CITY OF BLOOMINGTON

PLAN COMMISSION

January 13, 2025, 5:30 P.M.
Council Chambers, Room #115
Hybrid Zoom Link:

https://bloomington.zoom.us/j/82362340978?pwd=ZnExeVNaSUNGVGdZQTJHNjBBb3M0UT09

Meeting ID: 823 6234 0978 Passcode: 622209

CITY OF BLOOMINGTON
PLAN COMMISSION (Hybrid Meeting)
❖City Council Chambers, 401 N Morton Street Bloomington – Room #115
January 13, 2025 at 5:30 p.m.

❖Virtual Link:

https://bloomington.zoom.us/j/82362340978?pwd=ZnExeVNaSUNGVGdZQTJHNjBBb3M0UT09

Meeting ID: 823 6234 0978 Passcode: 622209

Petition Map: https://bton.in/G6BiA

ROLL CALL

MINUTES TO BE APPROVED: December 9, 2024

REPORTS, RESOLUTIONS AND COMMUNICATIONS:

Election of Officers

PETITIONS TABLED:

SP-24-22 **Cutters Kirkwood 123 LLC**
115 E Kirkwood Ave
Parcel: 53-05-33-310-062.000-005
Request: Major site plan approval to construct a 4-story building with 3 floors of residential units over a ground floor parking garage and retail space in the MD-CS zoning district. The upper floors will consist of 15 dwelling units for a total of 38 beds.
Case Manager: Jackie Scanlan

ZO-34-23 **City of Bloomington Planning and Transportation**
Text Amendment
Request: Text amendment related to Sign Standards and request for waiver of second hearing. *Case Manager: Jackie Scanlan*

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

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact the **Melissa Hirtzel** at **hirtzelm@bloomington.in.gov** and provide your name, contact information, and a link to or description of the document or web page you are having problems with.

PETITIONS:

MP-38-24 — **City of Bloomington**
Request: Amendment to the City of Bloomington Transportation Plan in order to Incorporate the Safe Streets and Roads for All (SS4A) Action Plan. *Case Manager: Ryan Robling*

PLAT2024-10-0040 / DP-44-24 — **Walnut Street Pike Development, LLC**
3111 S. Walnut Street Pike
Parcel(s): 53-08-16-400-002.000-009
Request: Primary plat approval for a 75 lot subdivision in 15.56 acres for a Common Area Development Plat for the Residential Medium Lot (R2) zoning district. *Case Manager: Eric Greulich*

USE2024-12-0070 / SP-47-24 — **Bledsoe Riggert Cooper James (William Riggert)**
301 N College Ave
Parcel: 53-05-33-310-170.000-005
Request: Major site plan approval for Convention Center in the Mixed-Use Downtown Downtown Core zoning district. *Case Manager: Jackie Scanlan*

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

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Case # MP-38-24

To: Bloomington Plan Commission

From: Ryan Robling, Planning Services Manager

Date: January 13, 2025

Re: Amendments to Safe Streets and Roads for All (SS4A) Safety Action Plan: Returned from Council

The Plan Commission heard case MP-38-24 on October 7, 2024 and forwarded the Safety Action Plan to the Common Council with a positive recommendations. The Safety Action Plan was amended by the Common Council at its December 4, 2024 Regular Session, and is being returned to the Plan Commission. A memo from the Common Council describing the amendments, a copy of each amendment, and the original information provided to the Common Council is included.

RESOLUTION 2024-20

TO AMEND THE CITY OF BLOOMINGTON'S TRANSPORTATION PLAN IN ORDER TO INCORPORATE THE SAFE STREETS AND ROADS FOR ALL (SS4A) SAFETY ACTION PLAN

WHEREAS, pursuant to IC 36-7-4-501, the Plan Commission is responsible for preparing comprehensive plans and amendments thereto and forwarding them to the Common Council; and

WHEREAS, on May 22, 2019, with the passage of Resolution 19-01, the Common Council adopted the City's current Transportation Plan as an amendment to the City's Comprehensive Plan; and

WHEREAS, the Common Council, via Resolution 2024-07, directed that a Transportation Plan amendment proposal be considered by the Plan Commission to adopt a Safe Streets and Roads for All (SS4A) Safety Action Plan; and

WHEREAS, the Plan Commission has considered this case, MP-38-24, and recommended that an SS4A Safety Action Plan be amended into the Transportation Plan; and

WHEREAS, the Plan Commission requests that the Common Council consider this petition;

NOW THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION 1. The City's Transportation Plan is amended.

SECTION 2. An Amended Transportation Plan, including other materials that are incorporated therein by reference, is hereby adopted. Said addendum to the Transportation Plan consists of the following documents which are attached hereto and incorporated herein:

1. The proposal forwarded to the Common Council by the Plan Commission with a positive recommendation by a vote of 6 Ayes, 1 Nays, and 0 Abstentions., consisting of:
    a. MP-38-24, (hereinafter "Attachment A as twice amended")
    b. Appendices A through C, (hereinafter "Attachment B as amended")

SECTION 3. If any section, sentence or provision of this ordinance, or application thereof to any person or circumstances shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions or application of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

PASSED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this 4 day of December, 2024.

I Piedmont-Sit

ISABEL PIEDMONT-SMITH, President
Bloomington Common Council

ATTEST:

NICOLE BOLDEN, Clerk
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this _____ day of _____, 2024.

_____
NICOLE BOLDEN, Clerk,
City of Bloomington

SIGNED and APPROVED by me upon this _____ day of _____, 2024.

_____
KERRY THOMSON, Mayor
City of Bloomington

SYNOPSIS

Pursuant to state law and as directed by the Common Council in Resolution 2024-07, this resolution amends the City of Bloomington's Transportation Plan in order to incorporate the Safe Streets and Roads for All (SS4A) Safety Action Plan.

Note: At the November 20, 2024 Regular Session, the Council considered and adopted Amendment 01 to Resolution 2024-20, which included a revised version of the SS4A Safety Action Plan in final, rather than draft, form and three appendices of additional material.

Additional Note: At the December 4, 2024 Regular Session, the Council considered and adopted Amendment 02 to Resolution 2024-20, which included a further revised version of the SS4A Safety Action Plan and revised appendices that corrected typos, updated graphics, added citations and updated standards, and improved clarity of information presented.

*****Amendment Form*****

Resolution #: 2024-20
Amendment #: Am 01
Submitted By: Cm. Stosberg
Date: November 20, 2024

Proposed Amendment:

Section 2 of Resolution 2024-20 shall be amended by incorporating a revised version of the Safe Streets and Roads for All (SS4A) Safety Action Plan as "Attachment A as amended". Section 2 of Resolution 2024-20 shall be further amended by inserting a new subdivision "b" to include three (3) associated appendices (hereinafter "Attachment B"), to read as follows:

> SECTION 2. An Amended Transportation Plan, including other materials that are incorporated therein by reference, is hereby adopted. Said addendum to the Transportation Plan consists of the following documents which are attached hereto and incorporated herein:
>
> 1. The proposal forwarded to the Common Council by the Plan Commission with a positive recommendation by a vote of 6 Ayes, 1 Nays, and 0 Abstentions., consisting of:
>   a. MP-38-24, (hereinafter "Attachment A as amended")
>   b. Appendices A through C, (hereinafter "Attachment B")

Synopsis

This amendment is proposed by Cm. Stosberg at the request of Planning and Transportation staff. It includes a revised version of the SS4A Safety Action Plan that corrects typos, updates graphics, and improves clarity; incorporates three completed appendices; and makes several substantive changes to address errors, provides additional information and context, and reorganizes action items. Additionally, it includes detailed descriptions of potential future funding, staffing, and other requirements necessary for completion.

11/20/2024 Regular Session Action: Adopted 9-0

Amendment Form

Resolution #: 2024-20
Amendment #: Am 02
Submitted By: Cm. Piedmont-Smith
Date: December 4, 2024

Proposed Amendment:

Section 2 of Resolution 2024-20 shall be amended by incorporating a second revised version of the Safe Streets and Roads for All (SS4A) Safety Action Plan as "Attachment A as twice amended". Section 2 of Resolution 2024-20 shall be further amended by incorporating a revised version of the three (3) associated appendices, to read as follows:

> SECTION 2. An Amended Transportation Plan, including other materials that are incorporated therein by reference, is hereby adopted. Said addendum to the Transportation Plan consists of the following documents which are attached hereto and incorporated herein:
>
> 1. The proposal forwarded to the Common Council by the Plan Commission with a positive recommendation by a vote of 6 Ayes, 1 Nays, and 0 Abstentions., consisting of:
>   a. MP-38-24, (hereinafter "Attachment A as twice amended")
>   b. Appendices A through C, (hereinafter "Attachment B as amended")

Section 2 of Resolution 2024-20 shall be further amended by incorporating the following changes to the Safe Streets and Roads for All (SS4A) Safety Action Plan:

Chapter	Section	Page #
Getting to Zero	Immediate or Short Term Action Items (2024-2027) - PPGS3	41
Getting to Zero	Immediate or Short Term Action Items (2024-2027) – PPGS12	43
Getting to Zero	Immediate or Short Term Action Items (2024-2027) – SSI10	48
Progress & Moving Forward	Performance Measures & Annual Reporting	59

A redlined version of the changes is included.

Synopsis

This amendment is proposed by Cm. Piedmont-Smith. Part of it comes forward at the request of Planning and Transportation and Engineering staff. This includes a revised version of the SS4A Safety Action Plan and its appendices that corrects typos, updates graphics, includes additional citations, incorporates updated engineering standards, and improves clarity. Additionally, this amendment removes one image from page 9 of Appendix C: Proven Safety Countermeasures that was not compliant with current City standards for crosswalks. In the section proposed by Cm. Piedmont-Smith, this amendment also provides clarifying language to the "Additional Information" section of three Action Items and the "Performance Measures & Annual Reporting" section. While substantive, the changes do not alter the proposed Action Items themselves but instead aim to clarify what accomplishing each Action Item entails. The revisions to the "Performance Measures & Annual Reporting" section add language specifying that some reported performance measures will include countermeasures expected to have the greatest impact on safety, drawn from those listed in Appendix C.

12/04/2024 Regular Session Action: Adopted 8-0

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

Additional information:

- 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.
- Expand to include serious injury crashes as staffing allows.
- Provide brief report on crash data and findings to Advisory Transportation Committee (see PPGS1).

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)

Additional information:

- Add standard details for sidewalks, driveways, bikeways, RRFBs, traffic signals, safety countermeasures provided in **Appendix C: Proven Safety Countermeasures**, etc. that currently do not exist but contribute to safety for all transportation users.
- 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.

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

Additional information:

- Promote redevelopment and new development that encourages slow vehicle speeds, mode shift to non-personal vehicle transportation, and funds adjacent transportation safety projects.
- Utilize development opportunities to meet other goals, such as filling in sidewalk gaps, intersection improvements, and road diets.
- Utilize proactive land use planning, such as small area plans, to inform potential developers of future land use intent.

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

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:

- Also post to City website, social media, and in locations accessible to the public.

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:

- Other slower speed zones, such as neighborhood slow zones, may also be considered as part of this effort.

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:

- Use available city data and public input to prioritize improvements.
- Projects along roadways with a high number of VPD and higher vehicle speeds should be given greater priority in the prioritization plan.
- Incorporate criteria similar to those used in the 2022 Sidewalk Evaluation Matrix developed by the Council Sidewalk Committee.
- Prioritize construction of at least one side of sidewalk where none currently exist and to fill in gaps in existing sidewalks.
- Where available right of way and roadway geometrics allow, provide physical horizontal and vertical separation between roadway and sidewalk/bikeway.
- Increase potential for mode shift away from personal vehicles and toward active transportation, reducing system kinetic energy and helping the City meet climate goals.

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

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:

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

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, 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 & 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:~~ 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

****RESOLUTION CERTIFICATION****

In accordance with IC 36-7-4-508 I hereby certify that the attached Resolution Number 2024-20 is a true and complete copy of Plan Commission Case Number MP-38-24 which was given a recommendation of approval by a vote of 6 Ayes, 1 Nays, and 0 Abstentions by the Bloomington City Plan Commission at a public hearing held on October 7, 2024.

Date: October 15, 2024

D-H-

David Hittle, Secretary
Plan Commission

Received by the Common Council Office this _____ day of _____, 2024.

Nicole Bolden, City Clerk

Appropriation Ordinance # _____ Fiscal Impact Statement Ordinance # _____ Resolution # _____

Type of Legislation:

Appropriation	End of Program	Penal Ordinance
Budget Transfer	New Program	Grant Approval
Salary Change	Bonding	Administrative Change
Zoning Change	Investments	Short-Term Borrowing
New Fees	Annexation	Other

If the legislation directly affects City funds, the following must be completed by the City Controller:

Cause of Request:

Planned Expenditure	_____	Emergency	_____
Unforseen Need	_____	Other	_____

Funds Affected by Request:

Fund(s) Affected		
Fund Balance as of January 1	$	$
Revenue to Date	$	$
Revenue Expected for Rest of year	$	$
Appropriations to Date	$	$
Unappropriated Balance	$	$
Effect of Proposed Legislation (+/-)	$	$
Projected Balance	$	$

Signature of Controller

Will the legislation have a major impact on existing City appropriations, fiscal liability or revenues?

Yes _____ No XX

If the legislation will not have a major fiscal impact, explain briefly the reason for your conclusion.

Pursuant to state law and as directed by the Common Council in Resolution 2024-07, this resolution amends the City of Bloomington's Transportation Plan in order to incorporate the Safe Streets and Roads for All (SS4A) Safety Action Plan.

If the legislation will have a major fiscal impact, explain briefly what the effect on City costs and revenues will be and include factors which could lead to significant additional expenditures in the future. Be as specific as possible. (Continue on second sheet if necessary.)

City of Bloomington
Office of the Common Council

December 6, 2024

City of Bloomington Plan Commission
401 North Morton Street, Room 160
P.O. Box 100
Bloomington, IN 47402

Dear Plan Commissioners,

This letter is being written pursuant to I.C. 36-7-4-510, which requires the Council, in the event it amends a proposal to amend the City's Comprehensive Plan, to return the proposal and the amendment(s) to the Plan Commission, with a statement of reasons for the amendment(s). On October 15, 2024, the Common Council received certification of the Plan Commission's action on proposals to amend certain provisions of the Transportation Plan, which is part of the City's Comprehensive Plan, and came forward as:

- Resolution 2024-20 – To Amend the City of Bloomington's Transportation Plan in Order to Incorporate the Safe Streets and Roads for All (SS4A) Safety Action Plan

At a Regular Session on November 20, 2024, the Common Council adopted Amendment 01 to Resolution 2024-20 by a vote of 9-0. The Council postponed further discussion of the resolution until the next Regular Session on December 4, 2024, at which the Common Council approved of the resolution listed above with a second amendment, Amendment 02, both of which passed by a vote of 8-0. Attached to this correspondence are copies of the following records:

- Resolution 2024-20, signed by the Council President;
- Attachment A to this ordinance, consisting of MP-38-24, the proposal forwarded to the Council by the Plan Commission;
- Attachment B to this ordinance, consisting of the two relevant Council amendments to the proposal and their relevant attachments, which includes a written statement of the reasons for the amendment.

The Council extends its deep appreciation for the work of the Plan Commissioners and staff on these items and is looking forward to your response to these proposed amendments. Please forward any questions to your staff and your attorney.

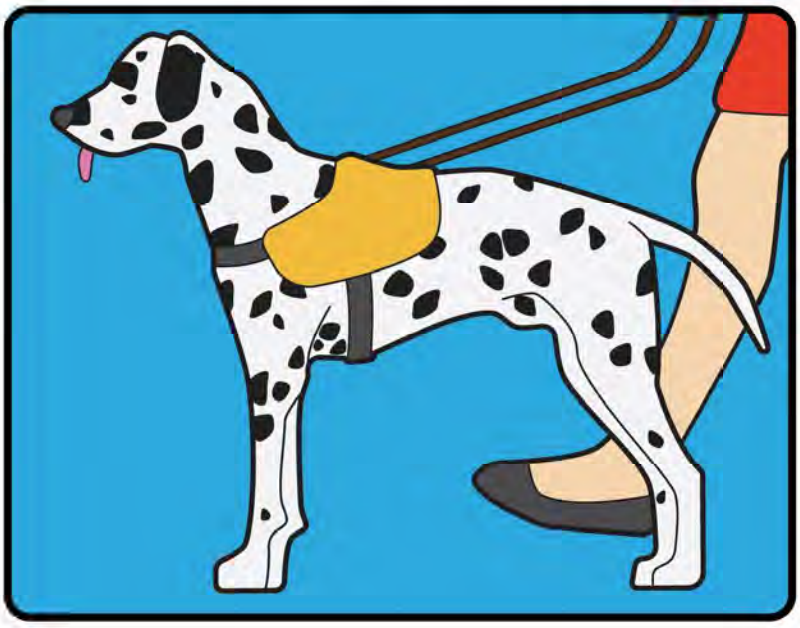
Sincerely,

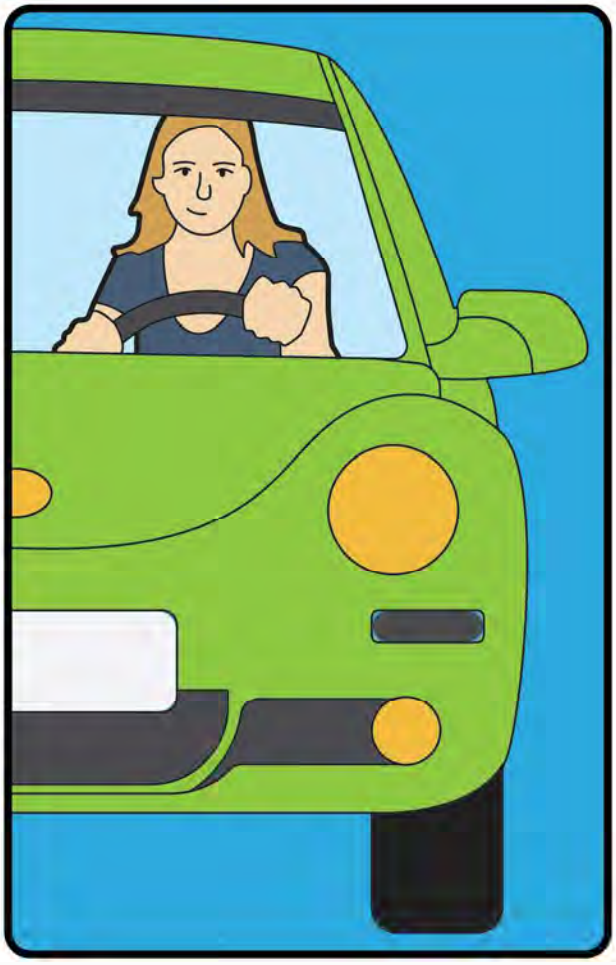
I Piedmont-Smith

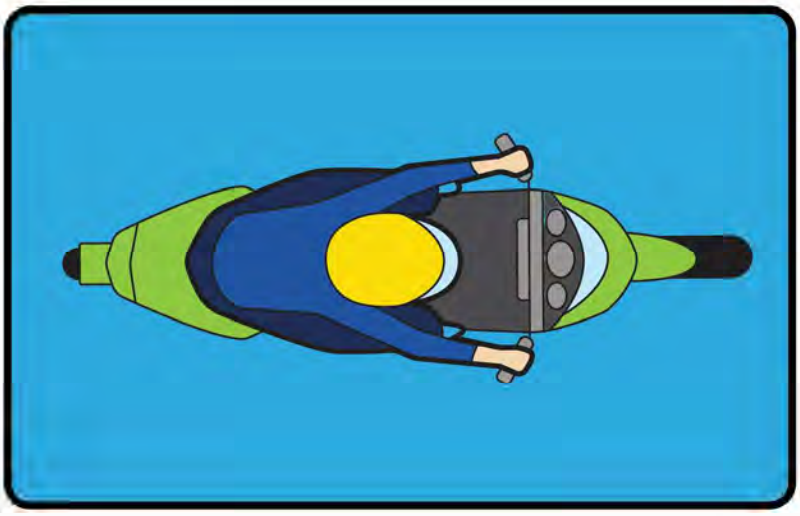
Isabel Piedmont-Smith, President
Bloomington Common Council

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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Table of Contents

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

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 Policy Committee

CONSULTANT TEAM

TOOLE DESIGN

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

Tariq Shihadah, Data Analyst

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 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

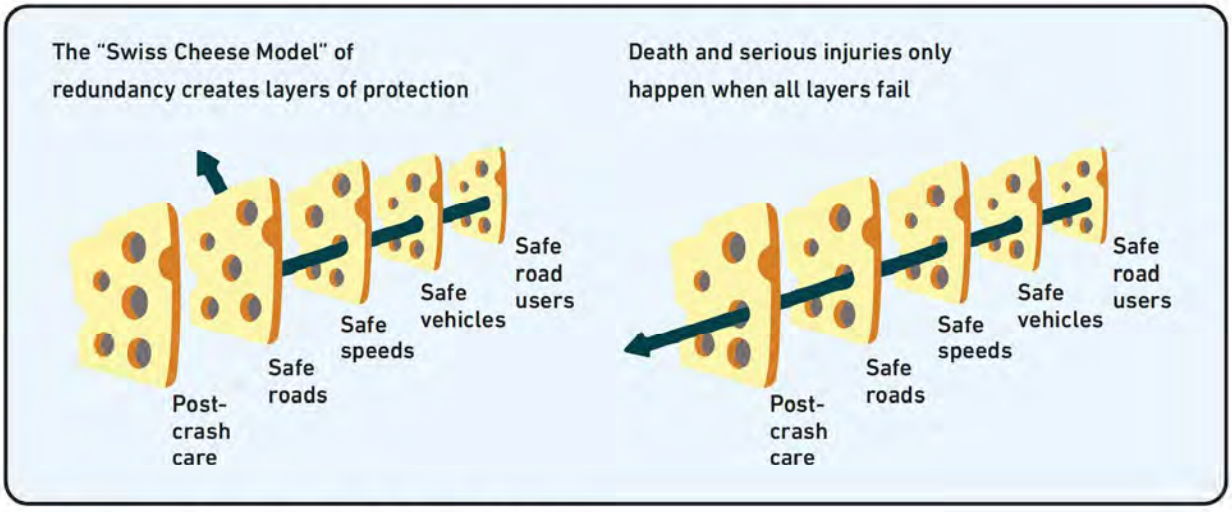
The Safe Systems Approach is founded in the belief that humans are human - people will not always behave perfectly, won't always follow the rules, and may make bad decisions on the roadways. The Safe Systems Approach confronts this reality by creating a multi-faceted system that acknowledges the many 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					x		
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
BMCMPO Transportation Improvement Program					x	x	x
BMCMPO 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 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.

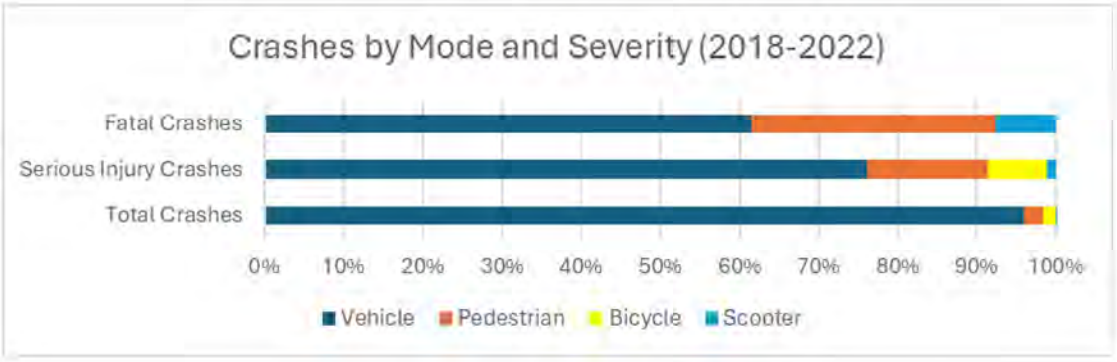


Figure 2. Crashes by Mode and Severity, 2019-2023

The majority of fatal or serious injury crashes occurred on arterial 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.

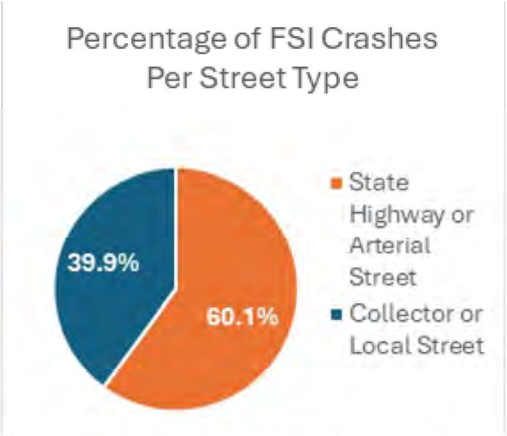


Figure 3. Percentage of FSI Crashes by Type of Street/ Highway

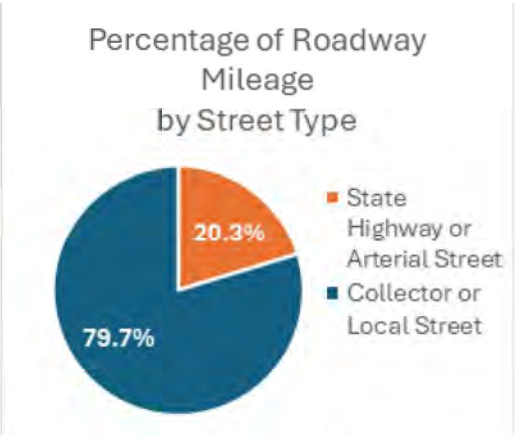


Figure 4. Percentage of Streets by Type of Street/ Highway

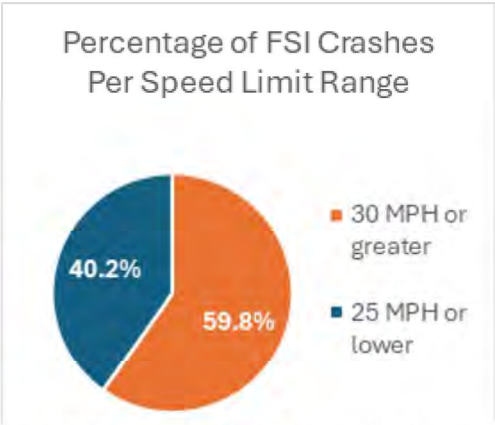


Figure 5. Percentage of FSI Per Speed Limit Range

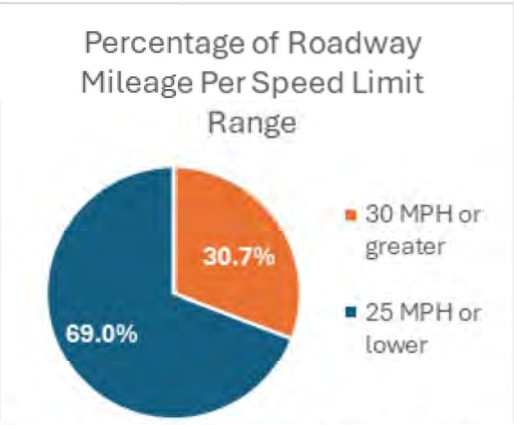


Figure 6. Percentage of Roadway Mileage Per Speed Limit Range

Fatal and Serious Injury Crashes 2019-2023

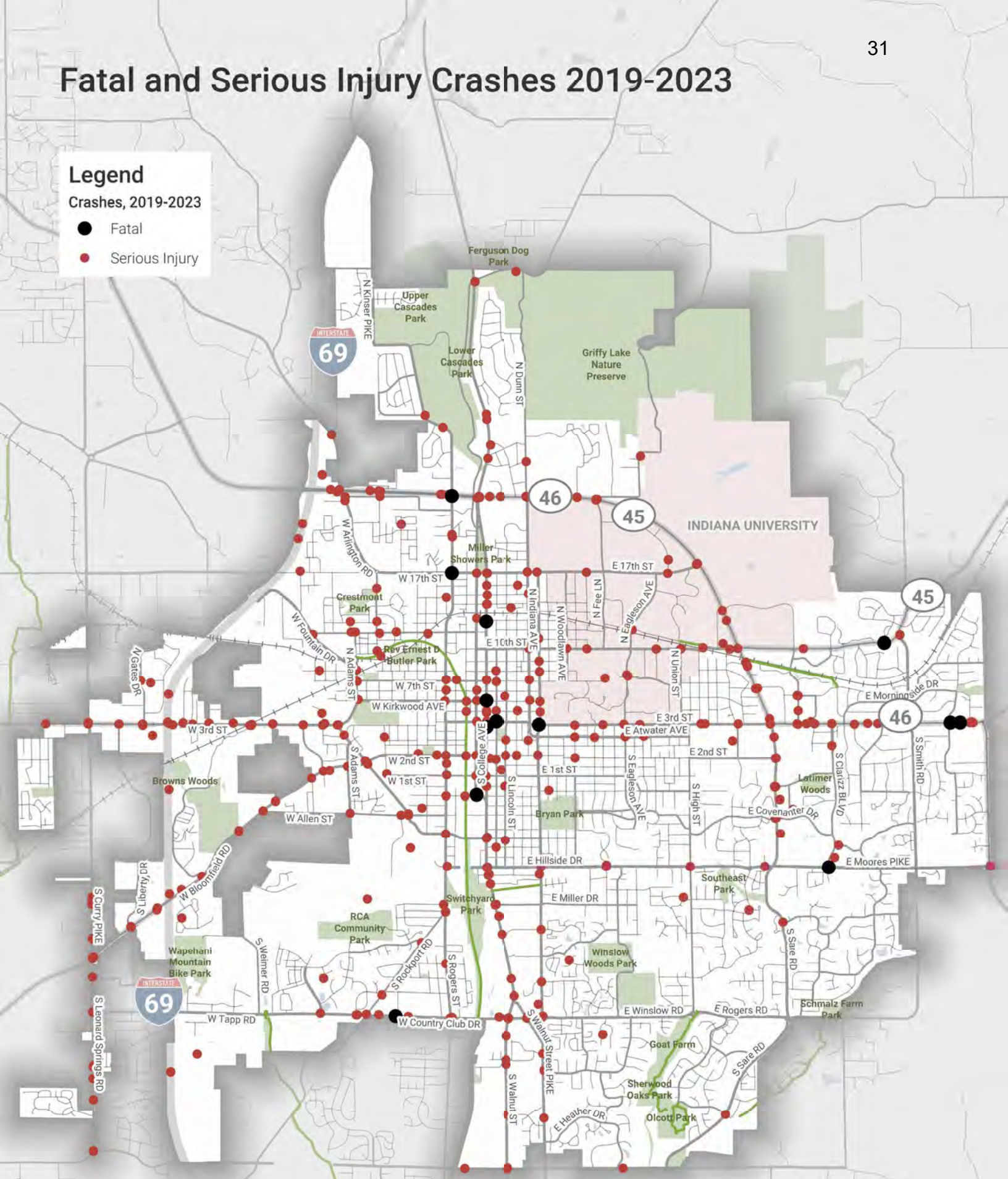


Figure 7. Location of Fatal or Serious Injury Crashes, 2019-2023

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
- 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

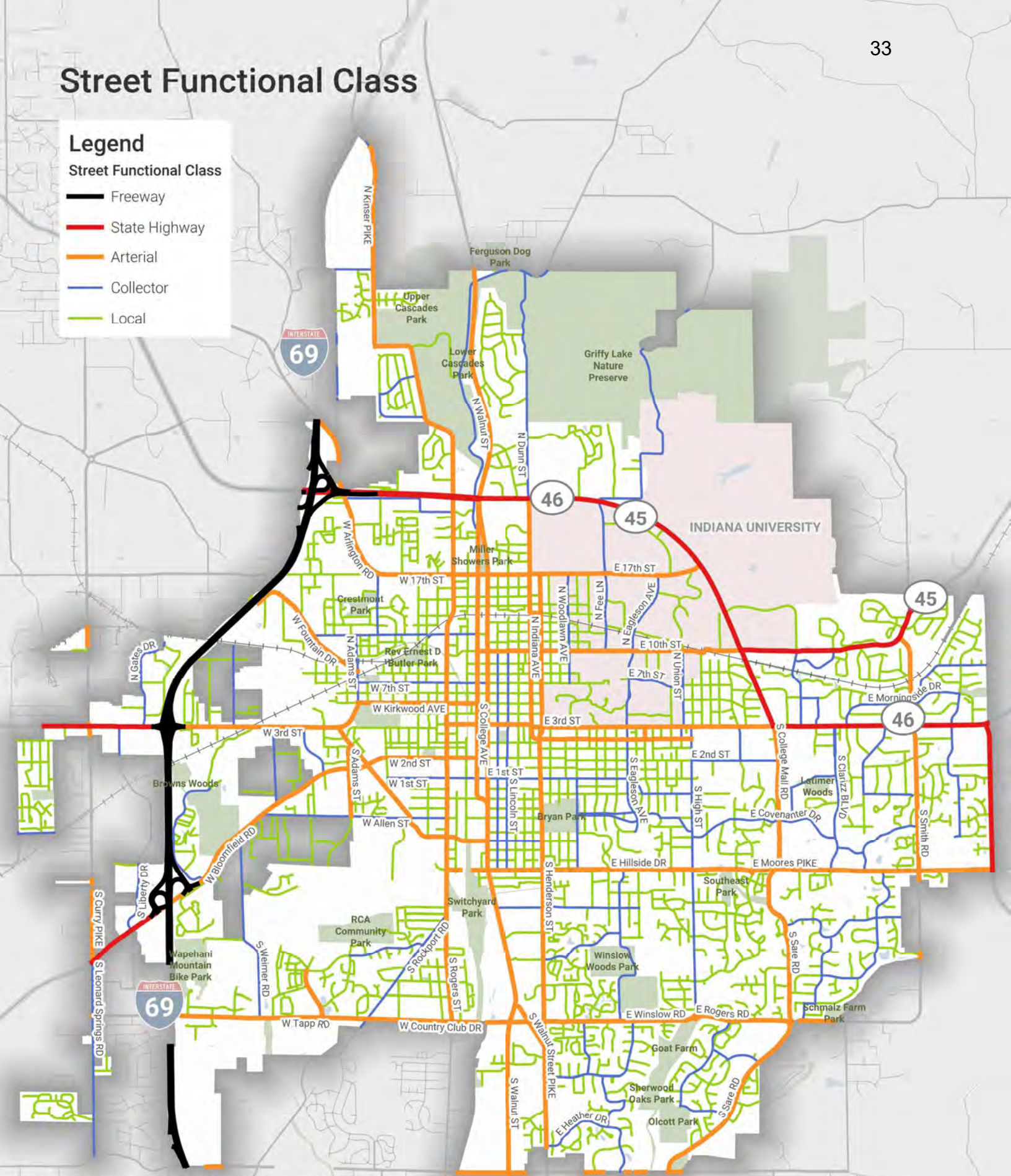


Figure 9. Functional Class of Streets in Bloomington

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.

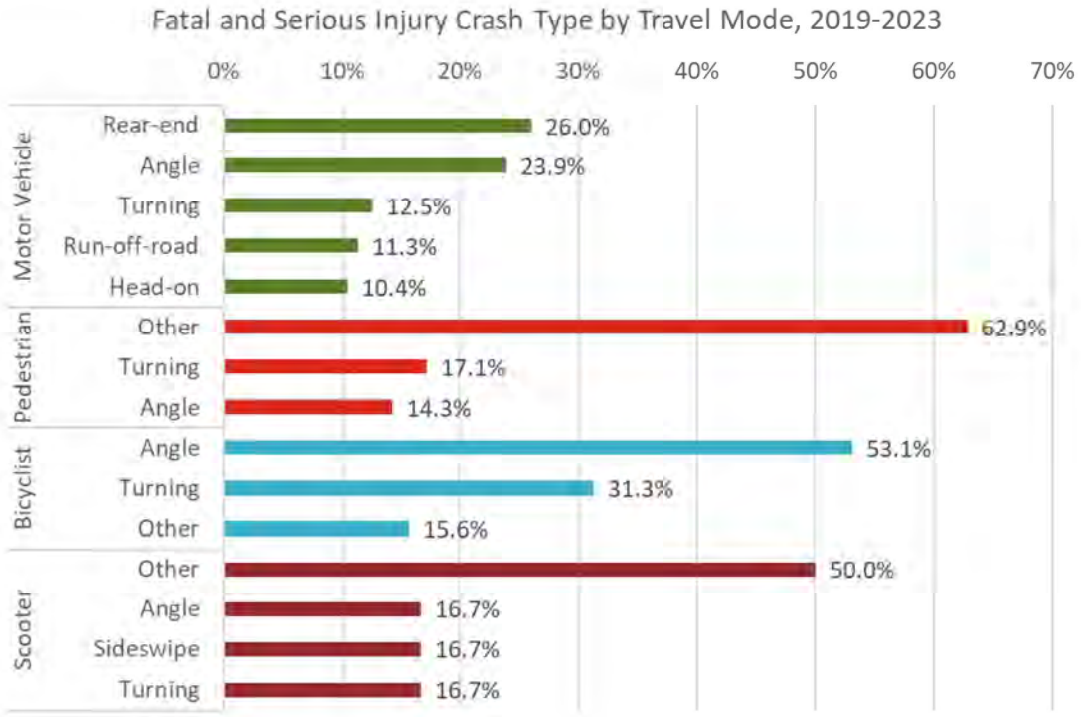


Figure 10. Crash Type by Mode of Travel for Fatal and Serious Injury Crashes, 2019-2023

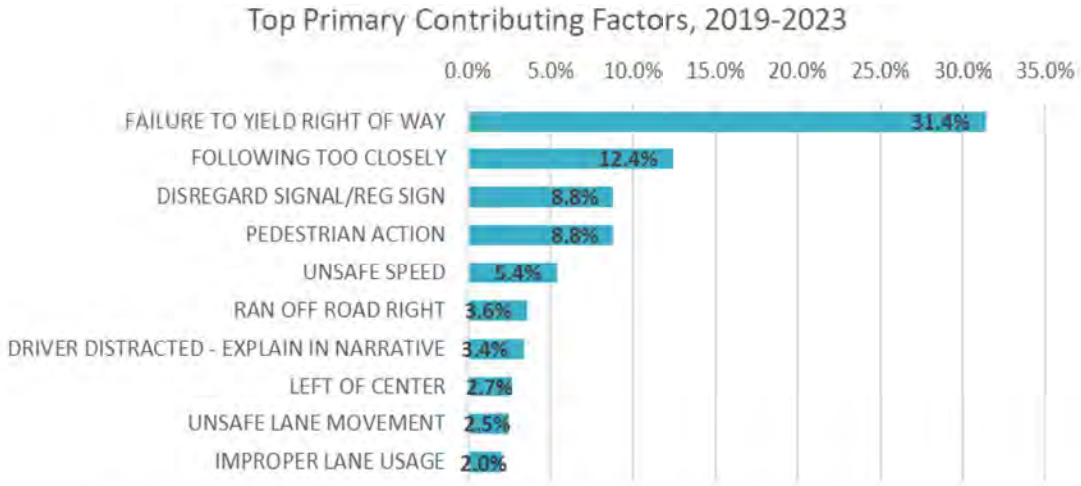
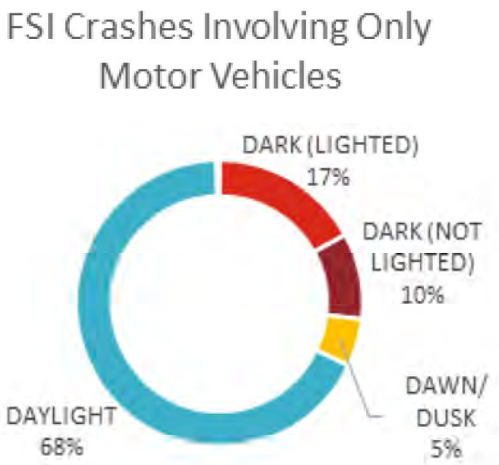
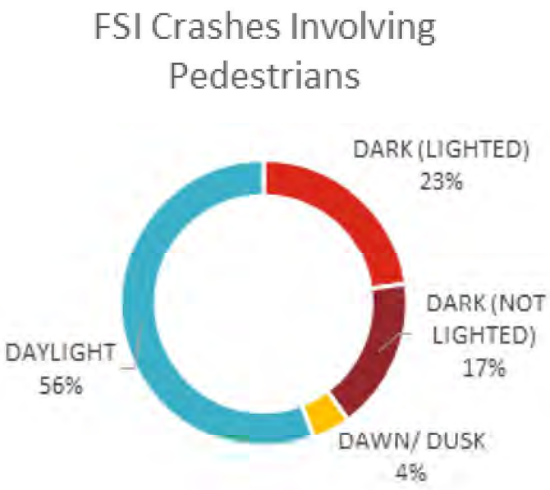
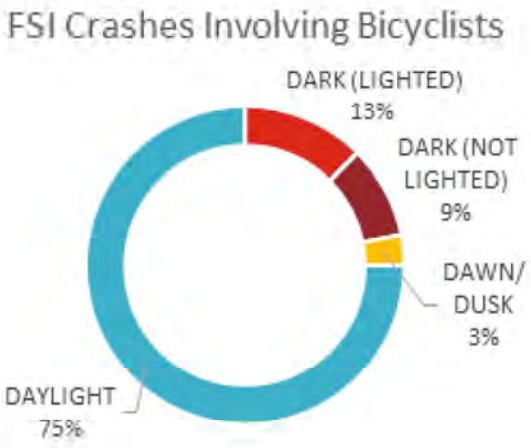


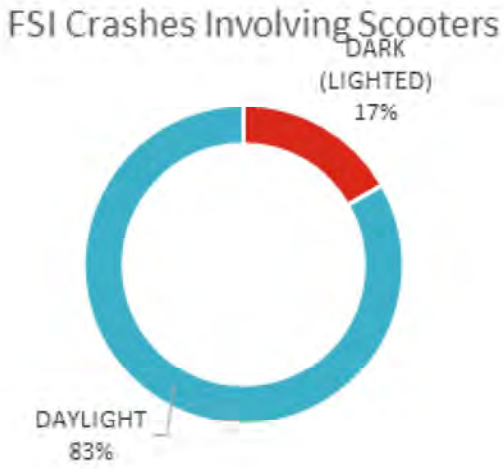
Figure 11. Top Primary Contributing Factors for Fatal and Serious Injury Crashes, 2019-2023

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.









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.

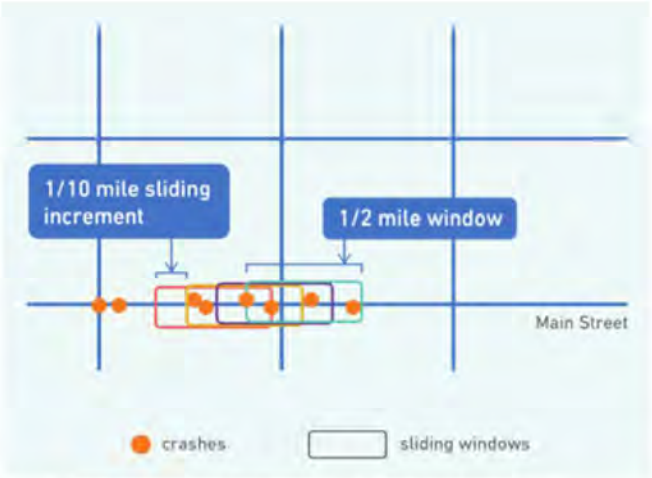


Figure 12. High Injury Network - Sliding Windows Analysis

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)
- **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

High Injury Network - All Modes

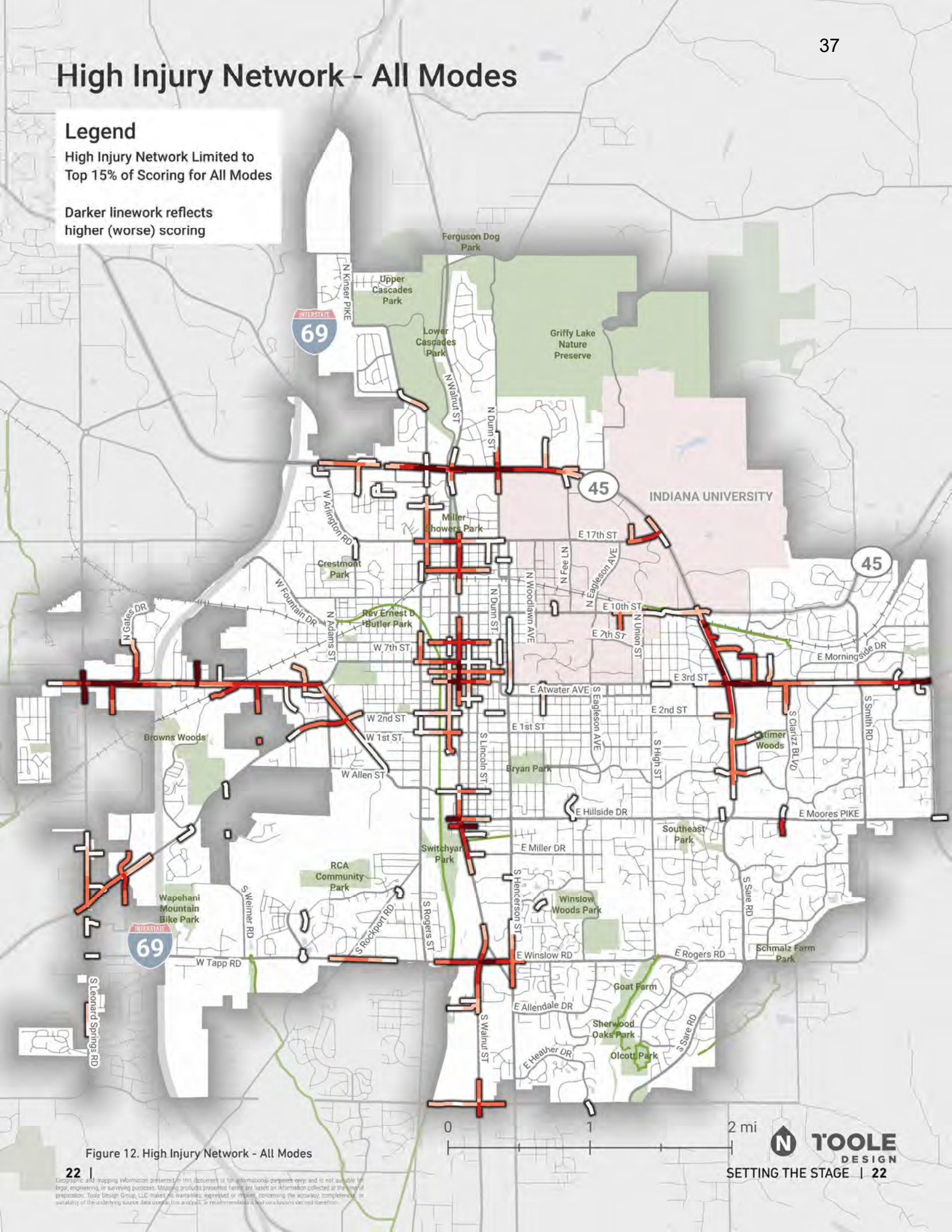


Figure 12. High Injury Network - All Modes

High Injury Network - Motor Vehicle Crashes Only

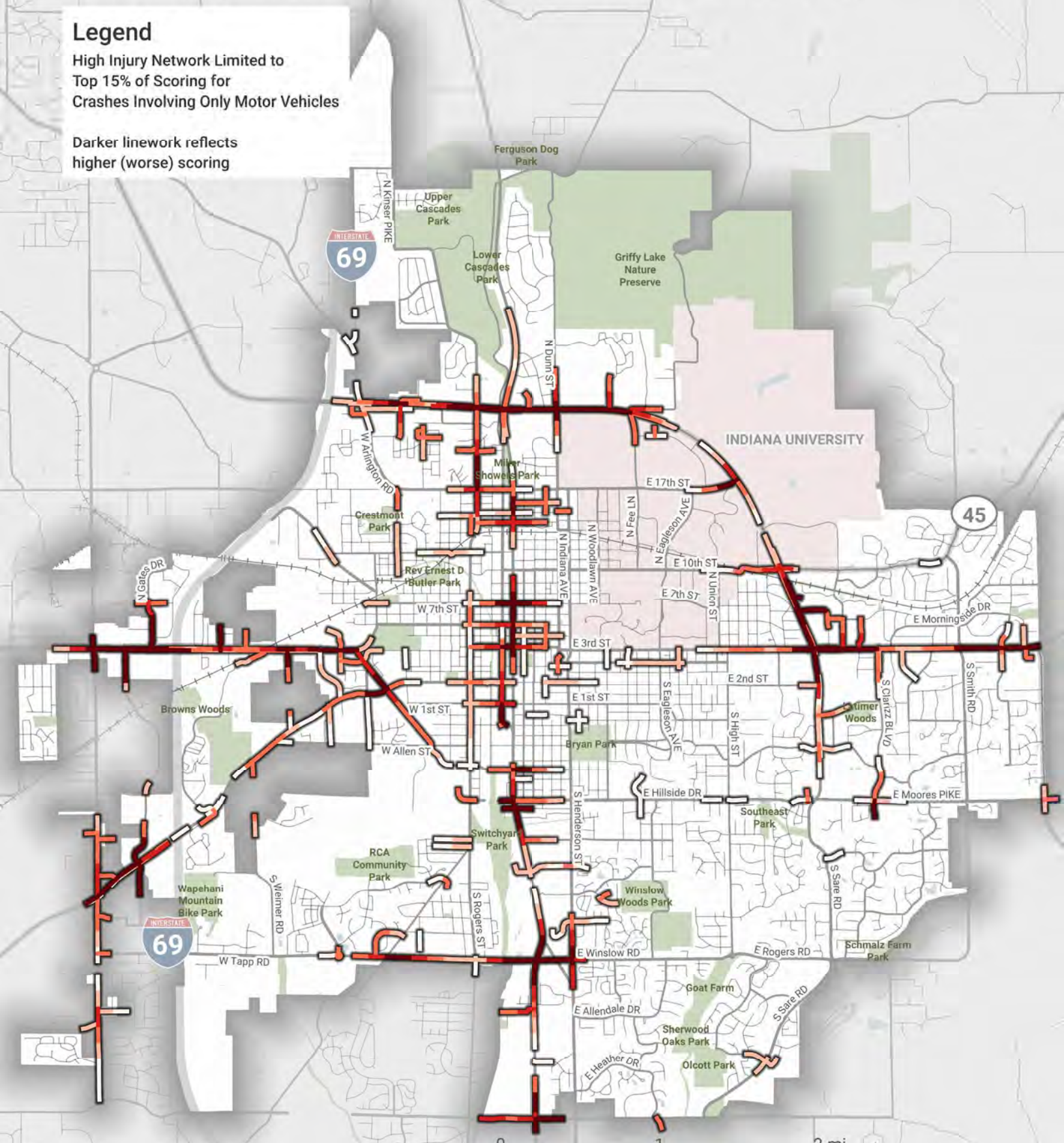


Figure 13. High Injury Network - Motor Vehicle Crashes

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

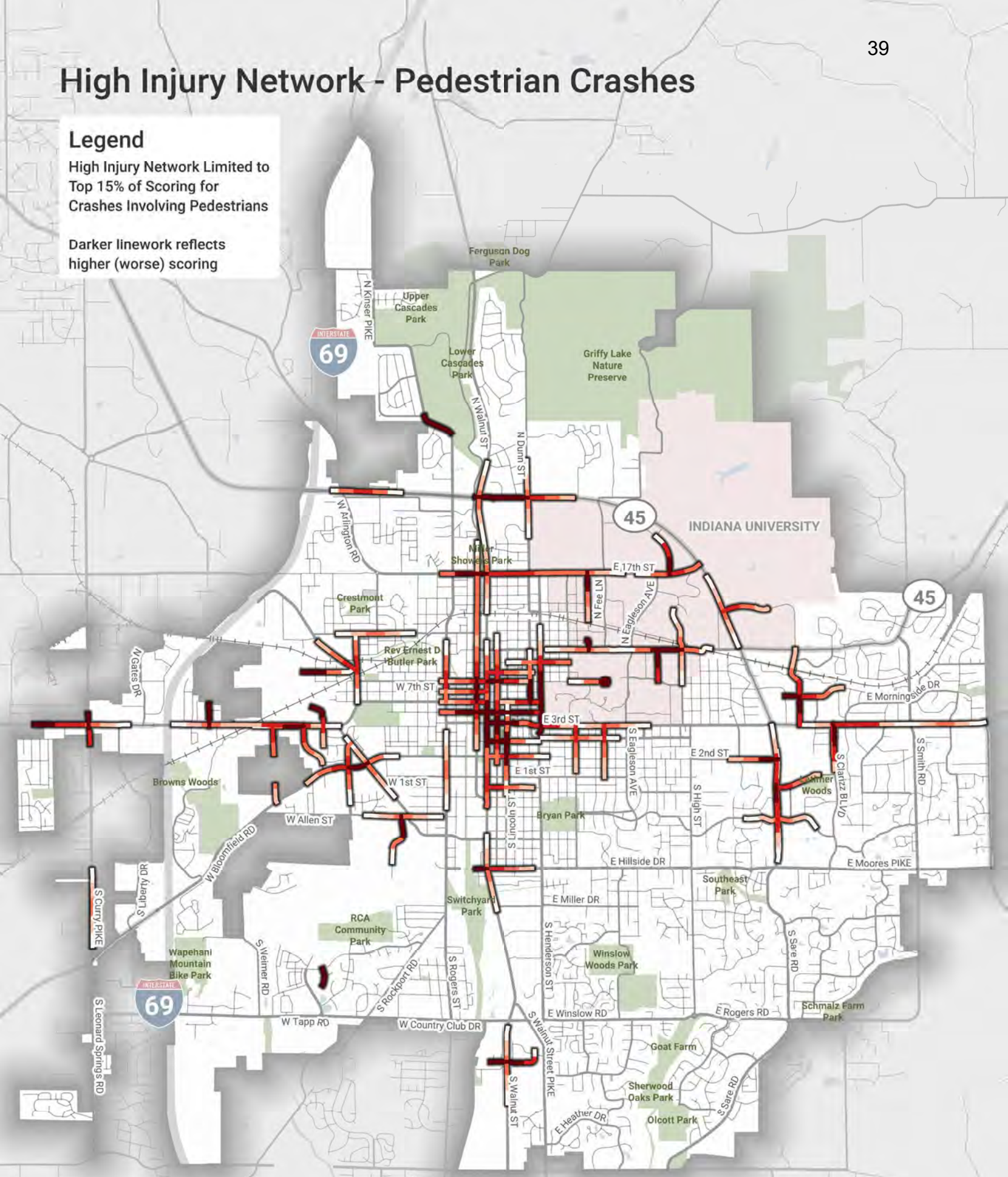


Figure 14. High Injury Network - Pedestrian Crashes

TOOLE DESIGN

High Injury Network - Bicyclist Crashes

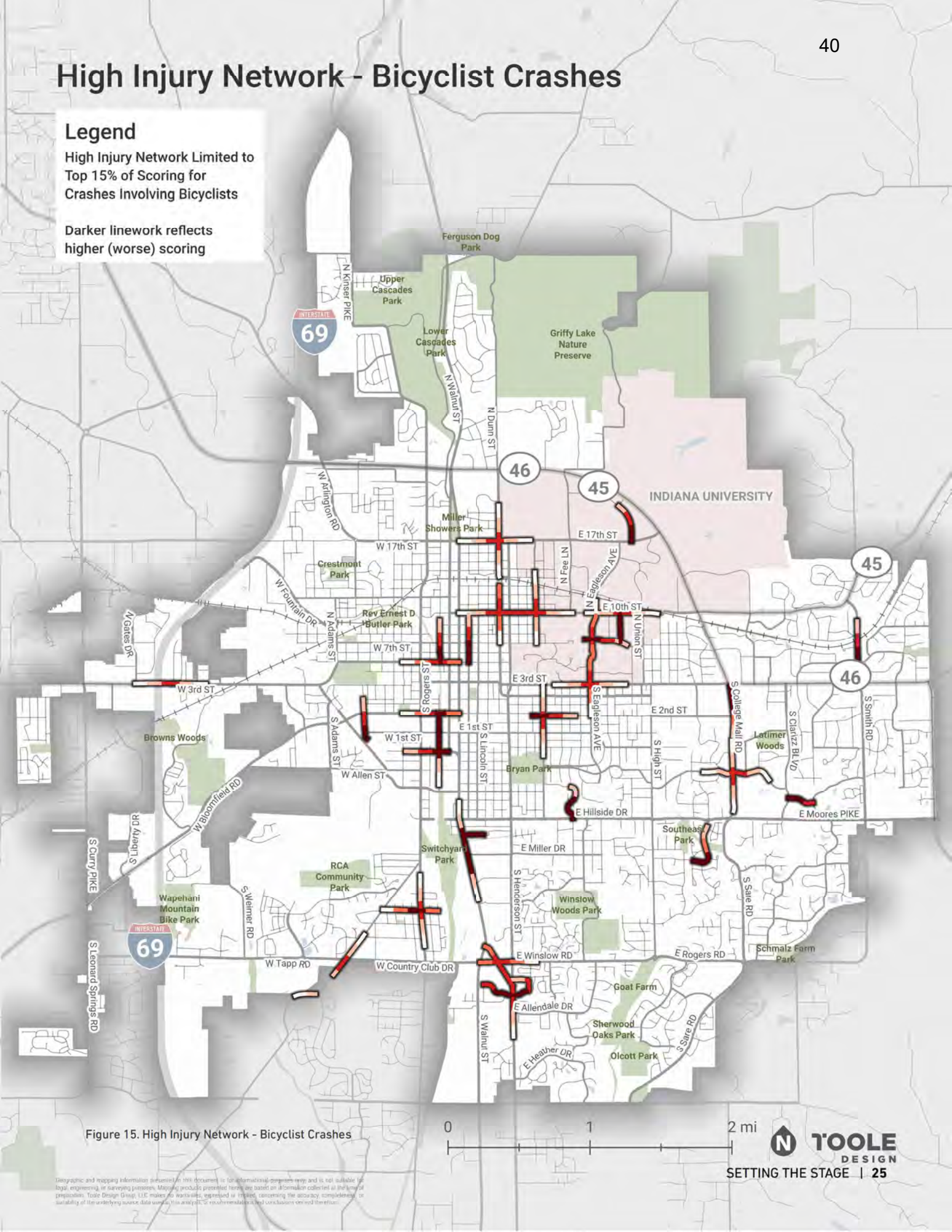


Figure 15. High Injury Network - Bicyclist Crashes

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

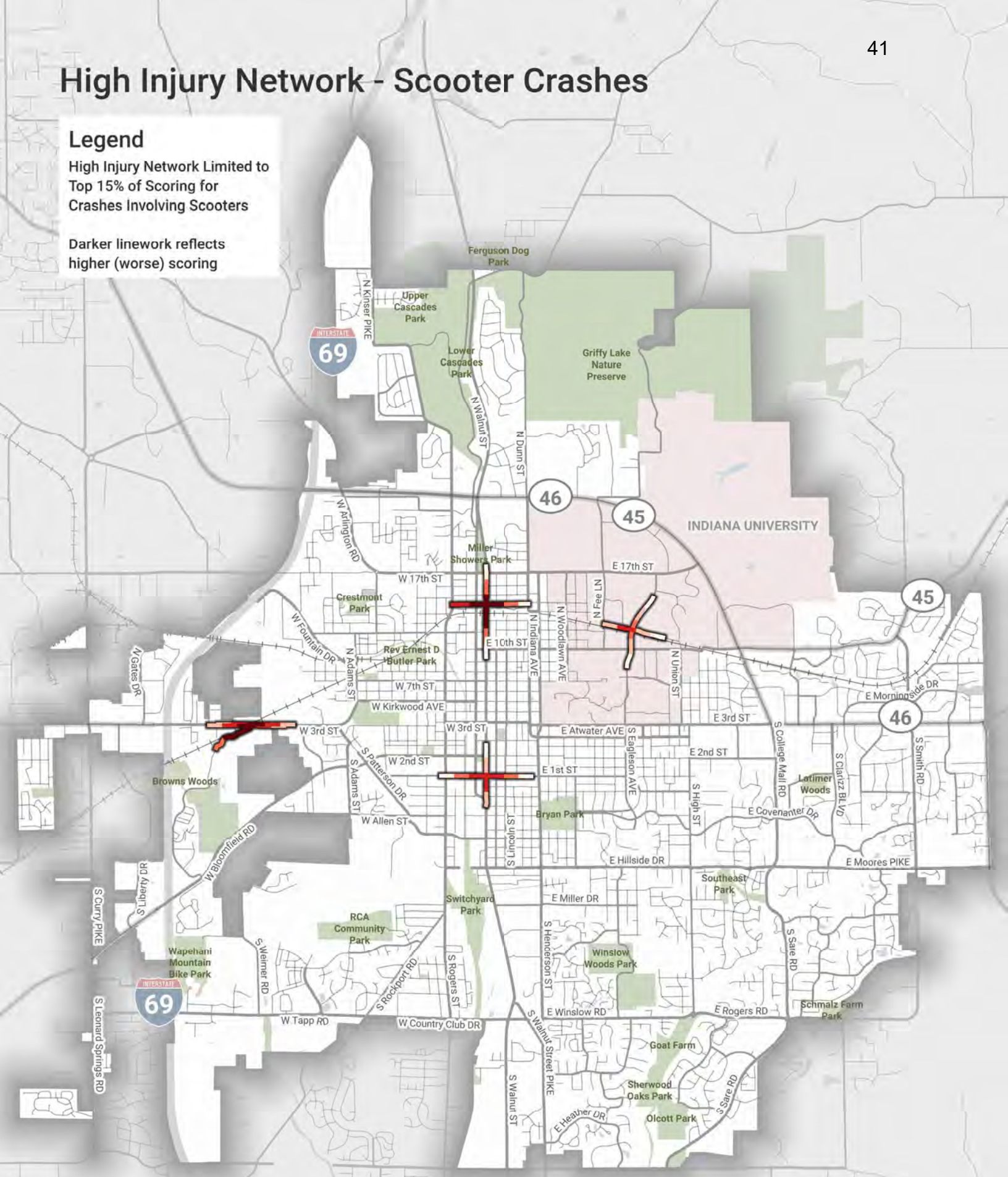


Figure 16. High Injury Network - Scooter Crashes

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

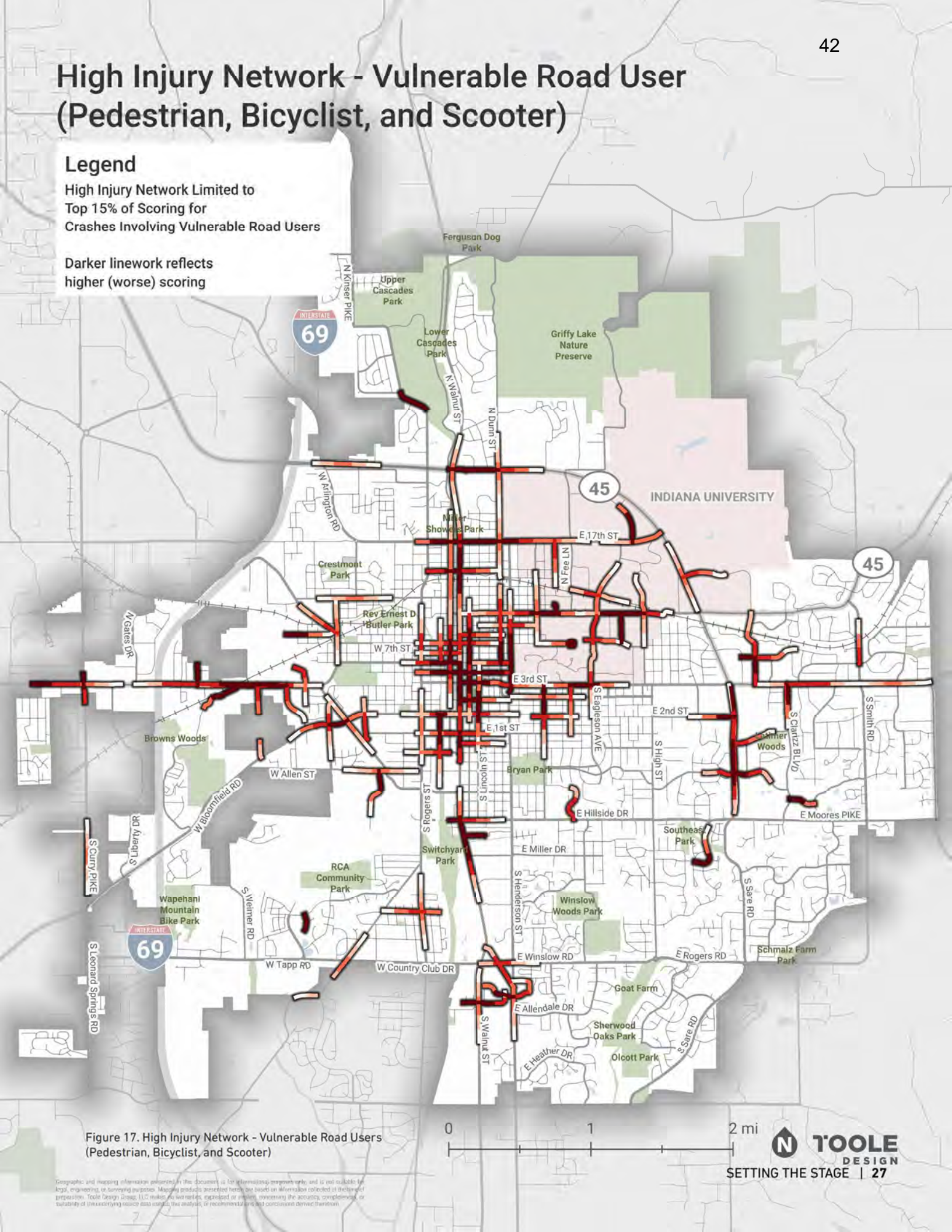


Figure 17. High Injury Network - Vulnerable Road Users (Pedestrian, Bicyclist, and Scooter)

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.

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

High Risk Network Facility Profile Analysis

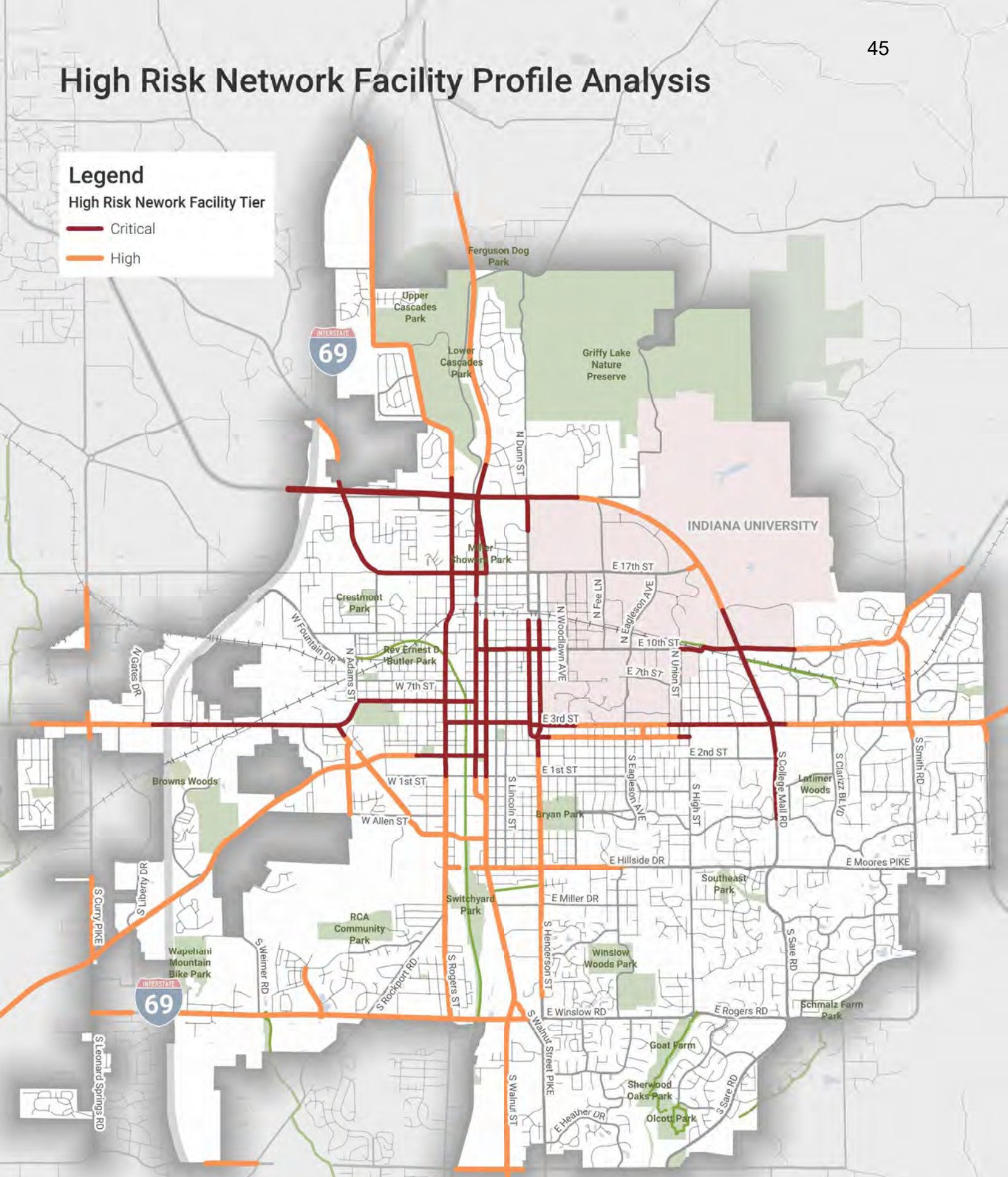


Figure 18. High Risk Network - Facility Profile Analysis

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, 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.

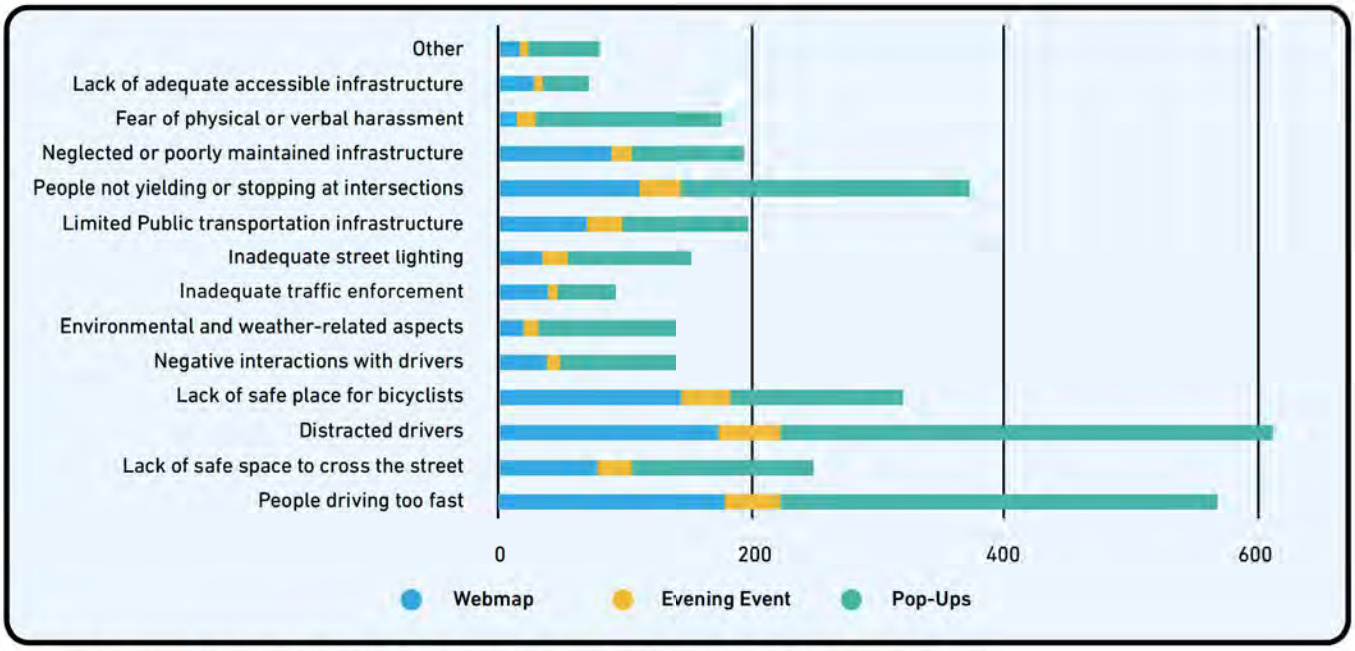


Figure 19. Responses to "What are the top three things that make you feel unsafe on Bloomington's Streets?"

• **Residents think 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.

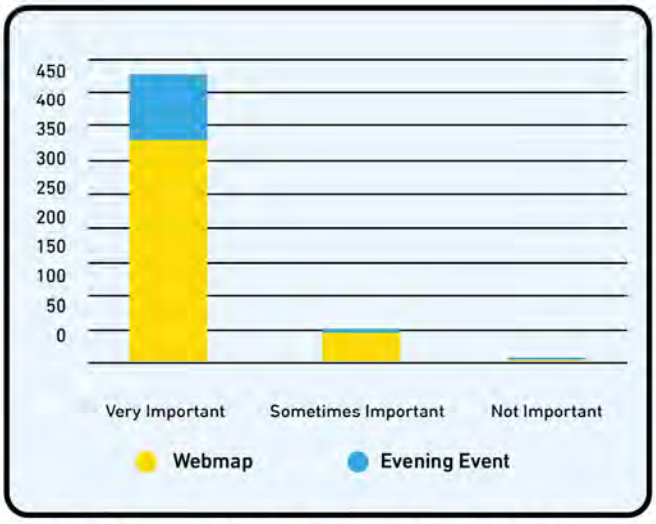


Figure 20. Responses to "How important do you think it is to invest in a safe and comfortable transportation system in Bloomington?"

• **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.

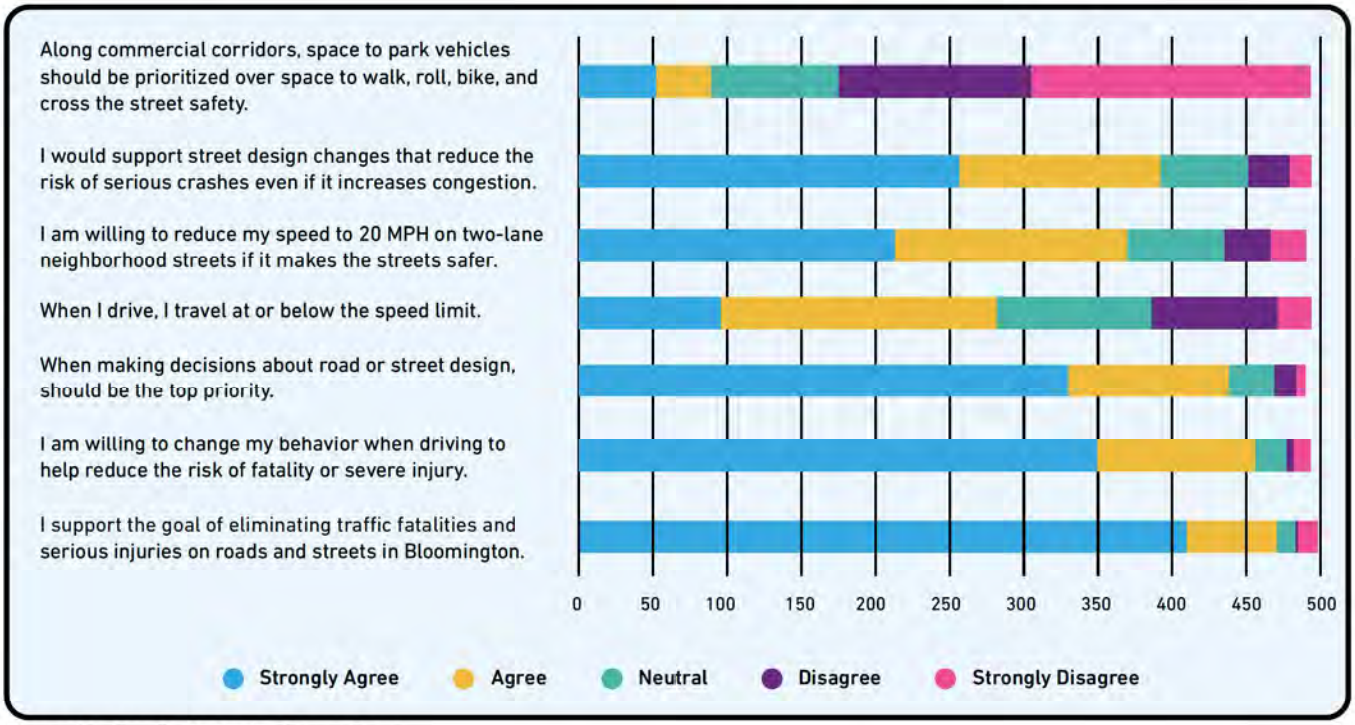


Figure 21. Results to trade-off questions

• **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.

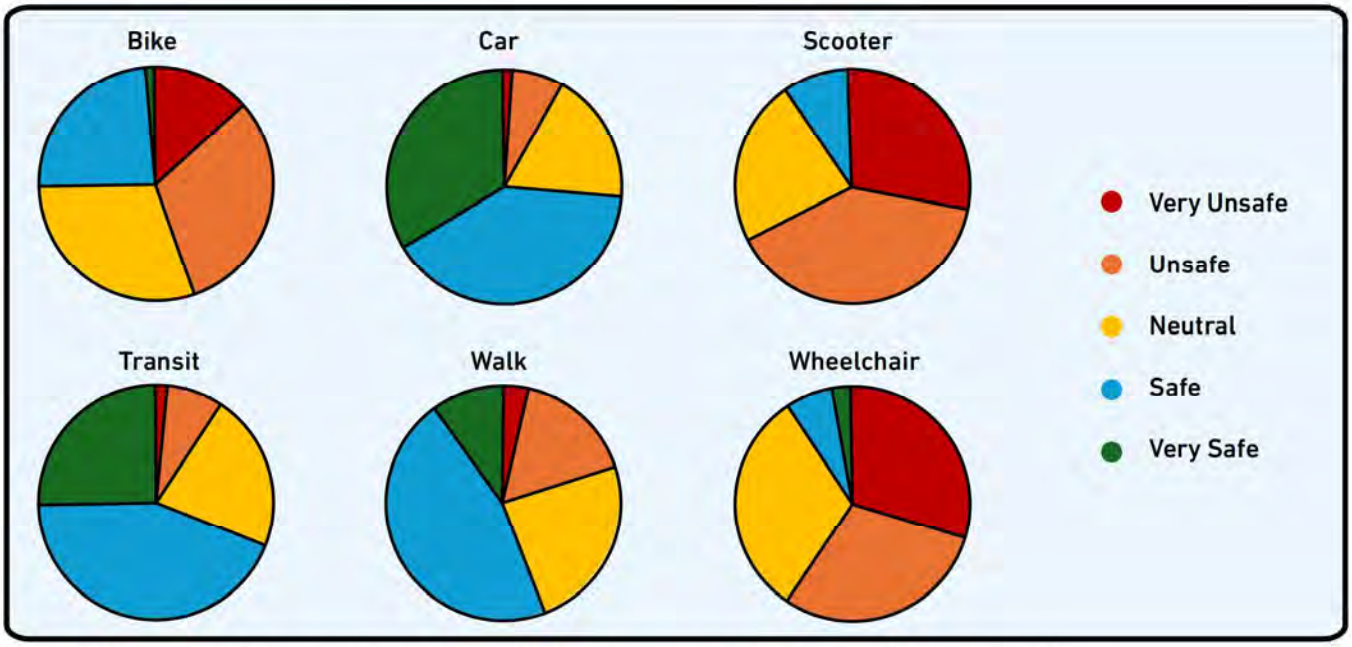


Figure 22. Responses to "Generally, how safe do you feel traveling around Bloomington walking, rolling, biking, scooting, driving, or taking transit?"

• **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

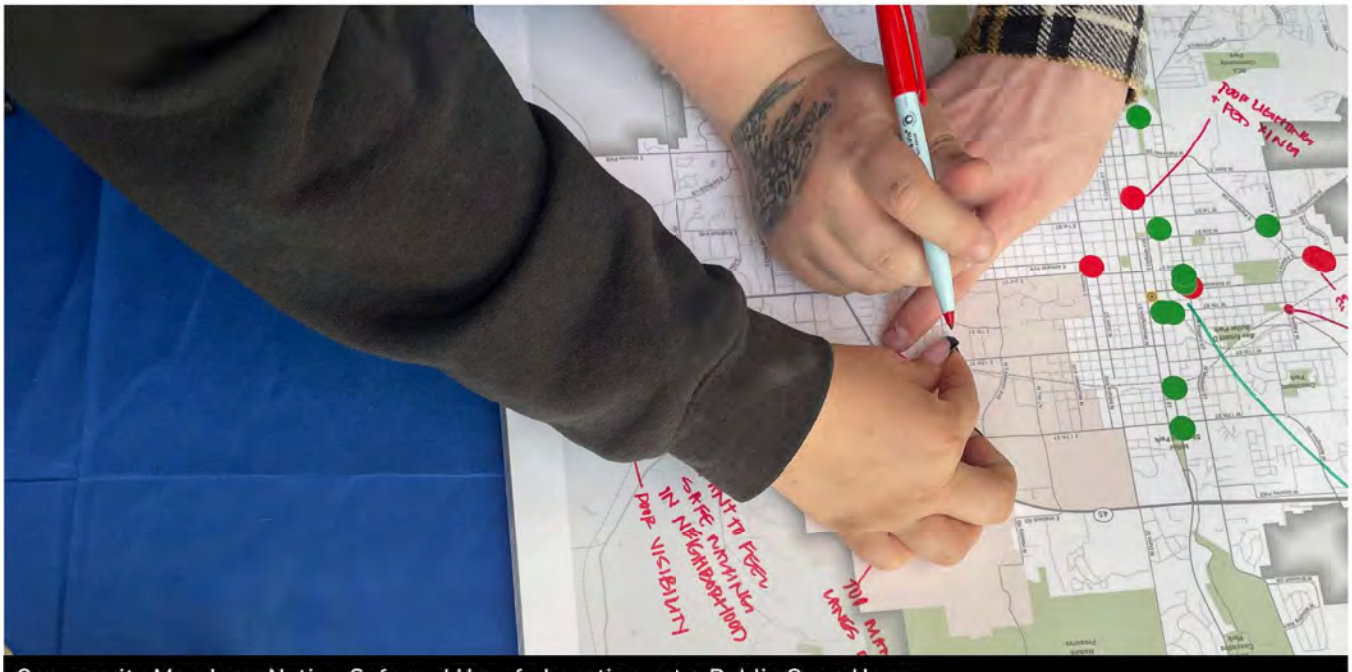
What would make you feel safer when taking transit?	# of Responses
Adding more shelters at transit stops	151
Increasing lighting around transit stops	145
Having more pedestrian crossings and/or signals near transit stops	133
More route information so I know where to go	117
Additional signs or signals 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:

- Consider hiring permanent staff in place of consultants to reduce estimated costs reported elsewhere in this document.

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:

- 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).

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:

- 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.
- 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.

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

Additional information:

- Currently, there is not a transparent, data-driven process for prioritizing Capital Improvement Plan.
- Utilize the project prioritization in this report combined with infrastructure maintenance and preservation needs to develop funding levels and Capital Improvement Plan.
- Include regular funding for maintenance and replacement of safety infrastructure, sidewalks, trails, and bikeways.

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

Additional information:

- Integrate language that communicates safety goals into public outreach.
- 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).
- Utilize existing events to promote safety messaging and collect feedback (examples include Bloomington Community Farmers' Market, annual City festivals, etc.).
- Include 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 strategies.
- 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.
- Provide materials in other languages (Spanish at a minimum and consider other languages as needed
- 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.
- 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.

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

Additional information:

- 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.).
- Includes information and training to local media around understanding crash data, minimizing victim blaming, and high-level understanding of SS4A efforts.

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

Additional information:

- 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.
- 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.
- 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.

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

Additional information:

- 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.

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

Additional information:

- 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.
- Expand to include serious injury crashes as staffing allows.
- Provide brief report on crash data and findings to Advisory Transportation Committee (see PPGS1).

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)

Additional information:

- Add standard details for sidewalks, driveways, bikeways, RRFBs, traffic signals, safety countermeasures provided in **Appendix C: Proven Safety Countermeasures**, etc. that currently do not exist but contribute to safety for all transportation users.
- 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.

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

Additional information:

- Promote redevelopment and new development that encourages slow vehicle speeds, mode shift to non-personal vehicle transportation, and funds adjacent transportation safety projects.
- Utilize development opportunities to meet other goals, such as filling in sidewalk gaps, intersection improvements, and road diets.
- Utilize proactive land use planning, such as small area plans, to inform potential developers of future land use intent.

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

Additional information:

- Evaluate appropriate design vehicles and accommodation/control vehicles for various street typologies from the 2019 Transportation Plan and surrounding land use context.
- 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.

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

Additional information:

- Historical crash data for Indiana has been challenging to analyze and compare.
- Historically marginalized communities may avoid reporting injury crashes to law enforcement but likely will seek medical attention for injuries.

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)

Additional information:

- Examples include No Turn on Red, Leading Pedestrian and/or Bicycle Intervals, Pedestrian Scrambles, and Rest-In-Red.
- Prioritize implementation in high priority areas and all new signal installations.

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)

Additional information:

- Consider additional incentives, such as free or reduced fares to select groups or all riders, to encourage transit usage during events and for commuting.
- Continue to promote transit usage for City employees, and consider expanding further to additional employers.
- 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.
- Enhance accessibility of system (shelters, boarding zones) to ensure availability to all users regardless of physical ability.
- Increase potential for mode shift away from personal vehicles and toward transit, reducing system kinetic energy and helping the City meet climate goals.
- 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.

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:

- Also post to City website, social media, and in locations accessible to the public.

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:

- Other slower speed zones, such as neighborhood slow zones, may also be considered as part of this effort.

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:

- Use available city data and public input to prioritize improvements.
- Projects along roadways with a high number of VPD and higher vehicle speeds should be given greater priority in the prioritization plan.
- Incorporate criteria similar to those used in the 2022 Sidewalk Evaluation Matrix developed by the Council Sidewalk Committee.
- Prioritize construction of at least one side of sidewalk where none currently exist and to fill in gaps in existing sidewalks.
- Where available right of way and roadway geometrics allow, provide physical horizontal and vertical separation between roadway and sidewalk/bikeway.
- Increase potential for mode shift away from personal vehicles and toward active transportation, reducing system kinetic energy and helping the City meet climate goals.

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
SSI1	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)

Additional information:

- 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:
  - 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)
  - Dunn Street (E 3rd Street to E 10th Street)
- 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.

ID	Description	Interim Goal Year	Who Is Responsible	Additional Resources Needed
SSI2	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: • 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

Additional information:

- 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.
- 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.

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: • Intended to provide funding to move utility poles/boxes, landscaping, and other items that are obscuring necessary sight triangles at intersections. • Revisit funding annually to determine appropriate budget level to complete removal of sight obstructions by zero deaths and serious injuries goal year.				
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: • Estimate includes only reanalysis of the High Injury Network and project management. Cost does not include full redevelopment of a new SS4A Action Plan.				

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
Additional information: • Exact funding amounts cannot be estimated at this time due to unknowns of project scope, termini, timing, etc. • 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.				
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)
Additional information: • Evaluate funding amount annually to ensure funding levels contribute to meeting zero fatal and serious injury goal.				
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
Additional information: • Flexibility is encouraged if conditions, analysis, funding sources, etc. change over time.				
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)
Additional information: • Suggested to pursue SS4A Implementation Grant funding to achieve this action item.				

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)
Additional information: • 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.				

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:

- 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.

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

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
    - 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

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

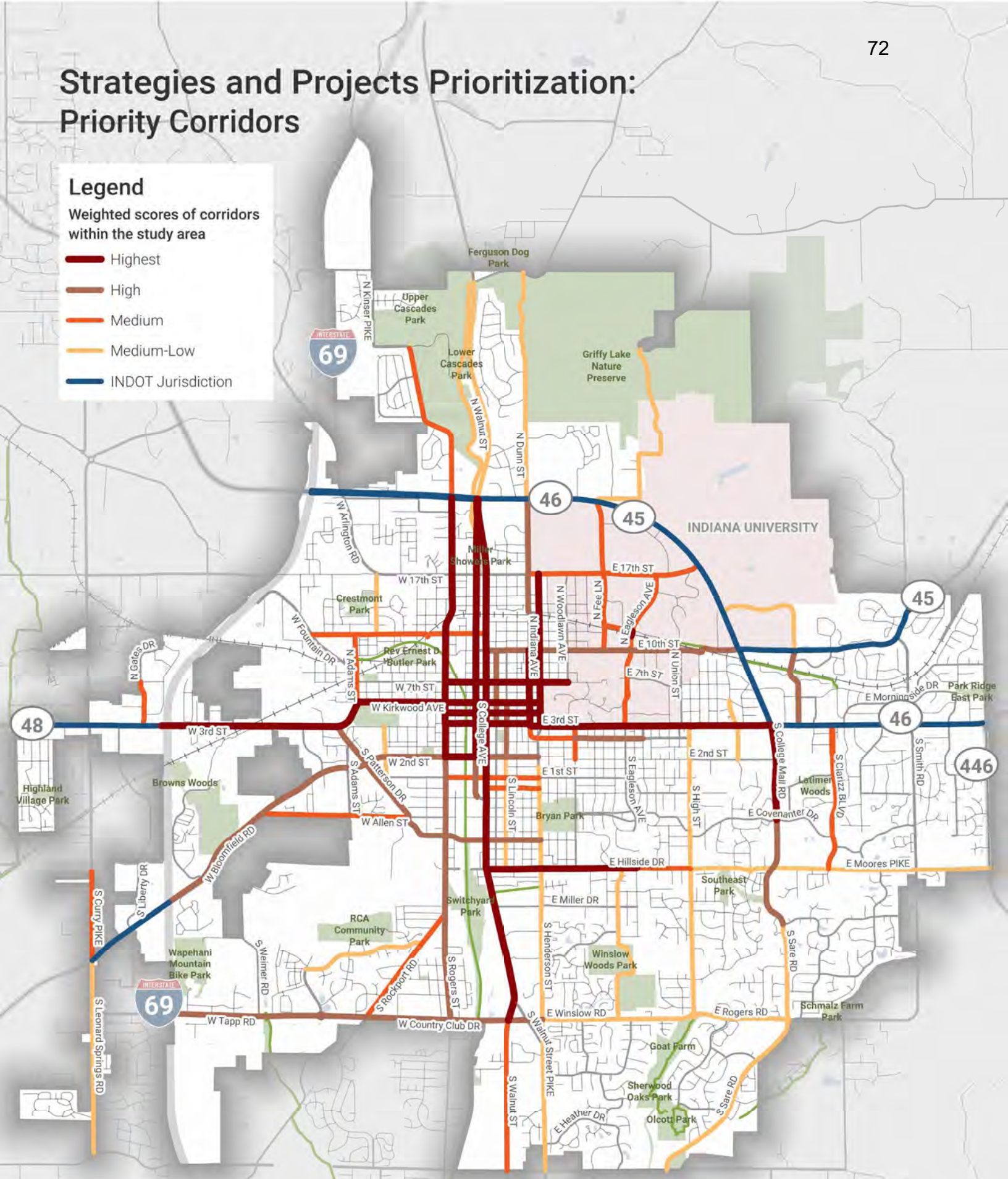


Figure 25. Priority Corridors for Safety Countermeasures

Strategies and Projects Prioritization:
Priority Intersections

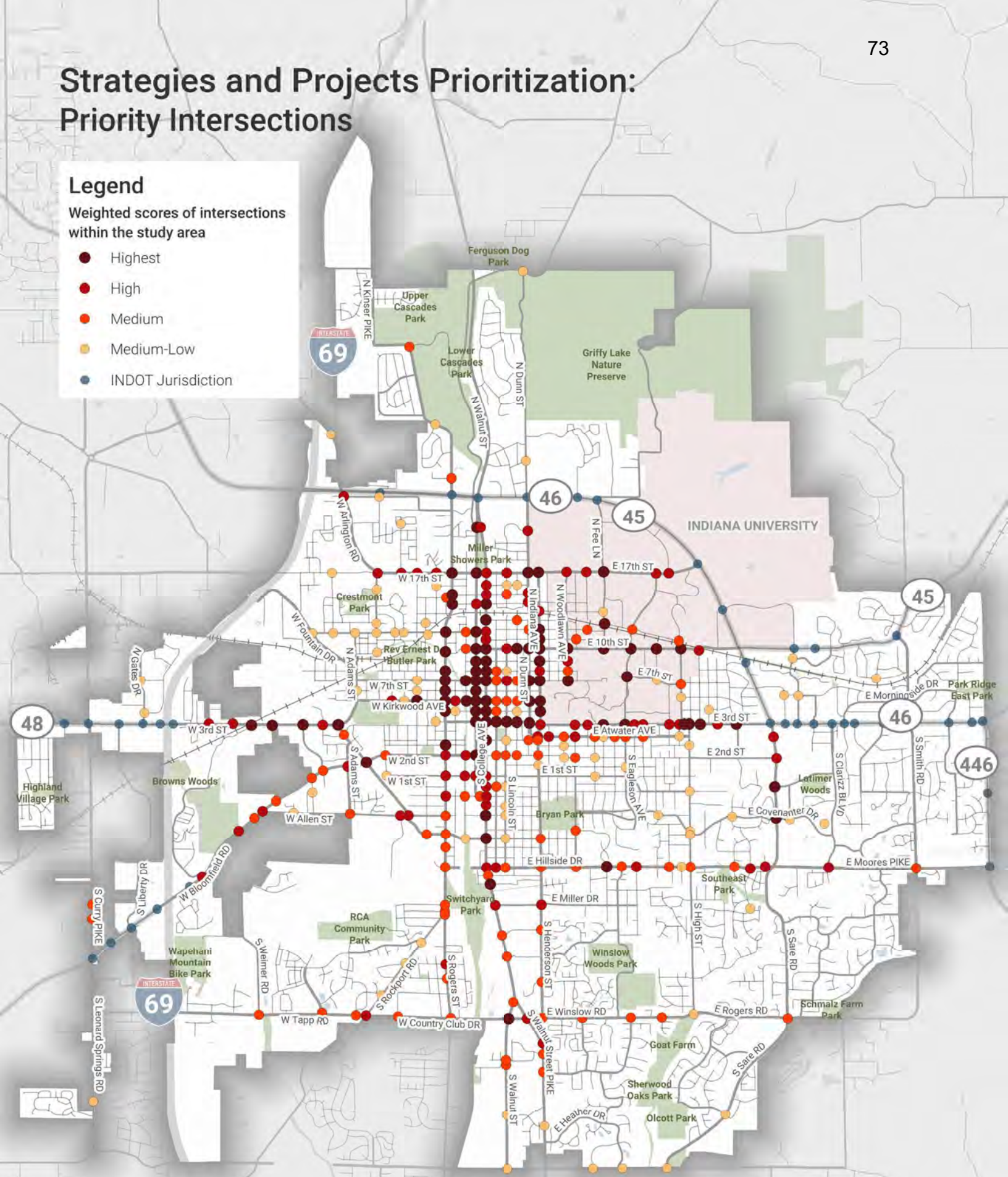


Figure 26. Priority Intersections for Safety Countermeasures

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, 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 & 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.

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BLOOMINGTON SAFE STREETS FOR ALL SAFETY ACTION PLAN APPENDIX A: SAFE STREETS FOR ALL - EQUITY FRAMEWORK

October 2023

Introduction

The City of Bloomington recognizes intentional and unintentional acts of racism and systemic discrimination in the city and university. Bloomington embraces a responsibility to provide equitable access and service to all community members, especially those that are low-income, Black Indigenous People of Color (BIPOC), students, people with disabilities, youth and elder adults, and other historically marginalized groups. This Equity Framework will act as a tool to eliminate disparities in traffic safety and create an equitable transportation system.

The Equity Framework in this Safe Streets for All (SS4A) Safety Action Plan will act as a model for future planning processes. This framework acknowledges the findings around racial discrimination in Bloomington and is guided by the city's racial equity goals to address destructive systems and cultivate a culture of connectedness. The development of the Equity Framework supports existing efforts and advances initiatives around equity and inclusion by the city through the 2019 Divided Community Project Report, 2020 Plan to Advance Racial Equity, and the Future of Policing and Racial Equity task forces.

This Equity Framework:

- Establishes a definition of "equity" for the Bloomington Safe Streets for All Safety Action Plan
- Acknowledges the role of discriminatory policies and practices in infrastructure, housing and land use, law enforcement, and climate resilience that have created inequitable transportation access
- Summarizes equity and racial equity efforts that have been initiated by the City today
- Identifies Communities of Interest that have historically experienced disinvestment in transportation infrastructure, lower access to opportunities, and disparate transportation safety outcomes
- Describes the approach for increasing participation from Communities of Interest in the plan process; and
- Provides a flow chart for centering equity at each stage of the plan process, including project selection and ongoing evaluation

Equity Definitions and Principles

The Bloomington Safe Streets for All Safety Action Plan defines equity as:

> **"The development of planning practices, policies, and programs and dedication of financial and staff resources that intend to reverse disparity trends and historic inequities, address systemic discrimination, and establish a transportation system that provides equal access to safe travel by any mode and opportunities to all people of the community, regardless of race, color, ancestry, age, gender, disability, neurodiversity, sexual orientation, or socioeconomic status."**

Analyzing the community through an equity lens will allow the SS4A Safety Action Plan to recommend facilities in communities that have been underinvested, marginalized, or otherwise discriminated against at any point in history to improve and increase transportation opportunities. This framework seeks to apply the definition above to the SS4A planning process and delineate what an equitable transportation system means through 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, campus, 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 health, safety, or climate outcomes.
- 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 bicycling, micromobility, walking, 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.

Transportation Related Policies & Practices

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 interact socially. Nearly everyone regularly uses the transportation system, whether to access jobs, healthcare, groceries, shopping, entertainment opportunities, or other activities. 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, 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 are responsible for reversing these practices and implementing planning practices and policies that respond to the needs of all people.

This section explains some ways in which infrastructure, housing policies, land use planning, law enforcement, and climate resilience continue to act as a barrier for an equitable transportation system. Acknowledging and understanding how these systems influence one another helps present-day planning efforts, such as the SS4A Safety Action Plan, avoid further harm, build trust from the community, and develop fair policies and practices.

By understanding where institutional issues exist, the City can employ strategic investment, planning, and implementation of equitable transportation projects, programs, and policies to create a more inclusive Bloomington.

Infrastructure

Indiana, like other American states, has a history of infrastructure that has led to inequitable transportation outcomes. Around mid-century, destructive roadway practices and a car-centered culture shift began to proliferate across the US. This occurred in conjunction with a movement to avoid racial integration, reinforce segregation, and resist efforts that would aid Black communities, such as the 1949 Housing Act. This resulted in "white flight," which refers to the mass exodus of white and upper-class families from urban areas to suburban neighborhoods and the rise of urban sprawl. The transportation system quickly transformed to facilitate these shifts, developing practices that divided well-established and growing communities, created transportation barriers, increased serious crashes, and led to higher concentrations of pollution. These impacts were largely targeted towards Black and low-income communities through adopted plans and policies.

Highways

Like most states, Indiana's highway system was largely developed following the first Federal Highway Act of 1956 to create what is commonly known as the Interstate Highway System. This act, in concert with the 1949 Housing Act, led to widescale construction of highways through Black communities to facilitate white flight from the 1950s through the 1970s. Many low-income and Black households did not have the financial means to follow the investment occurring in suburbs. They remained in city neighborhoods that were experiencing disinvestment in infrastructure, schools, and employment, and other services.

Figure 1: Photo of College Ave Circa 1953 (Indiana University, Bloomington)

Public housing and highway construction were the twin cornerstones of the racially motivated urban renewal that swept the country from the 1940s to 1970s, resulting in an extensive loss of urban housing stock and the creation of hyper-segregated communities. Notably, the construction of Indiana's I-70 and I-65 highways decimated historic neighborhoods and divided multi-cultural communities in Indianapolis and the surrounding areas. Thriving businesses, residential streets, new public housing, and recreational spaces were wiped away and replaced with concrete barriers and multi-lane highways connecting new suburbs and the developing interstate network. In neighborhoods like Southside and Ransom Place in Indianapolis, property values plummeted due to the effects of the highway construction, including the traffic congestion that followed. Land acquisition to build the Interstate-70 displaced 17,000 long-time residents, and those that stayed were left with few practical options to sell and relocate.[1]

While the height of highway construction occurred between 1940 and 1970, there are still highway projects being developed today that exacerbate or cause issues of disenfranchisement. The recent development of the southern segment of I-69, running along the west border of Bloomington from Evansville to Indianapolis, is a modern example of how interstate projects can disproportionately burden a portion of the population. The segments of this

[1] Bradley, Daniel. (2020). 'Under the Highway': How interstates divided Indianapolis neighborhoods and displaced 17,000 people. https://www.wrtv.com/news/local-news/indianapolis/under-the-highway-how-interstates-divided-indianapolis-neighborhoods-and-displaced-17-000-people

highway were selected and constructed despite much opposition and many protests by communities[2] along the corridor. While the highway will support commuters and statewide travel, it has still been destructive for many directly impacted by the highway construction. Residents have been forced to sell portions of their land and some have been impacted by damage to their property from drainage and other infrastructure issues.[3] Further, the route required the destruction of approximately 1,500 acres of forest and 300 acres of wetland.[4]

One-Way Road Conversions

Along with the highways, one-way street conversions were another roadway retrofit mass-implemented around the mid-1900s to support significant increases in automobile traffic. During this time, with the cultural shift towards the automobile and away from cities, the objective of the transportation network became to move as many cars as quickly as possible across cities and thoroughfares. While successful at moving vehicles quickly and efficiently, these practices often compromise other modes of travel and cause detrimental impacts to traffic safety and community vitality. Higher speeds along roadways reduce visibility of pedestrians and bicyclists and lead to more fatal or high injury crashes.

Policies and practices that prioritize travel by private vehicle over travel by walking, biking, or transit, disproportionately harm people who are low-income and who may not be able to afford a private vehicle (70% of white Bloomington residents take single-occupant vehicles to work compared to 60% of Bloomington's people of color). Because low-income and BIPOC communities typically rely more on alternate modes of transportation, they are impacted by the negative effects of the one-way roadways at higher rates. Across the country, inequities exist related to safety for people of different demographic backgrounds. Smart Growth America found that People of Color (specifically Native and Black Americans) are more likely than other racial/ethnic groups to die while walking. They also found that people walking in lower income areas are killed at higher rates than people walking in higher income areas.[5]

WRONG-WAY MOTORIST—Driver of car left (above) was one of several local motorists who today found themselves going wrong way on Walnut and College after one-way traffic went into effect this morning. Meanwhile, Street Department started working immediately on parking meters and angle parking lanes to make them conform, and no parking signs were hung on meters about Square.

Figure 2: Photo from *Daily Herald-Telephone*, Vol. 79, No. 222 (April 16, 1956)

The converted one-way roads typically become the main thoroughfare for daily traffic. This fact, paired with the fact that drivers are often forced to recirculate to get to their routes, increases VMT, emissions, and noise pollution in concentrated areas. This causes degraded air quality for residents and users along the corridors. Higher speeds and one direction roads also reduce visibility to local businesses. Neighborhoods across the country have seen local businesses close following one-way conversions because they lose visibility and accessibility of visitors.[6] Many cities are restoring one-way

[2] Roadblock Earth First! (2008). A Look at Resistance to Interstate 69 (Past, Present, and Future). https://inthemiddleofthewhirlwind.wordpress.com/a-look-at-resistance-to-interstate-69/

[3] Sandweiss, Ethan. (2023). A year from completion, I-69 remains divisive. https://indianapublicmedia.org/news/a-year-from-completion-i-69-remains-divisive.php

[4] Indiana Department of Transportation. (2011). I-69 Evansville to Indianapolis Tier 2 Studies – Section 2 Draft Environmental Impact Statement. https://web.archive.org/web/20110726163519/http://www.deis.i69indyevn.org/DEIS_Sec2/2D_Appendix_U.pdf

[5] Smart Growth America. (2022). Dangerous by Design. https://smartgrowthamerica.org/dangerous-by-design/#custom-tab-0-3b878279a04dc47d60932cb294d96259

[6] Walker, Wade, Kulash, Walter, & McHugh, Brian. (2000). Downtown Streets: Are We Strangling Ourselves on One-Way Networks? https://nacto.org/wp-content/uploads/2015/04/Are-We-Strangling-ourselves-on-one-way-networks_Walker.pdf

streets back to two-way streets to reduce vehicular speeds, increase “eyes on the road”, improve pedestrian and bicycle safety, and revitalize local business districts.

In the 1950s, Bloomington saw its own two-way to one-way conversion along College Ave and Walnut St. As with corridors in many cities across the US, College Ave and Walnut St were voted to be designated as one-way roads in 1950s to make the highway routes more convenient for parking and to improve traffic flow. Although this was met with opposition from the public and a new council attempted to reverse the controversial decision, the motion was denied by the state and the one-way streets were declared in 1956.[7]

Housing and Land Use

The neighborhood where a person lives determines what transportation options are safe, available, and accessible for them to use. This, in turn, impacts the spaces and destinations that can be accessed via the available transportation network. Conversely, investment in transit and active transportation infrastructure often corresponds to increased property values. Across the United States, housing policies, zoning laws, and land use practices have a history of being inequitable. Historically, planning and housing policies were regularly weaponized against low income and BIPOC communities to plan disinvestment, concentrate polluting industries, and maintain racial segregation. Today, low income and BIPOC communities are more likely to depend on walking, biking, and transit for travel. These types of projects should bolster these communities; however, transportation infrastructure investments often still lead to gentrification and displacement of residents in low-income areas.[8]

Redlining and Racial Covenants

Around 1916, Black families began to relocate from the South to various cities in the Northeast, Midwest, and West. These families were fleeing aggressive segregationist laws and racial violence in the South. Racial tensions subsequently rose in northern states as competition for jobs increased and large cities became more crowded. Racial violence started to erupt across the US as a result of these growing tensions.

In response, developers and white residents began to integrate racially restrictive language into housing deeds in the 1920s to prevent Black families and other communities of color from accessing quality housing. This language would explicitly ban lots being sold to or occupied by non-Caucasian residents within the property deeds. The practice was reinforced by the real estate industry and National Association of Real Estate Brokers (NAREB), which adopted racial covenants as standard language.[9]

[7] Wiley, Grace. City of Bloomington College/Walnut History Report.

[8] National Institute for Transportation and Communities (NITC). The Transportation, Land Use, and Housing Connection. https://nitc.trec.pdx.edu/land-use-and-housing-research

[9] Evans, Farrell. (2022). How Neighborhoods Used Restrictive Housing Covenants to Block Nonwhite Families. https://www.history.com/news/racially-restrictive-housing-covenants

As Monroe County began to grow through the 1910s, landowners began to regularly place covenants within deed language as land was sold for new development. Much of this language exists in deeds today throughout Bloomington.[10] Beginning in 2021, the Monroe County Recorder's Office developed a project to identify and remove racially restrictive language from these deeds.

The racial covenant practices were further solidified by the National Housing Act of 1934, which introduced and legalized redlining. This law provided white American families suffering through the Great Depression with much needed home-buying aid. But from its inception, the assistance excluded non-white families. The program developed maps that distinguished white and Black neighborhoods to maintain housing segregation. The Federal Housing Administration (FHA) used these maps to systematically deny Black families housing loans and insurance.

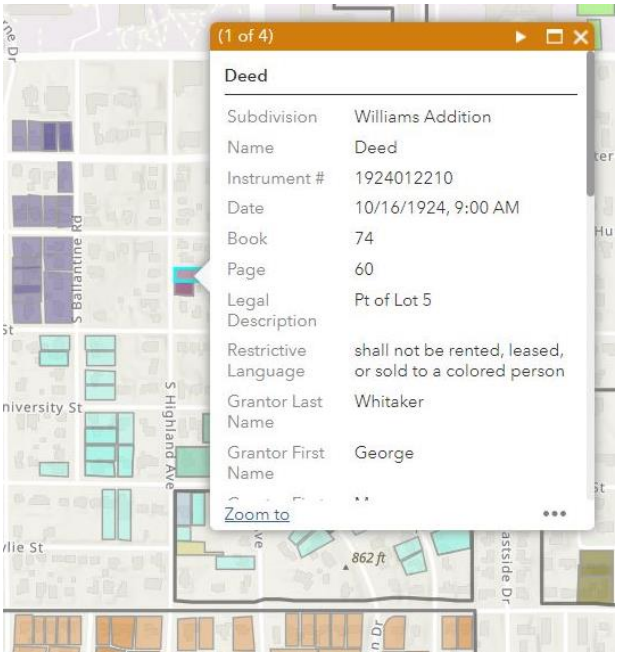

Figure 3: Example Racial Covenant Mapping (Monroe County)

The FHA also used highways and federal housing projects to reinforce barriers between neighborhoods and keep Black residents in areas with fewer resources and services.[11] Aside from denying Black families opportunities for equity and generational wealth, these practices also excluded these families from public services and increased exposure to pollution and environmental hazards.

This has led concentrations of air and water pollution and wide disparities in chronic illnesses and premature death for BIPOC communities, particularly Black and Native American residents. Redlining and racial covenants were not outlawed until the 1968 Fair Housing Act, outlawing all discrimination in housing. However, 30 years of legal housing discrimination had detrimental and lasting effects on low-income and BIPOC neighborhoods. Black residents in Bloomington have reported discrimination by real estate agents and brokers to this day, including being presented with obstacles that were not presented to their white counterparts or being blatantly denied loans for homes in white neighborhoods.[12]

Affordable Housing

Because neighborhoods provide different transportation access and transportation investments influence property values, affordable housing is pertinent to transportation equity discussions. Home and rental prices have skyrocketed in the last 30 years while wages have remained largely flat, impacting families in most American cities across the US. This fact, paired with the recent rise in mortgage rates, has made home buying unattainable for many. Families are forced to rent at higher rates, especially non-white communities. In Bloomington, the Black

[10] Monroe County Records Office. (2023). Monroe County, Indiana's Racially Restrictive Covenants Map. https://gisserver.co.monroe.in.us/portal/apps/storymaps/stories/0309438633e84d78a3d406b93a7421ad

[11] Little, Becky. (2023). How a New Deal Housing Program Enforced Segregation. https://www.history.com/news/housing-segregation-new-deal-program

[12] Legan, Mitch (2021). Black History in Southern Indiana: Racially Restrictive Housing Covenants in Bloomington. https://indianapublicmedia.org/news/black-history-in-southern-indiana-racially-restrictive-housing-covenants-in-bloomington.php

homeownership gap in 2022 was 33.7%, with only 31.4% of Black families owning homes and 65.1% of white families owning homes.[13]

Around 66% of the Bloomington housing stock is rental, which continues to rise as new rental developments are built and home buying becomes less attainable. Bloomington single family housing and rental unit costs are among the highest in the state. There is limited affordable housing near the city center, and limited transportation options to connect people outside of the city center to the university, schools, jobs, groceries, entertainment, and other services. While there is not a shortage of housing units for high-income residents, there are only 24 adequate affordable housing units to serve every 100 extremely low-income household (households making 0-30% of the Area Median Income of $33,172). The most cost-burdened residents are concentrated downtown and around the campus, come in low-income concentrated areas where people are already at a disadvantage to afford daily needs. Further, there is a growing need and demand in Bloomington for accessible and senior housing.

It is important to note that affordable housing is not only connected to transportation, but also affordable food, healthcare, and childcare. Often, affordable housing areas are further from city centers and further from goods and services, with less safe and accessible transportation options to assist with additional distances. Alternatively, residents that are willing to pay more of their income to unaffordable housing (housing is considered "affordable" when someone spends less than 30% of their gross income on housing) to live close to daily destinations are considered "cost-burdened". This means they may not be able to pay for their other monthly needs, such as quality food or medical care.[14]

While the City has increased housing availability through new developments throughout the city, much of these are luxury complexes or are otherwise unaffordable to the average household. Students tend to feel forced to rent too-expensive housing to be close to the university, while non-student households may need to relocate for cheaper housing as the rent and property taxes are driven upward.[15] Bloomington has implemented initiatives that aim to build enough affordable housing for residents to remain close to the city and to keep up with the growing student populations.

In the 2000s, there was a shift back to the cities from suburban areas, but there was also a trend of restricting construction of housing units which drove up the price of housing in desirable urban areas. Zoning discrimination has been outlawed, yet exclusionary zoning practices are still common today through restrictions on land uses, lot sizes, and number of units on properties. Parking requirements,

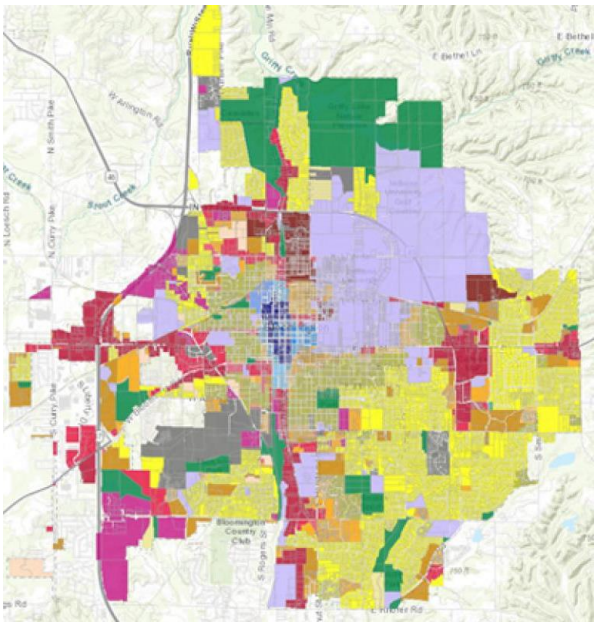

Figure 4: UDO Zoning Map

[13] Stacker. (2022). The Black Homeownership Gap in Bloomington. https://stacker.com/indiana/bloomington/black-homeownership-gap-bloomington

[14] Bloomington Affordable Living Committee. (2019). Report on Affordability. https://bloomington.in.gov/sites/default/files/2021-04/Working%20Hard%20Falling%20Behind%20--%20Flat-%20Built%201%20November%202019.pdf

[15] Moser, Nick. (2023). The Problem with Bloomington Apartments and Rising Rent. https://www.idsnews.com/article/2023/02/bloomington-apartments-rising-rent-problems#:~:text=For%20the%202022%2D2023%20school,they%20are%20building%20luxury%20apartments .

building setbacks, and other design regulations also undermine affordable housing potential.[16]

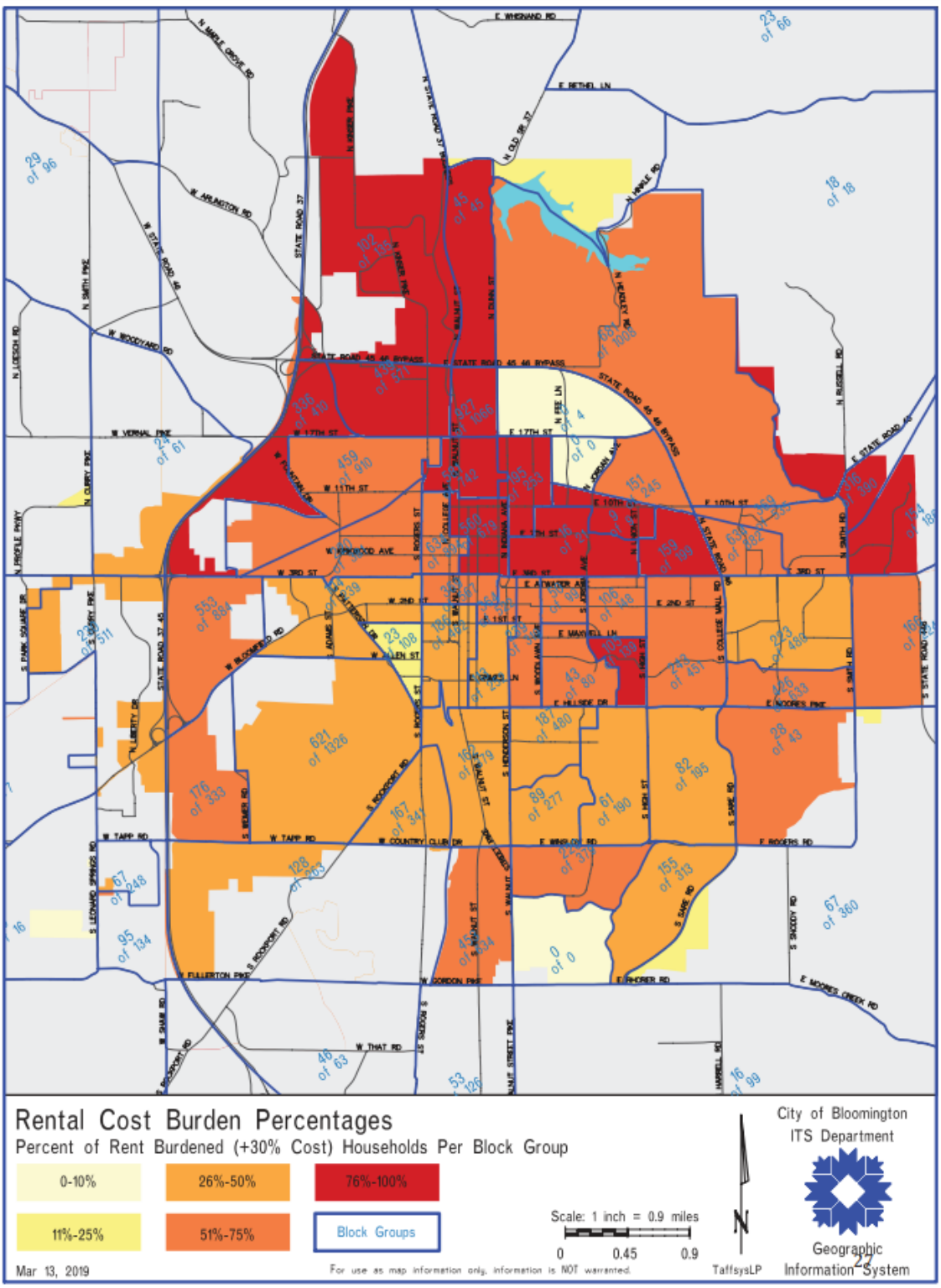

Figure 5: Rental Cost-Burden Percentages (Bloomington Affordable Living Committee)

[16] Planetizen. What is Exclusionary Zoning. http://www.planetizen.com/definition/exclusionary-zoning

Through the Bloomington Unified Development Ordinance (UDO), zoning changes will allow more mixed-use student housing that is campus accessible, additional parks and open space protection and preservation, and expanded multi-family housing (especially duplexes and triplexes). This is intended to diversify housing, create more affordable housing, and reduce dependency on vehicles, allowing more people to live near downtown.[17] The UDO has also implemented incentives for affordable housing in new developments, which is increased if there are select sustainability features. There are various federal and local funds and organizations whose missions are to assist those experiencing homelessness and low to medium income residents.

Displacement and Gentrification

Low-income, BIPOC, and other marginalized groups have been intentionally and unintentionally displaced from their neighborhoods throughout American history. This can take the form of physical displacement, either direct or indirect, or cultural displacement.

As discussed, BIPOC neighborhoods have been strategically selected for destructive infrastructure, such as highways, polluting industries, and disinvestment. This can force people to move out to make way for the development of these projects or cause them to leave over time due to neighborhood degradation.

For decades displacement has also been closely linked with gentrification. Gentrification refers to the ways in which a neighborhood is changing, while displacement refers to the impact on people that live in said neighborhood.

Gentrification is largely the process of white or higher-income residents moving to a historically marginalized neighborhood. This is often because these neighborhoods typically have cheap housing and development opportunities. When white flight led to suburban sprawl through the 1960s and 1970s, the property value of many urban areas drastically declined.

Over the last 30 years there has been an influx back to the city. These urban areas that were undesirable then, are now more desirable due to their convenient locations close to city centers. Further, many of the features that once made these areas undesirable, such as old or industrial buildings, are now prime features for art and historic districts. Many of these city neighborhoods are primarily BIPOC or other marginalized residents that could not afford to follow the exodus to the suburbs, who are now being pushed out of their neighborhoods as high-income residents return to urban areas and developers capitalize on the opportunities.

An influx of quality goods, services, housing, and infrastructure typically follows high-earning residents, causing property values to quickly rise. Even projects that are intended to serve low-income residents, such as transit or active transportation facilities, if unchecked and not paired with anti-displacement strategies, can unintentionally cause gentrification by making the neighborhood more desirable. Gentrification can result in physical displacement by raising costs of living, eminent domain for new projects and developments, or predatory investment strategies to skew property values. Vulnerable residents are often convinced by property speculators or forced to sell their home, typically much lower than fair market value.

Physical displacement can also occur through evictions, lease non-renewals, discriminatory real estate practices, and exclusionary zoning. As neighbors and businesses are replaced with new people and developments, other long-time residents may also feel pushed out by the transformation of their neighborhood.[18] This can further

[17] Charron, Cate. (2021). Rezoning: Explained. http://specials.idsnews.com/bloomington-indiana-udo-zoning-districts/

[18] The Uprooted Project. (2023). Understanding Gentrification and Displacement. https://sites.utexas.edu/gentrificationproject/understanding-gentrification-and-displacement/

impact these residents as they are forced to move further from their jobs and regular activities if they do not have access to safe or affordable transportation.

Gentrification itself does not cause displacement of long-time residents, but the effects of gentrification do lead to displacement. With intentional policies, programs, and practices, involuntary displacement can be prevented. Discussions around residents being displaced by new housing, park space, the convention center, and other development projects are ongoing in Bloomington. Even the rezoning project allowing duplexes and triplexes on single family lots, which are intended to allow more affordability for homeowners and potential renters, runs the risk of developers taking advantage of multi-unit properties to further raise housing costs.[19]

Dedicated and consistent funding, business support, housing support, thorough engagement, project communication, and updated policies are strategies that can prevent displacement in the community. Safety and infrastructure projects intended to improve conditions in neighborhoods should be preceded by anti-displacement policies and strategies so that these residents are not forced out as a result of neighborhood infrastructure improvements.

Law Enforcement

Enforcement is conventionally viewed as a key component of achieving transportation safety and compliance. For this reason, an understanding of law enforcement policies and practices in Bloomington is important for the Safe Streets for All Action Safety Plan and other transportation initiatives. Transportation enforcement has a discriminatory history throughout the US, impacting the level of safety on public streets and in public spaces for specific members of the community. BIPOC, especially Black residents, are more likely than white residents to be pulled over, have their car searched, be pulled over on a bicycle, be stopped by a cop while walking, and be ticketed on transit.[20] Enforcement discrimination can cause a mobility issue for marginalized communities, such as BIPOC and LGBTQ people. Some cities have implemented anti-harassment programs, hired unarmed personnel for transportation enforcement, and increased engagement between the community and law enforcement members.

While only 4% of the Bloomington population, Black residents make up 23% of arrests and are nearly 5 times more likely to be arrested for low level, non-violent offenses.[21] However, efforts such as the Police Department LGBTQ+ Liaison Task Force, reporting of hate crimes to the FBI, the Future of Policing Task Force, and anti-discrimination actions by the police department and other city leaders strengthen trust and ties to the community. When law enforcement is not a threat to any member of the community, this helps create a safe public environment for everyone and empowers vulnerable groups to use public infrastructure and services, such as transit and bike lanes.

Climate Resilience

Climate and transportation equity are closely tied in a variety of ways. As extreme weather events increase, risk to transportation infrastructure and transportation users increases. Replacement, repairs, and regular maintenance needs for infrastructure will continue to increase. Damage and maintenance issues to infrastructure can disrupt users by causing safety and convenience issues. Transportation users will not only be impacted by damage to the infrastructure, but also by the climate impacts themselves. Increase in flooding, extreme heat, snow and precipitation can be a safety barrier for transportation users. This is particularly true for bicyclists, transit users,

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[19] Sturbaum, Chris. (2023). A Zoning Debate in Bloomington, Indiana. https://www.cnumidwest.org/single-post/a-zoning-debate-in-bloomington-indiana

[20] Barajas, Jesus. (2021). Biking Where Black: Connecting Transportation Planning and Infrastructure to Disproportionate Policing. https://www.sciencedirect.com/science/article/pii/S1361920921003254

[21] Police Scorecard. (2023). Bloomington Police Department. https://policescorecard.org/in/police-department/bloomington

and especially pedestrians, the most vulnerable user of the transportation system. These also happen to be the modes of transportation that underrepresented groups rely on more than their represented counterparts.

Climate impacts disproportionately impact low-income, BIPOC, and other marginalized groups, who are typically the least responsible for climate change. The transportation sector is a large contributing industry to greenhouse gas emissions, which degrade both air and water quality. Infrastructure funding, reducing climate impacts, and combating climate-change contributors in all communities is vital for the future transportation networks. Equitably implementing climate solutions and interventions will improve the transportation safety and reduce threats of climate related displacement.

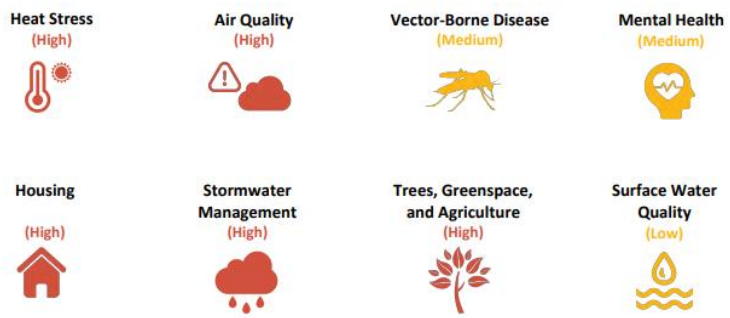


Figure 6: Bloomington Climate Change Vulnerabilities (Climate Action Plan)

Heat stress, air quality, home costs and damages, stormwater management, and trees, greenspace, and agriculture were found to be the highest vulnerability areas for climate risks in Bloomington. These vulnerabilities will likely impact low-income and marginalized residents who may be in higher risk areas, rely on walking, and biking, and public transit, and have limited options for relocation and protecting themselves from climate impacts. 63% of commuters drive alone and 61.4% of vehicle miles traveled (VMT) are single-occupancy vehicle trips in Bloomington.[22] By implementing green infrastructure, climate policies and funding, sustainability incentives, greenspace and nature preservation, and other solutions, the city can build climate resilience and bolster the community against climate change. Integrating these solutions within transportation projects can improve the safety, accessibility, and convenience of the transportation network for all mode types and users.

Relevant Plans and Studies

The City of Bloomington has adopted a variety of plans and other initiatives that aim to build a safe and equitable future for the community. While not all of these plans are transportation-focused, the solutions and recommendations often overlap with transportation as described in the previous section. The project team conducted a review of these transportation and related plans, policies, and studies to identify where solutions may overlap with transportation equity considerations. Table 1 describes the findings of this equity framework assessment. A broad summary of these plans and policies can be found in the Existing Conditions section of this plan.

[22] City of Bloomington. (2021). City of Bloomington Climate Action Plan. https://bloomington.in.gov/sites/default/files/2021-04/Bloomington%20Climate%20Action%20Plan%20040521%20Reduced.pdf

Table 1: Transportation Equity Considerations in Relevant Plans and Studies

Plan, Policy, or Study	Description	Transportation Equity Applicability
Bloomington Indiana Urban Forest Assessment	This is a comprehensive assessment of the City of Bloomington's urban tree forest. It identifies current and potential tree canopy coverage, priority planting levels, and heat intensity areas and sets goals for greenspace and ecosystem health.	Trees provide heat protection, stormwater management, improve air quality, and assist energy conservation. White, high-income neighborhoods typically have more tree canopy coverage than non-white or lower-income neighborhoods. Street trees can be used to create inclusive spaces, mitigate the effects of climate change, and strengthen the community.
City of Bloomington 2022 Future of Policing Task Force Initial Report	The task force, made up of various community leaders and members, conducted an analysis of law enforcement policies and practices and provided a set of recommendations for the police department.	Analysis of policing procedures and recommendations for policing improvements have the potential to combat discriminatory policing practices, provide police officers with resources needed to adequately serve all residents, and improve the public perception of the police department among community members. This in turn improves public safety and perception of safety in public streets and spaces.
City of Bloomington 2021 Climate Action Plan	This plan establishes a comprehensive vision for climate resilience in the Bloomington community. The report provides analysis of existing conditions and recommendations for areas of focus to address climate change.	These recommendations include actions to improve multimodal travel options, improve pedestrian safety, expand Complete Streets, and address greenhouse gas emissions. These efforts can improve public health by reducing pollution directly, as well as indirectly by reducing car use. These actions can also make transportation more accessible and affordable for the community.
City of Bloomington 2020 Plan to Advance Racial Equity	This plan was developed to evaluate City policies and programs and propose recommendations to address racism and other types of discrimination in Bloomington. This plan established a set of goals and action items for anti-racism and anti-discrimination, including developing two task forces.	Anti-racist and anti-discrimination efforts in the City can help to create a safe and inclusive space for all member of the community, particularly underrepresented groups. These actions aim to address potential issues internally in City departments, and externally in the community. Fostering a culture of equity and connection will create safe environments in all public spaces.

Plan, Policy, or Study	Description	Transportation Equity Applicability
City of Bloomington 2019 Divided Community Project Report	Sparked by the Farmer's Market controversy[23], this project was conducted to complete deeper analysis of social issues and discrimination that led to the Market controversy. This project employed a task force to provide guidance, conduct interviews with the community, and develop recommendations to address long-standing issues around discrimination in the community.	This effort is a step towards informing people about any problematic history in Bloomington, understanding discrimination that occurs in the community today, uplifting voices of marginalized groups and residents in the city, and developing actions to create a more inclusive community. Elevating BIPOC voices, combating antisemitic and discriminatory behavior, and raising concerns over housing and gentrification are most directly applicable to transportation system planning.
City of Bloomington 2019 Transportation Plan	This project provides a comprehensive plan for the future transportation system. The plan includes an analysis of the existing network and a recommended multimodal network and program.	The recommended network, projects, and policies in this plan aim to lower transportation costs, provide better access to multimodal transportation, improve connections across Bloomington, improve the health of the community, and reduce traffic burdens. These are especially beneficial to those that rely on active transportation and transit for transportation.
City of Bloomington 2018 Comprehensive Plan	This comprehensive plan sets a vision, goals, and action items to create a sustainable community and high-quality of life for all community members. This acts as the foundation for city planning and policies.	The plan highlights equity considerations for housing, environmental, and transportation efforts. The transportation objectives and action items aim to make the multimodal network more efficient and expansive, providing safe and effective transportation options for all members of the community.

[23] Healy, Jack. (2019). Amid the Kale and Corn, Fears of White Supremacy at the Farmers' Market. https://www.nytimes.com/2019/08/18/us/indiana-farmers-market-white-supremacy.html

Equitable Project Process

As part of the Safe Streets for All effort, this Equity Framework has identified Communities of Interest (COI) – census tracts that have higher densities of the priority demographics listed below. These groups consist of populations that have been underinvested in or otherwise marginalized throughout history in terms of transportation related planning practices. The SS4A Safety Action Plan will utilize the COI geography when conducting equity analyses and data-based prioritizations. The project team will also use COI geography to determine appropriate locations for engagement and outreach activities.

Priority Demographics

The following demographic groups have been identified as vulnerable to underinvestment or marginalization through transportation and other planning projects.

- Black, Hispanic/Latino, Indigenous, Asian, and other People of Color
- Low-Income Households
- People with Disabilities
- People with Low English Proficiency
- Students
- Children
- Elderly Adults
- People with Limited Vehicle Access
- Cost-Burdened Renters

Equity Safety Analysis

The following analyses will be conducted and assessed with this equity framework to understand how the priority demographics can be accommodated by this Safety Action Plan.

- Existing Conditions
  - » Home Ownership
  - » High Heat Intensity
- Historical Trends
- Systemic Safety
- Crash Data
- High Injury Network

Community Engagement

Community engagement is a critical piece of the Safe Streets for All Safety Action Plan. The project team intends to conduct inclusive engagement in alignment with the principles of this framework to improve equity in both process and outcome. As described in this document, the historical exclusion of marginalized communities in transportation planning and decision making has resulted in these communities having less access to safe, comfortable, convenient, and otherwise desirable transportation. This includes bike, walk, roll, and transit options. Inclusive and meaningful engagement is a step towards addressing past wrongs and preventing the perpetuation of past harms in future planning efforts.

Historically, community engagement efforts for transportation projects have attracted people who are already comfortable interacting with government agencies and have the time and resources to participate in engagement activities. Further, many members of the public have limited time to attend events, lack access to reliable internet for online engagement, or do not trust decision makers to adequately listen to their feedback because of historical wrongdoings. This often means people who are most impacted by a project do not get the opportunity to express their opinions, provide feedback, or assist in decision-making. More inclusive and equitable engagement can better help the City of Bloomington develop infrastructure and safety projects, policies, and programs that meet the needs of all residents.

Approach

The SS4A Safety Action Plan project team will intentionally engage community members who are diverse in age, race, income, ability, and language, and those who bring life experiences and expertise often missing from existing data and transportation decision-making groups. Aside from desiring to correct inequities in planning, by conducting inclusive engagement, planning projects and programs can achieve higher quality outcomes by including diverse backgrounds and perspectives. To maximize the input and guidance on the Safe Streets for All Safety Action Plan received from priority demographics living in the Communities of Interest, the project team will follow best practices for equitable engagement including:

- Successful community engagement should end with both the project staff and stakeholders feeling that their expectations were met. The International Association for Public Participation (IAP2) has created the Spectrum of Public Participation, which can help practitioners honestly select and match the goals of their participation effort with their commitment to the public (see Figure 7). While no level of the spectrum Inform, Consult, Involve, Collaborate, or Empower – is better than the other, the project team will ensure that there is honest communication with community members about the purpose of the various outreach strategies that will be employed. Full disclosure on the level of engagement is especially important when engaging historically marginalized communities – these communities have historically been on the "inform" level and, as a result, many planning projects have simply happened to them without their input. This reality is not forgotten within communities and it will take consistent and diligent work to build trust in these communities.

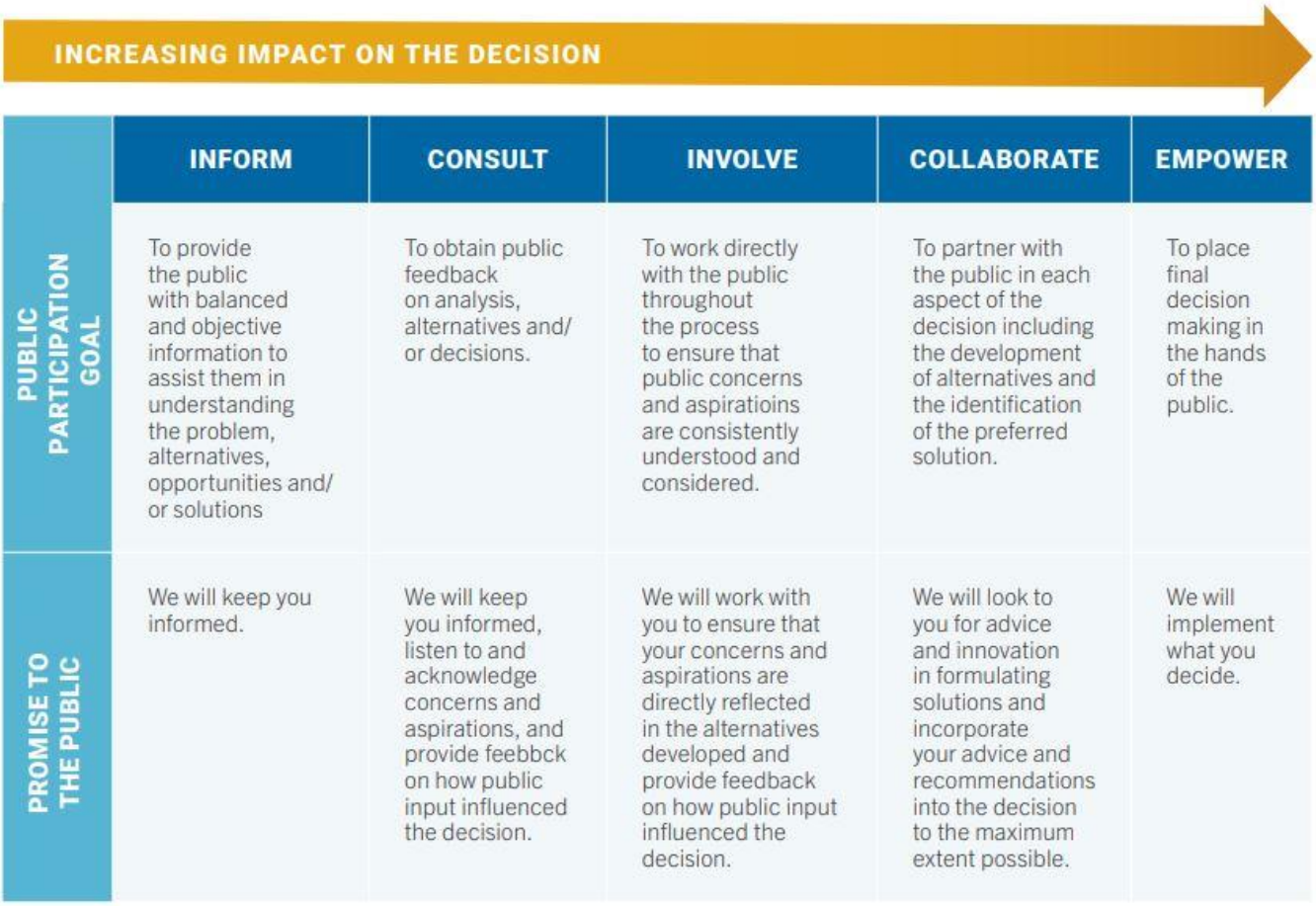


Figure 7. IAP2 Spectrum of Public Participation (source: www.iap2.org).

- The project team will prioritize strategies that allow for meaningful engagement of priority demographics including in-person events (safety week, pop-ups, open house, community group meetings, in-classroom presentations/workshops, and committees) and virtual opportunities (website updates, e-blasts, social media posts, online polls, online interactive activities).
- When identifying locations for outreach activities the project team will focus on popular and/or strategic locations within Communities of Interest. The project team may consult with organizational partners and local community leaders for advice on locating outreach activities.
- It is important that the project team members who are in the field deploying engagement strategies and discussing the planning process with residents are demographically representative of the populations they aim to engage. Therefore, the project team members deploying engagement strategies will be diverse in race, gender, age, cycling comfort, and lived experience.
- Specific engagement materials will be provided in languages aside from English that are commonly used by Communities of Interest. As appropriate, the project team will coordinate live interpretation for engagement and outreach activities that aim to reach Spanish residents.

Table 2: Priority Engagement Outreach Groups

Core Factors Outreach efforts will prioritize engaging these populations to exceed the diversity of the city:	• Black, Hispanic/Latinx, or other person of color (consistent with categories used by the Census Bureau) • Earning less than 80% of the median household income • High rental cost-burden (over 51%)
Intersectional Factors Outreach will seek to engage a diverse set of people that represent one or more of the core factors as well as one or more intersectional factors:	• No access to a car or don't drive • Low-AMI (0-50% of average) • Frequently walk, bike, or ride transit for transportation • Women or non-binary people • Have limited English proficiency • Are LGBTQIA+ • Have a physical or mental disability • Over the age of 65 • Young Adults (18-30) • University students • Under the age of 18 (teens who make their own mobility decisions) • A different national origin than the U.S. • Immigrant or refugee • Have high housing cost burden • Families with young children (under 12) • Are single parents

Engagement Goals

The public participation process will invite stakeholders to articulate how transportation safety infrastructure, programs, and policies impact their quality of life. Our intention is to engage the public around the conditions that determine where infrastructure can be placed, the programs that can be developed, and policies that can be revised. We respect the value the community brings to this process and warmly encourage their involvement through the development of the plan.

The principal goals of public outreach are to:

1. Implement a process that is equitable and accessible, with an emphasis on uplifting voices from the "Core Factor" (Table 2) groups, being the groups of focus for transportation equity.
2. Prioritize engagement with historically underrepresented and underserved stakeholders by collaborating with key community organizations with access and credibility to these populations, and by valuing this expertise through incentives and/or compensation for time.
3. Create awareness of the Safe Streets for All Safety Action Plan, the public input needed, and the overall process.
4. Present information in a manner that respects native languages and is culturally appropriate.
5. Provide a variety of methods for public participation that are accessible in terms of language, technology literacy, location, and time so that prioritized individuals or groups may easily participate in the process.
6. Gain substantive insights from the public to inform the plan's goals, network, recommendations, and priorities.
7. Communicate how transportation safety infrastructure, policies, and programs support the larger goals of the City around equity, connectedness, economic growth, and vitality.

To ensure the efforts and outcomes are aligned with the outreach goals and equity framework, the project team will continually measure outreach and provide periodic updates on public participation throughout the planning process.

Success Measures

We will document who participates in the process. The intent of this project is to prioritize participation of Black, Hispanic/Latino, Indigenous, Asian, and other People of Color, as well as people in low-income households, students, people with disabilities, and people residing in Communities of Interest. During each engagement activity, the team will ask for personal data from participants to ensure the process is engaging with a diverse set of residents. The data will help the team identify any gaps or potential areas for improvement and serve as general metrics to measure the plan's effectiveness and overall performance. The key data considerations include:

- Race/Ethnicity
- Age
- Gender
- Primary language spoken at home
- Disability status
- Residential ZIP Code
- University student
- Contact Information – provided when opting in to receive email communications
- Income
- Rent or own home
- Modes of travel regularly used

Note that for some engagement activities (e.g., pop-up or intercept events) it may not be feasible to collect all of these data points. At a minimum, the Team will seek to document the participant's residence ZIP code, race, and age. The Team will also track the number and impact of engagement activities throughout the project. Metrics for this effort include:

- Online interactive map analytics
- Survey participation
- Event attendees
- Social media analytics
- Demographics of individuals engaged (age, race, location, etc.)
- Number of individuals submitting feedback
- Participation in neighborhood events

Equity Framework Flow Chart

The Equity Framework Flow Chart will be a tool to inform the planning process and project selection and prioritization for Safe Streets Approach projects that center communities most impacted. Figure 8 below illustrates how the six principles of equitable transportation, identified in this document, inform the evaluation of planning process decisions across three general categories: Engagement methods; Analysis methods; and Recommended project, policy, or program.

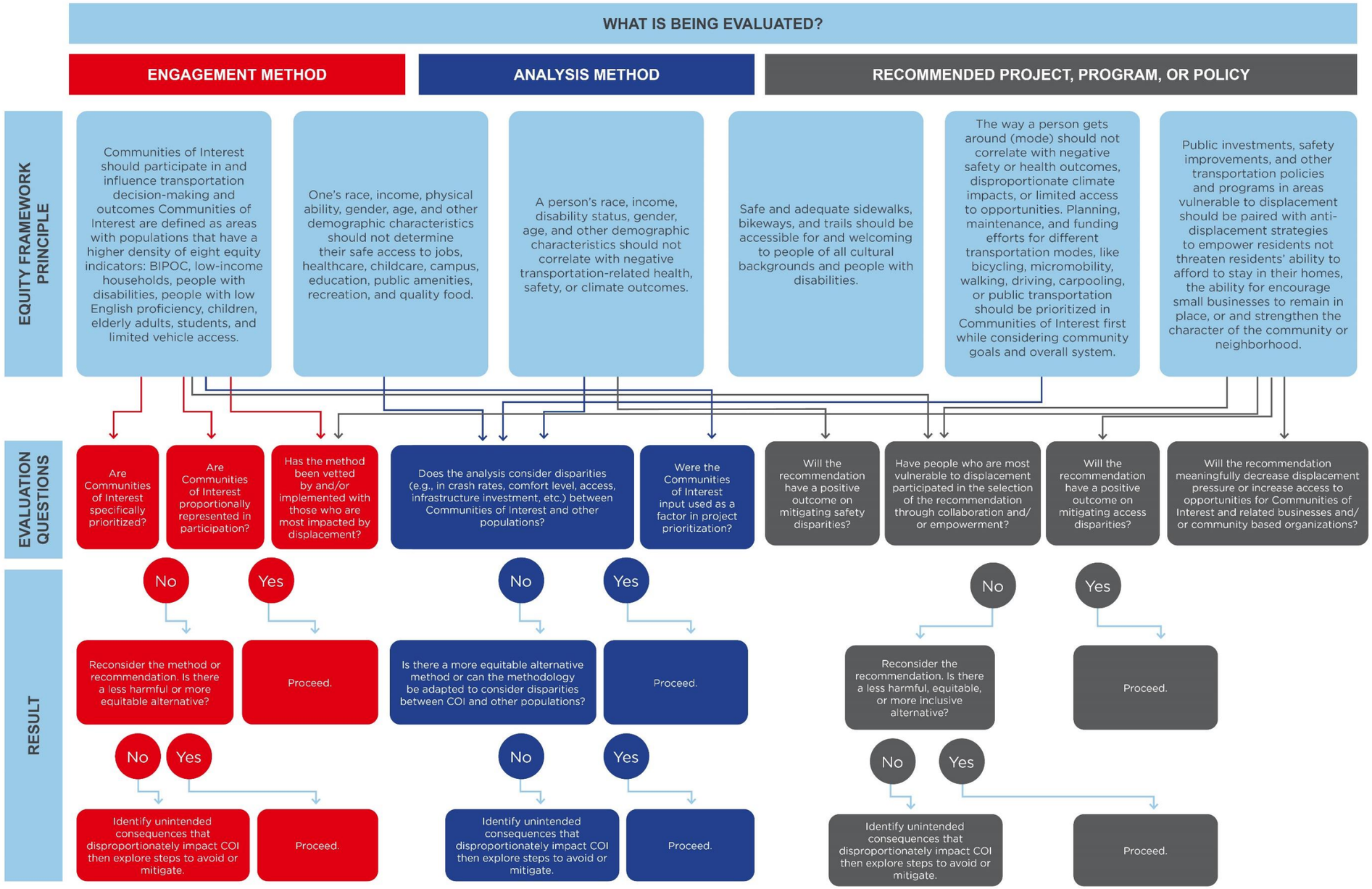
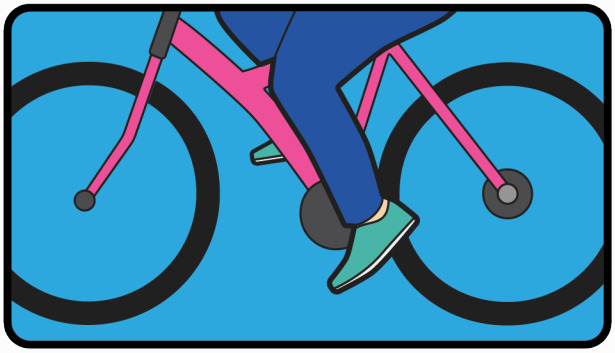
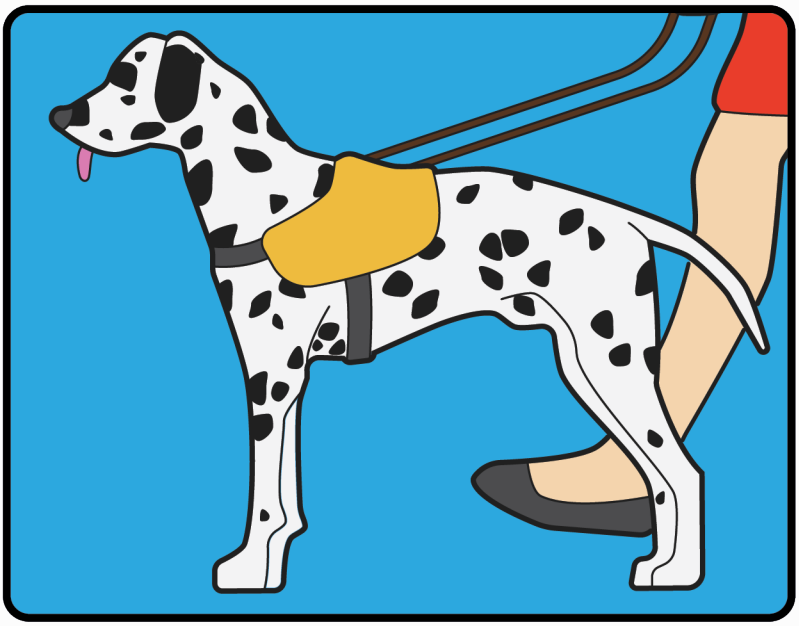


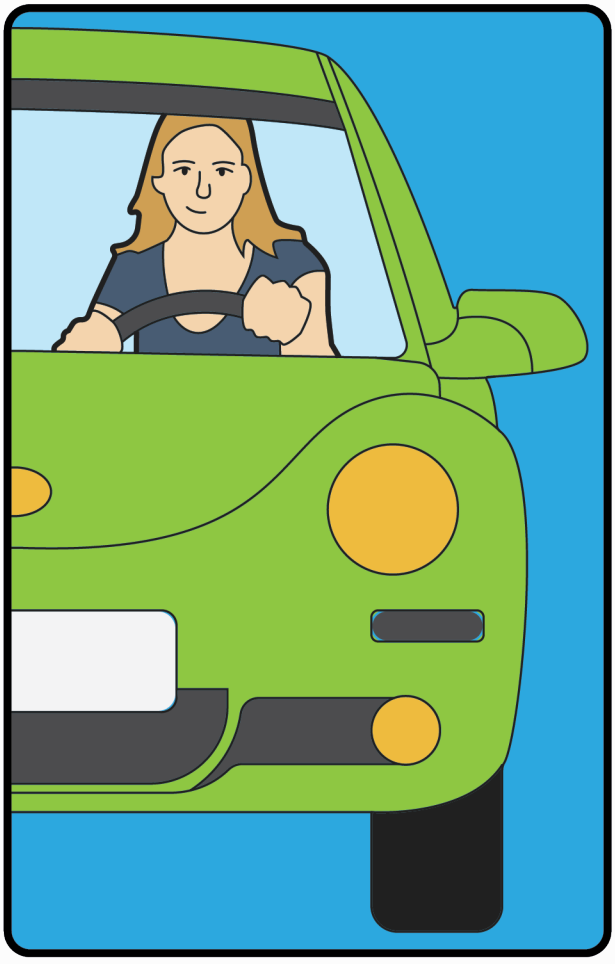
Figure 8: Equity Framework Flow Chart

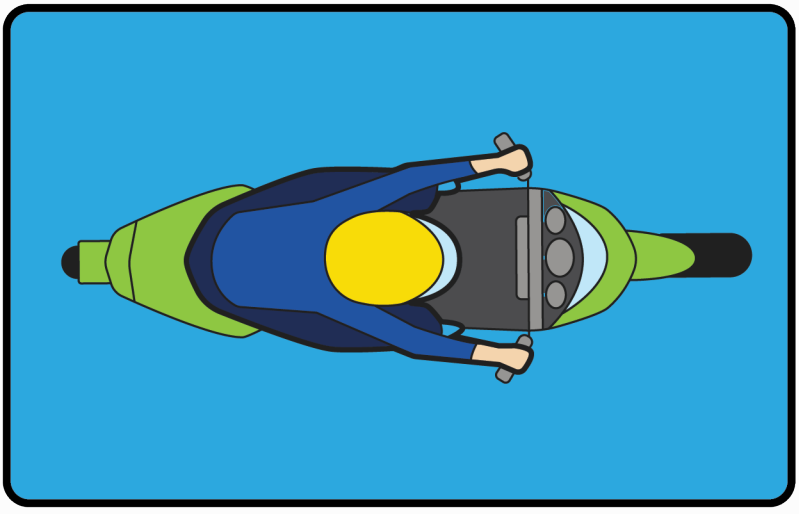
BLOOMINGTON

SAFE STREETS FOR ALL









Appendix B: Public Engagement Overview

July 2024

Background & Purpose

This memorandum summarizes the public input methods and results gathered as part of public engagement efforts for Bloomington Safe Streets and Roads for All (SS4A) Action Safety Plan in Spring 2024. The public engagement for the Bloomington SS4A Safety Action Plan aimed to gather public input that would help the project team on the following tasks:

- Identify general transportation safety concerns.
- Identify unsafe locations throughout the city.
- Identify opportunities to improve roadway safety.
- Assist in developing and affirming the High Injury Network.
- Inform the development of implementation strategies and projects.

The engagement strategies for the Bloomington SS4A Safety Action Plan emphasized the following:

- Including various in-person and virtual outreach events.
- Inform the development of implementation strategies and projects.
- Engaging jurisdictional staff and a SS4A Steering Committee that can help guide plan development and provide direction on implementation.
- Attracting a broad and diverse audience, reaching beyond transportation safety advocates, and engaging people of all ages, abilities, genders, races/ethnicities, languages, and incomes throughout Bloomington.
- Prioritizing Communities of Interest (COI) in engagement outreach to ensure historically marginalized voices are included.
- Utilizing City of Bloomington communication methods and community partners to promote the project, direct people to project resources, and announce project meetings and engagement opportunities

Equitable Engagement

Community engagement provides local governments with key information and local expertise that may not be available anywhere else and is often required to receive federal, regional, state, or local funding. Conducting equitable engagement invites people to reflect on their lived experiences and bring their unique perspectives to the conversation in order to correct past planning wrongs and prevent inequities in future planning efforts.

Equitable engagement makes special effort to search out and listen to voices of Communities of Interest (COI) including BIPOC, low-income households, people with disabilities, people with low English proficiency, children, elderly adults, students, limited vehicle access households, and other groups who have intentionally and unintentionally been excluded from transportation planning efforts and decision-making in the past. This exclusion from prior community conversations, along with other factors, generally results in having less access to safe, comfortable, and convenient transportation, being overrepresented in serious and fatal crashes on our roadways and being displaced by transportation projects and planning efforts.

The engagement methods used as part of the Bloomington SS4A Saefty Action Plan were intentionally designed to be welcoming and engaging for historically marginalized communities. The project team worked to ensure that COIs felt empowered that their input can influence transportation decision-making and outcomes.

Participant Demographics

The project team gathered demographic data from about 450 webmap participants and 100 evening event attendees (more details on these methods are later in the memo). The following graphics show how the participant demographics compared with each other as well as with Bloomington's overall population. In general, webmap participants were more likely to be white, own their home, be highly educated, and older than Bloomington residents as a whole. Those that participated in evening events were more representative of Bloomington residents, especially in terms of race, home ownership, education, and income.

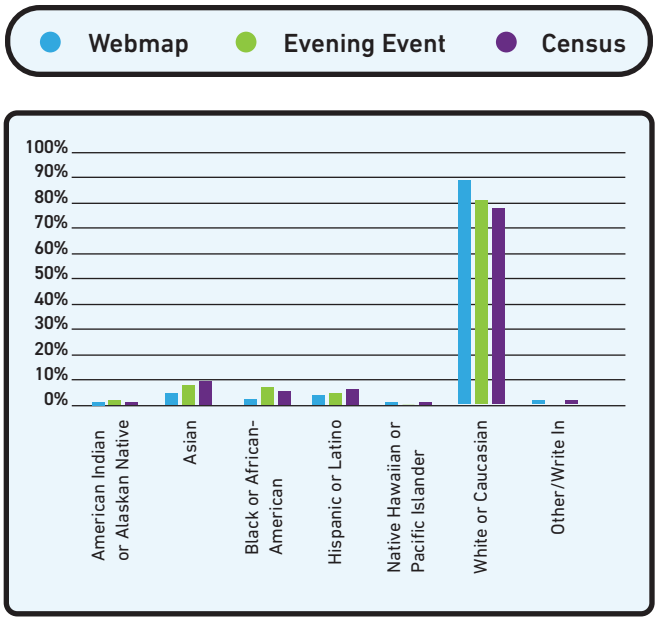


Figure 1. Race and ethnicity of public engagement participants

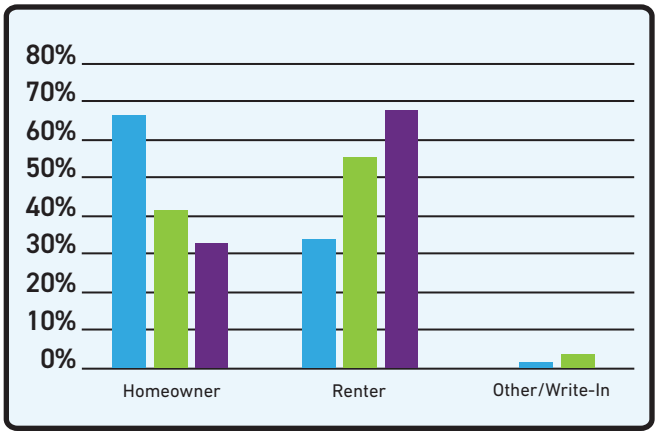


Figure 2. Housing situation of public engagement participants

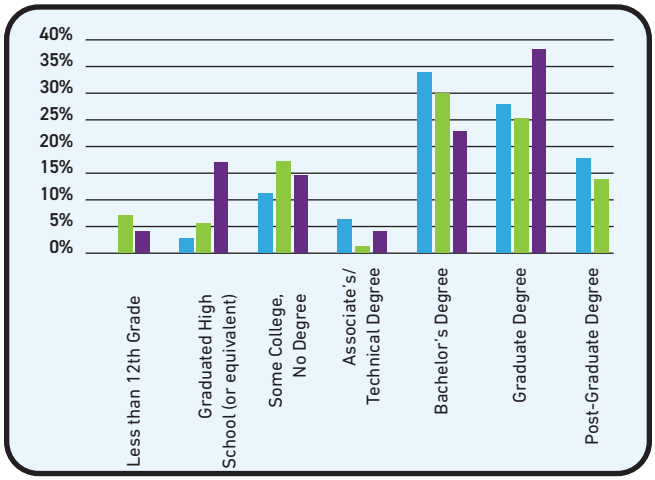


Figure 3. Highest level of education completed for public engagement participants

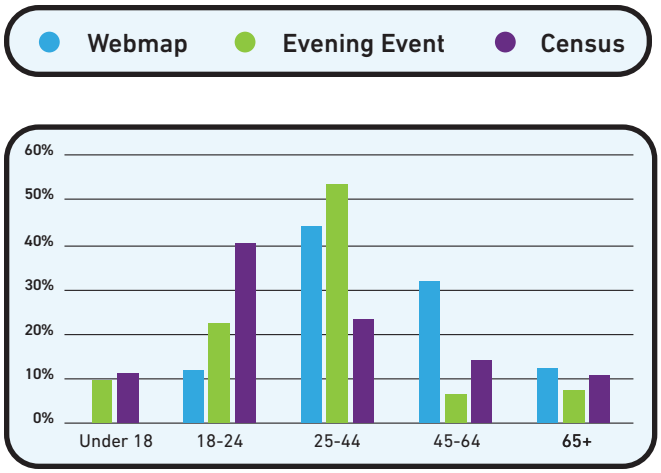


Figure 4. Age of public engagement participants

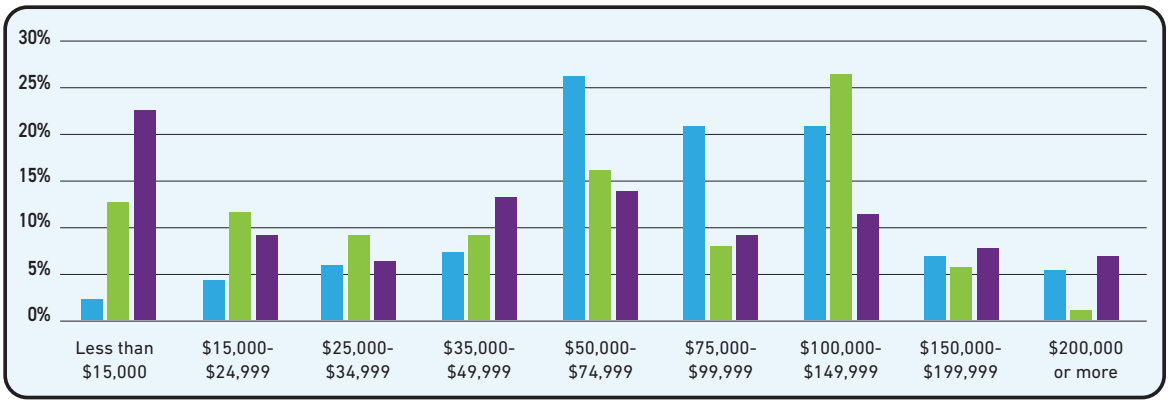


Figure 5. Income distribution of public engagement participants

It should be noted that neither the webmap nor evening event demographics align perfectly with Bloomington residents. Pop-up events conducted during Safety Week were intentionally located in areas frequented by younger, more diverse residents, including those with varying levels of education.

Engagement Methods

The project team used a diverse set of engagement strategies, both virtual and in-person, to reach a wide variety of Bloomington residents. An interactive webmap served as the primary virtual engagement option, and in-person opportunities were conducted during "Safety Week," a one-week engagement action that included many different techniques and locations. The following sections describe both efforts in detail.

Interactive Webmap

The project team prepared and administered an interactive webmap and survey that served as the primary virtual engagement method. This tool allowed participants to pinpoint locations and/or corridors where they experience safety concerns and leave comments on key issues and opportunities. Decision-making and outcomes.

The map had three distinct parts:

1. Landing Page. This was the participant's first view of the online webmap where they could learn about the project and the role of the webmap.

2. Intro Survey. The survey collected demographic information on who contributed to the webmap.

3. Interactive Webmap. The webmap let respondents enter points directly onto a map to indicate locations where they felt safe or unsafe. Respondents could also provide comments on the area selected, such as highlighting existing conditions, describing an experience that made them feel safe or unsafe, or proposing safety improvements.

Approximately 450 individuals left feedback – either through the survey or webmap. Just over 1,000 "safe" or "unsafe" points were placed on the map.

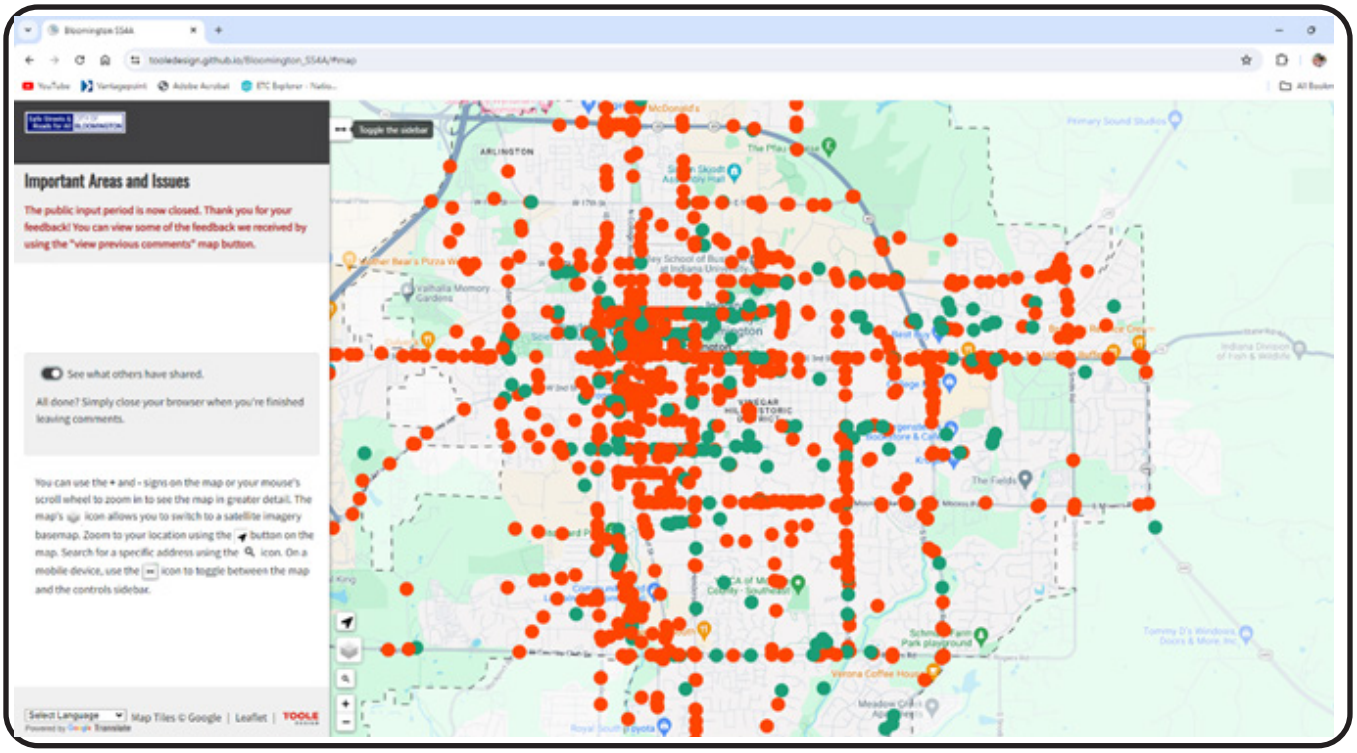


Figure 6. Screenshot of interactive webmap responses

In-Person Engagement Safety Week

While the online map generated and allowed for a wide range of feedback, the project team felt it was essential to have in-person opportunities. As such, the project team hosted "Safety Week" from April 1 – 5, 2024, which sought to get feedback from a wide and representative range of Bloomington residents and allow for more in-depth conversations than could be had through the webmap.

The following sections describe the different elements of Safety Week.

Pop-Up Events

Pop-up events are tabling activities that were set up throughout the community at places identified as having populations that we wanted to especially engage with as part of the SS4A Saefty Action Plan. The activity had two parts – (1) asking participants to respond to the question of "What are the top three things that make you feel unsafe on Bloomington's streets" by placing pom-pom balls in jars with potential answers, and (2) drawing on a map of Bloomington to show where they have safety concerns or see opportunities.

There were 13 pop-ups held during Safety Week, which engaged approximately 750 people. While demographics were not gathered, participants trended younger (20-30) and racially diverse. This, most likely, was due to the specific places the pop-up events were held which aimed to intercept student populations, which included:

- 3rd and Walnut Transit Center
- BloomingFoods Co-op
- Stadium Parking Lot
- 10th/Fee Arboretum
- The Back Door (LGBTQ+ bar)
- IU Health Sciences Building
- Hopscotch (coffee shop)
- Downtown Library
- Little 5 Practice
- Courthouse Square
- Sample Gates
- Student housing bus stop
- La Bonita (Hispanic/Latino grocery store)

Figure 7. Pop-Up at the 3rd and Walnut Transit Center

Figure 10. Pop-up at Sample Gates

Figure 8. Pop-up at Indiana University Health Sciences Center

Figure 11. Pop-up at Hopscotch coffee shop

Figure 9. Pop-Up at the Stadium parking lot

Figure 12. Pop-up at Bloomingfoods Co-op

Figure 13. Pop-up at student housing bus stop

Figure 14. Pop-up at the downtown library

Evening Open Houses

The project team hosted three evening events as part of Safety Week. These events were open to the general public and included six stations, each with an interactive activity, to garner feedback and spur discussion. The questions asked at the open houses closely mimicked those from the online webmap survey in order to complement that data set.

The open house locations were selected to be welcoming and, potentially, places where Bloomington residents might already be. The events were advertised using flyers posted throughout town, a local blog, social media, and word of mouth. The events were held at the following places, dates, and times:

- **City Hall Atrium.** April 2, 2024. 5-7pm. This event was originally supposed to be held at the Waldron Hill Buskirk Park but, because of thunderstorms, was relocated to the City Hall Atrium. There was a taco truck parked outside. All participants who completed all the activities were given a $10 gift card to the taco truck.

- **Chocolate Moose Ice Cream Parlor.** April 3, 2024. 6:30-8pm. At this evening event, all participants who completed the activities received a free small ice cream. This event had all ages and demographics attend, and probably had the most families of any event.

- **Friendly Beast Cider Company.** April 4, 2024. 6:30-8pm. This event was held during the location's weekly trivia night and trivia participants participated in the engagement stations before and after trivia rounds. Most of the participants were younger adults and, notably, very few knew about the project or attended that evening because of the engagement event. All participants who completed the activities received a gift card to a local taco shop.

Participants were greeted at a welcome table where a project team member introduced the project, gave them a "passport" to be stamped at each station (once completed, it could be turned in for the incentive), and had them fill out a brief demographic survey. After that, participants moved on to the following stations and activities:

- **Station #1**. Big Question. This station asked how important participants think it is to invest in safe and comfortable transportation in Bloomington. Participants placed a building block on the response area.

- **Station #2**. Trade-offs. This station presented participants with a variety of transportation safety-related trade-offs, and asked them to place a sticker along a line indicating how much they agreed or disagreed with the statements.

- **Station #3.** Safety Concerns. This station asked participants to select their top three transportation safety concerns on Bloomington's streets. This station was the same as the pop-up event.

• **Station #4.** Mode-Specific Safety. This station asked, per mode – walking/rolling, biking, driving, and transit – what would make the participant feel safer.

• **Station #5.** Map. This station had a large map of Bloomington where participants could mark locations of concern or opportunity.

• **Station #6**. Transportation Safety Quilt. Using Bloomington's quick logo as inspiration, participants wrote their "hopes and dreams" for transportation safety in the city on paper triangles. Staff then put these triangles on to a board to build a "Transportation Safety Quilt."

Figure 15. Evening event at the City Hall Atrium

Combined Advisory Committee Meeting

On April 1 from 5:30-6:30pm, the project team hosted a Multi-Commission meeting that invited members from a variety of City Advisory Committees to learn about and provide feedback on the project. Attendees included members of the following committees:

- Traffic Commission
- Public Transportation Corporation Board of Directors
- Parking Commission, Environmental Commission
- Environmental Commission
- Council for Community Accessibility
- Commission on Sustainability
- Board of Public Safety

The project team began the meeting with a presentation that gave an overview of the project as SS4A, reviewed the High Injury Network, and covered the variety of events occurring throughout Safety Week. Overall, committee members were supportive of the project and its mission. However, there were notable themes of the discussion:

- **Members would like to see a shorter timeline for the vision zero goal.** The project team provided clarification on process for selecting the timeline, traffic safety data trends, and goals and progress of other jurisdictions.

- **Attendees expressed concern about allocating any of the SS4A project and program funding to the police department,** which is not expected at this time.

- **There was concern for the consistency of data due to COVID, lack of self-reporting and reporting of near misses, perceived safety, and the exclusion of non-vehicle crashes in the data analyses.** The project team elaborated on the definition of safety in the context of SS4A and the emphasis on fatal and serious injury crashes, as well as how engagement provides additional context that is not captured in the data.

- **Addressing speed along the high injury network was a major point of discussion.** The project team provided insight about various proven countermeasures and how a comprehensive safety system minimizes error and impact.

- **Members expressed interest in how culture changes can be incorporated into this project and what type of impact this can have.** Educational and psychological strategies need to be paired with engineering strategies to create a comprehensive safety system, which will be incorporated in the Safety Action Plan. Additionally, land use gaps and opportunities will need to be addressed as land use and transportation are closely linked.

Figure 16. Project team staff presenting at the All-Commission Meeting

School Outreach

Children and their families were identified as a key engagement demographic for this project. To reach students, we worked with three schools in Bloomington – Fairview Elementary School, The Project School, and Tri-North Middle School to bring information and engagement opportunities to students. In the two elementary schools, a project team member led an engaging presentation about how students can practice safe behaviors using any mode and how they can behave to make Bloomington's streets safe for other roadway users.

The presentation also introduced transportation infrastructure that has and will continue to be installed around the city as part of safety efforts such as crosswalks, curb extensions, signs, lighting, bike lanes, etc. – and discussed what each of those elements do. The sessions ended with working with the students to create a "transportation safety quilt," where they could write or draw about ways to make the city's roads safer for all users on paper triangles, which were then assembled into a larger quilt.

Figure 18. Building a transportation safety quilt with Bloomington students

At the middle school, project staff held a pop-up event during the lunch period, which drew nearly 200 students. Students at all the activities were overwhelmingly engaged with the idea of making streets safer for all users. They were quick to discuss how they behave to be safe by walking on the sidewalk, looking both ways before crossing the street, and using Bloomington's trail system, especially the B-line (it should be noted that both elementary schools were close to downtown Bloomington near the B-line).

They were also very aware of dangerous behaviors that their parents often engage in, such as speeding and distracted driving. Students were very interested in understanding how different transportation countermeasures make streets safer and were hopeful to see these on more streets around the City in the future.

Figure 19. Teaching students about different types of transportation facilities that reduce speed

Engagement Results & Key Takeaways

Through virtual and in-person engagement, the project team received thousands of comments. These comments covered a wide variety of topics relevant to making Bloomington's streets safer for all users. The major takeaways from questions asked throughout the engagement processes are summarized in the following sections.

Question: Where do you feel safe and unsafe when traveling around Bloomington?

The webmap and in-person events allowed participants to label points on a map they deemed safe and unsafe and offer details into their opinions. Table 1 shows some of the main reasons webmap participants felt places were safe or unsafe; these responses were consistent with in-person discussion as well.

Table 1: Summary of safe and unsafe location webmap attributes

"This Location Is Safe Because"	Count	"This Location Is Dangerous Because"	
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**

Safe Locations

Many respondents indicated that the presence of walking and cycling facilities, such as sidewalks, bicycle lanes, and crossings, contribute to a location feeling safe. Over half of the total "safe" locations were associated with a bicycle lane, sidewalk, or a crossing. Many of these points were placed in proximity to the B-Line Trail or 7-Line, and the comments characterized both facilities as being convenient, comfortable, and safe, the latter of which was due to their separation from cars.

Many other "safe" points were placed on locations where there are a lot of other people walking or biking. While these points were also placed near the B-Line Trail and 7-Line, parks (e.g. Switchyard Park, Bryan Park), and other specific streets other streets (e.g. Kirkwood Avenue) were specified in comments. Kirkwood Avenue was mentioned repeatedly, often with favorable comments about the 'Open Streets' events that temporarily close Kirkwood Avenue to motor vehicles.

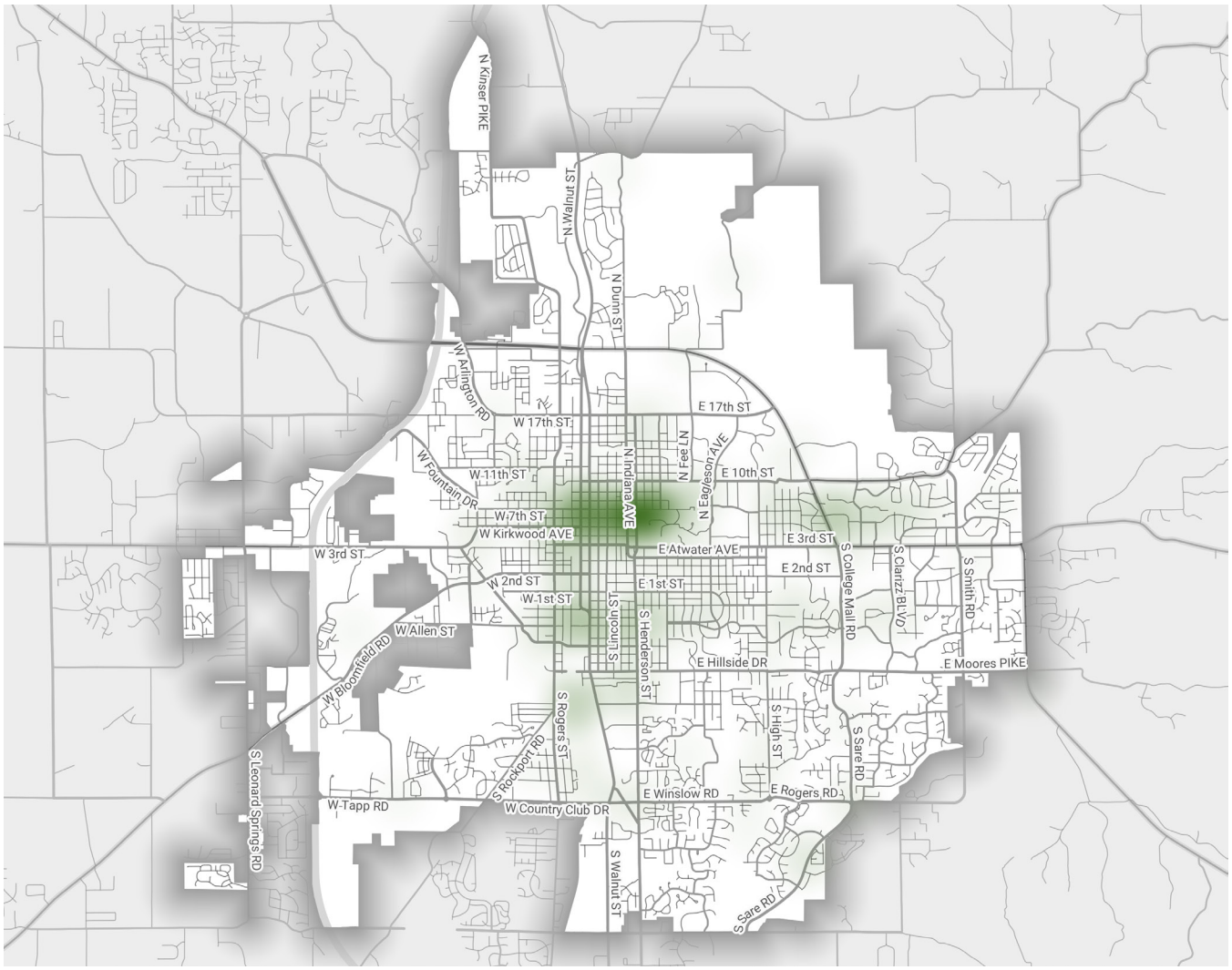


Figure 20. Heat map of areas selected as "safe" by webmap participants

Unsafe Locations

The most common reason for a spot being deemed "unsafe" was that people are driving too fast. This characteristic was pointed out the most near 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. Respondents also targeted key intersections as being unsafe due to high vehicle speeds, particularly at intersections that include a greenway crossing such as Allen and Walnut Street Intersection (W Allen Neighborhood Greenway Crossing) and Hillside Drive and Weatherstone Lane/Olive Street Intersection (Highland-Hawthorne Greenway Crossing).

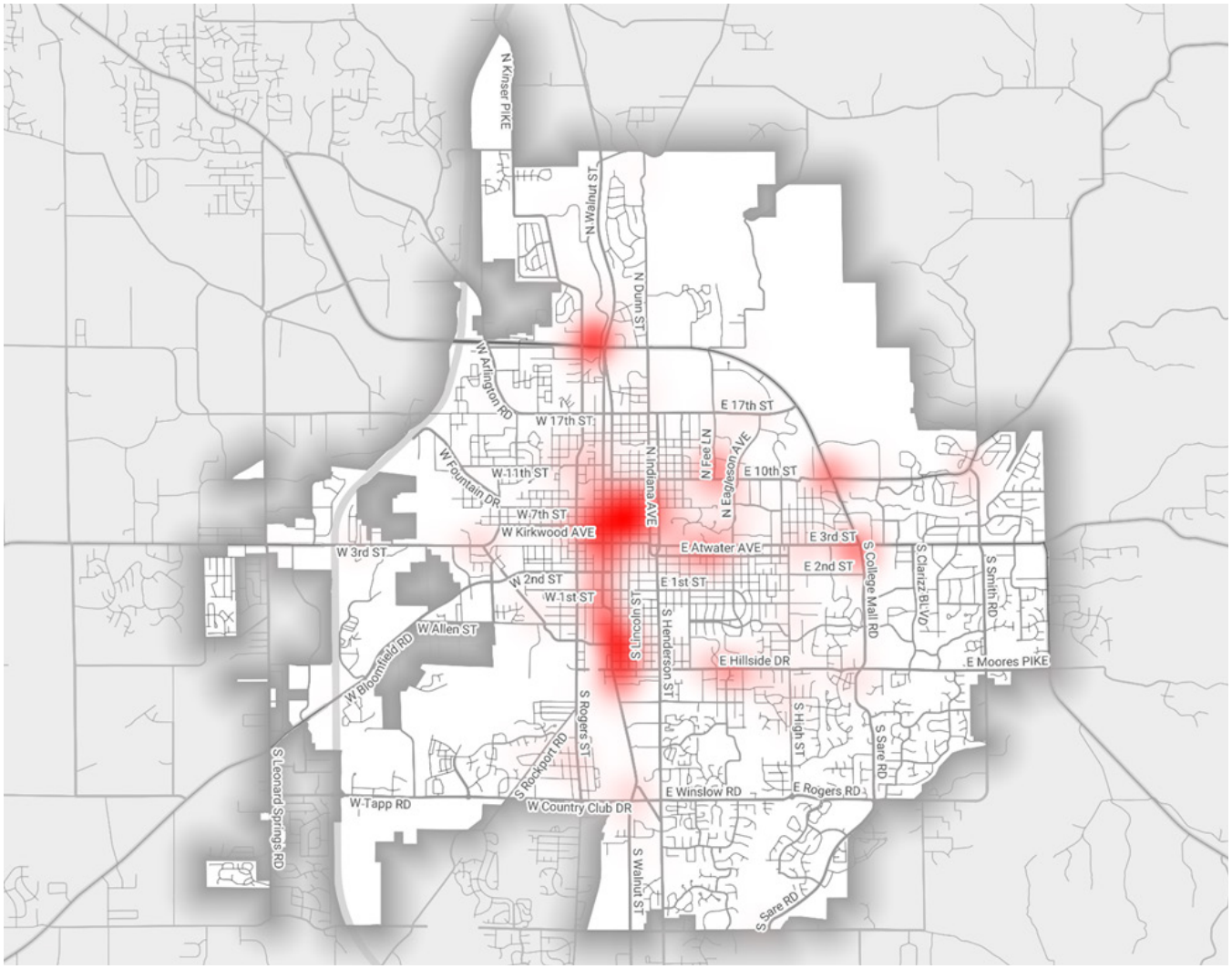


Figure 21. Heat map of areas selected as "unsafe" by webmap participants

Additionally, it should be noted that a number of 'unsafe' comments were associated with points placed along the 7-Line. Many respondents stated that they have experienced a near miss along 7th Street, and the comments suggest that the primary issues are visibility obstructions and determining who yields to the right-of-way.

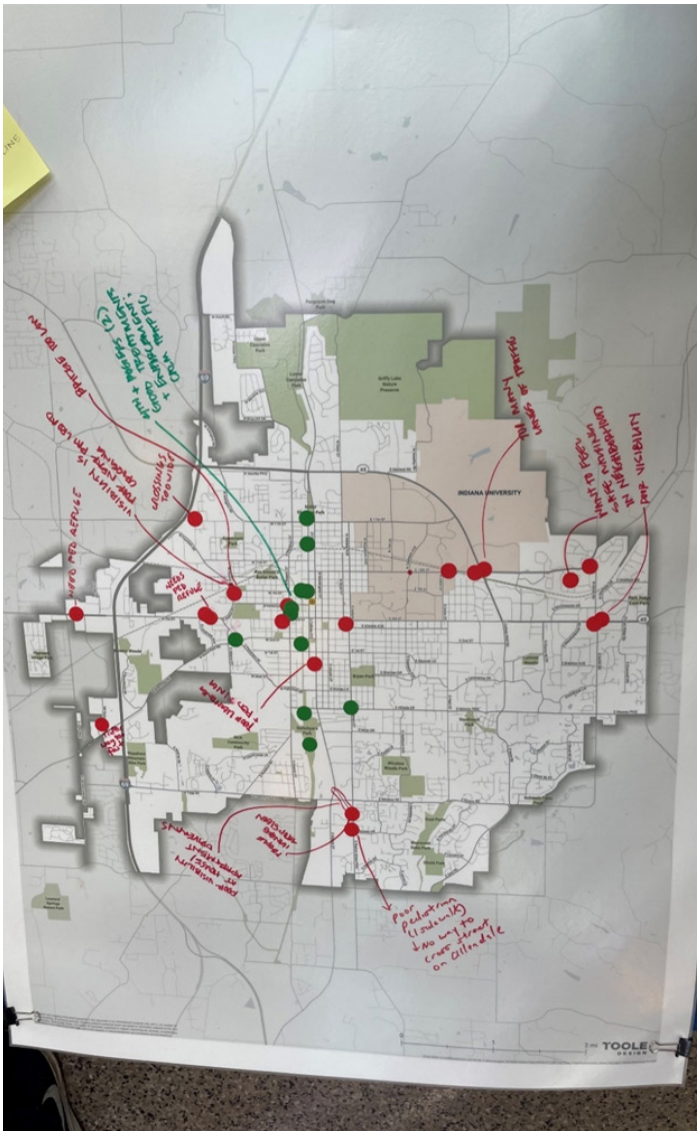


Figure 22. Map with written comments from a Safety Week evening event

Question: What are the top three things that make you feel unsafe on Bloomington's Streets?

Participants overwhelmingly selected distracted driving and people driving too fast as their top two safety concerns on Bloomington's streets. These two answers were followed by people not yielding at intersections, fear of physical or verbal harassment, lack of safe space to cross the street, and lack of safe places for bicyclists. It should be noted that different locations resulted in different distributions of responses. For example, at a pop-up help at Tri-North Middle School, a much higher percent of participants selected "fear of physical or verbal harassment" as one of their top concerns than overall pop-up participants. This variation is most likely due to middle school students mostly being on foot, bike, or scooter and, in general, feeling threatened by adults.

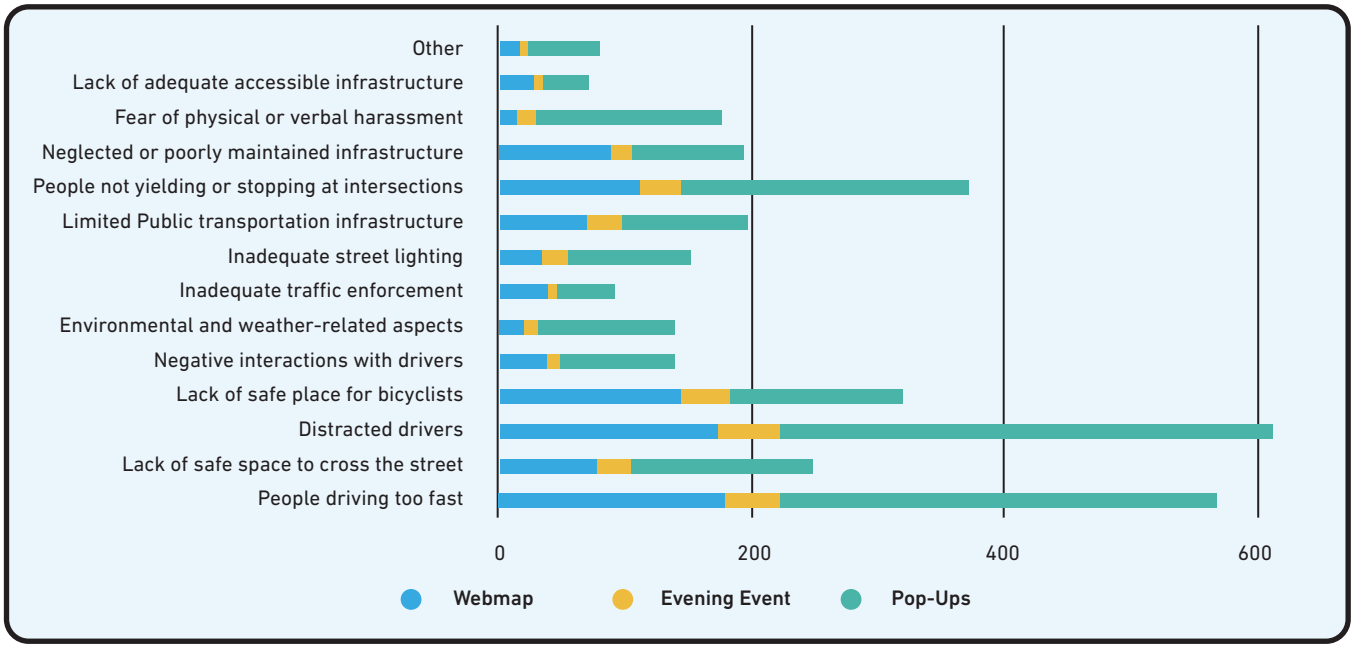


Figure 23. Responses to "What are the top three things that make you feel unsafe on Bloomington's Streets?"

Question. How important do you think it is to invest in a safe and comfortable transportation system in Bloomington?

At both the evening events and on the webmap, participants strongly believed that investing in a safe and comfortable transportation system was important. Very few selected "not important" as their answer.

Figure 24. In-person responses at a Safety Week evening event

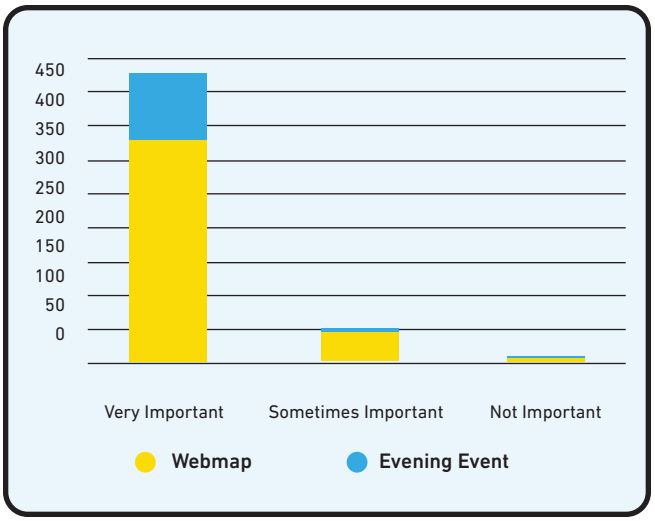


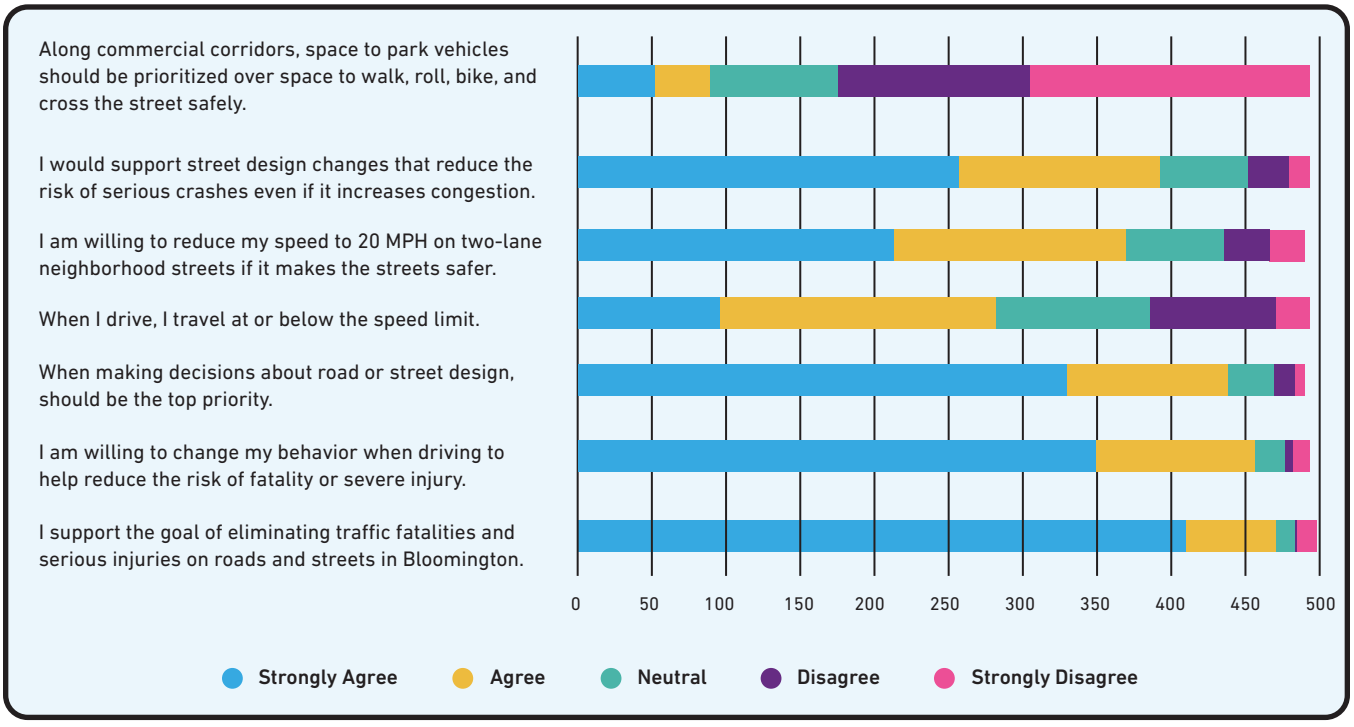
Figure 25. Responses to "How important do you think it is to invest in a safe and comfortable transportation system in Bloomington?"

Question: Trade-offs

Participants were asked how strongly they agreed with a variety of statements that focused on trade-offs between safety and speed or convenience. In general, most participants agreed with statements that align with safer roadways design and operational practices. That said, many participants said that they don't usually drive at or below the speed limit which shows that people are in support of safety but may need more than a speed limit to encourage them to drive at safe speeds.

Notably, for policy and project implications, only 20% of respondents believed that space to park vehicles should be prioritized over space to walk, roll, bike, and cross the street safely along commercial corridors. Parking is often a major source of conflict and pushback to safety-focused projects, and these results show that participants are, in theory, willing to make that sacrifice for active transportation and safety improvements.

Figure 27. Trade-off question station at a Safety Week evening event



Question: Generally, how safe do you feel traveling around Bloomington walking, rolling, biking, scooting, driving, or taking transit?

The feeling of safety can vary dramatically depending not only on where you're traveling, but also how you're traveling. Webmap participants were asked what modes of transportation they use and then, as a follow-up, how safe they feel using those modes around Bloomington.

Overall, respondents felt most 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.

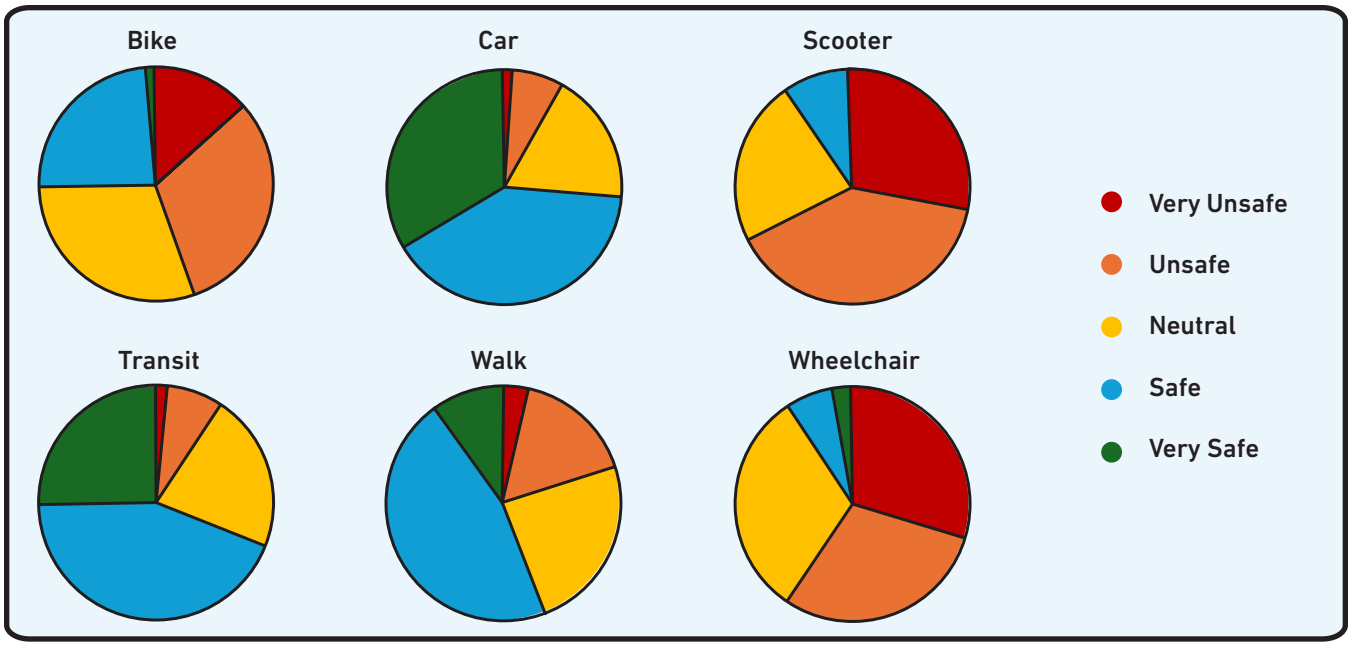


Figure 28. Responses to "Generally, how safe do you feel traveling around Bloomington walking, rolling, biking, scooting, driving, or taking transit?"

Question: "When walking or rolling, biking, taking transit, or driving, what would make you feel safer?"

As a follow-up to the prior question, webmap and evening event participants were asked to select three choices from a list to offer insight about what would make them feel safer while walking/rolling, biking, driving, or taking transit. For walking and biking, participants top answers were the same – they wanted 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.

Transit riders (of which there were few) 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?	
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
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 or scootering?	
More space separating people and 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 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	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
Other	40
Additional police presence on transit	17
Additional police presence at the stops	11

Figure 29. Modal safety station at a Safety Week evening event

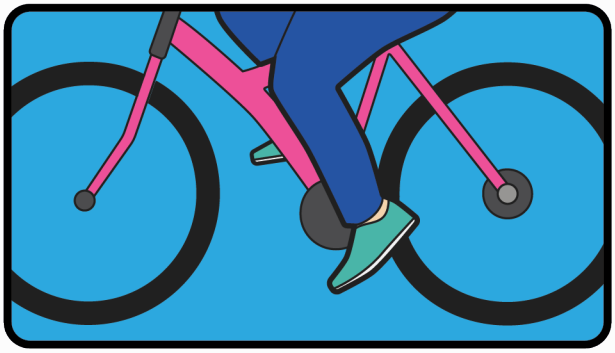
Activity. Transportation Safety Quilt

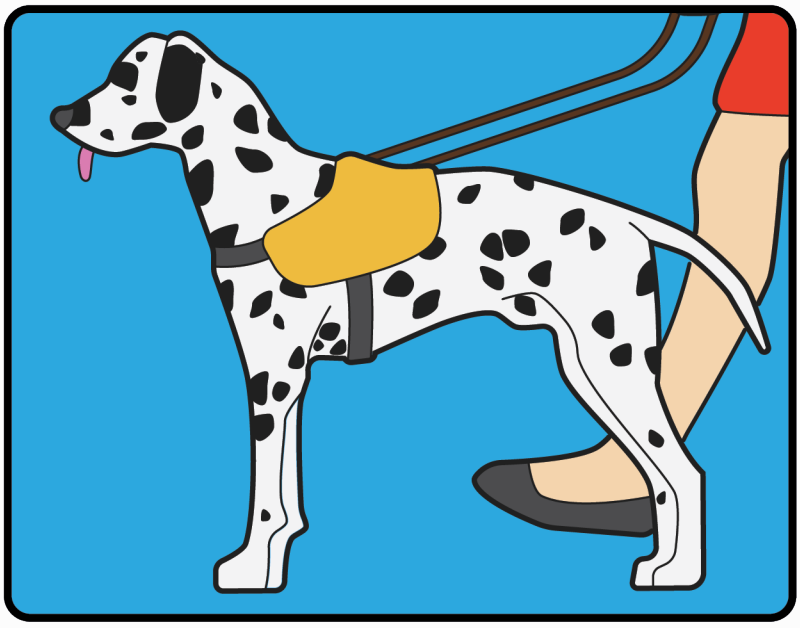
As a final activity at the evening events, participants were asked to write or sketch about how they would like to make Bloomington's streets safer for all users on quilt triangles. Many of the images reflected a desire for the roadways to be safer for all users through behaviors and facilities, like signage, bike lanes, and slower driving. Participants also wrote and drew about residents feeling respected on the streets and wishes for the roadways to feel "happy" and "fun."

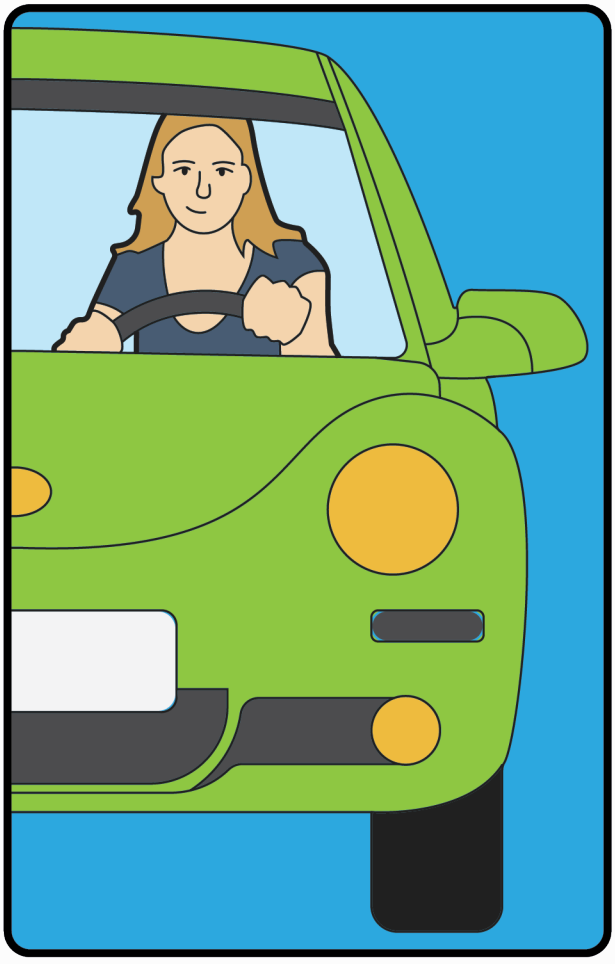
Figure 30. Transportation safety quilt from a Safety Week evening event

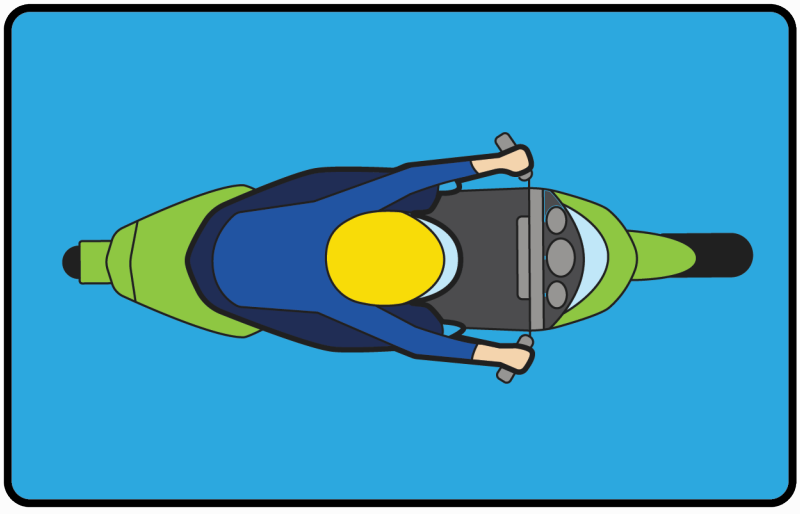
BLOOMINGTON

SAFE STREETS FOR ALL









Appendix C: Proven Safety Countermeasures

November 2024

4-to-3 Lane Conversions

Purpose:
Reduce the speed of traffic, reduce crossing distances and optimize available roadway space to improve levels of safety and comfort for pedestrians and bicyclists.

Description:
Reduce the number of lanes (road diets), the width of lanes (lane width reductions), or both. The additional space created is typically combined with other elements such as bike lanes, transit lanes, widened sidewalks, pedestrian refuge islands, and/or curb extensions. Typically, road diets are utilized on undivided, four-lane roadways, which in turn are converted into two through lanes and a center turn lane or painted median.

Estimated Cost:
$$$ per mile (no additional cost with paving work)

Applicable Locations

- Multi-lane roads are eligible for lane reconfiguration.
- Emphasis should be placed on roads with priority pedestrian and bicyclist routes.
- Lane reconfiguration can be done in urban, suburban, and rural areas.

Applicable Street Types

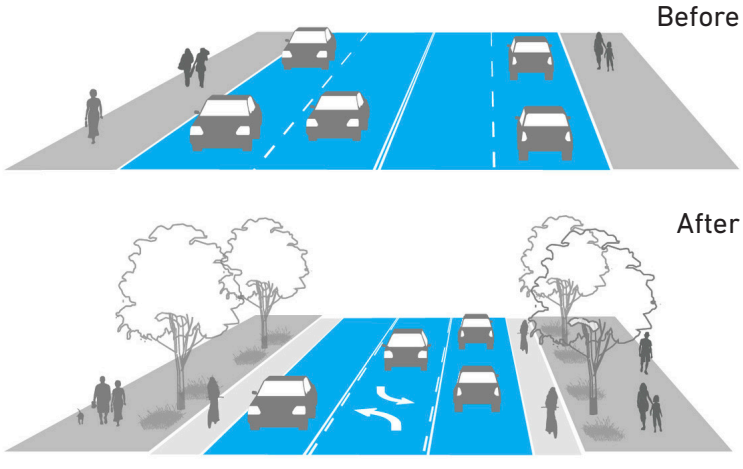
- Use INDOT collector/minor arterial

Safety Benefits

- Increase available space for additional safety infrastructure for pedestrians or bicyclists.
- May reduce the number of potential conflict points.
- May slow motor vehicle operating speeds on average, but will reduce "high-end" speeders (10 mph +) up to 90% per Seattle DOT.
- May reduce crossing distances by eliminating a lane or through provision of a pedestrian median island.
- Remove possibility of "double-threat" crashes from vehicles passing stopped vehicles.
- Improve sight distance for turning vehicles.
- Reduce emergency vehicle response timers per FHWA. (https://safety.fhwa.dot.gov/road_diets/resources/pdf/fhwasa17020.pdf)

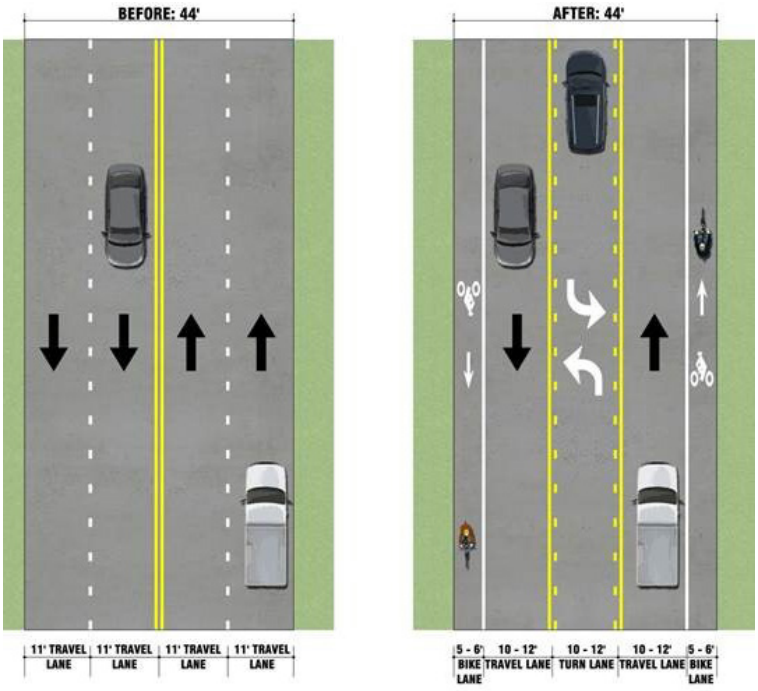
Expected Crash Reduction

- 47% reduction in total crashes in suburban areas (Pawlovich, et al., 2006)
- 19% in urban areas (FHWA, 2008)



Design Guidance

- Eliminating a travel through lane can make room for a bicycle lane, turn lanes, wider sidewalks, median island, curb extensions, on-street parking, transit lane, landscaping, or other uses.
- Road diets are most successful on roadways with daily volumes of 8,000 to 20,000 motor vehicles.
- Road diets can be supplemented with painted, textured, or raised center islands or green infrastructure to reduce storm runoff.
- A conversion to a three-lane road can be compatible with a single-lane roundabout.



Considerations

- Eliminating a travel through lane may increase congestion and vehicle queuing and blocking during peak travel hours.
- Evaluate impact of a road diet on all road users, not just vehicles. Consideration should be given to Level of Traffic Stress.
- Consider implementing a road diet in conjunction with pavement overlay.
- Outreach should be conducted to determine if a candidate street is meeting the needs of the community.
- A traffic study may be necessary to determine if high-traffic streets are candidates for removing one or more parking or travel lanes.
- The FHWA recommends considering factors including:
  - Volume thresholds, such as average daily traffic
  - Vehicle speed
  - Trip generation estimates
  - Level of Service
  - Quality of Service
  - Pedestrian and bicyclist volumes
  - Transit and freight operations
  - Peak hour and peak direction traffic flow

Systemic Safety Potential

This is a systemic corridor recommendation that improves road conditions for all roadway users.

Before four to three lane conversion

After four to three lane conversion

Additional Information

- Evaluation of Lane Reduction "Road Diet" Measures on Crashes
- PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System
- Road Diet Informational Guide

Chicanes

Purpose:
Slow motor vehicles speeds by diverting the path of travel.

Description:
Horizontal treatments to restrict vehicle movement and reduce speeds. Chicanes are often made of curb extensions or islands that create "S" curves along a roadway.

Estimated Cost:
$$ to $$$$ (depending on design)

Applicable Locations
- Most effective at midblock locations on one-way and two-way streets

Applicable Street Types
- Neighborhood Residential Street
- General Urban Street
- Neighborhood Connector Street

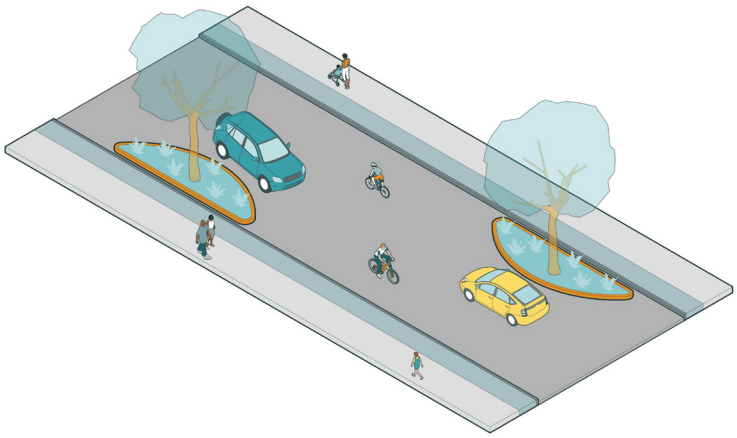
Safety Benefits
- Improves speed limit compliance.
- Certain designs increase the amount of sidewalk width, buffer width, or both on corridors.

Expected Crash Reduction
- 32% reduction of crashes (Elvik, R. and Vaa, T., 2004).

Design Guidance
- Interim treatments use striping and flex posts and temporary curb materials.
- Permanent treatments use curb extensions or islands and may include vegetation.
- Maintain sight lines by landscaping chicanes with lower shrubs and plants.
- Multiple treatments may be placed on alternating sides of the roadway.
- Drainage and utility location should be considered when implementing.
- Additional signing or pavement markings may be needed to ensure drivers and maintenance vehicles are aware of the bend in the roadway.

Considerations

- Vehicles and bicyclists must carefully maneuver around fixed objects. Traffic may be slowed when vehicles attempt to pass bicyclists.
- If drainage impacts are a concern, curb extensions may be designed as edge islands with a 1–2-foot gap from the curb.
- Neighborhood traffic circles should be considered at intersections of local roads.
- May reduce on-street parking depending on the design.
- Emergency vehicle and school bus access must be maintained.



Systemic Safety Potential

Best suited as a spot treatment.

Additional Information

- PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System
- NACTO Urban Street Design Guide

Curb Extensions

Purpose:
Shorten crossing distances and increase pedestrian comfort and visibility.

Description:
Also called bulb outs or neck downs, curb extensions extend a section of sidewalk into the roadway at intersections and other crossing locations. In addition to shortening crossing distances, curb extensions create more compact intersections, resulting in smaller corner radii and slower turns by people driving.

Estimated Cost:

$$ to $$$$ (depending on design)

Applicable Locations

- Curb extensions can make pedestrian, bicycle, or other crossings safer and more comfortable everywhere from a mid-block crosswalk to a large signalized intersection.
- Curb extensions can be built in all-day parking lanes or wide shoulders.
- Transitions to lower-speed areas.
- Curb extensions are particularly valuable in locations with high volumes of pedestrian traffic, near schools, bicycle/trail crossings at unsignalized pedestrian crossings, or where there are demonstrated needs.

Applicable Street Types

- Neighborhood Residential Street
- Main Street
- General Urban Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Slow the speed of motorists making turns at intersections.
- Create additional space for directional curb ramps.
- Provide opportunity to create accessible parking spaces.
- Improve visibility between crossing pedestrians and other street users.
- Prevent people from parking too close to or on crosswalks or blocking fire hydrants.
- Create space for utilities, signs, and amenities such as bus shelters or waiting areas, bicycle and micromobility parking, public seating, street vendors, and greenscape elements.

Design Guidance

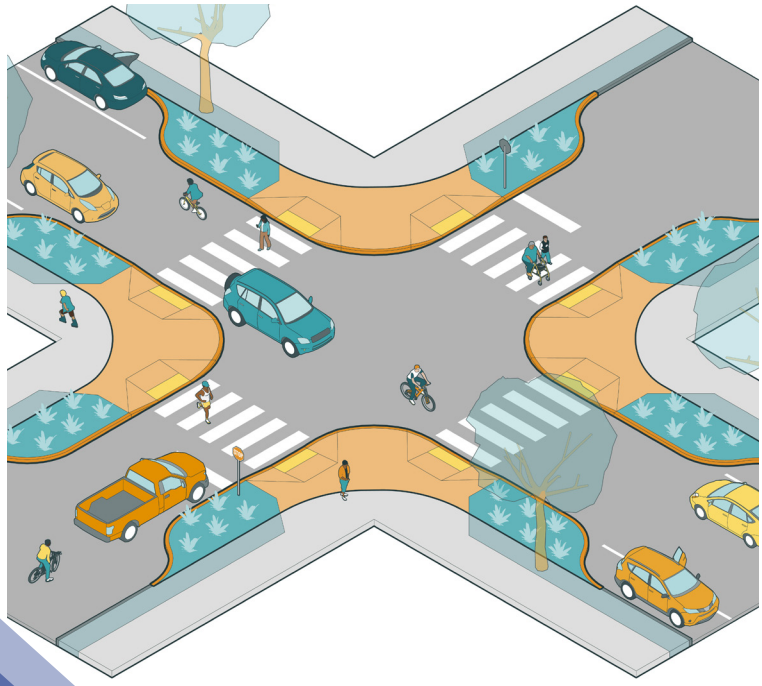
- Limit planting and street furniture height within curb extensions to preserve sight lines.
- Consider expanding curb extensions at bus stops to produce bus bulbs.
- Where curb extension installation on one side is infeasible or inappropriate (i.e., no parking lane), this should not preclude installation on the opposite side.
- A typical curb extension extends about 6 feet from the curb, or no further into the street than the parking lane.
- Protected bike lanes can go over or behind curb extensions, if present.
- The minimum width of a curb extension should match the existing NO PARKING requirements. The length of a curb extension can vary depending on the intended use (i.e., stormwater management, bus stop waiting areas, restricted parking).
- NO PARKING signs or yellow curb can be used to deter parking.

Considerations

- Curb extensions should not extend into travel lanes or bicycle lanes. Generally designed with one foot of shy distance between the face of curb and the edge of travel lane.
- When designing the corner radius on a curb extension, consider the appropriate large vehicle turning path to prevent encroachment into the pedestrian space.
- Consider the turning needs of emergency and larger vehicles in curb extension design and include mountable areas if necessary.
- Curb extensions can require modifications to or relocation of drainage structures. Consider drainage slots with solid surface plating at pedestrian crossings as an alternative.
- Temporary curb extensions may be created using paint, flexible delineators, and other temporary materials to speed installation or as a pilot project before permanent construction.

Systemic Safety Potential

Spot treatment or systemic safety improvement. Consider at all locations with on-street parking and as a gateway treatment to slow vehicle speeds.



Additional Information

- NACTO Urban Street Design Guide
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

High-Visibility Crosswalk

Purpose:
Providing marked crosswalks communicates to drivers that pedestrians may be present and helps guide pedestrians to locations where it is best to cross the street.

Description:
High-visibility crosswalks are distinguishable from other crosswalk designs by use of longitudinal, ladder, or continental-style markings more readily visible to approaching motorists as opposed to parallel, or transverse, lines which are more difficult to distinguish from a distance.

Estimated Cost:

$ (per crossing)

Applicable Locations

- High-visibility crosswalks are appropriate at all signalized intersections or at high pedestrian volume or busy street intersections as noted in City of Bloomington PM-6: Standard Traffic Crosswalk Details.
- Uncontrolled intersections should meet requirements in MUTCD Section 3B.18.

Applicable Street Types

- All street types

Safety Benefits

- Increase motorist awareness of crosswalk location.
- Reduce crashes between pedestrians, bicyclists, and motor vehicles.
- Designate pedestrian right-of-way, and may reduce pedestrian crossings at unmarked locations.

Express Crash Reductions

- 40% reduction for pedestrian-motor vehicle crashes. (Elvik, R. and Vaa, T., 2004).

Design Guidance

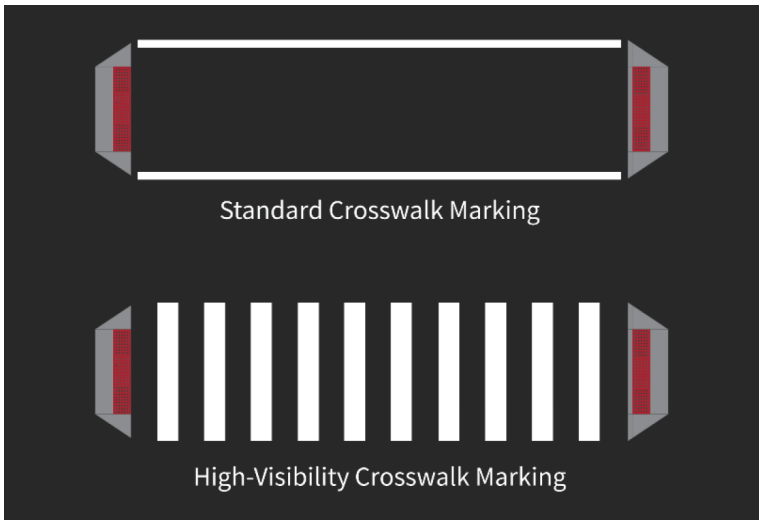
- Marking pattern should be continental: a series of wide stripes parallel to the travel lanes for the entire length of the crossing.
- Crosswalks should be as wide as the sidewalk width plus 1-2' either side (e.g., for a 6' sidewalk, mark the crosswalk 8-10' wide).
- Install with directional ADA compliant curb ramps.
- Stop lines at stop-controlled and signalized intersections should be located at least 8 feet in advance of crosswalks. At uncontrolled crossings, yield lines may be included 8 feet in advance of the crosswalk.
- Parking should be restricted in advance of a crosswalk to provide adequate sight distance.

Considerations

- Crosswalk location should be convenient for pedestrian access.
- Width may be wider than 10 feet at crossings with high pedestrian or bicycling demand.
- Crosswalk markings should consist of non-skid, retroreflective material.

Systemic Safety Potential

Apply as a systemic countermeasure at all controlled crossings. At uncontrolled crossings, apply in accordance with FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, Table 1.



Additional Information

- Manual on Uniform Traffic Control Devices
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

Floating Bus Stops

Purpose:
To eliminate the conflict between bicyclists traveling in bike lanes and transit vehicles that must pull into conventional bike lanes to load and unload passengers. Also to eliminate the conflict when buses merge back into mixed traffic.

Description:
Floating Bus Stops consist of a bus stop platform island extending into the street from the curb with a bicycle lane routed behind the stop on or adjacent to the curb, eliminating bus and bike conflicts at stations and reducing bus travel times.

Estimated Cost: $$$ to $$$$ (depending on design)

Applicable Locations

- Where bike lanes (separated, conventional, etc.) run along a transit stop. This treatment is compatible with near-side, far-side and midblock transit stop locations.

Applicable Street Types

- General Urban Street
- Suburban Connector Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Eliminates conflict between transit vehicles and bicyclists.
- Island stops maintain continuity of bike lanes.

Design Guidance

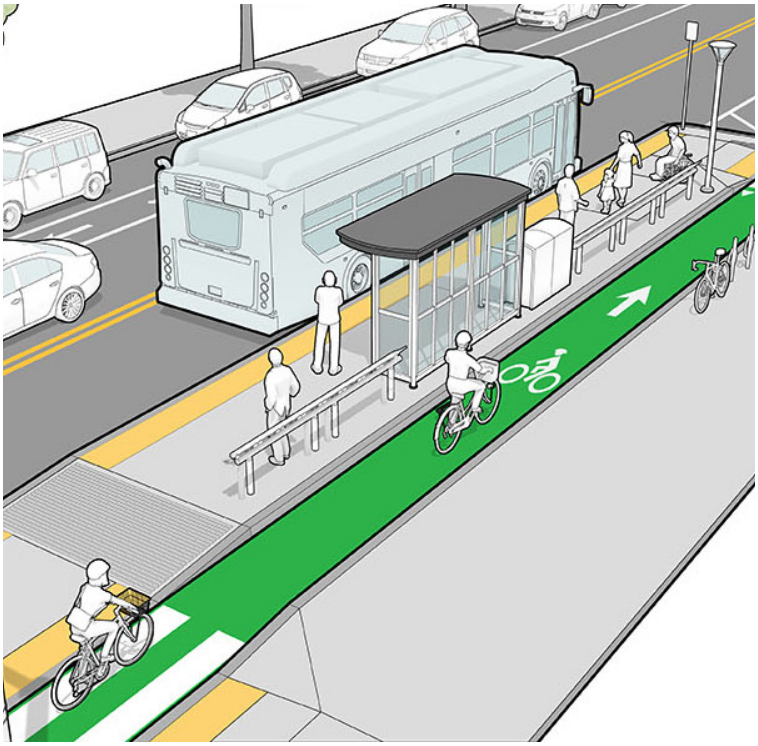
- Provide a buffer of 6 to 12 inches between the transit shelter and the bike lane. This buffer is narrower than the shy distance normally used for vertical surfaces (2 feet), but this is okay for short distances in constrained spaces.
- Channelizing railings, planters or other treatments can be used to help direct people to the crossing location(s).
- Bus shelters should be located away from pedestrian crossings to minimize bicyclist conflicts with pedestrians.
- Multiple pedestrian crossings are recommended, but not required.
- Provide a minimum 4-foot-wide walkway between the curb and the transit shelter.
- Minimum 8 feet of clear width at the location where the bus doors will open to accommodate people in wheelchairs.

Considerations

- The space between the bike lane and the sidewalk must have a detectable edge so pedestrians with vision disabilities can distinguish between the two. The bike lane may be located at street level, intermediate level, or sidewalk level. The bike lane elevation can affect the treatment used and can itself be a treatment for creating the detectable edge. The following design treatments can help provide this tactile cue:
  - Street furniture or other vertical objects.
  - A curb.
  - Curb height changes.
  - Continuous low landscaping.
  - A directional indicator installed linearly on the sidewalk adjacent to the edge.
  - Consider transit queuing and vehicle length to determine island length and pedestrian crossing placement.
  - Ensure visibility between bicyclists and pedestrians for safety.
- Consider raised pedestrian crossings between the floating transit island and the sidewalk to prioritize pedestrians and alert and slow bicyclists at the pedestrian crossing.

Systemic Safety Potential

Potential for systemic safety application at bus stops located along separated bike lanes. Best suited as a spot treatment along buffered bike lanes and conventional bike lanes.



Additional Information

- NACTO Transit Street Design Guide
- FHWA Achieving Multimodal Networks

Lighting

Purpose:
Increase visibility for all road users at dusk and darkness, especially at crossings.

Description:
Overhead lighting to illuminate crossings, signs, and street markings. Well-placed lighting improves visibility for all road users. Lighting can be placed overhead or in pavement, depending on the needs of each individual corridor. Pedestrian-scale lighting is often seen in commercial districts as it enhances the environment at night, while also enhancing security.

Estimated Cost:
$$ to $$$$ (depending on design)

Applicable Locations

- Controlled and uncontrolled intersections.
- On crossing approaches.
- Along sidewalks, paths, and trails.
- Beneficial at intersections in areas with high volumes of pedestrians, such as commercial or retail areas and at major bus stops.
- Near schools, parks, and recreation centers.
- On both sides of arterial streets.

Applicable Street Types

- All street types

Safety Benefits

- Improves visibility for all parties.
- May reduce crashes and injuries for all road users.
- May increase yielding and compliance with traffic control devices.
- Higher sense of personal security for pedestrians and bicyclists.

Expected Crash Reduction

- 42% for nighttime injury pedestrian crashes at intersections. (Elvik, R. and Vaa, T., 2004).
- 33-38% for nighttime crashes at rural and urban intersections. (Ye et al. 2008).
- 28% for nighttime injury crashes on rural and urban highways. (Elvik, R. and Vaa, T., 2004).

Design Guidance

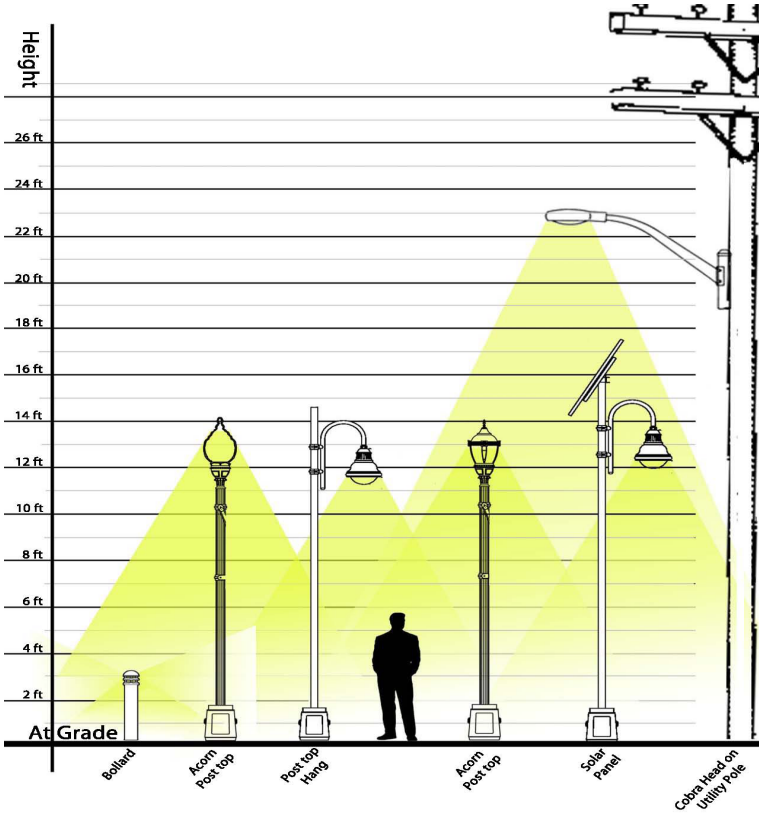
- Use 3000K shielded LED lights wherever possible.
- Lighting should be consistent and uniform.
- Consider placement of existing buildings and trees to reduce spillover.
- Install lighting to meet UDO requirements and minimize effects of light pollution.
- Lights should be placed in advance of a midblock or intersection crosswalk in both directions to illuminate the pedestrian in the front and avoid a silhouette.
- Should be co-located with traffic signs and signals to reduce clutter along or near sidewalks, paths, and trails especially at intersection corners.

Considerations

- Uniform lighting can suggest pedestrian use and create a sense of enclosure.
- Lighting should be provided on crosswalk approaches.
- If a crossing has a crossing island, additional lighting may be provided.
- Consider energy usage and environmental impacts.
- Consider quality and color of light.
- Nationwide, Black and Latino Americans have substantially higher pedestrian fatality rates at night (GHSA Pedestrian Traffic Fatalities by State), therefore pedestrian lighting should be prioritized equitably so neighborhoods that have not included pedestrian lighting in the past can be made safer.

Systemic Safety Potential

Potential for systemic safety application at all controlled and uncontrolled crossings.



Additional Information

- FHWA Lighting Handbook
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations
- ANSI/IES RP-8 Standard Practice for Roadway Lighting
- International DarkSky Association Outdoor Lighting Guidelines

Leading Pedestrian Intervals

Purpose:
Extends crossing time for pedestrians at signalized intersections. Also allows people walking to enter an intersection first to establish presence before turning drivers begin moving.

Description:
Leading pedestrian intervals (LPIs) are adjustments to traffic signals to give pedestrians a three to seven second head start before motorists enter the intersection.

Estimated Cost:

$

Applicable Locations

- Signalized intersections.
- Intersections with a significant number of turning vehicles and pedestrian volumes.
- At locations with protected bicycle lanes where people bicycling cross on the "Walk" signals.
- Locations with seniors or school children who tend to walk slower.

Applicable Street Types

- Main Street
- General Urban Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Increase visibility of pedestrians and bicyclists.
- Increase motorist yielding when turning across a parallel pedestrian or bicycle crossing.
- Provide exclusive crossing time for pedestrians and bicyclists.
- Prioritize pedestrian safety and convenience at intersections.
- Reduce conflicts between pedestrians and motorists.
- Can further enhance safety for pedestrians who need more time to cross the intersection by adding more time to the WALK phase.

Expected Crash Reduction

- 13% for pedestrian involved crashes (Goughnour, E., D. Carter, C. Lyon, B. Persaud, B. Lan, P. Chun, I. Hamilton, and K. Signor 2018),

Design Guidance

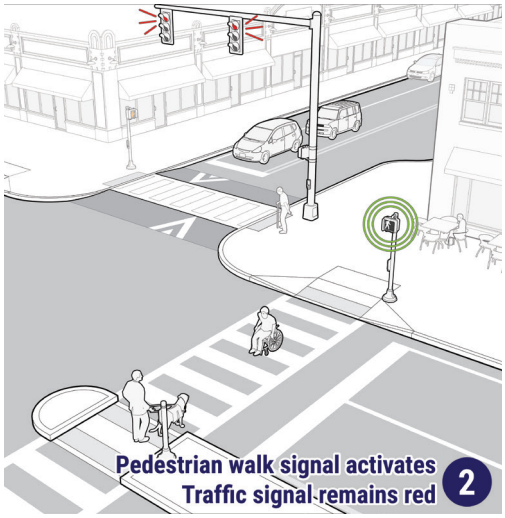
- LPIs should be installed with high-visibility crosswalk markings, curb ramps, accessible pedestrian signals, and "No Turn on Red" "(NOTR)" sign (MUTCD R10-11). NOTR should be considered, not required, unless the LPI is pedestrian actuated. Can include blankout signs that operate only during the LPIs.

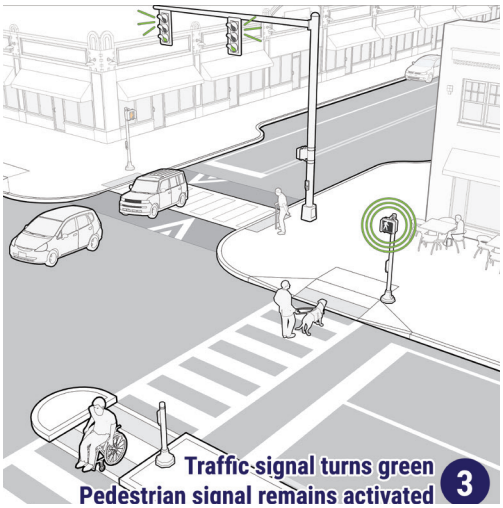
Considerations

- LPIs can be provided actively or provided only when actuated. Active detection requires an accessible pushbutton.
- The length of LPIs can be increased where pedestrian or bicyclist volumes are high or pedestrian only phasing should be used to eliminate conflicts.
- LPI may be accompanied with an audible noise for visually-impaired pedestrians.
- NO TURN ON RED signs should be considered with LPIs.
- Concurrent pedestrian phasing should appropriately match the motorist signal phasing.

Systemic Safety Potential

LPIs are suited for systemic use in areas with existing or planned pedestrian signals and high pedestrian and turning volumes.





Additional Information

- Pedestrian and Bicycle Information Center — Signals and Signs
- PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System

Pedestrian Refuge Island

Purpose:
Protect pedestrians and bicyclists crossing by slowing motor vehicle speeds, increasing motor vehicle yielding, increasing pedestrian visibility, providing a pedestrian waiting area, and allowing two-stage crossings for slower pedestrians.

Description:
Pedestrian islands are raised medians placed in the middle of a street that provide a protected space for people trying to walk across the street. Median crossing islands have a cut-out area for pedestrian and bicyclist refuge and are used as a supplement to a crosswalk.

Estimated Cost:
$$ to $$$$ (depending on design)

Applicable Locations

- Crossings at the midblock or at intersections.
- Most beneficial at uncontrolled crossings, multilane roads, wide signalized crossings, or complex intersections.
- On roads with two or more lanes of through traffic.
- Roads with insufficient gaps in traffic.
- Roads with high pedestrian crossing volumes.

Applicable Street Types

- All street types

Safety Benefits

- Reduce maximum distance and time pedestrians exposed to crash risk.
- Allow pedestrians to cross the street one direction of travel or fewer lanes at a time.
- Ease crossing for slower pedestrians (e.g. youth, elderly, and disabled).
- Provide space for additional lighting at the crossing.
- May slow motorist through speed.
- May slow motorists turning left.

Expected Crash Reduction

- 32 for vehicle-pedestrian crashes[1]

1 Zegeer, C., C. Lyon, R. Srinivasan, B. Persaud, B. Lan, and S. Smith. 2017. "Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments." Transportation Research Record: Journal of the Transportation Research Board 2636. Transportation Research Board of the National Academies. Washington, D.C.

Design Guidance

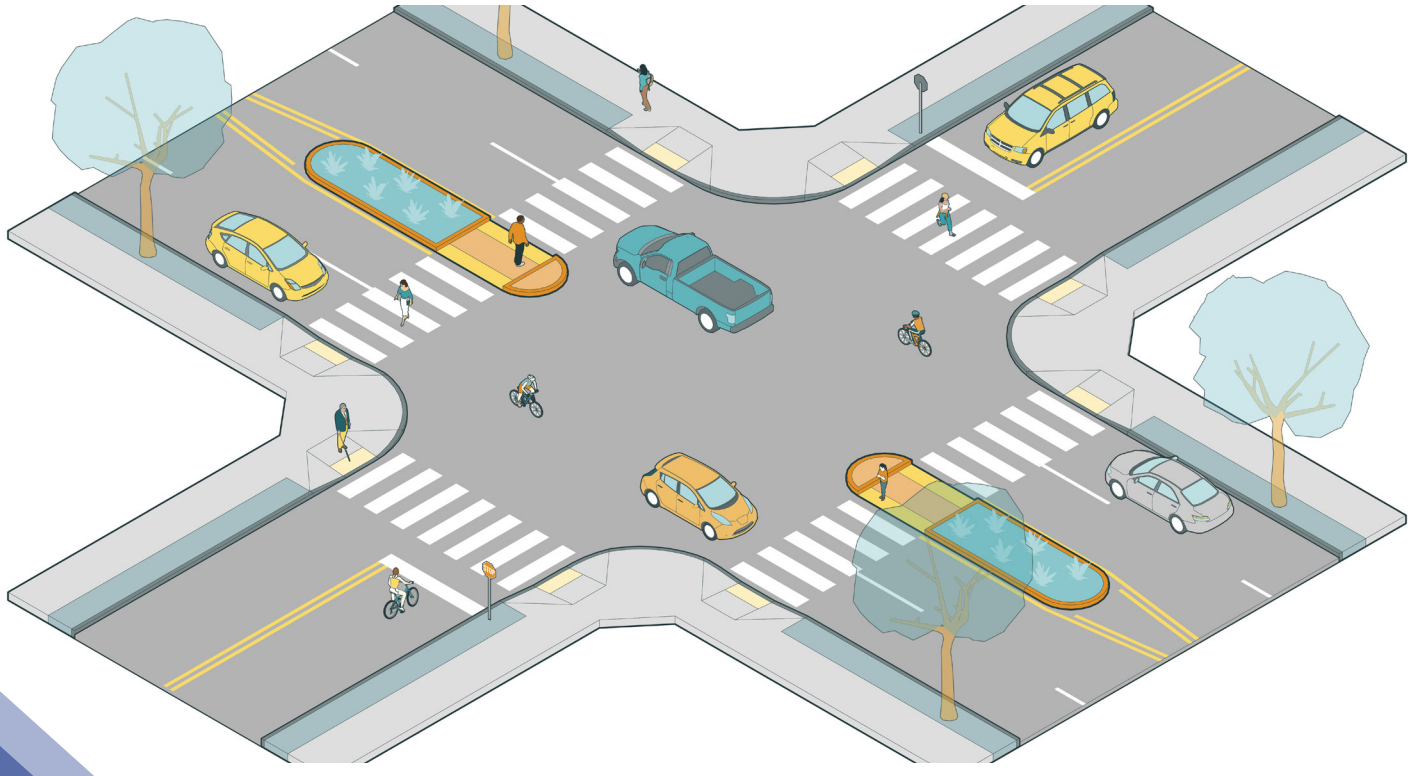
- Median crossing islands should be a minimum of 6 feet wide. To provide bicyclist refuge or for high pedestrian volumes, crossing islands should be a minimum of 8 feet wide. The refuge is ideally 40 feet long.
- Ramps or island cut-throughs are required to meet ADA requirements. They should be the full width of the crosswalk, 6 feet minimum.
- All medians at intersections should have a "nose" which extends past the crosswalk. The nose protects people waiting on the median and slows turning drivers.
- Mark with a high-visibility crosswalk.

Considerations

- Pedestrians may get caught on the crossing island if motorists do not yield or signal timing is too short.
- Crossing islands at intersections may restrict vehicles turning left without restricting pedestrian or bicycle crossings.
- Curb extensions can be built along with crossing islands to restrict on-street parking and reduce crossing distance.
- Temporary crossing islands can be constructed with temporary curbing or flex posts.
- Pedestrian islands should be considered at locations on busy 2-lane streets and on any street with more than two lanes.
- Where possible, stormwater management techniques should be utilized on pedestrian islands with adequate space, as long as a clear path for pedestrians is maintained.

Systemic Safety Potential

Potential for systemic safety application at mid-block crossings and at intersections along corridors with poor motor vehicle yielding, operating speeds over 30 mph, or motor vehicle volumes above 9,000 vehicles per day.



Additional Information

- Chapter 8 of Designing Sidewalks and Trails for Access: Part II of II: Best Practices Design Guide
- Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

Raised Crosswalk

Purpose:
Reduce drivers' speeds, increase driver yielding, and improve crossing safety for people walking or bicycling.

Description:
Raised crosswalks are ramped speed tables spanning the entire width of the roadway or intersection usually at minor locations. Crossings are elevated at least three inches above the roadway, and up to the sidewalk level.

Estimated Cost:
$$ to $$$$ (depending on design)

Applicable Locations

- Raised crosswalks are a treatment option often used at the midblock. However, intersections can also have raised crosswalks or the entire intersection can be raised.
- Roadways with a posted speed of 30 mph or lower.
- Common on school campuses, at shopping centers, and in pick up/drop off zones.

Applicable Street Types

- Main Street
- General Urban Street
- Neighborhood Connector
- Neighborhood Residential Street

Safety Benefits

- Reduce motor vehicle speeds.
- May reduce the frequency and severity of crashes for all road users.

Expected Crash Reduction

- 45% for pedestrian crashes. (Elvik, R. and Vaa, T., 2004).
- 36% for all vehicle crash types. (Elvik, R. and Vaa, T., 2004).

Design Guidance

- Place ramps on each vehicle approach.
- Raised crossings are often demarcated with different paving materials and additional paint markings. See MUTCD sections 3B.29 and 3B.30 for details.
- Mark the crossing with high-visibility crosswalk markings.
- Install with applicable warning sign (MUTCD W11-1, W11-2, W11-15, or S1-1). Consider advance warning signs such as SPEED TABLE or RAISED CROSSWALK (modified W17-1) and advisory speed plaques if applicable or on higher volume roadways.
- Raised crossings do not require curb ramps, though truncated domes should be included at each crossing entrance.

Considerations

- Raised crossings at sidewalk level are preferred for pedestrian accessibility and comfort, and safety.
- Raised crossings should not be used on steep curves or roadways with steep grades.
- May be used for bicyclists along crossings for shared use paths and multiuse paths including protected bicycle lanes.
- Consider drainage needs.
- Further consideration is needed for roadways heavily used by trucks, buses, and emergency vehicles.

Systemic Safety Potential

Best suited as a spot treatment.

Additional Information

- Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations
- A Guide to Vertical Deflection Speed Reduction Techniques: Planning and Design of Speed Humps, Speed Tables and Other Related Measures from ITE.

Raised Intersection/ Speed Table

Purpose:
Raised intersections create a safe, slow-speed crossing and public space at minor intersections. These treatments provide many benefits, especially for people with mobility impairments, because there are no vertical transitions to navigate.

Description:
Raised intersections are created by raising the street to the same level as the sidewalk.

Estimated Cost:

$$$$

Applicable Locations

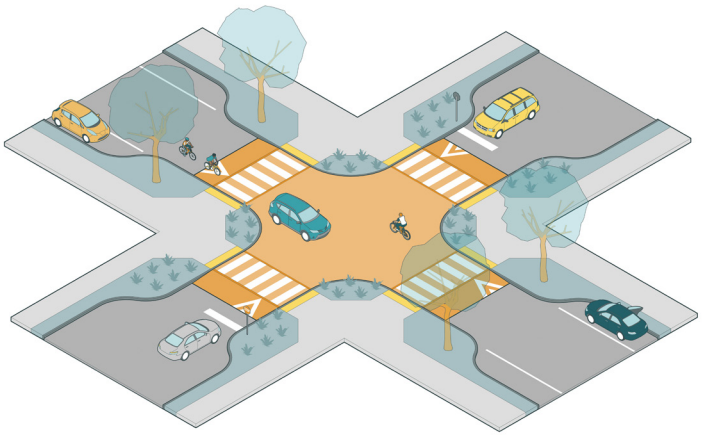
- Raised crosswalks and intersections are appropriate in areas with high pedestrian activity. They should also be considered at locations where poor pedestrian visibility and low motorist yielding have been identified.
- High-visibility or textured paving materials can be used to enhance the contrast between the raised intersection and the surrounding street.
- Raised intersections require detectable warnings at the curb line for people who are blind or have low vision.
- Directional curb ramps are preferred, as shown in the figure to the right.
- Raised intersections can be useful in placemaking where slow traffic speeds and decorative treatments are desirable and in conjunction with curb extensions and are generally best used on narrower, two-lane roadways.

Applicable Street Types

- Neighborhood Residential Street
- Main Street
- General Urban Street

Safety Benefits

- Improve motorists' awareness by prioritizing pedestrian crossings and helping define locations where pedestrians are expected.
- Reduce turning speeds of motorists at intersections and driveways.
- Increase visibility between drivers and pedestrians by raising pedestrians in the motorists' field of view and giving pedestrians an elevated vantage point from which to look for oncoming traffic.
- Create pedestrian crossings which are more comfortable, convenient, and accessible since transitioning between the sidewalk and roadway does not require negotiating a curb ramp.



Design Guidance

- Raised intersections and crosswalks can be used as gateway treatments to signal to drivers when there are transitions to a slower speed, pedestrian-oriented environment.
- Designs should ensure proper drainage.
- Raised intersections are flush with the sidewalk and ensure that drivers traverse the crossing slowly.
- Crosswalks do not need to be marked unless they are not at grade with the sidewalk. ADA-compliant ramps and detector strips are always required.
- Bollards along corners keep motorists from crossing into the pedestrian space. Bollards protect pedestrians from errant vehicles. Bollard placement and dissimilar pavement materials create space for occasional large vehicles similar to an apron.

Considerations

- Design speeds and emergency vehicle routes must be considered when designing raised crosswalks and intersections; these treatments may not be appropriate for high-speed streets without appropriate advanced markings and signing or other design changes.
- Installation of raised intersections and speed tables may affect snow removal operations. Snow plow operators should be adequately warned and trained.

Systemic Safety Potential

Best suited as a spot treatment.

Additional Information

- A Guide to Vertical Deflection Speed Reduction Techniques: Planning and Design of Speed Humps, Speed Tables and Other Related Measures
- PEDSAFE Countermeasures Guide
- Manual on Uniform Traffic Control Devices
- NACTO Urban Street Design Guide

Turn on Red Restriction

Purpose:
Turn on red restrictions prevent motorists from turning right (or left on intersecting one-way streets) while the traffic signal is red. Restricting this movement eliminates conflicts with pedestrians crossing in front of turning motorists.

Description:
Signs or dynamic electronic signs that prohibit motorists from making a right turn on a red signal.

Estimated Cost:

$ (for static signs)

Applicable Locations

Turn on red restrictions should be considered when one or more of the following conditions apply:

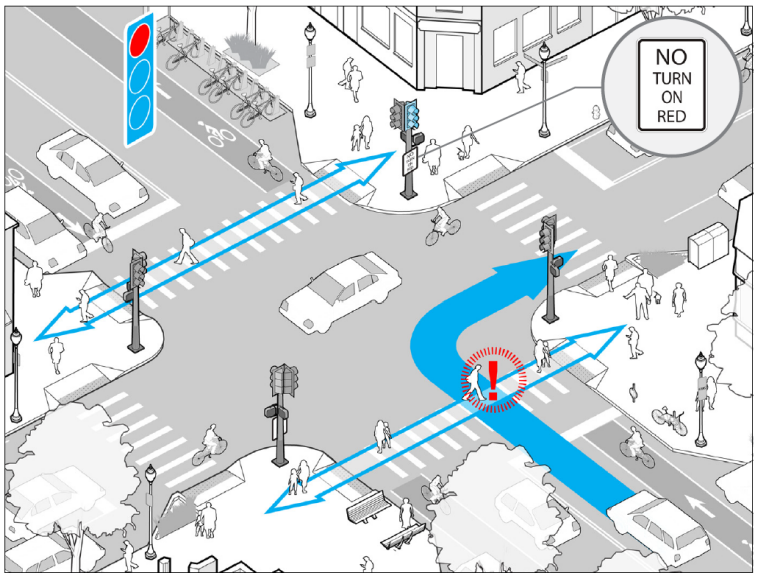
- An exclusive pedestrian phase.
- An LPI.
- High volumes of pedestrians.
- Where bicycle two-stage turn queue boxes are installed; bicycle boxes after two-stage turn queue boxes.
- Poor sight distances and visibility.
- Locations where poor intersection geometry causes unexpected conflicts; or specific cases located from intersections with 5 or more legs.
- Locations with a reported crash history.

Applicable Street Types

- Main Street
- General Urban Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Reduce conflicts between motorists and pedestrians.
- Prioritize pedestrian safety and convenience at intersections.
- Turn on red restrictions can significantly increase the portion of motorists who stop at marked stop lines and decrease the number of motorists who turn right on red without stopping.

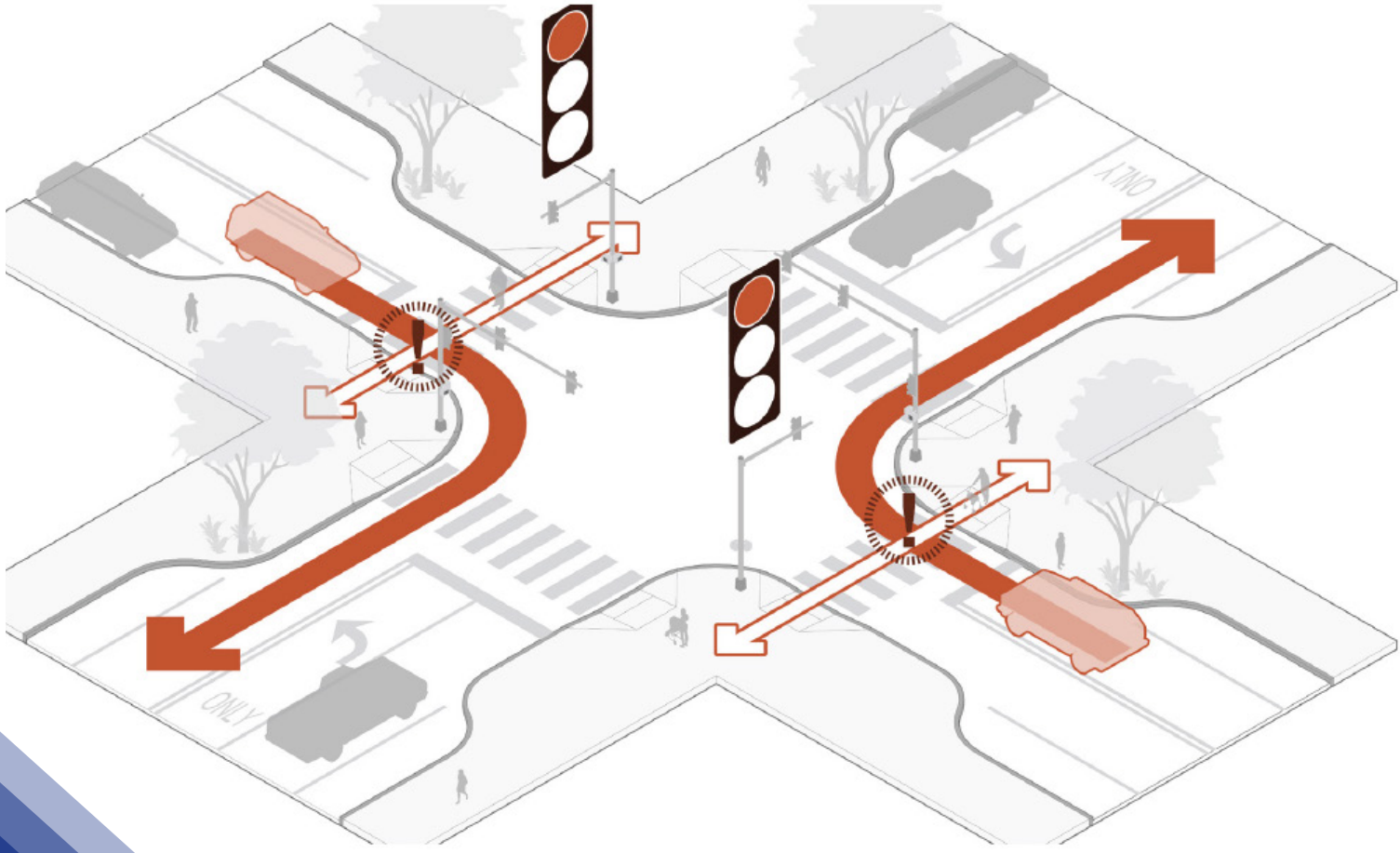


Design Guidance

- Consider dynamic electronic signs to restrict right turns only during certain times of day or during certain signal phases.
- Consider impacts to bus operations at near-side stops change to far-side if needed.
- Intersection impacts to vehicle operations should be studied.
- When used along a corridor or area of traffic signals, vehicle intrusions into pedestrian crosswalks and aggressive driving will be reduced.

Considerations

- Should be implemented all hours of the day, but can be considered by time of day in some circumstances.
- Can be used in conjunction with LPIs or bicycle signals that allow through movements when turning vehicular traffic is stopped.



Additional Information

- Manual on Uniform Traffic Control Devices (MUTCD)

Roundabout

Purpose:
All approaches must yield to traffic already within the roundabout. After yielding, drivers are able to circulate the center island before exiting to turn or continue straight. Eliminates left turning movements and intersection collisions by requiring all traffic to exit to the right of the circle.

Description:
Built with a raised circular island, roundabouts take the place of a traditional intersection. Roundabouts allow for traffic to flow and merge through the roundabout without stopping, reducing conflicts and facilitating increased motor vehicle yielding to pedestrians and bicyclists.

Estimated Cost:

$$$-$$$$ (depending on design)

Applicable Locations

- Signalized intersections
- Unsignalized intersections
- Intersections with protected bicycle lanes

Applicable Street Types

- Neighborhood Residential Street
- General Urban Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Reduces vehicular speeds.
- Facilitates motor vehicle yielding to pedestrians and bicyclists.
- Eliminates angle collisions.

Expected Crash Reduction

- 78-82% reduction in fatal and injury crashes (AASHTO HSM, 2010).

Design Guidance

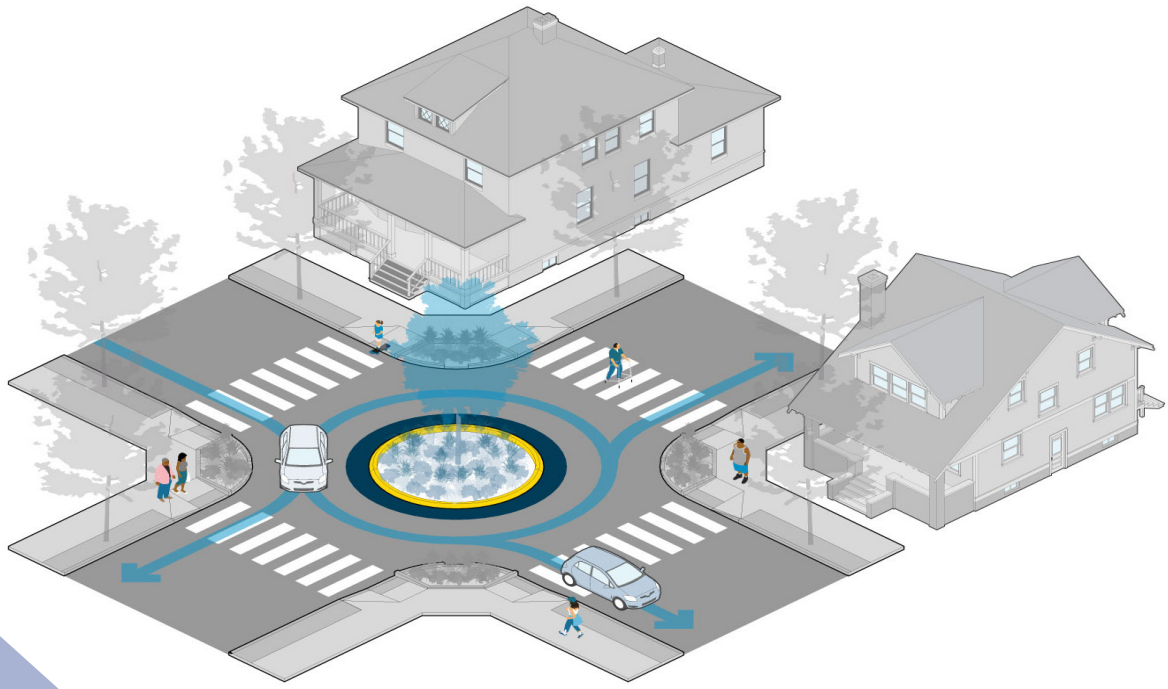
- Roundabouts should be designed for an entry speed of 15-18 mph on each leg.
- On a low speed and volume street, such as a local neighborhood street, consider installing mini-roundabouts, or neighborhood traffic circles.
- Accessible pedestrian signals are required in accordance with the Public Right-of-Way Accessibility Guidelines (PROWAG), particularly at roundabouts with more than one lane.
- Use yield rather than stop controls.
- Install signs to instruct vehicles to proceed to the right of the central shield per MUTCD Figures 2B-21 through 2B-24.
- May be used with shared lane markings, (sharrows) to indicate bicyclist usage.
- May be landscaped with low shrubs or vegetation that does not impede visibility.

Considerations

- General considerations include pedestrian and bicycle volumes, number of travel lanes, impacts on pedestrian routes, and available right-of-way.
- Where there are higher pedestrian volumes, it may be beneficial to install signal controls and wider crosswalks.
- Increasing turn radii or adding high speed slip lanes for motor vehicles can compromise pedestrian and bicyclist safety.
- Chicanes or other traffic-calming treatments can be installed on adjacent roadways.
- Consider restricting large vehicles from mini-roundabouts.
- Large vehicles, such as emergency response vehicles or school buses, may need to make left turns at intersections preceding the mini-roundabout.
- Implement parking restrictions on the approach to the traffic circle or create mountable curbs on the outside of the mini-roundabout to allow for emergency-response vehicle access.
- Modern roundabouts need to consider the needs of oversize and overweight (OSOW) vehicles. Consult the statewide OSOW routing as well as local businesses to determine appropriateness of installation.

Systemic Safety Potential

This is a systemic corridor recommendation that improves road conditions for all roadway users.



Additional Information

- Manual on Uniform Traffic Control Devices
- BIKESAFE Bicycle Safety Guide and Countermeasure Selection System
- PEDSAFE Pedestrian Safety Guide and Countermeasure Selection System
- NACTO Urban Street Design Guide
- FHWA Proven Safety Countermeasures

Rectangular Rapid Flashing Beacon (RRFB)

Purpose:
Used in combination with warning signage, Rectangular Rapid Flashing Beacons (RRFBs) provide a high-visibility warning to drivers when pedestrians are using a marked crosswalk.

Description:
Bright, irregularly flashing LEDs, mounted with pedestrian crossing signs, which increase pedestrian visibility to drivers at uncontrolled marked crossings. RRFBs consists of two rectangular-shaped yellow indicators with an LED light source that flashes with high frequency when activated, typically by pedestrian pushbuttons. RRFBs are often placed at locations with significant pedestrian safety issues but may also be located at a school or trail crossing.

Estimated Cost:
$$

Applicable Locations
- RRFBs are a treatment option at many types of unsignalized pedestrian crossings, including at standard pedestrian, school, or trail crossings.

Applicable Street Types
- Neighborhood Residential Street
- Main Street
- General Urban Street
- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits
- Increase driver yielding.
- May increase effectiveness of other safety treatments, such as advance yield markings with YIELD HERE FOR PEDESTRIAN (R1-5) signs.
- More effective than traditional overhead or post-mounted circular beacons.

Expected Crash Reduction
- 47% reduction for all pedestrian-motor vehicle crashes. (NCHRP Report 841, 2017).

Design Guidance

- Place on both sides of an uncontrolled crosswalk.
- If pole-mounted, place below a pedestrian, school, or trail crossing warning sign and above a diagonal downward arrow plaque.
- May also be used with an overhead-mounted crossing warning sign, located at or immediately adjacent to an uncontrolled marked crosswalk.
- If sight distance approaching the crosswalk is limited, an additional RRFB may be installed on the approach with a post-mounted W11-2, S1-1, or W11-15 sign with an AHEAD or distance plaque. Consider other treatments in these locations.
- Pedestrian detection, typically pushbuttons, must meet the requirements for PROWAG. Flashing time should conform to MUTCD, part 4L.

Considerations

- RRFBs should not be used in conjunction with "Yield," "Stop," or traffic signal control (except at roundabouts).
- An RRFB should not be used without a pedestrian crossing sign.
- RRFBs should only be used at locations with significant pedestrian safety issues. The overuse of RRFBs can diminish their effectiveness.
- Other treatments may be more appropriate in locations with sight distance constraints.
- Solar-power panels may eliminate the need for a power source.
- On high speed or multi-lane roadways, a Pedestrian Hybrid Beacon may be more appropriate (see Section 4U of the MUTCD).

Systemic Safety Potential

Spot treatment or targeted systemic locations, such as trail or school crossings are appropriate. Broad application suggests other treatments such as speed reduction or roadway redesign may be necessary.

Additional Information

- Manual on Uniform Traffic Control Devices
- FHWA Proven Safety Countermeasures
- PEDSAFE Pedestrian Safety Guide and Countermeasure Selection System

Multiuse Paths and Trails

Purpose:
Separates bicycle and pedestrian traffic from motor vehicles in a dedicated space outside the curb of the street.

Description:
Paths that accommodate two-way traffic for bicyclists and pedestrians. While separated from traffic, multiuse paths are located inside and parallel to the road right-of-way. Trails can be located along railway or utility corridors, land dedicated for planned but unbuilt streets, and through public land.

Estimated Cost:

$$$$

Applicable Locations

- Multiuse paths may be preferable to separated bike lanes if low pedestrian volumes are anticipated in order to minimize right-of-way impacts.
- Most useful on wide, multi-lane streets with speeds above 30 mph, or significant motor vehicle volume.
- Applicable on streets with three or more lanes, speeds of 30 mph or greater, or 6,000 vehicles or more.
- Suited for truck or bus routes, or streets where on street bike lane obstruction is likely to be frequent.
- Locations with limited right-of-way where combining walking and bicycling facilities to save space may be the only feasible option.

Applicable Street Types

- Neighborhood Connector Street
- Suburban Connector Street

Safety Benefits

- Fewer conflicts with motor vehicles than on-road bike lanes.
- Accommodate two-way pedestrian and bicyclist flow.

Expected Crash Reduction

- 25% reduction for all bicyclist-motor vehicle crashes. (Alluri et al, 2017)

Design Guidance

- Minimum 2-foot graded area with clearance from lateral obstructions, such as bushes, large rocks, bridge piers, abutments, and poles.
- A minimum 1-foot clearance from "smooth" features, such as bicycle railings or fences with appropriate flaring and treatments.
- Ideally, a graded shoulder area of 3 to 5 feet, with a 5-foot minimum buffer from traffic for user comfort and snow storage.
- Separation of modes in areas with existing or anticipated higher levels of activity, including a 10-foot (minimum width) bikeway and a 5-foot (minimum width) walkway.
- Adequate widths to enable side-by-side travel and passing and occasional maintenance vehicles typically at least 11 feet wide.
- Wider multiuse paths may be needed when adjacent to retail or commercial development to accommodate street furniture, swinging doors, etc, on steep up grade segments, or tight corners.
- PROWAG requirements for slopes must be followed.
- Lighting should be provided at path/roadway intersections at a minimum and at other locations where personal security may be an issue or where nighttime use is likely to be high.

Considerations

- To maintain year-round use, multiuse paths should be swept and plowed of snow, which may require additional maintenance equipment.
- High-quality construction and maintenance that avoids pavement cracking and buckling.
- Asphalt preferably as the surface material. If concrete is used, use longer sections with small joints for a smoother riding experience.
- Intuitive and safe intersection crossings.
- Straight alignments to allow direct and higher speed travel.
- Removal or relocation of poles, traffic signs, trees, or other obstructions that are present in many existing sidepath locations.
- Adequate lighting for nighttime use.

Systemic Safety Potential

This is a systemic corridor recommendation that improves road conditions for all roadway users.

Additional Information

- ODOT Multimodal Design Guide
- FHWA Bikeway Selection Guide
- BIKESAFE Bicycle Safety Guide and Countermeasure Selection System
- FHWA Shared Use Path Level of Service Calculator

Sidewalks

Purpose:
Sidewalks provide space along a street for pedestrian travel.

Description:
For sidewalks to function, they must be kept clear of any obstacles and be wide enough to comfortably accommodate expected pedestrian volumes (as anticipated by density and adjacent land use), and different types of pedestrians, including those using mobility assistance devices, pushing strollers, or pulling carts.

Estimated Cost:
$$-$$$$ (depending on design and length)

Applicable Locations
- Sidewalks should be installed on both sides of the street unless otherwise inconsistent with the City's Transportation Plan.

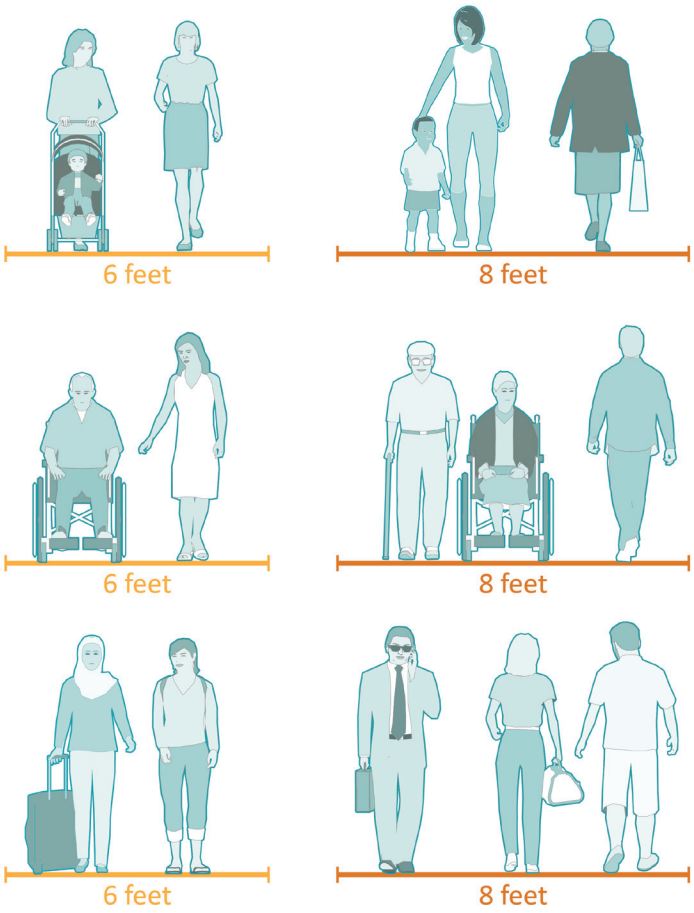
Applicable Street Types
- All street types

Benefits
- Sidewalks make walking an easy choice between destinations since they create a network for pedestrian travel throughout the city.
- Sidewalks and their buffers provide space for utilities, signs, and amenities such as bus shelters or waiting areas, bicycle parking, public seating, public art, newspaper stands, trash and recycling receptacles, and greenscape elements.
- Sidewalks are not only used for transportation, but for social walking, exercise, lingering, commerce, recreation, and as public social space—all activities that contribute to a vibrant and lively street.
- Sidewalks make access to transit possible since the majority of transit users walk between their destination and transit stops.

Expected Crash Reduction
- 65-89% reduction for pedestrian-motor vehicle crashes (Gan et al, 2005).

Design Guidance

- The widths of sidewalks will vary based on context and expected pedestrian volumes. Widths may range from 5 feet along residential and industrial streets to 12 feet or wider downtown and in areas of high use. Width can be lost due to grass on both sides and occasional large trees of up to 1 foot.
- Sidewalks must include an accessible pathway that is free of obstructions, such as light poles, traffic signals, trees, utilities, and furniture. ADA guidelines allow a minimum accessible pathway of 4 feet where there are major constraints. Bloomington uses a minimum width of 5 feet for the accessible pathway.

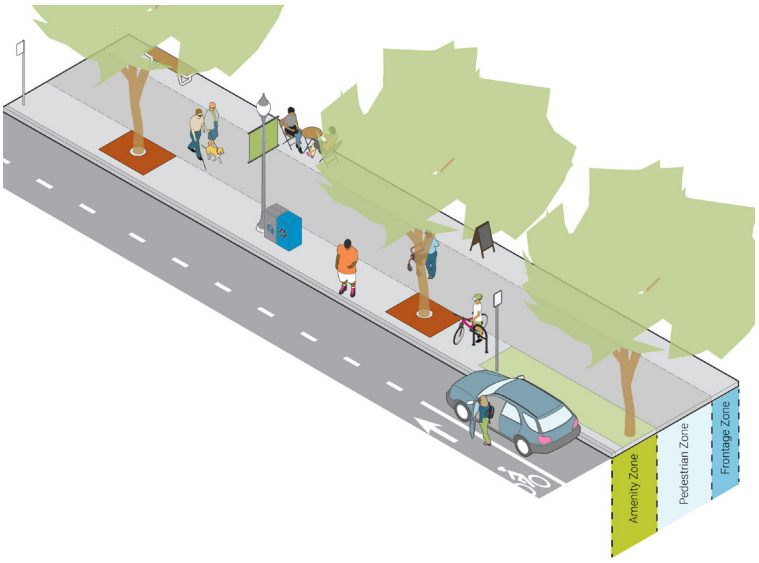


Considerations

- Sidewalks that are replaced for maintenance reasons should not be narrower than the sidewalk being replaced (e.g. a 6-foot wide sidewalk should not be replaced with a 5-foot wide sidewalk).
- All new sidewalks and curb ramps shall comply with ADA regulations, including running slope and cross slope.
- Sidewalks should be clear of any obstructions, including utilities, traffic control devices, trees, and furniture and large surface defects or heaved sections.
- The width and design of sidewalks will vary depending on street type, demand, and available right-of-way.
- Sidewalks should, as much as possible, follow the natural path of pedestrian travel parallel to the street. Crosswalks should be aligned with sidewalks to maintain the most direct path of travel.

Systemic Safety Potential

This is a systemic corridor recommendation that improves road conditions for all roadway users.



Additional Information

- NACTO Urban Street Design Guide
- PROWAG
- FHWA Guide for Maintaining Pedestrain Facilities for Enhanced Safety

Tree Lawn/ Boulevard

Purpose:
Separate sidewalk from the roadway, narrow motorists' field of vision. Add shade, comfort, and beauty to the street.

Description:
Trees or other appropriate plantings in raised medians or on the edge of streets.

Estimated Cost:

$$-$$$$ (depending on design and length)

Applicable Locations

- Residential neighborhoods.
- Downtown commercial areas.
- Rural roads.
- Areas near schools.

Applicable Street Types

- All street types

Safety Benefits

- Large, mature trees can provide a physical barrier between the road and pedestrian pathways.
- May reduce vehicle speeds due to increased perceived friction and sense of enclosure.
- Lower vehicle speeds can result in improved safety outcomes for all road users.

Design Guidance

- Select the right tree species for a space to provide canopy and minimize maintenance costs. Avoid tree species with shallow root systems that may heave sidewalks and pathways.
- Provide access to 800 cubic feet or more of unrestricted and unshared soil space.
- Provide soil depth of 36 inches or more.
- Street trees are healthier in areas with greater permeable surface access.
- Provide minimum 5-foot-wide tree pit or raised planter area in urban contexts, and continuous vegetation in the planting strip in non-urban contexts where possible.
- Coordinate placement of street trees with streetlights, overhead utilities, street furniture, traffic signals and signs (especially stop signs).
- Tree pits or raised planter areas may accommodate trees when additional sidewalk is needed to accommodate pedestrian volumes.
- Make sure to minimize construction impacts including trenching and soil compaction in root areas.

Considerations

- Width of planting zone should be considered so trees do not damage the sidewalk as they grow.
- Street trees can improve vibrancy of the streetscape.
- Street trees help to create a sense of enclosure.
- Consider allocation of space to optimize tree health and maintenance.
- Sight distance (and the maintenance needed to maintain a safe sight distance) must be considered for street trees near intersections or on roadway curves.
- Mature trees and other plantings by the City require ongoing maintenance, including regular trimming, pruning, and street sweeping.

Systemic Safety Potential

Street trees can be included for traffic calming on all street types. Sight lines should be maintained on all street types and clear zones as applicable.

Additional Information

- Bloomington Urban Forestry Plan
- Bloomington Tree Care Manual

BLOOMINGTON PLAN COMMISSION **CASE #: DP-44-24**
STAFF REPORT – Second Hearing **DATE: January 13, 2025**
Location: 3111 S. Walnut Street Pike

PETITIONER: Walnut Pike Development, LLC
3039 W. Post Road, Indianapolis, IN

CONSULTANTS: Angela Parker
116 W. 6th Street, Bloomington, IN

Bledsoe Riggert Cooper James
1351 W. Tapp Road, Bloomington

REQUEST: Primary plat approval for a 75 lot subdivision of 15.56 acres for a Common Area Development Plat in the Residential Medium Lot (R2) zoning district. The petitioner is requesting a waiver from the Common Area development standards that requires lot lines to not extend more than 10' from any structure, a waiver to allow a cul-de-sac, and for secondary plat approval to be delegated to staff.

BACKGROUND:

Area:	15.56 acres
Zoning:	Residential Medium Lot (R2)
Comp Plan Designation:	Neighborhood Residential
Existing Land Use:	Single family residences
Proposed Land Use:	Single family residences
Surrounding Uses:	North – Single family residence
	West – Multifamily residence
	East – Single family residences
	South – Place of Worship

CHANGES SINCE FIRST HEARING: At the first hearing the Plan Commission gave comments regarding the overall layout of the interior road network and concerns regarding the number of 3-point turns that are required within the overall development. Concern regarding providing enough adequate parking for the development was also expressed. Since the first hearing the petitioner has revised the interior road design to replace the previous hammerhead road at the east end of the development with a cul-de-sac to provide a turnaround area that does not necessitate a 3-point turnaround. Areas have also been shown within the development along the street to provide area for refuse and recycling containers to meet Public Works and Sanitation standards. Other changes include the incorporation of individual driveways on six of the lots (Lots #39-44), an amenity center, a pickleball court, and a gazebo.

REPORT: The property is located at 3111 S. Walnut Street Pike and is zoned Residential Medium Lot (R2). Surrounding zoning includes Residential Medium Lot (R2) to the north, east, and south and Residential High-Density Multifamily (RH) to the west. The surrounding properties have been developed with a mix single family residences to the north, east, and south with multifamily residences to the west. This site has a large stand of mature trees on the northern portion of the site as well as several karst features scattered throughout the site.

The Plan Commission approved a primary plat in 2022 (DP-08-22) to plat the property for 33

single family lots and 4 common area lots. However, a secondary plat was never approved and a new development plan is now being proposed for the property. The current petition involves developing this property as a Common Area Development plat as allowed under Section 20.05.050(e)(3)(E) of the Unified Development Ordinance. A common area development is a type of development where the lot area includes only the footprint of a building or the footprint and a limited area outside the footprint. The remainder of the area included in the parent parcel is owned in common by a homeowner's association. The UDO allows the Plan Commission to modify lot and setback standards to create a common area development plat subject to the following standards:

i. A petitioner shall request a common area development designation with the primary plat
ii. All individual units shall be placed on an individual lot
iii. All units shall have individual utility service.
iv. Lot lines shall not extend more than 10 feet from any structure; and
v. All areas outside of individual lots shall be placed in common area

This petition would involve the platting of this property into 75 lots, including three common area lots, and constructing attached single family residences that straddle each property line with each unit located on its own property. Each unit would be located on its own lot with a common wall. The respective lot lines are shown to extend no more than 10' from the structures as required except in 2 situations. The petitioner is requesting a waiver from the requirement that lot lines extend not more than 10' from a structure for two aspects. The first aspect in regards to the front lot line. Since the front yard setback in the Residential Medium Lot (R2) zoning district is 15', the petitioner is requesting a waiver from the 10' lot line locational requirement to allow the 15' setback along the front as required for this zoning district and to allow for 6 of the lots (Lot #39-44) to have a setback of approximately 23' to accommodate driveways. The second aspect of the 10' deviation is in regards to side lot lines for two lots since there are two areas of the development where storm water infrastructure requires a greater space between lots (Lots #14/15 and Lots #68/67) and the lot lines must exceed the 10' requirement to accommodate storm water drainage around karst features. A waiver is also being requested to allow for a cul-de-sac and to delegate secondary plat approval to staff.

The proposed plat would have two internal public roads with one main road connection to Walnut Street Pike and a road stub provided to the north. Although the plan shows a cul-de-sac at the east end of the development, the right-of-way has been stubbed to the property line to provide an additional future connectivity option. There are several karst features on the property that have been placed within the required Karst Conservancy easements, as well as large areas of tree preservation that are also located in Common Area. No driveways or parking areas are proposed for a majority of the lots and parking will be provided exclusively by the proposed on-street parking spaces. Although on-street parking spaces are not typically striped, the proposed plan shows a conceptual 109 parking spaces which equals 1.51 spaces per dwelling unit.

20.06.060(b)(3)(E) PRIMARY PLAT REVIEW: The Plan Commission or Plat Committee shall review the primary subdivision petition and approve, approve with conditions, or deny the petition in accordance with Section 20.06.040(g) (Review and Decision), based on the general approval criteria in Section 20.06.040(d)(6) (Approval Criteria) and the following standards:

i. All subdivision proposals shall be consistent with the need to minimize flood damage.
ii. All subdivision proposals shall have public utilities and facilities such as sewer, gas,

electrical, and water systems located and constructed to minimize flood damage.

iii. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards

iv. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than the lesser of 50 lots or five acres.

v. All subdivision proposals shall minimize development in the SFHA and/or limit intensity of development permitted in the SFHA

vi. All subdivision proposals shall ensure safe access into/out of SFHA for pedestrians and vehicles (especially emergency responders).

PROPOSED FINDING: The petitioner is proposing one on-site detention area at the southwest corner of the site to meet storm water detention and water quality requirements. The detention area is shown in a common area lot on the southwest side of the site and the proposed stormwater management plan has been designed to provide for appropriate stormwater management throughout the development. Public water and sanitary sewer connections will be provided to existing facilities along Walnut Street Pike to the west and extended through the site. The City of Bloomington Utilities Department is still reviewing the proposed plans and no problems with meeting sewer and water capacity have been identified. There are no portions of this site that lie within the 100-year regulatory special flood hazard area and there are no known flooding issues on this site.

20.06.040(d)(6)(B) General Compliance Criteria

i. Compliance with this UDO

ii. Compliance with Other Applicable Regulations

iii. Compliance with Utility, Service, and Improvement Standards

iv. Compliance with Prior Approvals

PROPOSED FINDING: The petitioner is requesting a waiver from the requirement to have a lot lines extend no more than 10' from proposed buildings and to allow a cul-de-sac. With the approval of this development as a common area development and requested waivers, all of the proposed lots meet the standards of the UDO. If the requested waivers are deemed appropriate and approved, the proposed subdivision would be compliant with the UDO. There are no other known applicable regulations that would apply to this property or subdivision. The previous plat was vacated by the Plan Commission and there are no other prior approvals that would pertain to this plat

20.06.040(d)(6)(D) Additional Criteria Applicable to Primary Plats and Zoning Map Amendments (Including PUDs)

i. Consistency with Comprehensive Plan and Other Applicable Plans

The proposed use and development shall be consistent with and shall not interfere with the achievement of the goals and objectives of the Comprehensive Plan and any other adopted plans and policies.

ii. Consistent with Intergovernmental Agreements

The proposed use and development shall be consistent with any adopted intergovernmental agreements and shall comply with the terms and conditions of

any intergovernmental agreements incorporated by reference into this UDO.

iii. Minimization or Mitigation of Adverse Impacts

1. The proposed use and development shall be designed to minimize negative environmental impacts and shall not cause significant adverse impacts on the natural environment. Examples of the natural environment include water, air, noise, stormwater management, wildlife habitat, soils, and native vegetation.
2. The proposed use and development shall not result in the excessive destruction, loss or damage of any natural, scenic, or historic feature of significant importance.
3. The proposed use and development shall not result in significant adverse fiscal impacts on the city.
4. The petitioner shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the pre-submittal neighborhood meeting for the specific proposal, if such a meeting is required.

iv. Adequacy of Road Systems

1. Adequate road capacity must exist to serve the uses permitted under the proposed development, and the proposed use and development shall be designed to ensure safe ingress and egress onto the site and safe road conditions around the site, including adequate access onto the site for fire, public safety, and EMS services.
2. The proposed use and development shall neither cause undue traffic congestion nor draw significant amounts of traffic through residential streets.

v. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity shall exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, streets, potable water, sewer, stormwater management structures, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

vi. Rational Phasing Plan

If the petition involves phases, each phase of the proposed development shall contain all of the required streets, utilities, landscaping, open space, and other improvements that are required to comply with the project's cumulative development to date and shall not depend upon subsequent phases for those improvements

PROPOSED FINDING: The proposed plat and use of the property as a "Dwelling, Single Family" use is consistent with Comprehensive Plan designation of the property as Neighborhood Residential. There are not any Interlocal Agreements that would pertain to this subdivision. There are no expected adverse impacts as a result of this plat. The proposed plat allows the creation of 72 new single family lots that are consistent with the requirements of the UDO with access to existing road system, public services, and public facilities. A new sidewalk and street trees will be installed within the development and along the Walnut Street Pike frontage. All roads within the development will be public and will connect to existing public roads and infrastructure. The site contains several karst featues that are all located within karst preservation easements and areas of tree preservation that are contained within Common Area and tree preservation easements. All adjacent facilities and infrastructure are adequate to support the proposed use. The project will be

constructed in one phase.

20.06.060(b)(3)(F) Subdivision Waivers: Waivers from any standards within Chapter 5 shall be reviewed according to the following criteria:

1. The granting of the subdivision waiver shall not be detrimental to the public safety, health, or general welfare, or injurious to other property; and
2. The conditions upon which the request for a Subdivision Waiver are based are unique to the property; and
3. The Subdivision Waiver shall not in any manner vary the provisions of the development standards, Comprehensive Plan, or Transportation Plan.

PROPOSED FINDING:

Cul-de-sac: The granting of the waiver to allow a cul-de-sac will not be detrimental to the public safety, health, or general welfare, or be injurious to other property as it will allow for adequate and safe turnaround capacity within the development. All of the adjacent properties to the east have been developed with similar single family residences and there were no road stubs provided to this property to connect to. Right-of-way has been shown to stub to the east property line to provide a possible future extension opportunity. The conditions upon which the waiver are being requested are unique in that there are no opportunities on adjacent properties to connect to as a result of the location of the adjacent single family residences. The granting of this waiver will not vary any of the development standards, Comprehensive Plan, or Transportation Plan.

Lot Line Setback: The granting of the waiver to allow the lot lines to extend more than 10' will not be detrimental to the public safety, health, or general welfare, or be injurious to other property as it will allow the development to accommodate two proposed stormwater structures, allow for driveways to be incorporated along the cul-de-sac to provide adequate parking, and allow the front yards to match the development standards of the zoning district. The conditions upon which the waiver are being requested are unique in that the placement of the stormwater pipes are related to the location of existing karst features and a need to provide driveways on 6 lots to allow the development to provide sufficient parking for the residents. The granting of this waiver will not vary any of the development standards, Comprehensive Plan, or Transportation Plan.

PLAT REVIEW: The proposed subdivision is following the Conservation Subdivision (CS) design standards.

Conservation Subdivision Standards:

Parent Tract Size (minimum required): The minimum parent tract size required is 5 acres and this tract is 16 acres.

Open Space Required: The minimum open space required is 50% and the petitioner is providing 9.25 acres (60%) of the overall property size in common area open space.

Block Length: The maximum block length allowed is 1,760 feet and they are showing block lengths of 550', 650', and 1,200'.

Lot Establishment Standards: Although the minimum lot size in the R2 zoning district is 7,200 square feet and the minimum lot width is 60', the Common Area Development standards allow the Plan Commission the ability to modify those standards provided the outlined criteria are met. All of the proposed lots meet the standards for a Common Area Development as outlined under Section 20.05.050(3)(3)(E).

Right-of-Way standards: Walnut Street Pike is classified as a Neighborhood Connector typology and is required to have 74' of total dedication (37' from centerline). A total of 40' of right-of-way from centerline was dedicated with the previous plat and no additional right-of-way dedication is required. The internal roads will all be public and have been shown with the required 61' of right-of-way. There are no alleys proposed and this subdivision type does not require any lots to be served by an alley. The stub street to the north will be constructed to the property line.

Street Design: The main internal street is proposed with two, 10' travel lanes and 7' wide on-street parking on both sides for a total face-of-curb to face-of-curb width of 34'. This proposed cross section does differ from what is outlined in the Transportation Plan as a typical cross section for a street of this volume which would allow only a 28' wide street for parking on both sides, however given the unique development proposal where there are no driveways or parking areas on each lot and parking is provided exclusively by the on-street parking spaces, the additional travel lane width is needed to accommodate two-way traffic assuming all of the on-street spaces are full and adequate area for emergency service vehicles. Traffic calming measures may be required as a result of the increased travel lane width and will be finalized with the secondary plat review.

The Public Works Department has requested that the proposed cul-de-sac be constructed of concrete to accommodate the turning movements of the sanitation trucks that will be utilizing that area. There are bumpouts shown throughout the development to serve as collection areas for garbage and recycling totes and have been sized to meet Public Works and Sanitation Department standards.

Alternative Transportation: A 10' wide asphalt multiuse path is required along the Walnut Street Pike frontage and must be shown with the primary plat. All internal streets will be public with 6' sidewalks and 6' tree plots.

Environmental Considerations: The property currently has approximately 37% of the property covered with closed canopy tree coverage and they are required to save 80% of that area. The UDO requires that Karst Features greater than one-half acre and areas of tree preservation greater than one acre be set aside in common area lots. Compliance with this standard has been shown on the plat with the areas of required tree preservation and sinkholes shown within Common Area lots and the preservation of 83% of the existing tree coverage. All karst features have been shown with the required Karst Conservation Easements. The common area lots will be platted with a conservation easement.

Bloomington Transit: This property is serviced by Bloomington Transit and they have indicated that a bus stop at this location would be desired and is required by the UDO. The petitioners have worked with Bloomington Transit on the appropriate location for the shelter and this has been shown on the site plan.

CONCLUSION: The petitioner is requesting a waiver from the subdivision standards to allow for

a greater front yard setback that matches the base zoning district, to allow for four lots to have lot lines that are more than 10' from the building, and to allow a cul-de-sac. The Department finds that the granting of the waiver to allow for a front setback of 15' to match the base zoning district and for four of the lots is appropriate since it would allow this development to have the same design as other single family neighborhoods. The request to allow for a cul-de-sac is based on the fact that the majority of the surrounding properties have been developed with residences and there are no connection opportunities stubbed to this property to the east or south. In addition, the location of the karst features and required tree preservation standards makes a traditional grid-type subdivision impractical. The petitioner has shown a road stub to the north to provide for additional connectivity when the property to the north redevelops and extended right-of-way to the east as an additional possible connection option. The Department finds that the granting of the waiver to allow for a cul-de-sac is appropriate. Otherwise, the proposed plat meets all of the requirements of the UDO.

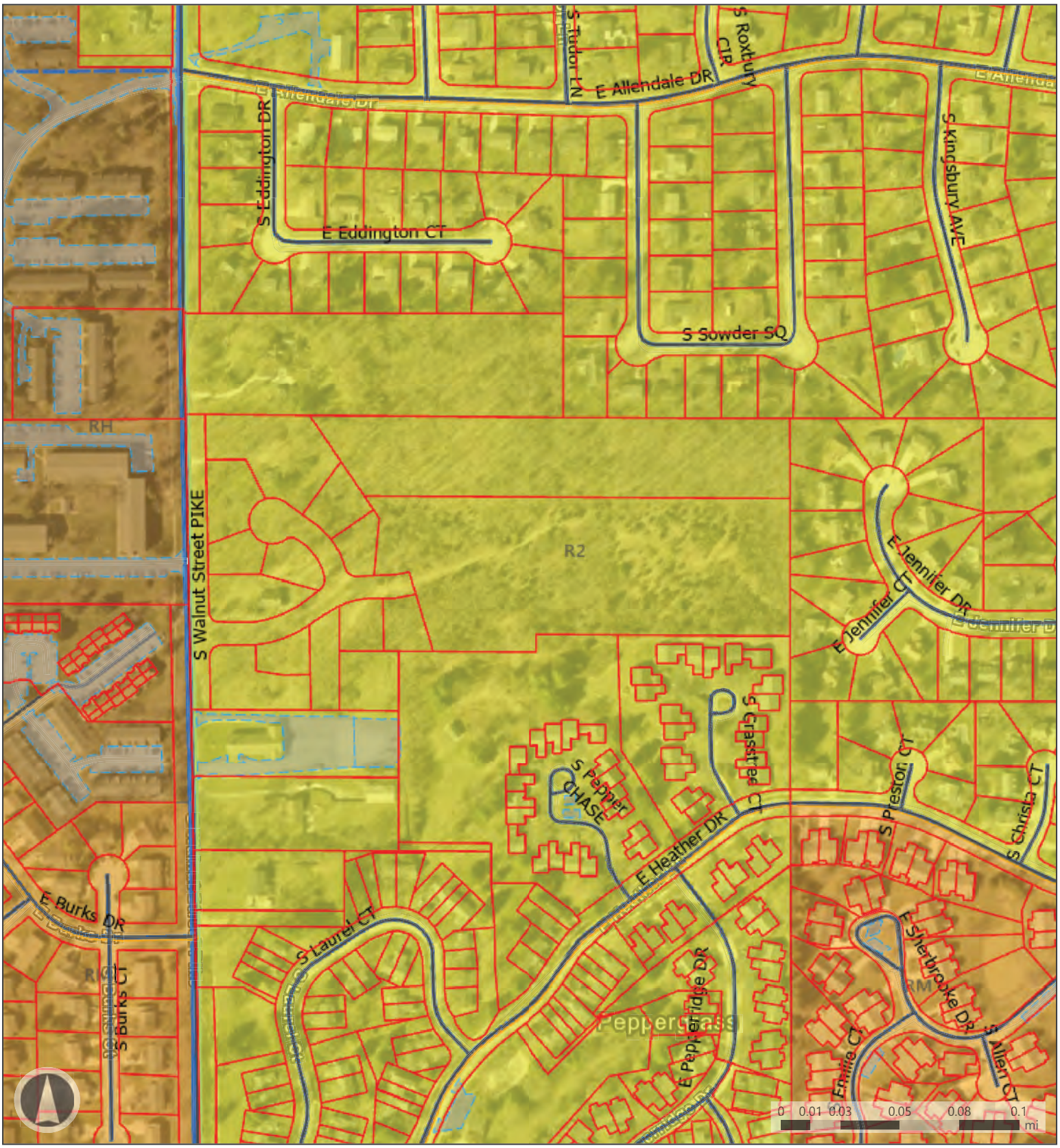
The petitioner is also requesting to delegate Secondary Plat approval to staff. The petitioner has provided full grading, site, and utility plans for the development and there are no substantial changes expected to the Secondary Plat, so the Department finds that the request to delegate secondary plat approval to staff is appropriate.

RECOMMENDATION: The Planning and Transportation Department recommends that the Plan Commission adopt the proposed findings and approve the primary plat of DP-44-24 with the following conditions:

1. Secondary plat approval is delegated to staff.
2. All easements on secondary plat must use language outlined in the UDO.
3. A waiver to allow the lot lines as shown is approved with this petition.
4. Traffic calming measures may be required along the main street subject to the Engineering Departments standards with the approval of the secondary plat.
5. The proposed cul-de-sac must constructed of concrete and meet Engineering and Public Works standards.

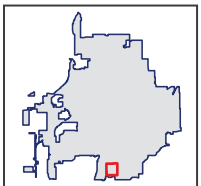
City of Bloomington

Planning and Transportation Department



Map Legend

- Parcels
- Parking Lot Type
  - Paved Parking Lot
- Current
- City Maintained Streets
- Street Typology
  - Neighborhood Connector
  - Neighborhood Residential
- Functional Classification
  - Secondary Arterial
  - Secondary



Created: 9/13/2024 *Map By:*

For use as map information only, information is NOT warranted.

City of Bloomington

Planning and Transportation Department

Map Legend

- Parcels
- Paved Parking Lot

Parking Lot Type

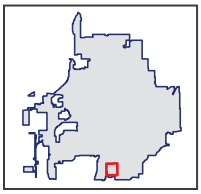
- Current
- City Maintained Streets

Street Typology

- Neighborhood Connector
- Neighborhood Residential

Functional Classification

- Secondary Arterial
- Secondary Collector



Created: 9/13/2024 *Map By:*

For use as map information only, information is NOT warranted.

PAGANELLI LAW GROUP
ATTORNEYS AT LAW

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Bloomington, Indiana 47404

Tel: 812.332.6556
Fax: 812.331.4511
www.paganelligroup.com
aparker@paganelligroup.com

December 30, 2024

Revised Petitioner's Statement: Ivy Chase Development for January 13, 2025 Plan Commission Hearing (2nd)

A. The Neighborhood

Ivy Chase will be an inviting, caring and accessible place to live, focusing on "senior-age" residents, as an age 55+ community. The 15.56-acre site, located at 3111 S. Walnut Street Pike on the south side of the City of Bloomington, will be dedicated to quality of place and principles to create community and connection for its residents. It will also include nearly 50% (8.23 acres) dedicated to conservancy and greenspace for preservation and enjoyment by the residents. Those areas will include outdoor walking paths along with landscaped and hardscaped areas for residents to enjoy and a small amenity center for resident gatherings.

Ivy Chase will include an access street into the development, directly off Walnut Street Pike, with 2 bedroom-2 bath paired units along the way. The living units, each established on single/stand-alone legal lots of record, will provide private entrances on opposite sides of each building. Each building will house 2 residential units, connected as paired homes, but actually separated from foundation to roof by specially-designed air gaps and rubber gaskets to provide fire and sound barriers between living spaces. Each 868 square foot unit will be open in design on the interior and include no-step entries, single floor living and wider doors and halls to accommodate needed accessibility. The project will offer connectivity to the north and east if adjacent development occurs in that area in the future.

Outside amenities will provide residents with dedicated parking spaces and some driveways, walking paths, a water retention area built as a visually-appealing amenity with benches and seating areas throughout to promote walkability and access. The project includes a 1200 square foot community building as an amenity center for resident use and enjoyment and a space for meeting outdoors with a shelter-style (open) structure as a gathering place for residents. Tree preservation and maintaining buffers to the adjacent neighborhoods will be added features surrounding the residences.

B. Development Plan

The legal description for the parcel is attached to this Statement (Warranty Deed). The parcel is currently zoned R2. It has a previously approved Plat and site plan for development of single-family housing, which Petitioner proposes modifying to a common area development with a particular focus on 55+ residential housing. Petitioner does not anticipate the use of incentives for affordability or sustainability although both are embedded in this project. This parcel has been the subject of site plans in 1998, 2000, 2006 and 2022 but has never been developed.

A total of 36 buildings, or 72 residential units, will be constructed on property. Three lots will be maintained as "common area" and greenspace. The project is being proposed under a "common area" development under the Uniform Development Ordinance in that each lot will be separately, legally described and the remaining acreage ("Common Area") will be owned by a single homeowner's management entity. Individual lots with residential structures in this neighborhood could be legally conveyed to individual residential owners. A core value in this project is not only centrally maintaining the common areas, but also servicing the residential units with the highest standard of care as this developer provides with other similar projects in the State. This enables senior residents to reduce, and even eliminate, burdens of ownership, if desired, representing further savings to residents by avoiding the increasing costs of insurance, taxes and homeowner fees to maintain the development. Initially, all of the neighborhood costs will be borne by the owner of the common area and units will be leased to the residents. As the market develops and change, lots may be conveyed to owners, subject to the established covenants. Trash and recycling services will be offered to all residents as well as sufficient parking for each unit, some with driveways in the cul-de-sac area. The parking to unit ratio is 1.51.

The target resident for this development are individuals that are over 55 years of age. By building units in the manner proposed, it keeps the construction costs manageable, which in turn, helps keep the rents at a reasonable level. The developer will commit to managing ten percent (10%) of the units as "affordable" at a standard *below* the stated UDO – at 100% AMI instead of the minimum standard of 120% AMI provided by the ordinance.

The parcel will be developed in accordance with the standards set forth in the Uniform Development Ordinance and no requested variances are expected from design or development standards. Waivers are requested as noted below, given the lay of the land and need to "stack" housing across the site to preserve environmental features and introduce connectivity to both the north and east of the development. Public transportation is available in the area. Parking along the street is anticipated with periodic "bump-outs" to both break-up the stretch of roadway and create greenspace and tree plots along the way. As noted above, some units will have drive-ways within the lots to provide off-street parking (in the cul-de-sac area).

UDO 20.05.050(e)(3)(E) sets forth the design standards for a common area development plat. Each of the following standards are met in this proposal:

i. A common area development designation is requested with the primary plat;
ii. All individual units will be placed on an individual lot;
iii. All units shall have individual utility service;
iv. Lot lines do not extend more then 10' from a structure; and
v. All areas outside of individual lots are placed within a common area.

The Petitioner will place tree canopy, karst areas and open spaces in a conservancy easement, as well as for utilities and stormwater management as was also proposed in the 2022 site plan submissions and reflected on the attached plat. The development meets the current storm water and utilities standards and petitioner has been working with CBU to ensure all elements and requirements are included.

The developer held a neighborhood meeting (after providing the requisite notice to the two adjacent HOAs- Peppergrass and Sherwood Oaks).[1] The meeting was held on June 19, 2024, with a commitment from the developer to update the HOAs as plans were revised and submitted. The minutes from the June 19th meeting are attached here. All notices have issued to adjacent owners in accordance with the UDO.

C. The Housing Need

In this common area development, the developer is meeting identified and unmet needs in providing housing for a senior population that is projected to grow significantly in the coming years in the City of Bloomington. According to the Housing Study completed by the City of Bloomington in 2020, the projected rate of growth from 2018 to 2030 in the over 55+ age group is 26.4% while the growth in the 65+ age group expects to see a 48.7% increase (Bloomington Indiana Housing Study, page 21). The recently completed Hoosier Uplands housing study, through Rural Opportunities Initiative, points to similar increases and expressly points to a finding that "seniors struggle to find housing." It also notes that a variety of types of options in housing is important. (Addendum 2.H. page 111, 127).

The City of Bloomington's Comprehensive Plan (2018) point to a policy objective that enables seniors to enjoy housing options with supportive services (Objective 5.3.2). The proposed plan is consistent with the goals of the Comprehensive Plan.

National studies have cited to the need for senior housing, finding that senior housing is one of the *highest* areas of need but one of the *slowest* in growth rate, point to a rate of 1.3% in 2024, year-over-year (*cite*: seniorsite.org. The State of Senior Housing in 2024). A study completed by the Harvard Joint Center for Housing Studies indicates that homeownership with the over 55-group is just under 80% nationally, a primary consideration for these residents evolve around the increasing costs and burdens of ownership. This aging population is less likely to seek homeownership particularly in situations where they do not want to incur mortgage debt.

Organizationally, the development will meet legally-required standards to be created as an "over-55+ community" so that the target population and goals to provide housing are appropriately met and maintained. The covenants and conditions for operating the neighborhood will be created in compliance with relevant legal standards to serve this population and also the specific features of this development site.

D. The Developer

Walnut Pike Development, LLC is owned and operated as a subsidiary of Helix33. This organization has had wide-spread success in providing housing to the unhoused, creating affordable housing projects, co-work space to promote economic development, as well as over 55+ residential housing in other communities. The organization's founder, Ethan Fernhaber, set on this course over 20 years ago when he acquired his first housing unit (a double-wide) to provide a

[1] The Affidavit of Notice was provided by letter to the City of Bloomington Planning & Transportation Department on June 7, 2024.

single house to someone in need. This has expanded into management of over 4,000 units along with supportive and connective services for job seekers, co-work job incubation/creation center, a security services company, and efficiently building 1,000 homes a year in an indoor, temperature controlled environmental at Volumod in Indianapolis, Indiana, where these units will be constructed.

E. The Request

Petitioner Walnut Pike Development LLC respectfully requests:

- Vacation of the existing Ivy Chase Subdivision Phase 1 Plat
- Approval of new Primary Plat with 75 total lots (3 common area lots).
- Waiver to allow a cul-de-sac at the east-end of the development to situate units and provide future east-side connectivity.
- Waiver of 10' lot line offset [per UDO 20.05.050(e)(3)(E)] to accommodate R2 front building setback of 15', and allow for ADA accessibility at the following lots:
    - 1-20
    - 23-58
    - 60-75
- Waiver of 10' lot line offset [per UDO 20.05.050(e)(3)(E)] to accommodate 30' drainage easement running between the following lots:
    - 67
    - 68
- Waiver dimensional standards, including 25' rear building setback, minimum 7,200 SF Lot Area, and minimum 60 ft Lot Width [per UDO 20.02.010.i.2] to accommodate 10' lot line offsets defined for common area development at the following parcels:
    - 1-20
    - 23-58
    - 60-75

Respectfully submitted,

Angela F Parker

Angela F. Parker
Counsel for Petitioner

Attachments

Ivy Chase Project Neighborhood Meeting Minutes

June 19, 2024, 5:30 pm

After notice issued more than ten (10) days prior, the Neighborhood Meeting required by the UDO was held regarding Ivy Chase's PUD proposal. The meeting commenced at 5:30 p.m. at the Peppergrass Clubhouse, 654 E Heather Drive, Bloomington, IN 47401.

26 people were in attendance in addition to the petitioner representatives, Angela Parker and Sib Sheikh. Notice was given to both the Sherwood Oaks HOA and the Peppergrass Homeowners Association.

1. The drawing of the revised plan and renderings of the residences was shared and discussed with those in attendance. Easels were set up to allow the residents to look at the intended plan and drawings. There was considerable discussion regarding the change in the development to a 55+ community, which residents spoke in favor of at the meeting.

2. One of the residents suggested that the shelter house located on the Peppergrass property could be upgraded and serve as a shared amenity for both communities. One was concerned that the homes were small in size and did not have garages.

3. Some residents expressed concern about the increase in traffic on Walnut St., Pike, which they deemed dangerous because there is no slowing down or stopping of traffic until you arrive at the Rhorer Road intersection to the south or Henderson Street to the north. Some neighbors suggested that the housing development on the west side of Walnut St., Pike was a high-crime area, that sometimes spilled into their neighborhood at Peppergrass.

4. Petitioner reported that the engineer's site plans were not yet completed, but we're expected to be for the meeting. As that information becomes available, it will be shared with the residents through their homeowner associations. Also offered additional opportunity for future meetings and invited any questions or discussion as the project proceeds forward.

The meeting adjourned at 6:45 PM.

Submitted by: Angela F. Parker, Paganelli Law Group

DULY ENTERED
FOR TAXATION
Dec 22 2021 TS
Catherine Smith
Auditor Monroe County, Indiana

2021023554 WAR $25.00
12/22/2021 10:50:33AM 5 PGS
Eric Schmitz
Monroe County Recorder IN
Recorded as Presented

WARRANTY DEED

THIS INDENTURE WITNESSETH, That **JEFFREY S. JONES**, an adult of Monroe County, Indiana ("Grantor"), CONVEYS AND WARRANTS to **WALNUT PIKE DEVELOPMENT LLC**, an Indiana limited liability company ("Grantee"), for the sum of Ten Dollars ($10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the following described real estate located in Monroe County, in the State of Indiana, to wit:

PARCEL 1:

Lots 1, 2, 3, 4, 5, 37, 38, 39, 40, 41, 42 and 43 in Ivy Chase Subdivision Phase 1, as per plat thereof recorded April 2, 2000, as Instrument Number 2000005465, in Plat Cabinet "D", Envelope 79, in the Office of the Recorder of Monroe County, Indiana.

Property Addresses:

Commonly known as: 636 E. Arlie Avenue, Bloomington, Indiana, as to Lot 1
Parcel No. 015-32771-01 / 53-08-16-400-002.001-009, as to Lot 1

Commonly known as: 608 E. Arlie Avenue, Bloomington, Indiana, as to Lot 2
Parcel No. 015-32771-02 / 53-08-16-400-002.002-009, as to Lot 2

Commonly known as: 680 E. Arlie Avenue, Bloomington, Indiana, as to Lot 3
Parcel No. 015-32771-03 / 53-08-16-400-002.003-009, as to Lot 3

Commonly known as: 702 E. Arlie Avenue, Bloomington, Indiana, as to Lot 4
Parcel No. 015-32771-04 / 53-08-16-400-002.004-009, as to Lot 4

Commonly known as: 726 E. Arlie Avenue, Bloomington, Indiana, as to Lot 5
Parcel No. 015-32771-05 / 53-08-16-400-002.005-009, as to Lot 5

Commonly known as: 703 E. Arlie Avenue, Bloomington, Indiana, as to Lot 37
Parcel No. 015-32771-37 / 53-08-16-400-002.037-009, as to Lot 37

Commonly known as: 3141 S. Marcell Avenue, Bloomington, Indiana, as to Lot 38
Parcel No. 015-32771-38 / 53-08-16-400-002.038-009, as to Lot 38

Commonly known as: 3121 S. Marcell Avenue, Bloomington, Indiana, as to Lot 39
Parcel No. 015-32771-39 / 53-08-16-400-002.039-009, as to Lot 39

Commonly known as: 3136 S. Marceil Avenue, Bloomington, Indiana, as to Lot 40
Parcel No. 015-32771-40 / 53-08-16-400-002.040-009, as to Lot 40

Commonly known as: 3144 S. Marceil Avenue, Bloomington, Indiana, as to Lot 41
Parcel No. 015-32771-41 / 53-08-16-400-002.041-009, as to Lot 41

Commonly known as: 3150 S. Marceil Avenue, Bloomington, Indiana, as to Lot 42
Parcel No. 015-32771-42 / 53-08-16-400-002.042-009, as to Lot 42

Commonly known as: 609 E. Arlie Avenue, Bloomington, Indiana, as to Lot 43
Parcel No. 015-32771-43 / 53-08-16-400-002.043-009, as to Lot 43

PARCEL 1 SUBJECT TO:

1. Rights of parties under unrecorded leases.

2. Taxes for the year 2020 due and payable in 2021 and all subsequent taxes and assessments.

3. Minerals or mineral rights or any other subsurface substances (including, without limitation, oil, gas and coal), and all rights incident thereto, now or previously leased, granted, excepted or reserved.

4. Survey recorded February 11, 1998, as Instrument Number 80291, at Book 4, page 441, in the Office of the Recorder of Monroe, County, Indiana, and all matters disclosed thereby.

5. Karst Conservancy Easement and Tree Preservation Easement disclosed on plat of Ivy Chase Subdivision Phase 1, recorded April 2, 2000, as Instrument Number 2000005465, in Plat Cabinet "D", Envelope 79, in the Office of the Recorder of Monroe County, Indiana.

6. Covenants, Conditions, Restrictions, Utility and Drainage easements and setback lines and any amendments thereto as disclosed on the recorded plat of Ivy Chase Subdivision Phase 1, recorded April 2, 2000, as Instrument Number 2000005465, in Plat Cabinet "D", Envelope 79, in the Office of the Recorder of Monroe County, Indiana. Any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, or national origin are hereby deleted to the extent such covenants, conditions or restrictions violate 42 USC3604(c).

PARCEL 2:

Part of the Northwest quarter of the Southeast quarter of Section 16, Township 8 North, Range 1 West, in Monroe County, Indiana, described as follows: Beginning at the Northwest corner of the Northwest quarter of said Southeast quarter; running thence South 10 rods; thence East 80 rods; thence North 10 rods; thence West 80 rods to the place of beginning, containing 5 acres, more or less.

EXCEPTING THEREFROM:

That portion of the above described property contained within Ivy Chase Subdivision Phase 1, as per plat thereof recorded April 2, 2000, as Instrument Number 2000005465, in Plat Cabinet "D", Envelope 79, in the Office of the Recorder of Monroe County, Indiana.

Commonly known as: 3095 S. Walnut Street Pike, Bloomington, Indiana
Parcel No. 015-33910-20 / 53-08-16-400-006.000-009

PARCEL 2 SUBJECT TO:

1. Rights of parties under unrecorded leases.

2. Taxes for the year 2020 due and payable in 2021 and all subsequent taxes and assessments.

3. Minerals or mineral rights or any other subsurface substances (including, without limitation, oil, gas and coal), and all rights incident thereto, now or previously leased, granted, excepted or reserved.

4. Survey recorded February 11, 1998, as Instrument Number 80291, at Book 4, page 441, in the Office of the Recorder of Monroe, County, Indiana, and all matters disclosed thereby.

PARCEL 3:

A part of the Northwest quarter of the Southeast Quarter of Section 16, Township 8 North, Range 1 West, Monroe County, Indiana, described as follows: Beginning at a point 10 rods due South of the Northwest corner of said Southeast quarter of said Section 16; thence running South 21 rods; thence East 46 rods; thence North 38 feet and 9 inches; thence East 34 rods; thence North 18 rods, 5 feet and 9 inches; thence West 80 rods to the place of beginning. Containing 10 acres, more or less.

ALSO:

A part of the Northwest quarter of the Southeast Quarter of Section 16, Township 8 North, Range 1 West, Monroe County, Indiana, described as follows: Beginning at a point 31 rods due South of the Northwest corner of said Southeast quarter of said Section 16; thence running South 8 rods; thence East 20 rods; thence North 8 rods; thence West 20 rods to the place of beginning. Containing 1 acre, more or less.

EXCEPTING THEREFROM:

That portion of the above described property contained within Ivy Chase Subdivision Phase 1, as per plat thereof recorded April 2, 2000, as Instrument Number 2000005465, in Plat Cabinet "D", Envelope 79, in the Office of the Recorder of Monroe County, Indiana.

Commonly known as: 3111 S. Walnut Street Pike, Bloomington, Indiana
Parcel No. 015-32770-20 / 53-08-16-400-002.000-009

PARCEL 3 SUBJECT TO:

1. Rights of parties under unrecorded leases.

2. Taxes for the year 2020 due and payable in 2021 and all subsequent taxes and assessments.

3. Minerals or mineral rights or any other subsurface substances (including, without limitation, oil, gas and coal), and all rights incident thereto, now or previously leased, granted, excepted or reserved.

4. Survey recorded February 11, 1998, as Instrument Number 80291, at Book 4, page 441, in the Office of the Recorder of Monroe, County, Indiana, and all matters disclosed thereby.

IN WITNESS WHEREOF, Grantor has executed this Warranty Deed as of the date set forth opposite the signature below.

Jeffrey S. Jones

Dated: March 2, 2021

STATE OF INDIANA)
) SS:
COUNTY OF MONROE)

Before the undersigned, a Notary Public in and for said County and State, this 22nd day of March, 2021, personally appeared Jeffrey S. Jones and acknowledged execution of the foregoing *Warranty Deed*.

Kristen R. Helton, Notary Public
Residing in Greene County, Indiana.

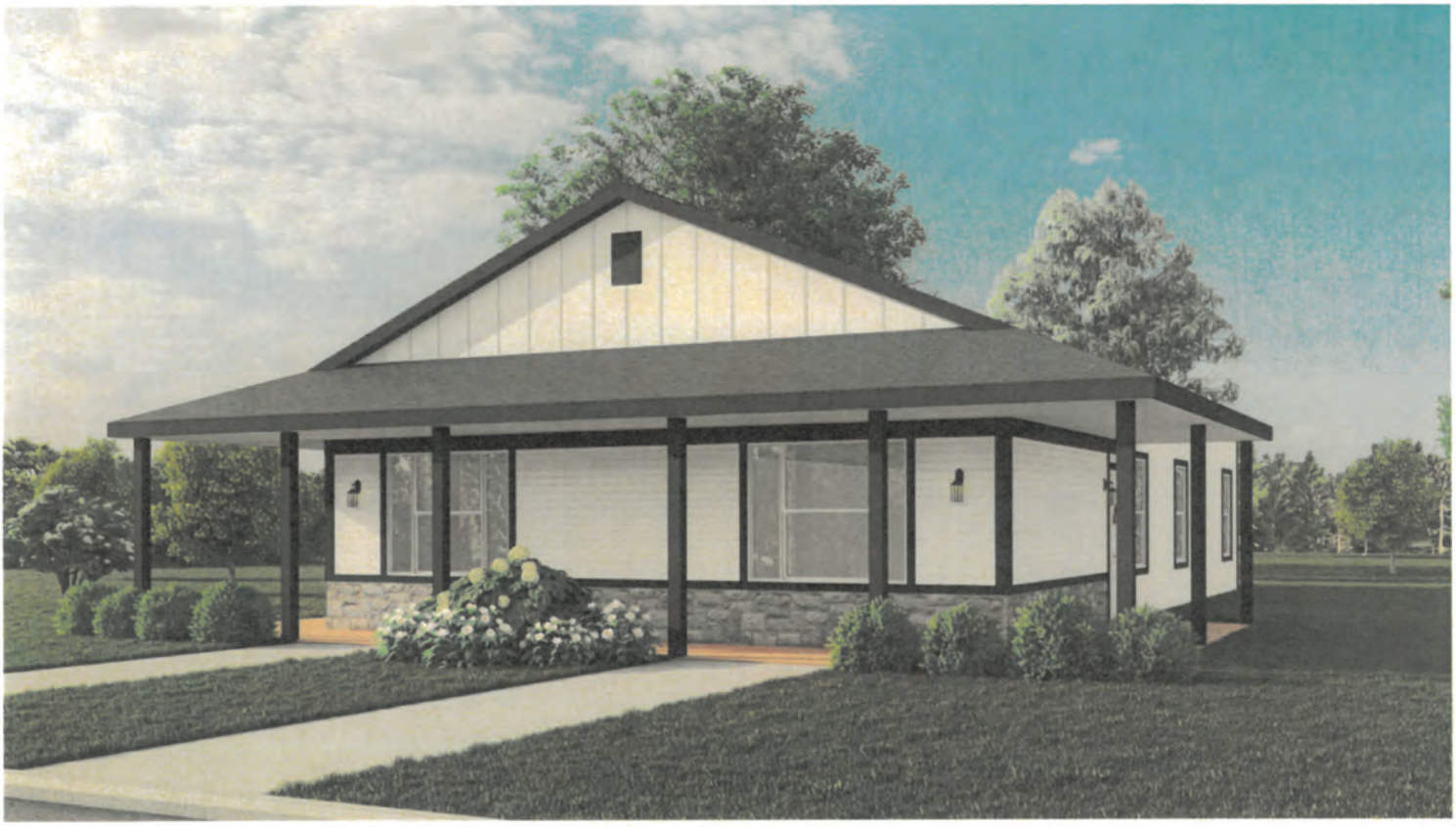
My Commission Expires: March 21, 2022

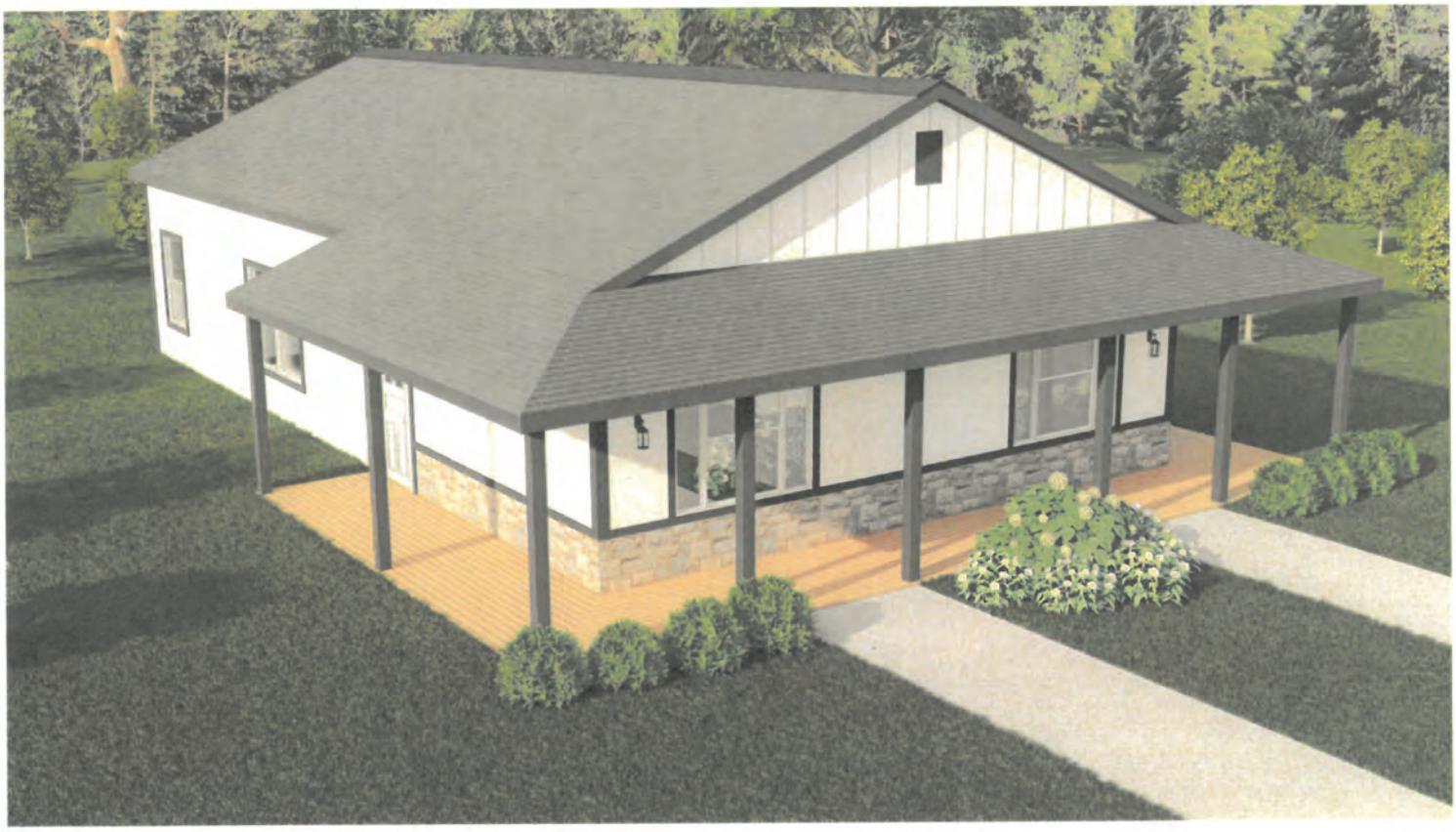
This instrument prepared by and after recording please return to Jason L. McAuley, Koch McAuley & Bailey P.C., 1720 N. Kinser Pike, Suite 110, P.O. Box 1030, Bloomington, Indiana 47402-1030; Tel. (812) 337-3120.

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law. Jason L. McAuley.

MAIL TAX STATEMENTS TO: Walnut Pike Development LLC, Attn: Ethan Fernhaber, 9511 Angola Ct., Ste. 213, Indianapolis, IN 46268

Grantee's Address: 9511 Angola Ct., Ste. 213, Indianapolis, IN 46268

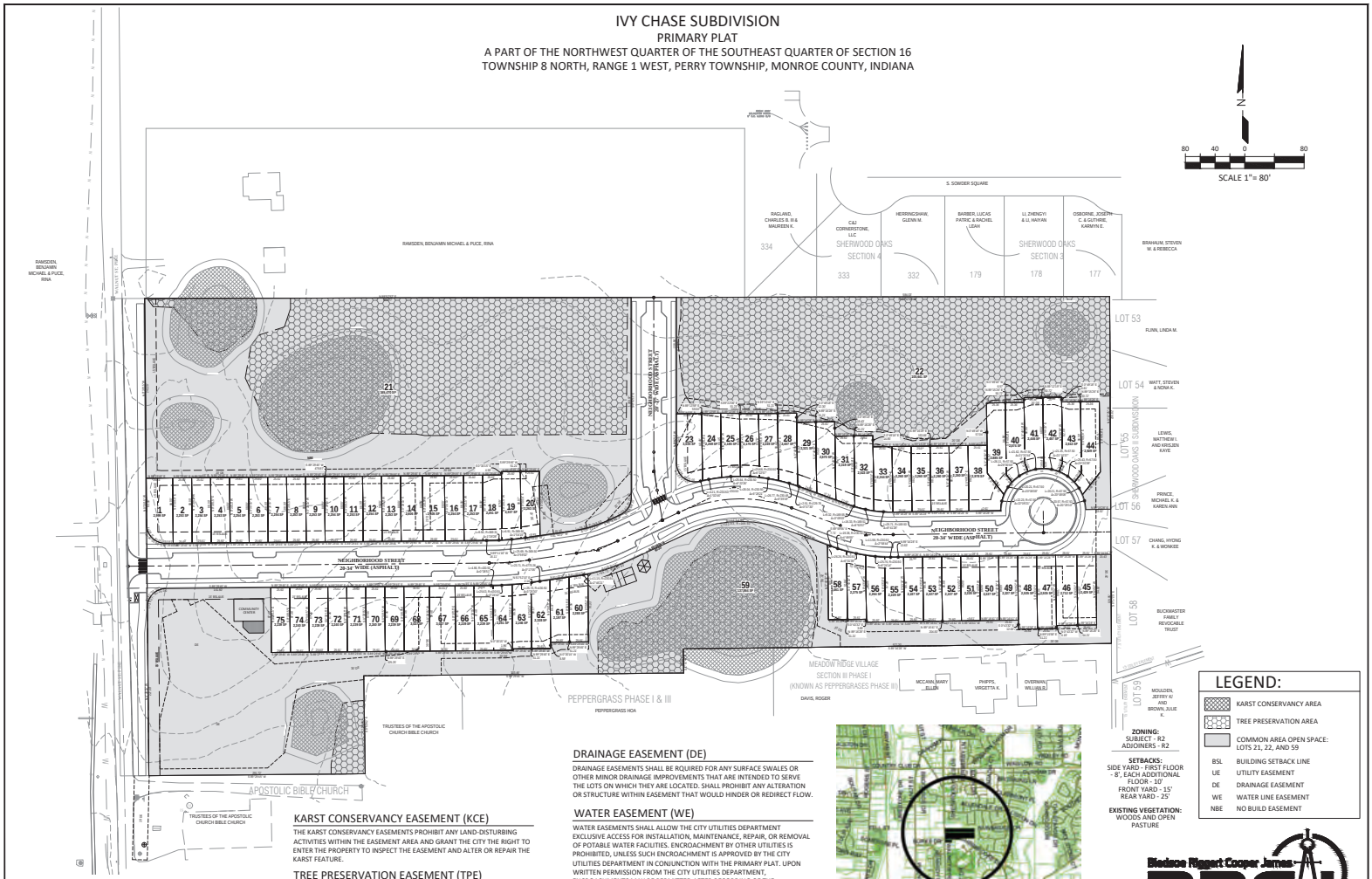




IVY CHASE SUBDIVISION

PRIMARY PLAT

A PART OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 16
TOWNSHIP 8 NORTH, RANGE 1 WEST, PERRY TOWNSHIP, MONROE COUNTY, INDIANA



LEGEND:

- KARST CONSERVANCY AREA
- TREE PRESERVATION AREA
- COMMON AREA OPEN SPACE: LOTS 21, 22, AND 59

BSL	BUILDING SETBACK LINE
UE	UTILITY EASEMENT
DE	DRAINAGE EASEMENT
WE	WATER LINE EASEMENT
NBE	NO BUILD EASEMENT

ZONING:
SUBJECT - R2
ADJOINERS - R2

SETBACKS:
SIDE YARD - FIRST FLOOR - 8', EACH ADDITIONAL FLOOR - 10'
FRONT YARD - 15'
REAR YARD - 25'

EXISTING VEGETATION:
WOODS AND OPEN PASTURE

KARST CONSERVANCY EASEMENT (KCE)

THE KARST CONSERVANCY EASEMENTS PROHIBIT ANY LAND-DISTURBING ACTIVITIES WITHIN THE EASEMENT AREA AND GRANT THE CITY THE RIGHT TO ENTER THE PROPERTY TO INSPECT THE EASEMENT AND ALTER OR REPAIR THE KARST FEATURE.

TREE PRESERVATION EASEMENT (TPE)

THE TREE PRESERVATION EASEMENTS PROHIBIT REMOVAL OF ANY TREE OVER 6-INCHES DIAMETER -AT-BREAST-HEIGHT (dbh) WITHIN THE EASEMENT AREA AND ALLOW THE REMOVAL OF DEAD AND DISEASED TREES THAT POSE A SAFETY RISK OR IMPEDE DRAINAGE, ONLY AFTER FIRST OBTAINING WRITTEN APPROVAL FROM THE CITY PLANNING DEPARTMENT.

COMMON AREA

HOME OWNERS ASSOCIATION SHALL BE RESPONSABLE FOR MAINTAINING THE COMMON AREA WHICH SERVES AS THE DETENTION BASIN FOR THE DEVELOPMENT.

DRAINAGE EASEMENT (DE)

DRAINAGE EASEMENTS SHALL BE REQUIRED FOR ANY SURFACE SWALES OR OTHER MINOR DRAINAGE IMPROVEMENTS THAT ARE INTENDED TO SERVE THE LOTS ON WHICH THEY ARE LOCATED. SHALL PROHIBIT ANY ALTERATION OR STRUCTURE WITHIN EASEMENT THAT WOULD HINDER OR REDIRECT FLOW.

WATER EASEMENT (WE)

WATER EASEMENTS SHALL ALLOW THE CITY UTILITIES DEPARTMENT EXCLUSIVE ACCESS FOR INSTALLATION, MAINTENANCE, REPAIR, OR REMOVAL OF POTABLE WATER FACILITIES. ENCROACHMENT BY OTHER UTILITIES IS PROHIBITED, UNLESS SUCH ENCROACHMENT IS APPROVED BY THE CITY UTILITIES DEPARTMENT IN CONJUNCTION WITH THE PRIMARY PLAT. UPON WRITTEN PERMISSION FROM THE CITY UTILITIES DEPARTMENT, ENCROACHMENTS MAY BE PERMITTED AFTER RECORDING OF THE SECONDARY PLAT.

UTILITY EASEMENT (UE)

UTILITY EASEMENTS SHALL ALLOW BOTH PRIVATE AND PUBLIC PROVIDERS TO ACCESS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, REPAIR, OR REMOVAL OF UTILITY FACILITIES. THE UTILITY EASEMENT PROHIBITS THE PLACEMENT OF ANY UNAUTHORIZED OBSTRUCTION WITHIN THE EASEMENT AREA UNLESS AUTHORIZED BY THE CITY UTILITIES DEPARTMENT AND THE EASEMENT HOLDER(S).

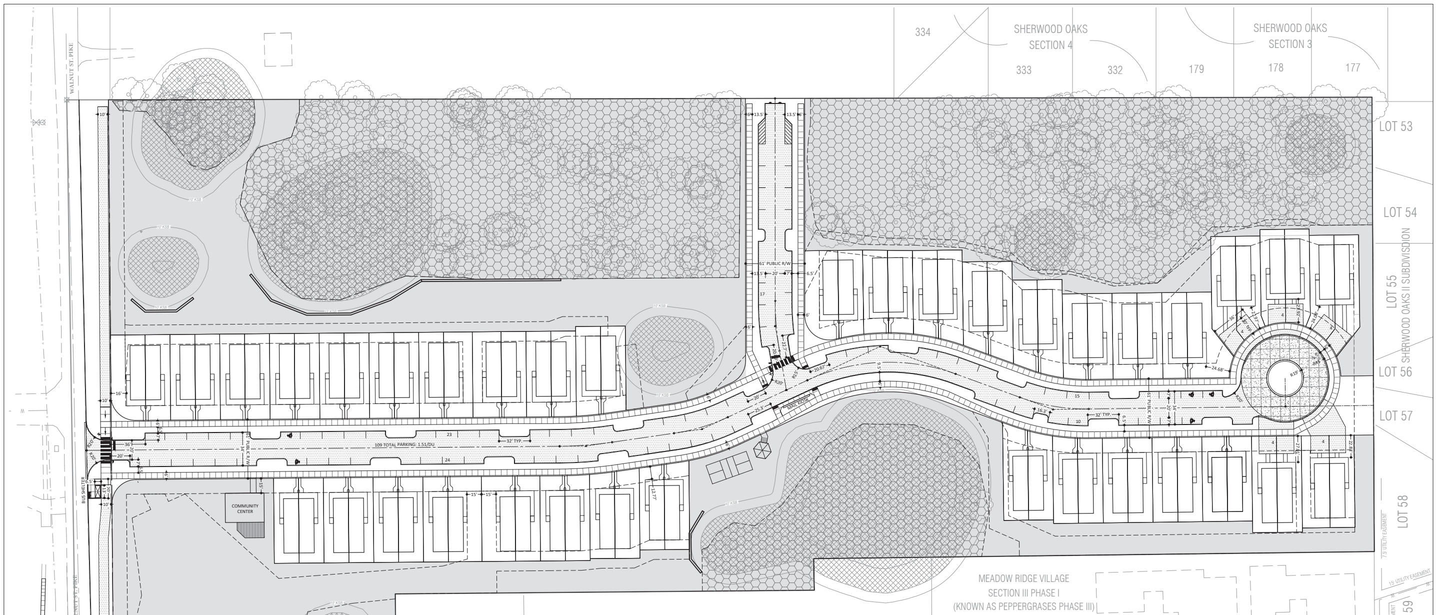
TYPICAL ROAD CROSS SECTION

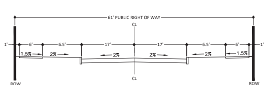
LOCATION MAP
NOT TO SCALE
N 39.1272
W 86.5258

Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road
Bloomington, Indiana 47403
Phone: 812-336-8277

DRAFT PRIMARY PLAT DATED: 2024-11-25 JOB # 10633

S:\Jobs\10600-10699\10633 BLOOMINGTON SUBDIVISION (3111 S. Walnut Street Pike)\DRAW\10633 Ivy Chase 2024 Updated Design\10633_BRCJ design base_2024-12-18_plat.dwg





TYPICAL ROAD CROSS SECTION

PLAN NOTES ①

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. [illegible]
14. [illegible]
15. [illegible]
16. [illegible]
17. [illegible]
18. [illegible]

GENERAL NOTES

A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENCY, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR FENCELINE, UNLESS OTHERWISE NOTED. CURB RETURN RADII ARE TO FACE OF CURB. COORDINATE DIMENSIONS WITH ARCHITECTURAL. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

C. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

D. SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

E. ALL STREET CUTS FOR UTILITIES AND OTHER IMPROVEMENTS SHALL BE REPAIRED TO MATCH EXISTING PAVEMENT SECTION OR BETTER.

LEGEND

- LIMITS OF KARST EASEMENT AREA
- LIMITS OF OPEN SPACE AREA
- LIMITS OF TREE PRESERVATION EASEMENT AREA
- LIMITS OF ASPHALT PAVEMENT
- LIMITS OF CONCRETE PAVEMENT
- LIMITS OF ASPHALT PAVEMENT PATCH
- 10'KSB — 10' KARST EASEMENT SETBACK
- NBE — NO BUILD EASEMENT

DEVELOPMENT SUMMARY

SITE AREA:	15.56 acres
OPEN SPACE AREA:	9.23 acres
OPEN SPACE PERCENT:	59.32%
TREE CANOPY AREA:	258,008 sq.ft.
TREE CANOPY PRESERVED:	224,528 sq.ft.
PRESERVED PERCENT:	87.02%

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1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

PRELIMINARY NOT FOR CONSTRUCTION

12-30-2024

IVY CHASE SUBDIVISION 2024
3111 South Walnut Street Pike
Bloomington, IN

BRCJ Project No: 10633

SITE IMPROVEMENT PLAN

NORTH
SCALE: 1" = 40'

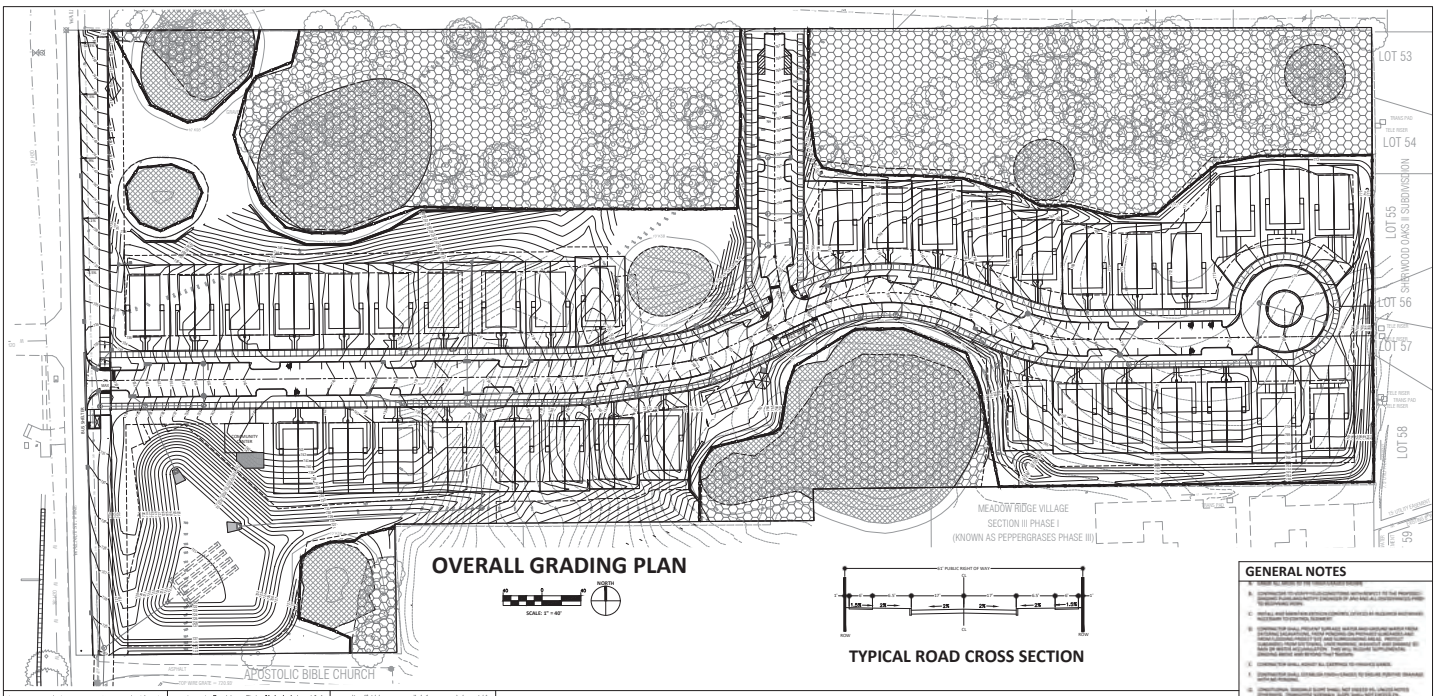
Date:	Issue:
01-06-2025	PLAN COMMISSION SUBMISSION

REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date

Drawn By: DLN
Designed By: DLN
Checked By: WSR

C401

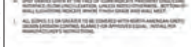


OVERALL GRADING PLAN

SCALE: 1" = 40'

TYPICAL ROAD CROSS SECTION

GENERAL NOTES



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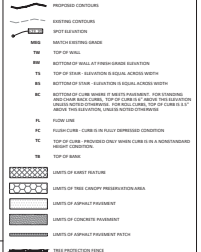
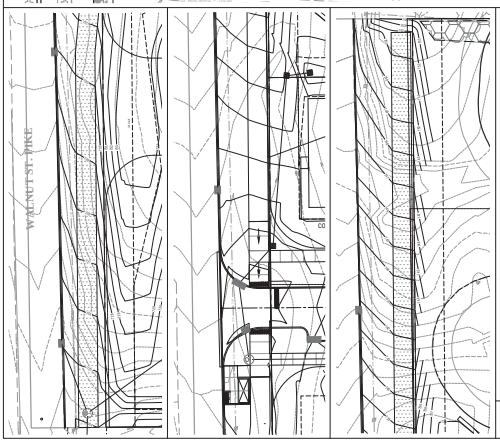
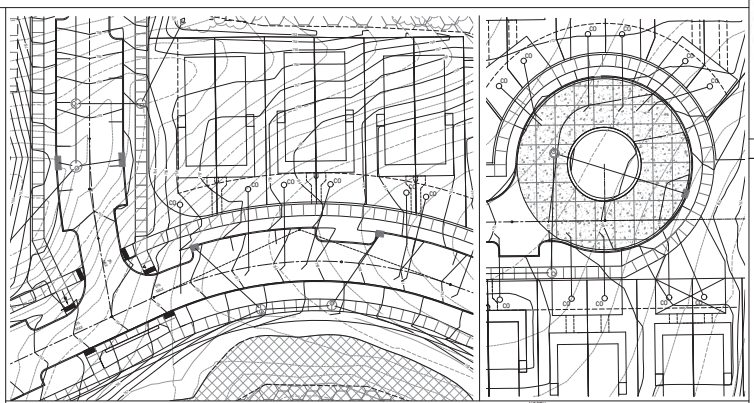






GRADING ENLARGEMENTS

SCALE: 1" = 20'

BRCJ
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-6277 www.brcjinc.com

PRELIMINARY NOT FOR CONSTRUCTION

12-30-2024

IVY CHASE SUBDIVISION 2024
3111 South Walnut Street Pike
Bloomington, IN

BRCJ Project No: 10633

SITE GRADING PLAN

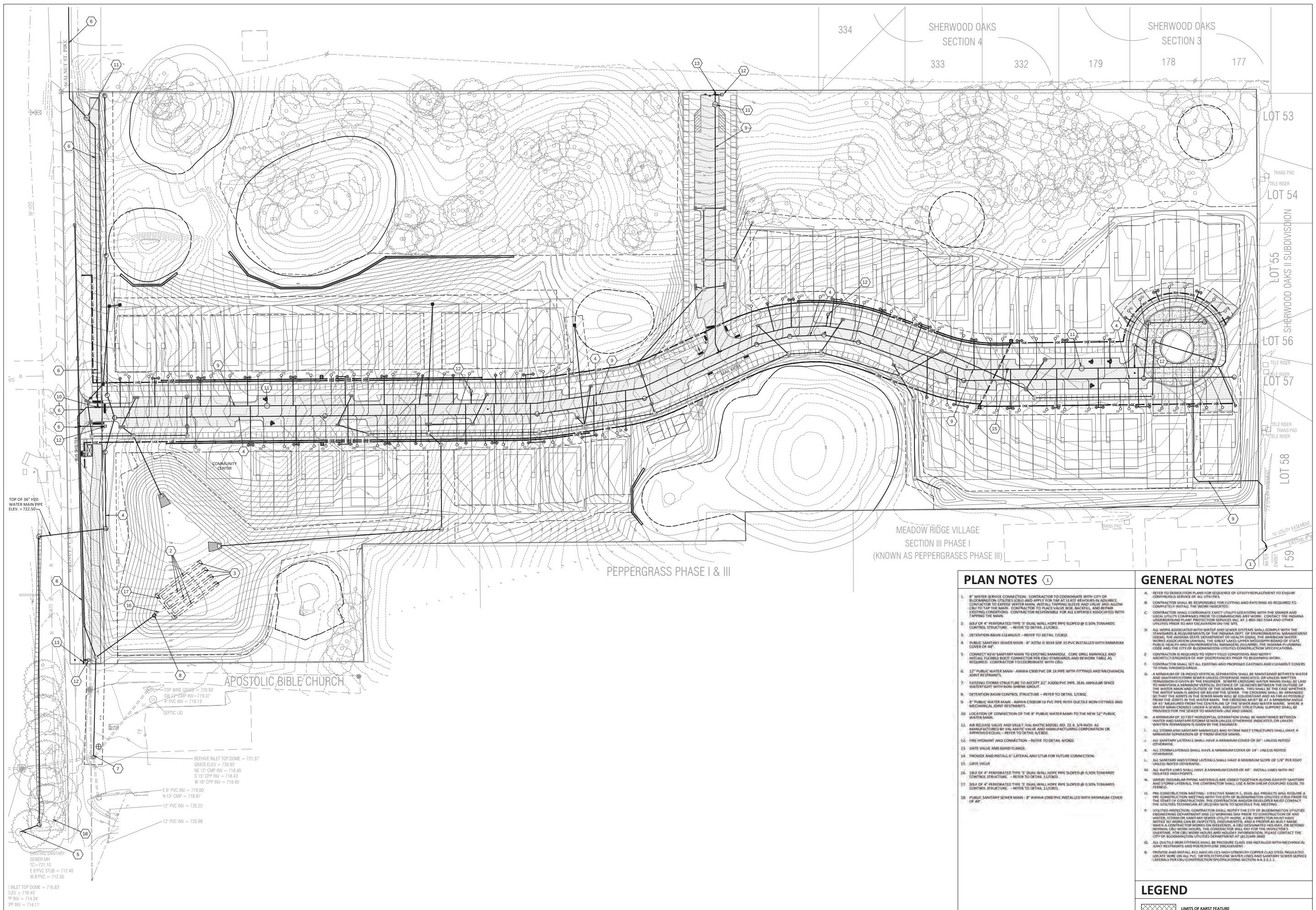
Date:	Issue:
01-06-2025	PLAN COMMISSION SUBMISSION

REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date

Drawn By: DLN
Designed By: DLN
Checked By: WSR

C501



PLAN NOTES (1)

1. 8" WATER SERVICE CONNECTION. CONTRACTOR TO COORDINATE WITH CITY OF BLOOMINGTON UTILITIES (CBU) AND APPLY FOR TAP AT LEAST 48 HOURS IN ADVANCE. CONTACTOR TO EXPOSE WATER MAIN, INSTALL TAPPING SLEEVE AND VALVE AND ALLOW CBU TO TAP THE MAIN. CONTRACTOR TO PLACE VALVE BOX, BACKFILL, AND REPAIR EXISTING CONDITIONS. CONTRACTOR RESPONSIBLE FOR ALL EXPENSES ASSOCIATED WITH TAPPING THE MAIN.
2. 60LF OF 4" PERFORATED TYPE 'S' DUAL WALL HDPE PIPE SLOPED @ 0.50% TOWARDS CONTROL STRUCTURE. – REFER TO DETAIL 11/C801.
3. DETENTION BASIN CLEANOUT – REFER TO DETAIL 7/C802.
4. PUBLIC SANITARY SEWER MAIN - 8" ASTM D 3034 SDR 35 PVC INSTALLED WITH MINIMUM COVER OF 48".
5. CONNECT NEW SANITARY MAIN TO EXISTING MANHOLE. CORE DRILL MANHOLE AND INSTALL FLEXIBLE BOOT CONNECTOR PER CBU STANDARDS AND REWORK TABLE AS REQUIRED. CONTRACTOR TO COORDINATE WITH CBU.
6. 12" PUBLIC WATER MAIN - AWWA C900 PVC DR 14 PIPE WITH FITTINGS AND MECHANICAL JOINT RESTRAINTS.
7. EXISTING STORM STRUCTURE TO ACCEPT 21" A2000 PVC PIPE. SEAL ANNULAR SPACE WATERTIGHT WITH NON-SHRINK GROUT.
8. DETENTION BASIN CONTROL STRUCTURE – REFER TO DETAIL 1/C802.
9. 8" PUBLIC WATER MAIN - AWWA C900 DR 14 PVC PIPE WITH DUCTILE IRON FITTINGS AND MECHANICAL JOINT RESTRAINTS.
10. LOCATION OF CONNECTION OF THE 8" PUBLIC WATER MAIN TO THE NEW 12" PUBLIC WATER MAIN.
11. AIR RELEASE VALVE AND VAULT: VAL-MATIC MODEL NO. 22.4, 3/4-INCH, AS MANUFACTURED BY VAL-MATIC VALVE AND MANUFACTURING CORPORATION OR APPROVED EQUAL – REFER TO DETAIL 6/C802.
12. FIRE HYDRANT AND CONNECTION – REFER TO DETAIL 4/C802.
13. GATE VALVE AND BLIND FLANGE.
14. PROVIDE AND INSTALL 6" LATERAL AND STUB FOR FUTURE CONNECTION.
15. GATE VALVE
16. 18LF OF 4" PERFORATED TYPE 'S' DUAL WALL HDPE PIPE SLOPED @ 0.50% TOWARDS CONTROL STRUCTURE. – REFER TO DETAIL 11/C801.
17. 30LF OF 4" PERFORATED TYPE 'S' DUAL WALL HDPE PIPE SLOPED @ 0.50% TOWARDS CONTROL STRUCTURE. – REFER TO DETAIL 11/C801.
18. PUBLIC SANITARY SEWER MAIN - 8" AWWA C900 PVC INSTALLED WITH MINIMUM COVER OF 48".

GENERAL NOTES

A. REFER TO DEMOLITION PLANS FOR SEQUENCE OF UTILITY REPLACEMENT TO ENSURE CONTINUOUS SERVICE OF ALL UTILITIES.
B. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS REQUIRED TO COMPLETELY INSTALL THE WORK INDICATED.
C. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICES INC. AT 1-800-382-5544 AND OTHER UTILITIES PRIOR TO ANY EXCAVATION ON THE SITE.
D. ALL WORK ASSOCIATED WITH WATER AND SEWER SYSTEMS SHALL COMPLY WITH THE STANDARDS & REQUIREMENTS OF THE INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (IDEM), THE INDIANA STATE DEPARTMENT OF HEALTH (ISDH), THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE GREAT LAKES-UPPER MISSISSIPPI BOARD OF STATE PUBLIC HEALTH AND ENVIRONMENTAL MANAGERS (GLUMRB), THE INDIANA PLUMBING CODE AND THE CITY OF BLOOMINGTON UTILITIES CONSTRUCTION SPECIFICATIONS.
E. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
F. CONTRACTOR SHALL SET ALL EXISTING AND PROPOSED CASTINGS AND CLEANOUT COVERS TO FINAL FINISHED GRADE.
G. A MINIMUM OF 18 INCHES VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER. SEWERS CROSSING WATER MAINS SHALL BE LAID TO MAINTAIN A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER MAIN. THIS SHALL BE THE CASE WHETHER THE WATER MAIN IS ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE JOINTS IN THE SEWER MAIN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE JOINTS IN THE WATER MAIN. THE CROSSING MUST BE AT A MINIMUM ANGLE OF 45° MEASURED FROM THE CENTERLINE OF THE SEWER AND WATER MAINS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
H. A MINIMUM OF 10 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.
I. ALL STORM AND SANITARY MANHOLES AND STORM INLET STRUCTURES SHALL HAVE A MINIMUM SEPARATION OF 8' FROM WATER MAINS.
J. ALL SANITARY LATERALS SHALL HAVE A MINIMUM COVER OF 30" - UNLESS NOTED OTHERWISE.
K. ALL STORM LATERALS SHALL HAVE A MINIMUM COVER OF 24" - UNLESS NOTED OTHERWISE.
L. ALL SANITARY AND STORM LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS NOTED OTHERWISE.
M. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48". INSTALL LINES WITH NO ISOLATED HIGH POINTS.
N. WHERE DISSIMILAR PIPING MATERIALS ARE JOINED TOGETHER ALONG GRAVITY SANITARY AND STORM LATERALS, THE CONTRACTOR SHALL USE A NON-SHEAR COUPLING EQUAL TO FERNCO.
O. PRE-CONSTRUCTION MEETING: EFFECTIVE MARCH 1, 2010, ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES (CBU) PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812)349-3676 TO SCHEDULE THE MEETING.
P. UTILITIES INSPECTION: CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND A PROPER AS BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES DEPARTMENT AT (812)349-3660
Q. ALL DUCTILE IRON FITTINGS SHALL BE PRESSURE CLASS 350 INSTALLED WITH MECHANICAL JOINT RESTRAINTS AND POLYETHYLENE ENCASEMENT.
R. PROVIDE AND INSTALL #12 AWG HS-CCS HIGH STRENGTH COPPER CLAD STEEL INSULATED LOCATE WIRE ON ALL PVC OR POLYETHYLENE WATER LINES AND SANITARY SEWER SERVICE LATERALS PER CBU CONSTRUCTION SPECIFICATIONS SECTION 4.4.3.2.1.1.

LEGEND

- LIMITS OF KARST FEATURE
- LIMITS OF TREE CANOPY PRESERVATION AREA
- LIMITS OF ASPHALT PAVEMENT
- LIMITS OF CONCRETE PAVEMENT
- LIMITS OF ASPHALT PAVEMENT PATCH
- PROPOSED WATER METERS
- PROPOSED SANITARY CLEANOUTS
- PROPOSED AIR RELEASE VALVE AND VAULT

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

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PRELIMINARY NOT FOR CONSTRUCTION

12-30-2024

IVY CHASE SUBDIVISION 2024
3111 South Walnut Street Pike
Bloomington, IN

BRCJ Project No: 10633

SITE UTILITIES PLAN

SCALE: 1" = 40'
NORTH

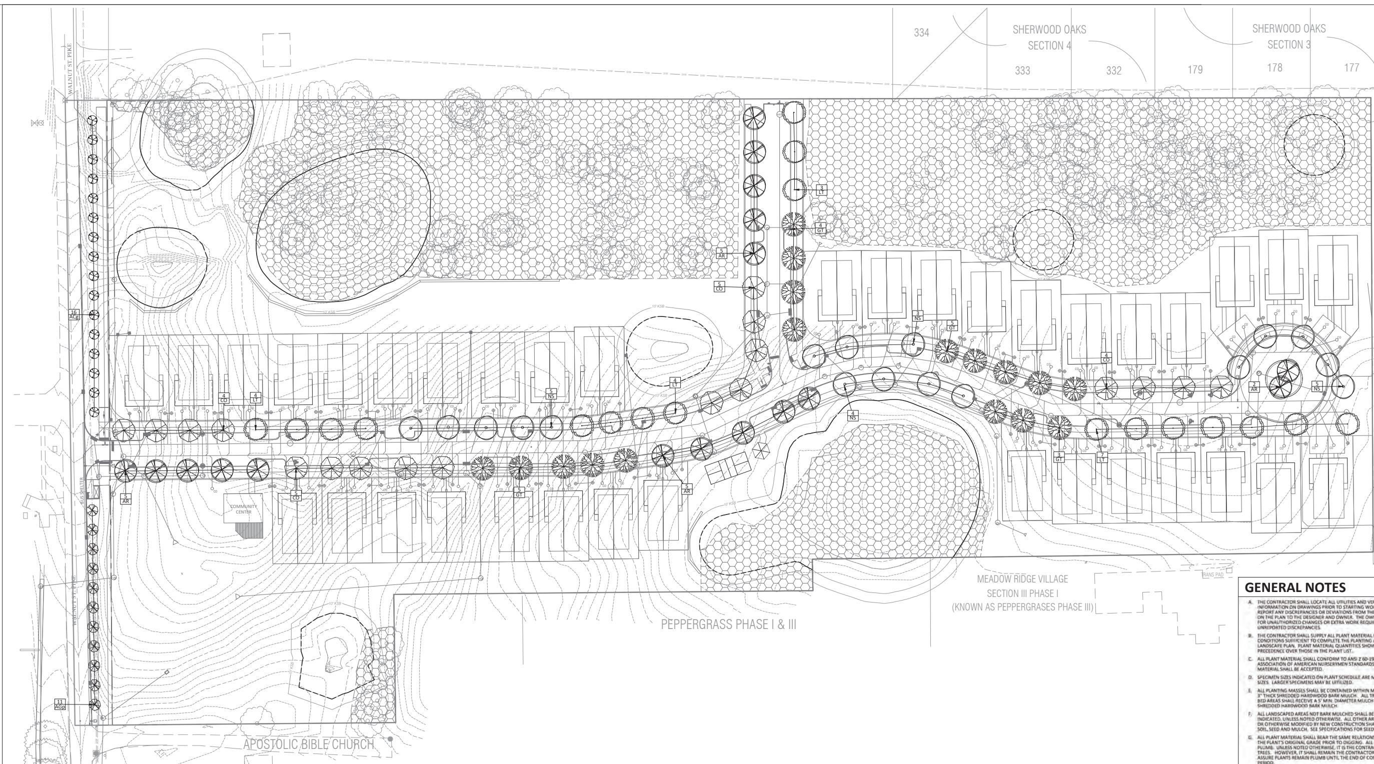
Date:	Issue:
01-06-2025	PLAN COMMISSION SUBMISSION

REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date

Drawn By: GBM
Designed By: GBM
Checked By: WSR

C601



GENERAL NOTES

A. THE CONTRACTOR SHALL LOCATE ALL UTILITIES AND VERIFY SITE CONDITION INFORMATION ON DRAWINGS PRIOR TO STARTING WORK AND PROMPTLY REPORT ANY DISCREPANCIES OR DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLAN TO THE DESIGNER AND OWNER. THE OWNER IS NOT RESPONSIBLE FOR UNAUTHORIZED CHANGES OR EXTRA WORK REQUIRED TO CORRECT UNREPORTED DISCREPANCIES.

B. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES AND CONDITIONS SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN ON THE LANDSCAPE PLAN. PLANT MATERIAL QUANTITIES SHOWN ON PLAN TAKE PRECEDENCE OVER THOSE IN THE PLANT LIST.

C. ALL PLANT MATERIAL SHALL CONFORM TO ANSI Z 60-1996 AND CURRENT ASSOCIATION OF AMERICAN NURSERYMEN STANDARDS. NO PARK GRADE MATERIAL SHALL BE ACCEPTED.

D. SPECIMEN SIZES INDICATED ON PLANT SCHEDULE ARE MINIMUM ACCEPTABLE SIZES. LARGER SPECIMENS MAY BE UTILIZED.

E. ALL PLANTING MASSES SHALL BE CONTAINED WITHIN MULCH BEDS AND RECEIVE 3" THICK SHREDDED HARDWOOD BARK MULCH. ALL TREES OUTSIDE PLANTING BED AREAS SHALL RECEIVE A 5' MIN. DIAMETER MULCH RING AT BASE, WITH 3" OF SHREDDED HARDWOOD BARK MULCH.

F. ALL LANDSCAPED AREAS NOT BARK MULCHED SHALL BE SEEDED OR SODDED AS INDICATED, UNLESS NOTED OTHERWISE. ALL OTHER AREAS DISTURBED, GRADED OR OTHERWISE MODIFIED BY NEW CONSTRUCTION SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH. SEE SPECIFICATIONS FOR SEEDING REQUIREMENTS.

G. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THE PLANT'S ORIGINAL GRADE PRIOR TO DIGGING. ALL PLANTS SHALL BE SET PLUMB. UNLESS NOTED OTHERWISE, IT IS THE CONTRACTOR'S OPTION TO STAKE TREES. HOWEVER, IT SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY TO ASSURE PLANTS REMAIN PLUMB UNTIL THE END OF CONTRACTED GUARANTEE PERIOD.

H. ALL PLANTINGS SHALL BE WATERED DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. WATER THOROUGHLY TO ENSURE ALL AIR POCKETS ARE REMOVED AROUND ROOT BALL.

I. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING PLANT MATERIAL UNTIL TIME OF ACCEPTED ESTABLISHMENT.

J. ALL PLANTING BED AND TREE MULCH RING EDGES TO BE SPADE CUT UNLESS SPECIFIED WITH MOW STRIP OR OTHER INSTALLED EDGING.

K. PLACE BIODEGRADABLE STRAW BLANKET NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL ON SLOPES OF OR EXCEEDING 3:1 OR AS OTHERWISE INDICATED OR DIRECTED BY ENGINEER.

L. COORDINATE LANDSCAPE PLAN WITH ALL WATER QUALITY AND EROSION CONTROL MEASURES.

M. IF OWNER REQUESTS, PLANTS SHALL BE STAKED AND/OR FIELD-LOCATED BY DESIGNER AND CONTRACTOR. FINAL LOCATIONS OF TREES SHOULD BE ADJUSTED IF NEEDED TO AVOID OVERHEAD AND UNDERGROUND UTILITIES.

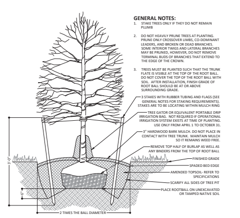
N. ANY PLANT MATERIAL SUBSTITUTIONS INSTALLED WITHOUT APPROVAL FROM DESIGNER AND/OR OWNER SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

O. ALL PLANTING MATERIALS COMPLY WITH CITY OF BLOOMINGTON UDO LANDSCAPING STANDARDS.

P. NO HEAVY MACHINERY/EQUIPMENT SHALL BE USED WITHIN ROOT ZONES OF EXISTING TREES THAT ARE TO REMAIN, EXCEPT WERE DISTURBANCE IS INDICATED. CONTRACTOR SHALL ENSURE EXISTING TREES TO REMAIN ARE PROTECTED AND FULLY PRESERVED DURING THE CONSTRUCTION/GRADING PROCESS.

LEGEND

1
AA



GENERAL NOTES:

1. STAKE TREES ONLY IF THEY DO NOT REMAIN PLUMB
2. DO NOT HEAVILY PRUNE TREES AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER, DO NOT REMOVE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
3. TREES MUST BE PLANTED SUCH THAT THE TRUNK FLATE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL. AFTER INSTALLATION, FINISH GRADE OF ROOT BALL SHOULD BE AT OR ABOVE SURROUNDING GRADE.

1 **TREE PLANTING DETAIL**

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

PLANTING SCHEDULE

KEY	QUA.	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION
OVERSTORY TREES					
CO	18	Celtis occidentalis	Hackberry	2" Caliper Minimum	B & B
GT	17	Gleditzia triacanthos f. inermis	Imperial Honey Locust	2" Caliper Minimum	B & B
AR	17	Acer rubrum 'red sunset'	Red Sunset Red Maple	2" Caliper Minimum	B & B
LT	18	Liriodendron tulipifera 'JFS-Oz'	Emerald City Tulip Tree	2" Caliper Minimum	B & B
NS	17	Nyssa sylvatica	Black Gum	2" Caliper Minimum	B & B
UNDERSTORY TREES					
ACg	16	Amelanchier Canadensis 'Glenn Form'	Rainbow Pillar Serviceberry	6' High multi-stem	B & B
AGp	11	Amelanchier X grandiflora 'Princess Diana'	Princess Diana Apple Serviceberry	6' High multi-stem	B & B

Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYORS • CIVIL ENGINEERS • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

PRELIMINARY NOT FOR CONSTRUCTION

12-30-2024

IVY CHASE SUBDIVISION 2024
3111 South Walnut Street Pike
Bloomington, IN

BRCJ Project No: 10633

SITE LANDSCAPE PLAN

40 0 40
SCALE: 1" = 40'
NORTH

Date:	Issue:
01-06-2025	PLAN COMMISSION SUBMISSION

REVISION SCHEDULE

Rev. #	Rev. Description:	Issue Date

Drawn By: DLN
Designed By: DLN
Checked By: WSR

C701

BLOOMINGTON PLAN COMMISSION **CASE #: SP-47-24**
STAFF REPORT **DATE: January 13, 2025**

Location: 301 & 327 S College Ave and 300, 302, & 314 S Walnut St

PETITIONER: Monroe County Capital Improvement Board
c/o Jim Witlatch 211 S College Avenue Bloomington, IN

CONSULTANTS: William S. Riggert, BRCJ
1351 W Tapp Road Bloomington, IN

REQUEST: The petitioner is requesting major site plan approval for a convention center in the downtown core overlay in the mixed-use downtown (MD-DC) zoning district.

BACKGROUND:

Area:	~1.7 acres
Zoning:	Mixed-Use Downtown Downtown Core Overlay (MD-DC)
Comp Plan Designation:	Downtown
Existing Land Use:	Office / Surface Parking Lot
Proposed Land Use:	Conference or Convention Center
Surrounding Uses:	North – Office
	West – Conference or Convention Center
	East – Transportation Terminal
	South – Office

REPORT: The petition site is located at 301 & 327 S College Ave and 300, 302, & 314 S Walnut St and is zoned Mixed-Use Downtown in the Downtown Core Overlay (MD-DC). The property has frontage on W. 3rd Street to the north, S. College Avenue to the west, and S. Walnut Street to the east and is roughly 1.7 acres. The site currently contains a number of surface parking lots and an office building that is utilized as election central during voting seasons. There are a number of vacated alleys on the petition site. There are no known sensitive or regulated environmental features within the petition site.

The petitioner is requesting major site plan approval to allow the construction of one 55,000 square foot building to be used as a 'conference or convention center.' The building is proposed to contain a roughly 30,000 square foot two story 'great hall' as the majority of the structure. The first floor is proposed to surround the great hall with an open meeting area on the north and west sides on the building, while the second floor is proposed to be comprised of three additional auxiliary meeting rooms on the west side of the building. The back of the house kitchen and support staff areas are located on the south side of the building. The new building will be attached to the existing convention center by a skywalk over S. College Avenue.

MAJOR SITE PLAN REVIEW 20.06.050(a)(2)(C)(ii): Major site plan approval is required for developments that contain more than 20,000 square feet of new non-residential gross floor area. This proposal contains 55,000 square feet of new non-residential gross floor area.

DEVELOPMENT STANDARDS & INCENTIVES 20.04: The following UDO standards are

required to be reviewed for all activities that require New Development approval.

Downtown Character Overlay Design:

Required Building Entrance: One entrance is required along each façade facing a public street. The proposed design incorporates corner entrances, one to serve both 3rd Street and S. College Avenue and one to serve 3rd Street and S. Walnut Street. The entrances must contain a landscaped plaza with at least 3 amenities, for example benches, bike racks, planters, or public art. The primary pedestrian entrances are required to be recessed 4 feet and have required design elements including address and lighting. The petitioner needs to demonstrate compliance with these requirements.

Roof Design: The site utilizes a flat roof with parapet, which is permitted. The parapet is recessed behind a

Windows and Doors: The MD-DC district requires facades along the ground floor to utilize a minimum of 60% window and door space. The petitioner meets this percentage. Windows on floors 2 and above must be between 20% and 70% coverage and must have a ratio for height at 1.5 times the width. The windows must have sills and lintels. The petition site is designed with curtain walls that extend to cover both the first and second floors. The petitioner is requesting a variance from the 2n story window design requirement.

Belt Courses: The MD-DC requires belt coursing, as well as vertical banding, on all four sides of the building. More detailing of how the banding requirements is met needs to be submitted.

Articulation: The MD-DC allows for modules of 20-65 feet wide. The building is designed without modules as described in the Unified Development Ordinance (UDO). The petitioner is requesting a variance from this requirement.

Material: In the MD-DC, all exterior finish materials shall have a non-reflective, low reflectance, or matte finish. The exterior of the building is predominantly windows, which is not included in the analysis of primary or secondary exterior materials. Exterior materials are largely brick and stone. The petition meets this requirement.

MD-DC Dimensional Standards:

Building Setbacks: The front build-to range is 0 to 5 feet, with 70% of the façade required in this range. In the MD-DC character area, the first 2 stories shall comply with the build-to range. There are not side are rear yard setbacks required. The petition meets setback requirements on W. 3rd Street and S. College Avenue. The petitioner has requested a variance from the 70% standard for the S. Walnut Street frontage.

Front Parking Setback (minimum): There is no surface or interior parking proposed. The petition meets this requirement.

Side/Rear Parking Setback (minimum): There is no surface or interior parking proposed. The petition meets this requirement.

Impervious Surface Coverage: 100%. The petition meets this requirement.

Primary Structure Height: The maximum height allowed in the MD-DC is 4 stories or 50 feet. The minimum height allowed in the MD-DC is 35 feet. The petition meets the stories and height requirements.

First Floor Height: The minimum ceiling height of the ground floor is required to be at least 12 feet because the proposed use is non-residential. The petition meets this requirement.

Environment: There are no known sensitive or regulated environmental features within the site.

Access and Connectivity:

Driveways and access: Vehicular access is proposed from S. College Avenue on the southwest corner of the site to a loading area adjacent to the kitchen area in the south end of the building. The loading area will need to accommodate large trucks, and has been designed to do so. A variance is requested for the width of the driveway at this location, as well as from the required separation of the proposed driveway from the existing driveway to the south.

Pedestrian and Bicycle Circulation: Required pedestrian facilities shall be as indicated in the Transportation Plan unless it is determined by the Planning and Transportation Director that such facility should be altered to match adjacent facilities. Minimum width requirements for pedestrian facilities and tree plots shall be as indicated in the Transportation Plan. The external sidewalk on each of the three frontages shall be located at least one foot inside the right-of-way or be included in a pedestrian easement if located on the petition site. Sidewalks shall have a minimum separation of five feet from the curb. All three roadways are classified as Primary Arterials. The Street Typology for W. 3rd Street at this location is General Urban. The Street Typology for S. College Avenue and S. Walnut Street are Main Street. Minimum street typology design requirements are found in Table 5 of the Transportation Plan. The General Urban typology calls for a 10 foot pedestrian zone (sidewalk) with an 8 foot greenspace (location for trees, meters, bike racks). The Main Street typology requires a minimum of a 7 foot pedestrian zone and a 5 foot greenspace. The proposal meets the pedestrian and greenspace requirements for S. College Avenue and S. Walnut Avenue. The petitioner is requesting a variance from the requirement to meet the Transportation Plan guidance for greenspace along W. 3rd Street. The Engineering Department is working with the petitioner on the height of the skywalk. Both the Planning & Transportation and the Engineering Department are working with the petitioner on their desire for a bus pull-off on W. 3rd Street.

Public Transportation: No new transportation stops are proposed. However the petitioner is working with Bloomington Transit (BT) on possible facilities. The BT Transit Center is on the east side of S. Walnut Street, across from the petition site.

Vehicular Parking and Loading: There are no minimum parking requirements for this use, and because the project is in the MD-DC district, but south of 4th Street, even if there were, they would not apply. No parking is required or proposed. There will be a loading berth on the southwest corner of the building, and it shall be screened from view from S. College Avenue by a 6 foot wall constructed of similar building materials as the building.

Bicycle Parking: A minimum of 11 bicycle parking spaces are required for this development. All 11 spaces are required to be Class II covered bicycle parking. Existing public bicycle parking spaces can count for up to 6 spaces. All spaces counting toward the 11 required spaces must be within 50 feet of a primary building entrance. A condition of approval has been added.

Outdoor Lighting: Any proposed pedestrian lighting plan shall be consistent with the City of Bloomington Downtown Vision and Infill Strategy Plan and approved by the Board of Public Works. Such lighting can utilize traditional or contemporary design, and must not exceed 15 feet in height. A lighting and photometric plan will be submitted at the Site Development Permit stage. No deviations from the lighting code are expected. A condition of approval has been added.

Solar Ready Building Design: The petitioner must demonstrate compliance with this

requirement, which includes either including the infrastructure for solar to be easily added to the building or demonstrating an approved solar assessment.

Landscape, Buffering, and Fences: The site is allowed to be, and will be covered by improvements, with no substantial landscaping to occur on-site. The petitioner is planning an exterior roof garden on the roof of the first floor at the northwest corner of the building that will be accessible to building users.

Street Trees: The petition site has 3 public frontages that require street tree installation. One large canopy tree is required for every 30 feet of frontage. If a large canopy tree does not fit because of separation requirements from existing and proposed utilities, medium or small trees can be used at a rate of 2 per 30 feet of frontage. The S. College Avenue frontage requires 12 large canopy street trees. The W. 3rd Street frontage requires 10 large canopy street trees. The S. Walnut Street frontage requires 9 large canopy street trees. The petitioner desires a bus pull-off along 3rd Street which may affect the interface between the required pedestrian facilities and required greenspace for street trees. Each street tree may be planted in a minimum 5 foot by 5 foot tree pit with a grate. The petitioner is requesting a variance from street tree total requirements.

Screening: All roof-mounted equipment shall be screened by a parapet wall or similar feature that is integral to the architectural design of the building. It is currently unclear if this requirement is being met. All ground-mounted mechanical equipment shall also be screened.

SITE PLAN REVIEW: The Plan Commission shall review the major site plan petition and approve, approve with conditions, or deny the petition in accordance with Section 20.06.040(g) (Review and Decision), based on the general approval criteria in Section 20.06.040(d)(6)(B) (General Compliance Criteria).

20.06.040(d)(6)(B) General Compliance Criteria

i. Compliance with this UDO
ii. Compliance with Other Applicable Regulations
iii. Compliance with Utility, Service, and Improvement Standards
iv. Compliance with Prior Approvals

PROPOSED FINDING:

CONCLUSION: The proposed site plan meets many of the design requirements of the Unified Development Ordinance, and will be appearing at the Board of Zoning Appeals on January 23, 2025 to address a number of items. The Department will continue to work with the petitioner on the project's design before the February 10, 2025 Plan Commission hearing.

RECOMMENDATION: The Planning and Transportation Department recommends that the Plan Commission forward this petition to the February 10, 2025 Plan Commission hearing.

City of Bloomington

Planning and Transportation Department

Map Legend

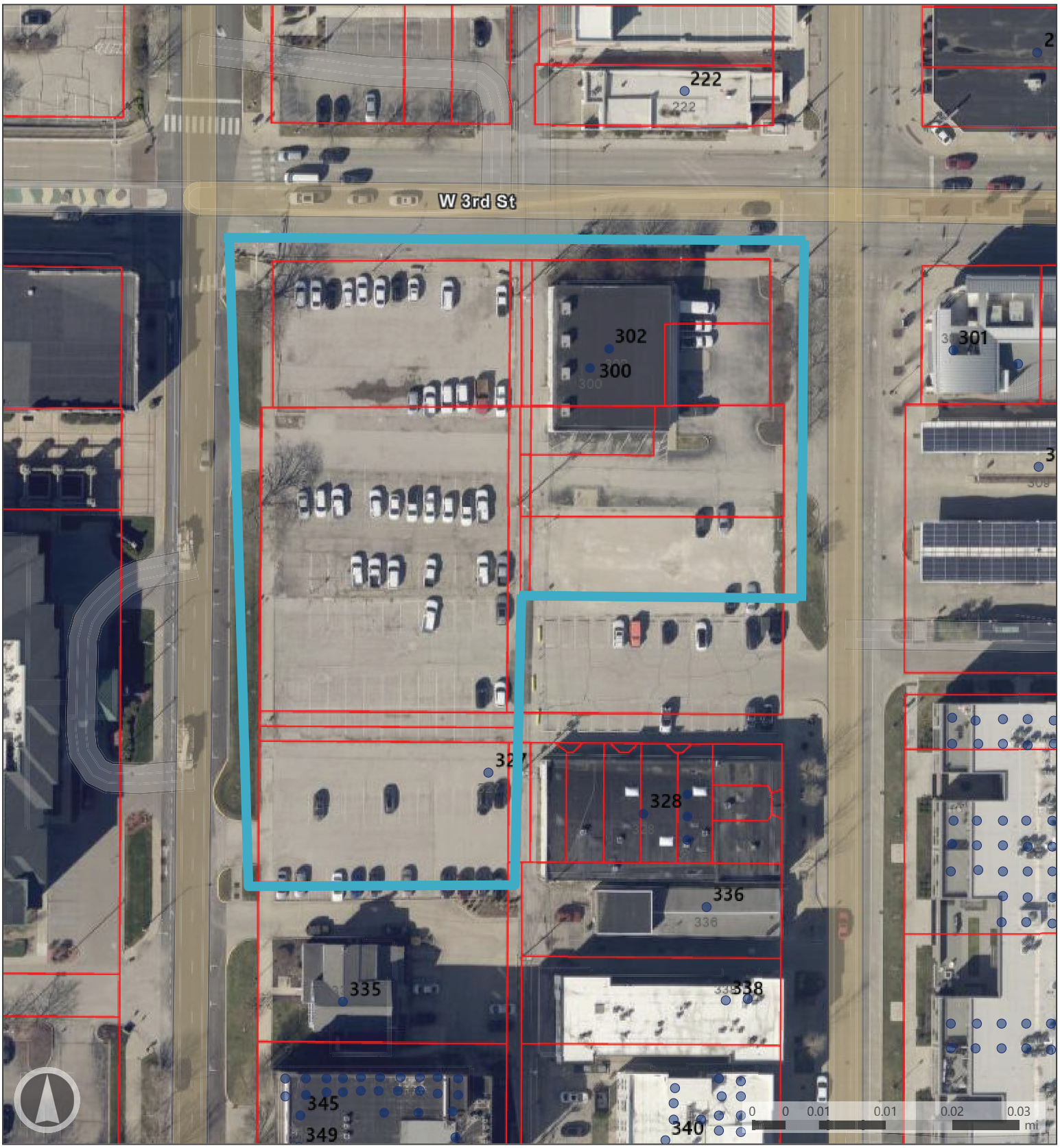
- Parcels
- Bloomington Municipal Boundary

Created: 11/22/2024 *Map By:*

For use as map information only, information is NOT warranted.

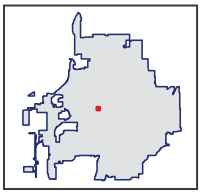
City of Bloomington

Planning and Transportation Department



Map Legend

- Addresses
- Parcels
- Bloomington Municipal Boundary



Created: 11/22/2024 *Map By:*

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Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS

December 9, 2024

Jacqueline Scanlan, AICP
Development Service Manager
City of Bloomington Planning and Transportation Department
401 N. Morton St., Suite 130
Bloomington, IN 47404

Re: Monroe Convention Center Expansion
301 S. College Avenue
Petitioner's Statement

Dear Jackie,

On behalf of the Monroe County Capital Improvement Board, we respectfully request Major Site Plan Approval for the Monroe Convention Center expansion.

The Monroe Convention Center expansion is planned to take place across College Avenue from the existing Monroe Convention Center on the property currently owned by the Monroe County Capital Improvement Board. This site has an area of approximately 1.7 acres and it is zoned Mixed-Use Downtown, Downtown Core.

The expansion and renovation of the Monroe Convention Center will more than double the size of the existing building by expanding to a site across College Avenue from the current building. The existing and new structures will be connected by an elevated pedestrian bridge spanning College Avenue. The expansion will be a two-story tall structure that fills most of the new site, creating a new urban street wall along College, Third, and Walnut Streets in keeping with the intent of the City of Bloomington's Downtown Core development guidelines. These three streets will be lined with a public prefunction area with significant expanses of storefront and curtainwall glazing facing the street, to provide transparency for the project both for visitors looking out and passers-by looking in. The solid elements on these facades will be comprised of a mixture of limestone and brick masonry.

The primary space will be a large, flexible ballroom/exhibit space of approximately 30,000 square feet. The exhibit/ballroom will have a clear height of at least 30 feet or more to structure and a top of wall height of approximately 46 feet.

An exterior roof garden on the Northwest corner will provide an outdoor space, that guests can use as a place to unwind. This space will offer scenic views of downtown Bloomington, a connection with nature, and highlight Bloomington's commitment to sustainability.

An elevated walkway will connect the new and existing buildings. This walkway will be designed to maximize transparency and minimize its profile over the street. The walkway will be a steel structure with continuous glazing on both sides affording views of the downtown.

Other spaces in the expansion include back of house spaces like a commercial kitchen, loading dock, storage and service spaces.

Stormwater management is planned to satisfy the City of Bloomington Utilities Department's standards. A vegetated green roof and tree planting cells are proposed to satisfy the green infrastructure requirement for stormwater treatment. Underground detention is proposed to address stormwater quantity.

Thank you for your assistance on this project. Please place us on the January 13 and February 10, 2025 Plan Commission agendas.

Sincerely,

William S. Riggert, PE
Principal

ROOF PLAN NOTES

REFER TO A-001 FOR GENERAL NOTES. NOT ALL NOTES APPLY TO EVERY SHEET.

#	NOTE

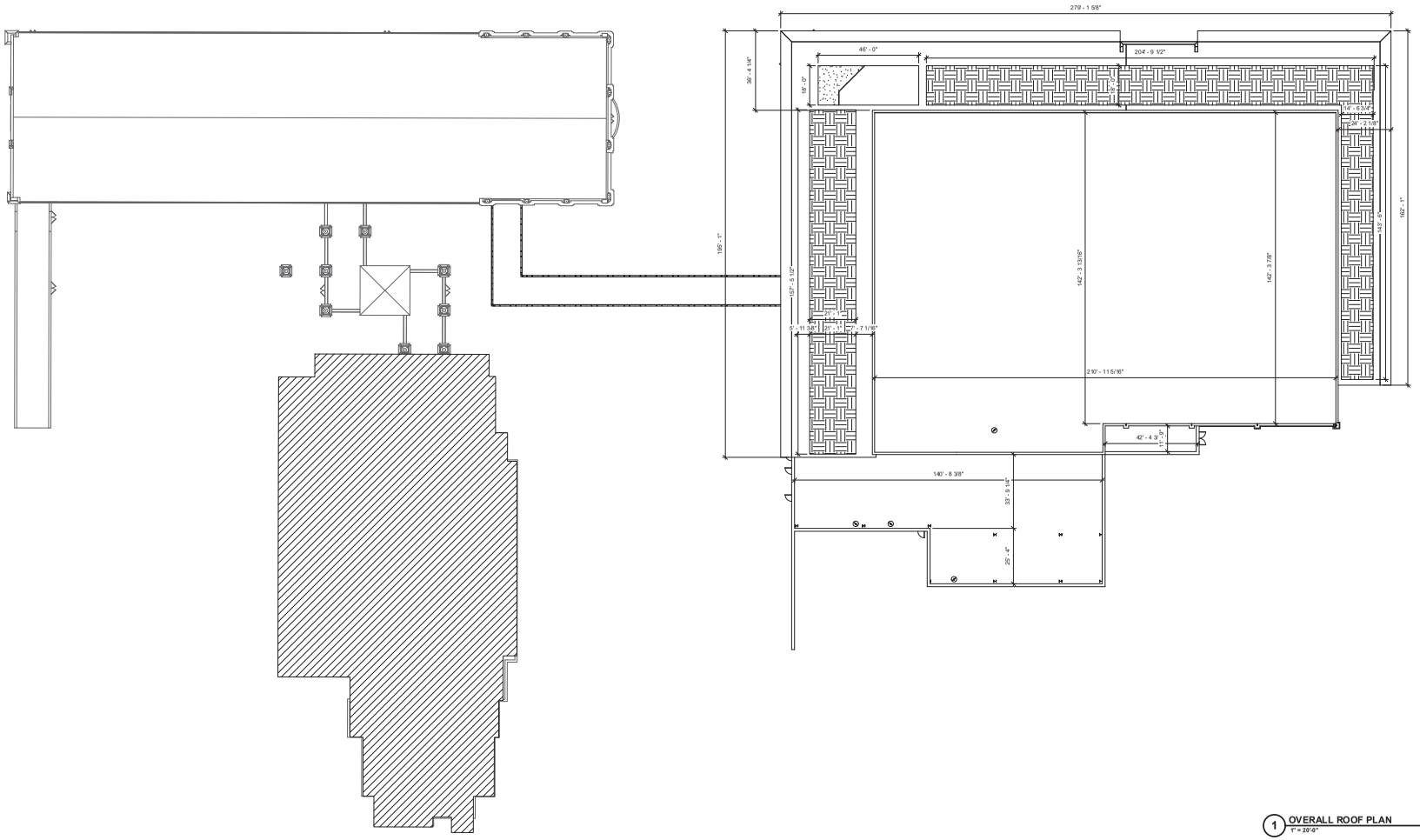
GENERAL ROOF PLAN NOTES

A. WHERE UTILIZED, TAPERED INSULATION SHALL BE INSTALLED TO ACHIEVE POSITIVE DRAINAGE WITH A MINIMUM RESULTANT SLOPE OF 1/4" PER FOOT, UNLESS NOTED OTHERWISE.

B. LOW SLOPE ROOF AREAS SHALL HAVE A MINIMUM OF 4" RIGID INSULATION OVER METAL ROOF DECK. SADDLES, CRICKETS, AND SLOPE PORTIONS OF FLAT ROOF DECK SHALL BE FORMED BY TAPERED INSULATION. AREAS WHERE TAPERED INSULATION IS ANTICIPATED HAVE BEEN INDICATED, BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE SLOPED SURFACES TO ACHIEVE PROPER DRAINAGE.

C. ROOF PENETRATIONS AND EQUIPMENT SHOWN SHALL NOT BE CONSIDERED ALL INCLUSIVE. COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DOCUMENTS TO CONFIRM PENETRATIONS AND EQUIPMENT LOCATIONS. FLASH ALL ROOF PENETRATIONS IN ACCORDANCE WITH ROOFING MANUFACTURER'S RECOMMENDATIONS. PROVIDE CRICKETS TO ALLOW FOR PROPER DRAINAGE AROUND UNITS.

D. ROOF WALKWAY PADS OR BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH ROOFING MANUFACTURER'S RECOMMENDATION WHERE INDICATED AND AROUND ENTIRE PERIMETER OF ROOFTOP EQUIPMENT.



1 OVERALL ROOF PLAN
1" = 20'-0"

SCHMIDT ASSOCIATES
schmidt-arch.com • 317.263.8226
415 Massachusetts Ave., Indianapolis, IN 46204
731 Brent St. #203, Louisville, KY 40204

Project No. 2018-067.MCC
Project Date 11.22.2024
Produced EL JG

SITE REVIEW - NOT FOR CONSTRUCTION

#	Revision	Date

302 S College Ave,
Bloomington, IN 47403

KEY PLAN

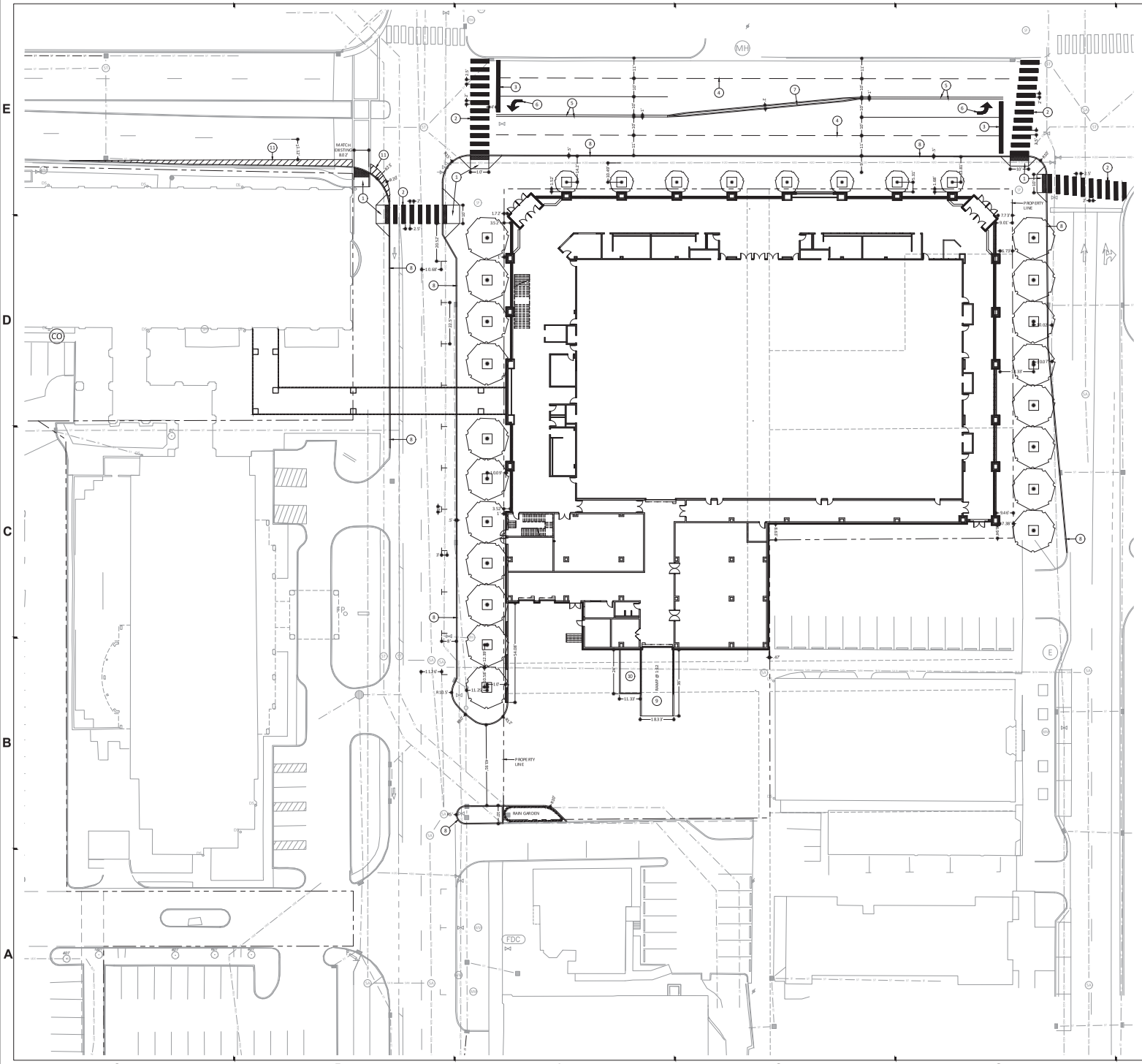
MONROE COUNTY CAPITAL IMPROVEMENT BOARD

monroe convention center

MONROE CONVENTION CENTER EXPANSION

ROOF PLAN

AR100



GENERAL NOTES

A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENTS, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR TO PROPERTY LINE UNLESS OTHERWISE NOTED. CURB RETURN RADII ARE TO FACE OF CURB. COORDINATE DIMENSIONING WITH ARCHITECTURAL. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

C. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOP SOIL, SEED AND MULCH OR BE IMPROVED AS NOTED OTHERWISE.

D. SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

E. ALL STREET CUTS FOR UTILITIES AND OTHER IMPROVEMENTS SHALL BE REPAIRED TO MATCH EXISTING PAVEMENT SECTION OR BETTER.

PLAN NOTES

1. INDOT STANDARD ADA COMPLIANT SIDEWALK RAMP - REFER TO INDOT STANDARD DRAWINGS
2. CONTINENTAL CROSSWALK PAVEMENT MARKING, WHITE, THERMOPLASTIC - REFER TO CITY OF BLOOMINGTON STANDARD DRAWING NO. - PM-3
3. STOP BAR PAVEMENT MARKING, WHITE, THERMOPLASTIC - REFER TO CITY OF BLOOMINGTON STANDARD DRAWING NO. - PM-5
4. DIVIDED LANE LINE PAVEMENT MARKING, WHITE, THERMOPLASTIC - REFER TO CITY OF BLOOMINGTON STANDARD DRAWING NO. - PM-3
5. CENTER LINE, NO PASSING ZONE, TWO DIRECTIONS PAVEMENT MARKING, YELLOW, THERMOPLASTIC - REFER TO CITY OF BLOOMINGTON STANDARD DRAWING NO. - PM-1
6. LEFT TURN ARROW PAVEMENT MARKING, WHITE, THERMOPLASTIC - REFER TO CITY OF BLOOMINGTON STANDARD DRAWING NO. - PM-4
7. RAISED CONCRETE MEDIAN, 3' HIGH, TAPERED ENDS
8. STANDING CONCRETE CURB
9. CONCRETE RAMP WITH REMOVABLE PRECAST PANELS
10. TRASH COMPACTOR PAD
11. PAVEMENT MARKING, 4" WIDE, WHITE, THERMOPLASTIC, 3' ON CENTER HATCH PATTERN

LEGEND

SCALE: 1" = 20'

NORTH

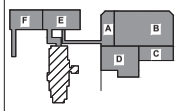
SCHMIDT ASSOCIATES
schmidt-arch.com • 317.263.8226
415 Massachusetts Ave., Indianapolis, IN 46204
731 Brent St. #203, Louisville, KY 40204

Project No. 2018-067.MCC
Project Date 12.30.2024
Produced DLN/KJP

PLAN COMMISSION FINAL REVISION SUBMISSION 1

#	Revision	Date

302 S College Ave,
Bloomington, IN 47403



KEY PLAN

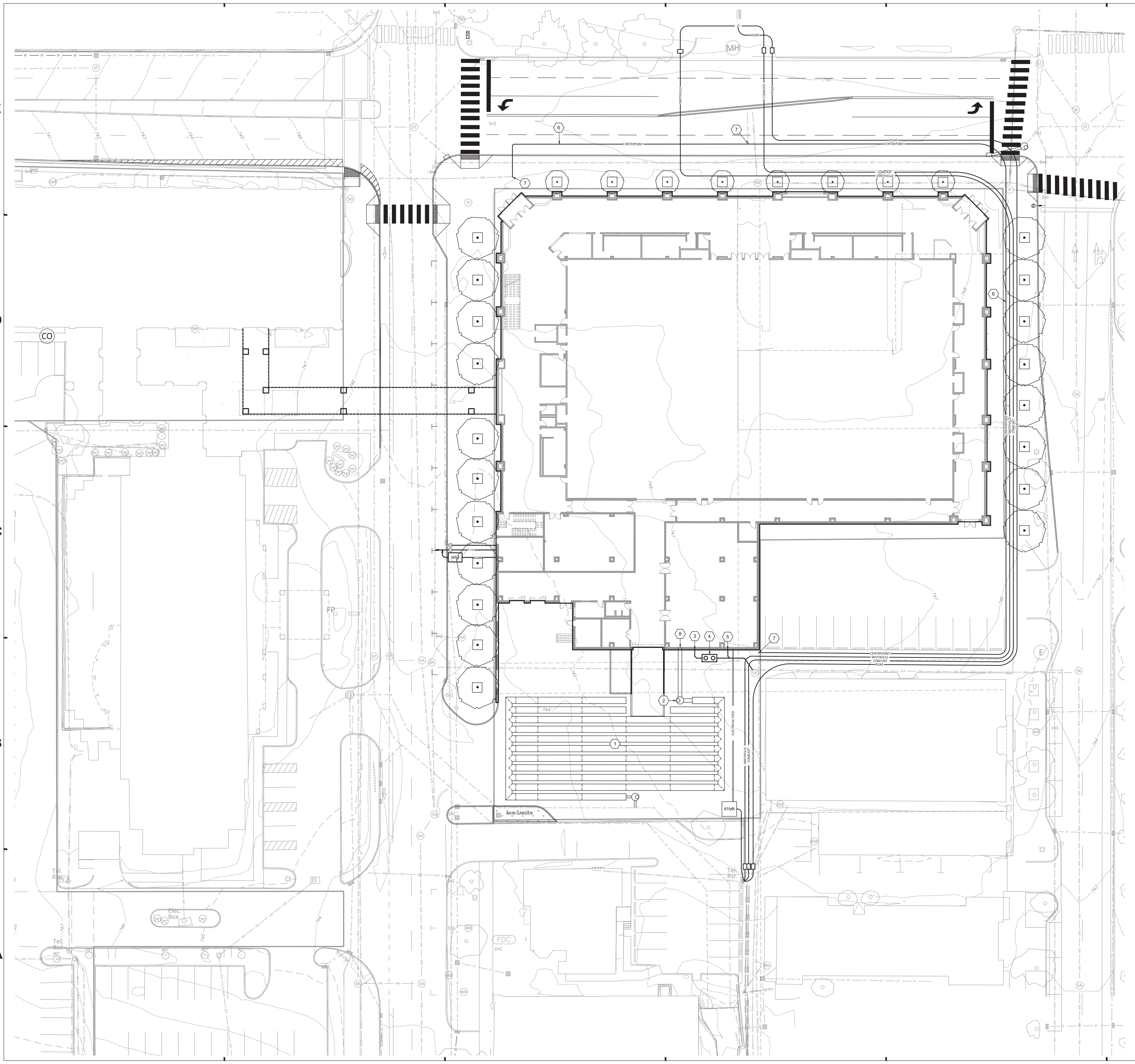
MONROE COUNTY CAPITAL IMPROVEMENT BOARD

monroe convention center

MONROE CONVENTION CENTER EXPANSION

SITE LAYOUT PLAN

CL101



GENERAL NOTES

A. REFER TO DEMOLITION PLANS FOR SEQUENCE OF UTILITY REPLACEMENT TO ENSURE CONTINUOUS SERVICE OF ALL UTILITIES.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS REQUIRED TO COMPLETELY INSTALL THE WORK INDICATED.

C. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT INDIANA 811 AND OTHER UTILITIES PRIOR TO ANY EXCAVATION ON THE SITE.

D. ALL WORK ASSOCIATED WITH WATER AND SEWER SYSTEMS SHALL COMPLY WITH THE STANDARDS & REQUIREMENTS OF THE INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (IDEM), THE INDIANA STATE DEPARTMENT OF HEALTH (ISDH), THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE GREAT LAKES-UPPER MISSISSIPPI BOARD OF STATE PUBLIC HEALTH AND ENVIRONMENTAL MANAGERS (GLUMRB), THE INDIANA PLUMBING CODE AND THE CITY OF BLOOMINGTON UTILITIES CONSTRUCTION SPECIFICATIONS.

E. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

F. CONTRACTOR SHALL SET ALL EXISTING AND PROPOSED CASTINGS AND CLEANOUT COVERS TO FINAL FINISHED GRADE.

G. A MINIMUM OF 18 INCHES VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER. SEWERS CROSSING WATER MAINS SHALL BE LAID TO MAINTAIN A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER MAIN. THIS SHALL BE THE CASE WHETHER THE WATER MAIN IS ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE JOINTS IN THE SEWER MAIN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE JOINTS IN THE WATER MAIN. THE CROSSING MUST BE AT A MINIMUM ANGLE OF 45° MEASURED FROM THE CENTERLINE OF THE SEWER AND WATER MAINS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.

H. A MINIMUM OF 10 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.

I. ALL STORM AND SANITARY MANHOLES AND STORM INLET STRUCTURES SHALL HAVE A MINIMUM SEPARATION OF 8 FEET FROM WATER MAINS.

J. ALL SANITARY LATERALS SHALL HAVE A MINIMUM COVER OF 30"- UNLESS NOTED OTHERWISE.

K. ALL STORM LATERALS SHALL HAVE A MINIMUM COVER OF 24"- UNLESS NOTED OTHERWISE.

L. ALL SANITARY AND STORM LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS NOTED OTHERWISE.

M. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48". INSTALL LINES WITH NO ISOLATED HIGH POINTS.

N. WHERE DISSIMILAR PIPING MATERIALS ARE JOINED TOGETHER ALONG GRAVITY SANITARY AND STORM LATERALS, THE CONTRACTOR SHALL USE A NON-SHEAR COUPLING EQUAL TO FERNCO.

O. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND LANDSCAPE PLANS FOR ADDITIONAL UTILITY MODIFICATIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

P. CONTRACTOR TO EXTEND ALL FOUNDATION, SUBDRAIN, UNDERDRAIN, INTERNAL DRAIN, ROOF DRAIN AND RETAINING WALL DRAIN PIPING TO THE NEAREST PROPOSED STORM STRUCTURE WHILE MAINTAINING POSITIVE FLOW, UNLESS NOTED OTHERWISE. ALL CONNECTIONS SHALL BE WATER TIGHT.

Q. PRE-CONSTRUCTION MEETING: A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES (CBU) IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812) 349-3676 TO SCHEDULE THE MEETING.

R. UTILITIES INSPECTION: CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND A PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES DEPARTMENT AT (812) 349-3660.

S. ALL STORM STRUCTURES WITHIN 10 FEET OF A WATER MAIN SHALL BE EPOXY COATED. STORM DRAINAGE PIPING WITHIN 10 FEET OF A WATER MAIN, OR WHERE 18" OF VERTICAL SEPARATION AT A CROSSING IS NOT FEASIBLE, PIPING MATERIAL SHALL BE AWWA C900 PVC PIPE OF EQUIVALENT DIAMETER.

PLAN NOTES ⟨1⟩

1. UNDERGROUND DETENTION SYSTEM - 42" DIAMETER, SOLID, GALVANIZED, CORRUGATED METAL PIPE
2. HYDRODYNAMIC SEPARATOR - 7' DIA. HYDRO INTERNATIONAL FIRST DEFENSE HIGH CAPACITY (FDHC)
3. GREASE LADEN WASTE LINE FROM BUILDING
4. GREASE INTERCEPTOR - SIZED AND SPECIFIED BY MEP, LOCATED BY CIVIL
5. SANITARY SEWER LATERAL - REFER TO PLUMBING PLANS FOR CONTINUATION WITHIN THE BUILDING
6. NEW 2" DIA. HIGH DENSITY POLYETHYLENE NATURAL GAS MAIN BY CENTERPOINT ENERGY
7. POINT OF CONNECTION BETWEEN EXISTING AND NEW NATURAL GAS MAIN
8. ROOFTOP STORM DRAINAGE - REFER TO PLUMBING PLANS FOR CONTINUATION INSIDE THE BUILDING

LEGEND

- GREASE INTERCEPTER
- COMMUNICATION INFRASTRUCTURE RELOCATION - BY OTHERS
- FIRE HYDRANT
- WATER VALVE
- WM WATER METER VAULT
- POST INDICATOR VALVE
- FIRE DEPARTMENT CONNECTION (WALL-MOUNTED)
- STORM STRUCTURE AND PIPING
- STORM MANHOLE
- LIMITS OF RAIN GARDEN AREA
- XFMR 8' x 8' ELECTRIC TRANSFORMER PAD

SCHMIDT ASSOCIATES
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415 Massachusetts Ave, Indianapolis, IN 46204
731 Brent St, #203, Louisville, KY 40204

Project No. 2018-067.MCC
Project Date 12.30.2024
Produced KJP

PLAN COMMISSION FINAL REVISION SUBMISSION 1

#	Revision	Date

302 S College Ave,
Bloomington, IN 47403

KEY PLAN

A B C D E F

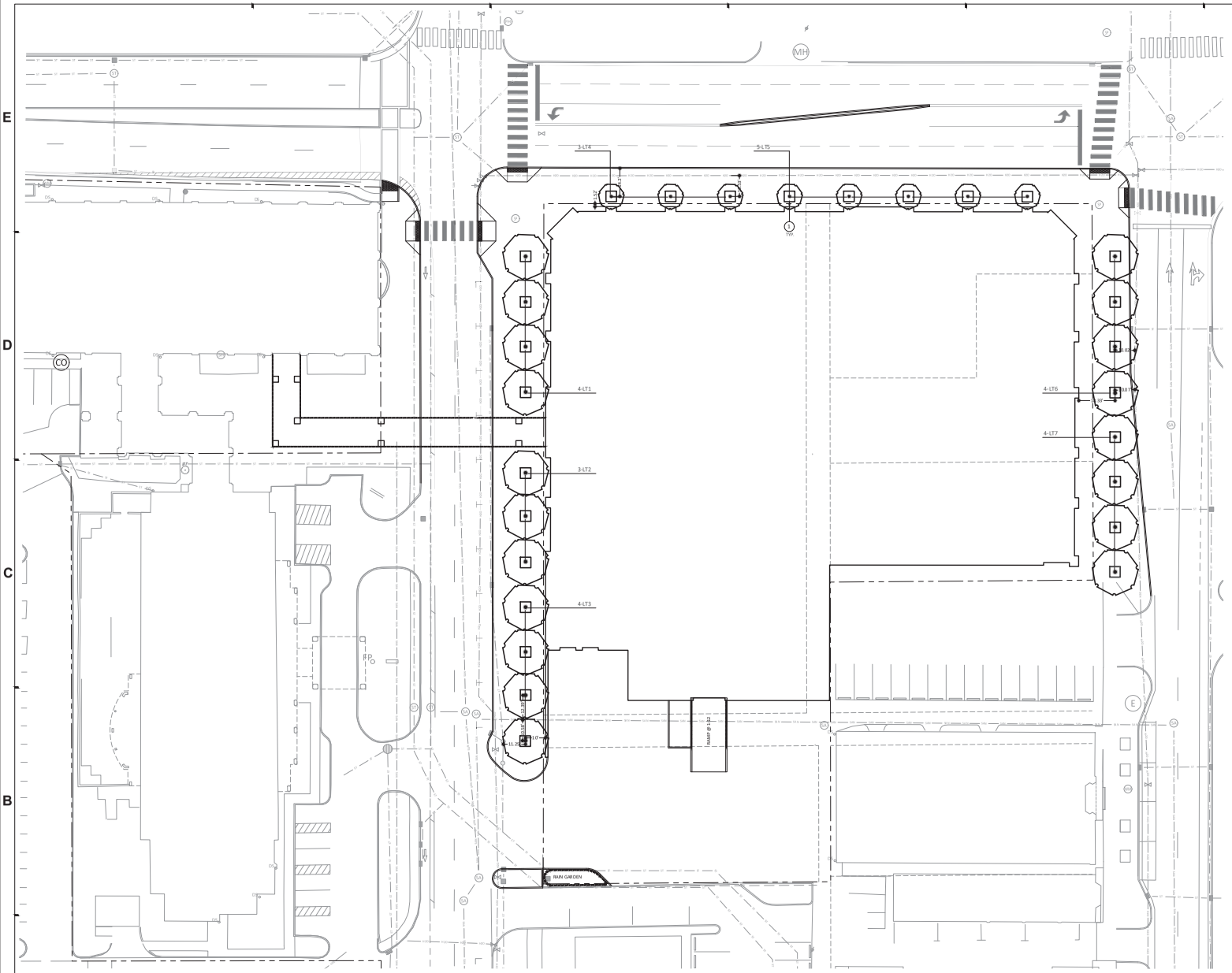
MONROE COUNTY CAPITAL IMPROVEMENT BOARD

monroe convention center

MONROE CONVENTION CENTER EXPANSION

SITE UTILITY PLAN

CU101



CONCEPTUAL PLANT LIST

#-KEY	TREE TYPE - SPECIES	SIZE
4-LT1	LARGE TREE - SPECIES 1	2" Cal., BB, Full Top
3-LT2	LARGE TREE - SPECIES 2	2" Cal., BB, Full Top
4-LT3	LARGE TREE - SPECIES 3	2" Cal., BB, Full Top
3-LT4	LARGE TREE - SPECIES 4	2" Cal., BB, Full Top
5-LT5	LARGE TREE - SPECIES 5	2" Cal., BB, Full Top
4-LT6	LARGE TREE - SPECIES 6	2" Cal., BB, Full Top
4-LT7	LARGE TREE - SPECIES 6	2" Cal., BB, Full Top

TREE SPECIES WILL BE SELECTED FROM UDO 20.04.080 TABLE 04-4 Permitted Tree Species

REQUIRED STREET TREES: 1 PER 30 LF
TOTAL PROPERTY LINE STREET FRONTAGE: 809' 809'/30 = 26.9 = 27 Trees
N: 375'
E: 190'
W: 344'

PROPOSED: 27 TOTAL STREET TREES

PROPOSED TREE GRATE SIZE: 5.5' SQUARE CAST IRON

GENERAL NOTES

A. ALL DIMENSIONS ARE TO FACE OF CURB, POINT OF TANGENCY, EDGE OF PAVEMENT, EDGE OF WALK, FACE OF BUILDING OR UTILITY, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

B. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

C. ALL LANDSCAPE PLANT MATERIAL SHALL MEET OR EXCEED THE CITY OF BLOOMINGTON REQUIREMENTS AND THE AMERICAN NURSERY STOCK STANDARDS AS SET BY THE AMERICAN ASSOCIATION OF NURSERYMEN. NO SUBSTITUTIONS OF PLANT MATERIAL ARE ALLOWED. ALL TREE PLANTINGS MUST MEET CITY REQUIREMENTS FOR SIZE AND TYPE. PLANT SPECIES, AND LOCATIONS APPROVAL, NOT EXCEPTED.

PLAN NOTES

1. 5.5' SQ. WALK MILE CAST IRON TREE GRATE

LEGEND

- LARGE TREE: COLUMNAR
- LARGE TREE
- TREE GRATE

20 0 20 NORTH
SCALE: 1" = 20'

SCHMIDT ASSOCIATES
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Project No. 2018-067.MCC
Project Date 12.27.2024
Produced MSDDLS

FD RxR
NOT FOR CONSTRUCTION

#	Revision	Date

302 S College Ave,
Bloomington, IN 47403

KEY PLAN

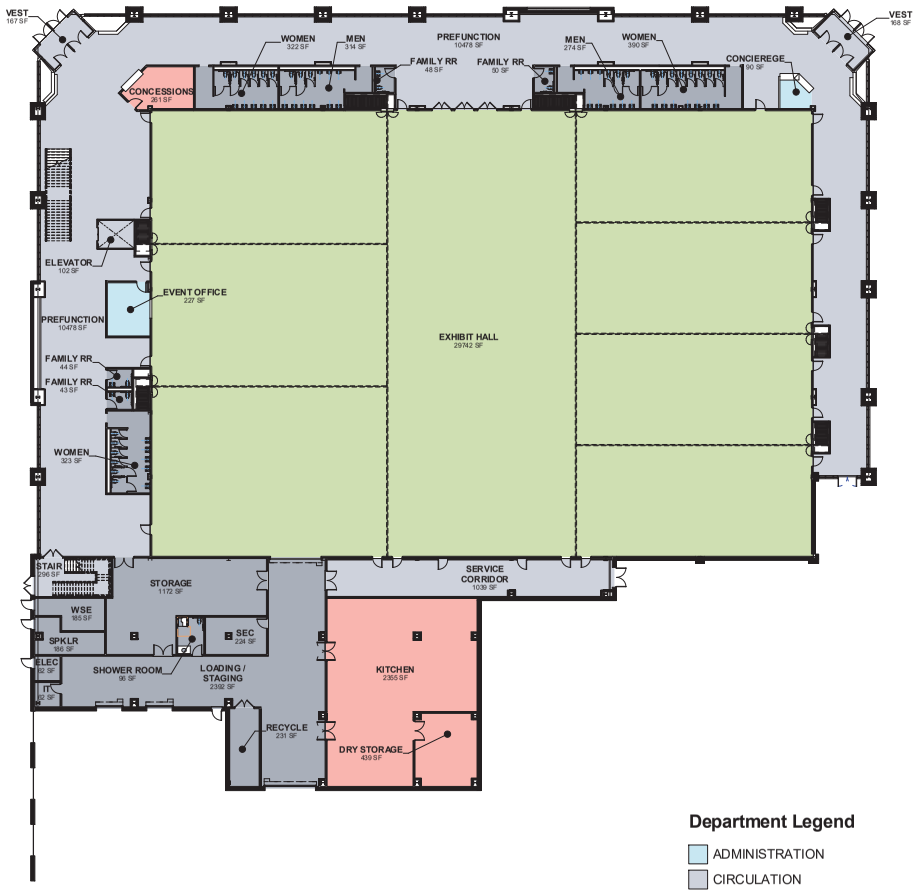
MONROE COUNTY CAPITAL IMPROVEMENT BOARD

monroe convention center

MONROE CONVENTION CENTER EXPANSION

SITE LANDSCAPE PLAN

L101



Department Legend

- ADMINISTRATION
- CIRCULATION
- KITCHEN
- MEETING ROOMS
- SUPPORT

193

SAI PROJECT INFO
2018.067.MCC

MONROE COUNTY CAPITAL IMPROVEMENT BOARD

SITE REVIEW

First Floor Plan | 11.22.2024

CONVERGENCE DESIGN

SCHMIDT ASSOCIATES

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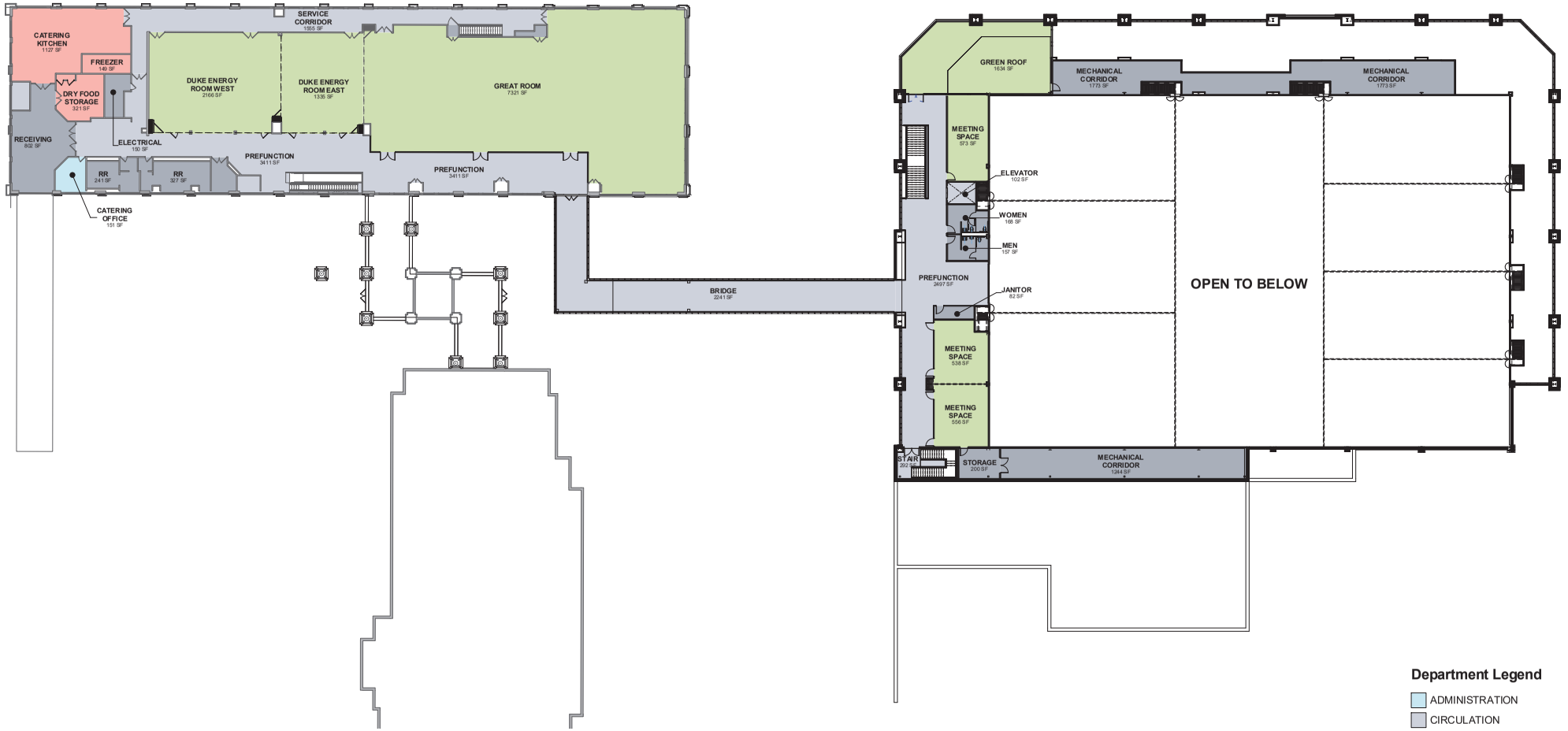
Louisville, KY 40204



SAI PROJECT INFO
2018.067.MCC

MONROE COUNTY CAPITAL IMPROVEMENT BOARD

SITE REVIEW

Second Floor Plan | 11.22.2024

CONVERGENCE DESIGN
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schmidt-arch.com
415 Massachusetts Ave.
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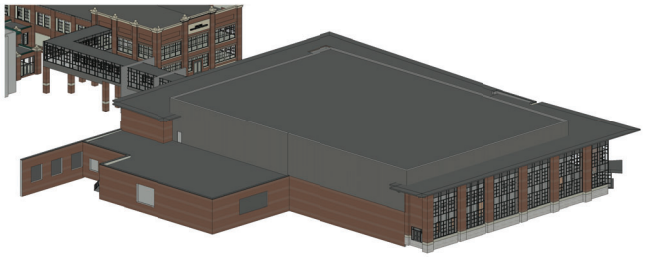
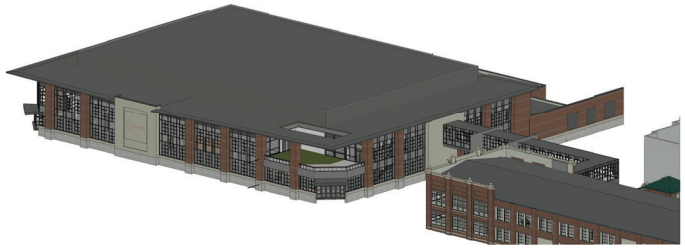
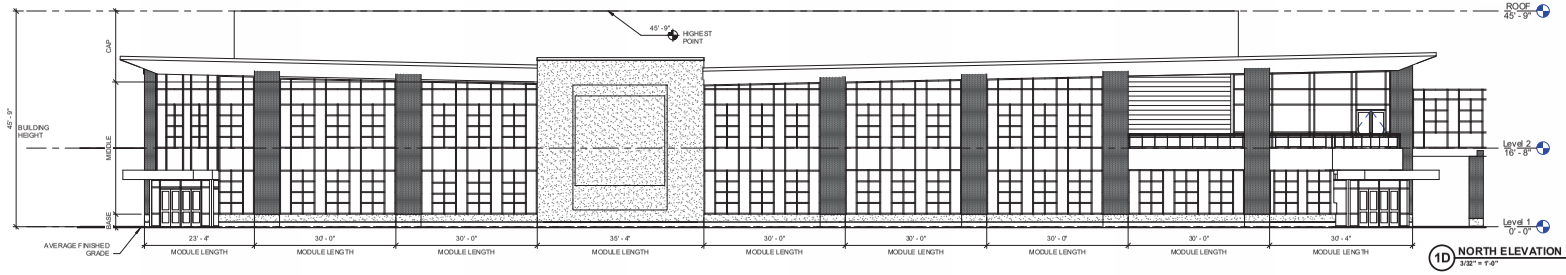


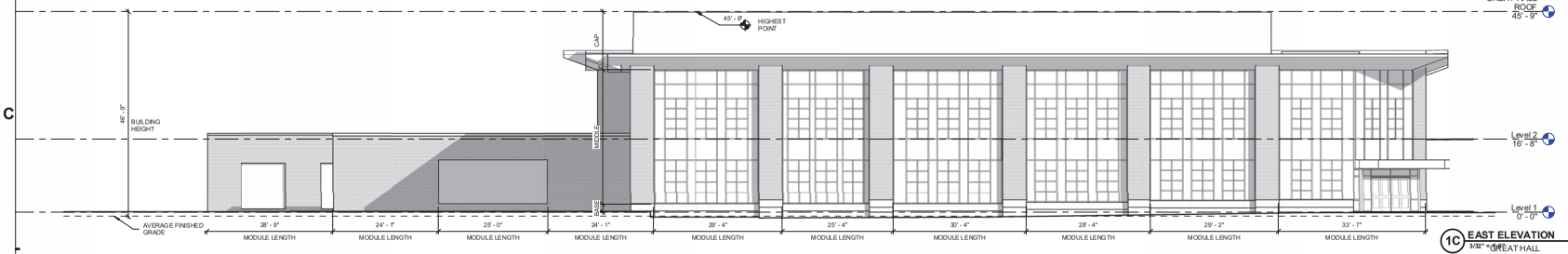
4E 3D SE VIEW OVERALL 2



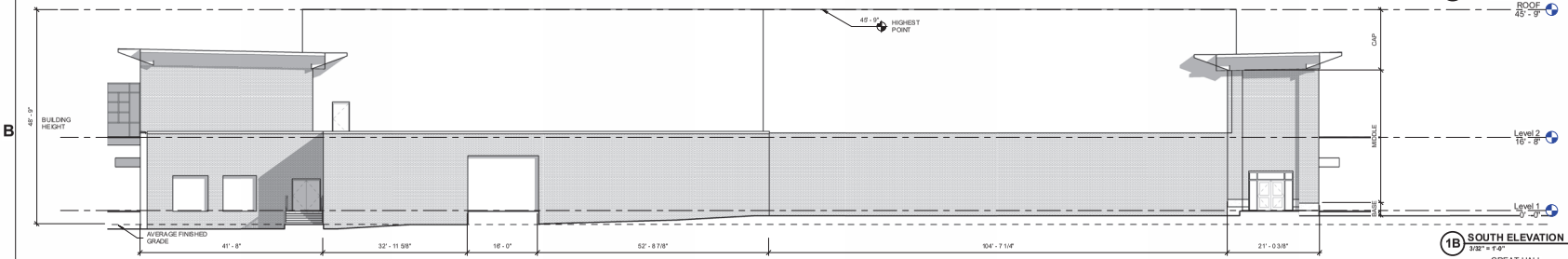
1E 3D NW VIEW OVERALL 1



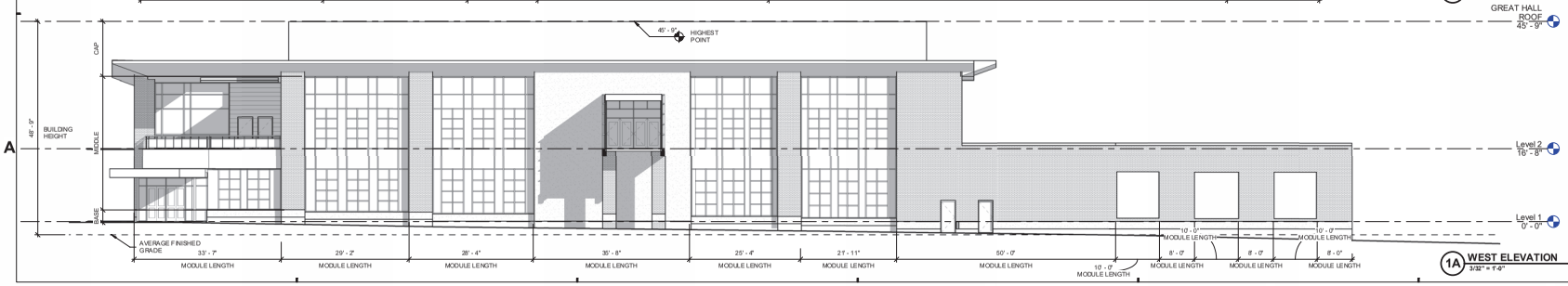
1D NORTH ELEVATION 3/32" = 1'-0"



1C EAST ELEVATION 3/32" = 1'-0"



1B SOUTH ELEVATION 3/32" = 1'-0"



1A WEST ELEVATION 3/32" = 1'-0"

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Produced EL CW JG

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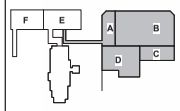

KEY PLAN

N

MONROE COUNTY CAPITAL IMPROVEMENT BOARD

monroe convention center

MONROE CONVENTION CENTER EXPANSION

OVERALL ELEVATIONS

A-200