

VISION ZERO HUNTSVILLE



MULTIMODAL SAFETY ACTION PLAN

PRELIMINARY FINDINGS REPORT ~DRAFT~

July 2023



HUNTSVILLE
The Star of Alabama

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Matt Whitfield / citizen

...and the many community members who participated in our Vision Zero Huntsville planning process.

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In 2022, the City of Huntsville passed a Resolution committing to zero roadway fatalities and serious injuries by 2055.



Clinton Ave
Downtown
EXIT ↓ ONLY

AMERICAN LEGION
BRIDGE

WHY VISION ZERO? WHY NOW?



WHAT IS VISION ZERO?

Vision Zero is an international movement with a goal to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. Vision Zero recognizes that all users of the transportation system should be considered in the planning and design of the roadway network. In addition, Vision Zero encourages robust data analysis and meaningful public engagement that will result in a plan that is effective and responsive to the needs of the public and will foster a culture of safety throughout every level of the community.

Six principles of the Safe System Approach:

- ✓ **deaths and serious injuries are unacceptable**
- ✓ **humans make mistakes**
- ✓ **humans are vulnerable**
- ✓ **responsibility is shared**
- ✓ **safety is proactive**
- ✓ **redundancy is crucial**

Vision Zero emphasizes the *Safe System Approach* in transportation planning which acknowledges that even one death on our transportation system is unacceptable and focuses on safe mobility for all road users. Reaching zero deaths requires the implementation of a Safe System Approach, which was founded on the principles that humans make mistakes and that human bodies have limited ability to tolerate crash impacts. The USDOT emphasizes that in a Safe System, those mistakes should never lead to death.

"Applying the Safe System Approach involves anticipating human mistakes by designing and managing road infrastructure to keep the risk of

a mistake low; and when a mistake leads to a crash, the impact on the human body doesn't result in a fatality or serious injury. Road design and management should encourage safe speeds and manipulate appropriate crash angles to reduce injury severity." FHWA/USDOT

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**
PERFECT human behavior
Prevent **COLLISIONS**
INDIVIDUAL responsibility
Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**
Integrate **HUMAN FAILING** in approach
Prevent **FATAL AND SEVERE CRASHES**
SYSTEMS approach
Saving lives is **NOT EXPENSIVE**



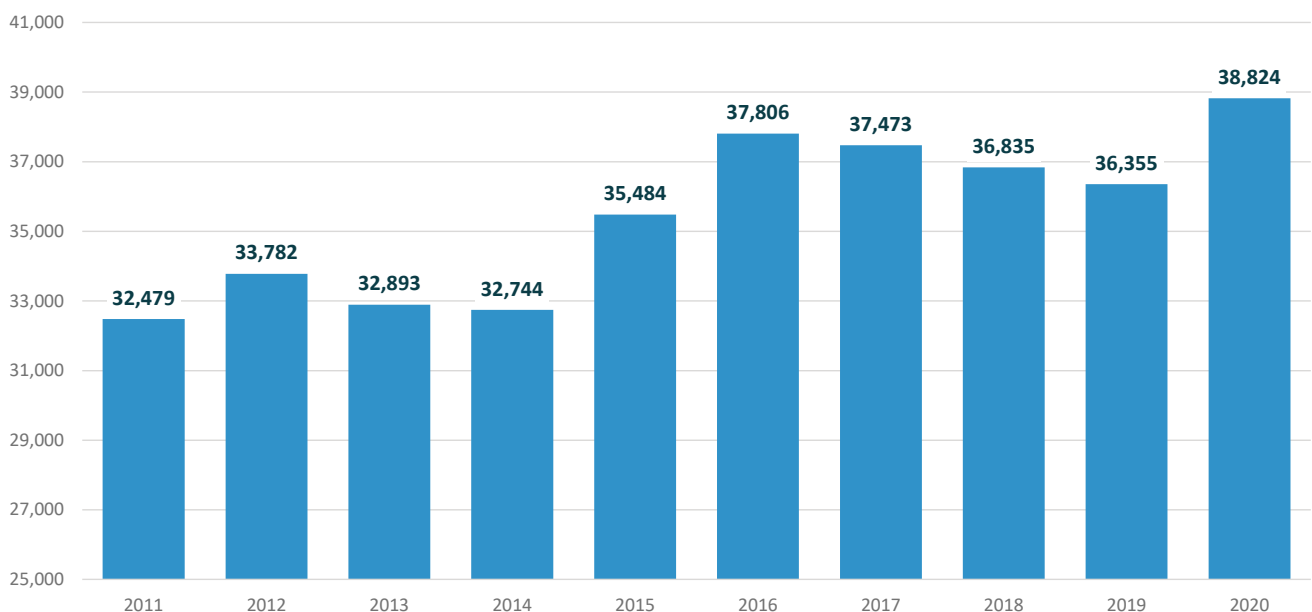
WHY VISION ZERO? WHY NOW?

The National Highway Traffic Safety Administration (NHTSA) releases traffic fatality data each year. In 2020, NHTSA reported that between the years 2011-2020, the number of traffic fatalities increased from 32,479 in 2011 to 38,824 fatalities in 2020, representing an 18% increase. In 2021, NHTSA estimated 42,915 people died in motor vehicle traffic crashes, a 10.5% increase from 2020. This projection is the highest number of fatalities since 2005 and the largest annual percentage increase in the Fatality Analysis Reporting System's history. The Federal Highway Administration (FHWA) further estimates that 40% of the nation's roadway fatalities occurred on local roads. They also found that low-and-moderate income populations and historically-disadvantaged communities have a disproportionately higher rate of roadway fatalities. In response to this national crisis, last year the USDOT unveiled the National Roadway Safety Strategy that is now getting resources from the President's Bipartisan Infrastructure Law (BIL) and other key infrastructure programs. With Equity at its core, the USDOT encourages communities adopt the Safe System Approach to transportation planning to help achieve zero roadway fatalities and serious injuries.

The graph below shows the total police-reported U.S. fatalities of motor vehicle traffic crashes, 2011-2020. This is the number of people who died, as opposed to the number of crashes, and it includes all motor vehicle occupants, motorcyclists, pedestrians, bicyclists, and people traveling by other modes.



Total US Traffic Fatalities 2011-2020

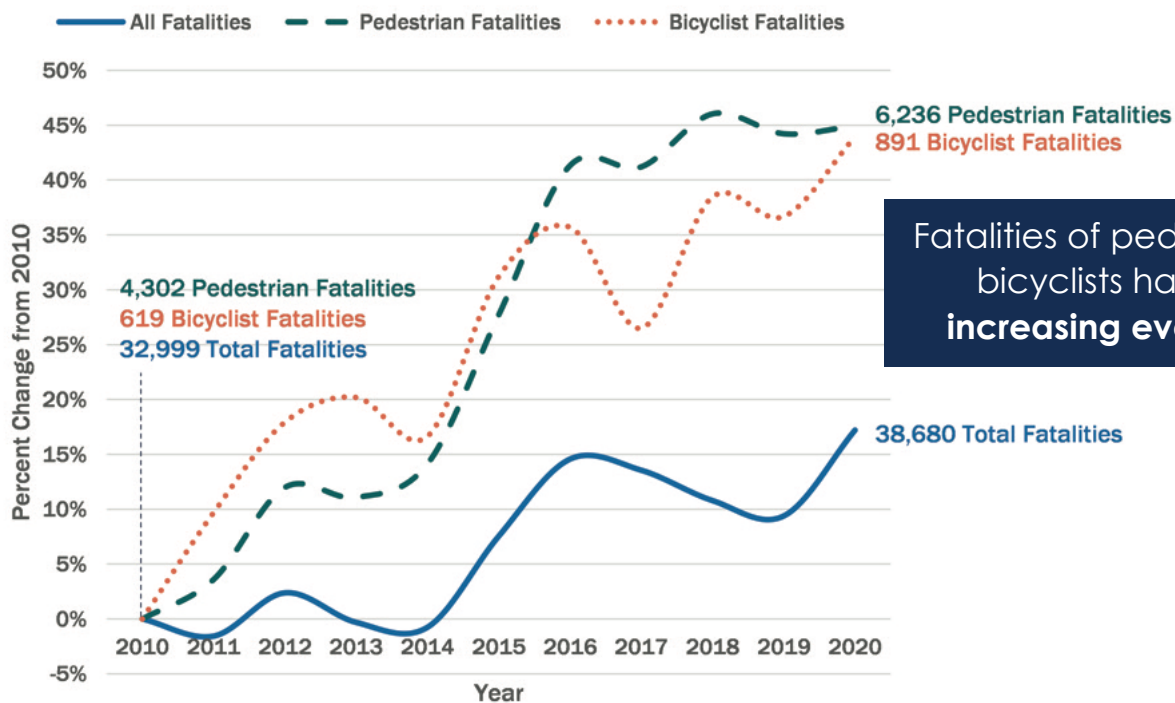




From 2020 to 2021 in the United States:

- ↑ Fatalities in multi-vehicle crashes up 16%
- ↑ Fatalities on urban roads up 16%
- ↑ Fatalities among drivers 65 and older up 14%
- ↑ Pedestrian fatalities up 13%
- ↑ Fatalities in crashes involving at least one large truck up 13%
- ↑ Daytime fatalities up 11%
- ↑ Motorcyclist fatalities up 9%
- ↑ Bicyclist fatalities up 5%
- ↑ Fatalities in speeding-related crashes up 5%
- ↑ Fatalities in police-reported, alcohol-involvement crashes up 5%

Additionally, the traffic fatalities in the categories above showed relatively large increases in 2021, as compared to 2020. While these statistics are troubling, the trend in pedestrian fatalities is more alarming. Disproportionate impacts are felt acutely by people outside of vehicles. Fatalities among pedestrians and bicyclists have been increasing even faster. The graphic below from the National Roadway Safety Strategy shows that on a percentage change basis, fatalities of pedestrians and bicyclists have increased faster than total traffic fatalities from 2010 through 2020.

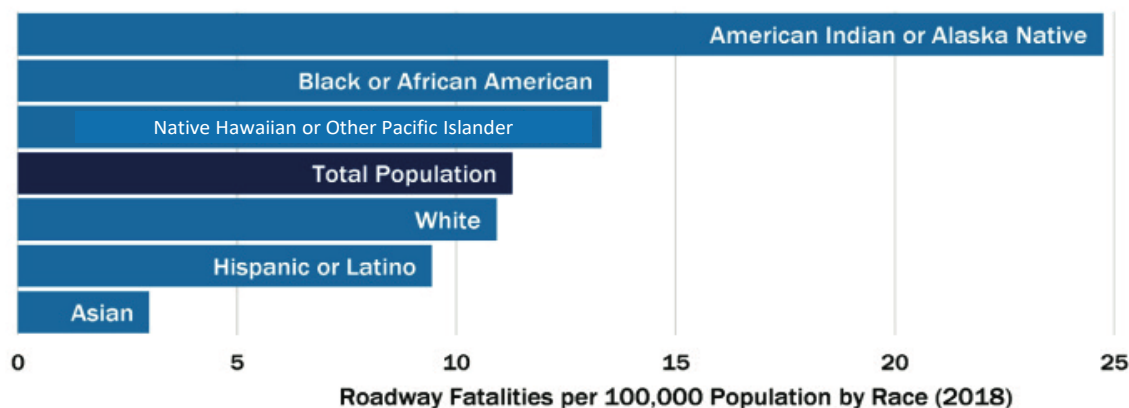




TRANSPORTATION DISPARITIES

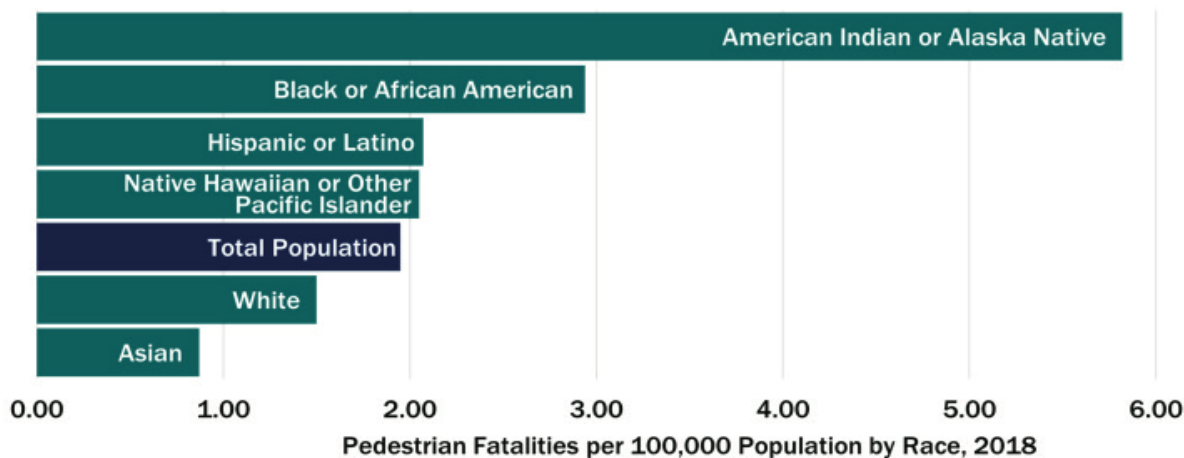
Since 2015, the annual number of roadway fatalities has exceeded 35,000, with millions more injured, sometimes permanently, each year. Traffic crashes are a leading cause of death for teenagers in America, and, in addition to the increasing number of pedestrian and bicyclist fatalities, the data shows that traffic fatalities disproportionately impact people who are Black or African American, American Indian, and live in rural communities. Because of these disparities, the USDOT has prioritized Equity as a strategic goal aiming to reduce inequities across our transportation systems and the communities they affect. This involves supporting and engaging people and communities to promote safe, affordable, accessible, and multimodal access to opportunities and services while reducing transportation-related disparities, adverse community impacts, and health effects. Incorporating equity into transportation safety means working with individuals in underserved communities and vulnerable roadway users to: collect and analyze data to identify communities experiencing disparities in roadway fatalities and serious injuries; engage community representatives to understand their transportation safety needs and build trust; implement improvements in safety planning, funding, design, operations, and maintenance processes to eliminate disparities in traffic fatalities and serious injuries; and evaluate impacts by monitoring outcomes and working to continuously improve outcomes with communities.

Fatalities impact communities differently...



...particularly for people not in a vehicle.

Fatalities Among Pedestrians





HOW DOES ALABAMA COMPARE?

Out of the 50 states, Alabama has the 7th highest traffic fatality rate in the country, with a Traffic Fatality Rate of 18.6 fatalities per 100,000 people (2020). In comparison, the U.S. Traffic Fatality Rate is 11.7. It should be noted that the number and types of motor vehicle crash deaths differ widely among the 50 states and the District of Columbia. A state's population has an obvious effect on the number of motor vehicle deaths. Fatality rates per capita and per vehicle miles traveled provide a way of examining motor vehicle deaths relative to the population and amount of driving. However, many factors can affect these rates, including types of vehicles driven, traffic patterns, travel speeds, rates of licensure, state traffic laws, emergency care capabilities, weather and topography. FHWA NHTSA uses Fatality Rates per Capita as a baseline standard to compare states and localities.

Fatality Facts 2020 - State by State

State	Deaths per 100,000 population
1. Mississippi	25.4
2. Wyoming	22
3. Arkansas	21.2
4. South Carolina	20.7
5. Montana	19.6
6. New Mexico	18.8
7. Alabama	18.6
8. Louisiana	17.8
9. Tennessee	17.6
10. Kentucky	17.3
11. Oklahoma	16.5
12. Missouri	16
13. South Dakota	15.9
14. Georgia	15.5
15. Florida	15.4
16. West Virginia	14.9
17. Arizona	14.7
18. North Carolina	14.7
19. Kansas	14.5
20. Texas	13.3

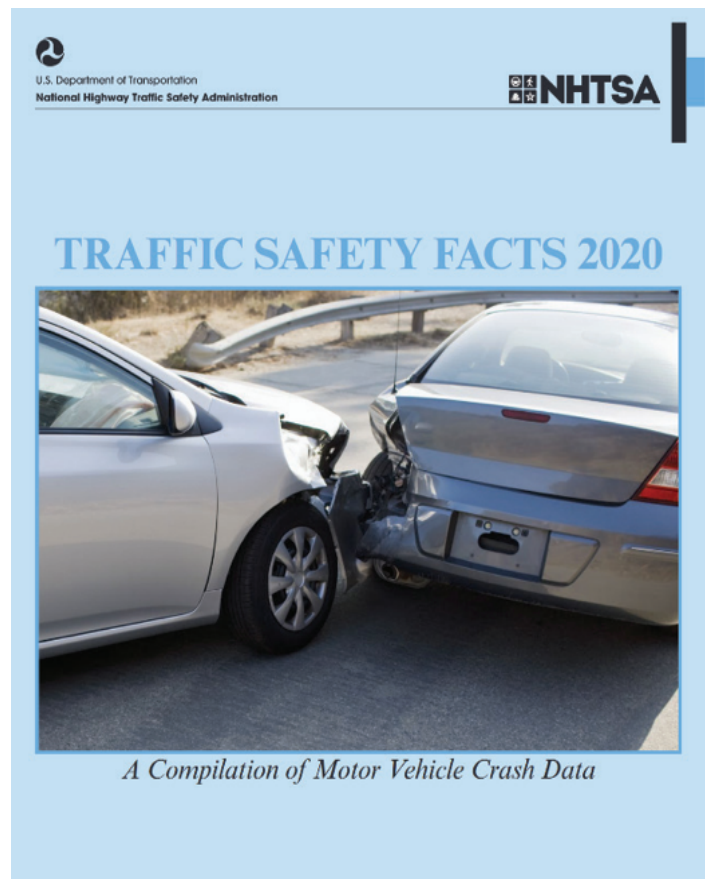
21. Indiana	13.2
22. North Dakota	12.8
23. Maine	12
24. Oregon	12
25. Nebraska	11.9
26. Delaware	11.7
U.S. total	11.7
27. Idaho	11.6
28. Colorado	10.8
29. Michigan	10.8
30. Iowa	10.6
31. Ohio	10.4
32. Wisconsin	10.4
33. Nevada	10.2
34. Virginia	9.8
35. California	9.7
36. Vermont	9.6
37. Illinois	9.3
38. Maryland	9.2
39. Alaska	8.7
40. Pennsylvania	8.7
41. Utah	8.4
42. Connecticut	8.2
43. New Hampshire	7.5
44. Washington	7.3
45. Minnesota	6.9
46. New Jersey	6.3
47. Rhode Island	6.1
48. Hawaii	5.9
District of Columbia	5.2
49. New York	5.2
50. Massachusetts	4.9

Fatality Facts 2020 - State by State; Source: IIHS, NHTSA FARS



HOW DOES HUNTSVILLE COMPARE?

In 2020, of all cities with populations of 150,000 or greater, Huntsville ranked #43 out of 172 cities in Traffic Fatality Rate rankings, at 12.81 fatalities per 100,000 people. For Pedestrian Fatality Rates, Huntsville ranked #35 out of those 172 cities, with a Pedestrian Fatality Rate of 3.94 fatalities per 100,000 people. From 2015-2020, Huntsville's Traffic Fatality Rate more than doubled, and the Pedestrian Fatality Rate nearly doubled.



People Killed, Population, and Fatality Rates in Cities With Populations of 150,000 or Greater, 2020

City	2020 Total Killed	Fatalities 2020 Pedestrians Killed	Percent of Total	2020 Population	Fatality Rate per 100,000 Total	Fatality Rate per 100,000 Pedestrian
Memphis city, TN	223	63	28.3	649,705	34.32	9.7
Jackson city, MS	53	15	28.3	157,821	33.68	9.5
Detroit city, MI	191	41	21.5	665,369	28.71	6.16
St. Louis city, MO	81	20	24.7	297,645	27.21	6.72
Baton Rouge city, LA	68	20	34.5	219,052	26.48	11.13
Tucson city, AZ	125	37	29.6	553,571	22.58	6.68
Little Rock city, AR	43	20	46.5	197,866	21.73	10.11
Birmingham city, AL	44	5	20.5	206,956	21.26	4.35
San Bernardino city, CA	45	12	26.7	217,491	20.69	5.52
Cleveland city, OH	75	10	13.3	378,589	19.81	2.64
Jacksonville city, FL	178	45	25.3	920,570	19.34	4.89
Glendale city, AZ	49	15	30.6	255,307	19.19	6.88
Macon-Bibb County, GA	29	7	24.1	152,737	18.99	4.58
Albuquerque city, NM	105	30	28.6	562,540	18.67	5.33
Fort Lauderdale city, FL	34	10	29.4	184,245	18.45	5.43
Chattanooga city, TN	113	31	27.4	618,338	18.27	5.01
Lancaster city, CA	22	3	28.6	155,822	17.97	5.13
Kansas City city, MO	88	16	18.2	487,159	17.7	3.22
Palmdale city, CA	26	6	23.1	150,498	17.28	3.99
Springfield city, MO	29	6	20.7	168,090	17.25	3.57
Shreveport city, LA	31	8	25.8	184,786	16.78	4.33
Dallas city, TX	222	66	29.7	1,343,266	16.53	4.91
Atlanta city, GA	91	25	30.9	512,550	16.8	4.88
Knoxville city, TN	30	5	16.7	190,223	15.77	2.63
Tampa city, FL	64	14	21.9	407,599	15.7	3.43
Orlando city, FL	45	11	24.4	289,457	15.55	3.8
Nashville-DeVoson metropolitan Indianapolis city (balance), IN	104	37	35.6	671,295	15.49	5.51
Kansas City city, KS	134	39	29.1	877,903	15.26	4.44
Mobile city, AL	23	4	17.4	152,727	15.06	2.52
Hollywood city, FL	28	5	17.9	187,746	14.91	2.66
Akron city, OH	23	4	17.4	154,611	14.88	2.59
Milwaukee city, WI	29	4	13.8	195,994	14.8	2.04
Fayetteville city, NC	87	15	17.2	589,067	14.77	2.55
Tulsa city, OK	31	13	41.9	211,705	14.64	6.14
Augusta-Richmond County consolidated	19	16	27.1	403,165	14.63	3.97
Fresno city, CA	27	10	37	197,468	13.67	6.06
Bakersfield city, CA	71	29	40.8	530,267	13.39	6.47
Phoenix city, AZ	51	14	27.5	385,725	13.22	3.63
New Orleans city, LA	224	73	32.6	1,788,127	13.11	4.27
Toledo city, OH	51	10	19.6	389,476	13.09	2.57
Huntsville city, AL	35	6	17.1	271,455	12.81	2.21
Montgomery city, AL	25	8	32	196,268	12.74	4.08
Miami city, FL	60	21	35	471,525	12.72	4.45
St. Petersburg city, FL	34	5	17.6	267,802	12.7	2.24
Newport News city, VA	22	3	13.6	179,082	12.29	1.68
Wichita city, KS	48	5	10.4	391,731	12.25	1.28
Salt Lake City city, UT	25	4	16	204,087	12.25	1.96
Oklahoma City city, OK	81	25	30.9	662,314	12.23	3.77
Tallahassee city, FL	24	7	29.2	196,326	12.22	3.57
Amarillo city, TX	24	4	16.7	199,654	12.02	2
Fort Worth city, TX	110	36	32.7	927,720	11.86	3.88
Cincinnati city, OH	36	8	22.2	304,548	11.82	2.63
Clarksville city, TN	19	4	21.1	161,247	11.78	2.48
Greensboro city, NC	35	9	25.7	297,878	11.75	3.02
Richmond city, VA	27	10	37	235,398	11.75	4.31
Houston city, TX	266	76	28.6	2,302,584	11.55	3.28
Charlotte city, NC	101	24	23.8	883,706	11.55	2.67
Riverside city, CA	37	8	21.6	199,654	11.55	4.42
Scottsdale city, AZ	29	4	13.8	235,398	11.55	4.42
Killeen city, TX	17	1	5.9	141,853	11.55	4.42
Newark city, NJ	31	1	3.2	141,853	11.55	4.42
Ontario city, CA	20	1	5	141,853	11.55	4.42
Des Moines city, IA	23	1	4.3	141,853	11.55	4.42
Hialeah city, FL	25	1	4	141,853	11.55	4.42
Baltimore city, MD	62	1	1.6	141,853	11.55	4.42
Philadelphia city, PA	166	1	0.6	141,853	11.55	4.42
Colorado Springs city, CO	50	1	2	141,853	11.55	4.42
Norfolk city, VA	25	1	4	141,853	11.55	4.42
San Antonio city, TX	157	1	0.6	141,853	11.55	4.42
Stockton city, CA	31	1	3.2	141,853	11.55	4.42
Lubbock city, TX	26	1	3.8	141,853	11.55	4.42
Durham city, NC	28	1	3.6	141,853	11.55	4.42
Rancho Cucamonga city, CA	17	1	5.9	141,853	11.55	4.42
Corpus Christi city, TX	31	1	3.2	141,853	11.55	4.42
Austin city, TX	94	1	1.1	141,853	11.55	4.42
El Paso city, TX	64	1	1.6	141,853	11.55	4.42
Aurora city, CO	36	1	2.8	141,853	11.55	4.42
Columbus city, OH	81	1	1.2	141,853	11.55	4.42

In Huntsville, People of Color are 33% more likely to be involved in a fatal pedestrian traffic crash than non-People of Color

Huntsville Traffic Fatality Rates Over Time

(Fatality Rate per 100,000 people)

2010

Traffic Fatality Rate (all modes):

8.88

Pedestrian Fatality Rate:

N/A

2015

Traffic Fatality Rate:

5.77 ↓

Pedestrian Fatality Rate:

2.10

2020

Traffic Fatality Rate:

12.81 ↑

Pedestrian Fatality Rate:

3.94 ↑



Nationally, Huntsville ranks 43rd in traffic deaths per 100,000 people. This is higher than the 2020 U.S. national average of 11.7 people per 100,000.

Between 2017-2022, there were 1,812 Fatalities & Serious Injuries Crashes in Huntsville. On average, 302 people a year are killed or severely injured in traffic crashes in Huntsville.

In an average year, the following people are killed or severely injured:



262 people driving



34 people walking



6 people biking

For every 100,000 collisions, nearly 4 more people in Huntsville are killed in traffic than in identified peer cities



Austin, TX **9.4 People** *3.31 Ped Fatality Rate



Reno, NV **8.9 People** *2.31 Ped



Colorado Springs, CO **10.4 People** *2.07 Ped



Lexington, KY **8.01 People** * 1.85 Ped



Huntsville, AL **12.8 People** *3.94 Ped



HUNTSVILLE CRASH DATA (2012-2022)

Huntsville experiences 8,000-9,000 crashes a year. In the last ten years, reported crashes have increased by fifteen percent. 2019 was the worst year within this timeframe, accounting for 9,012 crashes that year. Since the Covid-19 pandemic, traffic crashes in Huntsville have risen steadily.

Crash Data Limitations

The crash analysis in this Plan only includes police-reported crashes. This means the analysis may not reflect crashes involving someone who is uncomfortable reporting to or interacting with police, or who did not feel the need to report. Crash data is collected for roadways within the Huntsville City Limits only.

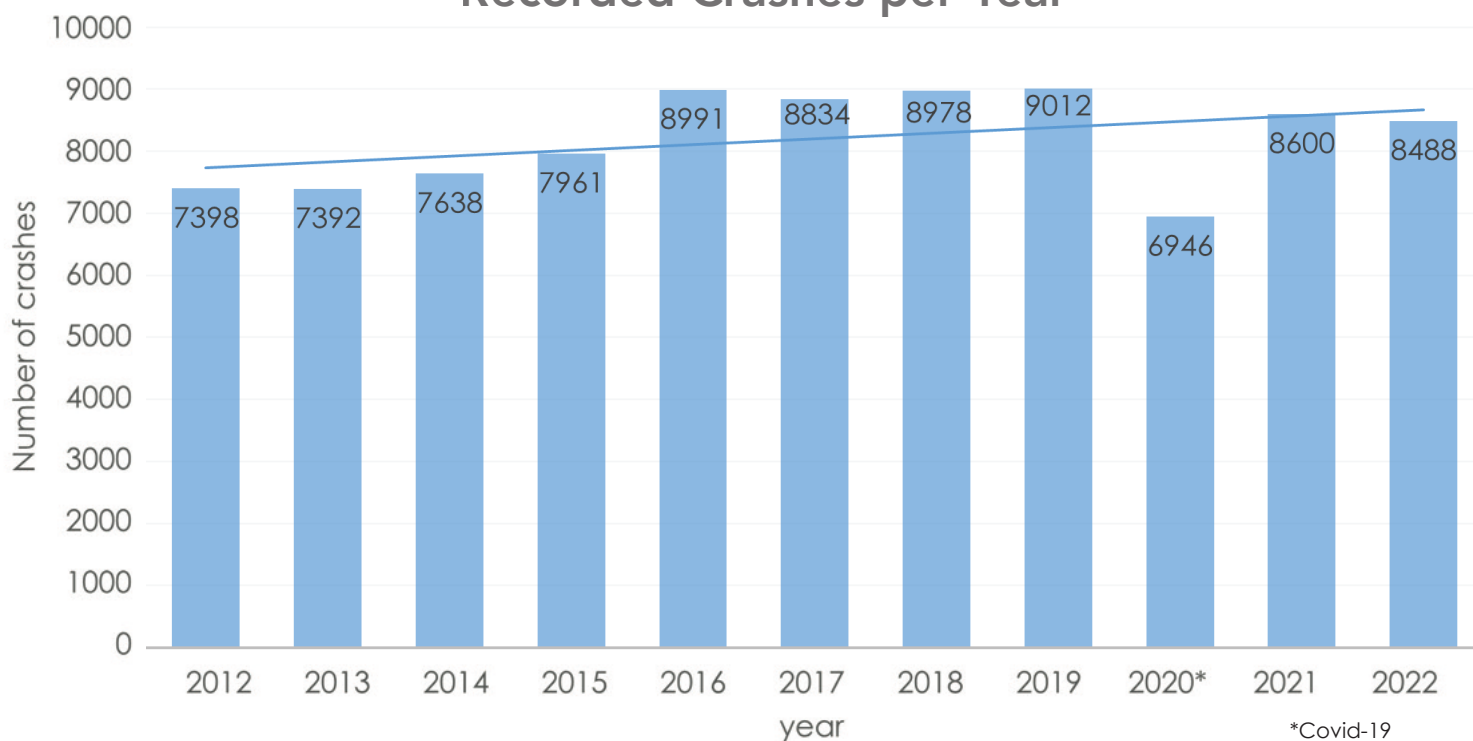
In addition, crash data does not capture situations where there was nearly a crash, but no crash occurred. These “near miss” situations are not crashes, but they can make people feel unsafe or uncomfortable traveling on the roadway.

While police-reported crash data is known to be an underrepresentation of crashes, it is the most complete data source available, and likely captures most crashes, especially those resulting in a fatality or life-changing injury. When combined with public and stakeholder input, crash analysis offers valuable insight into how the design and operation of the transportation system can be improved to achieve better safety outcomes.

**Huntsville
experiences 8,000-
9,000 crashes a year**

**In the last 10 years,
total crashes have
increased by
15%**

Recorded Crashes per Year



Annual Crashes (2012-2022): All Modes / All Severities



On average, 25 lives are lost each year to traffic-related crashes in Huntsville.

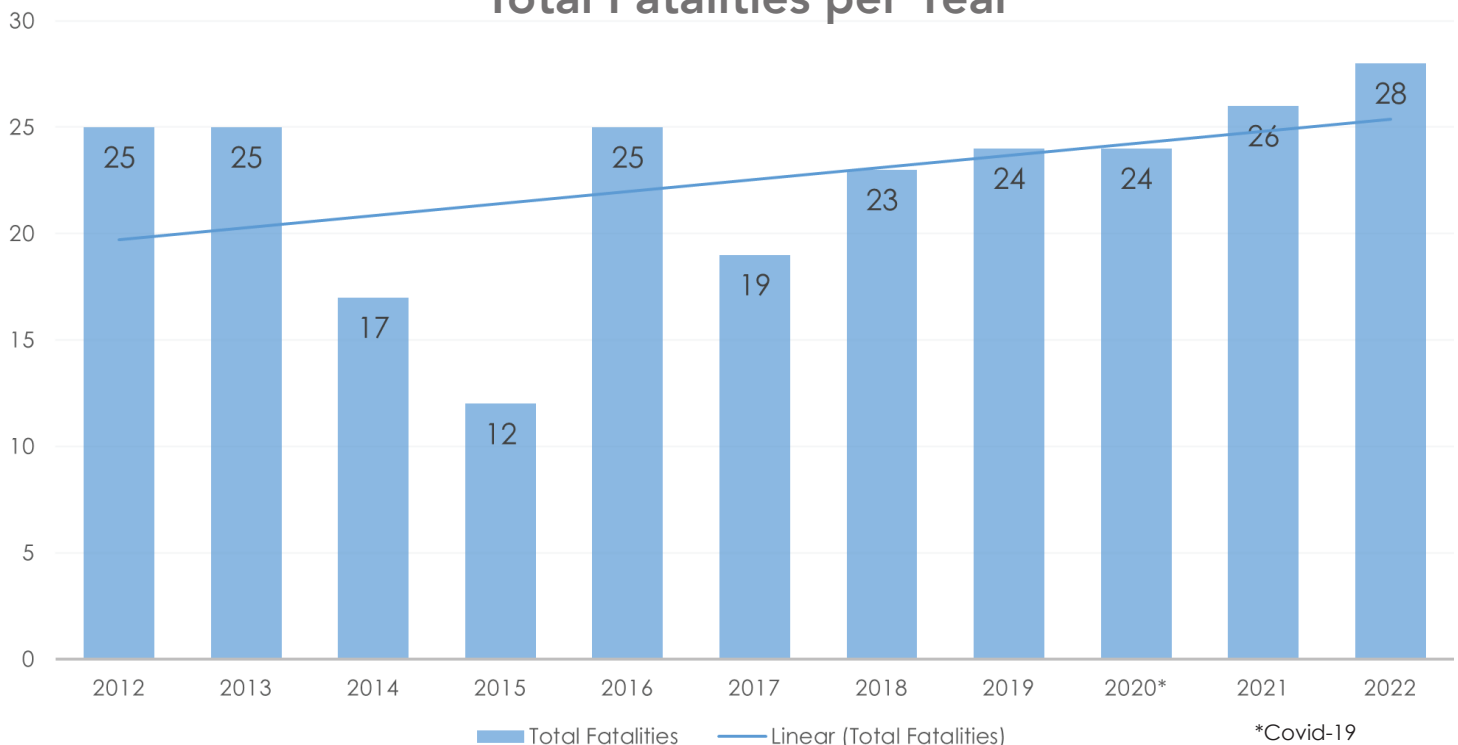
In the last ten years in Huntsville, total fatalities for all modes of transportation have increased by twelve percent. 2022 was the worst year in the last ten years for traffic fatalities in Huntsville, with the city losing 28 people last year to fatal collisions.

City of Huntsville	2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021	2022	AVG
Total Crashes	7,398	7,392	7,638	7,961	8,991	8,834	8,978	9,012	6,946	8,600	8,488	8,203
Total Fatalities	25	25	17	12	25	19	23	24	24	26	28	25
Total Type A Injuries	218	242	212	170	177	141	132	178	171	131	157	175
Total Type B Injuries	872	747	755	844	856	837	694	925	654	748	722	787
Time of Day (highest)	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	5pm-6pm	
Day of Week (highest)	Friday	Friday	Friday	Friday	Thursday	Friday	Friday	Friday	Friday	Friday	Tuesday	

Huntsville Crashes Snapshot (2012-2022): Source: ADVANCE E-Crash, HPD

**In the last
10 years, total
fatalities have
increased by
12%**

Total Fatalities per Year



Total Fatalities (2012-2022): All Modes



HUNTSVILLE CRASH DATA (2017-2022)

In addition to Crash Snapshots 2012-2022 data obtained from the Huntsville Police Department (HPD), detailed Crash Data was also collected for the 2017-2022 timeframe. Between these years, there were 38,417 total crashes in Huntsville. Of those, 1,812 resulted in fatalities and serious injuries. On average, 302 people a year are killed or severely injured in traffic crashes in Huntsville.

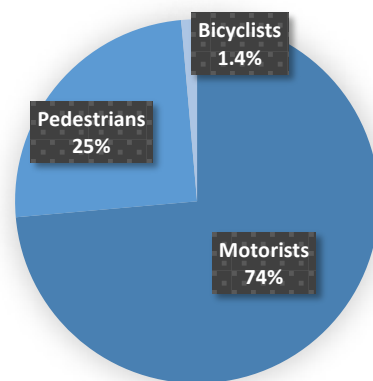
Of the total crashes within this six-year timeframe, 144 resulted in fatalities. Of the total crashes resulting in a fatality, 25% involved pedestrians; 1.4% involved bicyclists; and 73.6% involved motorists-only.

Of the 38,417 crashes in Huntsville between 2017-2022, 491 involved pedestrians, accounting for about 1.3% of all crashes. About 10% of those crashes resulted in a fatality. 30% resulted in a serious injury.

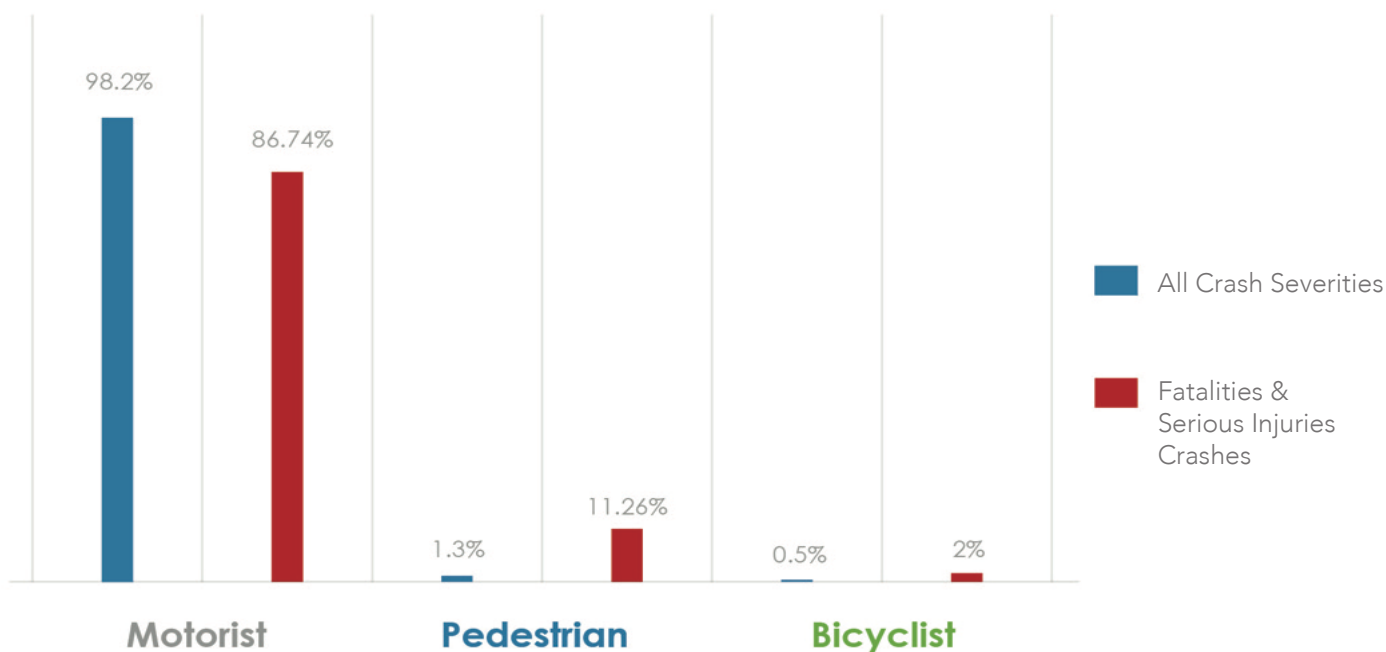
183 involved bicyclists, accounting for about 0.5% of all crashes. About 2% of those crashes resulted in a fatality. 13% resulted in a serious injury.

Of the total crashes within this timeframe, 37,743 were motorist-only involved crashes, accounting for 98.2% of all crashes, and 86.7% of fatalities & serious injuries crashes.

Crashes Resulting in Fatalities



All Crash Severities and Fatalities & Serious Injuries Crashes By Mode





On average, 302 people a year are killed or severely injured in traffic crashes in Huntsville.

Between 2017-2022, there were 1,812 Fatalities & Serious Injuries Crashes in Huntsville, representing 4.7% of all crashes. Over these years, Fatalities Crashes have steadily increased each year. Serious Injuries Crashes rose sharply from 2017-2020, but dropped in 2021 and 2022.

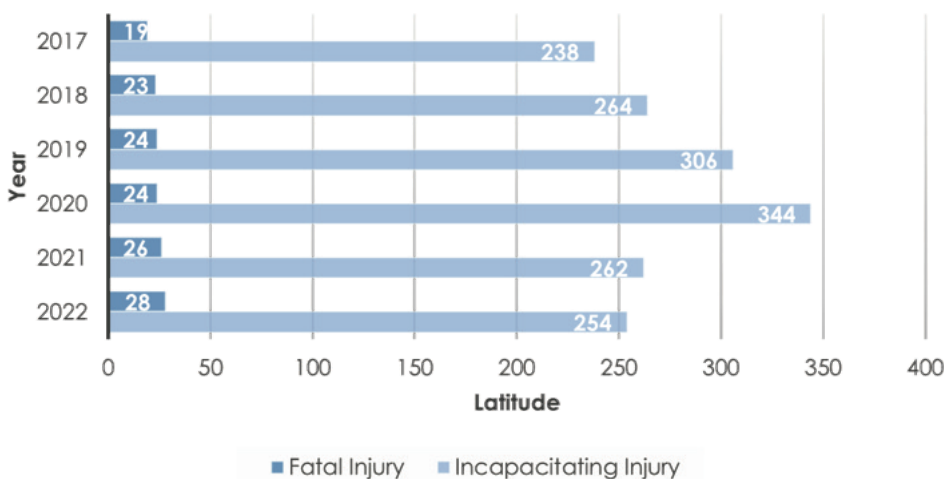
Between 2017-2022, of the 38,417 reported crashes in Huntsville:

- **633 crashes involved a motorcycle**
- **124 crashes directly involved a school bus; 14 crashes indirectly involved a school bus**
- **4 crashes involved a person in a wheelchair (*but more is reported by local news sources)**

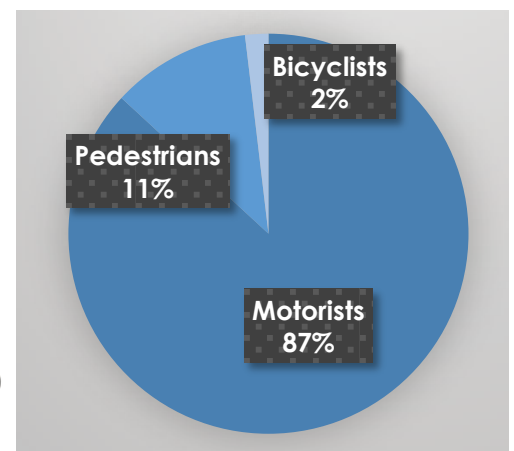
Distracted Driving Opinion (as recorded by the reporting officer):

- **1.35% reported "Distracted by use of electronic communication or other device"**
- **37% reported "Not Distracted"**
- **55% reported "Unknown"**

**Fatalities & Serious Injuries Crashes
2017-2022**



**Fatalities & Serious Injuries Crashes
By Roadway User**



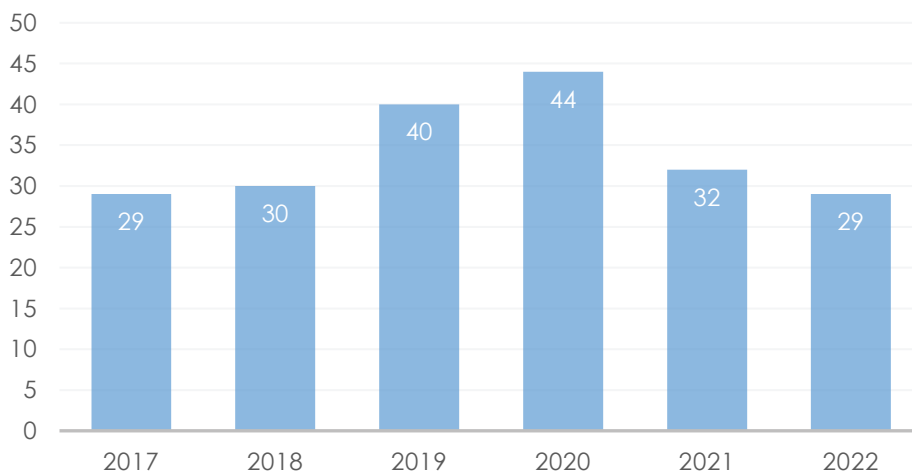


PEDESTRIAN & BICYCLIST INVOLVED CRASHES

Between 2017-2022, 204 pedestrians and 34 bicyclists have been reported killed or severely injured in traffic-related accidents in Huntsville. Within this same timeframe, four crashes were reported to involve a person in a wheelchair. However, this number is believed to be underrepresented, as local news reports indicate more cases have occurred during this time. Further data deficiencies include pedestrian- and/or bicyclist-versus-vehicle crashes from the city's major universities. As part of Huntsville's Vision Zero planning, the City anticipates greater coordination with these partners to obtain this information.

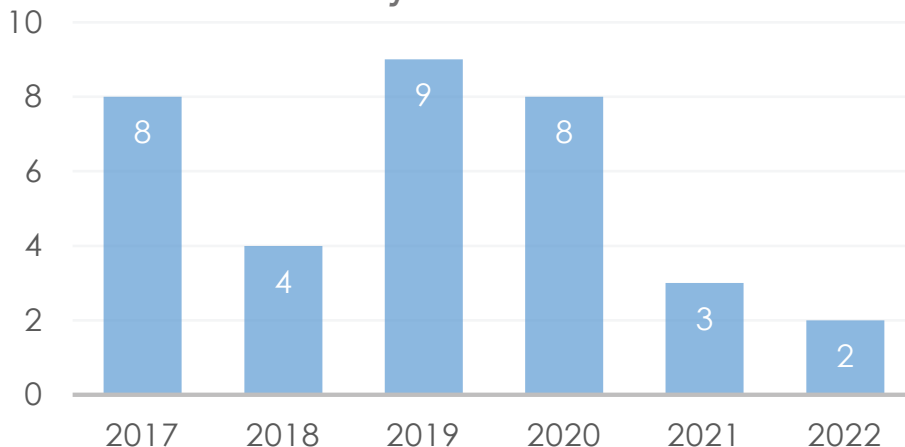
2020 saw the highest number of fatalities and serious injuries crashes involving pedestrians during the 2017-2022 timeframe. Pedestrian-involved crashes rose steadily from 2017 to 2020, peaked in 2020, and dropped off in 2021 and 2022. This was most likely related to the Covid-19 pandemic, as more people were making use of active transportation and walking and biking outdoors more during this time. Bicyclists fatalities and serious injuries crashes also peaked around this time, and has decreased since 2019-2020.

**Annual Fatalities & Serious Injuries Crashes
Pedestrian-Involved**



**In an average
year, 34
pedestrians are
killed or severely
injured in traffic
crashes**

**Annual Fatalities & Serious Injuries Crashes
Bicyclist-Involved**



**In an average
year, 5.6 bicyclists
are killed or
severely injured in
traffic crashes**

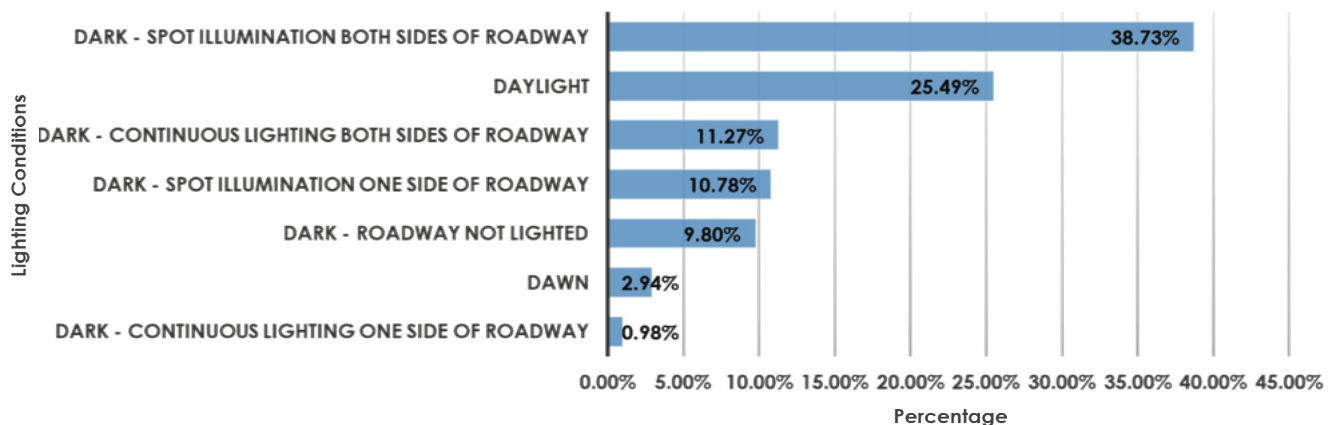


One of the most important outcomes of the City's Vision Zero planning effort will be identifying infrastructure deficiencies and high-injury/high-need areas that require greater attention and resources. This will help guide the City in prioritizing investment decisions so that it is the most effective and responsive to community need.

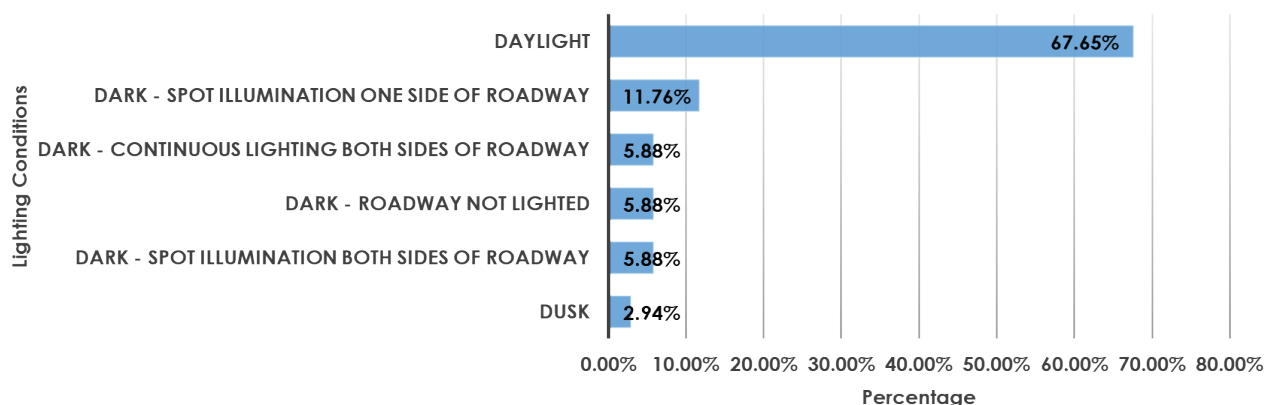
When recording existing conditions for crash cases, existing lighting conditions at the site of the crash is observed and recorded by the reporting officer and included in the crash database. For Pedestrian-Involved Fatalities & Serious Injuries Crashes, 25.5% of severe crashes occurred during daylight hours, while 71.6% occurred during nighttime hours and reported as dark conditions. Of those, 38.7% had spot illumination on both sides of roadway, and 9.8% had no roadway lighting. It is important to examine lighting conditions more closely along high-injury networks to understand if pedestrian lighting is sufficient enough in areas that see a pattern of high occurrences of severe crashes.

For Bicyclist-Involved severe injury crashes, the majority (67.7%) occurred during daylight hours, while 32.34% occurred during nighttime or dusk under dark conditions reported by the officer.

Lighting Conditions - Fatalities & Serious Injuries Crashes Pedestrian-Involved



Lighting Conditions - Fatalities & Serious Injuries Crashes Bicyclist-Involved





CONTRIBUTING CIRCUMSTANCES

Before creating recommendations, key collision trends were analyzed to develop a targeted and data-driven approach to understanding traffic safety. This analysis showed two main factors associated with crashes occurring in Huntsville – dangerous behaviors and street design impacts. The following is a summary of crash trends related to these elements and are filtered by transportation mode. These trends inform the actions presented later in the Plan.

Crash data includes information about actions and behaviors that may have contributed to a crash. Patterns of behavior are studied because a Vision Zero approach acknowledges and seeks to account for user error on our roadways. The crash analysis showed that in Huntsville, certain behaviors are strongly associated with all crashes, but with an emphasis on fatalities and severe injuries crashes.

Contributing Circumstances Consideration

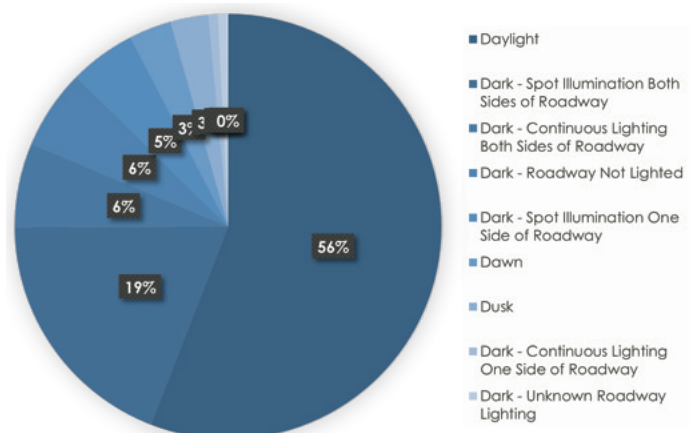
One consideration to make in the evaluation of the data for Primary Contributing Circumstance is the fact that some of the designations are reliant on accurate statements made by those involved in the crash. It is widely believed that distracted driving and fatigued driving are under-reported due to a lack of accurate statements by those involved.

Understanding the causes and contributing factors of crashes is a critical part of making data-driven decisions. The figures below illustrate the primary contributing factors reported by officers for fatalities and serious injuries crashes in Huntsville. Each of the contributing factors have different root causes and potential solutions. Targeting the factors related to the largest percentages of fatalities and serious injuries will help the city prioritize the greatest opportunities to reduce traffic-related fatalities and serious injuries.

The most common “Primary Contributing Circumstances” reported by officers involving all fatalities and severe injuries crashes (all modes) include:

- Driving Under the Influence (DUI)
- Aggressive Operation
- Failed to Yield Right-of-Way Making Left or U-Turn
- Ran Traffic Signal
- Improper Crossing
- Driving too Fast for Conditions / Speeding
- Failed to Yield Right-of-Way from Traffic Signal
- Failed to Yield Right-of-Way from Stop Sign
- Followed too Close
- Ran off Road
- Misjudge Stopping Distance
- Swerved to Avoid Vehicle
- Improper Lane Change/Use
- Over Speed Limit
- Unseen Object/Person/Vehicle

Lighting Conditions
Fatalities & Serious Injuries Crashes
All Modes





A breakdown of “Primary Contributing Circumstances” reported by officers of fatalities and serious injuries crashes involving pedestrians include:

• Improper Crossing.....	49.51%
• Unseen Object/Person/Vehicle.....	10.29%
• Other.....	8.33%
• Failed to Yield Right-of-Way to Pedestrian in Crosswalk.....	4.90%
• Unknown.....	4.41%
• Pedestrian Under the Influence.....	3.92%
• Failed to Yield the Right-of-Way.....	3.92%
• Other Failed to Yield.....	3.43%
• Ran off Road.....	1.96%
• Aggressive Operation.....	1.96%
• Not Applicable.....	1.96%
• Failure to Obey Signs/Signals/Officer.....	1.47%
• Ran Traffic Signal.....	0.98%
• Improper Backing.....	0.98%
• Followed too Close.....	0.98%
• Improper Lane Change/Use.....	0.49%
• Not Visible.....	0.49%

A breakdown of “Primary Contributing Circumstances” reported by officers of fatalities and serious injuries crashes involving bicyclists/pedalcyclists include:

• Unseen Object/Person/Vehicle.....	23.53%
• Improper Lane Change/Use.....	17.65%
• Unknown.....	11.76%
• Other Improper Action.....	5.88%
• Other Failed to Yield.....	5.88%
• Traveling Wrong Way/Wrong Side.....	5.88%
• Improper Crossing.....	5.88%
• Failed to Yield Right-of-Way from Driveway.....	5.88%
• Improper Passing.....	5.88%
• Other.....	5.88%
• DUI.....	2.94%
• Ran Traffic Signal.....	2.94%

*Click here for all Huntsville Crash Data Excels obtained from HPD: [HUNTSVILLE CRASH DATA HPD](#)

*Click here for Detailed Bike & Ped Crash Analysis conducted by Task Force members from the Huntsville Bicycle Advisory & Safety Committee (BASC): [BASC Crash Analysis](#)

A photograph of a community engagement meeting. In the foreground, a woman with long dark hair and a man with glasses and a grey beanie are leaning over a large table, looking at a map. The woman is pointing at a specific location on the map. The man is also pointing at the map. In the background, other people are visible, including a man in a dark jacket standing near a table. The setting appears to be an indoor space with large windows and a modern building facade. The entire image is overlaid with a semi-transparent blue filter.

COMMUNITY ENGAGEMENT



COMMUNITY ENGAGEMENT

One of the most important components of the Vision Zero Huntsville planning process was engaging multiple groups, stakeholders, and community members to solicit meaningful public input. Public input is crucial to Vision Zero goals and identifying safety needs and solutions that are responsive and effective. Making sure the City was engaging all areas and all voices throughout the community was critical to this process. From the very beginning, the City of Huntsville's newly-created Office of Diversity, Equity, and Inclusion (ODEI) was involved in the initial deliberations of Vision Zero planning to ensure a transparent, open and inclusive public engagement/planning process. ODEI members were consulted on Task Force-building to ensure diverse representation, the use of inclusive language in multilingual public surveys and literature, and engaging hard-to-reach populations. The Vision Zero Planning Team also consulted with ADA advocates on the Task Force. The Team consulted with Task Force members on how to make the outreach effort more Accessible to individuals with disabilities.

Building an inclusive Vision Zero Task Force made up of members who represent the diverse interests of the community is critical to the success of the Vision Zero Huntsville effort. The 25-member Task Force is made up of members who represent the following organizations and/or groups. The Vision Zero Huntsville Task Force meets on a monthly basis to share data and present crash analysis findings and to discuss critical multimodal safety issues of their representative organizations. Members are also able to express ideas and concerns through email correspondence and interactive Live Excel worksheets.

Vision Zero Huntsville Task Force representation:

- CITY GOVERNMENT
- HUNTSVILLE HOSPITAL SYSTEM
- VETERANS AFFAIRS HOSPITAL
- HUNTSVILLE CITY SCHOOLS
- iDefy DISABILITIES ADVOCACY GROUP
- OFFICE OF DIVERSITY, EQUITY, & INCLUSION
- PUBLIC SAFETY / LAW ENFORCEMENT
- COH ADA COORDINATOR
- VILLAGE OF PROMISE (*REPRESENTING PEOPLE LIVING IN POVERTY*)
- HUNTSVILLE HOUSING AUTHORITY
- ALABAMA A&M UNIVERSITY (AAMU)
- UNIVERSITY OF ALABAMA HUNTSVILLE (UAH)
- HUNTSVILLE AREA METROPOLITAN PLANNING ORGANIZATION (MPO)
- HUNTSVILLE TRANSIT AUTHORITY
- DOWNTOWN HUNTSVILLE, INC
- ENGINEERING
- TRAFFIC ENGINEERING
- PLANNING
- PUBLIC WORKS
- BASC BICYCLIST SAFETY & ADVOCACY GROUP
- PRIVATE CITIZENS (*REPRESENTING VULNERABLE ROADWAY USERS: PEOPLE LIVING WITH DISABILITIES; WHEELCHAIR-BOUND INDIVIDUALS; RUNNERS; WALKERS; BICYCLISTS*)



PUBLIC OUTREACH EFFORTS

In addition to the formation of the Task Force, the Vision Zero Huntsville Community Engagement process involved the following methods of outreach:

Three Public Input Sessions that were strategically held in various locations of the city where high crash rates are occurring. These are also in locations considered "Vulnerable Areas of Concern."

1. First Baptist Church Life Center Auditorium (central Huntsville/Governors Drive)
2. North Huntsville Public Library (north Huntsville/Sparkman Drive)
3. Morris Elementary School (west Huntsville/Bob Wallace Avenue)

All facilities were ADA-Accessible and the City offered special accommodations if needed. Huntsville Transit Authority offered free rides to and from meeting locations for participants. Community Surveys were offered online and in hardcopy in English and Spanish. The City's Communications Department and Mayor Battle hosted a media event and all public meetings were advertised via radio, television, newspaper, email, and on multiple online media sources. Flyers were posted all over the city. Community meetings were also held in Vulnerable Areas of Concern where transportation safety projects are proposed to be located. Planners from the City of Huntsville Urban & Long Range Planning Department met with individuals at the North Alabama Boys & Girls Club in the Cavalry Hill Neighborhood / Northwoods Housing Development on University Drive/north Huntsville and the Terry Heights Neighborhood Association meetings (located on Holmes Avenue in west Huntsville) to gauge perspectives about specific safety needs in their neighborhoods. Planners also attended regular monthly meetings, such as the Huntsville Bicycle Advisory

and Safety Committee (BASC) and MPO meetings to advertise the events and garner additional input. Public meetings were advertised on numerous Facebook groups, including the Hispanic/Latino Advisory Council (HLAC). HLAC members continue to be included on all Vision Zero correspondence. At the public input meetings, participants were asked to place color dots on areas where they feel the most unsafe traveling in Huntsville. A large-scale aerial map of the city was presented and participants placed dots on the map with the color representing each mode of travel.

VISION ZERO HUNTSVILLE

Vision Zero is Huntsville's plan to reduce the number of traffic related fatalities and serious injuries to zero.

Listen, learn and speak at one of our upcoming community meetings.

Tuesday, 4/18 @ 5:30-7:30 PM
First Baptist Church Life Center Auditorium
600 Governors Drive SW

Wednesday, 4/19 @ 5:30-7:30 PM
North Huntsville Library Community Room 132
3011 Sparkman Drive NW

Thursday, 4/20 @ 5:30-7:30 PM
Morris School Cafetorium
4801 Bob Wallace Ave.

Take our Online Survey in English or Spanish:

All facilities are ADA-Accessible. If you need special accommodations, please call 256-427-3026 or visit huntsvilleal.gov/ada.

Huntsville Transit will offer FREE rides to/from meetings. All meetings are within 1/4 mile of a transit stop. Riders should tell operators they are attending Vision Zero meeting.

LEARN MORE
visionzeronetwork.org

HUNTSVILLE
The Star of Alabama





VISION ZERO PUBLIC INPUT MEETINGS

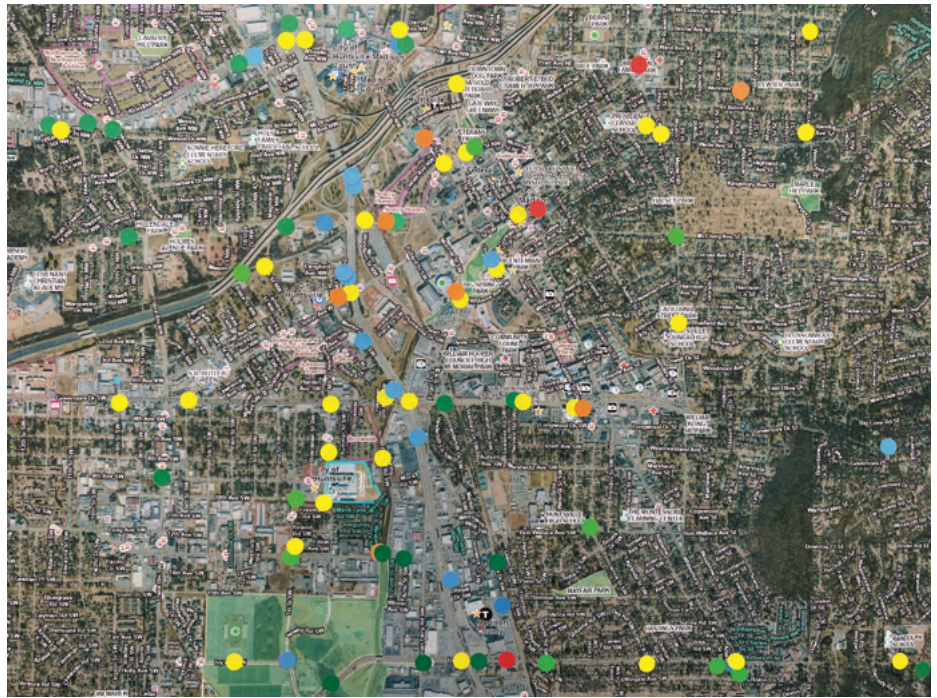
City of Huntsville Urban & Long Range Planning
Vision Zero Huntsville – Multimodal Safety Action Plan

Instructions

6 dots / each color / per person!

In regard to transportation and traffic-related safety, please take six (6) dots of each color and place dots in the top six "Areas of Concern" (where you feel the least safe) for the corresponding transportation mode shown below:

- Bicycle / Pedalcycling
- Pedestrian / Walking
- ADA / Wheelchair or Other Disability
- Vehicle / Driving
- Transit User / City Bus





WHAT WE HEARD

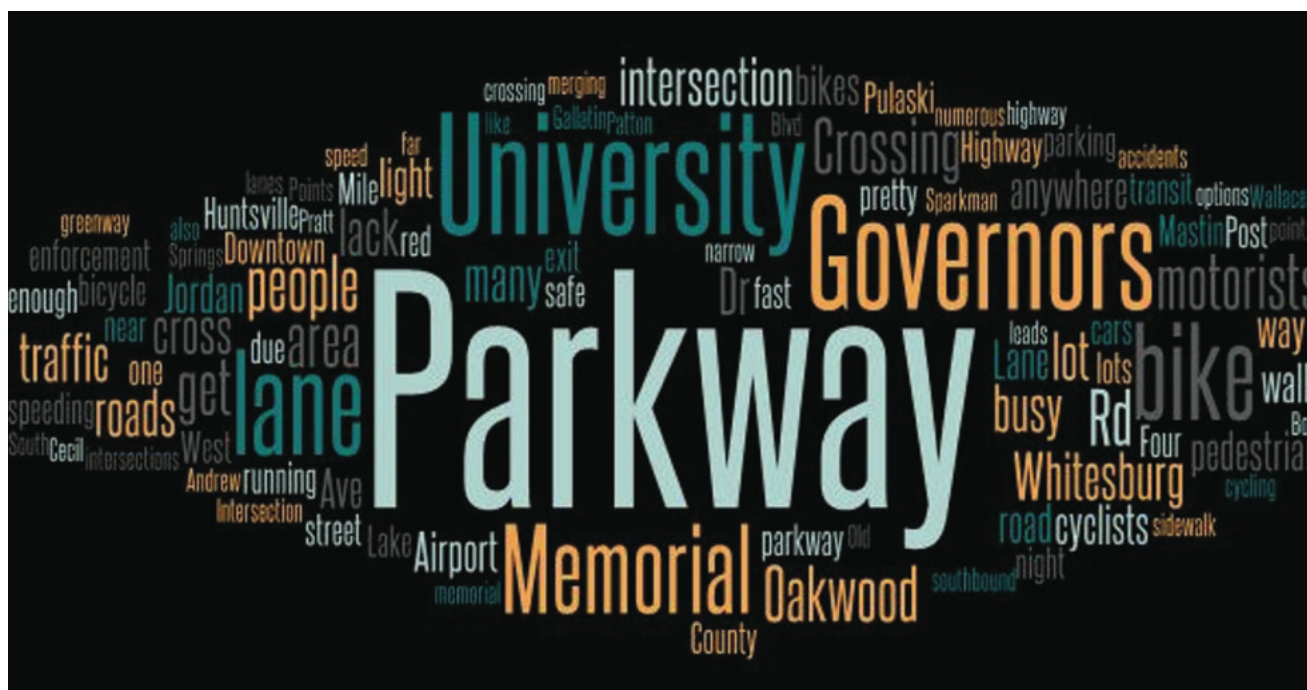
The following section provides summaries of comments heard at the Vision Zero Huntsville Public Input Sessions, as well as open-ended comments from the Vision Zero Huntsville Community Survey. The Survey was open May 1, 2023 through June 10, 2023, and generated 221 responses.

When asked to list the roadways in Huntsville where participants felt the most unsafe for any mode of transportation, the responses were:

- Memorial Parkway
- University Drive
- I-565
- Governors Drive
- Sparkman Drive
- Mastin Lake Road
- Oakwood Avenue
- Jordan Lane
- Research Park Boulevard
- Pulaski Pike
- Meridian Street
- Holmes Avenue
- Bob Wallace Avenue
- Whitesburg Drive

More pedestrian-friendly pathways would be amazing.

ROADWAYS THAT FEEL THE MOST UNSAFE



Click below to access the online Vision Zero Survey responses. Please use password: Huntsville123!

https://www.surveymonkey.com/results/SM-zT5TYmiLilmlBbUCNCUdWA_3D_3D/

Click here to access raw data from the Vision Zero Survey responses (online & hardcopy): [Vision Zero HSV Survey Responses](#)



“
I wish there were more options for public transit. I feel I would have to drive 15-20 minutes and park to use these services. I think there should be more priority to underserved areas that have no walkability.
”



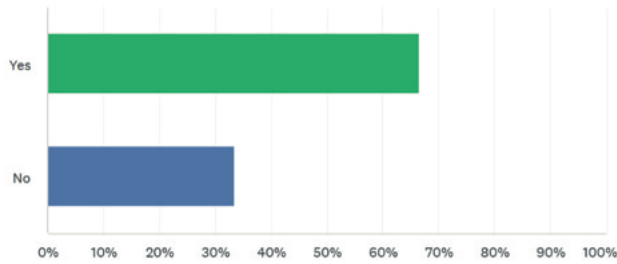
SAFETY PERCEPTION





Have you, or someone you know, ever been involved in a traffic crash in the city of Huntsville within the past five years?

Answered: 221 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	66.52%	147
No	33.48%	74
TOTAL		221

Schools in north and west Huntsville, especially Morris School, need increased safety measures to accomodate multimodal traffic.



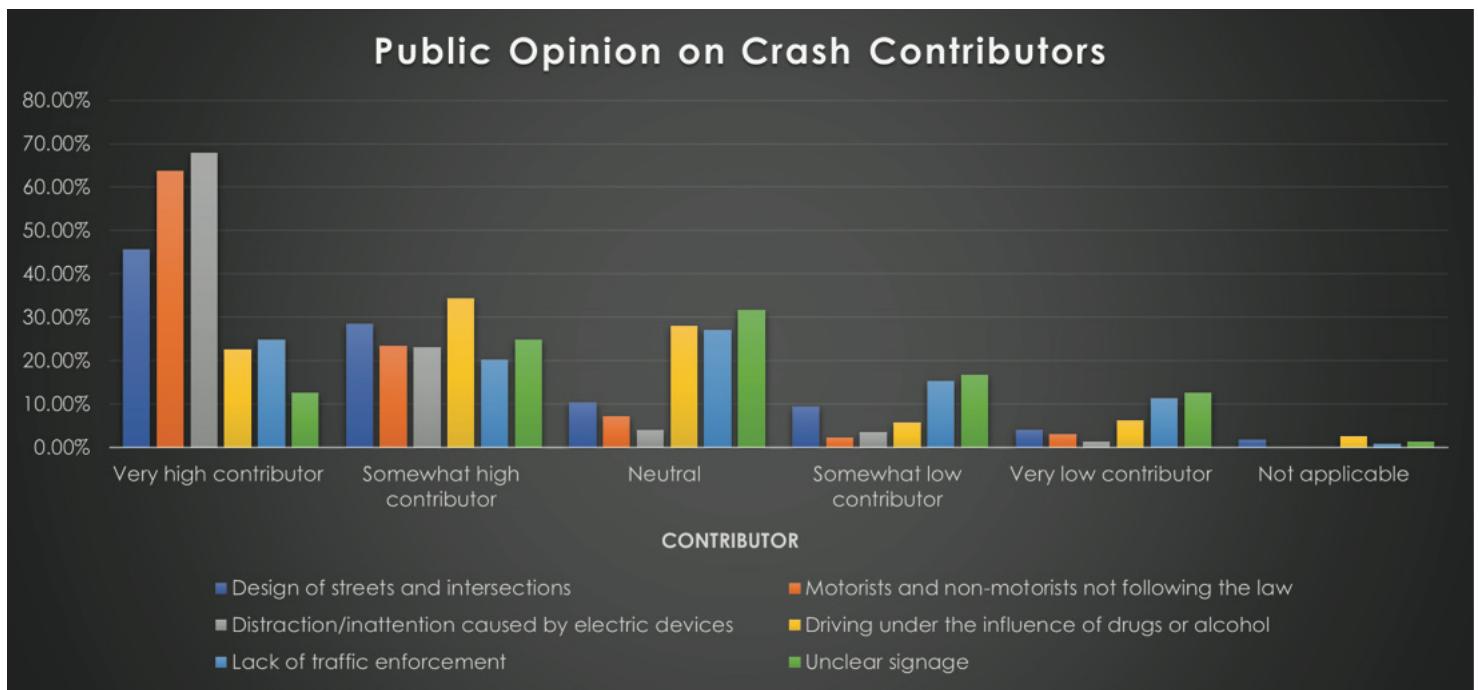


“
Pedestrian infrastructure leading up to bus stops is needed especially for the transit dependent who do not own a car.
 ”

“
Better bike/ped amenities at greenways and schools. Increase walkability throughout the city.
 ”

“
Memorial Parkway doesn't have a safe place for bikes and sidewalks regularly.
 ”

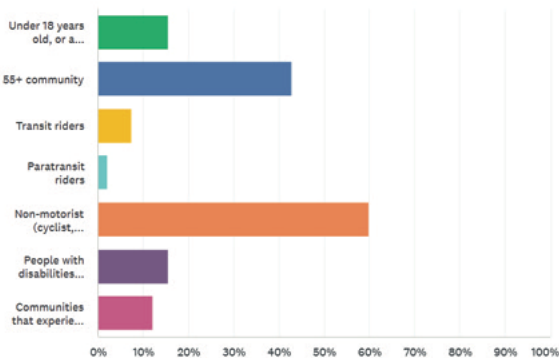
CRASH CONTRIBUTORS





The City's Vision Zero Huntsville – Multimodal Safety Action Plan acknowledges some groups are more vulnerable concerning transportation safety. Do you identify with any of the following groups? Please select all that apply (Optional):

Answered: 147 Skipped: 74



ANSWER CHOICES	RESPONSES
Under 18 years old, or a parent of a child under 18 years old	15.65% 23
55+ community	42.86% 63
Transit riders	7.48% 11
Paratransit riders	2.04% 3
Non-motorist (cyclist, pedestrian, wheelchair users, scooter, personal conveyance user, etc.)	59.86% 88
People with disabilities (physical, mental, vision impairments, etc.)	15.65% 23
Communities that experience racial, ethnic, and/or socioeconomic disparities	12.24% 18
Total Respondents: 147	

*"
Governors Drive and
Holmes Avenue need
Complete Streets
with dedicated
infrastructure.
"*

*"
While some parts of the
medical district work
well for people with
disabilities, there are
parts that need increased
safety, especially near
the hospital where it is
needed the most.
"*

*"
I would love to see
this city invest more in
pedestrian, ADA, and
bicyclist safety.
"*



*“
Protected/buffered
bike lanes and
separated traffic
would increase
safety for everyone.
”*

*“
I work at the hospital
and walking from
W&C to Main is
dangerous.
”*





“
There are several elderly and disabled people living in the Governors Drive area. The pedestrian crossing lights should accommodate them.
”

“
University Drive is severely lacking in safe pedestrian crossings for as much pedestrian activity as it has. Lighting is also an issue, especially at night. Jordan Lane is the same way.
”





“
There are few alternatives to driving here! Better connectivity throughout the city for active transportation is greatly needed.
”

“
I feel fairly safe walking and biking in my neighborhood, but not in commercial areas.
”



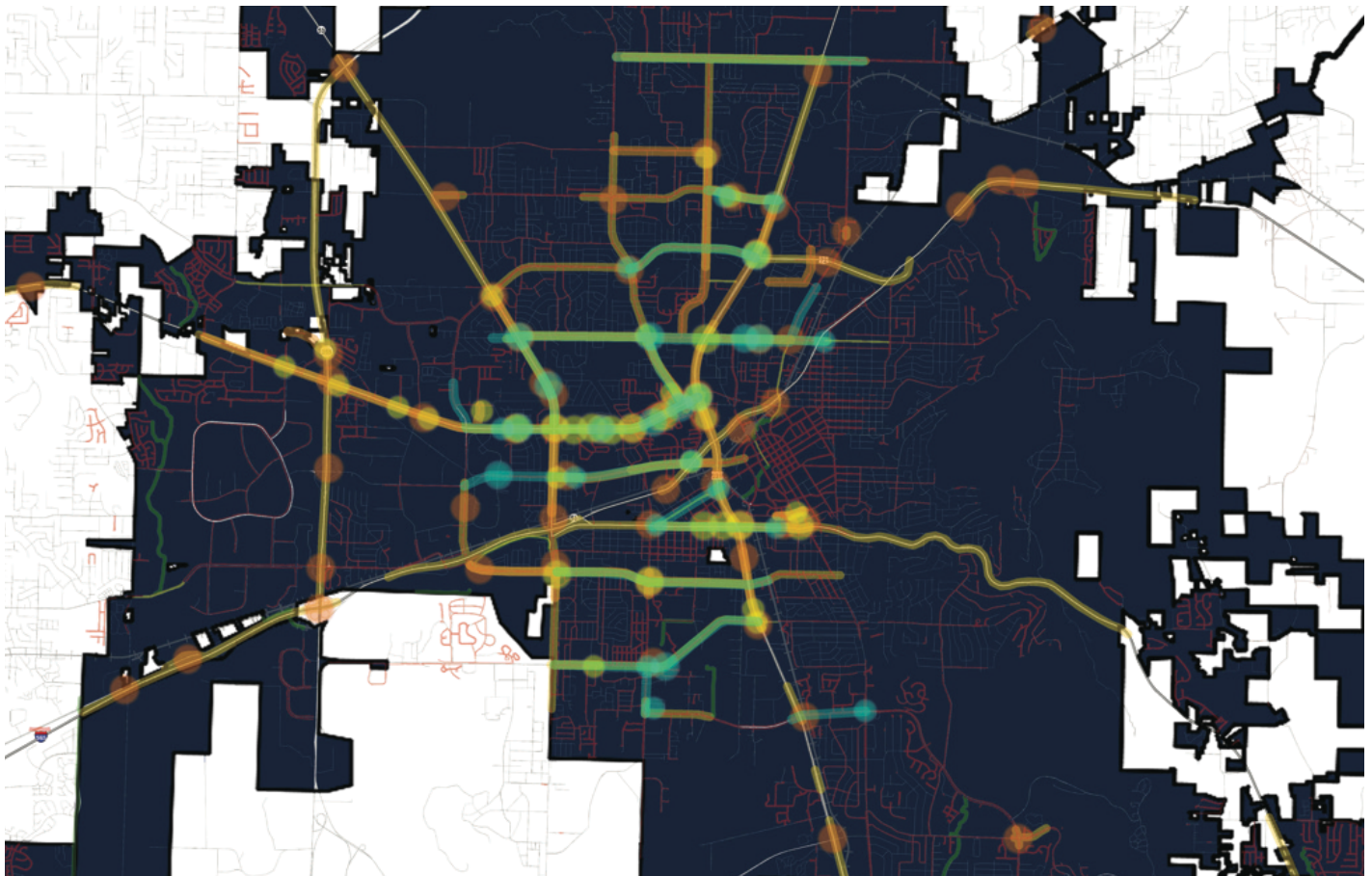
The background image is a blue-tinted photograph of a street scene. In the foreground, a crosswalk with white stripes is visible. Two young girls are walking across the crosswalk from left to right. In the background, a large octagonal stop sign with the word "STOP" in white letters is mounted on a pole. Other pedestrians are visible in the distance, and there are trees and buildings in the background.

HIGH INJURY NETWORK (HIN) & EQUITY ANALYSIS



HIGH INJURY NETWORK (HIN)

When it comes to advancing Vision Zero, data is crucial to set goals and strategies and measure progress to eliminate roadway fatalities and serious injuries. A key step is identifying the community's High Injury Network (HIN) to illustrate where the patterns and high numbers of traffic fatalities and serious injuries are occurring. However, identifying the High Injury Network is only the first of several important steps. It is strongly recommended by Vision Zero advocates and the Department of Transportation to start with identifying and mapping out your community's HIN by analyzing where the high numbers of roadway fatalities and severe injuries are occurring over a period of time (it is recommended at least over a five year period). Both fatalities and severe injuries should be tracked within all modes of transportation as serious crashes still have life-altering impacts or could have easily been fatal. Moreover, tracking serious injuries provides an opportunity to analyze growing severity or risk. The HIN Mapping Analysis helps decision-makers see where the high-risk areas are and helps identify where greater investment needs to be focused. This helps prioritize investment in areas that need it most and in communities of concern that have been historically disadvantaged or underserved due to past inequities and unfair planning practices. Emphasizing equitable investment in the transportation system especially in areas that experience high crash rates will help the city prioritize investment with the ultimate goal to prevent fatalities and serious injuries and save lives. In addition, the Equity Analysis and the HIN Analysis helps planners and traffic engineers identify where there are concentrations of vulnerable roadway users. By identifying streets with the highest concentration of traffic collisions that result in death or serious injuries, Huntsville can work to improve roadway design and reduce the risk of future collisions.





HIGH INJURY NETWORK (HIN)

The methodology used to identify the High Injury Network was the selection of one-mile corridors with the greatest frequency and severity of crashes (Fatalities & Serious Injuries Crashes) within the 2017-2022 timeframe. High injury “crash clusters” (or, “Hot Spots”) were also mapped out-- these may be along a corridor (that is or is not a HIN), and intersections that see a high rate of severe and fatal crashes. High Injury Networks were also mapped out for pedestrians and bicyclists. These were also identified networks that experienced high rates of fatalities and serious injuries crashes.

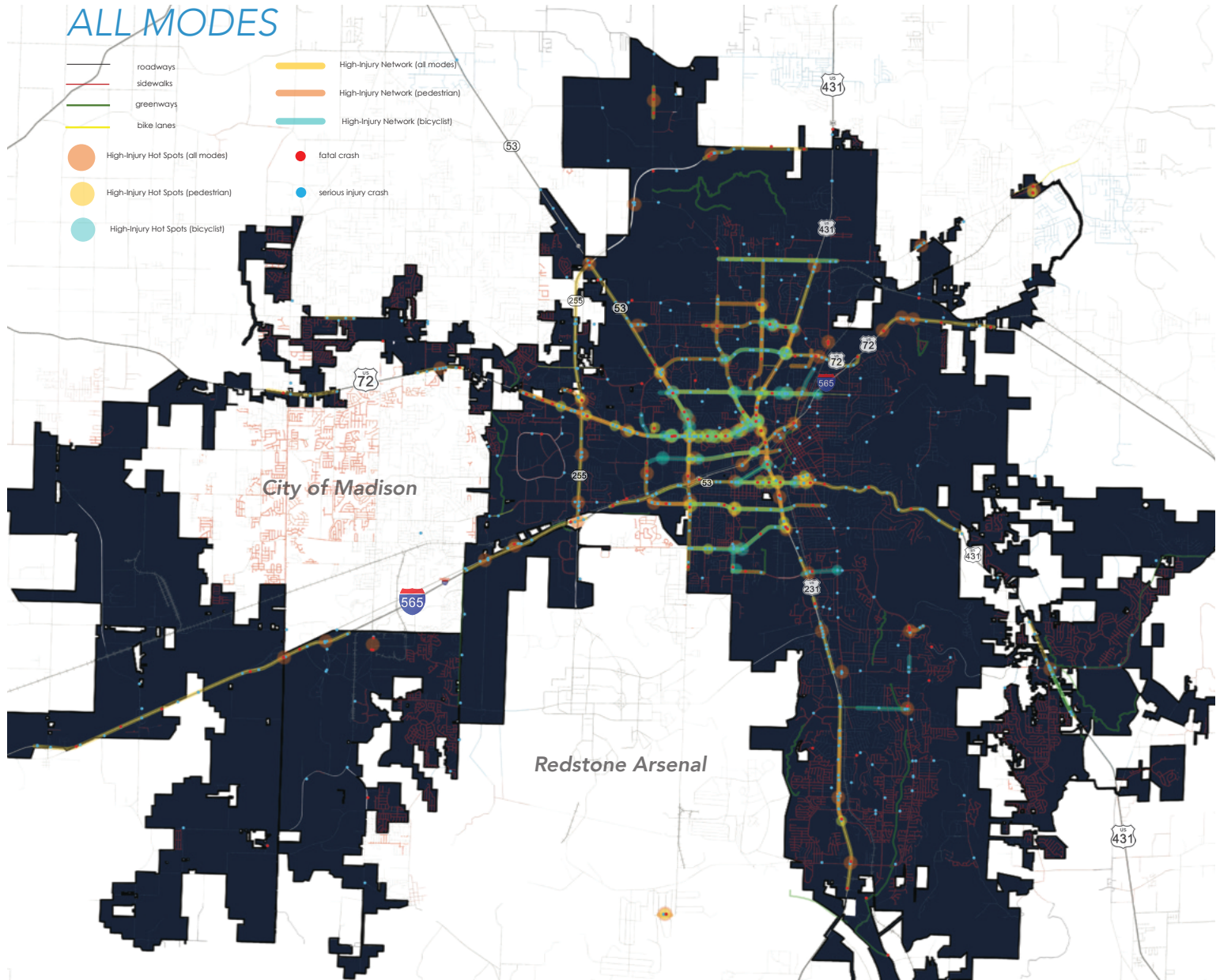
Some significant findings from the HIN Analysis include:

- The High Injury Network (HIN) mapped out for all transportation modes (vehicles, pedestrians, bicyclists) represents 93.34 miles of roadway in Huntsville.
- 63.9% of the (all modes) HIN is located on state-owned roadways.
- 36.1% of the (all modes) HIN is located on locally-owned roadways.
- There is 34.06 miles of Pedestrian HIN. 43.25% is located on state-owned roadways and 56.75% is located on locally-owned roadways.
- There is 27.21 miles total of Bicyclist HIN. 18.4% is located on state-owned roadways and 81.6% is located on locally-owned roadways.
- For all Fatalities & Serious Injuries Crashes across the city, 80.2% of all Fatalities & Serious Injuries Crashes occurred on state-owned roadways; 19.8% of all Fatalities & Serious Injuries Crashes occurred on local roadways.
- Nearly all of the all-modes HIN (98.4%) is located in areas defined as Disadvantaged Communities status and Vulnerable Areas of Concern.
- There is a high concentration of HIN located in close proximity to school zones and hospitals.
- There is a correlation between High Injury Networks and lack of alternative mode infrastructure.
- There is a strong correlation between posted speed limits and the High Injury Network. Nearly all of the HIN (98.8%) is located on roadways with speed limits posted at 40 mph and above.





HIGH INJURY NETWORK (HIN) ALL MODES



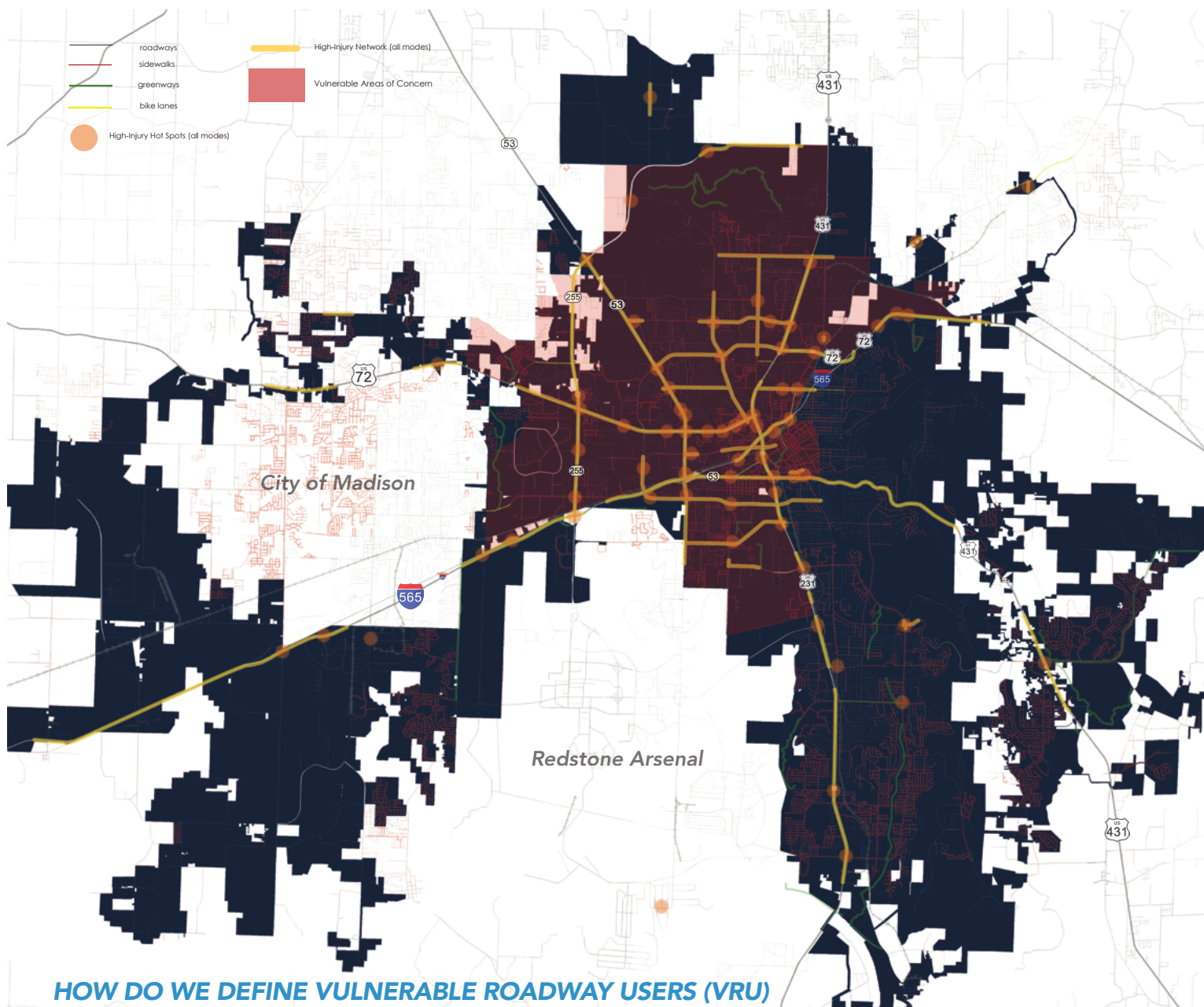
Roadways that have the highest frequency of severe injury crashes for all modes (in order):

1. University Drive (US 72).....STATE-OWNED
2. Governors Drive (AL 53).....STATE-OWNED
3. Memorial Parkway (US 431/US231).....STATE-OWNED
4. Jordan Lane (AL 53).....STATE-OWNED
5. Mastin Lake Road.....LOCALLY-OWNED
6. Bob Wallace Avenue.....LOCALLY-OWNED
7. Oakwood Avenue.....LOCALLY-OWNED
8. Pulaski Pike.....LOCALLY-OWNED
9. Sparkman Drive.....LOCALLY-OWNED
10. Drake Avenue.....LOCALLY-OWNED
11. I-565.....STATE-OWNED

*Click here for Current & Projected Traffic Volumes of HIN Segments: [HIN Traffic Volumes CURRENT & PROJECTED](#)



HIN (ALL MODES) & HOT SPOTS VULNERABLE AREAS OF CONCERN



HOW DO WE DEFINE VULNERABLE ROADWAY USERS (VRU) AND VULNERABLE AREAS OF CONCERN (VAC)?

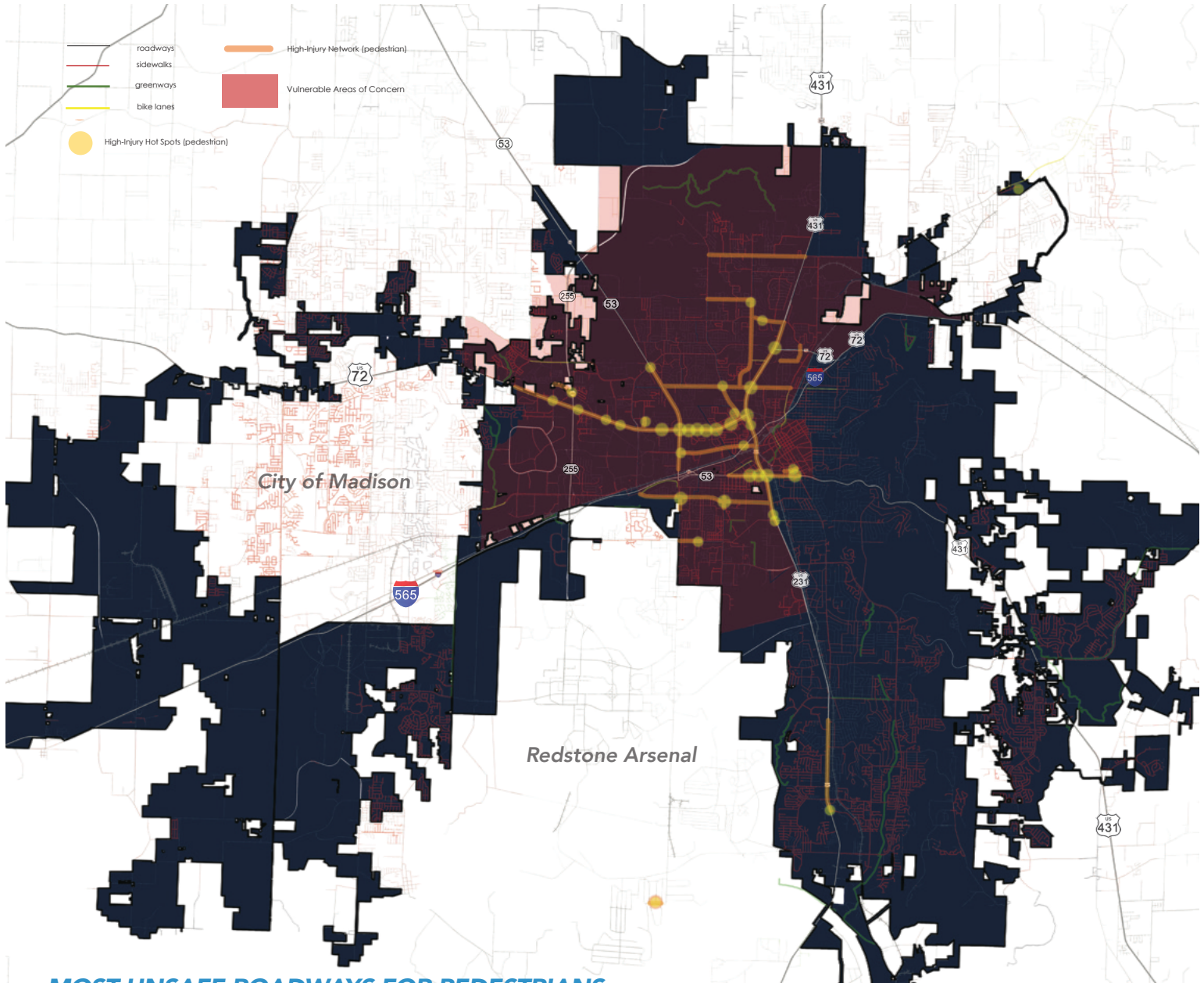
*Click here for Equity Analysis Maps: [EQUITY ANALYSIS MAPS](#)

- Active Transportation Users (people who walk, bike, or roll)
- Transit & Paratransit users
- Poverty Rates
- Carless Populations
- People Living with Disabilities
- People of Color (non-White and/or Hispanic/Latinx)
- Limited English Proficient (LEP) Households
- Seniors (65+)
- Youth (under 18) (particularly school zones)
- Unemployment Rates

**98.4% of the
HIN is located in
Vulnerable Areas
of Concern**



PEDESTRIAN HIN & HOT SPOTS VULNERABLE AREAS OF CONCERN



MOST UNSAFE ROADWAYS FOR PEDESTRIANS:

- University Drive
- Memorial Parkway
- Governors Drive
- Bob Wallace Avenue
- Holmes Avenue
- Jordan Lane
- Oakwood Avenue
- Pulaski Pike
- Mastin Lake Road
- Sparkman Drive
- Saint Clair Avenue / Gallatin St
- Drake Avenue
- Winchester Drive

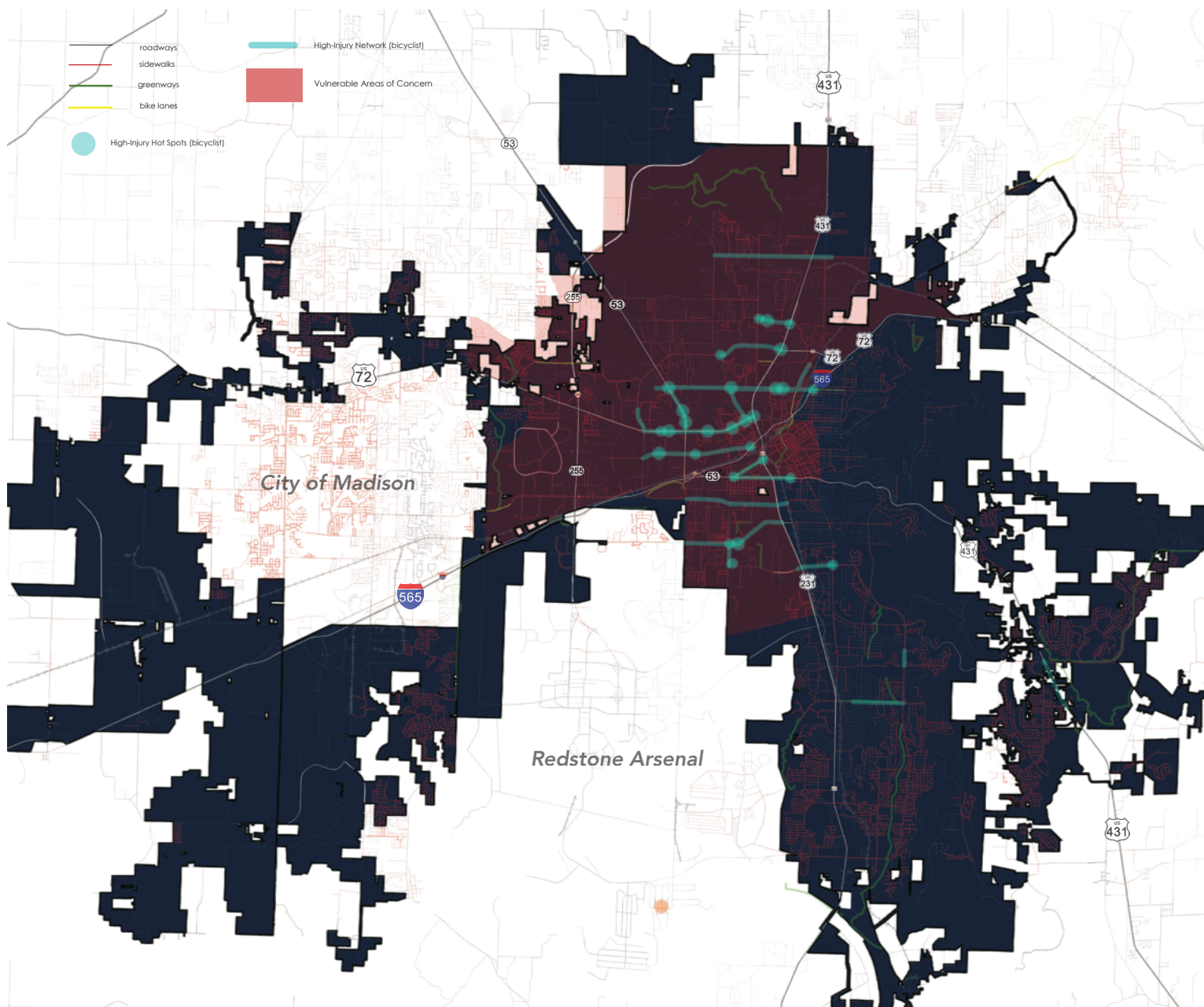
*It should be noted that University Drive is the main commercial corridor in Huntsville, but also contains a high percentage of residential housing units. More than any other area of the city, it generates the greatest multimodal traffic, with a high percentage of pedestrians, drivers, and bicyclists traveling together.

State : Local Ped HIN Ratio = 43.25% : 56.75%

**99.2% of the
Pedestrian HIN
is located in
Vulnerable Areas
of Concern**



BICYCLIST HIN & HOT SPOTS VULNERABLE AREAS OF CONCERN



MOST UNSAFE ROADWAYS FOR BICYCLISTS:

- University Drive
- Oakwood Avenue
- Holmes Avenue
- Jordan Lane
- Clinton Avenue
- Governors Drive
- Sparkman Drive
- Pulaski Pike
- Mastin Lake Road
- Meridian Street
- Drake Avenue
- Triana Boulevard
- Airport Road
- Bob Wallace Avenue
- Blue Spring Road

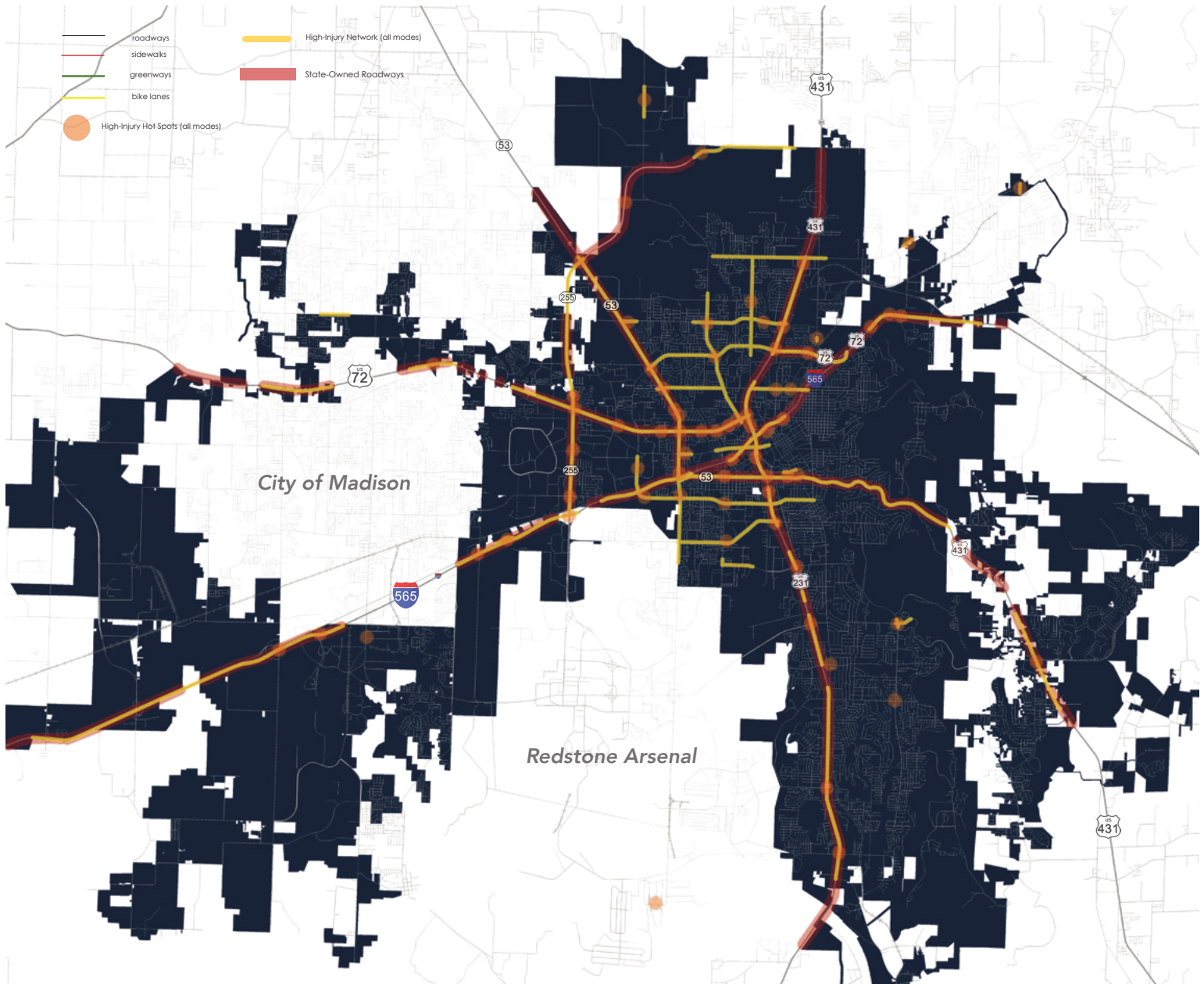
State : Local Bike HIN Ratio = 18.4% : 81.6%

**98.8% of the
Bicyclist HIN
is located in
Vulnerable Areas
of Concern**



HIN & HOT SPOTS

STATE-OWNED & LOCALLY-OWNED ROADWAYS



THERE IS 93.34 TOTAL MILES OF HIN IN HUNTSVILLE.

- **63.9% of HIN is located on state-owned roadways**
- **36.1% of HIN is located on local roads**
- **19.8% of ALL Fatalities & Serious Injuries crashes occurred on local roadways, while 80.2% occurred on state-owned roadways**

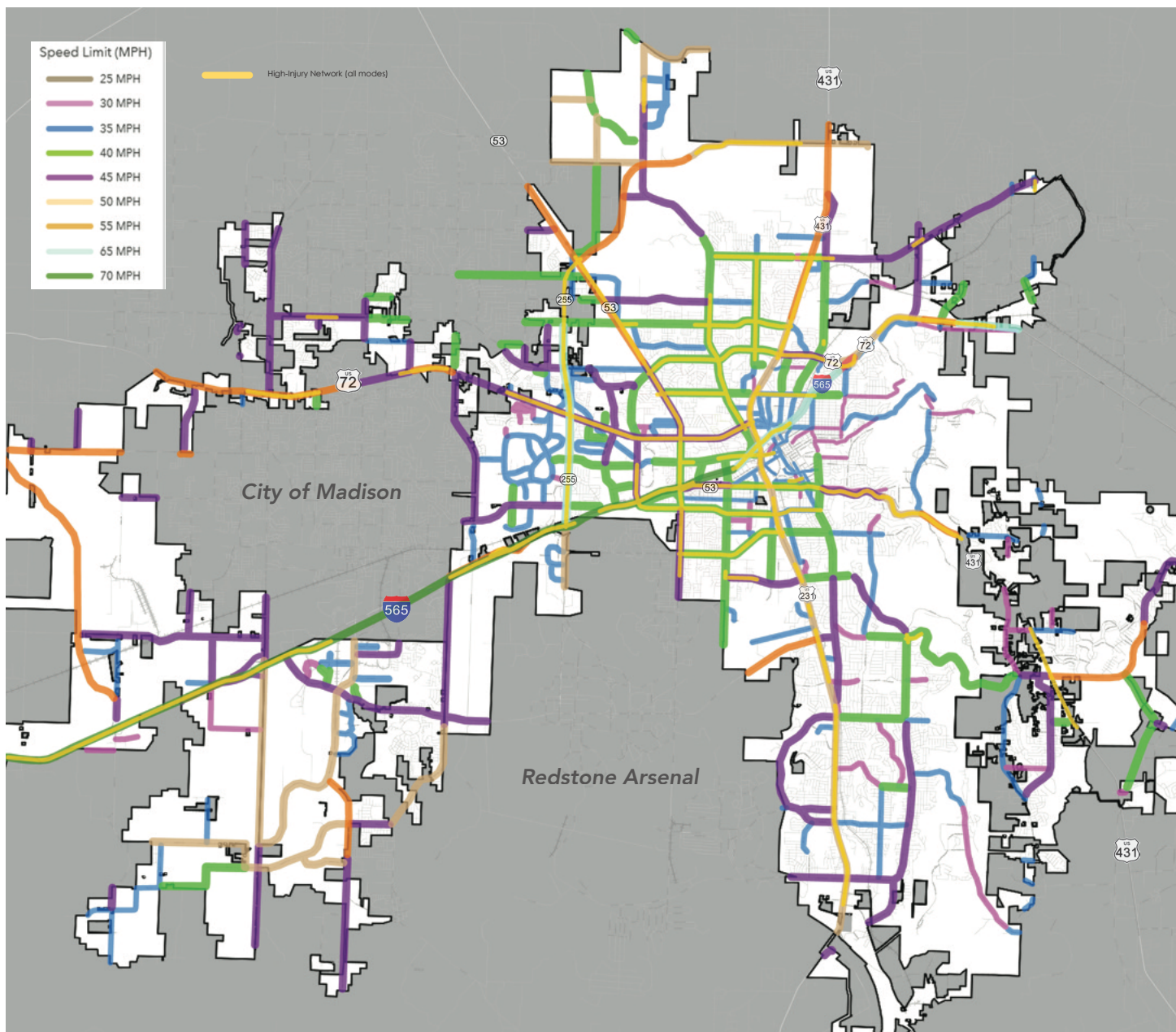
State : Local HIN Ratio = 63.9% : 36.1%

**63.9% of the
HIN is located
on State-Owned
Roadways**



HIN & EXISTING CONDITIONS

SPEED LIMITS



SPEED MATTERS:

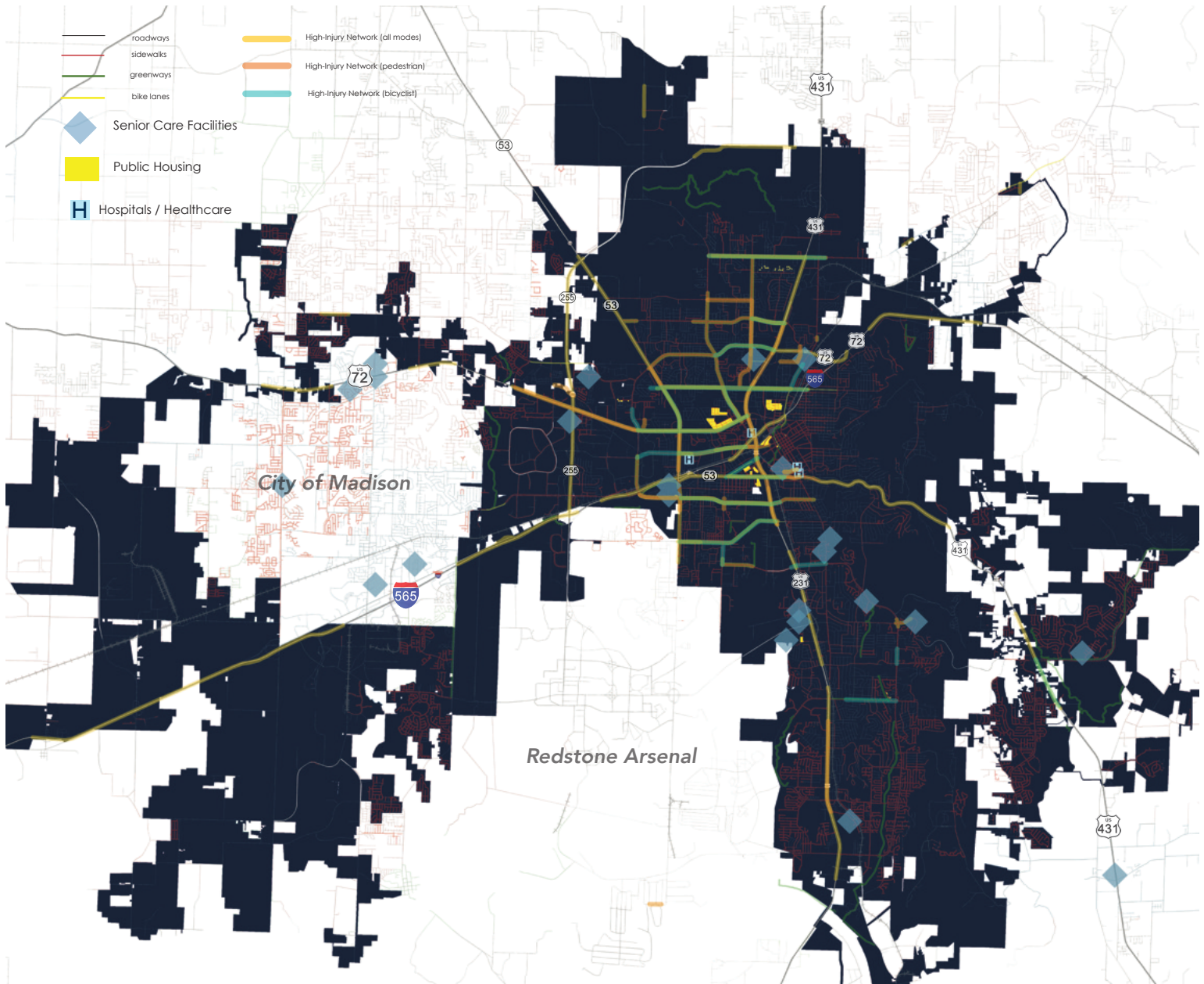
Nearly all of the HIN (98.8%) is located on corridors with posted speed limits of 40 mph and above. Less than 2% of the HIN is located on streets posted 35 mph and lower. However, not all 40 mph roadways are HIN. When factors such as density, mixed land uses, multimodal traffic, level of service, traffic volume, etc), are controlled for, there is a significant reduction in fatalities and serious injuries on slower speed limit roadways. Further analysis is needed to determine exact correlation.

98.8% of the HIN is located on corridors with posted speed limits of 40 mph and above



HIN & EXISTING CONDITIONS

PUBLIC HOUSING, HOSPITALS, & SENIOR CARE FACILITIES



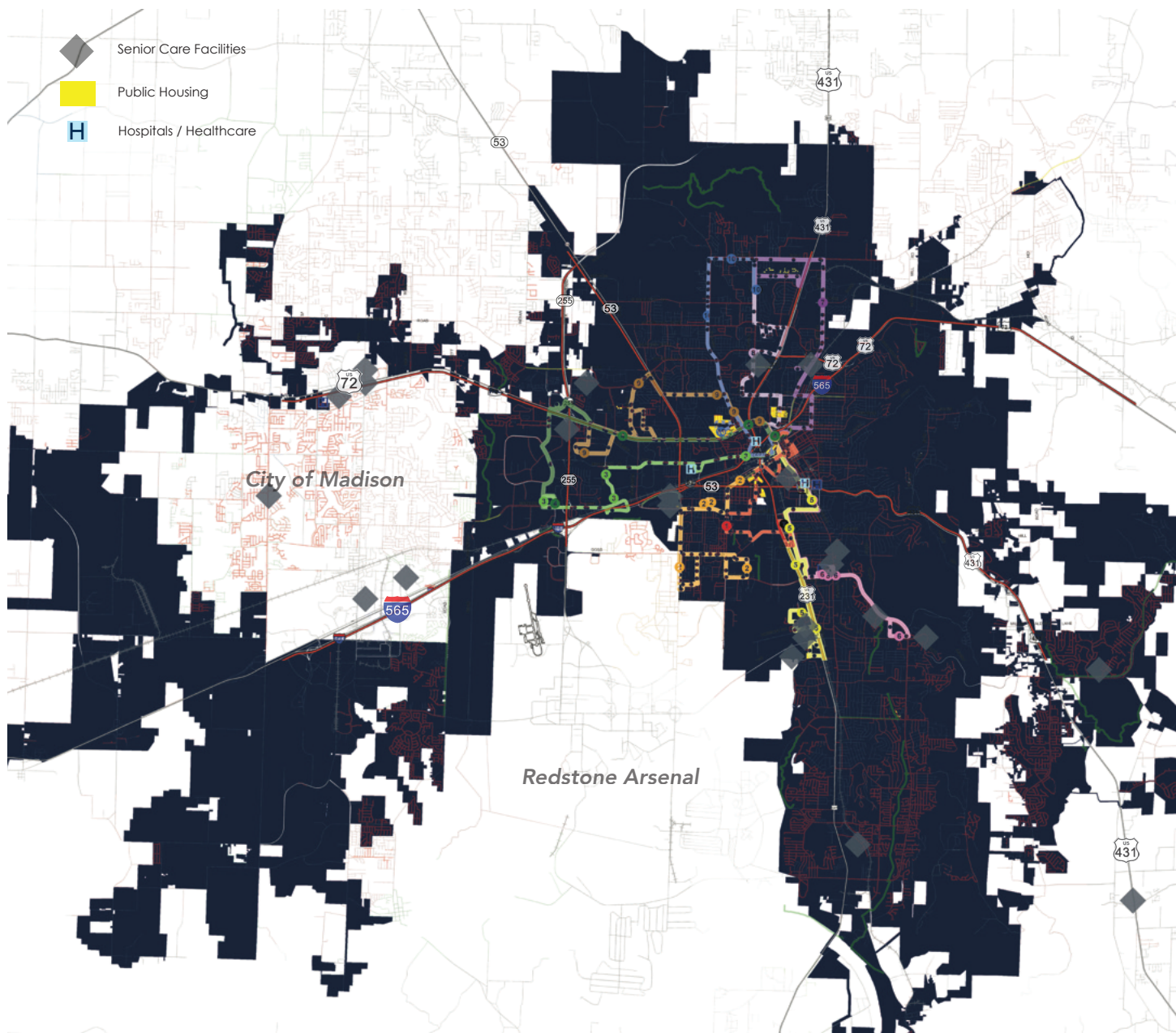
HIGH INJURY NETWORKS (HIN)'S OF ALL MODES ARE WITHIN CLOSE PROXIMITY TO PUBLIC HOUSING & SENIOR CARE FACILITIES IN ALL AREAS OF THE CITY.

Seniors and Low-and-Moderate Income (LMI) individuals and families living in Public Housing are considered "Vulnerable Roadway Users" (VRU).

HIN's are located in close proximity to Public Housing and Senior Care Facilities



HIN & EXISTING CONDITIONS TRANSIT



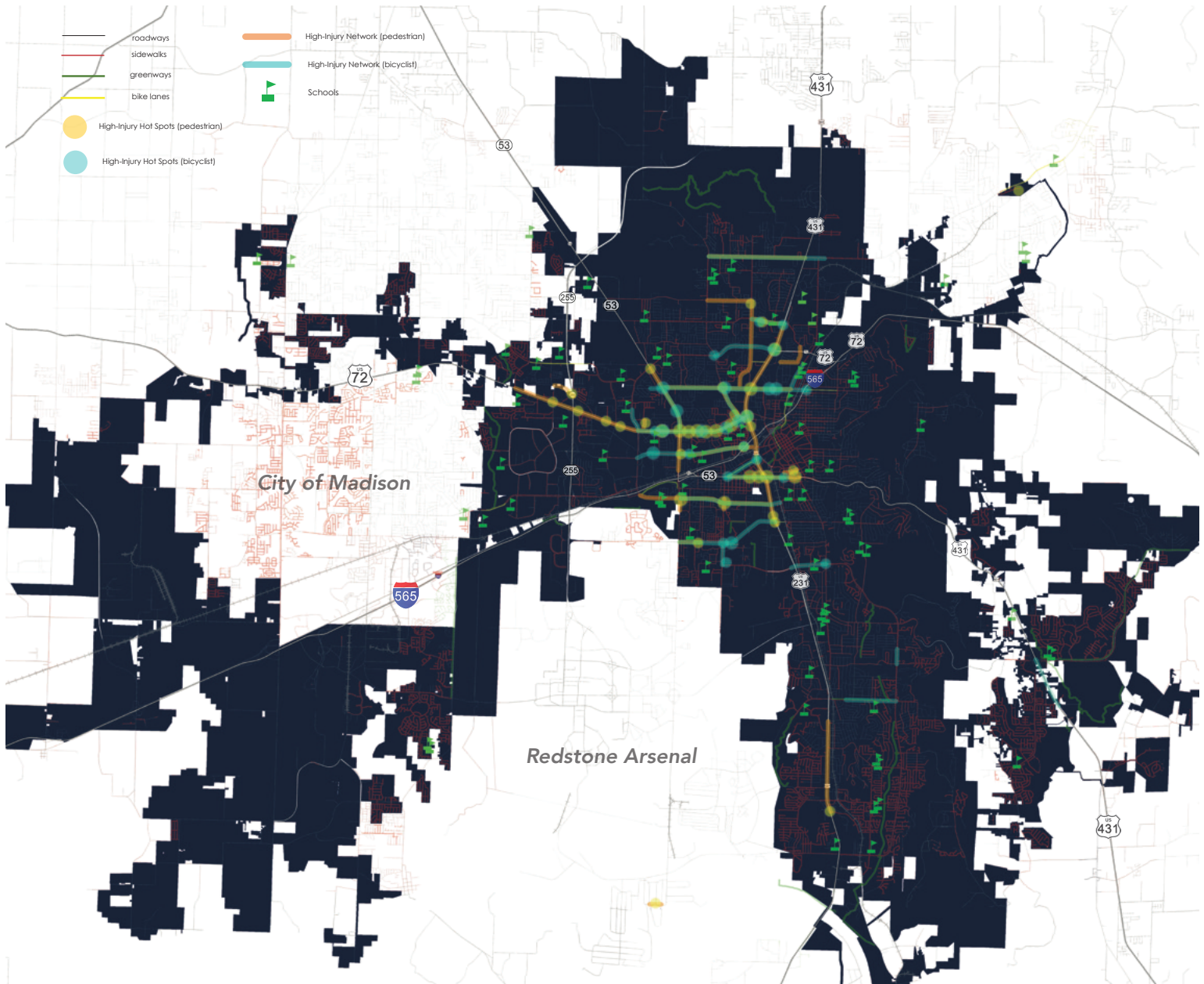
HUNTSVILLE TRANSIT SYSTEM

Huntsville is moderately-served by transit routes, especially to vulnerable population areas. However, there is a need and demand to expand the transit system and capacity as population and demographics change and more families are "Aging in Place." The Analysis also revealed an increased need for multimodal infrastructure to nearby transit stop locations, more covered bus stops, and more efficient routes to support the 8-5 workday. Huntsville Transit is currently in the process of updating the Transit Plan.

There is a need
for increased
multimodal
infrastructure
nearby transit
locations



HIN & EXISTING CONDITIONS SCHOOLS



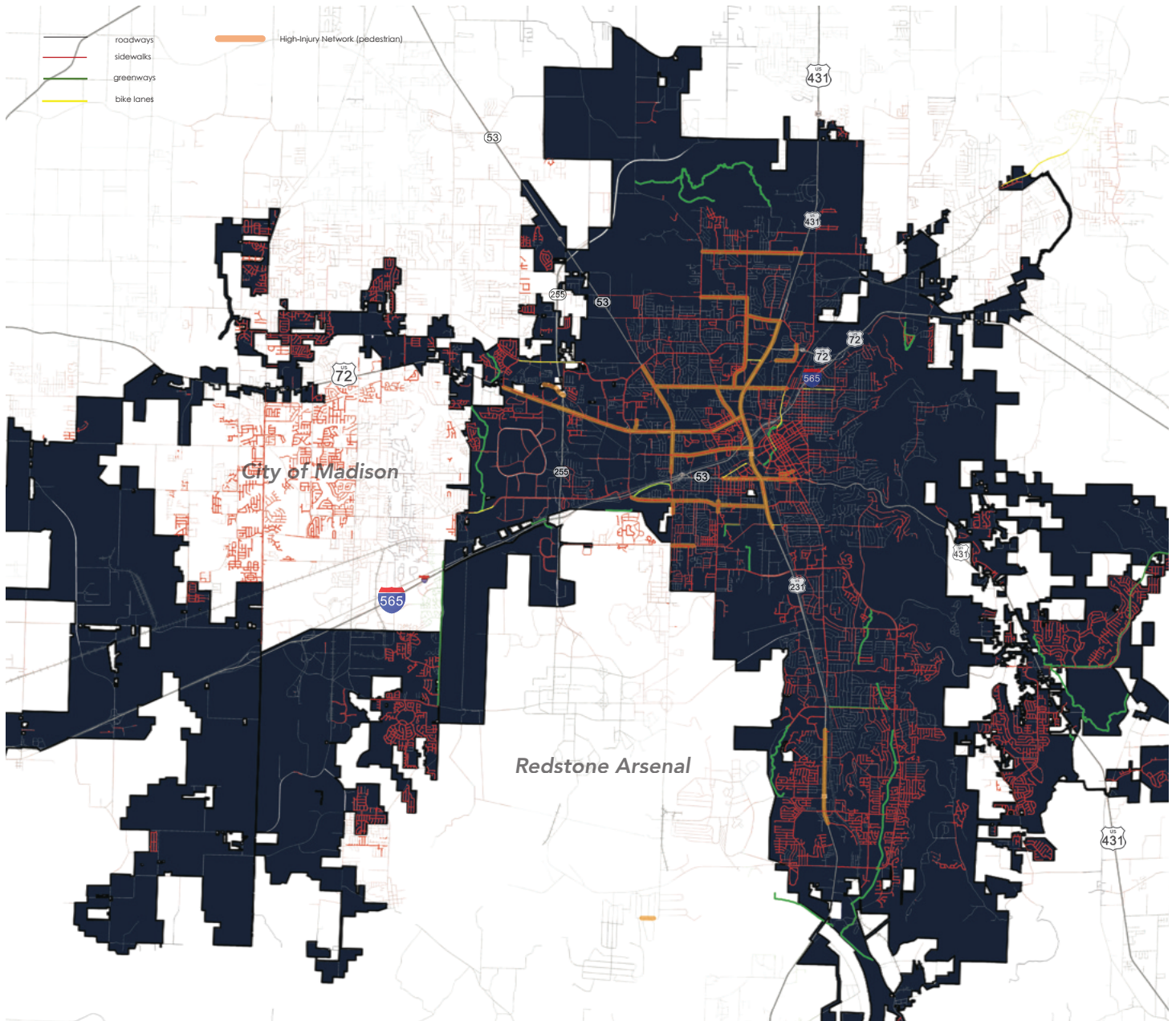
HIN's IN RELATION TO SCHOOLS

The Analysis revealed that High Injury Networks, specifically for pedestrians and bicyclists, were within close proximity (a one-mile radius) to schools, especially in Vulnerables Areas of Concern. School children and youth are considered "Vulnerable Roadway Users."

**Bike & Ped
HIN's are within
close proximity
to schools in
Vulnerable Areas
of Concern**



PEDESTRIAN HIN & EXISTING CONDITIONS SIDEWALKS & GREENWAYS



SIDEWALKS & GREENWAYS

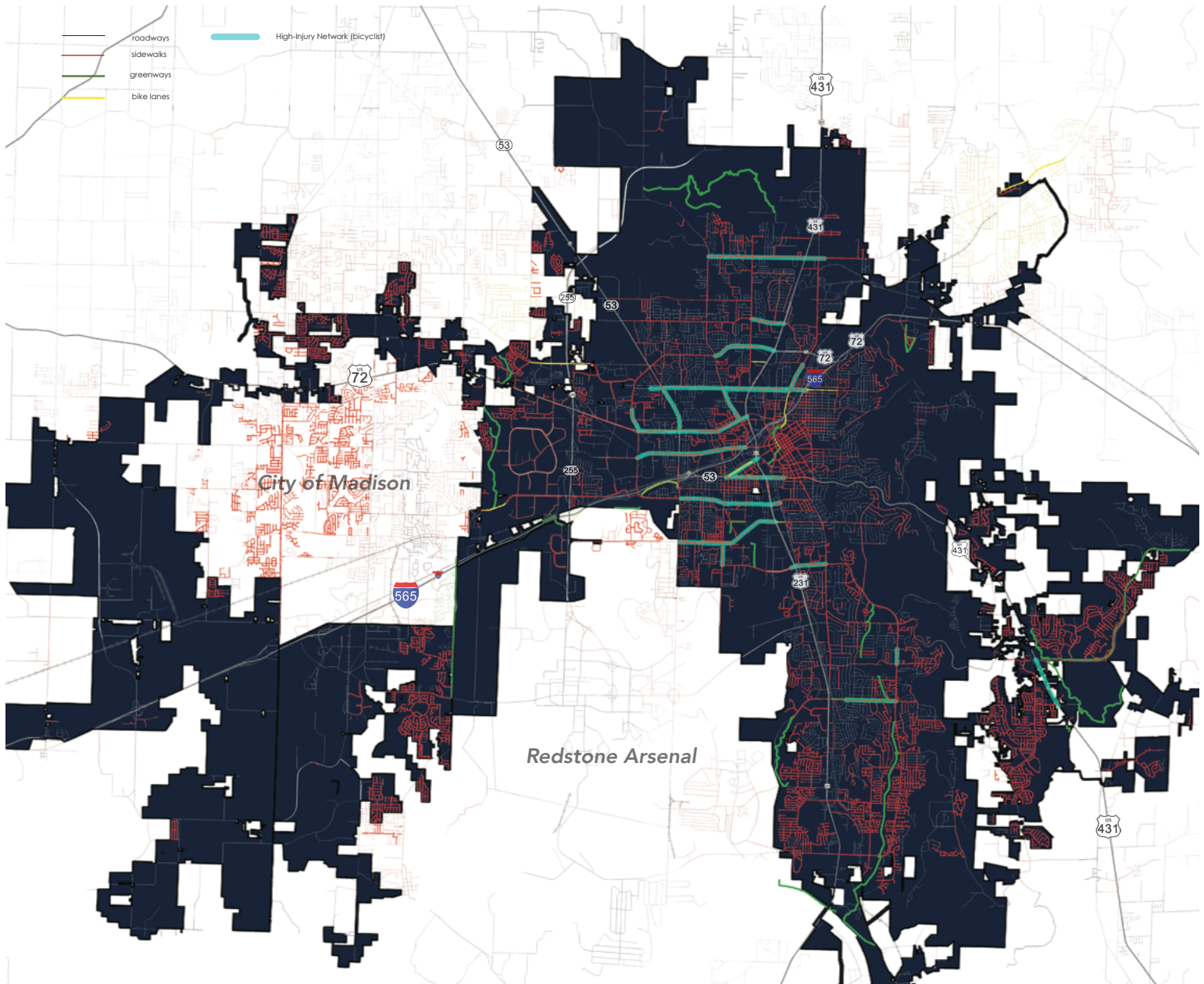
Huntsville is well-served by sidewalks in certain areas of the city, specifically the Downtown areas and the city's newer neighborhoods. However, in Pedestrian HIN areas, especially in Vulnerable Areas of Concern neighborhoods in north and west Huntsville, pedestrian infrastructure is insufficient to support these high-pedestrian activity areas. Either sidewalks are not continuous, exist on one side of the road only, or are non-existent. Increasing pedestrian infrastructure, such as greenways, sidewalks, crosswalks, pedestrian refuges, lighting, and Complete Streets facilities along major HIN-corridors within vulnerable areas should be, and are currently, a priority. City ordinances also now require sidewalks be built on both sides of the roadways for all new construction by private developers, but HIN's in more established areas will need increased investment in alternative infrastructure.

Infrastructure is insufficient for high-pedestrian activity areas along HIN's.



BICYCLIST HIN & EXISTING CONDITIONS

BIKE LANES & GREENWAYS



BIKEWAYS & GREENWAYS

As Huntsville's population grows, there are more multimodal and alternative transportation users on the roadways. The Pedestrian Fatality Rate has nearly doubled from 2015 to 2020. Pedestrians and bicyclists are considered "Vulnerable Roadway Users," and this demographic is vastly underserved in HIN areas. (Bike lanes are in yellow on the map above). The City recognizes this, and has made major strides in recent years to plan for increased bike infrastructure. The MPO Bikeway Plan is in the process of being updated, and the City is actively seeking funding to implement Complete Streets projects along HIN corridors and build out its transit and greenway system. The Pedestrian Access and Redevelopment Corridor (PARC--a pedestrian and bicyclist bridge) will span across major transportation barriers and provide safe connectivity to the downtown area for low-and-moderate Income (LMI) neighborhoods and all active transportation users. Huntsville is also served by a Bike Route system with signage to route bicyclists through the safest streets.

Bikeways are underdeveloped in high-activity HIN areas



EXISTING PLANS & POLICIES

CITY OF HUNTSVILLE COMPLETE STREETS POLICY

To proactively address safety needs across the city, the City of Huntsville adopted a city-wide Complete Streets Policy in 2018, recognized by Smart Growth America as one of the Top Ten Best Policies in the country. As part of this effort, the City identified several high-need corridors for Complete Streets implementation. The planning and policy-writing process began during the city's BIG Picture Huntsville planning effort. The BIG Picture Huntsville is the City of Huntsville's comprehensive planning effort. One of the Principles is to create a transportation network that is accessible, convenient, and safe for all users. As part of efforts to implement BIG Picture planning goals, the city began seeking opportunities for financial and technical assistance. In 2015, Smart Growth America (SGA) - through a five-year Building Blocks for Sustainable Communities grant from the U.S. Environmental Protection Agency (EPA) Office of Sustainable Communities - awarded the City of Huntsville a technical assistance workshop to support the development of the City's first Complete Streets Policy. In 2016, SGA held a Complete Streets Policy Development Workshop in Huntsville to educate the public about Complete Streets and to bring transportation stakeholders together to begin drafting Huntsville's Complete Streets Policy. Key transportation and planning staff, public health and safety officials, parks and recreation staff, members of the Huntsville Housing Authority, and community advocates all attended the workshop. Six months later, the City Council adopted a resolution authorizing the Urban Development Department to draft the city's first Complete Streets Policy. The purpose of the policy is to guide decision-making and design processes to ensure that all users (pedestrians, bicyclists, automobiles, and transit) and context (urban and suburban; neighborhood and corridor; residential and commercial) are considered as a matter of course during the planning, design, construction, funding and operation of the City's transportation network. The City's Vision Statement was: "All people who are a part of our community will be able to move comfortably, affordably, efficiently, and safely throughout the City, via the modes of their choice, to their desired destinations; and that streets contribute positively to the neighborhoods and districts through which they pass."

The City of Huntsville crafted the vision statement considering the two prominent transportation planning efforts of the Huntsville area: The Metropolitan Planning Organization's Year 2040 Long Range Transportation Plan (LRTP), which analyzes high-risk areas and safety needs and deficiencies, and the BIG Picture Huntsville's Comprehensive Plan. These efforts represent both a policy-based analysis of transportation needs as well as community input regarding what the citizens needed and desired from their future network. Both of these documents identify Holmes Avenue and Clinton Avenue as a high-need Complete Streets candidate. The goals of the City's Complete Streets Policy are as follows:

1. To establish new standards of practice for designing and implementing streets within the City of Huntsville
2. To improve connectivity for bicyclists and pedestrians throughout the city;
3. To provide alternatives to those residents that cannot or choose not to drive, particularly seniors and children;
4. To improve and enhance the public health and physical fitness of the city's residents;
5. To make the roadway and street environment safer and more inviting;
6. To maintain the fast and efficient movement of commuters, particularly around major employment centers;
7. To ensure access to economic opportunity, particularly for those in poverty;
8. To improve the performance of new development and redevelopment by improving the quality of the adjacent infrastructure and human-scale environment;
9. To protect and preserve the environment by reducing emission of greenhouse gases, and reducing the consumption of non-renewable energy resources.



Complete Streets design accommodates diverse modes, users and activities including walking, cycling, public transit, and automobile, for nearby businesses and residents. There is a need to integrate safe, comfortable, convenient, and affordable routes for walking, bicycling, and public transportation to increase use of these modes of transportation, especially in high-risk and highly vulnerable areas. The goal is to enable active travel as part of daily activities, reduce pollution, and meet the needs of all users of the street, including bicyclists, children, students, people with disabilities, pedestrians, users of public transportation, seniors, youth, and families, while continuing to maintain a safe and effective transportation system for motorists.

With the new policy in place, the City approaches every planned transportation improvement as an opportunity to create safer and more accessible streets for all users. These include: All new construction and reconstruction projects of all city-owned transportation facilities in the public right-of-way, including but not limited to, streets, bridges, and all other connecting pathways, using Federal, State, or Local funds; Resurfacing activities; and Privately constructed streets and drives, particularly if it is anticipated that they will link public facilities. The Policy states that the Complete Streets process is incorporated into all aspects of the transportation project development process, including: Project identification; Scoping procedures; Design and engineering approvals; Design policies and guidelines; and Performance measures. Furthermore, due to its regional impact, implementation of the policy necessitates collaboration among many regional partners and stakeholders affected by the implementation. The City is to foster partnerships with the State of Alabama, neighboring communities and counties, businesses and school districts, to develop facilities and accommodations that further the City's Complete Streets policy. The Metropolitan Planning Organization (MPO) serves as a means to coordinate implementation of the policy throughout the region. The Complete Streets policy applies to all users of the City of Huntsville's transportation system including: Commuters; School children, buses, parents and staff; Emergency services; People living with disabilities; Utility and maintenance vehicles; Cyclists; Motorcycles; Strollers; Cars; Pedestrians; Transit users and the transit dependent; Freight and trucking.

To ensure the realization of Complete Streets, the policy identifies the anticipated financial mechanisms, the criteria for prioritization, and the applicable means and methods for creating Complete Streets for the city. As part of policy implementation, Complete Streets is a targeted annual discussion during the development of the City's Capital Improvement Plan (CIP). During the summer prior to each subsequent fiscal year, department heads gather with the Mayor to suggest Complete Street projects to be added to the CIP. Project Prioritization also occurs at this annual meeting. The Planning Department is responsible for seeking grant funding to carry out prioritized Complete Streets projects. The City uses certain criteria to inform decision-making with regard to which projects receive a Complete Streets review. All bicycle and pedestrian facilities are designed in accordance with the following Best Practices and standards: National Association of City Transportation Officials (NACTO); Federal Highway Administration (FHWA); Institute of Transportation Engineers (ITE); Americans with Disabilities Act (ADA); Public Right-of-Way Accessibility Guidelines (PROWAG); American Society of Landscape Architects (ASLA); American Association of State Highway and Transportation Officials (AASHTO); Manual on Uniform Traffic Control Devices (MUTCD). City Departments,

**The City's
Complete Streets
Policy provides
a framework
for providing
safe, alternative
transportation**

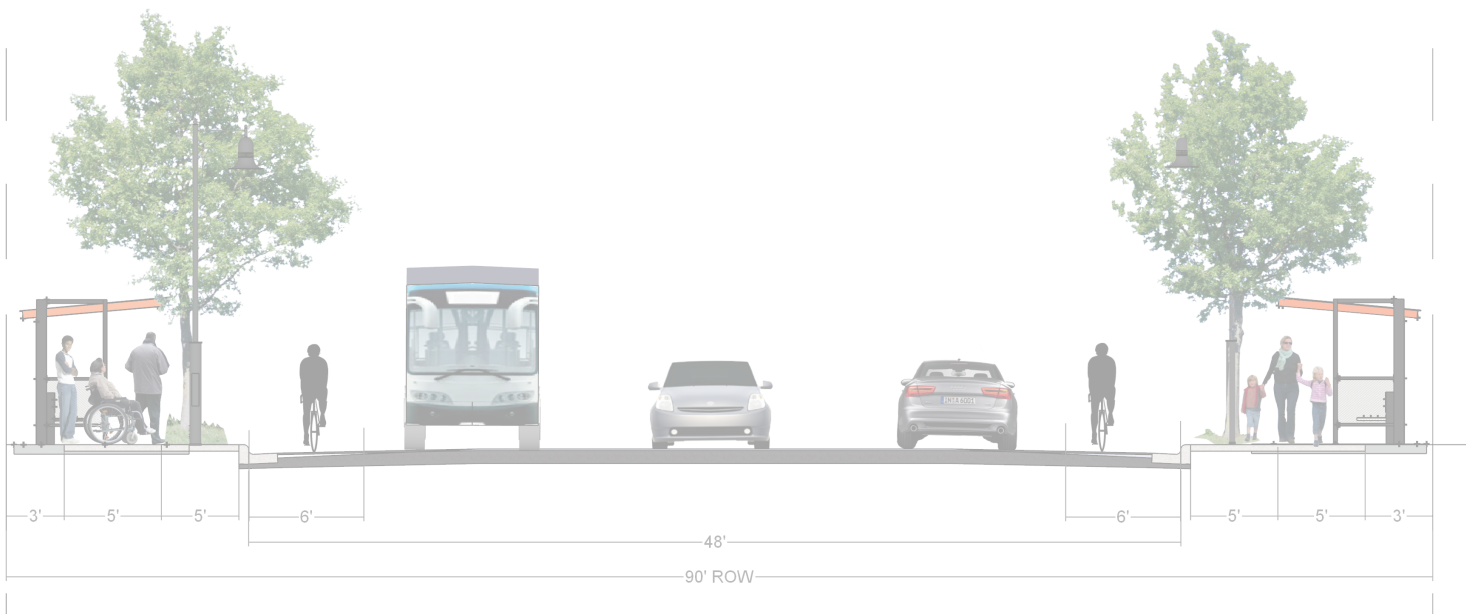


including Planning, Engineering, Traffic Engineering, Public Works, GIS, and Public Safety, and other departments conducts regular internal reviews of Complete Streets projects.

At the 2016 Complete Streets Workshop, the city designated Holmes Avenue and Clinton Avenue as the city's Complete Streets pilot projects. Both roads were wider than their capacity demand and are alternatives to major thoroughfares I-565 and US-72. Funds were committed in the city's capital plan for both projects. As outlined in the policy, the City will measure the success of the Holmes Avenue Complete Streets Corridor Project by using the following performance measures:

- User Data: Bicycle, pedestrian, transit and traffic counts
- Infrastructure Data: Total miles of pedestrian accommodation built / dedicated by width and type; Total miles of bike lanes (standard, buffered and protected), bike routes, and shared-use pathways; Percentage of transit stops accessible via sidewalks and bicycle facilities; Number of transit accessibility improvements built; Number of traffic calming facilities built / installed; Number of crosswalks built or improved; Number of traffic control signs/signals installed/upgraded; Total dollar amount spent on Complete Streets improvements;
- Commute Mode Share Data: Transit ridership rates; Shift in mode share; Rate of children walking or bicycling to school; Change in Vehicle Miles Traveled
- Safety Data: Rate of crashes, injuries, and fatalities by mode;
- Property and Economic Development Data: Retail sales in walkable areas; Vacancies; Sale price; Property value; Building permits;
- Environmental and Public Health Data: Number of street trees planted; Air quality data;
- ADA measures: Number of compliant businesses; Percentage of intersections with ADA accessible curb ramps; Number of ADA accommodations built / installed;
- Public opinion surveys;
- Number of exceptions approved.

Performance measure review are on-going, with twice-annually interim reports delivered to the Planning Commission and City Council, and published as part of the MPO's Transportation Quarterly Review (TQR). Citizens Advisory Groups are also used to measure project performance. Since 1992, the City has partnered with Huntsville's Bicycle Advisory and Safety Committee (BASC) to plan non-motorized





transportation facilities and programs. Members represent local bicycle organizations, bike shops, and citizens at large. The committee meets with city staff from Traffic Engineering, Planning, Public Safety, and other departments once a month to report on comprehensive safety needs. The City and BASC implemented *See & Be Seen, an online reporting tool where cyclists can share road hazards or incidents with motorists where they felt unsafe. The City used data from these submissions to inform municipal decision-making on road improvements and determine areas that need more traffic enforcement, or Complete Streets safety interventions. Planning, Engineering, Legal, Public Works, Traffic Engineering, and Public Safety are all involved in the implementation of Complete Streets projects. New and reconfigured streets are designed and constructed in accordance with the Complete Streets policy, wherever feasible.

The City of Huntsville's Complete Streets policy and approach helps ensure that flow is safe, steady and efficient, and all modes are safely accommodated. The criteria for selecting potential Complete Streets infrastructure are:

- Low to moderate traffic. Current daily traffic counts show there won't be a huge disruption during construction of new infrastructure.
- Excess capacity. Corridors that are "too wide" for their current daily traffic counts, so these corridors can afford to go on a "road diet."
- Destinations along a corridor. A Complete Street should be one that has places for pedestrians, cyclists and transit riders to go.
- In 2019, the City of Huntsville's Complete Streets Policy was recognized by Smart Growth America as one of the 2018 Top Ten best policies in the country. Smart Growth America added a new criteria in 2019 that included a new category for measuring equity in planning. In addition to this honor, the City recently implemented its first Complete Street project, and the "First Protected Bike Lane in the State," the Spragins Street Cycle Track, which uses advanced ITS technology that detects oncoming cyclists and triggers traffic signals to give cyclists the right-of-way. The City is actively seeking funding for additional Complete Streets projects. *See & Be Seen reporting tool currently undergoing update.



***PRIORITY NETWORKS
& INTERSECTIONS***



PROJECT PRIORITIZATION

As part of the Vision Zero Huntsville planning process, the HIN Analysis, Public Input, and findings in this report are used to identify and inventory high-need/high-risk roadway networks in an effort to prioritize projects and conduct further existing conditions analysis to examine high-frequency fatal and serious injury crash sites for improved engineering. Projects are prioritized based on multiple factors: HIN or Hot Spot located in Vulnerable Areas of Concern (VAC); Ped HIN; Bike HIN; HIN's in relation to: Schools; Transit; Hospitals; Senior Centers; ADA High-Need Areas. *Click here to view ongoing HIN Inventory: [HIN Inventory](#)*

The Vision Zero planning process will continue after an Action Plan has been developed and implementation has begun to reflect the changing dynamics of the community and as additional safety needs and issues arise. Crash data will be collected annually and used to benchmark progress. The Task Force is tasked with formulating a timeline for crash rate reduction targets and performance measures. In addition, coordination and consultation with existing safety studies, plans, and policies is ongoing. These plans include:

- Memorial Parkway Bicycle & Pedestrian Safety Study (adopted January 2022) [Link](#)
- Downtown Active Transportation Connectivity Action Plan (adopted January 2023) [Link](#)
- Meridian Street Corridor Redevelopment Plan (adopted June 2023) [Link](#)
- City-wide Complete Streets Policy (adopted 2016) [Link](#)
- Holmes Avenue Complete Streets Corridor Project
- Pedestrian Access and Redevelopment Corridor (PARC) – pursuing additional funding [Link](#)
- Huntsville Area MPO Bikeway Plan 2019 [Link](#)
- Huntsville Area MPO Bikeway Plan Update (beginning Fall 2023)
- Sidewalk Improvement Program (ongoing)
- Intersection Improvement Program (ongoing)
- Huntsville Transit Study (adopted 2019 and currently being updated) [Link](#)
- Alternative Modes Review 2022 [Link](#)
- Huntsville Area MPO ADA Transition Plan 2021 [Link](#)
- Mill Creek Choice Neighborhood Plan 2022 [Link](#)
- Huntsville Area MPO Long-Range Transportation Plan (LRTP) [Link](#)

The Vision Zero Huntsville Multimodal Safety Action Plan framework is built on Six Focus Areas that are based on themes that were developed in partnership with the Vision Zero Task Force. Each Focus Area serves as an overarching goal for supporting strategies and action items that will come out of this plan. After reviewing the next phase of existing conditions analysis, the Vision Zero Huntsville Task Force is tasked with developing the Vision, Goals & Objectives and review and prioritize proposed action items.

Click here to access Task Force Focus Areas Live Excel: [VZ Task Force Live Excel](#)

Vision Zero Huntsville Six Focus Areas:

- 1. EQUITY:** Identify equitable solutions developed on behalf of all citizens.
- 2. ENGINEERING:** Engineer streets to reduce risk of severe crashes.
- 3. EDUCATION:** Educate citizens to promote a culture of safe driving, walking, and biking.
- 4. POLICY:** Align policies with the Safe System Approach to achieve Vision Zero.
- 5. ENFORCEMENT:** Enforce traffic laws to reduce and prevent unsafe roadway behaviors.
- 6. EVALUATION & COORDINATION:** Evaluate Vision Zero efforts to prioritize investments and ensure resources are being used effectively. Ensure continued collaboration and transparency.



APPENDIX



APPENDIX

1

Huntsville Crash Data: [HUNTSVILLE CRASH DATA_HPD](#)

2

Equity Analysis Maps: [EQUITY ANALYSIS MAPS](#)

3

HIN Traffic Volumes: [HIN Traffic Volumes_CURRENT & PROJECTED](#)

4

Vision Zero Survey Responses:

(online & hardcopy): [Vision Zero HSV Survey Responses](#)

(online only): Please use password: Huntsville123!

https://www.surveymonkey.com/results/SM-zT5TYmiLiImIBbUCNCUdWA_3D_3D/

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