



# **ACKNOWLEDGMENTS**

This Plan was developed for Fishers with funding from the Safe Streets and Roads for All (SS4A) grant program.



#### **RESOLUTION NO. R122024I**

# A RESOLUTION OF THE CITY OF FISHERS BOARD OF PUBLIC WORKS & SAFETY APPROVING AND ADOPTING SAFE STREETS FOR ALL (SS4A) VISION STATEMENT

**WHEREAS**, the United States Bipartisan Infrastructure Law established the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over 2022-2026;

WHEREAS, the City of Fishers ("City") applied for and received a SS4A grant in February 2024, in the amount of \$200,000 ("Grant"), said Grant agreement was approved by the Board of Public Works & Safety ("Board") on February 27, 2024 as Resolution No. R022724B;

WHEREAS, the Grant will be utilized by the City's Department of Engineering and the Department of Planning & Zoning to develop a comprehensive safety action plan for the purpose of making its transportation network safer for all road users ("Purpose"); and

WHEREAS, as a condition of the Grant, the City is required to adopt a statement, committing to the goal of achieving significant declines in roadway fatalities and serious injuries through planning and proactive measures ("Vision Zero Statement").

NOW, THEREFORE, BE IT RESOLVED, by the City of Fishers Board of Public Works & Safety meeting in regular session as follows:

**Section 1.** The Board hereby approves and adopts the following Vision Zero Statement:

The City of Fishers is a smart, vibrant, and entrepreneurial city that provides an exceptional quality of life and fosters a culture of innovation and resiliency. Residents and visitors to the City depend on a safe transportation system and, with the goal of eliminating traffic deaths and serious injuries by 2040, the City is adopting a framework to improve safety for all roadway users, no matter age, ability, or community. Zero deaths and serious injuries is an ambitious goal that requires a multi-disciplinary approach. Fishers is focused on achieving this goal by following core components to improve roadway safety for all:

Collaboration & Cooperation Inclusivity & Public Engagement Transparency & Accountability Data-Informed Decision Making A Safe System Approach

- Section 2. The Board hereby authorizes the Mayor or the Director of Engineering to execute the Grant Agreement and any and all documents necessary to effectuate its intent.
- Section 3. This resolution shall be of full force and effect from and upon its adoption in accordance with Indiana law.

SO RESOLVED, by the City of Fishers Board of Public Works & Safety meeting this 20th day of December 2024.

#### BOARD OF PUBLIC WORKS & SAFETY, CITY OF FISHERS HAMILTON COUNTY, INDIANA

YAY		NAY	ABSTAIN
11	Scott Fadness, Chairman		
	Jeff Lantz, Member	11.2	
ATTEST: Re-	Sc	DATE: \[ \begin{align*} \begin{align*} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	24
Kari Adriano	, Board Clerk		

This instrument prepared by: Lindsey M. Bennett, Corporation Counsel, City of Fishers, Hamilton County, Indiana, One Municipal Drive, Fishers, Indiana, 46038

""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." /s/ Lindsey M. Bennett



# SAFE STREETS & TRAILS PLAN

Fishers has developed its Safe Streets and Trails Plan (the Plan) in response to the growing need for safer, more accessible transportation networks. Fishers has set an ambitious safety goal of zero roadway deaths and serious injuries by 2040. The Plan aligns with the U.S. Department of Transportation's (USDOT) vision of zero roadway fatalities and establishes a framework to eliminate traffic deaths and serious injuries through implementing evidence-based safety countermeasures and fostering a culture of safety across all transportation modes.

Fishers' commitment to safer streets is grounded in the understanding that traffic-related deaths and injuries are unacceptable and preventable. By adopting a proactive, data-driven approach, Fishers aims to systematically address safety risks and prioritize interventions in areas with high safety concerns.

The Plan builds upon a series of foundational elements designed to create a safer, more inclusive transportation network. The Plan is structured around the principles of the "Safe System Approach" advocated by the U.S. Department of Transportation and the Federal Highway Administration (FHWA). This approach shifts the focus from individual road user behavior alone to system-wide, comprehensive, strategies that make places safer for people by focusing on human error and vulnerability.



# **PLAN ELEMENTS**

The Safe Streets & Trails Plan consists of key elements designed to illustrate the need for comprehensive safety strategies; demonstrate the Plan's efforts to engage with a broad group of City officials, stakeholders, and the public; identify the extent and nature of the safety problem and underserved communities through data; and provide a comprehensive set of strategies to address the identified safety needs.

These elements are:

- CONTEXT
- ENGAGEMENT
- ANALYSIS
- COMMUNITY
- ACTION

#### CONTEXT

The Plan and the goal of zero deaths and serious injuries builds on and advances related safety programs, plans, and projects of regional, state, and federal agencies. As part of the SS4A federal grant program, the Plan illustrates the need for a comprehensive set of strategies to improve roadway safety and the implementation of a Safe System Approach.

#### **ENGAGEMENT**

The Plan includes outreach and engagement with stakeholders and the general public. This robust engagement strategy ensures that the Plan reflects the needs and priorities of all community members, particularly those of underserved communities.

#### **COMMUNITY**

The Plan emphasizes the importance of addressing safety disparities in underserved communities, where safety concerns are often elevated, and transportation options are limited. The Plan integrates a demographic analysis that identifies communities most in need of safety improvements and prioritizes projects in these areas.

#### **ANALYSIS**

The extent of the safety need is demonstrated by the analysis of crash data and the identification of the High Injury Network (HIN). Local crash trends as well as high-risk roadway features that contribute to fatal and serious injuries are analyzed to improve decision making.

#### **ACTION**

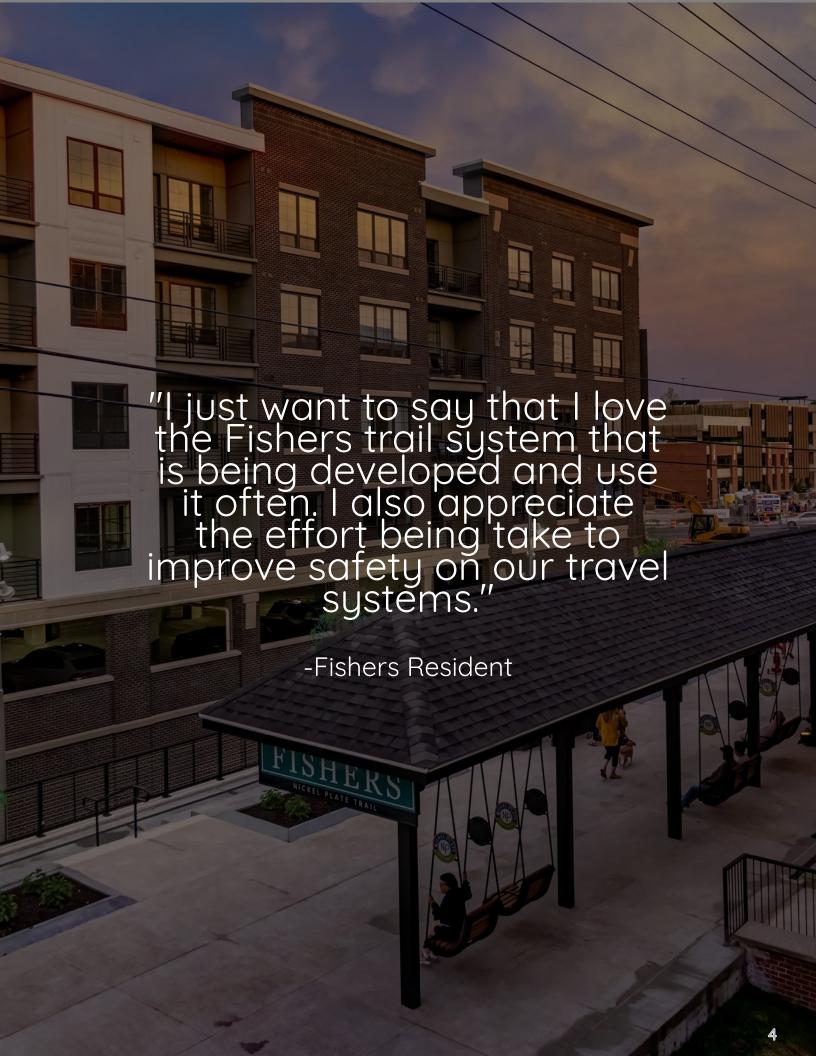
The Plan incorporates a toolkit of proven safety interventions recommended by the FHWA. These include measures such as bicycle lanes and shared use paths, enhanced crosswalks, warning systems, and improved lighting. These strategies have been shown to reduce crashes and improve safety outcomes in various settings.

In addition to the toolkit, the Plan recommends a comprehensive set of strategies that address safety needs. These strategies incorporate the findings of the technical analysis, public and stakeholder feedback, and local policy evaluation.

Strategies include safety countermeasures on the HIN, systemic strategies to mitigate highrisk roadway features, and policy/procedure strategies to prioritize safety improvements for all users, increase awareness, and improve driver behavior.

To ensure the Plan's effectiveness, Fishers has committed to ongoing monitoring and evaluation of implemented projects. This includes collecting data on crash reductions, public feedback, and other performance metrics to assess progress toward the stated safety goals.

Through these elements, the Plan provides a framework for achieving safer streets and roads for all users. This proactive approach to safety planning ensures that Fishers is prepared to address current and future transportation challenges while aligning with federal and state safety initiatives.





# **COMMITMENT TO ZERO**

The City of Fishers is committed to safe streets for all. Fishers has made roadway safety a central priority, reinforcing its commitment to reducing traffic deaths and serious injuries. Residents and visitors expect and depend on a safe transportation system. Fishers has set an ambitious safety goal of zero traffic deaths and serious injuries by 2040. The Plan builds a framework to achieve this goal and improve safety for all roadway users, particularly the most vulnerable road users including pedestrians, cyclists, and individuals with limited mobility. Fishers is committed to achieving zero deaths and serious injuries by focusing on the following set of guiding principles to achieve success.



Success is sustained cooperation and collaboration across City departments and with partner agencies and stakeholders.

#### **ENGAGEMENT**

Success is broad community support built through robust engagement and ongoing outreach.

#### TRANSPARENCY & ACCOUNTABILITY

Success is accountability through annual progress reporting and transparent and publicly available outcome data.

#### DATA-INFORMED DECISION MAKING

Success is decision making informed by data and sound analysis.

#### A SAFE SYSTEM APPROACH

Success is comprehensive action rooted in a Safe System Approach.





# SAFE STREETS & ROADS FOR ALL (SS4A)

Transportation safety has received additional emphasis in recent years, with increasing attention on reducing fatalities and injuries on roadways. The USDOT has identified the need for comprehensive safety strategies that address the rising number of trafficrelated deaths. The National Roadway Safety Strategy (NRSS), released by the USDOT in 2022, emphasizes the adoption of a "Safe System Approach" that promotes shared responsibility among all road users, policymakers, engineers, and planners.

The Plan embodies the core principles of the NRSS while addressing the specific safety challenges of the Fishers transportation system. The Plan focuses on improving safety for all road users, with a particular emphasis on vulnerable populations such as pedestrians, bicyclists, and individuals with limited mobility. The approach aligns with national, state, and local safety goals to create a transportation network that is safe and accessible.

The SS4A initiative is a national program aimed at supporting local governments in developing comprehensive safety action plans and implementing safety improvement projects. The program, part of the Bipartisan Infrastructure Law (BIL), allocates funding to local public agencies to reduce trafficrelated fatalities and serious injuries. Under this initiative, USDOT encourages local public agencies like Fishers to adopt evidencebased safety strategies and implement them through targeted investments in infrastructure and policy changes. The Plan was developed using SS4A planning grant funding and meets all SS4A requirements. As a result, strategies identified in the Plan are eligible for SS4A implementation funding.

Fishers' commitment to safer streets is grounded in the understanding that traffic-related deaths and injuries are unacceptable and preventable. By adopting a proactive, data-informed approach, Fishers aims to systematically address safety risks and prioritize interventions in areas with high safety concerns.



# A SAFE SYSTEM APPROACH

The Plan adopts a Safe System Approach to roadway safety, an approach to create a safer, more inclusive transportation network for all users. This approach shifts the focus from individual road user behavior to systemwide changes that focus on both human behavior and human vulnerability. To enhance safety for all, a system is designed with multiple layers of protection.

#### SAFE ROADS AND INFRASTRUCTURE

The Plan prioritizes investments in infrastructure that reduce traffic conflicts and protect vulnerable users. This includes designing safer intersections, reducing vehicle speeds, and improving road conditions in high-crash locations.

#### **SAFE SPEEDS**

Speed management is a critical component of the safe system framework. The Plan includes strategies to ensure that vehicle speeds are safe for the surrounding environment and that enforcement and education is part of the safe speeds solution.

#### **SAFE VEHICLES**

While local governments have limited control over vehicle design, Fishers supports national efforts to encourage the adoption of safer vehicles, particularly those equipped with advanced driver assistance systems (ADAS). These systems can reduce crash risks by providing real-time feedback to drivers and assisting with emergency braking or staying in their lane.

#### **SAFE PEOPLE**

It is the responsibility of everyone who uses the transportation system to keep streets safe for all. The Plan recognizes the role that education and outreach play in supporting safe behavior for all roadway users.

#### **POST CRASH CARE**

The timely arrival of emergency responders after a serious crash can significantly affect the survivability of a crash. The Plan supports FHWA initiatives to improve first responder safety through training and to deploy advanced technologies to improve incident management.



# POLICY & PLAN REVIEW

The Fishers Safe Streets & Trails Plan builds on and integrates several existing plans and policies, ensuring consistency with federal, state, and regional safety objectives. Key documents that informed the development of the Plan include the following:

#### **FISHERS 2040 COMPREHENSIVE PLAN**

The Fishers 2040 Comprehensive Plan, last updated in 2021, outlines a vision for a multimodal approach to transportation infrastructure. The transportation section of the Comprehensive Plan includes the Thoroughfare Plan, which establishes hierarchy of roadways in the network, and the Bicycle and Pedestrian Master Plan, which identifies future bicycle and pedestrian infrastructure to create a multimodal transportation network. The transportation section identifies ten goals, many of which are in alignment with the goal of the Plan including being accountable, safe, integrated, sustainable, and efficient.

# FISHERS TRAILS & GREENWAYS REPORT

The Fishers Trails & Greenways Report represents a visionary roadmap for the development and enhancement of bicycle and pedestrian infrastructure. Goals that align with the Plan include completing network gaps and developing safe roadway crossings.

# FISHERS AMERICANS WITH DISABILITIES ACT (ADA) TRANSITION PLAN FOR PUBLIC RIGHTS-OF-WAY

The Fishers ADA Transition Plan, completed in 2015, establishes policies and best practices for implementing pedestrian improvements that comply with ADA regulations and standards. The ADA Transition Plan identifies physical barriers including non-compliant sidewalks and curb ramps within public right-of-wau.

# FISHERS ALLISONVILLE ROAD CORRIDOR STUDY

The 2022 Allisonville Road Corridor Study analyzed current roadway conditions and presented a variety of recommendations to improve transportation conditions along the corridor and to better support adjacent land use goals. Many of the recommendations offer solutions that can improve safety and are supported by the recommendations found in the Plan.

# INDY MPO 2050 METROPOLITAN TRANSPORTATION PLAN

The Indianapolis Metropolitan Planning Organization (IMPO) 2050 Metropolitan Transportation Plan (MTP) was adopted in 2021 and most recently revised in 2023. The MTP guides regional transportation investments over a 20-year period. 2050 MTP recommendations include expanding transportation options for all users and improving safety throughout the transportation system.

# INDY MPO REGIONAL ACTIVE TRANSPORTATION PLAN

The Indy MPO regional active transportation plan was completed in 2024 and serves as a guide for implementing a regional connected network of sidewalks, bikeways, and trails. Goals of the active transportation plan include safety and equity/fairness, in alignment with the goal of the Plan.

#### INDY MPO SS4A SAFETY ACTION PLAN

The Indy MPO Safety Action Plan was formally adopted in 2022 and was updated in 2023 and again in 2024. The plan adopts a Vision Zero statement and a goal of reducing fatal and serious injury crashes by 35% by 2040. The plan identified a regional high injury network, roadway risk factors, and project scoring criteria. The regional high injury network includes 96th Street, 126th Street, and Olio Road.

## **EMPHASIS AREAS**

The Fishers Safe Streets & Trails Plan identifies key emphasis areas based on a comprehensive analysis of crash data, public and stakeholder input received throughout the planning process, and collaboration with the Safety Action Task Force. These emphasis areas align with goals set forth in other recently completed plans and offer focus areas to consider broad applications of safety strategies. Taken together, these emphasis areas ensure that comprehensive strategies aimed at eliminating fatal and serious injuru crashes address the most urgent safety needs while also advancing previously established goals for making Fishers a great place to live and work.

Emphasis areas are described here and found throughout the Plan to help organize community input, safety analysis findings, and strategic recommendations to achieve actionable success.

#### SAFE TRAILS & SIDEWALKS

Fishers is developing a robust and well-connected multimodal transportation network. With few on-street bikeways, the sidewalk and trail system is the primary means of pedestrian and cyclist mobility. With growing numbers of people walking and biking in Fishers, it is vital to ensure continued separation, comfort, and accessibility to those using non-motorized modes of transportation. The Plan emphasizes the need for additional sidewalk and trail connections to complete network gaps and provide a safe experience for pedestrians and cyclists.

#### SAFE CROSSINGS

Where sidewalks and trails intersect with the roadway network, there is the potential for conflict resulting in significant injury, much more so for the user without the protection of a vehicle. Fishers is developing residential neighborhoods, public spaces, and commercial centers that are increasing the number of people walking and biking. While increasing active forms of transportation is in line with long-term goals, the inherent conflict at roadway crossings is dangerous and unsustainable. The Plan emphasizes the need for safe, high visibility crossings to effectively alert drivers to the presence of pedestrians and cyclists.

#### SAFE ROUNDABOUTS

Roundabouts are a proven safety countermeasure and can significantly reduce fatal and serious injuries compared to traditional intersections. Common throughout Fishers and nearby communities like Noblesville and Carmel, roundabouts are effective at reducing vehicle speeds while moving traffic efficiently. Despite these advantages, some drivers find roundabouts difficult or confusing to navigate. Additionally, pedestrians and cyclists may be unsure how to safely cross at roundabouts, particularly multi-lane roundabouts, due to the constant flow of traffic and lack of consistent crossina treatments to alert drivers. The Plan emphasizes the need for additional safetu measures at roundabouts to ensure that navigation is clear and safe for all users.

#### SAFE SPEEDS

Excessive speeding is a leading cause of traffic fatalities. Combined with other unsafe behaviors such as aggressive or distracted driving, a prevalence of multilane corridors, and a lack of pedestrian protection at intersections, speeding becomes the common denominator to crashes that result in significant injuries. Speeding can also impact the perception of safety, or how people feel when using the transportation system. The Plan emphasizes the need to reduce vehicle speeds and prioritize safety over the movement of vehicles.



# **ENGAGEMENT**

Robust engagement with the public and relevant stakeholders is key to a successful planning process. A well-executed process promotes transparency, inclusion, consensus, and credibility. An engagement process including the private sector and community groups that allowed for both community representation and feedback was implemented, and the information received in this process was analyzed and incorporated into the Plan.





## SAFETY ACTION TASK FORCE

The Safety Action Task Force (SATF) was established to provide oversight of the Plan development, take ownership of the Plan's implementation, and take responsibility for monitoring progress after the Plan's adoption. The SATF was comprised of representatives from various City departments (shown in Table 1).

Responsibilities of the SATF included aiding in developing the Plan through discussions, review of materials, and providing feedback. On an ongoing basis the SATF is charged with holding responsible parties accountable for the implementation of the Plan, and will continue in an advisory capacity by assisting with monitoring of the Plan's success and sharing progress with City officials and the public. The SATF members were challenged to be leaders and advocates for transportation safety.

The SATF met at regular intervals during the development of the Plan to review key milestones. Members have committed to continue meeting on a regular basis to keep momentum and ensure that implementation begins immediately.

#### **ENGAGEMENT STRATEGY**

At the onset of the planning process, the project team created a Public Engagement Plan (PEP) to establish a cohesive engagement approach and align outreach and engagement activities with key steps in the planning process. The PEP identified the following goals for public engagement:

- Engage a diverse range of Fishers residents and stakeholders, including underserved communities
- Promote transparency and trust between the planning team and the community
- Inform the public about the safety need and potential strategies
- Gather information not captured by data
- Incorporate input received into the Plan

"I like the progress that has been made so far making Fishers more walkable, but keep it going!"

-Fishers Resident

Table 1 - Safety Action Task Force (SATF) Members

Department	Name	Title
Hatem Mekky	Engineering	Director
Rich Bassett	Engineering	Asset Manager
Ross Hilleary	Planning & Zoning	Director
Kevin Martin	Planning & Zoning	Assistant Director
Wayne Druelinger	Police	Sergeant
Samantha Wisecup	Community & Public Relations	Community Outreach Manager

## **OUTREACH EFFORTS**

Outreach efforts heavily relied on digital communications and targeted in-person community events. The SATF collaborated with the Fishers Community and Public Relations Department to ensure important project updates were shared with the public.

Project communications and updates were posted on the Fishers Safe Streets & Trails Plan web page as well as Fishers social media channels, newsletters, and other local digital publications.

#### STAKEHOLDER OUTREACH

With input from the SATF and the Community and Public Relations team, key transportation safety stakeholders were identified and invited to participate in small group interviews. The small group interviews gave the project team the opportunity to assess how different groups view roadway safety issues and potential strategies to improve safety. The small group interviews provided a means of gathering detailed and valuable information, perspectives, and opinions. Stakeholders represented various local and regional agencies and organizations including:

- Fishers Advisory Committee on Disability
- Fishers YMCA
- Hamilton Southeastern Schools
- Launch Fishers
- Locally owned businesses
- Opportunities for Positive Growth
- Trail Advocates
- Visit Hamilton County

#### WHAT WE LEARNED

The main themes resulting from the small group interviews closely align with the Plan's emphasis areas.

#### Sidewalks & Trails

- Support for continued trail development, including the Nickel Plate Trail.
- Support for completing gaps in the sidewalk and trail system that force pedestrians and bicycles to move to the roadway, creating a safety issue.

#### **Speeds**

• Support for more traffic enforcement and design changes to slow traffic speeds, particularly along 116th Street and 106th Street.

#### Crossings

- Support grade separated crossings along the Nickel Plate trail at 96th Street and 146th Street.
- Support for improved crossings near schools.
- Support for raised crosswalks, flashing warnings, and lighting.

#### Roundabouts

- Roundabouts can be more challenging to navigate for cyclists and pedestrians.
- Support for continued education on navigating roundabouts

#### PUBLIC OUTREACH

The goals of public outreach are to inform the public about the Plan and its purpose, to create space for the public to share their general and specific transportation safety concerns, and to integrate that input into the development of the Plan. Public outreach efforts included an online survey and an interactive mapping tool. The survey and mapping tool were available for six (6) weeks during the Fall of 2024 and were promoted via the Plan's web page, social media, newsletters, paper fliers, and yard signs. Input was solicited at in-person community events throughout this period.

#### **COMMUNITY EVENTS**

The project team and the SATF are committed to engaging all members of the public and ensuring that participation and input reflects the diverse demographics of Fishers residents and visitors. The community events were an opportunity to reach people where they are and engage with them in an open setting. The SATF identified three (3) events to attend at various locations throughout Fishers.

#### Pickleball at Holland Park

The project team set up a tent near the pickleball courts at Holland Park on Saturday October 12, 2024. Yard signs were set up along the trails, fliers were passed out, and tablets were available for folks to complete the survey and mapping tool.

#### Boo Bash at the Library Plaza

The project team attended the Fishers Boo Bash Halloween celebration on October 26, 2024. The team set up in the Library plaza near the event, passed out candy and fliers, and put down yard signs along the Nickel Plate Trail at Lantern Road.

#### Early Voting at Billericay Park

The project team canvassed the early voting line at Billericay Park on November 1, 2024. Folks were able to scan a QR code to take the survey and access the mapping tool while waiting in line to vote.







#### **ONLINE SURVEY**

The in-person community events generated hundreds of interactions with individuals and families. The online survey had nearly 750 submissions, and the mapping tool had 120 entries. Below is a snapshot of relevant input received.

# What topics would you like to see addressed in the Plan (top three)?

Shown in Figure 1, 57% of participants chose intersection design, and 54% selected pedestrian facilities. These two were the most selected choices, though a large number also selected roadway design (42%) and bicycling facilities (40%). 12% chose Other and specified completing sidewalk and trail gaps, safer crossings, improved lighting, and better enforcement of traffic laws.

# How safe would you feel traveling in Fishers using the following modes?

Shown in Figure 2, participants feel safe traveling in Fishers in their personal vehicles: about 40% feel very safe, and 50% feel safe. Around 25% of participants say they feel unsafe or very unsafe walking. 51% of participants say they feel unsafe or very unsafe biking.

# What are your main safety concerns (up to three)?

Shown in Figure 3, bad driver behaviors account for the top three concerns: speeding (53%), aggressive driving (49%), and red light running (45%). Other concerns noted by many include:

- Sidewalk and trail gaps
- Lack of protected bicycle lanes
- Lack of safe crossings
- Insufficient lighting
- Roundabouts

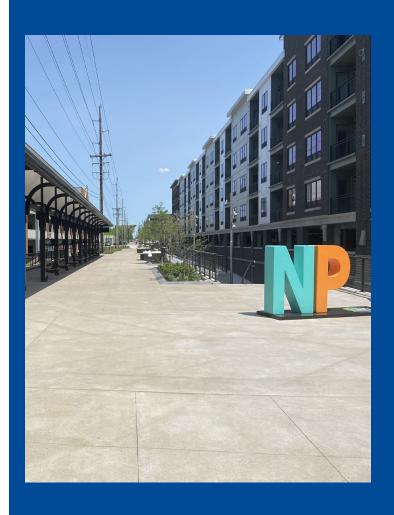
# What type of safety improvements would you support?

Shown in Figure 6, over 80% of participants fully support improvements to sidewalks, trail gaps, and bike trails, and over 70% support improved pedestrian crossings.

## What We Heard

"I use the Nickel Plate
Trail all the time, but
crossing busy streets
like 146th is very
dangerous. Cars often
ignore the flashing
lights, and drivers don't
seem to know who has
the right of way."

-Fishers Resident



"The unconnected sidewalks have got to get fixed. Gaps in the pedestrian network make it dangerous for people walking or biking, especially children."

-Fishers Resident

Figure 1 - What topics would you like to see addressed in the Fishers Safe Streets & Trails Plan (top three)?

**57%** want better intersection design.

**54%** want better pedestrian facilities.

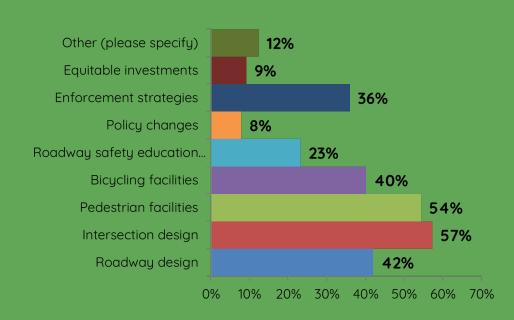
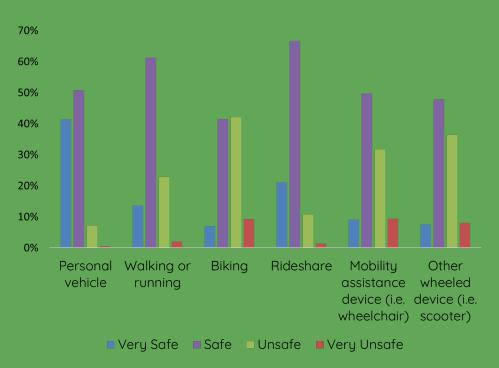
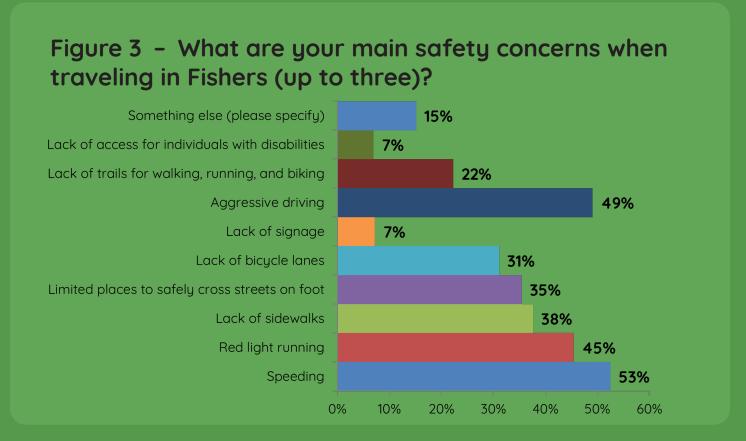


Figure 2 – How safe would you feel traveling in Fishers using the following modes?

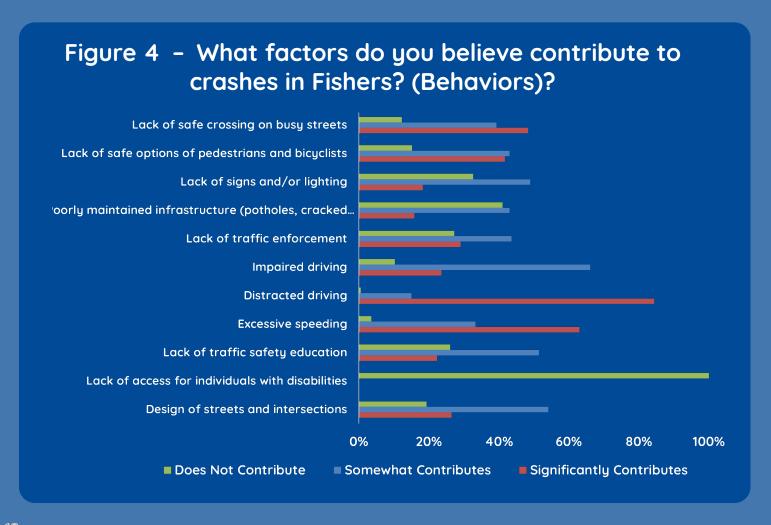


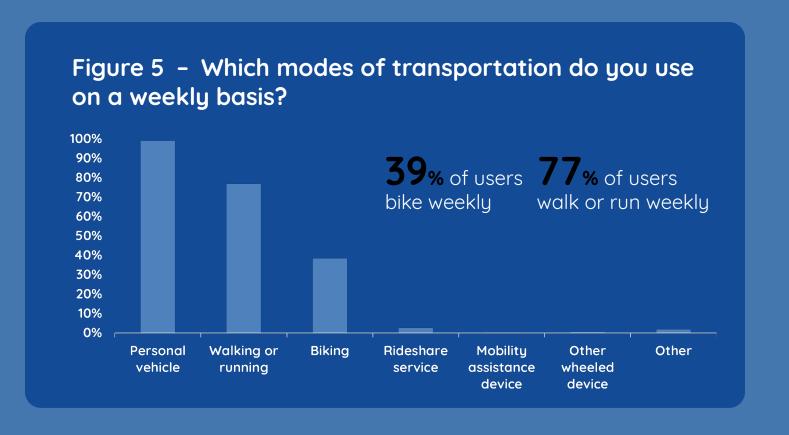
**51%** of users feel unsafe or very unsafe biking.

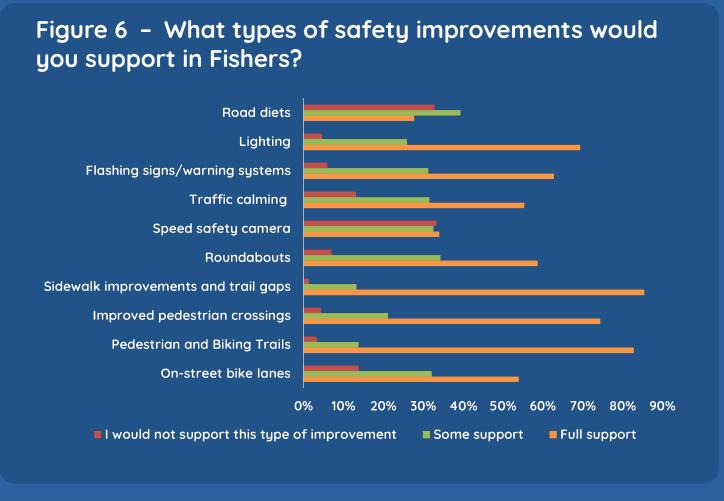


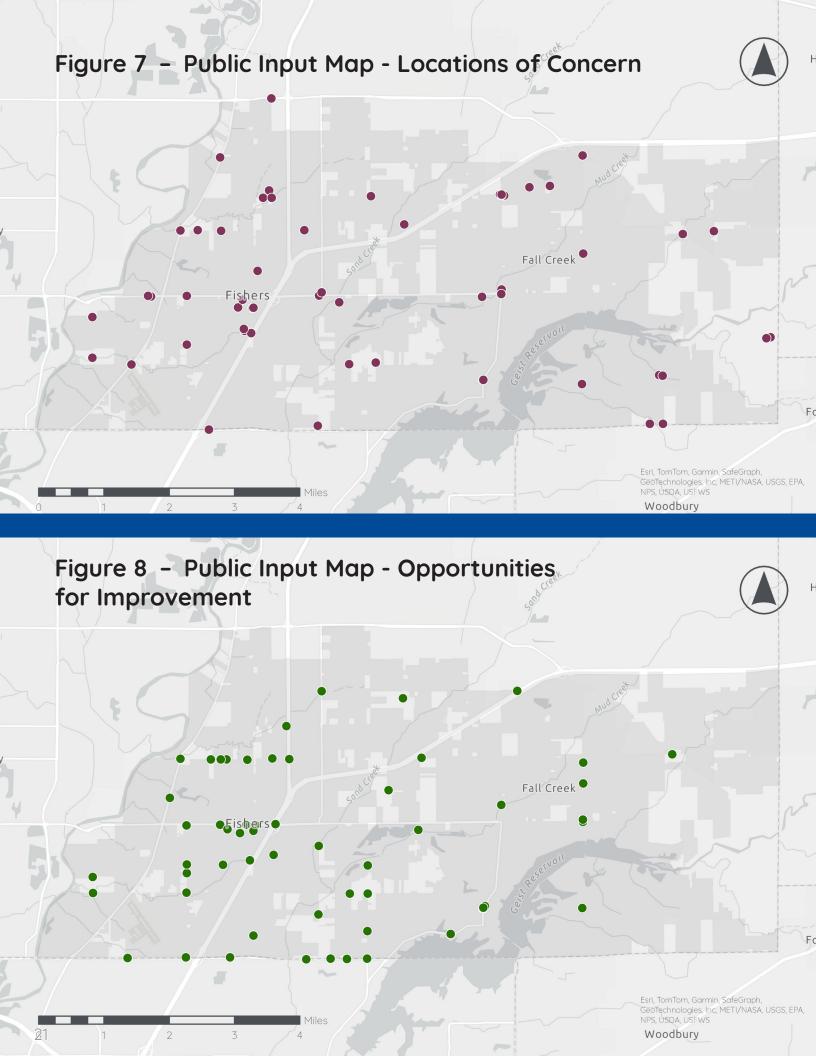
"Aggressive and distracted driving, including speeding and red light running, is a huge problem. It's unsafe for both drivers and non-motorists, and enforcement needs to be improved."

-Fishers Resident







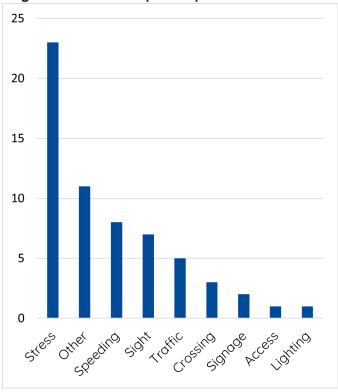


#### PUBLIC INPUT MAP RESULTS

#### **Public Input Map - Concerns**

Results are shown in Figure 7 and Figure 9. Over 60 map entries were submitted by the public reporting safety concerns. Of those, nearly 40% of concerns were for unsafe or uncomfortable conditions for bicyclists and pedestrians (Stress), and 13% were for speeding. Commenters noted concerns with speeding and red light running along major corridors such as Allisonville Rd, 116th St, 126th St, and Brooks School Rd. Other comments mentioned sidewalk and trail gaps and high traffic near some schools.

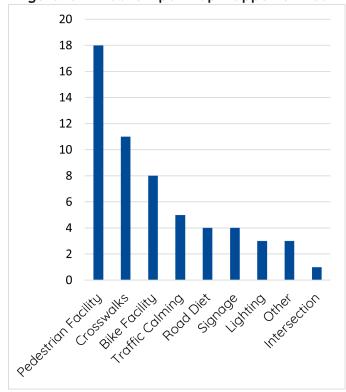




#### **Public Input Map - Opportunities**

Results, shown in Figure 8 and Figure 10. Almost 60 map entries were submitted by the public reporting opportunities to improve safety. Thirty-two percent (32%) were for additional pedestrian facilities, followed by 19% for new or better crosswalks, and 14% for additional bicycle facilities. Commenters again mentioned the need for completing sidewalk and trail gaps as well as greater protection and separation for on-street bike lanes.

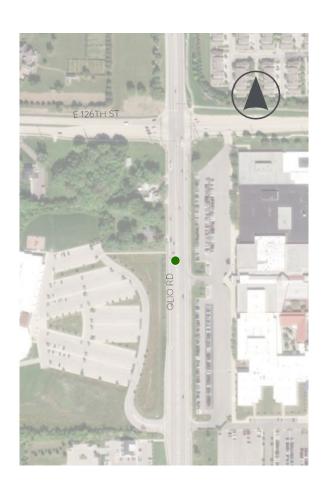
Figure 10 - Public Input Map - Opportunities



#### **PUBLIC INPUT MAP EXAMPLES**

#### **CONCERN - ALLISONVILLE ROAD**

"Cars consistently run this light north and southbound on Allisonville—I see one about 50% of the time I'm at the intersection. It's a daunting intersection to cross on a bike or on foot, but the frequent cars that run lights adds to that tremendously."





#### **OPPORTUNITY - OLIO ROAD**

"Current bike lanes which are panted on with no physical separation presents great risk for bikers. Converting these to protected or separated lanes would benefit the safety of all users"

#### **PUBLIC INPUT MAP EXAMPLES**

#### **CONCERN - 104TH STREET**

"There are gaps in the sidewalk, forcing pedestrians and bicyclists to use the road. This is not safe."



# PROWSE RD

#### **OPPORTUNITY - PROMISE ROAD**

"This road should have some sort of bike accommodation. Cars often try to pass bicycles in an area with low forward visibility with hills."

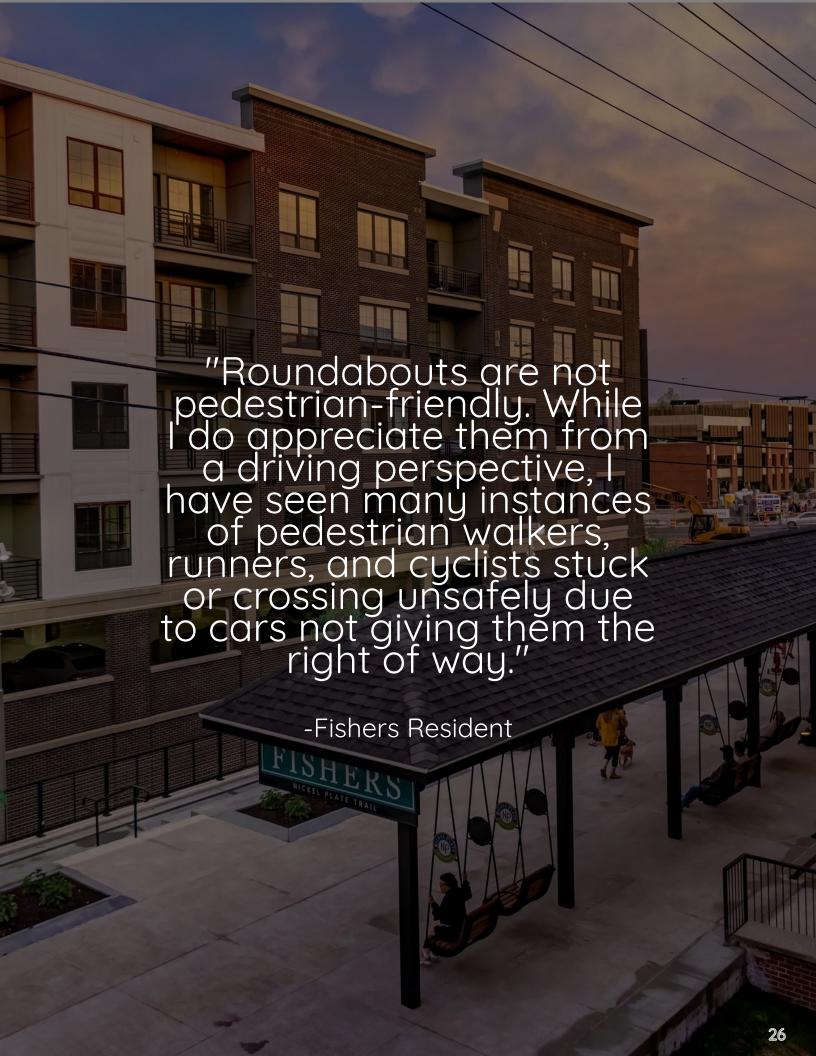
#### **OPEN HOUSE**

The project team held a public open house on February 24, 2025. The date, time, and location were chosen to align with a regularly scheduled City Council meeting to help drive turnout. The event was publicized on the project web page, social media, and direct outreach to previous survey respondents and stakeholders.

The open house provided residents and stakeholders the opportunity to engage directly with the project team as well as view draft recommendations and offer additional feedback.









## **DEMOGRAPHIC ANALYSIS**

A safe transportation system expands access to opportunities for all residents and helps reduce the disparate economic, environmental, and health burdens experienced by disadvantaged and underserved communities. Historically underserved populations such as people living in poverty, and people with limited English proficiency may rely on alternative modes of transportation such as walking, biking, and transit. Fishers is committed to a fair distribution of safety improvements so that all residents can feel safe when traveling.

#### **DEMOGRAPHIC INDEX**

Three demographic indicators were used to identify underserved populations and develop the demographic index (DI). For each demographic indicator, data was used from the U.S. Census Bureau 2019-2023 American Community Survey (ACS) 5-year estimates. The indicators used in the demographic index are:

- **Poverty:** Percent of households with income in the past 12 months below the federal poverty level.
- Limited English Proficiency (LEP):
   Percent of households reported an limited English speaking.
- **Vehicle Access:** Percent of households without access to a vehicle.

Figure 11 - Poverty

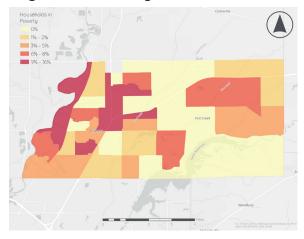


Figure 12 - LEP

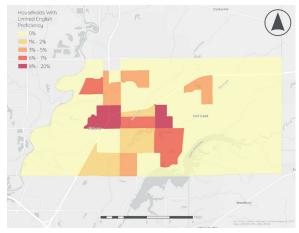
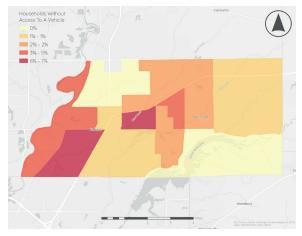
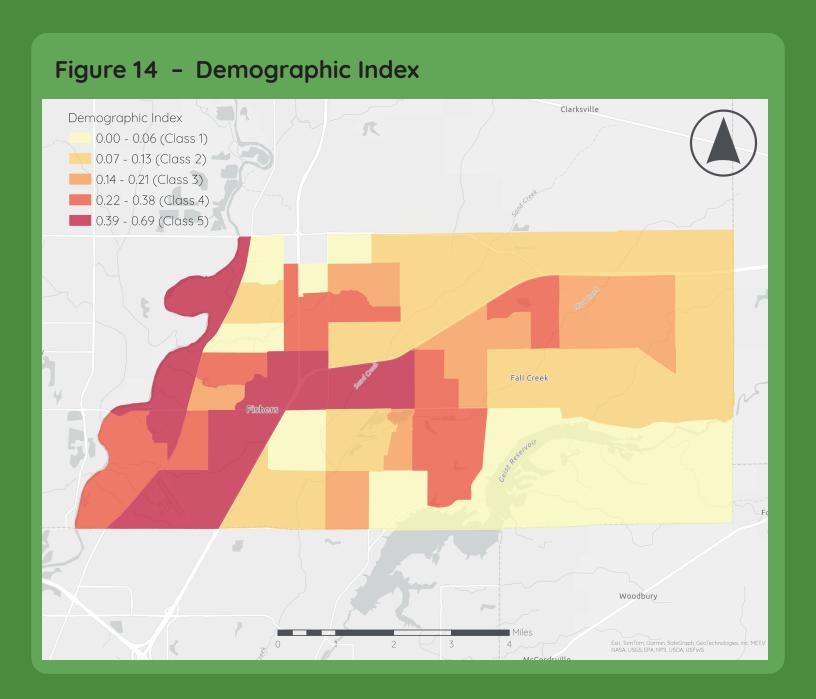


Figure 13 - Vehicle Access



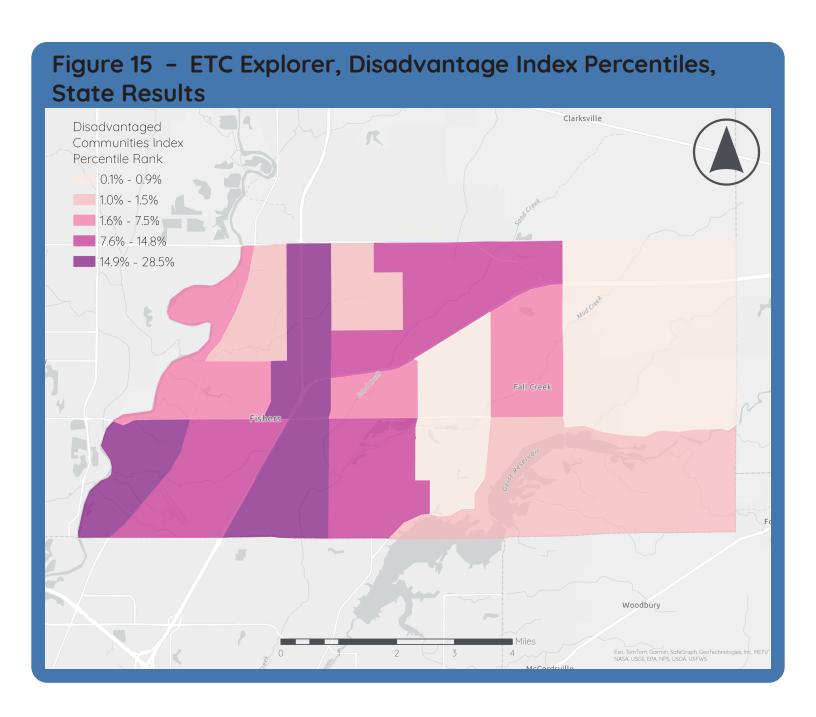
While the demographic indicators capture the geographic distribution and concentration of individual groups, the demographic index represents the general extent to which an area is comprised of underserved groups of people. The demographic index is comprised of all four demographic indicators with equal weighting. The DI is classified into five classes, each representing 20th percentile bins.



#### **DISADVANTAGED COMMUNITIES**

Disadvantaged communities are those that meet or exceed the threshold for one or more of eight burdens including: climate change, energy, health, housing, pollution, water, workforce, and transportation. There are no census tracts in Fishers that are currently designated as disadvantaged.

The Equitable Transportation Community (ETC) Explorer provides additional insights into Transportation disadvantage. The ETC Explorer provides data on five components that can help illustrate the extent to which communities experience transportation related disadvantages. Component scores are percentile ranked both nationally and statewide to provide various contexts. Figure 15 shows the ETC Explorer disadvantage index, State results, for each census tract within the City, providing decision-makers with a relative comparison of transportation disadvantage.





# NATIONAL TRENDS

According to the National Highway Traffic Administration (NHTSA), nearly 43,000 traffic deaths occurred across the nation in 2021, a 16-year high and a 10.5% increase from the previous year. Almost 43,000 people were again killed in traffic crashes in 2022. Despite a declining trend in 2023 and 2024, traffic crashes are still a leading cause of preventable death in the U.S. Vulnerable road users, pedestrians and cyclists, have seen a disproportionate rise in fatalities.

- Since 2011, pedestrian fatalities have increased 68%.
- Since 2013 cyclist fatalities have increased 47%.

The rise in fatal and serious injury crashes across the nation have not only prompted federal initiatives, such as the SS4A program, but also highlighted important themes related to roadway safety.

# **VULNERABLE ROAD USERS**

Pedestrians, cyclists, and motorcyclists represent a disproportionate share of traffic fatalities and serious injuries. Communities across the country are targeting and prioritizing vulnerable road users to improve roadway safety outcomes.

# **SPEEDING**

Speed remains a major contributor to fatal crashes. National efforts focus on implementing speed management strategies and road designs to reduce speeding. The risk of death for pedestrian hit by a vehicle is significantly high as speed increases.

# SAFE SYSTEM APPROACH

Adopted by USDOT as the guiding framework for addressing roadway safety, the Safe System Approach is a comprehensive approach that recognizes that traffic deaths are preventable. By establishing multiple layers of protection, the Safe System Approach attempts to prevent crashes from happening while also reducing injury risk when they do occur.

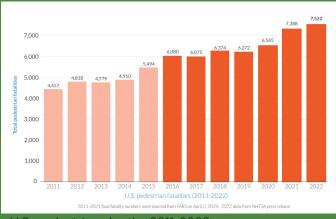




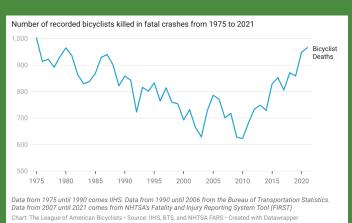




Pedestrian risk by speed of vehicle.



U.S. pedestrian deaths 2011-2022



# **CRASH ANALYSIS**

The Fishers Safe Streets & Trails Plan establishes an implementation guide for strategies to reduce and eliminate roadway deaths and serious injuries. The Plan will rely on a complete understanding of observed crash patterns throughout the City to best inform effective strategies to improve safety.

Between 2019 and 2023, there were 401 fatal or serious injury crashes, an average of 80 crashes per year in Fishers. Table 2 depicts fatal and incapacitating (serious injury) crashes per year. By analyzing local crash trends, the project team identified patterns related to crash severity, road user, crash type, and geography. With this information Fishers is able to effectively target high risk crash types and driver behaviors and offer solutions to achieve the largest reduction in fatal and serious injury crashes.

Local crash data highlights specific trends that guide Fishers' approach to roadway safety planning.

# **CRASH SEVERITY**

A total of 34 fatal crashes occurred from 2019-2023. Of the 401 crashes that result in a fatal or serious injury, 13% of pedestrians and cyclists were killed, compared to 8% of vehicle occupants.

### **CRASH LOCATION**

Figure 17 shows the density of crashes in Fishers from 2019 to 2023. Top corridors for the number of crashes over this time period include I-69, 116th Street, Allisonville Road, SR-37, and 96th Street.

# **TYPES OF CRASHES**

Accounting for over 50% of crashes, the most common types of crashes were Ran Off Road (19%), Right Angle (19%), and Rear End (18%).

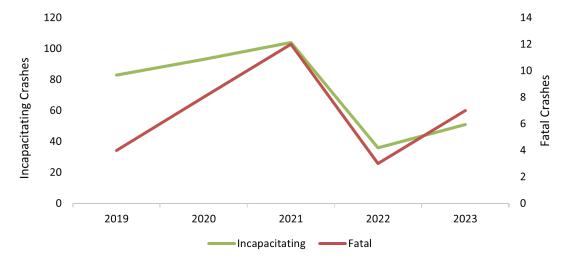
# **DRIVER BEHAVIOR**

30% of crashes were caused by a failure to yield right of way. 22% were caused by some type of unsafe behavior such as speeding or distracted driving.

	•	_		•		
Crash Severity	2019	2020	2021	2022	2023	Total
Fatal	4	8	12	3	7	34
Incapacitating	83	93	104	36	51	367
Total	87	101	116	39	58	401

Table 2 - Fatal and Incapacitating Crashes per Year, 2019-2023

Figure 16 - Fatal & Incapacitating Crashes per Year, 2019-2023



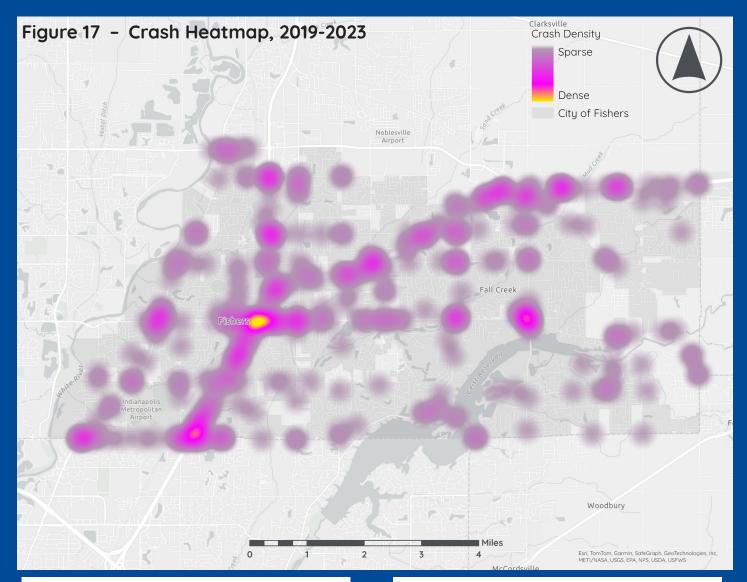


Table 3 – Manner of Col	lision	
Manner of Collision	Count	Percent
Ran off road	76	19%
Right angle	75	19%
Rear end	72	18%
Left turn	45	11%
Other - explain in narrative	38	9%
Same direction sideswipe	30	7%
Head on	25	6%
All others combined	40	10%
Total	401	100%

Table 4 – Primary Cause	е	
Primary Cause	Count	Percent
Failure to yield	112	28%
Following too closely	47	12%
Other (driver) - explain in narrative	40	10%
Ran off road right	39	10%
Disregard signal/sign	24	6%
Unsafe lane movement	20	5%
Unsafe speed	17	4%
Driver distracted	13	3%
Speed too fast for weather conditions	12	3%
All others combined	77	19%
Total	401	100%

# HIGH INJURY NETWORK

The identification of the High Injury Network (HIN) is a crucial element in Fishers' safety strategy. The HIN represents the roadways and intersections with the highest concentrations of fatal and serious injury crashes. The HIN will help decision-makers prioritize safety improvements to have the greatest potential to reduce fatal and serious injury crashes.

The Fishers HIN represents approximately 67 miles (15%) of the 450 mile street network, but experiences:

- 70% of serious injury crashes
- 92% of fatal crashes
- 88% of bicycle crashes

Principal arterials make up the majority of the HIN, around 45%, followed by minor arterials (27%), and major collectors (25%).

Eighty-two percent (82%) of the HIN is owned/maintained by the City of Fishers.

Note: I-69 was removed from the HIN analysis.

Notable streets on the HIN include:

- 96th Street
- 116th Street
- 126th Street
- 131st Street
- Allisonville Road
- Brooks School Road
- Lantern Road
- Olio Road
- Southeastern Parkway
- State Route 37

Table 5 - HIN by Functional Class

Functional Class	Miles	Percent
Principal Arterial	30	45%
Minor Arterial	18	27%
Major Collector	17	25%
Local	2	3%
Total	67	100%

Table 6 - HIN by Jurisdiction

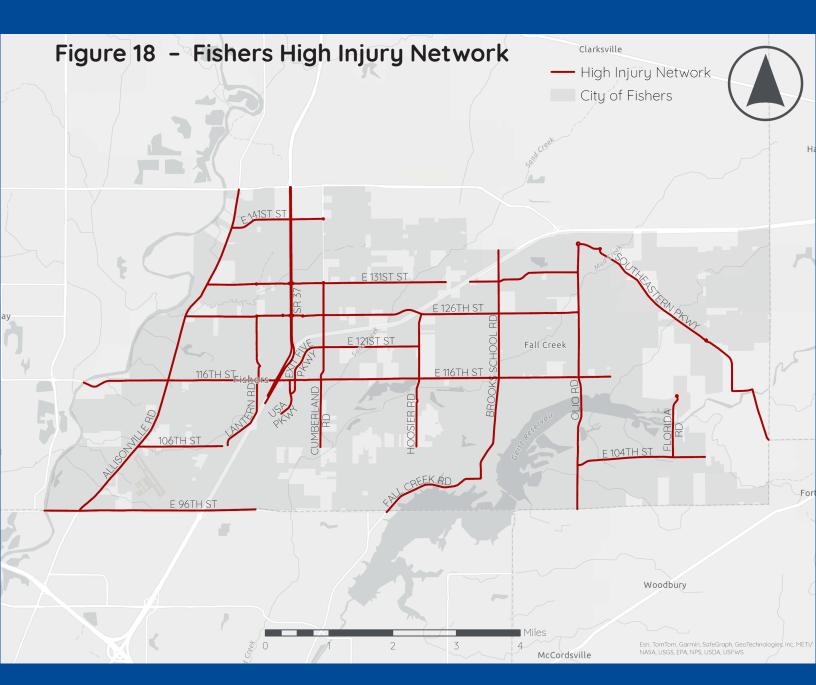
Jurisdiction	Miles	Percent
City Street	55	82%
County Road	5	7%
State Road	7	10%
Total	67	100%



Allisonville Road is an example of an arterial roadway.



Hoosier Road is an example of an collector roadway.



# **SAFETY INDEX**

The HIN is based on a composite index score, **the safety index**, calculated for each roadway segment. The safety index score represents a data-driven metric for overall safety between 0 and 1. Safety Index scores closer to 1 indicate more crashes, more injuries, and or more deaths, relative to other segments throughout the City.

Four metrics make up the safety index score:

- Total crashes
- Crashes per mile
- Total injuries
- Total deaths

Roadway segments with the highest safety index scores make up the High Injury Network. More information about the HIN can be found in the Appendix.

# SYSTEMIC RISK ANALYSIS

The systemic risk analysis is a complementary piece of Fishers' overall safety strategy. A systemic risk analysis is a data-driven, multi-step process that includes identifying and evaluating risk factors and identifying locations with the greatest risk. Different from the development of the HIN that identifies roadways with a history of fatal and serious injury crashes, the systemic risk analysis identifies high-risk roadway features throughout the network to identify locations with the greatest risk for serious and fatal injury crashes.

### **HIGH-RISK FEATURES**

The systemic risk analysis is aimed at identifying and evaluating roadway characteristics with the greatest risk of fatal and serious injuries. Five (5) roadway characteristics were selected and included in the development of risk factors.

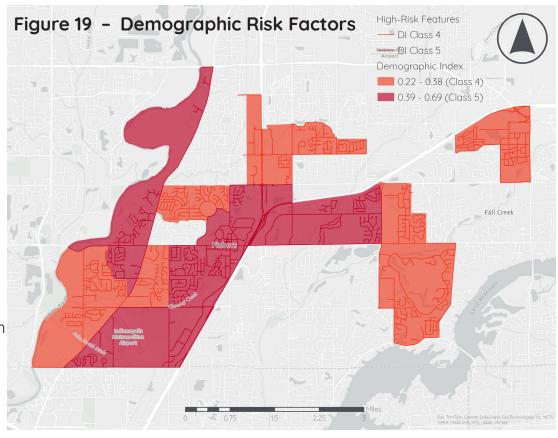
Risk factors are ratios between the share of fatal and serious injury crashes and the percentage of roadway with a given roadway characteristic. Risk factors greater than one have a higher-than-average risk and are considered a high-risk roadway feature. Table 7 shows the roadway characteristics included in the risk analysis along with high-risk features with each associated risk factor.

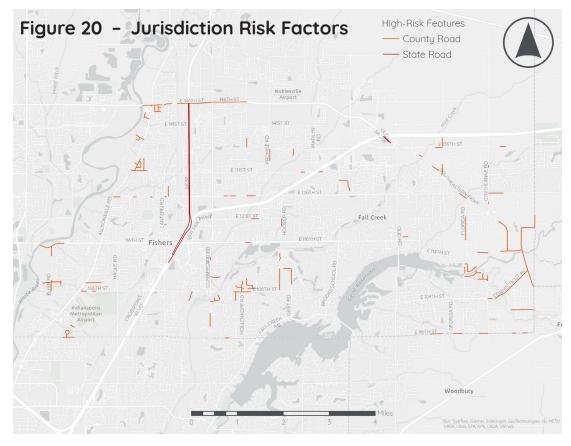
Table 7 - High-Risk Features & Risk Factors

Roadway Characteristic	High-Risk Feature	Risk Factor
Davas a susua bi a a	Demographic Index Class 4	1.3
Demographics	Demographic Index Class 5	2.2
le cota altasta ca	County Road	1.2
Jurisdiction	State Road	4.3
	Principal Arterial	6.5
Functional Class	Major Collector	8.6
	Minor Arterial	3.1
<b>N</b> 1	2 lanes	5.8
Number of Lanes	3 lanes	15.1
Multimodal Proximity	Within 100 feet of a sidewalk/trail	2.2

# **DEMOGRAPHICS**

Underserved communities, people living in poverty, or people with Limited **English Proficiency** often experience disproportionate impacts of traffic safety. Areas with higher demographic index (DI) scores experience a higher proportion of fatal and serious injury crashes. DI classes 4 and 5 are high-risk features. Figure 19 shows roadways within DI classes 4 and 5.



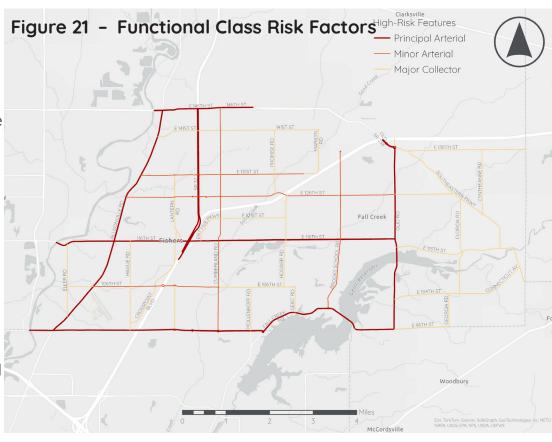


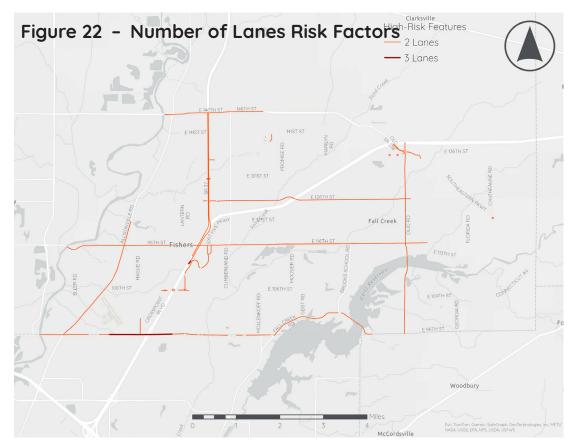
# **JURISDICTION**

Roadway operations and maintenance responsibility is shared among state and local agencies. In Fishers, roadways are owned and maintained by either the State of Indiana, Hamilton County, or the City. State and County owned roads have a higher proportion of fatal and serious injury crashes and are high-risk features. Countu and State owned roads are shown in Figure 20.

### **FUNCTIONAL CLASS**

**Functional** classification is a hierarchy of roadways based on function within the transportation system. Local roads offer more access while arterial offer more mobility. Higher classified roads tend to be higher traffic and higher speed. Minor arterials, major collectors, and principal arterials (shown in Figure 21) are high-risk features because they experience a higher proportion of fatal and serious injury crashes.



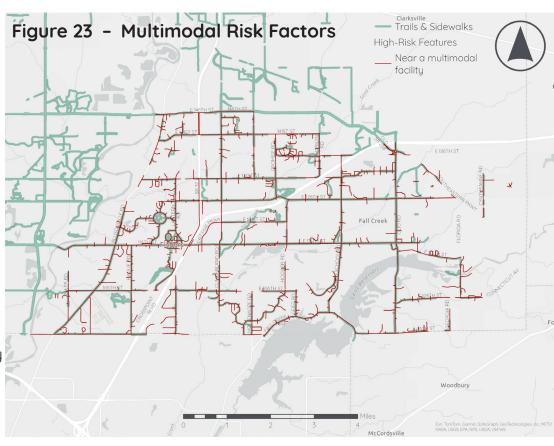


# NUMBER OF LANES

Roadways with more lanes often have greater risk because of high traffic volumes and high speeds. Although closely aligned and related to functional class, the number of lanes is a separate roadway characteristic. Corridors with two (2) or three (3) lanes in one direction (shown in Figure 22) are high-risk features because a higher proportion of fatal and serious injury crashes occur on these roadways.

# MULTIMODAL

Proximity to multimodal facilities may increase risk by increasing the potential conflict of vehicles and pedestrians or cyclists. While corridors near multimodal facilities may not share similar design elements, they share the potential for multimodal users. Roadways within 100 feet of a trail or sidewalk (shown in Figure 23) experience a greater share of fatal and serious injury crashes and are highrisk features.



# Fall Creek Ciartsville Risk Index 0.0 - 0.5 - 0.6 - 1.5 - 1.6 - 2.5 - 2.6 - 3.5 - 3.6 - 4.5 Fall Creek Fall Creek Moodbury Woodbury McCordsville Woodbury McCordsville Woodbury McCordsville Woodbury McCordsville

# **RISK INDEX**

The risk factors were combined to create a **risk index** which helps illustrate roadways with the most significant combination of highrisk features based on the risk profile of fatal and serious injury crashes. The range of risk index scores is 0-7. A higher risk index means more highrisk features and/ or more significant high-risk features.



# SAFETY TOOLKIT

The Fishers Safe Streets & Trails Plan Safety Toolkit provides a collection of proven safety strategies aimed at reducing traffic fatalities and serious injuries. These strategies are based on the Safe System Approach, emphasizing that while human errors are inevitable, transportation infrastructure should minimize the risk and severity of crashes. The toolkit draws from national best practices endorsed by agencies like the FHWA and the NHTSA.

The Safety Toolkit provides safety countermeasures intended for location-specific implementations as well as systemic applications. Each proven safety countermeasure included in the Safety Toolkit is accompanied by key information such as expected safety benefits, applicable locations, important design considerations, and cost estimates.

A key emphasis is to protect vulnerable road users, including pedestrians, cyclists, and motorcyclists, through enhanced infrastructure and traffic management strategies. Vulnerable road user interventions aim to address disparities in crash risks and access to safe transportation options.

Crash conditions and contextual circumstances drive the suitability of each safety countermeasure for a specific situation or location. The Safety Toolkit offers decision makers the ability to select from multiple appropriate countermeasures and identify those that best align with available resources and public preferences in order to address a specific safety problem.

By offering a set of adaptable, data-driven solutions, the Safety Toolkit serves as a foundational resource for efforts to reduce serious injuries and fatalities, supporting planners, engineers, and public administrators in creating a safer, more accessible transportation system.



Table 8 - List of Safety Toolkit Countermeasures

	Safety Countermeasure	Safety Benefits	Cost
	Bicycle Lanes (On Road)	30%-49% reduction in total crashes	\$-\$\$\$
	Corridor Access Management	25%-31% reduction in fatal and injury crashes along urban/suburban arterials	\$\$\$
1	Crosswalk Enhancements	25%-42% reduction in pedestrian crashes	\$
	Curb Extensions	Increase pedestrian visibility; reduce pedestrian crossing distance	\$\$
	Curve Improvements	30%-50% reduction in total crashes	\$-\$\$\$\$
	Dedicated Turn Lanes	28%-48% reduction in total crashes (left turn lanes) 14%-26% reduction in total crashes (right turn lanes)	\$\$\$
	Dilemma Zone Detection	Effective at reducing red-light running and rear end crashes	\$
	Dynamic Speed Monitoring Systems	Effective at reducing vehicle speeds, improving driver awareness, and promoting safer driving behaviors.	\$
	Enhanced Delineation	Effective at alerting drivers to oncoming curves and reducing out of control crashes	\$
	High Friction Surface Treatments	20% reduction in total crashes at intersections 48% reduction in injury crashes at curves	\$
	Improved Right Turn Angle	50% reduction in right turn crashes at intersections	\$\$
	Intersection Conflict Warning Systems	30% reduction in intersection crashes	\$\$
	Leading Pedestrian Intervals	13% reduction in pedestrian crashes	\$
HHH	Medians	46%-56% reduction in pedestrian crashes	\$\$\$\$
7			



Safety Countermeasure	Safety Benefits	Cost
Pedestrian Refuge Island	56% reduction in pedestrian crashes	\$
Permissive to Protected Left Turns	50% reduction in left turn crashes at intersections	\$
Rectangular Rapid Flashing Beacon (RRFB)	47% reduction in pedestrian crashes	\$
Reduced Left-Turn Conflict Intersections	22%-63% reduction in fatal and injury crashes	\$\$\$\$
Reverse Angle Parking	Improved sight lines for bicyclists and motorists; vehicle passengers channeled to curb	\$
Road Diets	19%-47% reduction in total crashes	\$\$\$
Road Safety Audits	Effective at identifying and mitigating roadway hazards	\$
Roadway Lighting	30%-50% reduction in total crashes at night	\$\$
Roundabouts	78%-82% reduction in fatal and injury crashes	\$\$\$\$
Rumble Strips	29%-51% reduction in out of control crashes (shoulder) 45-64% reduction in sideswipe crashes (centerline)	\$
Shared Use Paths	60% reduction in non-motorist crashes	\$\$\$
Signage	Effective at alerting drivers to oncoming hazards and reducing crashes.	\$
Systemic Application at Stop Intersections	10% reduction in fatal and injury crashes	\$
Vertical Deflections	30%-50% reduction in total crashes	\$
Walkways	65%-89% reduction in pedestrian crashes	\$\$
Yellow Change Intervals	12% reduction in injury crashes	\$

# **COST ESTIMATES PER UNIT**

\$\$\$\$ Less than \$100k \$\$\$\$ \$100k - \$500k \$\$\$\$ \$500k - \$1M \$\$\$\$ \$1M+



# **IMPLEMENTATION**

The Action element of the Fishers Safe Streets & Trails Plan is built to guide the implementation of strategies and projects aimed at reducing and eliminating fatalities and serious injuries. The Plan incorporates data-informed decision-making, focused interventions, and proven safety countermeasures from national best practices, while leveraging input from local stakeholders and communities. This section outlines the selected strategies, recommended policy and process changes, and targeted actions for high priority high-injury network (HIN) locations.

The strategies and projects identified in the Plan are based on the findings from the technical safety analysis, a review of existing policies and processes, and input received from the public and stakeholders.

The comprehensive set of strategies is centered on the Safe System Approach, a framework that emphasizes designing roadways that account for human error, reducing crash forces to prevent fatalities and serious injuries, and promoting shared responsibility among all road users, designers, and policy makers. The comprehensive list of projects and strategies is broken down into the following categories:

- Safety Strategies
- Policy and Process Changes
- HIN Interventions
- Systemic Interventions





### **APPROACH**

Zero is our goal. A Safe System is how we get there.

# SAFETY STRATEGIES

Safety strategies outline the framework within which a set of comprehensive strategies are developed and implemented. These strategies help define the approach that Fishers will deploy to effectively and proactively address issues of roadway safety.

# SAFETY ACTION TASK FORCE

The Safety Action Task Force will continue to be a working group to lead the implementation of the Plan and deliver results that improve safety. The SATF will be responsible for continued engagement with the public and collaborating with internal and external stakeholders to move strategies forward.

# **DATA-INFORMED DECISION MAKING**

Fishers will prioritize safety interventions supported by data for their effectiveness and identified by the Federal Highway Administration (FHWA) as "Proven Safety Countermeasures," which have demonstrated success in reducing crashes and fatalities.

Project locations, prioritization, and selection will also be a data-informed process ensuring that investments in roadway safety have the greatest impact.

### **EDUCATION & ENFORCEMENT**

Roadway design and engineering solutions offer proven benefits to reduce crashes and improve safety outcomes. To develop a safety focused culture, Fishers will implement robust safety marketing campaigns demonstrating shared responsibility. Fishers will also implement targeted enforcement enhancements because driving behaviors that endanger others will not be tolerated.

# **ACCOUNTABILITY**

The City of Fishers and the SATF are committed to the success of the Plan. On an annual basis, the City will produce and distribute a report detailing progress made on several key data points including but not limited to:

- Number of fatal and serious injury crashes
- Number of pedestrians or cyclists killed or seriously injured
- Miles of new sidewalks and trails constructed
- Number of new or enhanced treatments installed at crossings
- Review of safety marketing campaigns
- Upcoming safety projects

# POLICY & PROCESS CHANGES

To address the challenges of roadway safety in a comprehensive manner, engineering and design solutions alone are not sufficient. Policy and process changes are important strategies to better incorporate safety in the project development process, provide more tools to City officials to encourage safety improvements, improve driver behaviors, and develop a safety focused culture that begins with the City.

Proposed policy and process changes were developed after an extensive review of current policies and procedures. The project team reviewed policies or procedures in the following categories:

- ADA Transition Plan
- Complete Streets
- Education/Marketing Campaigns
- Project Selection
- Traffic Calming
- Trail Crossings
- Traffic Operations (Measures of Effectiveness)

Policy and process changes are listed in Table 9.

Table 9 - Policy and Process Changes

Table 7 Tolleg and	Process Changes	
New/Revised Policy or Process	Description	Timeframe
Complete Streets	Develop and implement a Complete Streets policy.	0-2 years
Traffic Calming	Develop a traffic calming program that establishes context appropriate traffic calming treatments and speed limits.	1-3 years
Corridor Access Management	Develop corridor access management policies and design guidelines that minimize conflict points on high traffic commercial corridors.	5+ years
Safe Routes to School	In collaboration with the Hamilton Southeastern School Corporation, develop a comprehensive Safe Routes to School Plan.	3-5 years
Marketing & Education	, ,	0-2 years
Enforcement	Increase targeting enforcement efforts to reduce dangerous driving behaviors.	0-2 years

# **COMPLETE STREETS POLICY**

Complete Streets is an approach to planning, designing, building, operating, and maintaining streets that enables safe access for all people who need to use them, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. A Complete Streets policy is a foundational element of a transportation system dedicated to the safety of all users. Key elements of a successful Complete Streets policy include:

- Vision and commitment
- Application to all projects and phases with only clear exceptions
- Compliance by private developers
- Adoption of design guidance that relies on national best practices
- Establishment of criteria for selecting projects
- Plan for implementation of the policy

# Resources for developing a Complete Streets Policy:

National Complete Streets Coalition Federal Highway Administration (FHWA) Indiana Department of Transportation (INDOT)

# TRAFFIC CALMING PROGRAM

Speeding increases the number of crashes as well as overall severity. Speeding significantly increases that likelihood that pedestrians and cyclists are killed in a crash. Over 20% of fatal and serious injury crashes in Fishers are caused by speeding or some other unsafe driving behavior.

A Traffic Calming Program will establish resources and responsibilities across City departments to address speeding. Safe speeds can be achieved through context appropriate traffic calming treatments as well as targeted enforcement and educational outreach. A Traffic Calming Program will also establish City-approved design solutions for rapid deployment under appropriate conditions.

# Resources for developing a Traffic Calming Program:

Federal Highway Administration (FHWA) U.S. Department of Transportation (USDOT) National Association of Transportation Officials (NACTO)



# **CORRIDOR ACCESS MANAGEMENT**

Corridor access management refers to the land development regulations, roadway design standards, and control of entry and exit points along a roadway. This includes intersections with other roadways and driveways that serve as access points to adjacent properties. Access management treatments may include:

- Reduce density through driveway closure, consolidation, or relocation
- Manage spacing of intersection and access points
- Implement raised medians that preclude across-roadway movements
- Utilize designs such as roundabouts or reduced left-turn conflicts (such as restricted crossing U-turn, median U-turns, etc.)
- Use lower speed one-way or two-way off-arterial circulation roads

Resources for developing Corridor Access Management policies:

Federal Highway Administration (FHWA) National Cooperative Highway Research Program (NCHRP)

# SAFE ROUTES TO SCHOOL PLAN

Safe Routes to School (SRTS) is a holistic, multifaceted approach to increasing walking and bicycling to school. SRTS programs often include safety education, targeted traffic enforcement, and encouragement activities like Walk to School Day or daily Walking School Buses. Since schools in Fishers can vary widely in terms of nearby residential density and safe pedestrian and bicycle infrastructure, a SRTS Plan would provide the City and the Hamilton Southeastern School Corporation a comprehensive view of travel patterns, preferences, transportation facilities, risks, and resources.

Resources for initiating a Safe Routes to School Plan:

U.S. Department of Transportation (USDOT) National Center for Safe Routes to School Safe Routes Partnership Indiana Safe Routes to School Guidebook







# MARKETING & EDUCATION

Road safety educational campaigns are flexible safety tools used by national, state, local, and non-profit agencies. The goal of these campaigns is to encourage better/ safer driving behaviors through effective messaging. This messaging can be achieved through different strategies like improving knowledge and/or awareness of risks and preventative behaviors, changing underlying factors known to influence behaviors, modifying problem behaviors, and maintaining or encouraging safetuconscious behaviors. Marketing and education campaigns should be targeted to specific users groups and/or specific behaviors such as:

- Distracted driving
- Impaired driving
- Pedestrian safety (for pedestrians and drivers)
- Cyclist safety (for cyclists and drivers)
- Young drivers
- Senior drivers
- Roundabout safety (navigation, crossing, and sharing the road)

# Resources for developing marketing and education campaigns for road safety:

National Highway Transportation Safety Administration (NHTSA) World Health Organization (WHO) Traffic Injury Research Foundation (TIRF)



### **ENFORCEMENT**

Law enforcement plays a critical role in overall roadway safety, and targeted enforcement strategies can be effective tools to mitigate unsafe driving behaviors such as speeding, aggressive driving, red light running, and distracted driving. Public input clearly identified unsafe driving behaviors as problematic and unwanted and supported more effective enforcement. Limited resources make increased enforcement challenging; however, this Plan demonstrates that effective enforcement strategies are part of the City's comprehensive approach to improving road safety for all users.

# Resources for enhancing targeted enforcement efforts:

International Association of Chiefs of Police (IACP)

National Sheriffs' Association (NSA) U.S. Department of Justice



# HIN INTERVENTIONS

The High Injury Network serves as the foundation for Fishers' safety projects and strategies. The HIN identifies the corridors with the highest concentrations of fatal and serious injury crashes, allowing Fishers to focus on the areas that will have the greatest impact on reducing fatalities and serious injuries.

The following nine (9) corridors were selected for additional evaluation and are considered high priority corridors:

- Allisonville Road
- 96th Street
- 104th Street
- 116th Street
- 126th Street
- 131st Street
- Brooks School Road
- Olio Road
- Southeastern Parkway

High priority corridors were selected based on crash history, access to public spaces and commercial centers, and the potential for pedestrian and bicycle improvements. The following set of information is provided for each corridor.

### **EXISTING CONDITIONS**

Existing conditions include important roadway characteristics such as functional class, number of lanes, adjacent land uses, and the presence and/or quality of pedestrian infrastructure and trails.

# **CONTEXT**

Context describes any in-progress or future capital improvements, potential or in-progress adjacent land developments, and any specifics from the 2040 Thoroughfare Plan.

### **CRASHES**

The types and counts of crashes that contribute to fatal and serious injuries.

# **PRIORITIZATION**

Prioritization offers a collection of safety and demographic related data points to be used in future project prioritization processes. Safety Index and Demographic Index have possible scores from 0-1. USDOT Disadvantage Index has possible score from 1-10. For each index score, a percentile is also provided (p) to illustrate a relative comparison.

# **POTENTIAL STRATEGIES**

Potential strategies are listed to improve safety. Strategies are proven safety countermeasures and are part of either a short-term strategy (0-5 years) or a long-term strategy (5+ years). Strategies were developed based on observed crash history, existing roadway characteristics, and any known capital projects or land developments.

# **ALLISONVILLE ROAD**

### **EXISTING CONDITIONS**

Allisonville Road is a principal arterial running north-south on the western edge of Fishers. It is a 5-lane roadway with a median/left-turn lane from F 96th Street to E 131st Street. North of E 131st Street to E 146th Street, it transitions to a mix of 2-lane and 4-lane sections with turn lanes at major intersections. Major intersections include new roundabouts at 96th Street and 146th Street, and signals at 106th Street and 116th Street. Sidewalks or shared-use paths are continuous from 96th to 131st Street but become discontinuous northward to 146th Street. Marked pedestrian crossings exist at intersections, though overall crossing locations are limited. Nearby land uses are mostly residential, with scattered nonresidential uses. The 116th Street intersection features a large commercial center.

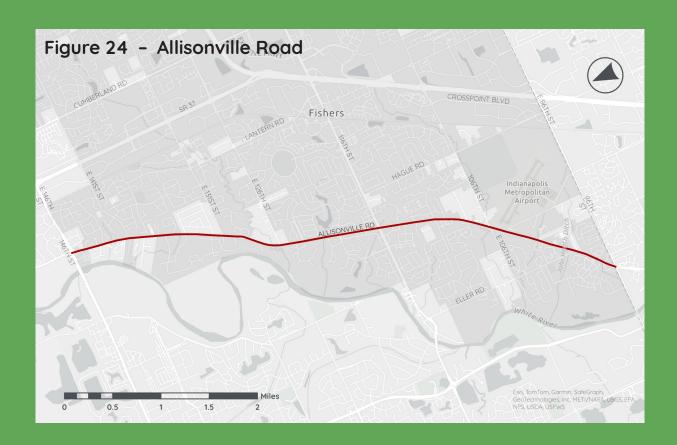
### **NOTES/CONTEXT**

Planned projects include converting intersections at 96th and 116th Streets into roundabouts, with 96th Street under construction and 116th Street in the design phase. The IMPO's 2050 MTP lists a grade-separated interchange at Allisonville Road and 146th Street (under construction) and a future widening from 131st to 146th Street. Survey results identified Allisonville Road and 106th Street as a dangerous intersection.

The 2040 Fishers Thoroughfare Plan envisions Allisonville Road as a 4-lane corridor with a turn lane, 10-foot shared-use paths, and landscape buffers. It suggests further study of 126th to 146th Streets as redevelopment occurs, with a minimum 3-lane section. The 2022 Corridor Study recommends mixed-use development near 116th Street, reduced parking requirements, and better pedestrian and bike connectivity.

Crash Type	Crashes
Right Angle	10
Rear End	4
Same Direction Sideswipe	3
Left Turn	3
Ran Off Road	2
Head On	2
Other - Explain In Narrative	2
Opposite Direction Sideswipe	1
Collision With Object In Road	1
Right Turn	1

Prioritization Criteria	
Length	5.8
Safety Index	0.27 (p99.7)
Total Crashes	29
Bike/Ped Crashes	2
Crashes per Mile	5
Total Injuries	40
Total Fatalities	2
Demographic Index	0.43 (p88.6)
USDOT Disadvantaged Communities Index	2.24 (p15.5)



Short Term Strategy	Purpose	Cost
Enhanced Delineation	Improve roadway visibility and features	\$
Yellow Change Intervals	Reduce red light running and right angle crashes	\$
Systemic Application of Multiple Low-Cost Countermeasures at stop-controlled intersections	Reduce crashes at unsignalized intersections	\$
Crosswalk enhancements	Improve pedestrian safety at intersections	\$
Long Term Strategy	Purpose	Cost
Long Term Strategy Intersection safety improvements at 106th Street	Purpose	<b>Cost</b> \$-\$\$\$
	Improved comfort and safety for pedestrian and bicyclists	
Intersection safety improvements at 106th Street Pedestrian Refuge Island or Signal Improvements	Improved comfort and safety for pedestrian and	\$-\$\$\$\$

### **EXISTING CONDITIONS**

96th Street is a principal arterial between the White River and Lantern Road. The roadwau varies, startina as a 4-lane divided road near the White River and expanding to nine lanes east of I-69. Most sections include a two-way left-turn lane or median. Major intersections include roundabouts at Allisonville Road (under construction) and Lantern Road, and signals at Masters Road, Hague Road/ Corporation Drive, the I-69 interchange, and Kincaid Drive/Village Way. Sidewalks are present on most of the corridor but are missing between Hague Road and the Regions Bank driveway. Pedestrian crossings are marked only at the Lantern Road roundabout. The Nickel Plate Trail will cross 96th Street west of Uptown Drive. Commercial uses are concentrated between Willow View Road and Lantern Road, with residential uses west of Willow View Road.

### NOTES/CONTEXT

Future projects include the Nickel Plate Trail Bridge over 96th Street, now in the pre-construction phase, and a roundabout replacing the Allisonville Road signalized intersection.

The 2040 Fishers Thoroughfare Plan envisions a 10-foot shared-use path, 6-foot sidewalk, landscape buffers, a median/center turn lane, and four lanes from the White River to Masters Road. From Masters Road to Lantern Road, the design expands to six lanes with two sidewalks and buffers.

Crash Type	Crashes
Right Angle	11
Left Turn	5
Same Direction Sideswipe	3
Rear End	3
Other - Explain In Narrative	3
Head On Between Two Motor Vehicles	1

Prioritization	
Length	3.3
Safety Index	0.25 (p96.1)
Total Crashes	26
Bike/Ped Crashes	2
Crashes per Mile	7.9
Total Injuries	40
Total Fatalities	0
Demographic Index	0.43 (p88.6)
USDOT Disadvantaged Communities Index	2.6 (28.5)



Short Term Strategy	Purpose	Cost
Yellow Change Intervals	Reduce red light running and right-angle crashes	\$
Leading Pedestrian Intervals	Reduce pedestrian crashes	\$
Crosswalk Enhancements	Reduce pedestrian crashes and reduce vehicle speeds	\$
Permissive to protected left turns	Reduce left turn, right angle, and head on crashes	\$
Long Term Strategy	Purpose	Cost
Complete Sidewalks and/or Shared Use Path between Hague Road and the Region's Bank driveway	Improve Pedestrian Mobility and Safety	\$-\$\$\$
Corridor Access Management as parcels are redeveloped near I-69	Reduce Conflict Points	\$\$-\$\$\$\$

### **EXISTING CONDITIONS**

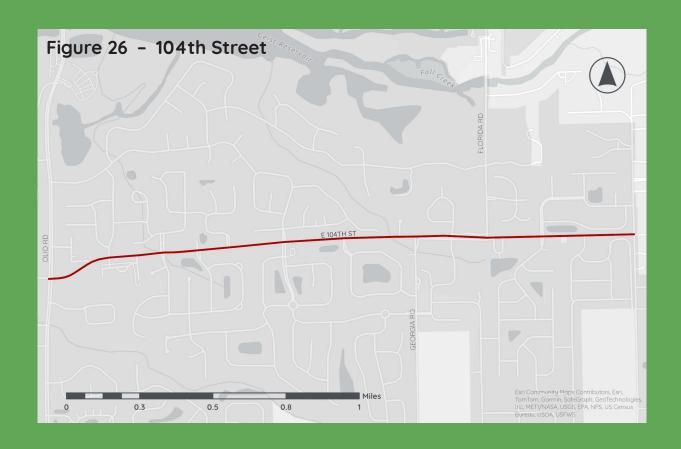
104th Street is a 2-lane major collector with turn lanes at major intersections. Major intersections occur at the signalized intersection at Olio Road and stop controlled intersection at Cyntheanne Road. Sidewalks are on both sides of the street for most portions of the roadway but are disconnected on the north side. There are no protected pedestrian or bike crossings other than the crosswalks at Olio Road. Nearby land uses are primarily residential with a small number of commercial uses and a school at the intersection with Olio Road.

# NOTES/CONTEXT

The 2040 Fishers Thoroughfare Plan includes a Corridor Plan for 104th street which envisions a typical 2-lane section with two, 10-foot shared use paths separated from the roadway by two landscape buffers

Crash Type	Crashes
Rear End	2
Left Turn	1
Same Direction Sideswipe	1
Right Angle	1

Prioritization	
Length	2.0
Safety Index	0.2 (p99.3)
Total Crashes	5
Bike/Ped Crashes	1
Crashes per Mile	2.5
Total Injuries	8
Total Fatalities	2
Demographic Index	0.0 (p0.0)
USDOT Disadvantaged Communities Index	1.5 (p1.2)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop-controlled intersections	Reduce crashes at unsignalized intersections	\$
Long Term Strategy	Purpose	Cost
Complete Sidewalks and/or Shared Use Path between Hammerly's Way and Oxer Drive	Improve pedestrian mobility and safety	\$-\$\$\$
RRFB at mid-block crossings	Improve bicycle and pedestrian safety near between existing pedestrian and bike facilities	\$\$\$

### **EXISTING CONDITIONS**

E 116th Street is an east-west principal arterial bisecting Fishers. From the White River to Olio Road, 116th Street varies from a 4-lane to a 7-lane section with turn lanes at major intersections and a median/left-turn lane. Sidewalks or shared-use paths run the length of 116th Street on both sides of the corridor, with a small number of disconnected segments. Major intersections include signals at Allisonville Road, the I-69 interchange, Cumberland Road, and Olio Road, There are marked pedestrian crossings at major intersections, but few protected mid-block crossing opportunities. However, there is an underpass for the Nickel Plate Trail. Land uses are varied along the corridor. Near Allisonville Road, Olio Road, and the 1-69 interchange, there is a concentration of commercial uses, while residential is the primary use throughout the rest of the corridor.

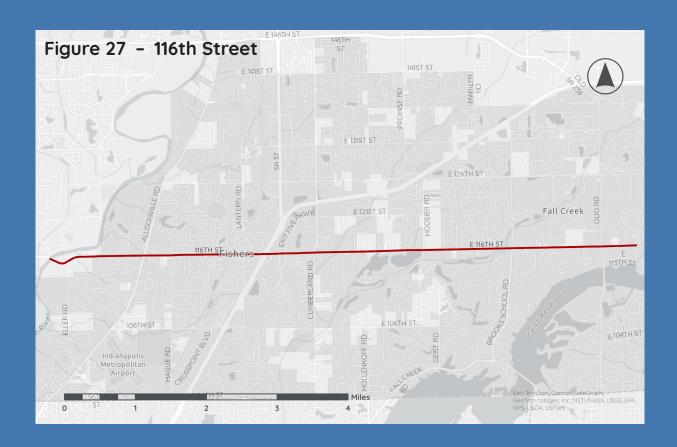
### **NOTES/CONTEXT**

Future projects include reconstructing the 116th Street and Allisonville Road intersection into a roundabout, currently in pre-construction. The Allisonville Road Corridor Study recommends examining the River Glen Drive and 116th Street intersection for safer pedestrian and cyclist crossings and considering wider, more separated shared-use facilities along 116th Street.

The 2040 Fishers Thoroughfare Plan envisions 116th Street with four travel lanes, a turn-lane/landscape median, a 10-foot shared-use path, a 6-foot sidewalk, and landscape buffers. Further study is recommended for the stretch between Hague Road and Commercial Drive to address land use changes and mobility needs

Crash Type	Crashes
Left Turn	21
Right Angle	14
Rear End	13
Head On Between Two Motor Vehicles	7
Other - Explain In Narrative	5
Same Direction Sideswipe	2
Left/Right Turn	1
Ran Off Road	1

Prioritization	
Length	8.3
Safety Index	0.58 (p100)
Total Crashes	64
Bike/Ped Crashes	6
Crashes per Mile	7.7
Total Injuries	88
Total Fatalities	5
Demographic Index	0.69 (p100)
USDOT Disadvantaged Communities Index	2.6 (p28.5)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop controlled intersections	Reduce crashes at unsignalized intersections	\$
Yellow Change Intervals	Reduce red light running and right angle crashes	\$
Permissive to protected left turn	Reduce left turn, right angle, and head on crashes	\$
Crosswalk enhancements	Reduce pedestrian crashes and reduce vehicle speeds	\$
Long Term Strategy	Purpose	Cost
Complete Sidewalks and/or Shared Use Path where disconnected	Improve Pedestrian Mobility and Safety	\$-\$\$\$
Corridor access management near major intersections	Reduce conflict points	\$\$-\$\$\$\$
Pedestrian refuge island and RRFB at mid-block crossings	Improve crossing safety, visibility, and comfort for pedestrians	\$\$

# **EXISTING CONDITIONS**

126th Street is a minor arterial from Allisonville Road to Olio Road. It varies in configuration from a 2-lane undivided road to a 4-lane divided roadway with a median/left-turn lane at intersections. Major intersections include a roundabout at the SR 37 interchange, and signals at Allisonville Road, Brooks School Road and at Olio Road. There are sidewalks or shared use paths on at least one side of the roadway along the entirety of the corridor, except between Allisonville Road and Pasco Street. The Nickel Plate Trail has a pedestrian signal where it crosses 126th Street. Most signalized intersections and roundabouts have pedestrian crossing facilities on at least one leg crossing 126th Street. However, few midblock crossings exist between major intersections. Uses along the corridor are primarily residential with a large commercial center located near SR 37.

### NOTES/CONTEXT

The Allisonville Road Corridor Study recommended evaluating signal timing changes and other bicycle and pedestrian safety improvements at the intersection of 126th Street and Allisonville Road, in anticipation of extended shared use paths on 126th Street.

The 2040 Fishers Thoroughfare Plan includes a Corridor Plan for 126th street which envisions a typical section with four travel lanes, a turn-lane/landscape median, a 10-foot shared use path and a 6-foot sidewalk separated by two landscape buffers. Between Allisonville Road and Lantern Road the plan specifies a 2-lane roadway.

Crash Type	Crashes
Right Angle	9
Head On Between Two Motor Vehicles	3
Rear End	2
Left Turn	2
Left/Right Turn	2
Right Turn	1
Non-Collision	1

Prioritization	
Length	6.5
Safety Index	0.25 (p99.5)
Total Crashes	20
Bike/Ped Crashes	1
Crashes per Mile	3.1
Total Injuries	33
Total Fatalities	2
Demographic Index	0.69 (p100)
USDOT Disadvantaged Communities Index	2.6 (p28.5)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop-controlled intersections	Reduce crashes at unsignalized intersections	\$
Yellow Change Intervals	Reduce red light running and right-angle crashes	\$
Crosswalk enhancements	Reduce pedestrian crashes and reduce vehicle speeds	\$
Long Term Strategy	Purpose	Cost
Complete Sidewalks and/or Shared Use Path where missing near Allisonville Road	Improve Pedestrian Mobility and Safety	\$-\$\$\$
Pedestrian refuge island and PHB or RRFB at mid- block crossings	Improve crossing safety, visibility, and comfort for pedestrians	\$\$

# **131ST STREET**

# **EXISTING CONDITIONS**

131st Street is a minor arterial from Allisonville Road to Sand Creek Intermediate School a major collector from Sand Creek Intermediate School to Marilyn Road, and a local road from I-69 to Olio Road. It varies from a 2-lane roadway to a 4-lane roadway with turn lanes at intersections. Major intersections include the signal at Allisonville Road, and roundabouts at Lantern Road, the IN 37 interchange, and Cumberland Road. There are sidewalks or shared use paths almost continuously alona the length of the corridor on at least one side of the roadway, but there are incomplete portions of the network. There are no sidewalks between 1-69 and Packers Avenue. The Nickel Plate Trail has a pedestrian signal at 131st Street. Most major intersections, including roundabouts, have pedestrian crossing facilities. However, few midblock crossings exist between major intersections. The

corridor is mostly residential in use with schools concentrated east of Promise Road in addition to a commercial center near the IN 37 interchange. Retail and commercial uses are also concentrated between Saxony Boulevard and Olio Road.

# **NOTES/CONTEXT**

Planned future improvements include a new roundabout at 131st Street and Howe Road, currently a side-street stop-controlled intersection. This project is in the pre-construction phase and is anticipated to begin in Spring 2025. Survey results specified 131st Street as a route respondents felt unsafe walking or biking on due to incomplete or missing sidewalks and trails. Respondents reported the intersection at 131st Street and Brooks School Road is dangerous and unsafe to cross. The 2040 Fishers Thoroughfare Plan does not include specifications for 131st Street.

Crash Type	Crashes
Right Angle	9
Rear End	7
Head On Between Two Motor Vehicles	2
Left Turn	2
Same Direction Sideswipe	1
Other - Explain In Narrative	1
Ran Off Road	1

Prioritization	
Length	5.5
Safety Index	0.26 (99.6)
Total Crashes	23
Bike/Ped Crashes	2
Crashes per Mile	4.2
Total Injuries	30
Total Fatalities	4
Demographic Index	0.34 (p72.7)
USDOT Disadvantaged Communities Index	2.6 (28.3)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop controlled intersections	Reduce crashes at unsignalized intersections	\$
Yellow Change Intervals	Reduce red light running and right angle crashes	\$
Crosswalk enhancements	Reduce pedestrian crashes and reduce vehicle speeds	\$
Long Term Strategy	Purpose	Cost
Complete Sidewalks and/or Shared Use Path where disconnected	Improve Pedestrian Mobility and Safety	\$-\$\$\$
Pedestrian refuge island and RRFB at mid-block crossings	Improve crossing safety, visibility, and comfort for	\$\$
C103311193	pedestrians	

# **BROOKS SCHOOL ROAD**

# **EXISTING CONDITIONS**

Brooks School Road is a 2-lane minor arterial with turn lanes at major intersections. Major intersections include the roundabout at Fall Creek Road, signals at 116th Street and 126th Street, and a roundabout at 136th Street. There are sidewalks or shared used paths on at least one side of the roadway along almost the entire corridor, however some segments are missing leaving the network incomplete. Crosswalks exist at major intersections, but there are few crossing opportunities for pedestrians and bicyclists mid-block. Land uses vary along the corridor. Residential is the primary land use with commercial uses scattered throughout the corridor, though concentrated near intersections.

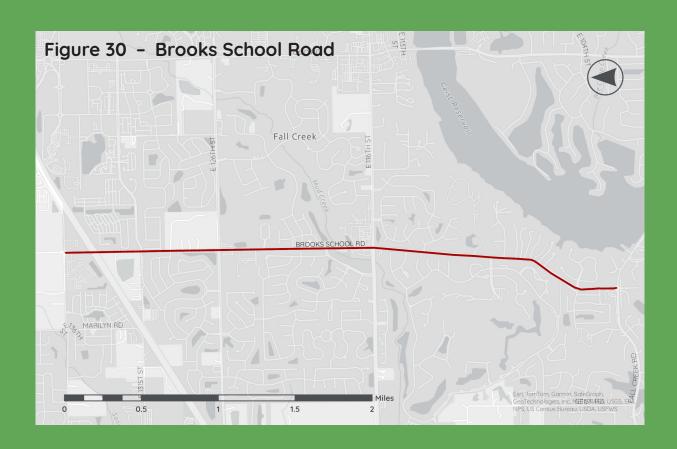
### NOTES/CONTEXT

Survey results specified Brooks School Road as a route respondents felt unsafe walking or biking on due to incomplete or missing sidewalks and trails. Respondents also reported the intersection at 131st Street and Brooks School Road is dangerous and unsafe to cross.

The 2040 Fishers Thoroughfare Plan includes a Corridor Plan for Brooks School Road which envisions a 2-lane roadway with two, 10-foot shared use paths separated by two landscape buffers.

Crash Type	Crashes
Right Angle	8
Head On Between Two Motor Vehicles	3
Left Turn	3
Rear End	2
Ran Off Road	2

Prioritization	
Length	3.7
Safety Index	0.26 (p99.5)
Total Crashes	18
Bike/Ped Crashes	0
Crashes per Mile	4.9
Total Injuries	26
Total Fatalities	0
Demographic Index	0.31 (p70.5)
USDOT Disadvantaged Communities Index	2.2 (p14.8)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop-controlled intersections	Reduce crashes at unsignalized intersections	\$
Long Term Strategy	Purpose	Cost
Pedestrian refuge island and PHB or RRFB at mid- block crossings	Improve crossing safety, visibility, and comfort for pedestrians	\$\$
Complete Sidewalks and/or Shared Use Path where network is disconnected	Improve Pedestrian Mobility and Safety	\$-\$\$\$
Roundabout at 131st Street and Brooks School Road	Reduce right angle crashes and eliminate crossing conflict points	\$\$\$\$

# **OLIO ROAD**

### **EXISTING CONDITIONS**

Olio Road is a north-south principal arterial that runs in the eastern portion of Fishers. Olio Road is primarily a 4-lane divided roadway with a median with turn lanes at major intersections. Major intersections include the roundabout at Southeastern Parkway and 136th Street, and the signals at 126th Street, 116th Street, and 96th Street. There are sidewalks or shared use paths on at least one side of the roadway for the length of the corridor. Pedestrian crossings are marked at major intersections, but there are few crossing opportunities for pedestrian and bicyclists mid-block. Land use is primarily residential along the corridor with commercial nodes near major intersections. Additionally, there is a commercial stretch of the corridor between 116th and 126th Streets with educational uses near 126th Street and retail uses near 116th Street.

### NOTES/CONTEXT

Planned projects for Olio Road include the roundabout at Southeastern Parkway/ 136th Street. The existing roundabout is in the design phase to improve utilization for increased traffic flow while decreasing side swipe crashes.

The 2040 Fishers Thoroughfare Plan includes a Corridor Plan for Oilio Road which envisions four travels lanes, two unprotected 5-foot bike lanes, two right-turn lanes and two, 10-foot shared use paths separated by two landscape buffers. Between 116th Street and 126th Street, Olio Road is planned to be a five or more lane roadway.

Crash Type	Crashes
Right Angle	7
Left Turn	4
Other - Explain In Narrative	2
Same Direction Sideswipe	1
Right Turn	1
Rear End	1
Head On Between Two Motor Vehicles	1
Ran Off Road	1

Prioritization	
Length	4.2
Safety Index	0.51 (p99.9)
Total Crashes	18
Bike/Ped Crashes	0
Crashes per Mile	4.3
Total Injuries	27
Total Fatalities	4
Demographic Index	0.21 (p63.6)
USDOT Disadvantaged Communities Index	2.2 (p14.8)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop controlled intersections	Reduce crashes at unsignalized intersections	\$
Crosswalk enhancements	Reduce pedestrian crashes and reduce vehicle speeds	\$
Long Term Strategy	Purpose	Cost
Bicycle Lanes – protected cycle track	Reduce bicycle crashes and reduce vehicle speeds	\$\$
Pedestrian refuge island and RRFB at mid-block crossings	Improve crossing safety, visibility, and comfort for pedestrians	\$\$

# **SOUTHEASTERN PARKWAY**

# **EXISTING CONDITIONS**

Southeastern Parkway, from Olio Road to the Hamilton County line, is a 4.5-mile major collector with one lane in each direction for most of the corridor. Most of the corridor north of Cyntheanne Road is maintained by the City while the southern portion is maintained by the County. There are multi-lane roundabout intersections at Olio Road, 136th Street, 126th Street, and Cuntheanne Road. Pedestrian crossings at these roundabouts typically includes signage and a marked crosswalk. Adjacent land uses are mainly suburban residential but also include medical, religious, and educational facilities. There are no onstreet bicycle facilities nor sidewalks, but there are some disconnected multiuse trails near the Avalon of Fishers subdivision.

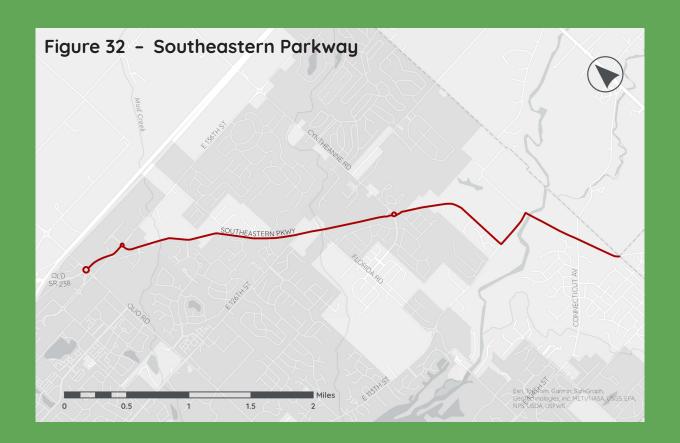
### NOTES/CONTEXT

The roundabout at 126th Street just recently opened to traffic in 2024. The roundabout at Olio Road is currently in the design phase for intersection improvements. Upcoming developments along the corridor include the Grantham subdivision at Cyntheanne Road (200 single family units, under construction), the Hy-Vee commercial development at Olio Road (under review), as well as a Meijer commercial development at Cyntheanne Road (under review).

The 2040 Fishers Thoroughfare Plan includes a Corridor Plan for Southeastern Parkway which recommends further study of the corridor to anticipate future requirements. The plan outlines Southeastern Parkway as a 2-lane roadway with a left-turn lane/landscape median and two, 10-foot shared use paths separated by two landscape buffers.

Crash Type	Crashes
Ran Off Road	5
Right Angle	4
Rear End	3
Same Direction Sideswipe	2

Prioritization	
Length	4.8
Safety Index	0.15 (p99.1)
Total Crashes	14
Bike/Ped Crashes	0
Crashes per Mile	2.9
Total Injuries	23
Total Fatalities	3
Demographic Index	0.17 (p47.7)
USDOT Disadvantaged Communities Index	1.5 (p1.2)



Short Term Strategy	Purpose	Cost
Systemic Application of Multiple Low-Cost Countermeasures at stop-controlled intersections	Reduce crashes at unsignalized intersections	\$
Rumble Strips	Reduce ran off road crashes	\$
Enhanced Delineation	Improve roadway visibility and features	\$
Intersection Conflict Warning Systems	Reduce right angle and rear end crashes	\$\$
Long Term Strategy	Purpose	Cost
Pedestrian refuge island and PHB or RRFB at midblock crossings	Improve crossing safety, visibility, and comfort for pedestrians	\$\$

# SYSTEMIC INTERVENTIONS

To mitigate the effects of high-risk features along roadways throughout Fishers, a systemic application of safety countermeasures is recommended. Systemic interventions are based on the identified risk factors and the type of risk posed by each high-risk feature.

Proven safety countermeasures suitable for systemic applications are low-cost and can proactively mitigate high-risk features. The previously identified high-risk features and associated potential systemic interventions are listed in Table 10.

Table 10 - Systemic Interventions

Roadway Characteristic	High-Risk Feature	Systemic Interventions
Demographics	Demographic Index Class 4 Demographic Index Class 5	Sidewalks and Trails Pedestrian Refuge Islands Leading Pedestrian Intervals Permissive to Protected Left Turns Lighting
Jurisdiction	County Road State Road	Enhanced Delineation Rumble Strips High Friction Surface Treatments Curve Improvements
Functional Class	Principal Arterial Major Collector Minor Arterial	Corridor Access Management Median Barriers Dilemma Zone Detection Systems Intersection Conflict Warning Systems Permissive to Protected Left Turns Improved Right Turn Angles Sidewalks and Trails
Number of Lanes	2 lanes 3 lanes	Corridor Access Management Median Barriers Intersection Conflict Warning Systems Permissive to Protected Left Turns Sidewalks and Trails
Multimodal Proximity	Within 100 feet of a sidewalk/trail	Dynamic Speed Displays Intersection Conflict Warning Systems Pedestrian Refuge Islands Leading Pedestrian Intervals Sidewalks and Trails Crosswalk Enhancements Rectangular Rapid Flashing Beacons (RRFB) Lighting