integrate language that communicates safety goals into policy and City processes, such as public outreach, enforcement, development review, street design and planning, and other areas where safety may not be currently prioritized | 2025 (development), Ongoing (implementation) | All departments | None |
| CI2 | Update existing plans to incorporate data from and/or attach the SS4A Action Plan | 2025 | Planning | None |
| CI3 | Establish regular targeted outreach to various neighborhoods and civic groups to collect feedback on transportation safety issues and progress (examples include neighborhood groups, advocacy organizations, IU students and staff, religious organizations) | 2025 (development), Ongoing (implementation) | Planning | Planning staff |

| | | october 2024 | | |
|--------|--|---|---|------------------------------|
| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
| Cl4 | Utilize existing events to promote safety messaging and collect feedback (examples include Bloomington Community Farmers' Market, annual City festivals) | 2025 (development), Ongoing (implementation) | Planning | Planning staff |
| CI5 | Develop a Community Engagement Plan (CEP) for safety projects that includes set goals, engagement strategies, community partners, engagement timelines, and methods for integrating feedback into the project. Establish a scale to determine dollar amount or impact level that requires certain engagement strategies. | 2025 (development), Ongoing (implementation) | Planning | Planning staff |
| CI6 | 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. Materials should be provided in English and Spanish at a minimum and should consider translation into other languages as needed. | 2025 (development), Ongoing (implementation) | Planning | Planning staff |
| CI7 | Consider creation of a program to involve community members, groups, and organizations in conducting and participating in engagement efforts. Consider establishing community ambassadors to employ for engagement efforts and establish funding source to provide fair compensation and necessary resources for ambassadors. | 2026 (development), Ongoing (implementation) | Planning, Advisory Transportation Commission | Funding, Planning staff |
| C18 | Invest in a public communication campaign, focusing on shifting culture towards multimodal travel and educating transportation users about safety in all modes of travel. 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.). Also includes information and training to local media around understanding crash data, minimizing victim blaming, and high-level understanding of SS4A efforts. | 2026 (development), Ongoing (implementation) | Planning | Funding, Planning staff |

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|--|---|-----------------------|------------------------------|
| CI9 | Collaborate with local groups and advocates for walking, biking, and vulnerable road user groups to expand the reach of SS4A efforts. Includes collaboration with these groups to host events that promote and advocate for walking, rolling, biking, and taking transit. | 2025 (development), Ongoing (implementation) | Planning | Funding, Planning staff |

Design Standards and Data

| Design S | Standards and Data | | | |
|----------|--|---|--------------------------|---|
| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
| DS1 | Develop and/or revise City standard details for driveways, sidewalks, bikeways, etc. that integrate Safe Systems approach design principles and details | 2025 | Planning, Engineering | Planning and Engineering Staff |
| DS2 | Encourage testing of new safety countermeasures and monitor before/after condition data, lessons learned, feedback received, and best practices. | Immediate (ongoing) | Engineering | None |
| DS3 | Revise (as appropriate) land use and zoning to promote redevelopment and new development that complements slow vehicle speeds, encourages trips outside of personal vehicles (e.g., providing covered bike parking), and funds adjacent transportation safety projects. | 2025 | Planning | Planning staff |
| DS4 | Establish a policy that states that safety improvements take priority over motor vehicle operations and capacity. | 2024 | Planning | None |
| DS5 | Develop or invest in a system to collect vehicle speed data throughout the City | 2026 (development), Ongoing (implementation) | Engineering, Police | Funding; Engineering and/or Police staff |
| DS6 | Identify criteria or universal adoption of installation of "No Turn on Red", Leading Pedestrian/Bicycle Intervals, Rest-In- Red, and Pedestrian Scramble crossings, prioritizing implementation on the HPN and other high pedestrian areas | 2025 | Engineering | Engineering staff |

| | | October 2024 | | |
|--------|--|---|--------------------------|---|
| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
| DS7 | Analyze sight distance and visibility of all roadway users at intersections and midblock crossings. Adopt policies to remove features that obstruct visibility at these locations and prohibit such obstructions from being constructed at new locations. | 2026 | Planning, Engineering | Planning and/or Engineering staff |
| DS8 | Establish truck turning standards (design and control vehicles) based on reasonable truck usage and assess existing intersections to determine locations of oversized curb radii. | 2026 | Engineering | Engineering staff |
| DS9 | Incorporate speed and other safety analysis data into transportation elements of future planning efforts. | 2025 (development), Ongoing (implementation) | Planning | Planning staff |
| DS10 | Improve access to and understanding of crash data by working with departments to improve the quality and consistency of police crash data; study the intersection of crash data and EMS, hospital, and trauma registry data for crash connections; and work with community partners to access detailed crash data. | 2026 | Planning, Police | Planning and Police staff |
| DS11 | Conduct before and after analysis of safety improvements to assess effectiveness and refine future applications | 2025 (development), Ongoing (implementation) | Engineering | Engineering staff |
| DS12 | Assess quantitative data (design changes, past crashes, multimodal capacity counts, speed data, turning movement counts, transit boarding and alighting surveys, reduction in greenhouse gas emissions, air quality, tree canopy, high heat intensity areas, etc.) and qualitative data (intercept surveys, public surveys, walk audits, focus groups, surveys to identify commute mode, etc.) regularly to determine whether actions taken are meeting safety and other goals | Ongoing | Engineering, Planning | Funding; Engineering and/or Planning staff |

DRAFT October 2024 Project Programming, Development, and Funding

| Number | Description | Interim Goal | Who Is | Addl. |
|--------|--|---|---|--------------------------------------|
| | | Year | Responsible | Resources |
| | | | | Needed |
| PDF1 | Require an analysis of potential alternatives for all transportation facility projects (public or private led) 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 design alternatives report to include within a project's Engineer's Report (or similar) that is included in the project review and approvals process. | 2025 (development), Ongoing (implementation) | Planning, Engineering | Planning and Engineering Staff |
| PDF2 | Establish permanent local funding for safety and speed studies, low-cost implementation projects, and regular maintenance of safety infrastructure | 2025 (development), Ongoing (implementation) | Planning, Engineering, Public Works | Funding |
| PDF3 | Audit existing, ongoing, and/or planned projects within the City and integrate SS4A guidance into planning and design changes if necessary. | 2024 | Planning, Engineering | Outside audit team, funding |
| PDF4 | Using city data and public input, identify sidewalk and/or bikeway facility gaps and known/perceived safety issues and barriers (e.g., unsafe crossings, lack of separation from vehicles, utility poles in travelled way, lack of lighting, etc.) | 2025 | Planning | Planning staff |
| PDF5 | Develop a prioritization system for safety improvements within a half mile of schools (public and private) considering highest walking and bicycling demand, student engagement, the HPN, and Priority Neighborhoods | 2025 | Planning | Planning staff |
| PDF6 | Develop a Safe Routes to School Program to analyze school catchment areas, advance grant applications for infrastructure or education projects, and coordinate or deliver educational programming. | 2025 | Planning | Planning staff |
| PDF7 | Continue to progress toward mode shift targets in the Climate Action Plan and update targets as needed to support the zero deaths/serious injuries goal | 2025 | Planning | Planning staff |
| PDF8 | Update ADA Transition Plan self- evaluation and incorporate changes due to adoption of PROWAG | 2026 | Engineering | Engineering staff |

| DRAFT October 2024 | | | | |
|--------------------|--|---|--------------------------------|---|
| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
| PDF9 | Develop policies that maximize co- benefits beyond traffic safety, such as supporting public health by encouraging active transportation, improving climate impacts by expanding green space and green infrastructure, reducing heat intensity areas by incorporating vegetation and street trees, and addressing income disparities by improving multimodal connections in low-income areas. | 2026 | Planning | Planning staff |
| PDF10 | Increase funding and resources for the Sidewalk Repair Assistance Program, Traffic Calming Programs, and other safety improvements. | 2025 (development), Ongoing (implementation) | Planning | Funding |
| PDF11 | Evaluate the application records and project selection process to ensure equity in the Sidewalk Repair Assistance, Traffic Calming, and other programs. 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. | 2025 (development), Ongoing (implementation) | Planning | Funding, Planning staff |
| PDF12 | Develop process and funding opportunities to support a community- led safety implementation program, prioritizing the HPN, Priority Neighborhoods, and school areas. Projects should address safety for all users, especially vulnerable roadway users, and include (to the extent practical) art, low-cost/rapid implementation projects, communication campaigns, discussion groups, and educational programs. Establish an existing committee to oversee this program. | 2026 (development), Ongoing (implementation) | Planning, Engineering | Funding, Planning and/or Engineering staff |
| PDF13 | Establish and implement a transparent Capital Improvement Program funding programming process for infrastructure investment projects, which prioritizes investment in transportation safety projects. | 2025 (development), Ongoing (implementation) | Administration, Engineering | Administration and/or Engineering staff |
| PDF14 | Explore implementing a 20-mph City- wide speed limit. | 2025 | Engineering | None |
| PDF15 | Explore implementing slower speed limits adjacent to schools and within neighborhood slow zones. | 2025 | Engineering | None |

| | DRAFT (| October 2024 | | |
|--------|---|---|--------------------------|---|
| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
| PDF16 | Consider passing local ordinances for authorization of automated speed enforcement and red light enforcement for immediate effect when state law authorizes such enforcement. | 2025 | Planning | None |
| PDF17 | Provide incentives for people to take transit to events, including free or reduced fares. | 2026 (development), Ongoing (implementation) | Transit | Funding |
| PDF18 | Continue to promote walking, biking, and transit use among City employees through workplace programs, outreach, and incentives | 2025 (development), Ongoing (implementation) | Administration | Funding |
| PDF19 | Encourage employers to subsidize transit costs or incentivize active transportation for employees | 2025 (development), Ongoing (implementation) | Planning | Planning staff |
| PDF20 | Study proactive expansion, reduced headways (e.g., change service from hourly to every 15 or 30 minutes), increased service on nights and weekends, and investments in transit reliability to promote transit ridership | 2026 | Transit | Funding; Transit staff |
| PDF21 | Modify existing fatal crash analysis structure as follows: Include serious injury crashes Include Engineering, Police, Planning, and community members from emergency response, medical, and public health sectors Meets monthly on a regular schedule to review contributing factors Provides succinct report of conditions leading to the crash and strategies that could be implemented within 30 days of the monthly meeting to City Council and to the board or commission identified in GCS1. | 2024 (development), Ongoing (implementation) | Engineering | Engineering, Planning, Police staff |
| PDF22 | Identify state, federal, and MPO funding sources that can be utilized to undertake design and construction for safety improvements. Consider creating a position within the MPO focused on identifying grant funds for capital planning and programming. | 2024 | Planning, Engineering | Planning and/or Engineering staff |

Government Committees and Structure

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|--|--|--------------------------|------------------------------|
| GCS1 | Create an Advisory Transportation Commission whose role is to review and approve all transportation facility projects. | 2024 | Planning | None |
| GCS2 | Require the Advisory Transportation Commission to review all transportation facility projects (private or public led) for Safe Systems approach principles (see item PDF1). | 2024 (development), Ongoing (implementation) | Planning, Engineering | None |
| GSC3 | Train all planning, engineering, and other appropriate staff in Safe Systems Approach topics to ensure culture of safety among City staff charged with implementation of the adopted goal. | 2026 (development), Ongoing for new hires (implementation) | Planning, Engineering | Training resources |
| GSC4 | Prepare an annual report highlighting progress made toward zero deaths/serious injuries goal. Present to City Council, Advisory Transportation Commission, and post in an easily- accessible location on the City's website | 2025 (development), Ongoing (implementation) | Engineering | None |
| GSC5 | Develop list of City advocacy items targeted toward state decision-makers (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) and pursue lobbying or other advocacy for these items | 2024 (development), Ongoing (implementation) | Planning | None |
| | | | | |

Project Prioritization

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources |
|--------|---|----------------------|----------------------------|--|
| | | I Gai | Responsible | Needed |
| PP1 | Undertake corridor-wide safety analysis and project planning efforts on at least 4 High Priority Network corridors and complete College/Walnut corridor study. Suggest prioritizing the following corridors: E/W 3rd Street (Jackson Street to SR 46)/Atwater Avenue (Dunn Street to Mitchell Street) College Mall Road (E 3rd Street to Covenanter Drive) W 3rd Street (I-69 to Kirkwood Avenue) Kirkwood Avenue (Adams Street to Indiana Avenue) | 2026 | Planning, Engineering | Funding, Planning and/or Engineering staff |
| PP2 | Study, design, and implement rapid- implementation, low-cost safety countermeasures at (at least) half of the intersections shown on the HIN that are under the City's jurisdiction | 2026 | Engineering | Funding, Engineering staff |
| PP3 | Pursue funding (or procure locally), and design permanent safety countermeasure implementation for up to 50 intersections by the interim goal year. Construct if funding source allows by the interim goal year. | 2026 | Engineering | Funding, Engineering staff |
| PP4 | Inform INDOT of their transportation facilities on the HIN/HRN, and establish lines of communication with INDOT to progress safety studies on their corridors within the City limits. | 2025 | Planning or Engineering | None |
| PP5 | Using city data and public input, develop prioritization plan for eliminating sidewalk and/or bikeway gaps and reducing of barriers to use (see PDF4) | 2025 | Planning | Planning staff |
| PP6 | Implement design and construction projects to close 10% of sidewalk and/or bikeway gaps and barriers annually starting in 2026 (see PP5) | 2026-2035 | Engineering | Funding, Engineering staff |
| PP7 | Work in conjunction with schools (public and private) to install at least one safety project per year within a half mile of a school (in addition to other action plan items) (see PDF5). | 2026-2039 | Planning, Engineering | Funding, Planning and/or Engineering staff |
| PP8 | Continue implementing ADA Transition Plan and connect ADA improvements to safety best practices | 2024-2026 | Engineering | Funding, Engineering staff |

DRAFT October 2024 Who Is Number **Description Interim Goal** Addl. Year Responsible Resources Needed PP9 Implement annual program for 2026-2039 Engineering Funding, addressing sight distance issues, such as Engineering staff removal of vegetation or utility poles. Use public input from *uReport* to supplement known issues. **PP10** Implement lighting improvement program 2026-2039 Engineering Funding, for intersection visibility and personal Engineering staff safetv **PP11** Develop Road Safety Audit materials, 2025 Engineering Engineering staff checklists, etc. for use in execution of proactive and reactive Road Safety Audits for all transportation modes. **PP12** Complete Road Safety Audits on an 2026 Engineering Funding, additional 5 corridors on the HPN apart Engineering staff from those undertaken as part of PP1 **PP13 Develop long-range Capital Improvement** 2026 Planning, Planning and/or Plan through the zero deaths and serious Engineering Engineering staff injury goal year to coordinate safety improvements with infrastructure preservation, maintenance, and reconstruction projects to achieve future project cost savings.

Medium Term Action Items (2027-2034)

Design Standards and Data

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|--|--------------------------|---|
| DS14 | Catalyze redevelopment of land use along HPN corridors from unsupportive to supportive of safety enhancement and multimodal mobility. | 2030 (first corridor), Ongoing thereafter | Planning | Funding; Planning staff |
| DS15 | Reanalyze High Injury Network and High Risk Network every 5 years per SS4A program requirements to determine progress and reevaluate priorities for improvements. | 2029, 2034 | Engineering, Planning | Funding; Engineering and/or Planning staff |

Project Programming, Development, and Funding

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|----------------------|--------------------------|--------------------------------------|
| PDF25 | Coordinate and apply for outside funding to implement projects (state, federal, private, etc.). | Ongoing | Planning, Engineering | Planning and/or Engineering staff |

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|----------------------|--------------------------|--------------------------------------|
| PDF26 | Evaluate current staffing levels to plan, design, inspect, and administer safety implementation projects. Hire additional staff such as a Vision Zero Lead and Vision Zero Engineers/Planners to solely focus on implementing this plan. | 2028 | Planning, Engineering | Planning and/or Engineering staff |

Project Prioritization

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|-----------------------|----------------------------|---|
| PP6 | Implement design and construction projects to close 10% of sidewalk and/or bikeway gaps and barriers annually starting in 2026 (see PP5) | 2026-2035 | Engineering | Funding, Engineering staff |
| PP7 | Work in conjunction with schools (public and private) to install at least one safety project per year within a half mile of a school (in addition to other action plan items) (see PDF5). | 2026-2039 | Planning, Engineering | Funding, Planning and/or Engineering staff |
| PP9 | Implement annual program for addressing sight distance issues, such as removal of vegetation or utility poles. | 2026-2039 | Engineering | Funding, Engineering staff |
| PP10 | Implement lighting improvement program for intersection visibility and personal safety | 2026-2039 | Engineering | Funding, Engineering staff |
| PP14 | Undertake corridor-wide safety analysis and project planning efforts on remaining High Priority Network corridors at a rate of at least two per year but more if needed to meet interim completion year for all HPN corridors. | Ongoing until 2036 | Planning, Engineering | Funding, Planning and/or Engineering staff |
| PP15 | Study, design, and implement rapid- implementation, low-cost safety countermeasures at remaining intersections shown on the HIN that are under the City's jurisdiction | 2028 | Engineering | Funding, Engineering staff |
| PP16 | Lead or coordinate with INDOT on corridor studies involving all INDOT- jurisdiction roadways on the HIN and/or HRN within City limits. | 2030 | Planning or Engineering | Planning and/or Engineering staff |
| PP17 | Perform proactive Road Safety Audits on all streets not shown on the HPN. | 2034 | Engineering | Funding, Engineering staff |

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|---|---|--------------------------|---|
| PP18 | Plan, design, and construct longer-term, higher-cost projects along the HPN, specifically all of those with corridor studies undertaken as part of PP1 and some with corridor studies undertaken as part of PP14. Construct at least one relatively large, higher-cost project per year. | 2030 (implementation of PP1 projects), 2039 (implementation of PP14 projects) | Engineering | Funding, Engineering staff |
| PP19 | Revisit prioritization of improvements annually based on funding, design constraints, coordination with other projects, and reanalysis from DS15. | Ongoing | Planning, Engineering | Funding; Planning and/or Engineering staff |

Long Term Action Items (2035-2039)

Design Standards and Data

| Number | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|--------|--|----------------------|-----------------------|------------------------------|
| DS14 | Catalyze redevelopment of land use along HPN corridors from unsupportive to supportive of safety enhancement and multimodal mobility. | Ongoing | Planning | Funding; Planning staff |
| DS16 | Confirm zero fatal and serious injury goal met or adjustment to goal. If goal not met, reanalyze and adjust action plan items as needed to support expedited progress toward new goal. | 2039 | Planning | None |

Project Programming, Development, and Funding

| Numbe r | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|------------|---|----------------------|--------------------------|--------------------------------------|
| PDF25 | Coordinate and apply for outside funding to implement projects (state, federal, private, etc.). | Ongoing | Planning, Engineering | Planning and/or Engineering staff |

Project Prioritization

| Numbe r | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed |
|------------|---|----------------------|-----------------------|-------------------------------|
| PP6 | Implement design and construction projects to close 10% of sidewalk and/or bikeway gaps and barriers annually starting in 2026 (see PP5) | 2026-2035 | Engineering | Funding, Engineering staff |

| DRAFT October 2024 | | | | | |
|--------------------|---|---|----------------------------|--|--|
| Numbe r | Description | Interim Goal Year | Who Is Responsible | Addl. Resources Needed | |
| PP7 | Work in conjunction with schools (public and private) to install at least one safety project per year within a half mile of a school (in addition to other action plan items) (see PDF5). | 2026-2039 | Planning, Engineering | Funding, Planning and/or Engineering staff | |
| PP9 | Implement annual program for addressing sight distance issues, such as removal of vegetation or utility poles. | 2026-2039 | Engineering | Funding, Engineering staff | |
| PP10 | Implement lighting improvement program for intersection visibility and personal safety | 2026-2039 | Engineering | Funding, Engineering staff | |
| PP14 | Undertake corridor-wide safety analysis and project planning efforts on remaining High Priority Network corridors at a rate of at least two per year but more if needed to meet interim completion year for all HPN corridors. | Ongoing until 2036 | Planning, Engineering | Funding, Planning and/or Engineering staff | |
| PP16 | Lead or coordinate with INDOT on corridor studies involving all INDOT- jurisdiction roadways on the HIN and/or HRN within City limits. | 2030 | Planning or Engineering | Planning and/or Engineering staff | |
| PP17 | Perform proactive Road Safety Audits on all streets not shown on the HPN. | 2034 | Engineering | Funding, Engineering staff | |
| PP18 | Plan, design, and construct longer-term, higher-cost projects along the HPN undertaken as part of PP14. Construct at least one relatively large, higher-cost project per year. | 2030 (implementation of PP1 projects), 2039 (implementation of PP14 projects) | Engineering | Funding, Engineering staff | |
| PP19 | Revisit prioritization of improvements annually based on funding, design constraints, coordination with other projects, and reanalysis from DS15. | Ongoing | Planning, Engineering | Funding; Planning and/or Engineering staff | |
| PP20 | Lead or assist with planning, design, and construction of improvements to INDOT-jurisdiction roadways on the HIN/HRN. | 2039 | Planning, Engineering | Funding; Planning and/or Engineering staff | |

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 roads in Figure 25. Priority Corridors for Safety Countermeasures. FHWA's <u>Proven Safety Countermeasures</u> 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 region should be decided through the lens of the Safe System Approach, so that if a crash occurs it will 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.

Safety countermeasures are listed below along with hyperlinks to provide a more detailed description and effectiveness of the full safety countermeasure. A set of cut sheets describing each Safety Countermeasure are also included in Appendix XX: Safety Countermeasure Cut Sheets.





High Risk Network Priority Corridors and 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-theground safety improvement projects that will be designed using Safe Systems 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.

| Street | From | То | |
|--------------------------|-------------------|--------------------|--|
| West 2nd Street | Rogers Street | Walnut Street | |
| East 3rd Street | Rogers Street | State Route 46 | |
| West 3rd Street | Interstate 69 | Kirkwood Avenue | |
| East and West 4th Street | Rogers Street | Indiana Avenue | |
| East and West 7th Street | Rogers Street | Woodlawn Avenue | |
| College Avenue | State Route 45/46 | East 2nd Street | |
| College Mall Road | Covenanter Drive | State Route 46 | |
| Dunn Street | East 10th Street | East 3rd Street | |
| Hillside Drive | Walnut Street | Maxwell Street | |
| Indiana Avenue | East 3rd Street | East 17th Street | |
| Kinser Pike/Madison | State Route 45/46 | West 11th Street | |
| Street | | | |
| Kirkwood Avenue | Adams Street | Indiana Avenue | |
| Rogers Street | West 11th Street | West 2nd Street | |
| North Walnut Street | State Route 45/46 | East 2nd Street | |
| South Walnut Street | E 2nd Street | Dodds Street | |
| South Walnut Street | Dodds Street | Country Club Drive | |

Table 3. Highest Priority Corridors for Safety Countermeasures

Figure 25 and Figure 26 show the priority corridors and intersections grouped by highest, high, medium, and 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.

DRAFT October 2024 Figure 23. Priority Corridors for Safety Countermeasures



DRAFT October 2024 Figure 24. Priority Intersections for Safety Countermeasures



DRAFT October 2024 TRACKING PROGRESS AND 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, is it 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 and 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 the following performance measures, at minimum:

| 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 actions started |
| Number of actions completed |
| Locations and number of street segment and intersection improvements made on the High Priority Network |
| Locations and number of off-street segment improvements (sidewalks, multiuse paths, bike trails) made adjacent to 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. |

This annual report should also include any information about how the city plans to revise their approach (if needed) based on the findings of the annual report.

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 [placeholder].

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.