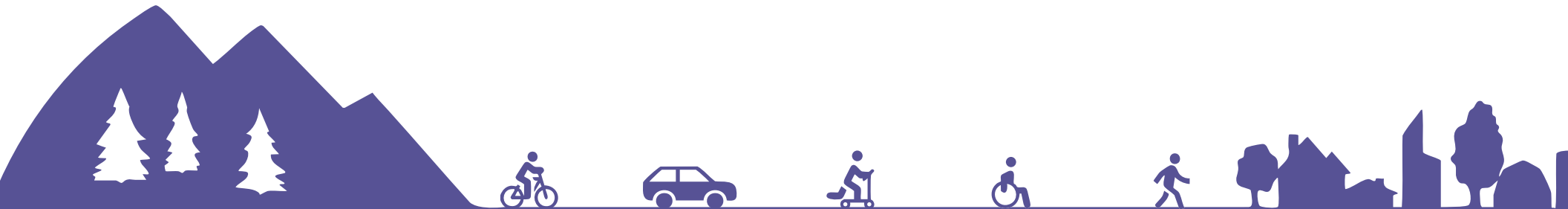# City of Lafayette

VISION ZERO ACTION PLAN

Lafayette City Council

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Governments

Lafayette Residents
Lafayette Planning Commission
Lafayette Senior Advisory Board
Mountain View Fire Rescue
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Approach Turn Crash - a crash that occurs when someone turns left in front of oncoming traffic without yielding the right-of-way.

Bicycle Crash – this crash type involves a motor vehicle and at least one person who is biking or rolling.

Broadside Crash – also known as a T-bone crash, a broadside crash happens when the front end of one car crashes into the side of another car from the intersecting roadway.

CDOT – Colorado Department of Transportation

Crash Modification Factor – used to compute the expected number of crashes after implementing a countermeasure on a street or at an intersection.

Crash Severity – refers to the extent of injury and/or property damage resulting from a traffic crash. Crash severity is categorized as property damage only, possible injury, minor injury, serious injury, or fatality.

DRCOG – Denver Regional Council of Governments

Fatal Crash – crashes resulting in one or more people dying within 30 days of the crash as a result of the injuries sustained in the collision.

FHWA – Federal Highway Administration

Injury Crash – a traffic crash that results in one or more individuals sustaining injuries, ranging from minor to serious (a "severe" crash as defined later includes fatalities).

KSI Crash – a term used to describe any crash resulting in a person being Killed or Seriously Injured (KSI).

High-Injury Network (HIN) – a data-driven mapping tool which identifies segments and intersections with the highest concentration of crashes resulting in injury, and serves as a tool to prioritize investment in safety projects.

High-Risk Network (HRN) – a data-informed framework that identifies roadway segments and intersections with elevated crash risk based on contributing factors such as roadway design, speed, and user behavior, and is used to guide proactive safety interventions before severe crashes occur.

Multimodal Transportation Plan (MMTP) - a planning effort completed by Lafayette in 2023 to assess current and future transportation needs and identify solutions to improve mobility, safety, and connectivity for all travel modes through data analysis and community input.

Pedestrian Crash – involves a motor vehicle and at least one person on foot.

Rear-End Crash – this crash type occurs when the front of one vehicle collides with the back of another vehicle.

Safe Streets for All (SS4A) – a federal, discretionary grant program with $5 billion to be spent nationwide between 2022 and 2026 to prevent roadway deaths and serious injuries.

Serious Injury Crash – a crash that results in an incapacitating (life altering) injury.

Sideswipe Crash - this crash occurs when vehicles traveling side-by-side make contact, often due to lane drift or unsafe lane changes.

Vision Zero – a transportation strategy to eliminate all traffic fatalities and serious injuries while increasing safe, healthy, equitable mobility for all. Vision Zero recognizes that humans make mistakes and therefore the transportation system should be designed to minimize the consequences of human error.

Vision Zero Action Plan (VZAP) - a strategic plan that analyzes past crashes and system challenges to identify actions that prevent severe injuries and fatalities.

Vulnerable Road User – a pedestrian, bicyclist, or motorcyclist.

TABLE OF FIGURES

TABLE OF TABLES

PROJECT OVERVIEW

The City of Lafayette strives to make meaningful progress in creating a safe and connected transportation system. Recognizing the importance of implementing a regional approach to roadway safety, Lafayette, in collaboration with Boulder County and the Town of Superior, applied and received funding for the 2023 Safe Streets for All (SS4A) grant to develop a Vision Zero Action Plan (VZAP). This initiative includes the creation of three standalone Vision Zero Action Plans for Boulder County, Lafayette, and Superior to improve roadway safety and support a cohesive regional strategy to enhance roadway safety. By fostering inter-agency collaboration and aligning safety priorities across jurisdictions, the Plan will improve its effectiveness and implementation potential.

The City's recent and ongoing planning efforts, policy, and infrastructure investments demonstrate Lafayette's commitment to a transportation system that safely accommodates travel for all modes, ages, and abilities. Lafayette recognizes that traffic-related injuries or fatalities are preventable and is committed to providing a safer transportation environment for all users.

The Lafayette VZAP provides a data-driven, community-informed strategy to address roadway safety concerns and implement targeted solutions.

The goal of the plan is to equitably prioritize safety improvements, ensuring that roadway users—regardless of mode, ability, or location—can travel safely throughout the region. The plan identifies key high-risk areas based on crash data analysis and community feedback to prioritize safety improvements at the most critical locations.

WHAT IS VISION ZERO?

Vision Zero is a global movement focused on eliminating all traffic-related deaths and serious injuries. It recognizes that while human error is inevitable, no loss of life on our streets is acceptable and therefore the transportation system should be designed to minimize the consequences of these mistakes. The goal of Vision Zero is to create a transportation system that prioritizes safety, using data-driven analysis to identify the root causes of traffic crashes and addressing them with comprehensive strategies rooted in the **Safe System Approach**.

WHAT IS A VISION ZERO ACTION PLAN?

A **Vision Zero Action Plan** is a strategic document that evaluates historic crash data and system challenges and identifies strategies and actions to reduce the potential for significant injuries and fatalities in the future.

WHAT IS THE SAFE STREETS FOR ALL (SS4A) GRANT PROGRAM?

In 2021, the Bipartisan Infrastructure Law established the **SS4A program** with $5 billion in appropriated funds between 2022 and 2026. The program provides financial support for the planning and infrastructure initiatives to prevent death and serious injuries on roads and streets involving all roadway users.

WHAT IS THE SAFE SYSTEM APPROACH?

Rather than depending on flawless human behavior, the Safe System Approach emphasizes redundancy by incorporating multiple layers of protection—through both infrastructure and non-infrastructure changes—into the transportation system. This ensures that when one safeguard fails others remain in place. This includes the 5 E's - Engineering (safer road designs), Enforcement (ensuring compliance with traffic laws), Education (promoting safe behaviors and awareness), Equity (ensuring safety solutions serve all road users fairly) and Emergency Response (improving post-crash care). Together, these elements create multiple layers of protection to reduce severe injuries and fatalities.

While this plan primarily focuses on the first four E's, initial conversations have begun around strengthening post-crash care through data sharing between regional first responders and local hospitals—an area that may be further explored through future regional collaboration or funding opportunities.

Traditional Approach	VS	Vision Zero
Traffic deaths are *inevitable*		Traffic deaths are *preventable*
Perfect human behavior		Integrate *human failing* in approach
Prevent *collisions*		Prevent *fatal and severe crashes*
Individual responsibility		*Systems* approach
Saving lives is *expensive*		Saving lives is *not expensive*

Figure 1. Traditional Approach vs Vision Zero

The Safe System Approach is based on six key principles*:

1. **Death and serious injuries are unacceptable:** A Safe System Approach prioritizes the elimination of crashes that result in death and serious injuries.

2. **Humans make mistakes:** Roadway designs must anticipate and accommodate human error.

3. **Humans are vulnerable:** The transportation system should protect users from fatal or serious injuries.

4. **Responsibility is shared:** Government agencies, policymakers, engineers, and road users all play a role in safety.

5. **Safety is proactive:** Risks should be identified and mitigated before crashes occur.

6. **Redundancy is crucial:** Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.

* *Source: U.S. Department of Transportation*
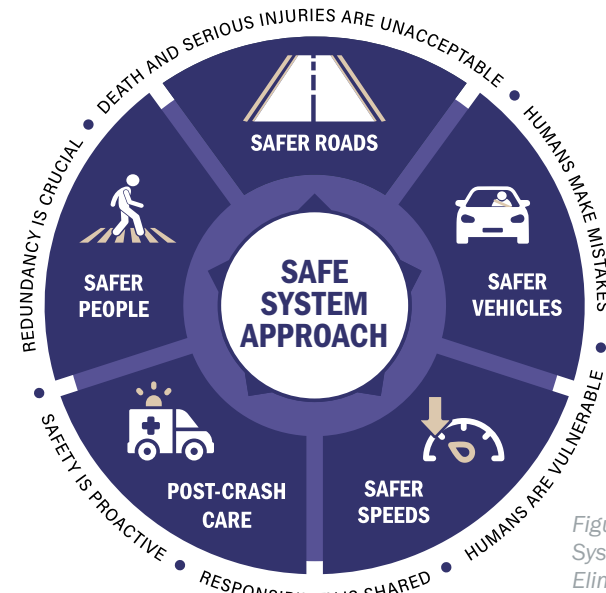
Figure 2. The Safe System Approach to Eliminating Traffic Deaths

ABOUT LAFAYETTE

Lafayette, Colorado, is a city in southeastern Boulder County, covering more than nine square miles with a population of approximately 30,000. The city includes a mix of land uses and development patterns, with a traditional grid in the Old Town area and more auto-oriented suburban growth in newer neighborhoods. Old Town features a dispersed grid network and includes key corridors such as CO 7 and Public Road, which formerly carried US 287. Outside of this core, street networks are less connected, with traffic volumes and speeds concentrated on arterial and collector roadways.

Lafayette is located 8 miles southeast of Boulder, 4 miles northeast of Superior, and 18 miles northwest of Denver. Its location between these major cities results in significant regional traffic. Two state highways and one federal highway pass through Lafayette, carrying over 120,000 people each day.

While Lafayette has a history rooted in coal mining from the 1860s to the 1930s, today it includes a mix of residential, commercial, and civic spaces. The city's downtown offers local businesses, restaurants, parks, and community facilities, while nearby open spaces and proximity to the Rocky Mountains and eastern plains provide access to outdoor recreation.

Colorado: Lafayette
Founded: Febuary, 1889
Population: 30,439
Area: 9.3 sq mi

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Legend:
- City of Lafayette
- State of Colorado
- Boulder County (State view)
- Boulder County (Regional view)

Figure 3: About Lafayette
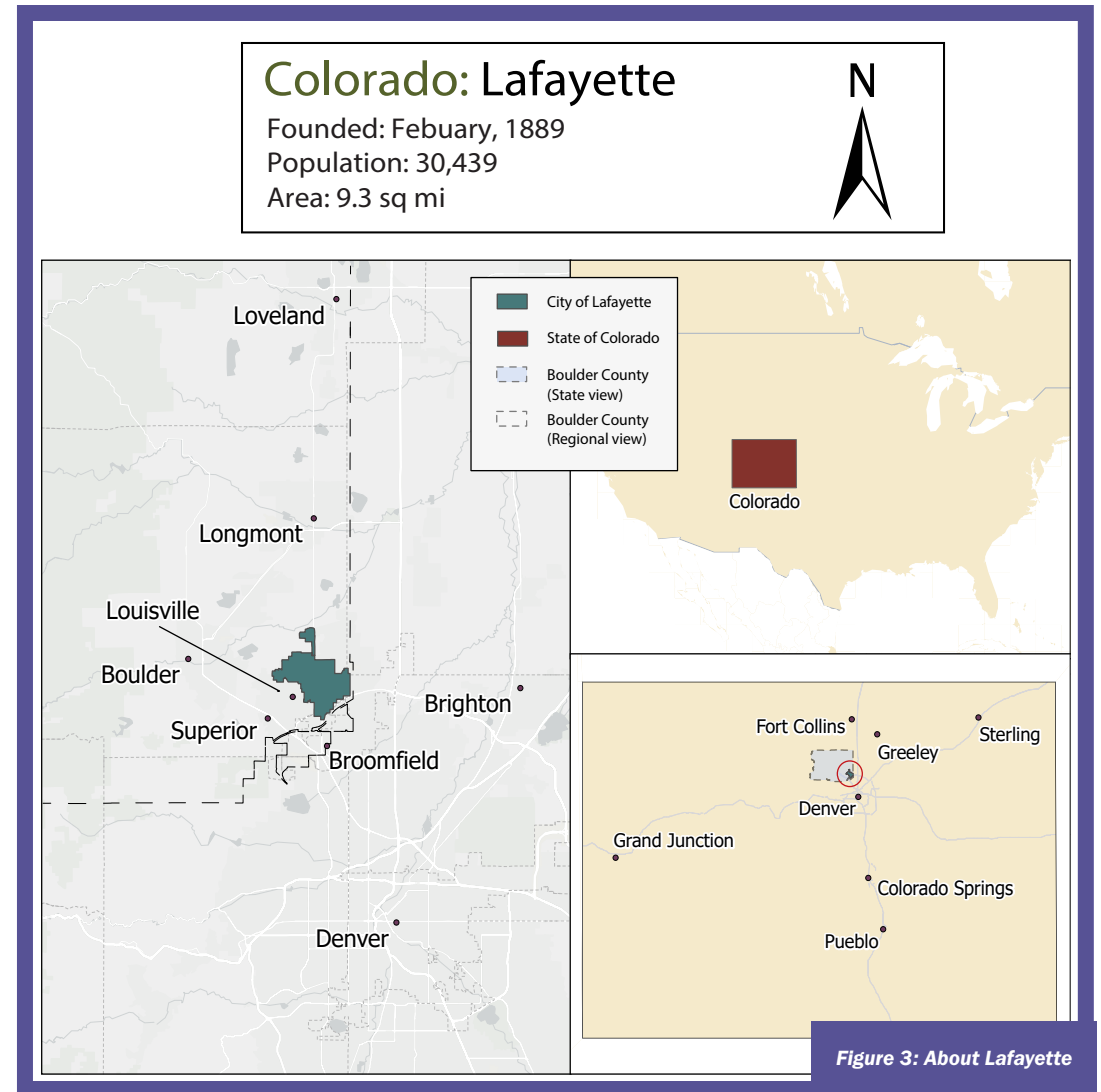
ABOUT LAFAYETTE
(CONT.)

The study area for this project extends beyond Lafayette's immediate city limits to align with the broader Lafayette Planning Area. This includes a 500-foot offset applied to the urban growth boundary previously identified in the 2021 "Legacy Lafayette Comprehensive Plan." This approach ensures this Plan accounts for regional connectivity, future growth, and key transportation and land use considerations affecting both the City and its surrounding areas.

Figure 4: Lafayette Study Area

Study Area

Lafayette Planning Area

City Municipalities

N

0   0.5   1.0   2 Miles
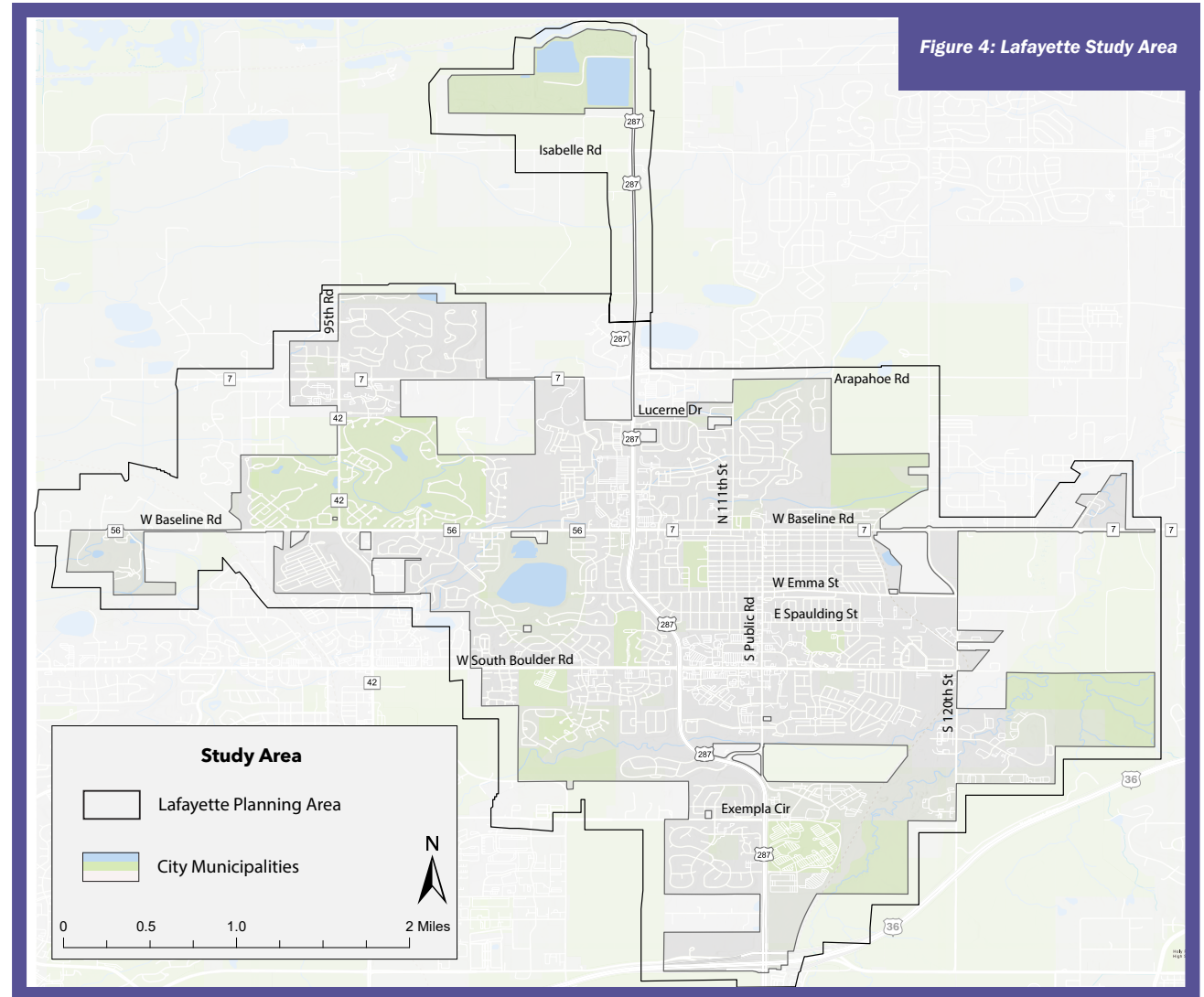
GOAL SETTING

The City of Lafayette adopted its first Multimodal Transportation Plan (MMTP) in 2023. One of the highest priority actions from the MMTP was to create a Safety Action Plan to guide the City's efforts. Boulder County formally adopted the Vision Zero initiative as part of its 2020 Transportation Master Plan (TMP), setting a goal to eliminate serious injuries and fatal traffic crashes in unincorporated areas by 2035. As a city within Boulder County, Lafayette shares this commitment to improving safety. This action plan is designed to guide the City of Lafayette's resources and efforts to improve safety, and to support the county's Vision Zero efforts, helping to create a safer, more connected transportation network for the entire region.

The Lafayette VZAP is centered around equity, safety, and data-driven decision-making. The plan's primary goals include:

✔ **Supporting Boulder County's Vision Zero goal to eliminate serious injuries and fatal traffic crashes in Boulder County by 2035.**

✔ Analyzing and mapping crash data from the last ten years of available information to identify crash trends and hot spots.

✔ Using a systemic analysis method, identify locations where the likelihood of crashes is greater in the future.

✔ Prioritizing safety improvements in high-risk locations, particularly for vulnerable road users.

✔ Identifying data-driven safety countermeasures to address crash hot spots and locations where future crashes are more likely.

✔ Identifying sustainable funding sources for long-term safety investments.

✔ Ensuring that transportation safety efforts are equitable and benefit historically underserved communities.

✔ Engaging community members to understand needs, concerns, and priorities for transportation safety. `

SCHEDULE

The Lafayette VZAP process began in **Spring of 2024.** Key stages of the project included:

Data Analysis:

Documenting major crash trends, developing the high-injury network (corridors where the most crashes are occurring), and identifying risk factors.

Citywide Recommendations:

Developing systemic recommendations designed to eliminate the most prevalent crash types resulting in serious injuries or fatalities.

Location Prioritization:

Identifying and prioritizing specific roadways to address existing issues and proactive measures to address risk.

Action Plans:

Creating to-do lists of specific actions (both infrastructure, such as roadway improvements, and non-infrastructure, such as educational campaigns), noting responsibility and potential funding sources for implementation.

Figure 5. Lafayette Vision Zero Action Plan Process

Throughout the process, community members and stakeholders were consulted to ensure that recommended strategies are coordinated, feasible, and aligned with regional safety goals. While additional details are provided in Chapter 3, key milestones include:

- **Phase 1 Outreach (Summer 2024):** Initial engagement through Art Night Out (August 9, 2024) and an online survey.
- **Phase 2 Outreach (Winter 2024/2025):** Further engagement through gathering feedback on proposed safety solutions with an online survey.
- **Phase 3 Outreach (Early Summer 2025):** Community feedback on the draft plan before finalization.
- **Final Action Plan (Anticipated Summer 2025)**

PAST RELEVANT SAFETY EFFORTS, PLANS & STUDIES

The **Lafayette Vision Zero Action Plan (VZAP)** builds upon the City and region's previous and ongoing efforts to enhance roadway safety and multimodal connectivity. In addition to the specific efforts, plans and studies outline below, **Crash data** has historically been incorporated into transportation efforts by police and engineering through coordination and data sharing. Police staff pull relevant crash data at a location from the Lafayette police crash database, and then engineering staff will analyze each report or narrative to determine relevant information. Analyzing a single intersection can take multiple days of combined time from police and engineering. On a large corridor study, having a consultant analyze state data has been a necessity.

- **Boulder County Transportation Master Plan (TMP) –** Completed in 2020, the TMP serves as the county's long-term vision for transportation and mobility. It prioritizes multimodal safety improvements, integrates Vision Zero principles, and emphasizes investments in infrastructure to protect vulnerable road users.

- **Future 42 Corridor Plan –** In 2022, the cities of Lafayette and Louisville completed a preliminary corridor study to envision the future of State Highway 42 (also known as 95th Street, CO-42, or Courtesy Road) for people who walk, bike, ride transit, or drive.

- **Lafayette Multimodal Transportation Plan (MMTP) –** In 2023, Lafayette completed the MMTP which analyzed existing and planned future land uses, traffic operations, safety, access, mobility, and connectivity of all transportation modes such as walking, biking, transit, and driving. It is a comprehensive multimodal transportation guiding plan for the city that addresses the near- and long-term transportation and mobility needs of the community including residents, commuters, businesses, and visitors. This Vision Zero Action Plan is a recommended priority of the MMTP.

- **US 287 Safety & Mobility Study –** Completed in 2024, Boulder County led this study which identified critical safety issues along the US 287 corridor, a high-crash corridor with a significant number of vehicle, pedestrian, and bicycle conflicts. Recommended safety enhancements include speed management strategies, a center median barrier along rural extents, and multimodal improvements.

- **South Boulder Road Corridor Study –** In 2024, DRCOG led the South Boulder Road preliminary corridor study in partnership with Boulder County, the Regional Transportation District (RTD) and the cities of Boulder, Lafayette, Louisville. The goal was to develop a shared vision for the corridor by identifying current safety and mobility challenges and future opportunities to make the corridor more accessible for all road users. The partner agencies have a DRCOG grant to further the study that will be starting in 2025.

PAST RELEVANT SAFETY EFFORTS, PLANS & STUDIES (CONT.)

- **Taking Action on Regional Vision Zero** – Adopted in 2020 and updated in 2024, this Denver Regional Council of Governments (DRCOG) plan was guided by local, regional, and state stakeholders, including City of Lafayette and Boulder County, and includes an extensive data analysis of fatal and serious-injury crash statistics. The plan sets out action initiatives, an implementation timeline, and measures to help track progress toward a shared goal of zero traffic-related deaths and serious injuries.

- **Boulder County Vision Zero Draft** – A precursor to the current Boulder County VZAP, this document laid the groundwork for the county's safety strategies by assessing early crash trends and identifying systemic countermeasures. It helped define focus areas for reducing serious and fatal crashes through education, enforcement, and engineering solutions.

- **Boulder County Vision Zero Action Plan** – This VZAP has been developed in coordination with Lafayette's Plan. The plan serves as a roadmap for improving transportation safety across the county, including unincorporated areas and key corridors within the mountain communities of Jamestown, Nederland, and Ward. Similar to Lafayette's Plan, strategies and actions are rooted in the Safe System Approach with the goal of eliminating all traffic-related deaths and serious injuries.

- **Other Municipal and Regional Vision Zero Plans** – Vision Zero initiatives in neighboring jurisdictions are aligned with Lafayette and Boulder County's efforts to create a regional approach to transportation safety. Coordination between agencies ensures consistency in safety policies and the implementation of best practices across jurisdictional boundaries.

These studies and plans provide a strong foundation for the Lafayette VZAP, helping to guide data-driven safety interventions and policy decisions.

SAFETY ANALYSIS METHODOLOGY

This analysis considers crash data within Lafayette from January 1, 2013, to December 31, 2022, provided by the Colorado Department of Transportation (CDOT). At the time of analysis, 2023 crash data was not available through this source. The data presented in this report is the latest available data, however, it is subject to change as new information is obtained in the years to come and traffic safety trends should be monitored in future years beyond the scope of this project.

CRASH DATA TRENDS

The crash data trend evaluation described below covers all roadways within the study area (Figure 4). The primary goal of this analysis was to identify trends and high-risk factors that are associated with injury and fatal crashes. . Figure 6 shows the total number of crashes each year (bar chart, left side) and highlights how many of those crashes resulted in a fatality (line chart, right side).

During the ten-year period from January 2013 through December 2022, there were a total of 5,169 crashes in the Lafayette study area. Of these crashes, there were 433 injury crashes (serious and minor) resulting in 631 injuries and 19 fatal crashes resulting in 23 fatalities. Of the 19 fatal crashes, 10 occurred at intersections, 8 on state highways, and 1 on a minor arterial.

Serious injury crashes are defined as crashes that result in one or more serious bodily injuries, which is defined as broken extremities, severe lacerations, paralysis, etc. Fatal crashes are defined when one or more people die within 30 days of the crash as a result of the injuries sustained in the collision. Combined, serious injury and fatal crashes constitute killed and serious injury (KSI) crashes, which involve one or more fatalities or serious bodily injuries. KSI crashes are a key focus of this plan as they represent the most severe outcomes, making their evaluation critical for identifying trends, risk factors, and targeted safety improvements. This report analyzes KSI crash trends to support data-driven strategies for reducing severe crashes.

Though total crashes have decreased since 2018, the percentage of serious injury and fatal crashes has remained consistent, with the most recent year of available data showing 5 fatal crashes—the highest number recorded in the 10-year study period (tied with one other year). While crash numbers dropped in 2020, this was likely due to fewer people on the roads during the COVID-19 pandemic.
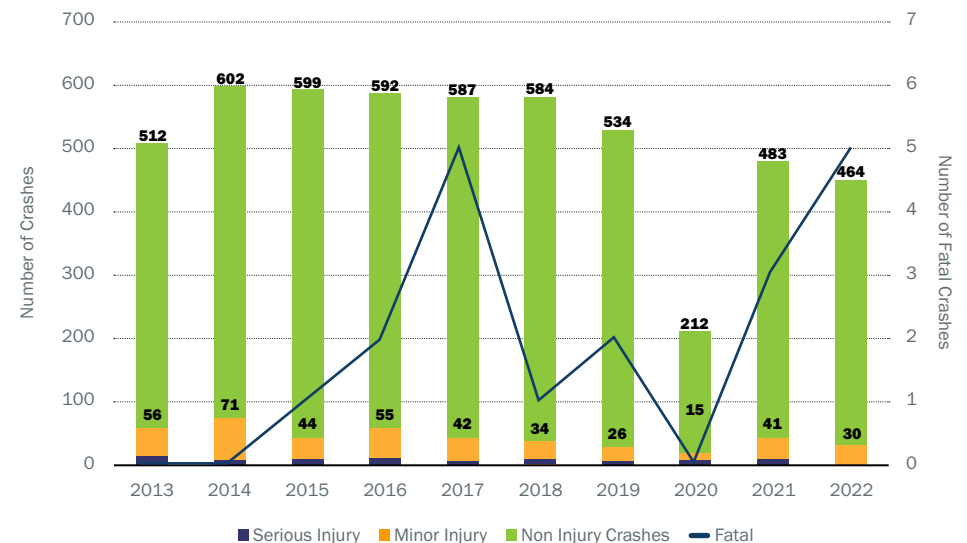
Figure 6. Crashes by Year

CRASH DATA TRENDS (CONT.)

ALL CRASH LOCATIONS

Figure 7 presents a heat map of all crashes, which shows where crashes have happened most often. Areas with more crashes appear brighter or more intense as 'dense', helping to highlight places with higher crash frequency across the city compared to less frequent crash frequency, 'space'. Crash hot spots can be observed at many intersections along Highway 287 and 95th Street.

Figure 7. Heat Map of All Crashes in Lafayette
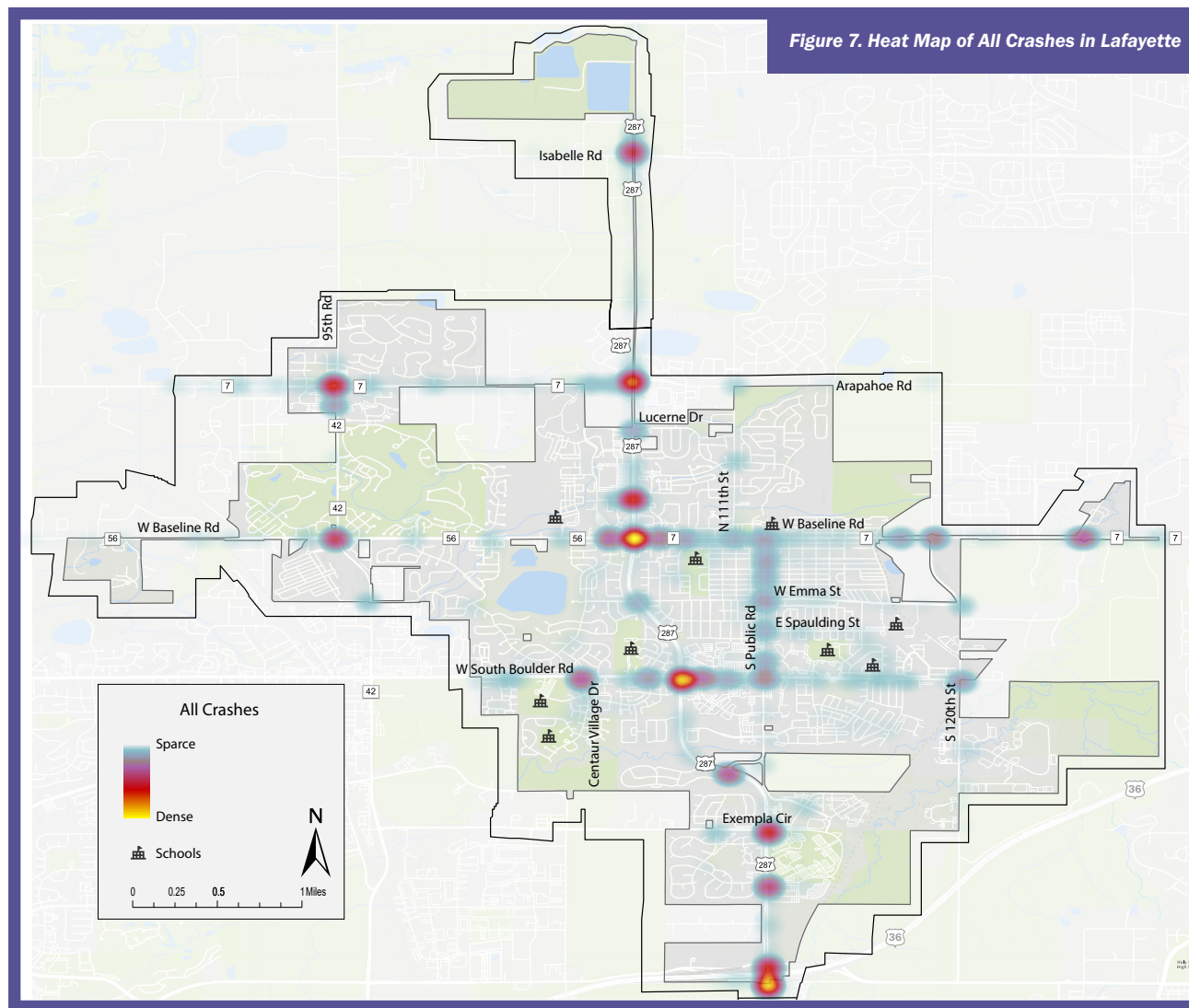
UNDERSTANDING RECENT CRASH TRENDS

CDOT crash data was used as the primary source for this analysis because it was complete for the full study period and aligns with the approach used in the Boulder County and Superior safety plans. To supplement this, local police data from 2022 to 2024 was also reviewed to provide insight into more recent trends.

Local crash data reflects a higher frequency of crashes compared to the state data source, emphasizing that these two sources should not be directly compared. For example, in 2022 the state data source identified four bicycle and pedestrian crashes compared to 13 identified from the local source in the same year. However, the local data provides valuable insight and can be used to highlight trends within the last two years.

Preliminary local data shows 80 additional injury crashes and 3 fatalities reported between 2023 and 2024, including 15 crashes involving pedestrians and 17 involving bicyclists. Notably, 2024 has seen the highest number of pedestrian and bicyclist crashes in the past three years. This data comes from a different source than the state and may not be directly comparable, but it helps highlight emerging trends.

	2022	2023	2024
Pedestrian	6	4	11
Bicyclist	7	7	10
Injury	37	44	36
Fatal	3	3	0

Table 1. 2022 - 2024 Local Crash Data

VULNERABLE ROAD USER CRASHES

Bicyclists and pedestrians are vulnerable road users. A vulnerable road user is someone who is at a higher risk of injury in a crash, like people walking or biking, because they don't have the protection of a vehicle. A deeper analysis was conducted to understand trends in crashes involving these groups. Given their increased risk of severe injury or death in collisions, it is important to assess whether safety conditions have improved over time. As shown in Figure 8, bicycle and pedestrian crashes have generally declined, with the three-year average dropping to 6.7 crashes per year in 2022, compared to a peak three-year annual average of 19.3 crashes in 2016. During the reporting period, three bicyclist/pedestrian fatalities occurred within the last four years of available data, underscoring the need for continued safety efforts.

Figure 8. Vulnerable Road User Crashes by Year
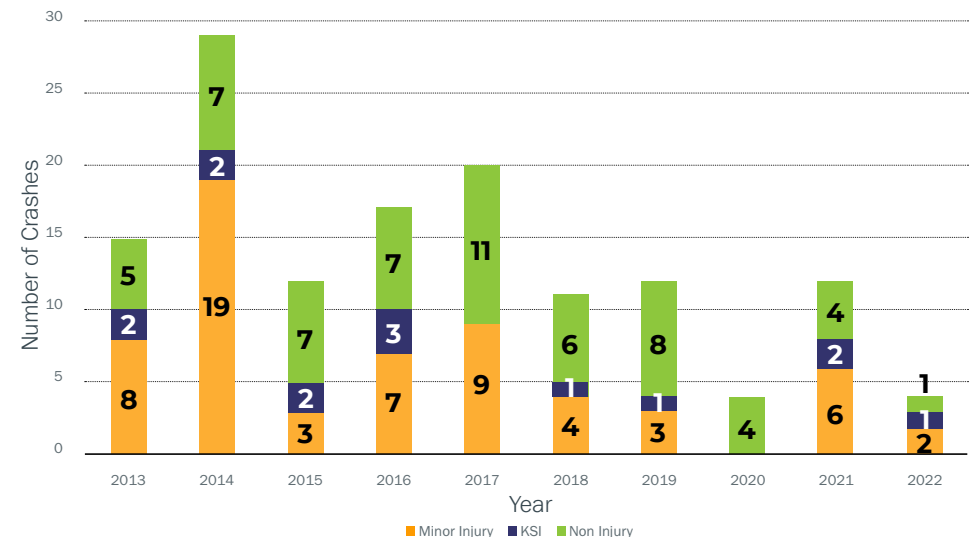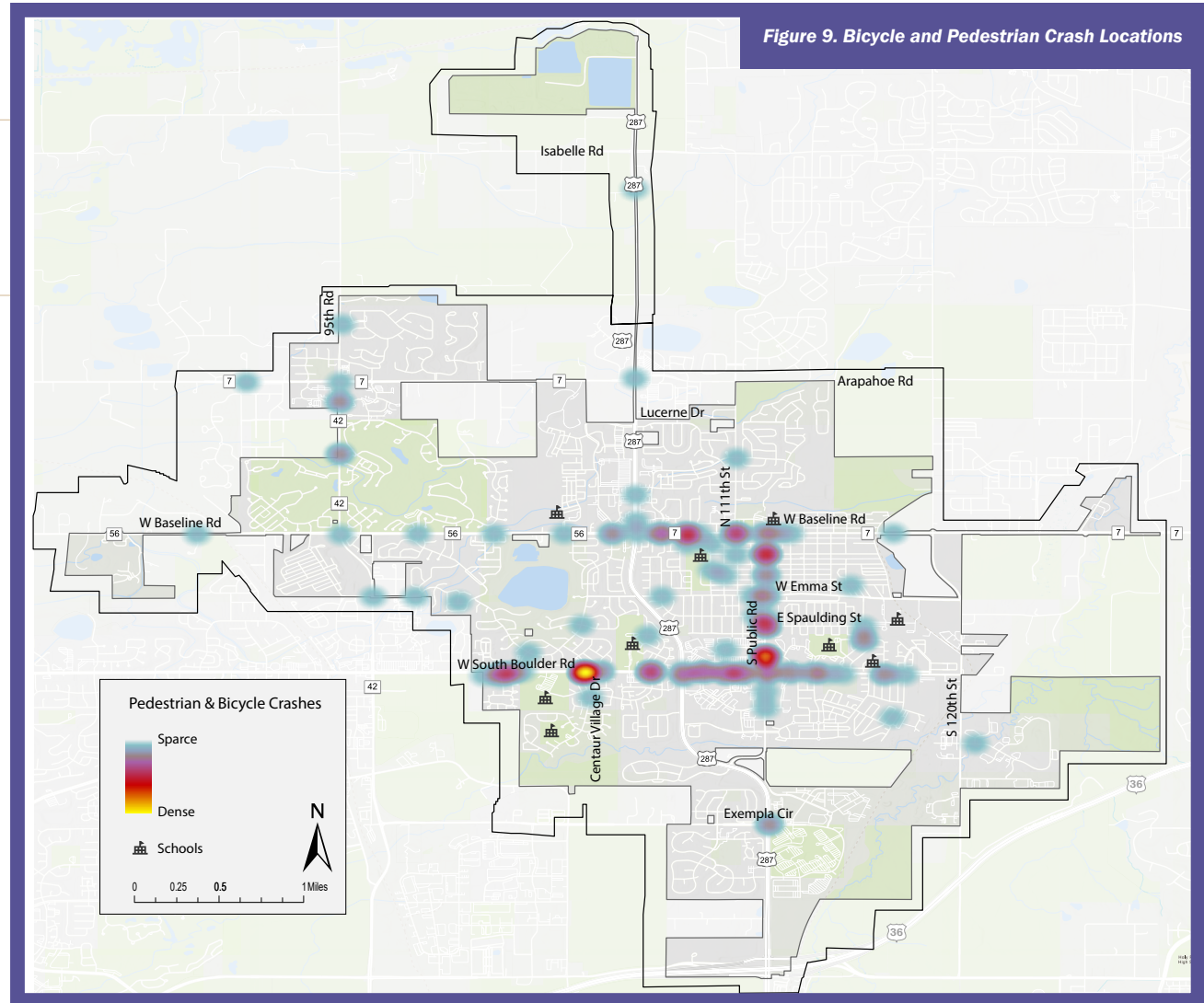
CRASH DATA TRENDS (CONT.)

VULNERABLE ROAD USER CRASHES (CONT.)

Figure 9 highlights concentrations of bicycle and pedestrian crashes in Lafayette. Hotspots are along South Boulder Road, Public Road, and Baseline Road east of Highway 287.

Figure 9. Bicycle and Pedestrian Crash Locations

Pedestrian & Bicycle Crashes

Sparce

Dense

Schools

0   0.25   0.5   1 Miles

CRASH TYPES

A key use of crash data is identifying the most common crash types, allowing strategies to be developed to mitigate them—especially those that most often result in injury or fatality (KSI). The four most frequent crash types leading to injury are:

Also known as a T-bone crash, a broadside crash happens when the front end of one car crashes into the side of another car. Broadside crashes were the most common KSI crash type, making up approximately 21% of all KSI crashes.

This is followed by approach turn crashes, which are crashes that occur when someone turns left in front of oncoming traffic without yielding the right-of-way. These crashes account for 19% of all KSI crashes.

A rear end occurs when the front of one vehicle collides with the back of another vehicle, this crash type accounts for 16% of all KSI crashes.

A sideswipe crash happens when two vehicles traveling next to each other make contact, often when one vehicle drifts out of its lane or changes lanes without enough space. This crash type accounts for 12% of all KSI crashes.

Figure 10 shows the distribution of KSI crashes in Lafayette by crash type. Approach turns, broadside, sideswipe, and bicycle/pedestrian crashes made up a larger share of KSI crashes than they did of overall crashes—meaning these types of crashes are more likely to result in severe outcomes.

Although bicycle and pedestrian crashes accounted for 2.6% of all crashes, they accounted for 16% of KSI crashes. Similarly, sideswipes accounted for 8% of all crashes, but 12% of KSI crashes, approach turns accounted for 6% of all crashes, but 19% of KSI crashes and broadside crashes accounted for 12% of all crashes, but 21% of KSI crashes. Rear-end crashes were the most common crash type for all crashes (49%) but were less likely to result in an injury crash (16%).

Reviewing crash trends that result in severe injury is critical and aligns with the Vision Zero model of aiming to reduce fatalities and serious injuries on roadways.

* Highlights crash types that occur more often in KSI crashes compared to all crashes.
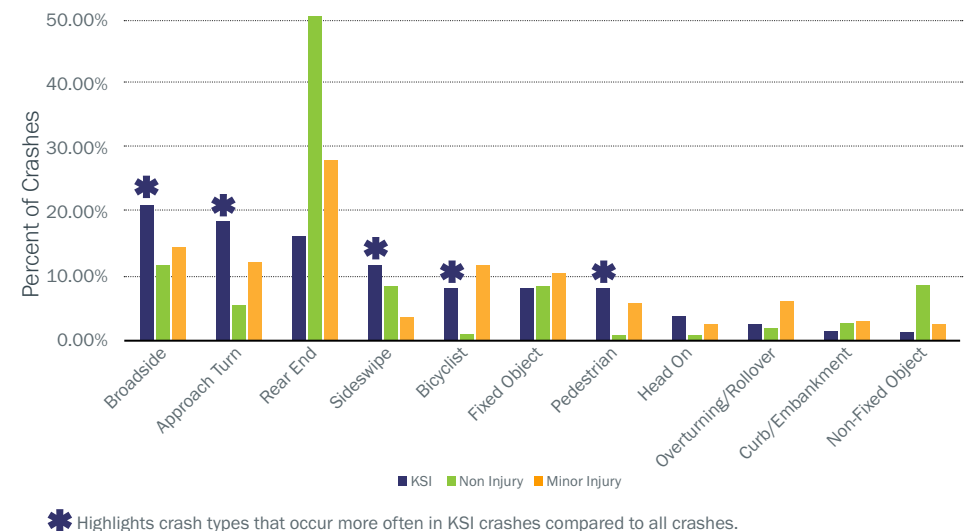
Figure 10. Summary of Crash Types by Injury Severity

DRIVER BEHAVIOR

Driver behavior has a major impact on both how often crashes happen and how serious they are. While it can be difficult to measure behaviors like distraction or inexperience through crash reports alone, in Lafayette, "driver preoccupied" (which includes distracted driving) was listed as a factor in nearly 16% of all crashes and just over 8% of the most serious crashes resulting in injury or death.

Younger drivers are involved in a large share of crashes in Lafayette. Drivers aged 24 and under are involved in 1 out of every 5 crashes, and drivers under 30 make up nearly a third of all crashes. This could be because newer drivers are still building experience and may be more likely to take risks, drive distracted, or misjudge gaps, speeds, and road conditions—especially in unfamiliar or high-pressure situations.

Speed also plays a big role in how serious a crash is. The faster a vehicle is moving, the more energy is involved in a crash—which means the consequences are more likely to be severe or fatal. Speeding also reduces the amount of time a driver has to see and respond to what's happening around them. When distraction is added to the mix, the risk increases even more, since reaction time is further delayed and drivers are less aware of what's going on.

Understanding the role of behaviors like distraction, inexperience, and speeding is key to improving safety. These are risks that can't be fixed with road design alone—they require education, enforcement, and community engagement to help change habits and save lives.
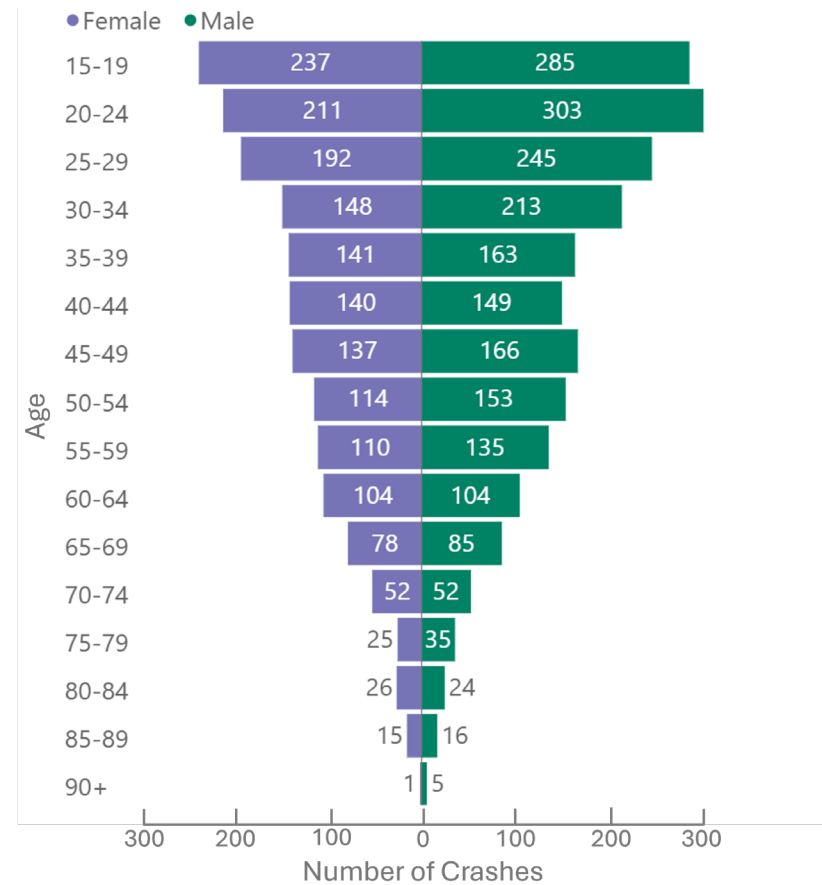
Figure 11. Number of Crashes by Age & Gender

HIGH-INJURY NETWORK (HIN)

Ten years of CDOT crash data (2013–2022) was used to develop a High Injury Network (HIN) for the City of Lafayette—a network of roadway segments and intersections with a higher concentration of injury crashes. The HIN helps identify high-priority locations for improvements aimed at reducing traffic fatalities and injuries.

Lafayette's network of state highways, arterials, and collector roadways was divided into ~0.5-mile segments, with breaks at major intersections—resulting in 131 segments and 79 intersections. Of 433 injury and fatal crashes, 417 (96.3%) occurred on these roadways. The remaining 16 crashes were reviewed to ensure there were no significant patterns that were missed.

Table 2 shows crash data by roadway classification, including total and serious (KSI) crashes. Intersections account for 63% of all crashes and 60% of KSI crashes. State highways account for 22% of all crashes and 29% of KSI crashes. Figure 12 maps the roadway classifications.

Figure 12. Lafayette Roadway Classification Map
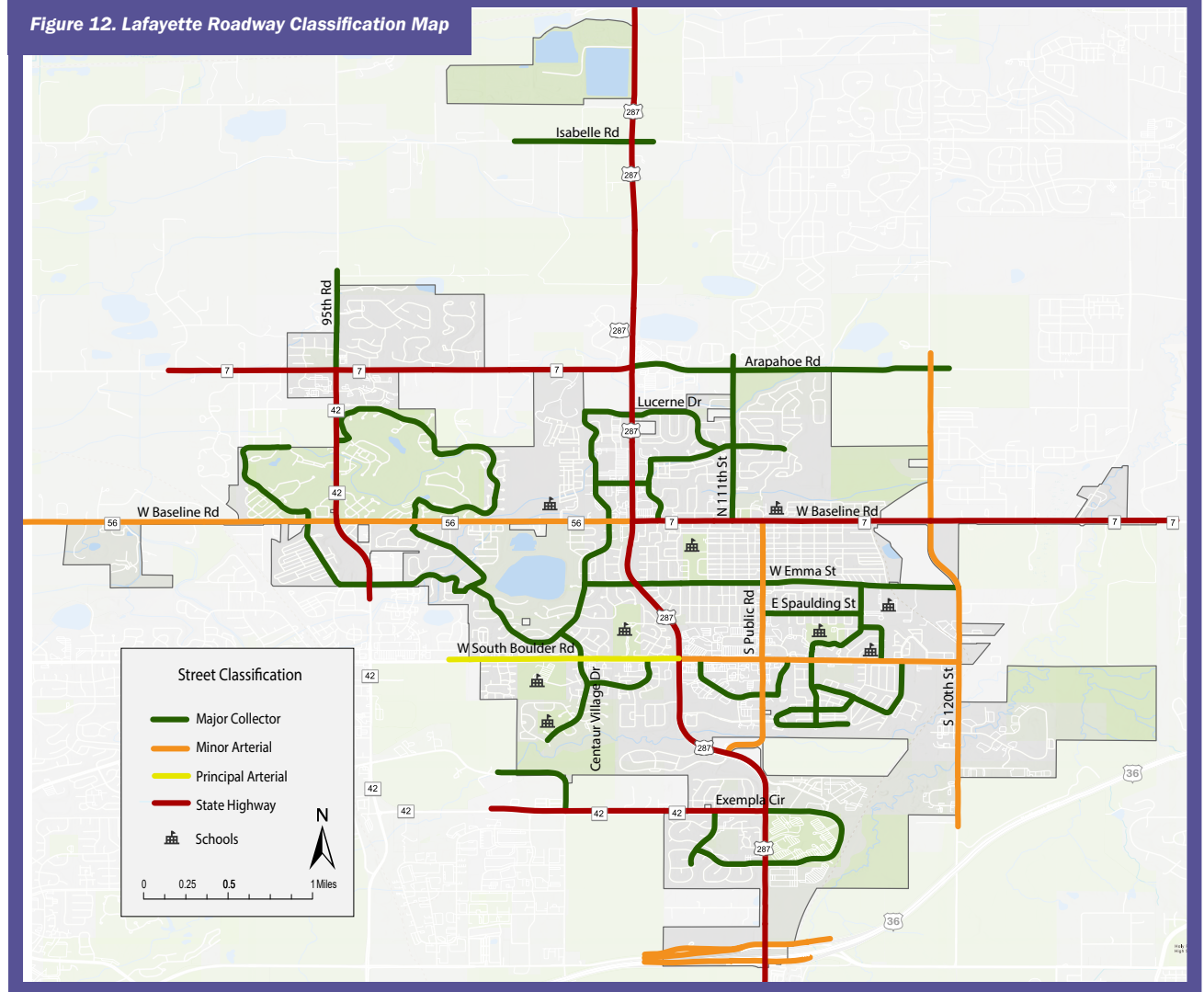
HIGH INJURY NETWORK (HIN)
(CONT.)

Classification	Total Crashes	KSI	K	SI
Major Collector	369	5	0	5
Minor Arterial	239	4	1	3
Principal Arterial	65	0	0	0
State Highway	1,043	24	8	16
All Other Roadways	64	1	0	1
Intersections	3,061	50	10	40
TOTAL	**4,841**	**84**	**19**	**65**

Table 2. Crashes by Roadway Classification

The Denver Regional Council of Governments (DRCOG) has a High Injury Network (Figure 13) that includes several significant roadways, on which Lafayette has been working with regional partners to develop corridor studies to prioritize needs.

Figure 13. DRCOG High Injury Network Map
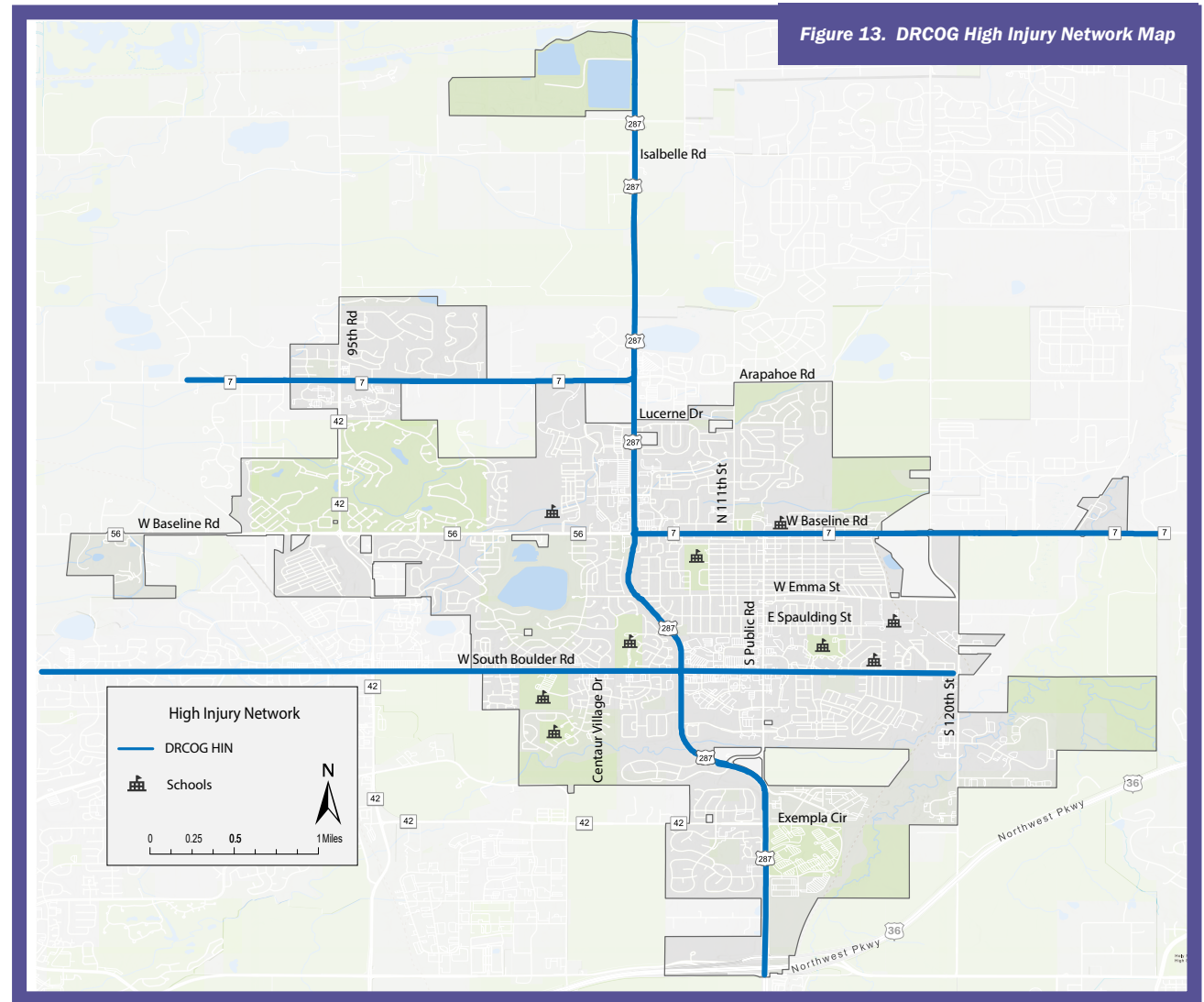
HIGH INJURY NETWORK (HIN)
(CONT.)

To avoid having a local HIN that merely duplicated the existing DRCOG HIN map, state highways that already had corridor planning efforts in progress or complete were excluded. The City of Lafayette wanted to have actionable items on roadways that it primarily owns and maintains in addition to state highways and other shared roadways. Including these state highways would have overshadowed trends on other roadways, making it difficult to extract meaningful takeaways or identify more localized safety needs. The City will continue to work with regional partners on progressing these regionally significant roadways in support of other plans. Specifically, the following segments were excluded due to recently completed studies and identified next steps:

- **US 287**
- **Arapahoe Road (west of US 287)**
- **95th St (south of Arapahoe Road)**

Crashes on these excluded roadways and associated intersections account for 56% of all crashes and 71% of the KSI crashes that occurred within the network shown in Figure 12.

Classification	Total Crashes	KSI	K	SI
State Highways with Existing Approved Plans	701	21	7	14
Intersections with Approved Plans	2006	39	10	29
TOTAL	**2707**	**60**	**17**	**43**

Table 3. Crashes Excluded from HIN Evaluation

For the remaining roadways, fatal, serious injury, and minor injury crashes were included in the analysis. Crashes were weighted by severity: minor (1), serious (2), and fatal (4).

Segment Analysis:

- Crashes per mile were calculated using weighted crashes and segment length.
- A threshold of 7 weighted crashes per mile identified 11 HIN segments (4.74 miles), representing **12% of the network but 61% of weighted crashes.**

12% of the Network	**61%** of Weighted Crashes

Intersection Analysis:

- 58 intersections (signalized and unsignalized) were evaluated.
- A threshold of 4 weighted crashes per intersection identified 12 HIN intersections, covering **20.7% of evaluated intersections but 69.8% of weighted crashes.**

21% of Evaluated Intersections	**70%** of Weighted Crashes

HIGH-INJURY NETWORK (HIN)
(CONT.)

The High Injury Network (HIN) map is shown in Figure 14, which reflects HIN segments on Baseline Road, South Boulder Road, and parts of Public Road, Emma Street and Aspen Ridge Drive.

HIN Intersections include:

- Centaur Village Dr & South Boulder Rd
- South Boulder Rd & Waneka Pkwy
- Caria Dr & Baseline Rd
- Public Rd & Spaulding St
- 111th St & Baseline Rd
- 119th St & Baseline Rd
- 120th St & South Boulder Rd
- Indian Peaks Dr & Baseline Rd
- Public Rd & Simpson St
- Autumn Ridge Blvd & Empire Rd
- Coal Creek Dr & South Boulder Rd
- Minotaur Dr & South Boulder Rd

Figure 14. High Injury Network Map
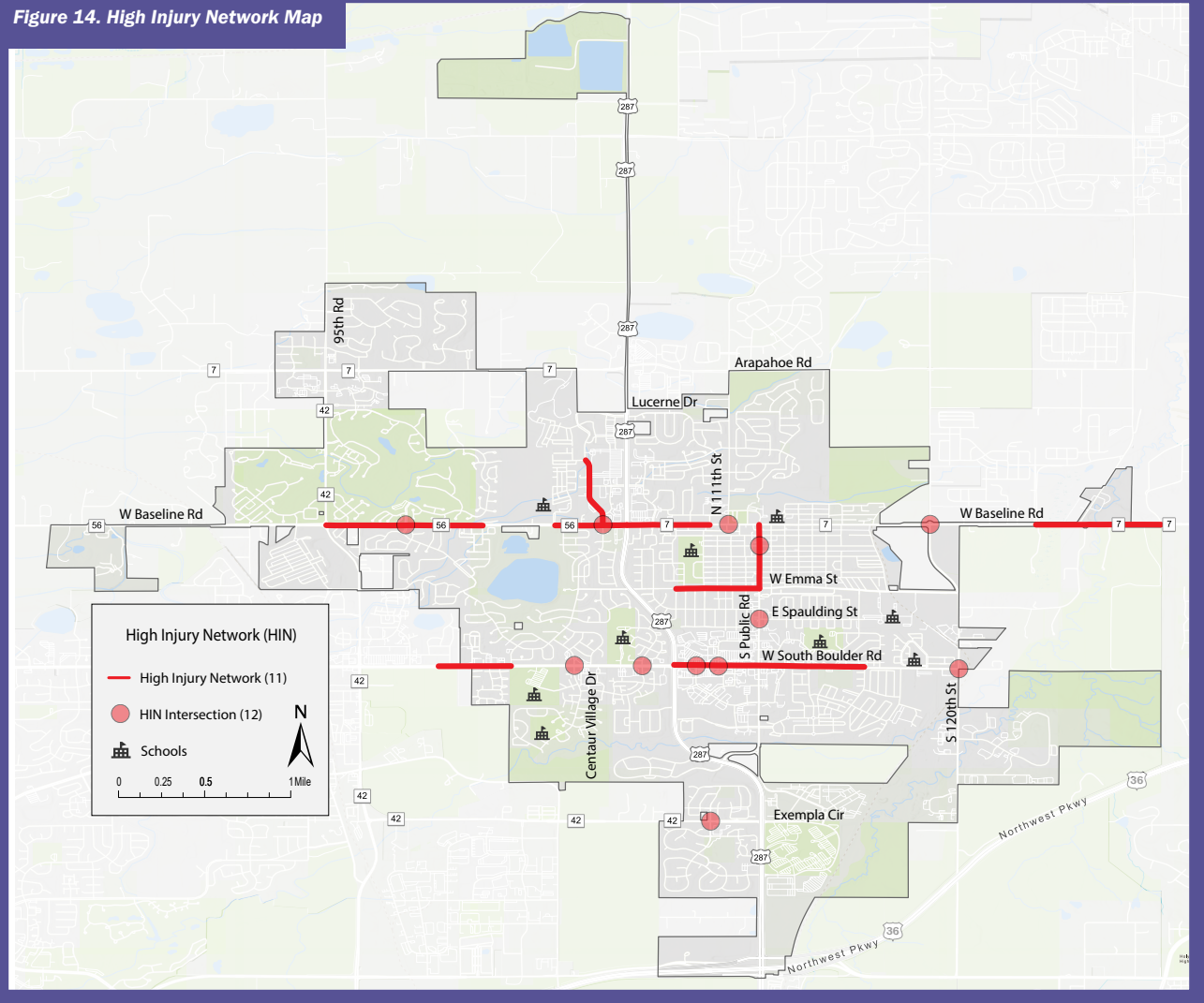
HIGH-RISK NETWORK (HRN)

Crash data, best practices and roadway characteristics were used to develop a High-Risk Network (HRN), which is a network identifying areas where conditions may indicate the risk of a serious injury or fatal crash occurring. The HRN can be used to proactively address locations that have risk of future serious injury or fatality crashes, rather than implementing safety measures reactively following such incidents.

Risk factors on the roadway network were incorporated using Lafayette provided GIS layers, aerial review, and manual input. Existing crash data in Lafayette was reviewed to understand the correlation of these risk factors with existing crash trends. This data along with engineering judgment was used to identify appropriate risk 'points' associated with each of these factors. The risk factors used for this analysis are shown in Table 4 and Figure 15.

Exposure plays a role in the High-Risk Network (HRN) factors evaluated. Roadways with higher speeds and more lanes tend to have greater traffic volumes leading to increased exposure to potential conflicts. However, these characteristics also directly contribute to crash severity and risk. Higher speeds elevate kinetic energy, making crashes more severe, while multiple lanes create more conflict points, increasing the likelihood of crashes. Similarly, roadways with more people walking and biking also add exposure. Schools, parks, libraries and other facilities generate walking and biking activity and can add to exposure.

These risk factors are not necessarily elements that can or should be mitigated—removing a school or transit services, for example, is not a practical solution. Instead, these indicators help identify locations where additional safety improvements could be targeted.

Risk Factor	Risk Description	Max Risk Points
Multimodal Facilities	Lack of multimodal facilities, such as missing sidewalks, unmarked crossings, or insufficient bicycle facilities.	5
Vulnerable Road Users	Presence of vulnerable populations (for example: young children, transit users, elderly, etc.)	4
Vehicle Speed	Higher speed roadways, which are associated with more severe crashes.	3
Roadway Geometry	Wider roadways with 3 or more lanes, which are associated with more severe crashes.	2
Roadway Lighting	Lack of roadway lighting, which could increase nighttime crash risk.	1

Table 4. HRN Criteria
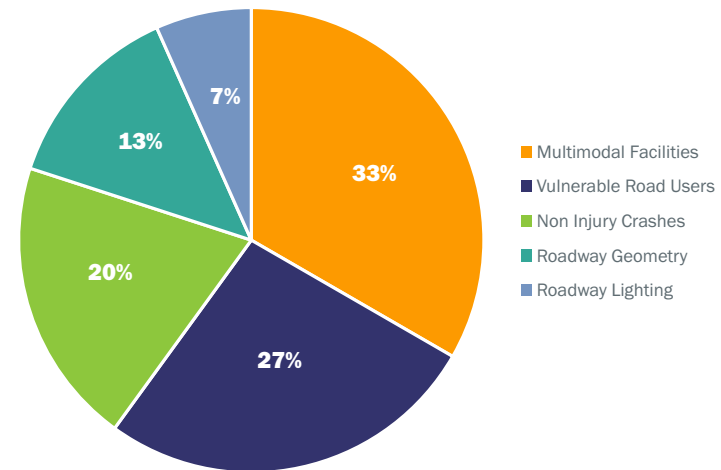
Figure 15. Risk Factor Point Distribution

HIGH-RISK NETWORK (HRN)
(CONT.)

Each segment was assigned a score based on the risk factors present. Segments with eight or more risk factors were selected to be included on the HRN. This network encompasses **6.87 miles of roadway which is 15% of the evaluated network.** The HRN is shown in Figure 16. Baseline Road, South Boulder Road, and Public Road make up the HRN.

Figure 16. High Risk Network
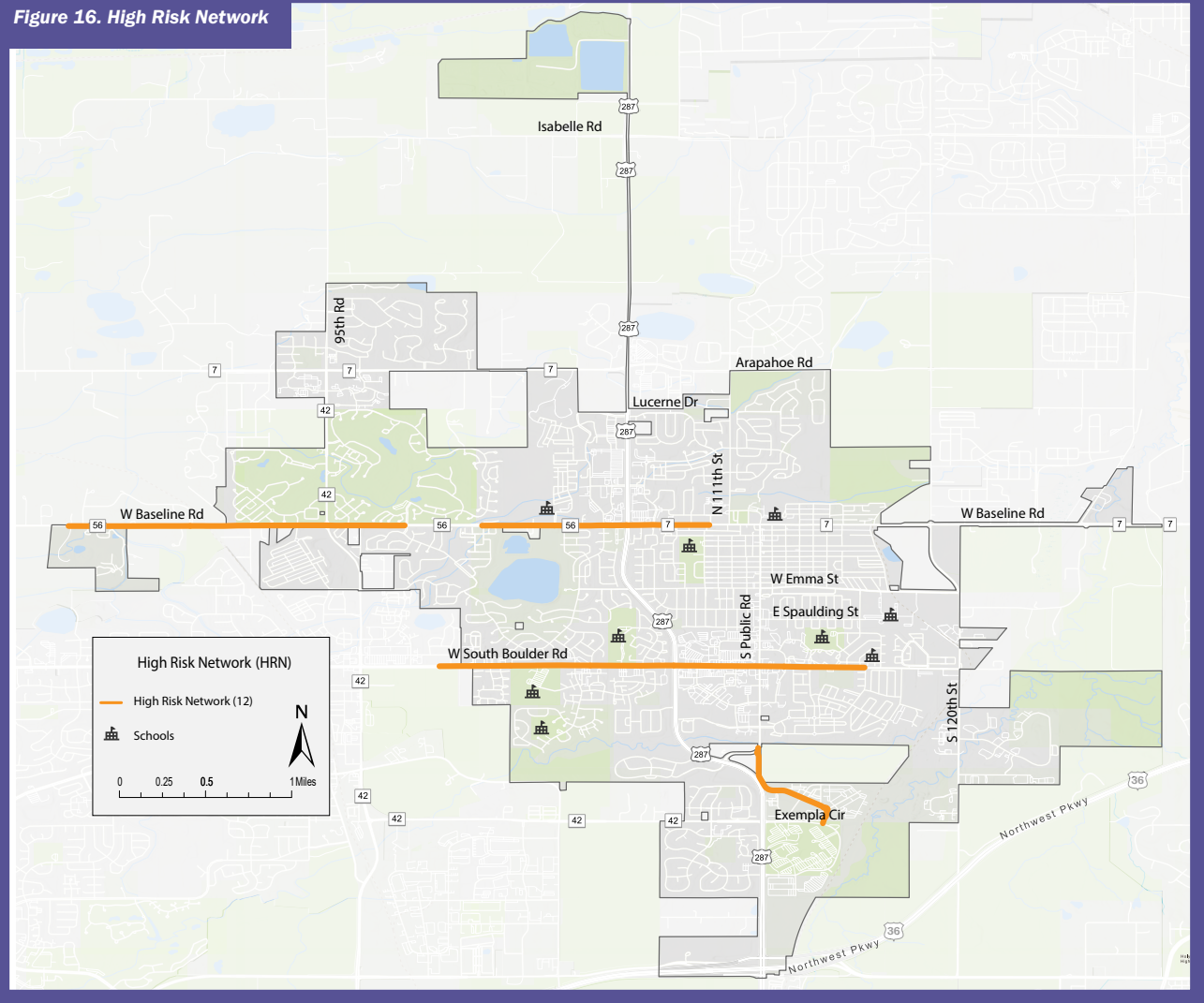
COMPREHENSIVE SAFETY NETWORK

The High Injury Network (HIN) identifies priority locations based on crash history, while the High-Risk Network (HRN) highlights roadways with similar characteristics where crashes could occur in the future. Overlaying the HIN, HRN, and the regional HIN creates the Comprehensive Safety Network—a more complete approach to identifying priority segments. The HRN helps fill in gaps where crash history alone may miss high-risk areas.

Together, the HIN and HRN span 9.1 miles of roadway—6.87 miles on the HRN and 4.74 miles on the HIN. Notably, 63% of HRN segments are not part of the HIN, underscoring the value of looking beyond crash history to identify safety needs. The Comprehensive Safety Network is shown in Figure 17.

This network is not static—it reflects conditions at the time of analysis. The City will continue to update it with new data and regular crash reviews to track trends and ensure safety strategies remain effective.

Figure 17. Comprehensive Safety Network

Lafayette Comprehensive Safety Network

— High Injury Network
— DRCOG High Injury Network
— High Risk Network
● HIN Intersection (12)
🏛 Schools
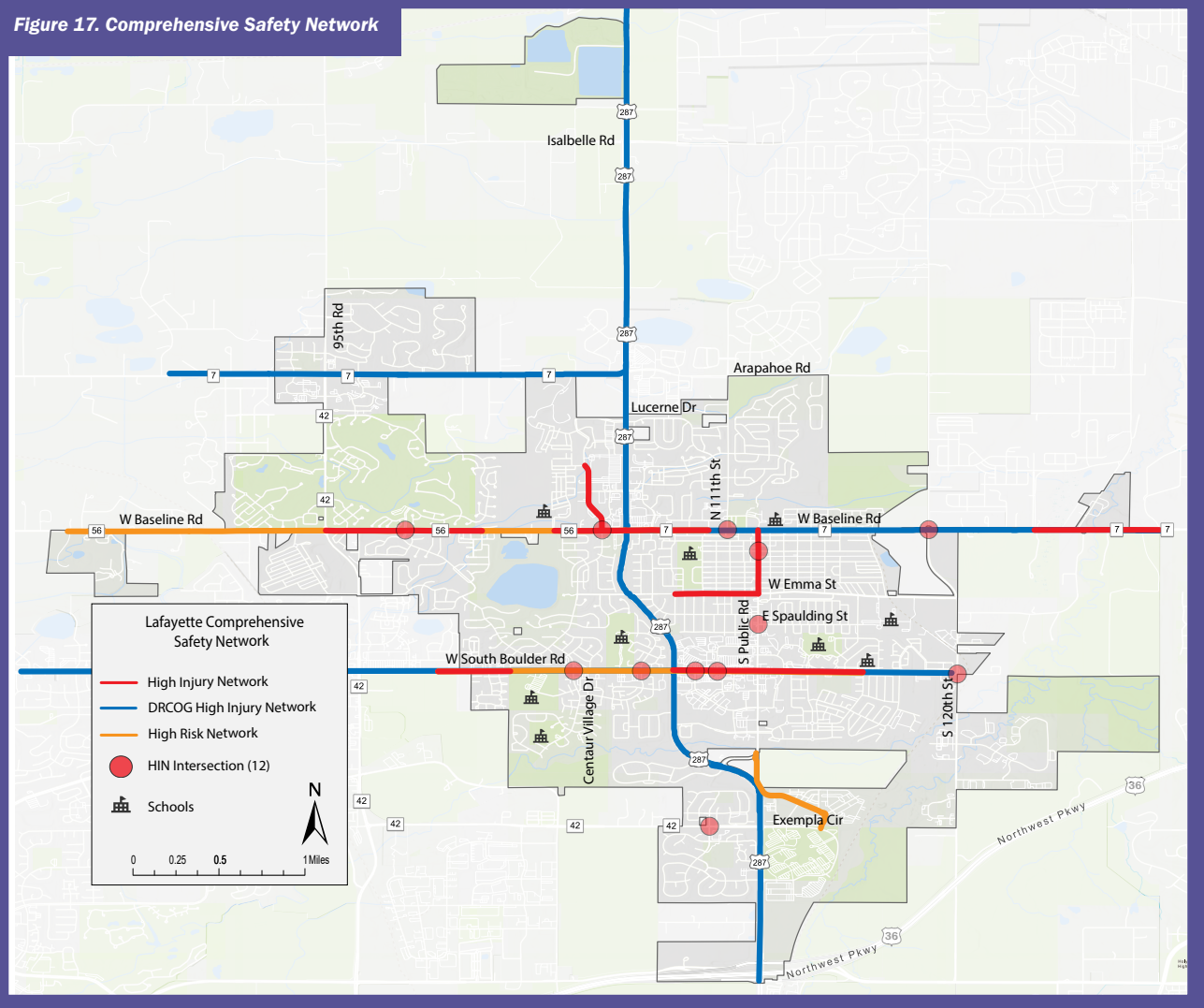
EQUITY INDEX

A segment-level Equity Index was developed citywide to identify locations with the highest need considering historically disadvantaged populations. The index was based on the following federal and state databases.

- Centers for Disease Control (CDC) Social Vulnerability Index – Identifies communities most vulnerable to external stresses on health by analyzing four categories: socioeconomic status, household composition and disability, minority status and language, and housing type and transportation.

- Colorado Department of Public Health & Environment (CDPHE) EnviroScreen – Identifies Colorado communities disproportionately affected by environmental and health risks across five categories: socioeconomic factors, sensitive populations, environmental exposures, environmental effects, and health outcomes.

- Census OnTheMap Concentration of Low Wage Jobs – Identifies areas with high concentrations of low-wage employment based on five categories: number of low-wage jobs, total jobs, percentage of low-wage jobs, job inflow and outflow, and spatial distribution of workers and employers.

- USDOT Equitable Transportation Community (ETC) Index - Assesses transportation disadvantage across eight categories, such as mobility, health, and economic vulnerability. In order to avoid double-counting factors included in the three other tools, this analysis focused specifically on the Transportation Insecure component, which highlights communities with limited access to safe, reliable, and affordable transportation options.

Equity Layer	Factor	Score
CDC Social Vulnerability Index	Social Vulnerability Index 2nd lowest quartile	1
	Social Vulnerability Index 2nd highest quartile	2
	Social Vulnerability Index highest quartile	3
Colorado EnviroScreen	EnviroScreen 2nd lowest quartile	1
	Enviroscreen 2nd highest quartile	2
	Enviroscreen highest quartile	3
Concentration of Low Wage Jobs	>472 low wage jobs/sq mi	1
USDOT Equitable Transportation Community Index	Transportation Insecure (65th percentile or higher)	1

Table 5. Equity Factors

EQUITY INDEX (CONT.)

Roadway segments were overlaid with the equity layers and received a total score ranging from 0 to 8, though the highest score any Lafayette segment received was a 6. The equity index is shown in Figure 18.

Figure 18. Equity Index
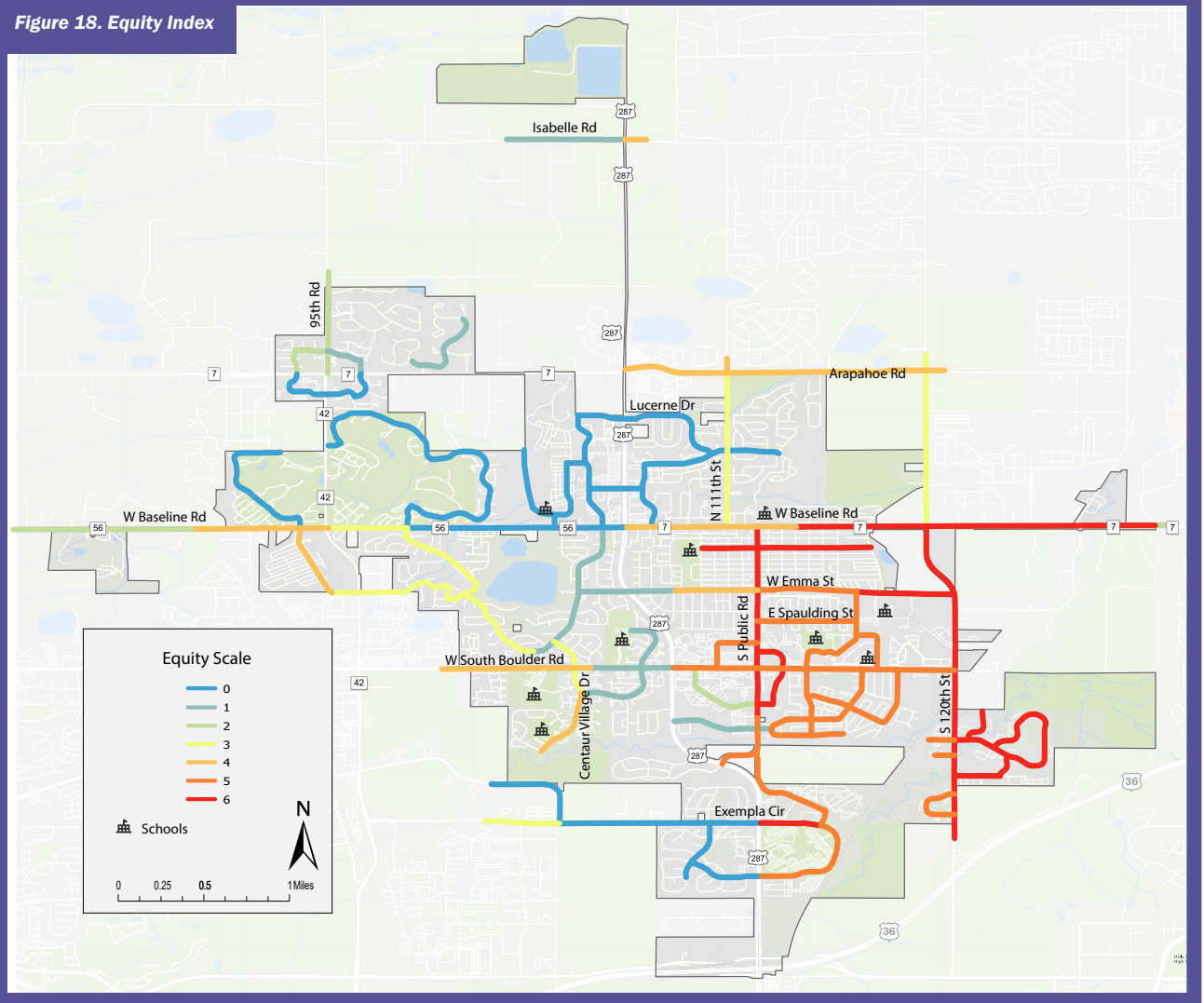
Community and stakeholder input is a key component of the City of Lafayette Vision Zero Action Plan. Engagement efforts included in-person events, online surveys, focused stakeholder work sessions, and a virtual public meeting. These efforts gathered feedback from residents, business owners, decision-makers, and other stakeholders who live, work, or travel through Lafayette. Engagement efforts were designed to complement and build on the substantial public outreach and statistically significant survey that were conducted as part of the MMTP.

The Action Plan is guided by three phases of public engagement to ensure community input shapes the final recommendations.

- **Phase 1 (Summer 2024):** The community was invited to share their traffic safety concerns, helping to identify key issues and areas of focus. This phase concluded in the fall of 2024.
- **Phase 2 (Winter 2024/2025):** This phase shared an update on the project status, gathered community feedback on safety priorities to refine project prioritization, and assessed public awareness of recommended safety strategies for locations with a history of crashes or high crash potential.
- **Phase 3 (Spring 2025):** In the final phase of outreach, the public will review the draft Action Plan and provide feedback through an online survey.

Each phase of engagement built on the previous one, creating a collaborative approach to improving roadway safety.

PHASE 1

A summary of Phase 1 events and the feedback received is provided below. In addition to promoting the project website and survey through flyers, social media, and newsletters, Phase 1 engagement in Lafayette included the following targeted events:

POP-UP EVENT - ART NIGHT OUT (AUGUST 9, 2024)

The project team hosted a pop-up booth at Lafayette's Art Night Out to gather community input on transportation safety. Attendees placed stickers on a bilingual map to mark locations where they felt unsafe walking, biking, driving, or using mobility devices. Comments were later digitized onto the online Social Pinpoint map. The event was promoted through social media and featured bilingual project information boards highlighting crash data and the project timeline.

Figure 19. Lafayette's Art Night Out

PHASE 1 (CONT.)

VIRTUAL PUBLIC MEETING (AUGUST 20, 2024)

A virtual public meeting was held via Zoom, with Spanish translation services available. The meeting included a presentation on the project background, crash history, and an online safety survey. Participants engaged in a discussion on transportation safety and had the opportunity to ask questions. The recorded meeting and presentation, in both English and Spanish, were uploaded to the project website for public access.

SURVEY RESPONSES

During Phase 1, there were 378 survey responses specific to Lafayette. Respondents were asked to rate their comfort level using various travel modes in Lafayette. The results of that question are shown in Figure 20. The majority of participants (55%) reported feeling safe while driving, while bicyclists were identified as the least safe mode, with 51% of respondents feeling "unsafe" while cycling.

SAFE UNSAFE NEUTRAL

Car: 14% Neutral, 31% Unsafe, 55% Safe

Pedestrian: 15% Neutral, 37% Unsafe, 48% Safe

Bicycle: 11% Neutral, 51% Unsafe, 38% Safe
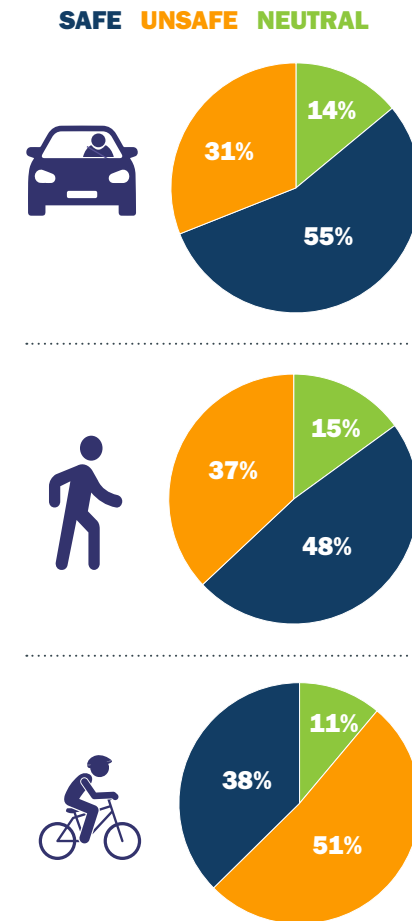
Figure 20. Feeling of Safety by Mode

PHASE 1 (CONT.)

22% of respondents said they, or someone they know, were involved in a crash in Lafayette in the past five years.

Survey participants had the chance to share additional safety concerns. A total of 223 responses were received and grouped by topic: Driving, Biking, Walking, and Other Safety Concerns. The breakdown of concerns is as follows:

- 145 Driving Concerns
- 34 Walking Concerns
- 28 Biking Concerns
- 12 Other Safety Concerns
- 5 Not Safety-Related Comments

These map comments were overlaid onto the Comprehensive Safety Network (CSN) to identify locations highlighted by community feedback that were not flagged in the crash history and risk analysis, and vice versa. Generally, comments aligned with the CSN with a few additional neighborhood clusters observed. That overlay is shown in Figure 21.

Figure 21. Community Feedback Map

Legend — Lafayette - HRN/HIN & Public Input Comments
- High Injury Network (12)
- High Risk Network (12)
- DRCOG High Injury Network
- I Feel Unsafe Biking (101)
- I Feel Unsafe Driving (93)
- I Feel Unsafe Walking (174)
- Other Concern (62)
- I Feel Unsafe Using a Mobility Device (6)
- HIN Intersections (11)
- Schools
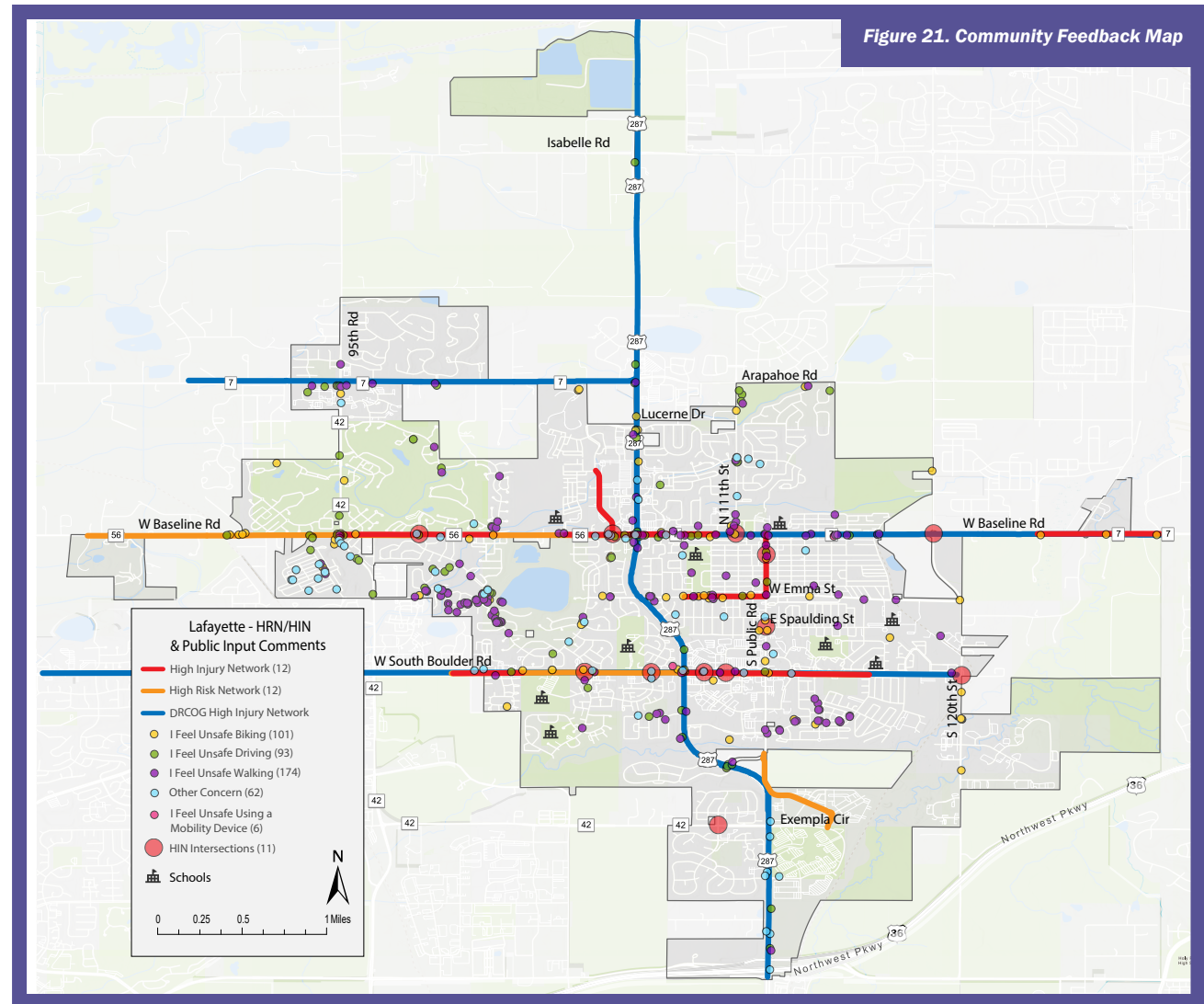
The identification of safety strategies is an important part of the safety action plan process. These context sensitive strategies are selected based on observed crash trends. These strategies focus on addressing common factors and patterns in crashes, such as roadway features, traffic behaviors, or vulnerable user groups, to reduce risks systematically. By applying these strategies broadly, rather than just to high-crash locations, safety improvements can be made across the entire network.

These strategies can include both infrastructure solutions, like roadway design changes, and non-infrastructure measures, such as education or enforcement initiatives, ensuring a comprehensive approach to safety. This aligns with the Safe System Approach, which recognizes that human mistakes will happen and emphasizes building redundancy into the transportation system to prevent serious injuries and fatalities. By integrating the 5 Es—Engineering, Education, Enforcement, Encouragement, and Evaluation— to create a system where all road users, especially the most vulnerable, are protected. By taking a holistic approach, Lafayette can work toward eliminating severe crashes and making the city's streets safer for everyone.

PRIMARY FOCUS AREAS

To develop effective strategies for addressing severe crash patterns in Lafayette, the first step is to determine key focus areas. Through a combination of data analysis, community feedback, and crash trend evaluation, three primary focus areas have been identified.

- **Vulnerable Road Users**: Vulnerable road users, such as pedestrians, cyclists, and motorcyclists, are particularly at risk because they lack the protection of a vehicle in the event of a crash, making them far more likely to be seriously injured or killed when involved in a crash. Approximately 16% of severe crashes have involved a pedestrian or bicycle.

- **Signalized Intersections:** Broadside and approach-turn collisions have been the two most prevalent severe crash types over the last ten years, with 43% of severe crashes occurring at signalized intersections, with 53.9% of all broadside and 70.5% of all approach turn crashes happening at signalized intersections. These crash types highlight the need for targeted interventions to improve intersection safety.

- **Speeding:** This focus area was identified based on community feedback and the well-documented correlation between higher speeds and crash severity. Posted speed was used to represent actual vehicle speed. 40 miles per hour roadways or higher are twice as likely to result in severe crashes compared to lower-speed roads.

29 identified strategies align with the three focus areas. This list was reviewed by City staff to determine which strategies could be effectively implemented in Lafayette and which would provide the greatest value to the City given local infrastructure and processes. Collaborative workshop sessions were held with City staff to review each strategy and explore how it could be applied in Lafayette. Participants also provided feedback on anticipated effectiveness, as well as the time, funding, and staff resources required for implementation.

Analyze Existing Crash Data → Determine Focus Areas → Develop List of Initial Strategies → Workshop with the City to Refine Strategy List → Create Prioritized List of Strategies
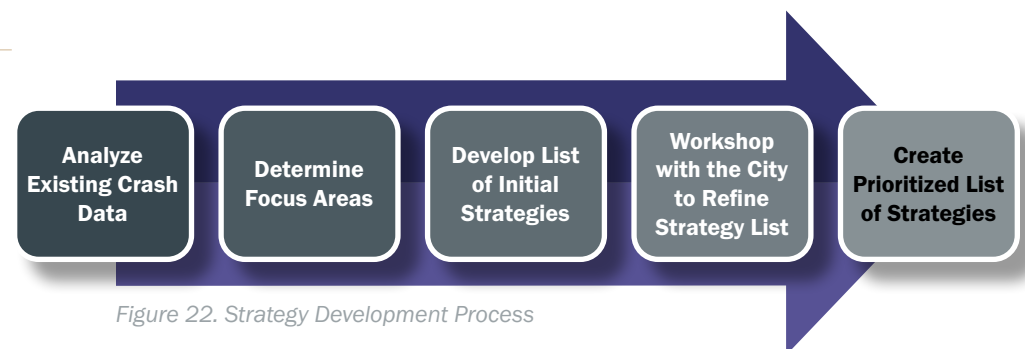
Figure 22. Strategy Development Process

The following tables present the identified strategies organized by focus area. Each table includes the components listed below to help evaluate and implement the strategies effectively.

STRATEGY COMPONENTS

A. Strategy information, including focus area, strategy name, and description

B. Method(s) of implementation

C. Identifying if the strategy requires additional education efforts or enforcement measures.

D. Identifying if the strategy requires a crash analysis database, programs, policies, or standards to be in place before it can be implemented.

E. Identifying if the strategy is foundational to being able to implement other strategies.

F. The applicable context for application within Lafayette.

G. Identifying if Lafayette is already doing this strategy in some capacity.

	A			B					C		D			E	F	G
Focus Area	Strategy	Description	Signing / Striping	Operations / Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards /Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Vulnerable Road Users	Crosswalk Visibility Enhancements	Install enhancements to crosswalks such as: advanced stop bars at traffic signals, high-visibility crosswalk striping, positive lighting, refuge islands, and additional signage.	✠		✠		✠				✠	✠		Will need to develop guidelines for review and implementation to ensure an equitable and consistent approach.	Yes

Table 6. Strategy Components

GENERAL

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards / Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
General	Driveway Standards	Establish driveway standards that create a smoother transition between sidewalks and driveways, ensuring driveways feel like extensions of the sidewalk rather than street intersections. Maintain sidewalk grade continuity for pedestrian safety and accessibility. Apply this standard to new developments and update existing driveways through the annual improvement program.					✠					✠	✠	Likely to be implemented as development occurs or through concrete maintenance.	Yes
General	Crash Review	Conduct a quarterly review of crash data to assess patterns, identify high-risk locations, and guide targeted safety improvements. This process supports data-driven decision-making and proactive mitigation strategies.									✠	✠	✠	Citywide applicability	No

Table 7. General Strategies

VULNERABLE ROAD USERS

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards / Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Vulnerable Road Users	Crosswalk Visibility Enhancements	Install enhancements to crosswalks such as: advanced stop bars at traffic signals, high-visibility crosswalk striping, positive lighting, refuge islands, and additional signage.	✠		✠		✠				✠	✠		Will need to develop guidelines for review and implementation to ensure an equitable and consistent approach.	Yes
Vulnerable Road Users	Intersection/Segment Lighting	Evaluate lighting conditions on segments, at mid-block crossings, intersection crosswalks and intersection approaches to ensure illumination standards are met, positive crosswalk lighting is provided and pedestrian level lighting is provided where appropriate. Actions to mitigate lighting deficiencies include installation of new light posts and enhancement/ replacement of existing luminaries.				✠					✠	✠		Existing mid-block crosswalks without lighting would be the top priority. Citywide prioritization would need to be analyzed.	No
Vulnerable Road Users	Enhance Bike Lanes	Install and improve existing bicycle facilities to provide buffered and separated bicycle lanes on appropriate roadways. Further enhancements could include pavement markings, green paint, dedicated signals with bicycle detection, and physical barriers.			✠	✠					✠	✠		Per the City's Multimodal Transportation Plan, or in locations with crash history that can be mitigated with this countermeasure. Can coordinate implementation with Annual paving program	Yes
Vulnerable Road Users	Bus Stop Access and Amenities	Evaluate Comprehensive Safety Network segments for transit routes and current transit stop conditions for: safe and convenient access to transit and ADA compliance. Ensure new capital improvement projects, development and redevelopment include bus stop upgrades. Seek funding and grants when applicable.			✠	✠					✠	✠		This is also in the City's Multimodal Transportation Plan. Will need to establish a program for maintenance	Yes
Vulnerable Road Users	Upgrade or Install Mid-Block Crossings	Install enhanced mid-block crossings, including Pedestrian Hybrid Beacons (PHBs/HAWKs), pedestrian signals, and Rectangular Rapid-Flashing Beacons (RRFBs), along with pedestrian refuge islands where feasible.			✠	✠					✠	✠		Will need to develop guidelines for review and implementation to ensure an equitable and consistent approach.	No

VULNERABLE ROAD USERS (CONT.)

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards /Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Vulnerable Road Users	Pedestrian Signal Enhancements	Install signal enhancements such as audible signals, pedestrian detection, countdown heads, re-timed pedestrian clearance, leading pedestrian intervals, exclusive phases, improved push buttons, and smart systems for slower walkers. Accessible Pedestrian Signals (APS) can also be added to assist individuals with vision impairments.		✠		✠	✠				✠	✠		New signals should meet current standards regarding pedestrian amenities. Specific signal enhancements should be considered on a case by case basis based on context sensitive needs.	Yes
Vulnerable Road Users	Sidewalk Infill, Inspection, and Maintenance	Continue upgrading sidewalks to address gaps and inadequate infrastructure through the annual program and capital improvement projects.			✠	✠					✠	✠		Annual Program addresses damaged concrete and some ADA upgrades. Capital programs and grants will need to address sidewalk gaps	Yes
Vulnerable Road Users	Targeted Education Campaigns	Develop and implement education campaigns for DRIVERS to learn about pedestrian and bicycle awareness and for PEDESTRIAN/BICYCLISTS to learn about basic riding skills, safety practices, and road rules.							✠					Can incorporate into Safe Routes to School Safety plan and/or through coordination with BVSD. Coordinate with ongoing safety programs from CDOT, cycling advocacy groups, etc.	Yes
Vulnerable Road Users	Safe Routes to School	Leverage funding opportunities to implement school-focused infrastructure improvements, prioritizing safety and accessibility through Safe Routes to School initiatives.			✠	✠			✠		✠			Safe Routes to School Action Plan is intended to create a mechanism for evaluating projects equitably throughout the county, and will create a list of project-ready grant applications.	No

Table 8. Vulnerable Road User Strategies

SIGNALIZED INTERSECTIONS

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards /Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Signalized Intersection	Evaluate and Improve Left Turn Movements at Signals (protected left, flashing yellow arrow, etc.)	Improve left-turn conflicts through signal timing, such as implementing protected left-turn signal phasing at high-risk intersections. This includes conversion of permissive or permissive/protected left-turn signal timing phases to a protected only left turn signal timing phase, reducing conflicts with through vehicles and could include replacing 'doghead' signal heads with 5-Section FYA heads.	✠								✠	✠	✠	Use consistent approach. Develop left turn phasing determination flow chart or use CDOT recommendations. Target identified left turn crash (approach turn crash) locations.	Yes
Signalized Intersection	Install Backplates with Retroreflective Borders on Signal Heads	Install backplates with retroreflective borders (framing the signal head with a 1- to 3-inch yellow retroreflective border) at high crash locations and on high speed roadways.		✠		✠						✠		Low cost improvement. Can be accomplished with annual program over time, or potential safety grant.	Yes
Signalized Intersection	Install Automated Enforcement for Red Light Running	Implement automated enforcement systems at intersections with a high incidence of red-light running crashes. These systems use cameras to capture violations, helping to deter risky driver behavior and improve compliance with traffic signals.						✠			✠			Would be implemented where crash picture indicates red-light running is present. Likely most feasible on CDOT roadways. Will require additional staff and policy through council.	No
Signalized Intersection	Evaluate and Modify Yellow Change and All-Red Intervals	Evaluate and update the yellow change interval and all-red intervals, which is the length of time that the yellow signal indication is displayed following a green signal indication, and the length of time all traffic signals are displayed red during the cycle length. This interval should be reviewed and modified considering roadway speeds and crash patterns.	✠									✠	✠	Use consistent approach. Develop change interval recommendations to apply citywide. Target identified red light running locations.	Yes

SIGNALIZED INTERSECTIONS (CONT.)

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards / Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Signalized Intersection	Restrict Parking Near Intersections	Evaluate parking needs and restrict parking at locations where parking is permitted near the intersections to improve visibility. This could be accomplished through either signage and curb markings or curb extensions, which could be constructed with curb or quick build materials.	✠		✠		✠					✠		Generally done on a case by case basis where there's a crash pattern that can be mitigated by this countermeasure. Standards should reflect best practices.	Yes
Signalized Intersection	Supplemental Pole-Mounted Signals on Near-Side Approaches	Install near side signal heads at signalized intersections with limited visibility of the traffic signal from approaching vehicles, a history of crashes or observed conflicts indicating driver unawareness of the intersection, and/or evidence of speeding on intersection approaches.			✠	✠	✠							Supplemental signal heads should be used in locations where there is a crash pattern that can be mitigated by this countermeasure. Implemented on a case by case basis - not citywide.	No
Signalized Intersection	Review and Improve Sight Visibility for Right and Left Turning Vehicles	Measure and evaluate sight visibility for right turns and left turns ensuring that there are not obstructions in sight visibility triangles, such as vehicles from offset turn lanes, and/or vegetation. Adjust stop bar location, remove vegetation as necessary, and correct offset turn lanes as necessary to provide unobstructed sight distance.			✠		✠				✠	✠		Should be used in locations where there is a crash pattern that can be mitigated by this countermeasure. Standards should reflect best practices.	Yes
Signalized Intersection	Reduce Turning Radius and Install Raised Corner Islands	Implement features like reduced turning radii, raised corner islands, and right-turn wedges to slow vehicles at intersections and reduce conflicts between vehicles and other road users. This can be accomplished through curb reconstruction, or by using temporary/quick build materials.				✠	✠				✠	✠		Can be used in locations with safety concerns related to turning vehicles, especially in terms of adjacent pedestrians / bicycles. Can be incorporated into annual programs.	No

SIGNALIZED INTERSECTIONS (CONT.)

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards / Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Signalized Intersection	Improve Intersection Geometry	Evaluate intersections with negative offset left turn lanes, unbalanced lanes, or skewed geometry to identify opportunities for optimizing the intersection layout.	⛩			⛩	⛩				⛩	⛩		Removing negative offsets is effective in urban areas where head on crashes not frequent. Can sometimes be accomplished with just striping. Should be targeted for implementation in locations where approach turn crashes are a concern. Standards should be updated to not require median at intersection noses.	No
Signalized Intersection	Convert Intersections to Roundabouts where Appropriate, Following an Evaluation to Determine Feasibility	Install roundabouts at appropriate intersections to slow traffic, reduce conflict points, and therefore reduce the frequency and severity of crashes.				⛩								Right of Way will likely be needed in most retrofit situations. Encourage developments to install roundabouts where feasible.	No
Signalized Intersection	Establish Access Management Policy	Establish a formal access management policy that restricts driveway access near signalized intersections to enhance safety and improve traffic operations. This policy would incorporate the use of raised medians or channelization to limit left-turn access, reducing conflict points, and ensuring more predictable traffic patterns.				⛩	⛩				⛩	⛩		Access policy could be generic in terms of access spacing to intersections, or specific along major corridors. Standards should be updated to reflect best practices and multimodal concepts.	No

Table 9. Signalized Intersection Strategies

SPEEDING

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards / Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Speeding	Signal Timing	Adjust signal timing to encourage steady, lower speeds along key corridors by prioritizing vehicle progression at or below the posted speed limit, rather than optimizing solely for throughput and efficiency.		✠								✠		Context sensitive solution for high bike and pedestrian activity areas, and areas with frequent signals only (This was recently done on South Boulder Road in conjunction with DRCOG). Limited effectiveness on suburban arterials.	No
Speeding	Automated Enforcement for Speeding	Install automated enforcement at key locations (Comprehensive Safety Network segments, school zones) to target speeding.						✠			✠			Policy change will be needed through council. Will likely require additional staff. DRCOG is coordinating implementation help from larger agencies.	No
Speeding	Surge Enforcement Operations	Complete Surge Operations on a monthly basis at key locations connected to the High Injury Network (HIN) and High Risk Network (HRN) and measure results related to traffic stops, citations, and other trends						✠						Staff may be a limiting factor. Can prioritize enforcement on comprehensive safety network. Can integrate into Neighborhood Speed Management policy.	No
Speeding	Saturation Patrols	Use data-driven methods to prepare for patrols, coordinate with other agencies, execute patrol, debrief, refine, and ensure efforts are ongoing. Continue funding for law enforcement officer training on the latest BAC enforcement techniques including field sobriety tests, the use of breathalyzer devices, and purchase of equipment that supports saturation patrols.						✠						Staff may be a limiting factor. Can prioritize enforcement on comprehensive safety network. Can integrate into Neighborhood Speed Management policy.	No

SPEEDING (CONT.)

Focus Area	Strategy	Description	Signing / Striping	Operations/ Traffic Control	Low Cost Infrastructure	Infrastructure - Capital	Maintenance	Enforcement	Education	Crash Analysis Required	Programs/Policies	Standards /Operating Procedures	Foundational	Applicability	Is Lafayette Already Doing This?
Speeding	Targeted Education Campaigns	Implement targeted education campaigns to drivers for dangerous behaviors (speeding, tailgating, distracted driving, seatbelt use, etc.). Collect input on campaigns, refine, and ensure efforts are ongoing.							✠					Social Media posts can be used for timely updates. General updates can go into the water bill. Coordinate with Boulder County and DRCOG	Yes
Speeding	Radar Speed Feedback Signs	Install fixed or temporary radar speed feedback signs to inform drivers of their current speed alongside the posted speed limit.			✠				✠		✠	✠		Due to high potential demand, will need to be implemented through a Neighborhood Traffic Mitigation Program.	Yes
Speeding	Evaluate Posted Speed Limits	Evaluate the posted speed limits on key roadways to identify if speeds should be lowered, taking into account factors beyond the 85th percentile speed to ensure context-sensitive speed adjustments.	✠								✠	✠	✠	Best if done through a consistent citywide approach.	No

Table 10. Speeding Strategies

STRATEGY VALUE ASSESSMENT

Given the scale of these initiatives, many strategies represent significant undertakings for the City. Where possible, efforts will be integrated into existing projects to maximize resources and improve efficiency. To guide the approach for new efforts, each strategy was evaluated to understand the value it offers. This helps ensure that limited resources are directed toward the most impactful and cost-effective solutions, maximizing the City's return on investment. By focusing on strategies that provide the greatest safety improvements relative to their resources required for implementation, the City can achieve the best possible outcomes within the constraints of available resources.

To assess the value of each strategy, a scoring system was developed that incorporated three key factors: the anticipated crash reduction value, relative cost of implementing the strategy, and the local contextual value.

Proven Value is determined by comparing the anticipated crash reduction benefits to the relative cost of implementing a strategy. This is calculated by dividing the estimated crash reduction value by the implementation cost, using the variables outlined below.

Crash Reduction Benefits were estimated using data from the Crash Modification Factor (CMF) Clearinghouse and Federal Highway Administration (FHWA) Proven Countermeasures which are trusted resources that provide data on the effectiveness of various safety measures. The CMF Clearinghouse offers a collection of crash modification factors that quantify the expected safety effects of different interventions, while FHWA Proven Countermeasures highlights strategies with a demonstrated track record of improving safety based on rigorous evaluations. This metric helps quantify the expected safety benefits of each strategy as a percentage of the crashes that strategy would be anticipated to reduce.

Relative Cost was estimated by assigning a cost rating scale of one to four, with one representing the lowest cost and four representing the highest cost. The cost categories are defined as follows:

> 1: $10,000 - $100,000
>
> 2: $100,000 - $500,000
>
> 3: $500,000 - $1,000,000
>
> 4: $1,000,000 +

Local Contextual Value was determined through a strategy selection workshop. Staff evaluated each strategy based on two criteria: effectiveness and implementation resources. Effectiveness was rated on a scale of one to five, with five indicating the highest expected positive impact. Resources, which accounted for factors such as time, funding, and staff hours, were also rated one to five, with one representing the fewest resources required for implementation and five representing the most resources required for implementation. Strategies perceived as having high effectiveness while requiring minimal resources are considered the most valuable by staff.

This local lens is important because the effort and cost to implement a strategy can vary significantly by community. In Lafayette, where staff resources and equipment are limited, even strategies that seem straightforward elsewhere may require contracting out work, hiring new staff, or making tradeoffs with other mission-critical services.

STRATEGY VALUE ASSESSMENT (CONT.)

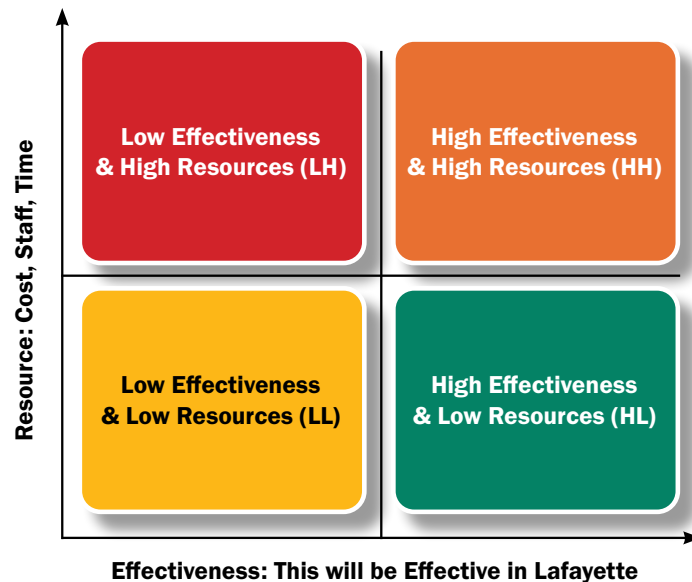Figure 23 is a matrix that shows how each strategy's local contextual value was categorized.

Figure 23. Local Contextual Value Matrix

For infrastructure and engineering-related strategies, both crash reduction benefits (using crash modification factors where available) and local contextual value were used to assess overall value. These two components were normalized and combined to create a comprehensive value score. For non-engineering strategies—such as education, enforcement, or policy initiatives—only the local contextual value was used. This approach reflects the limited availability of quantifiable crash reduction data and the differences in cost structure compared to infrastructure strategies.

Tables 11 and 12 list strategies in priority order based on their overall value score, noting the corresponding matrix category. For infrastructure strategies, a tier is also assigned based on natural breaks in the data to group similar-value investments.

NON-INFRASTRUCTURE

#	Focus Area	Strategy	Matrix Category	The Proven Value
1	**Speeding**	Targeted Education Campaigns	HL	0.44
2	**General**	Driveway Standards	LL	0.44
3	**Speeding**	Surge Enforcement Operations	LL	0.44
4	**General**	Crash Review	HH	0.44
5	**Speeding**	Saturation Patrols	HH	0.44
6	**Vulnerable Road Users**	Targeted Education Campaigns	HH	0.44
7	**Vulnerable Road Users**	Safe Routes to School	HH	0.44
8	**Signalized Intersection**	Establish Access Management Policy	HH	0.33
9	**Speeding**	Evaluate Posted Speed Limits	LH	0.32

Table 11. Non-Infrastructure Value Ranked Strategies

STRATEGIES BY VALUE (CONT.)
INFRASTRUCTURE

	#	Focus Area	Strategy	Matrix Category	Local Contextual Value	Proven Value	Comprehensive Value
Tier 1	1	Signalized Intersection	Evaluate and Improve Left Turn Movements at Signals (protected left, FYA, etc.)	HL	0.59	1.00	1.59
	2	Signalized Intersection	Install Backplates with Retroreflective Borders on Signal Heads	HL	1.00	0.15	1.15
	3	Speeding	Signal Timing	HH	0.44	0.56	1.00
	4	Vulnerable Road Users	Crosswalk Visibility Enhancements	HL	0.52	0.40	0.92
Tier 2	5	Speeding	Automated Enforcement for Speeding	HH	0.40	0.47	0.87
	6	Vulnerable Road Users	Intersection/Segment Lighting	HL	0.44	0.42	0.87
	7	Vulnerable Road Users	Enhance Bike Lanes	HH	0.39	0.45	0.84
	8	Vulnerable Road Users	Bus Stop Access and Amenities	LL	0.56	0.28	0.83
	9	Signalized Intersection	Install Automated Enforcement for Red Light Running	HH	0.35	0.47	0.82
Tier 3	10	Signalized Intersection	Evaluate and Modify Yellow Change and All-Red Intervals	HL	0.52	0.20	0.72
	11	Signalized Intersection	Restrict Parking near Intersections	LH	0.44	0.25	0.69

	#	Focus Area	Strategy	Matrix Category	Local Contextual Value	Proven Value	Comprehensive Value
Tier 3	12	Vulnerable Road Users	Upgrade or Install Mid-Block Crossings	HH	0.33	0.35	0.68
	13	Vulnerable Road Users	Pedestrian Signal Enhancements	HH	0.57	0.10	0.67
	14	Signalized Intersection	Supplemental Pole-Mounted Signals on Near-Side Approaches	HL	0.52	0.14	0.66
	15	Vulnerable Road Users	Sidewalk Infill, Inspection, and Maintenance	HL	0.53	0.10	0.63
	16	Signalized Intersection	Review and Improve Sight Visibility for Right and Left Turning Vehicles	HH	0.39	0.24	0.63
Tier 4	17	Signalized Intersection	Reduce Turning Radius and Install Raised Corner Islands	HH	0.39	0.18	0.57
	18	Signalized Intersection	Improve Intersection Geometry	HH	0.39	0.09	0.48
	19	Signalized Intersection	Convert Intersections to Roundabouts where Appropriate, Following an Evaluation to Determine Feasibility	HH	0.35	0.11	0.46
	20	Speeding	Radar Speed Feedback Signs	LL	0.37	0.05	0.42

Table 12. Infrastructure Value Ranked Strategies

COMMUNITY INPUT ON STRATEGIES

In late winter 2025, the project team conducted Phase 2 of outreach. During this phase, the community was asked to review high-level results from the safety analysis and provide input on safety-specific priorities, and feedback on familiarity with proposed safety strategies. The community and stakeholder engagement efforts included a blend of in-person, virtual, and digital engagement strategies, including informational online videos, an online survey that was open from February 26 – March 17, 2025, and a station at the Lafayette Library available February 28 – March 17, 2025.

There were 275 responses to the Phase 2 survey, with 95% of participants reporting they live in Lafayette. The survey included questions about participants' familiarity with example safety strategies that have been identified to address the most common crashes that occur in Lafayette and interest in seeing more of them implemented in Lafayette.

Participants were also asked to rank factors associated with higher crash risk and more crashes in order of importance when prioritizing roadway safety. Figure 25 shows the results of the question, with locations where people have historically been injured or killed in traffic crashes ranked the highest priority by participants, followed by higher speed roadways.

The community feedback collected in Phase 2 was used to inform roadway safety education campaigns and the prioritization of Vision Zero projects and specific actions Lafayette can implement to improve traffic safety.
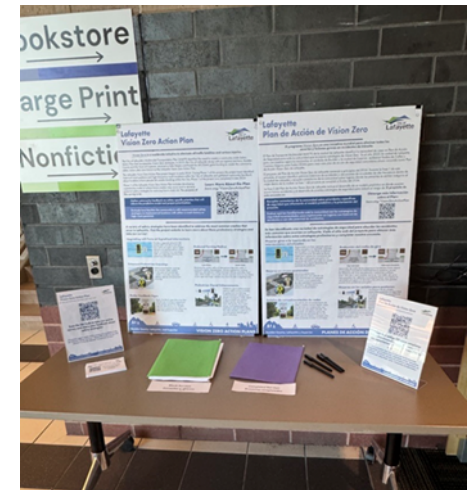

Figure 24: Community Outreach Boards at Library.

Prioritization Factor Weighted Averages

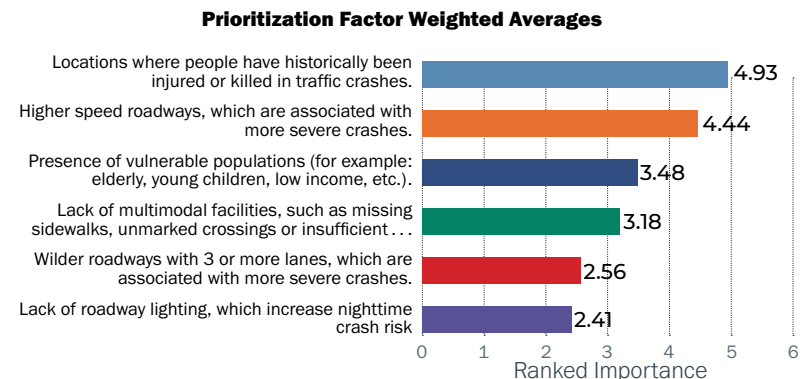| Factor	Ranked Importance
Locations where people have historically been injured or killed in traffic crashes.	4.93
Higher speed roadways, which are associated with more severe crashes.	4.44
Presence of vulnerable populations (for example: elderly, young children, low income, etc.).	3.48
Lack of multimodal facilities, such as missing sidewalks, unmarked crossings or insufficient . . .	3.18
Wilder roadways with 3 or more lanes, which are associated with more severe crashes.	2.56
Lack of roadway lighting, which increase nighttime crash risk	2.41

Figure 25. Community Feedback About Crash Risk Factor Importance when Prioritizing Roadway Safety

FUNDING PATHWAYS FOR SAFETY IMPROVEMENTS

Safety improvements, such as the strategies listed in Tables 7-10, can make significant strides to enhance transportation safety. Implementation requires resources, including staff time and funding. The City funds regular maintenance programs for traffic signals, pavement, and concrete infrastructure. The City currently does not have dedicated budget for safety improvements, but works to integrate safety improvements into infrastructure rehabilitation and replacement projects. For example, if curb ramps are upgraded at a corner, the corner radius is reduced as much as possible. When traffic signal poles are replaced, left-turn improvements are made and retroreflective backplates are installed as needed and if budget is available. When streets are paved, sharrows or bicycle lanes are upgraded where possible to meet the FHWA bicycle selection guide.

Safety improvements that are not able to be completed through ongoing maintenance or other programs require budget requests during the City's annual budget process and/or grant funding. While there are federal, regional, and state grant sources available to support safety projects, these grants are competitive, require time and resources to apply for and carry out, and often have longer timelines for approval and funding. Additionally, most grants necessitate a local match, which would be drawn from the City's limited general fund. This means that while grant funding can help, the City must still prioritize its available resources carefully to ensure that critical safety improvements are made while citywide needs are met.

The following section discusses opportunities for improvement to Lafayette's roadway network and outlines potential next steps. However, it is essential to recognize that all of these strategies require funding to implement, and securing the necessary resources will be a critical part of moving forward.

LOCATION PRIORITIZATION

This Plan utilizes a data-driven approach to prioritize projects based on four key considerations: Crash History, High-Risk Network Score, Equity Considerations, and Community Input. This prioritization process ensures an equitable and strategic implementation process.

Crash History was used to help identify where safety improvements are most needed, with more weight given to severe crashes. Each crash was scored based on injury severity, following the High Injury Network method: 1 point for minor injuries, 2 for serious injuries, and 4 for fatalities. Two types of crash data were considered: one focused only on crashes along roadway segments, and another that also included intersection crashes and pedestrian or bicycle crashes—even those that didn't result in an injury. This second method supports the Safe System approach, which emphasizes protecting vulnerable road users. The total weighted crash calculation was divided by the length of each segment. Segments with higher crashes per mile were given higher priority in the rankings.

The initial **Risk Score** for each segment was calculated using the High-Risk Network methodology, which takes into account the risk factors noted in Table 4. In addition to this objective analysis, public feedback collected during Phase 2 was incorporated to ensure that local priorities and concerns were reflected in the risk assessment. Community input provided insights into which factors residents and stakeholders felt were most critical to safety. To combine the objective data with the public's input, an adjusted risk score was calculated for use in the prioritization process by averaging the original risk score with the community's feedback. This adjusted score ensures that both data-driven insights and local perspectives are considered in determining safety priorities.

Equity was incorporated considering the equity index of each segment.

Community Input was integrated based on the statistically significant survey and extensive feedback provided during the MMTP. As part of this process, a comprehensive list of corridors was identified and rated by the public to establish the roadways with the greatest need for improvement. The MMTP ranks these roads as shown in Figure 26. Corridors included in the MMTP list will receive points for community input. Higher-ranked roads will receive elevated priority.
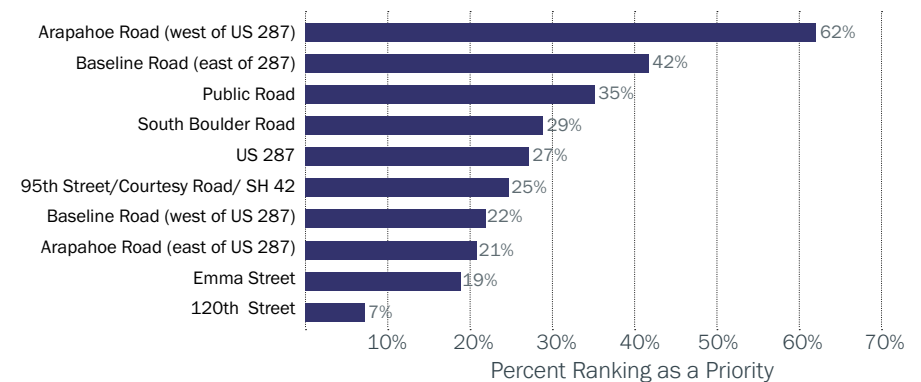

Figure 26. MMTP Community Input Corridors

Prioritization scores were calculated for each segment of roadway in Lafayette using the weighting shown in Figure 27. 50% of the priority score comes from the crash history, 20% from risk, 20% from equity, and 10% from community input.
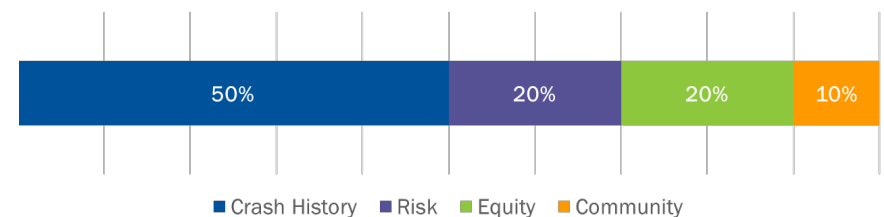

Figure 27. Prioritization Factor Weighting

LOCATION PRIORITIZATION (CONT.)

Prioritization scores were applied to the roadway network included in the HIN and HRN analysis process. Each segment was scored based on these factors. The resulting priority segments are reflected in the map shown in Figure 28.

Lafayette will actively pursue opportunities to secure outside funding. Implementation will rely heavily on outside funding, and the exact sequencing of projects will be influenced by the ability to secure grants and partnerships. This adaptable strategy enables the city to optimize available resources and drive transportation safety improvements. Many of these segments are larger roadways that connect Lafayette to other communities.

Collaboration with other agencies will be crucial in order to make meaningful progress on those roadways. Lafayette will work with Boulder County, Louisville, Erie, and Broomfield on roadways that cross jurisdictions. With Boulder County, Lafayette will pursue opportunities where Lafayette's HIN and HRN may overlap with Boulder County's high-priority corridors (roadways like South Boulder Road, Baseline, and 95th. CDOT will also be a key partner on state or interstate roadways.

*Figure 28. Prioritization Map*
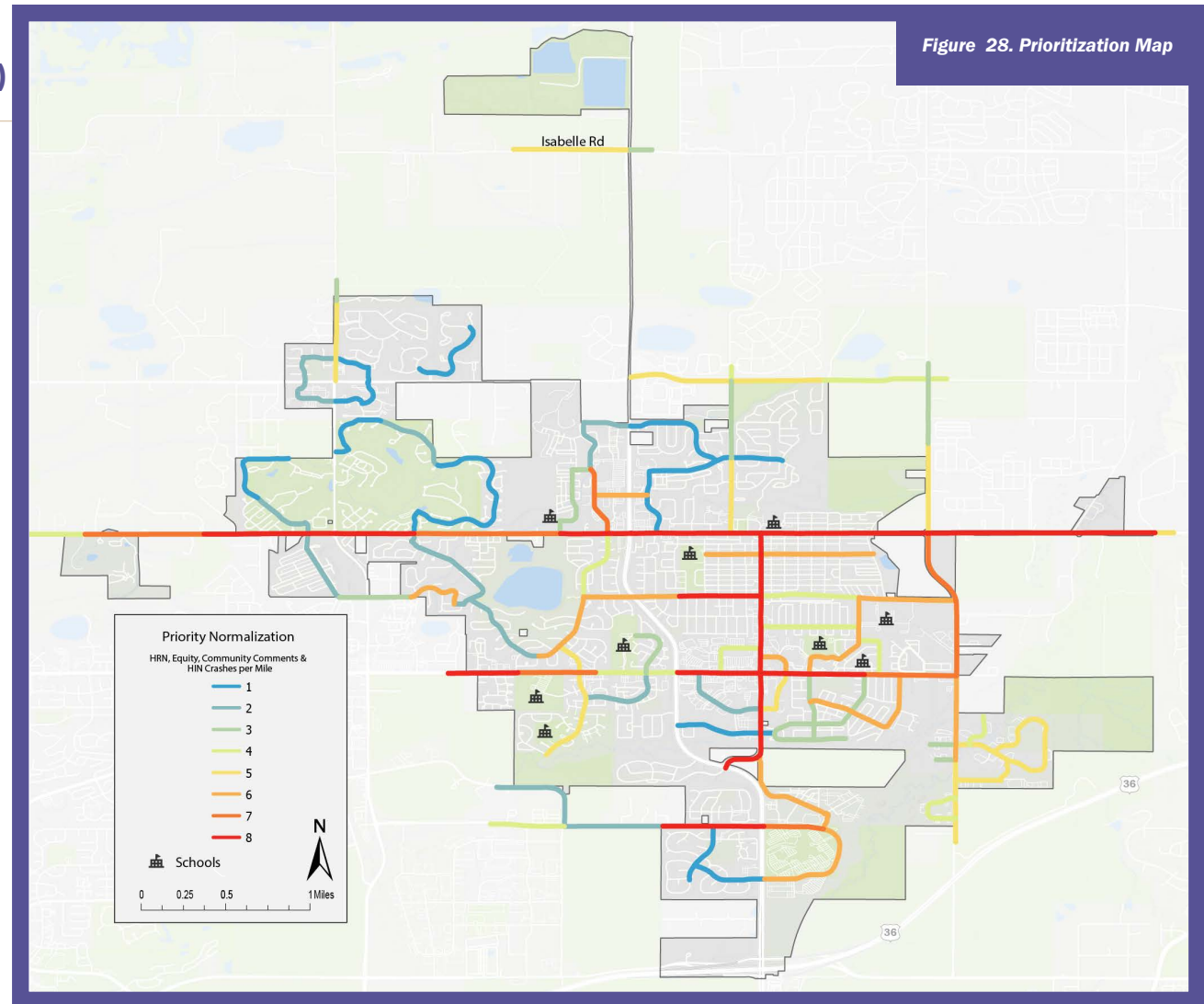
SAFETY PROJECT PIPELINE

The MMTP identified over $100 million dollars in projects with full implementation extending beyond the 25-year planning horizon. The VZAP further refines MMTP priorities and outlines additional projects. Implementation will continue to be refined through the annual budget process and consider new information including additional data, funding opportunities, and community input.

HIGH-PRIORITY CORRIDORS

Seventeen roadway segments were identified as high-priority based on the analysis in Chapter 5 and results shown in Figure 28. Adjacent segments were grouped into nine broader sections. The tables and figures below highlight these priority sections and their crash histories.

Priority Score	Group Name	Segment Name	Length (Mi)	Most Common Injury Crash Type	Total Injury	Total KSI	Minor Injury	Serious Injury	Fatal	Ped/Bike – PDO Or Possible
0.77	East South Boulder Road	South Boulder Rd, From US 287 To Robin Hood St	0.95	Broadside (30.4%)	23	4	19	3	1	5
0.72	West South Boulder Road	South Boulder Rd, From Ceres Dr To City Boundary	0.35	Bike (50%)	4	0	4	0	0	4

Table 13. High Priority Segments
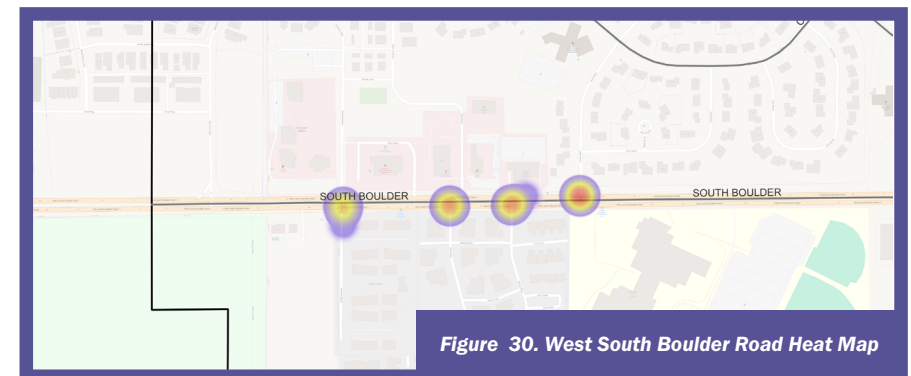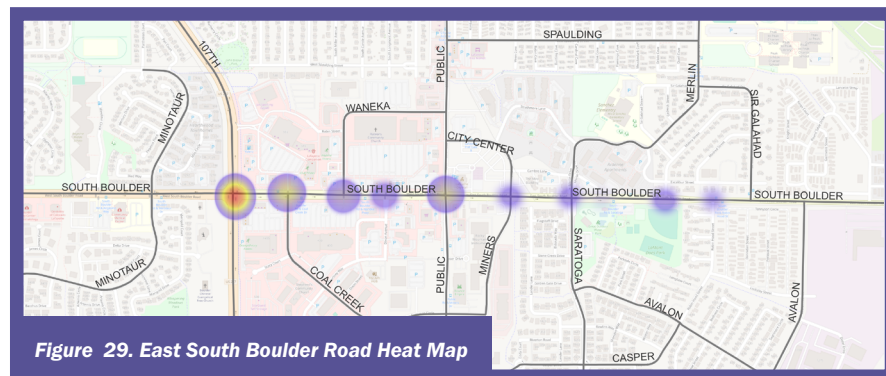
Figure 29. East South Boulder Road Heat Map

Figure 30. West South Boulder Road Heat Map

HIGH-PRIORITY CORRIDORS (CONT.)

Priority Score	Group Name	Segment Name	Length (Mi)	Most Common Injury Crash Type	Total Injury	Total KSI	Minor Injury	Serious Injury	Fatal	Ped/Bike – PDO Or Possible
0.69	East Baseline Road	Baseline Rd, From US 287 To Airport Drive	2.65	Rear End (31.9%)	47	4	43	3	1	8
0.69	North Public Road	Public Rd, From Baseline Rd To South Boulder Road	0.91	Rear End (50 %)	6	2	4	2	0	2

Table 13. High Priority Segments
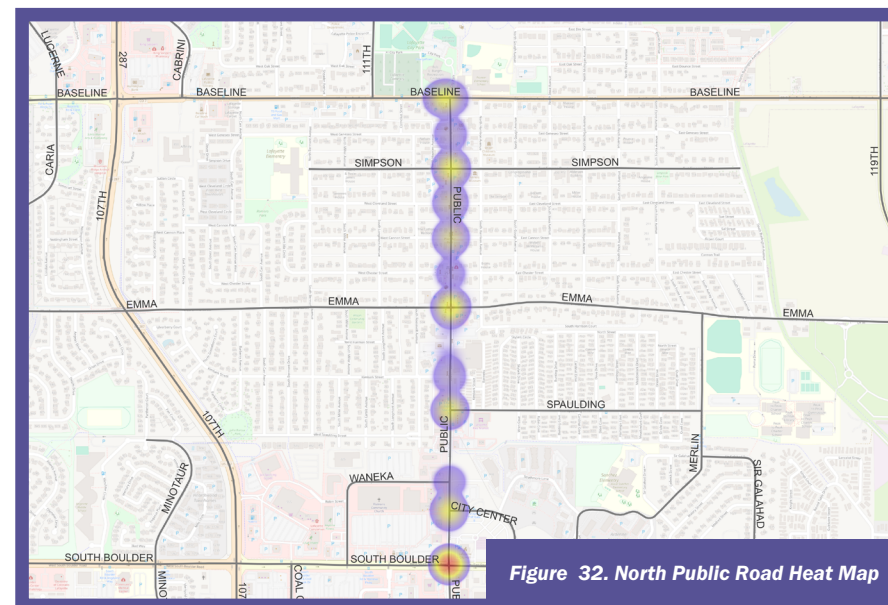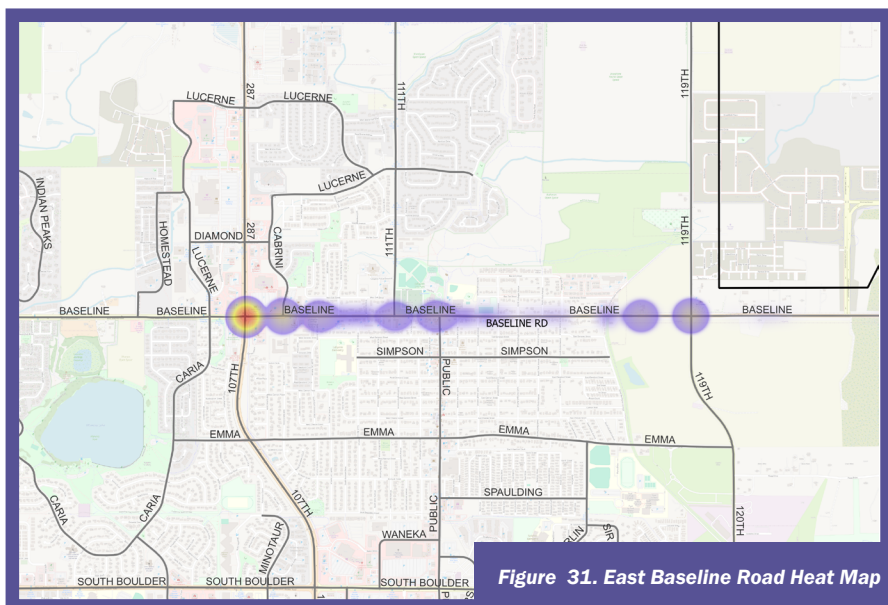
Figure 31. East Baseline Road Heat Map

Figure 32. North Public Road Heat Map

HIGH-PRIORITY CORRIDORS (CONT.)

Priority Score	Group Name	Segment Name	Length (Mi)	Most Common Injury Crash Type	Total Injury	Total KSI	Minor Injury	Serious Injury	Fatal	Ped/Bike – PDO Or Possible
0.60	West Baseline Road	Baseline Rd, From Indian Peaks Drive To Elgin Dr	1.06	Broadside / Rear End (30%)	10	2	8	2	0	0
0.59	Central Baseline Road	Baseline Rd, From US 287 To Anna Thomas Pkwy	0.36	Rear End (60%)	5	1	4	0	1	1
0.51	Emma St	Emma St, From Public Rd To Barberry Ave	0.41	Broadside (60%)	5	0	5	0	0	1

Table 13. High Priority Segments

Figure 33. West and Central Baseline Road Heat Map

Figure 34. Emma Street Heat Map

HIGH-PRIORITY CORRIDORS (CONT.)

Priority Score	Group Name	Segment Name	Length (Mi)	Most Common Injury Crash Type	Total Injury	Total KSI	Minor Injury	Serious Injury	Fatal	Ped/Bike – PDO Or Possible
0.48	South Public Road	Public Rd, From US 287 To South Boulder Road	0.75	Rear End (50%)	6	2	4	2	0	2
0.48	Empire Rd	Empire Rd, From US 287 To 10855 Empire Rd	0.51	Broadside (44.4%)	9	2	7	2	0	0

Table 13. High Priority Segments

Figure 35. South Public Road Heat Map

Figure 36. Empire Road Heat Map
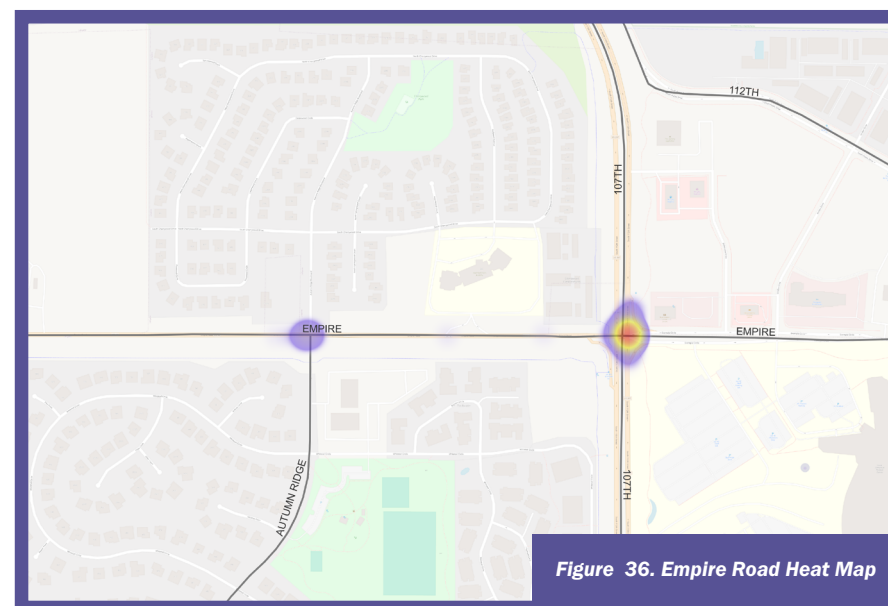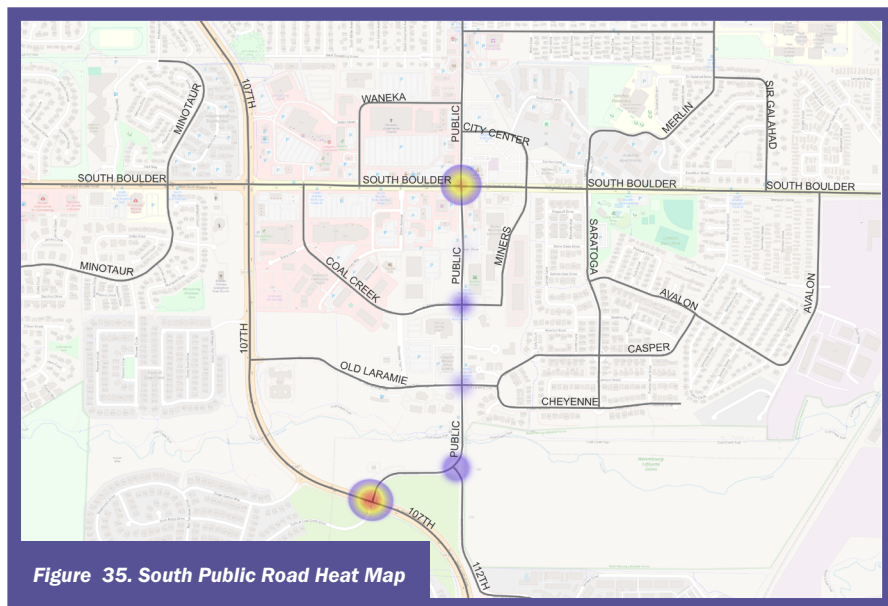
FEEDBACK ON THE DRAFT PLAN

The third and final phase of public engagement, conducted in late spring 2025, focused on reviewing the full draft of the Lafayette Vision Zero Action Plan. This phase included a bilingual online survey and targeted outreach to the Steering Committee and the general public. The survey invited participants to assess whether the draft plan provides a clear and effective roadmap toward achieving Vision Zero and to share open-ended feedback.

Thirty-five individuals responded to the survey, reporting that they reside in areas dispersed throughout Lafayette. When asked to rate how effective they believe the plan will be in achieving Vision Zero on a scale from 0 to 100, respondents provided a wide range of scores, with an average rating of 56. Feedback highlighted several recurring themes: requests for specific treatments in specific locations, stronger enforcement of both driver and cyclist behaviors, and interest in lane reduction strategies to calm traffic. Individual survey respondents also voiced support or opposition to specific actions, raised concerns about increasing congestion, and requested funding to support implementation.

In addition to public input, the project team convened a third and final meeting of the multi-agency Steering Committee on April 23, 2025. Participants provided targeted feedback via an interactive online board, identifying strategies their organizations could support and offering suggestions to refine the draft. The draft plan was presented at City Council on Tuesday, June 17th with a request to ensure the plan addresses mode specific education. Edits were made to the plan to incorporate all relevant feedback from the community, Steering Committee Members, and City Council during Phase 3.

IMPLEMENTATION AND NEXT STEPS

Creating safer streets for everyone is a top priority for the City. This VZAP will guide how Lafayette integrates safety into ongoing efforts including projects, programs, policies, and day-to-day operations. Recommendations from this Plan will integrate into the work already underway across departments.

Several foundational actions are already underway to support implementation. These include developing a crash analysis database, updating the land use code and public works standards and specifications, and strengthening in-house expertise in operations and maintenance. Continued training will ensure that City staff remain informed about current best practices in transportation safety.

The VZAP prioritization will guide decisions related to the City's resources, including the Capital Improvement Program, annual work plans, and budgeting processes. Prioritization of safety investments will evolve over time to align with funding opportunities and partnership efforts, allowing the City to maximize resources, accelerate progress, and deliver meaningful improvements.

The Plan identifies both systemic safety strategies that can be applied citywide and to specific high-priority locations that may benefit from targeted improvements. Successful implementation of these recommendations will require dedicated staff time, funding, and collaboration. The City is actively pursuing grant funding and working with regional partners and will continue to leverage existing programs wherever possible.

The following section outlines the City's phased approach to implementation, providing a clear roadmap for moving from planning to action.

STRATEGIES AND ACTIONS: NEAR TERM PRIORITIES

Each strategy identified in the Vision Zero Action Plan has been assigned a value score (see Tables 11 and 12), reflecting its potential impact and cost-effectiveness. These scores were developed to highlight strategies that could offer the greatest benefit for the City if implemented.

However, while these scores provide helpful guidance, many strategies cannot move forward until key foundational efforts are completed. This includes developing new policies, updating design standards, and establishing a reliable crash database to support data-driven decision-making.

As a result, the City will focus first on a select group of high-impact, enabling actions that create the conditions necessary for broader progress. These near-term priorities have been elevated because they:

- Lay the groundwork for future strategies,
- Involve substantial time or resource commitments that warrant early attention, or
- Align with immediate funding or partnership opportunities.

By focusing on these foundational steps, the City will be better positioned to implement the full range of strategies outlined in this plan—and make meaningful, lasting progress toward safety goals. The most critical of these is the creation of a comprehensive crash database.

Crash Database

Establishing a citywide crash database is the most essential early step. A reliable and accessible database will allow staff to evaluate crash patterns in more detail, track trends over time, and target the most effective safety solutions in the right locations. It will also support the implementation of both systemic and location-specific actions and help measure the success of interventions.

Signal Timing Enhancements

Signal timing enhancements include three targeted strategies:

Evaluate and Improve Left-Turn Movements
This will primarily involve upgrading left turn signal indications to flashing yellow arrow and converting permissive phasing to protected-only left-turn signals where crash data would indicate it is needed. This would provide safety benefits for all modes of travel.

Evaluate and Modify Pedestrian Clearance, Yellow Change and All-Red Intervals
This includes reviewing and adjusting yellow and all-red intervals at signalized intersections based on roadway speeds, approach geometry, and crash history. This strategy is also beneficial for all modes of travel.

Pedestrian Signal Enhancements
The strategies listed above have associated benefits for pedestrians and bicyclists, however additional improvements that are cost effective can be done while making other upgrades. This involves upgrading pedestrian signals with features like countdown timers, audible cues, leading pedestrian intervals, and accessible push buttons.

This is a priority step because signal timing enhancements lay the groundwork for a consistent, system-wide approach to improving intersection safety. These types of systemic strategies have some of the highest safety value scores and can often be implemented with minimal capital investment.

Programs, Policies and Guidelines

Many of the other strategies and actions will require policies, procedures, or guidelines so that they can be applied equitably and consistently across the city. Examples will likely include the development of a signal timing protocol, neighborhood speed management program and pedestrian crossing guidelines.

The City will approach these based on tier and priority and move systematically through the strategies and actions.

Education

The City will establish a social media plan around safety education. The City will also look to partner with larger agencies like Boulder County and DRCOG on safety related campaigns and potentials.

Enforcement

There are several enforcement related strategies and actions. Enforcement is already occurring and the City has started using the comprehensive safety network to prioritize enforcement locations. Surge enforcement is a top-tier strategy and enforcement strategies will likely also be included in programs and policies that are planned for development.

FUNDED SAFETY INITIATIVES

Several funded efforts are already underway or starting soon, offering immediate opportunities to integrate safety improvements. Vision Zero recommendations can help shape these projects to maximize their safety impact.

Future 42 Corridor Plan – The cities of Lafayette and Louisville are working to advance preliminary design of the Future 42 corridor from Baseline Road South. The project will kick off in 2025. The scope of the project is all roadway amenities along CO 42/95th Street and include exploration of the feasibility of an underpass at Baseline Road.

South Boulder Road Corridor Study – Boulder County, with support from multiple agencies including Lafayette, is leading an effort to progress the preliminary study that was completed by DRCOG in 2024. The project will progress the visioning study into cross section and concepts for future projects, ideally prior to the next DRCOG Transportation Improvement Program Cycle. This project will advance two of Lafayette's top HIN segments.

Missing Links Design and Construction – The City is designing and constructing three priority segments of missing sidewalk links on South Public Road, Emma Street, and Baseline Road.

Baseline & Gold Hill Hawk Signal - The City is designing a pedestrian signal at Baseline & Gold Hill in 2025 with construction to follow.

Safe Routes to School Action Plan – In partnership with multiple other agencies, Lafayette is supporting Boulder County in a plan that will create a framework for analyzing and prioritizing schools in Boulder County, and will develop a list of projects that can be pursued using the Safe Routes to School program and funding.

Neighborhood Speed Management Program – Acknowledging that speeding in neighborhoods is a common concern, the City will create a program to equitably handle requests and effectively allocate resources.

Sign Reflectivity Study and Assessment – The City is inventorying all signs in the city, assessing the nighttime visibility of them (retroreflectivity) and creating policies around maintenance, installation, and removal of signs.

Crash Database Setup – The City is setting up an engineering-based crash database to quickly analyze specific locations, citywide trends and ongoing monitoring.

Standards and Specifications - The City is in progress of updating the public works standards and specifications. This effort will be coordinated with the land use update effort. Safety best practices are being incorporated.

Standard Operating Procedures and Guidelines – The City has initiated creating standard operating procedures for transportation facilities. Most of the work to date has been around the maintenance program and incorporating Americans with Disabilities Act (ADA) requirements into annual programs. Additional top priority procedures will be signal timing practices, pedestrian crossing guidelines, and sight visibility.

HIGH PRIORITY SEGMENTS

Through this planning process, nine high-priority roadway segments were identified based on crash history, equity factors, and community context. These corridors represent the areas where safety improvements are most urgently needed to reduce the risk of severe and fatal crashes. While identifying these segments was a key step, implementation will require ongoing coordination, strategic funding pursuits, and clear direction on next steps tailored to each location.

Among the nine segments, three corridors—West South Boulder Road, East South Boulder Road, and North Public Road—have been advanced through this plan. Location-specific concepts and recommendations were developed for each, providing a foundation for near-term implementation. These concepts can be seen in Appendix A. In addition, a South Boulder Road Corridor Study is expected to begin in 2025, which will serve as a mechanism for advancing recommendations across both the east and west segments of the corridor.

Other high-priority segments will require additional steps before design or construction can occur. For example, the crash history on Empire Road is largely the intersection of SH 42 and Autumn Ridge, where a traffic signal was installed in late 2021. To determine the effectiveness of that improvement, it is recommended that the City postpone further action on this segment until updated crash data is available—ideally with at least three years of post-installation data.

The Emma Street corridor is anticipated to be studied in conjunction with a future sewer replacement and upgrade project. While this project is not yet programmed in the City's Capital Improvement Plan (CIP), it presents an opportunity to integrate multimodal safety improvements into planned infrastructure work. Similarly, West and Central Baseline Road have not undergone any preliminary

planning to date. Advancing these segments will require the City to pursue grant funding to conduct corridor-level safety studies. East Baseline Road, on the other hand, is recognized as a regional corridor in DRCOG's 2050 Regional Transportation Plan. The City is actively exploring funding sources to advance recommended improvements along this important east-west connection.

Collectively, these efforts reflect a phased and coordinated approach to implementation. By aligning safety priorities with capital planning efforts, grant opportunities, and regional partnerships, Lafayette can continue to make progress on its Vision Zero goals—starting with the roadways that need it most.

OPPORTUNISTIC IMPLEMENTATION

The City recognizes that the list of priority projects is larger than the City can afford to construct. The City will also take advantage of opportunities to implement safety improvements as they arise. This "opportunistic implementation" approach allows the City to integrate Vision Zero recommendations into ongoing projects, development, or existing programs—especially when it can be done at low or no additional cost.

For example, if a road is already scheduled for repaving, making improvements to bicycle lanes is a minimal addition. Similarly, if a curb is being replaced or concrete is being fixed in the area already, smaller curb radii, bulb outs, median refuge islands and crosswalk enhancements could be considered. Packaging projects together helps improve the benefit to cost ratio and allows the City to use funds to better public benefit.

By staying flexible and responsive to emerging opportunities, the City can make meaningful progress toward its safety goals more efficiently and cost-effectively.

MONITORING AND EVALUATION

Tracking the City's progress toward Vision Zero is essential to ensuring that safety efforts are effective and responsive to community needs. Regular monitoring will help identify which strategies are working, where adjustments are needed, and how resources can be directed most efficiently.

ONGOING EVALUATION

Quantitative progress will be measured through the crash database. This crash database will serve as the City's primary tool for understanding traffic safety trends and evaluating the impact of safety strategies. The database is targeted for completion by 2025, with full implementation tracking expected to begin in 2026.

Once in place, the database will support monitoring across several key areas:

• **Crash Reduction Trends** – Tracking decreases in fatalities, serious injuries, and other crash types over time.

• **Implementation Tracking** – Monitoring the roll-out of safety strategies, such as infrastructure changes or public education efforts.

Qualitative progress can be measured by understanding the public's perception of safety using surveys and community input to understand how residents feel about transportation safety and identify emerging concerns.

BUILDING A FRAMEWORK FOR ACCOUNTABILITY

As the crash database becomes operational, it will lay the groundwork for establishing additional performance metrics. These future goals will be based on local data, aligned with available resources, and tailored to Lafayette's unique transportation environment.

Ongoing evaluation will help ensure that strategies remain effective and relevant as conditions change—such as shifting traffic patterns, population growth, or new infrastructure. This approach enables the City to adjust course as needed and focus attention on areas where safety improvements can have the greatest impact.

By building a strong foundation for data collection and evaluation, Lafayette will be better equipped to make informed decisions, prioritize investments, and reduce and eliminate severe crashes from the city's streets.

Achieving Vision Zero is a shared, long-term commitment.

As Lafayette moves forward with implementing this Action Plan, ongoing collaboration and refinement will be essential. Success will depend not only on strong partnerships with regional agencies and neighboring communities, but also on the active participation of Lafayette's residents. **Everyone has a role to play—whether as a planner, policymaker, or person walking, rolling, or driving in Lafayette.** By fostering community buy-in and encouraging individual accountability, the City can ensure its safety strategies are supported, understood, and embraced. Through this shared commitment to continuous improvement, Lafayette can build a safer, more equitable transportation system for all.