

SS4A TRANSPORTATION SAFETY ACTION PLAN

EAST CHICAGO, INDIANA

City of East Chicago
Hope & Progress
INDIANA

SEH

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February 20, 2024

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg,

Making East Chicago, Indiana's streets safe for everyone is one of my top priorities. Working together in an interdepartmental team, we are creating our first Transportation Safety Action Plan that outlines how we will reach our goal of eliminating traffic fatalities and serious injuries by 2045.

Using a Safe Systems approach, we have implemented proven safety countermeasures throughout East Chicago. This included setting appropriate speed limits, enhancing crosswalk visibility, adding better lighting, and installing traffic calming measures. We have been making safety improvements to our streets during every reconstruction and resurfacing project. The SS4A grant program will help enable East Chicago to capitalize on this momentum to make decisive strides towards achieving zero traffic deaths and serious injuries.

The projects and initiatives we are proposing are designed to impact many areas of the city with a focus on ensuring the safety for people walking, biking, driving, and accessing our transit routes. In conversations on traffic safety and mobility we have heard from our residents the importance of safe walking routes and the safety and accessibility of intersections along our transit routes. We also know that some streets like Columbus Drive and areas around schools lack safe facilities for people walking and biking. I know that all these projects whether large or small in scale will make a positive impact in our community. The city is committed to a local share and successful delivery of the projects and initiatives if we are awarded this grant.

Ensuring our streets are safe for everyone regardless of who they are or how they travel and eliminating traffic fatalities and serious injuries is an ambitious goal but it is also imperative to the health and wellbeing of our city. I am convinced that East Chicago can be a model city for Vision Zero and I appreciate you taking the time to consider our application.

Sincerely,

Anthony Copeland, Mayor

CC: Paul Teicher, Safe Streets and Roads for All Program Manager

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1. INTRODUCTION

Between 2018 and 2022, there were five crash-related fatalities and 169 serious injury crashes on East Chicago streets[1] . Each one of those people was a member of the East Chicago community – someone's parent, child, sibling, and friend. These injuries and deaths were preventable.

This Transportation Safety Action Plan (Plan) is created to address traffic crashes in East Chicago. This Plan was created in response to East Chicago's commitment to eliminate all serious injury and fatal crashes on surface streets within the city. The Plan illustrates where and how East Chicago is planning to do better.

This Plan includes:

- An in-depth analysis of the factors that contribute to fatal and serious injury crashes throughout East Chicago.
- An understanding and acknowledgment of the areas most impacted by traffic crashes, and the needs of those areas.
- A description of projects that use strategies proven to reduce crash incidence and severity.
- Policy recommendations that change the way the city selects and design future projects.
- Recommendations for programs involving enforcement, education, and partnerships with other agencies.

[1] Purdue University LTAP Crash Data, 2018-2022

- A focus on equity to ensure that projects are selected, funded, designed, and implemented in a way that aligns with the city's goals; and
- A roadmap for implementing the strategies in this Plan.

Eliminating traffic deaths will not be easy, and it will take time. Many of East Chicago's roads were designed to move large steel moving vehicles, ignoring the impacts on bicyclists, pedestrians, and high crash risk to drivers. East Chicago cannot redesign all its streets at once, nor can the city finance more than one or two large-scale reconstruction projects each year. Additionally, many surface streets within East Chicago are owned by the Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT), realizing that collaboration is essential to making real progress on some of the city's most challenging roads. Through this Plan, East Chicago is committed to leading these efforts.

2. OUR GOAL

In 2022, the City of East Chicago committed to the goal of eliminating traffic deaths and serious injuries on all surface streets by pursuing Safe Streets for All (SS4A) Transportation Safety Action Plan funding. To achieve this goal, the city has adopted the following benchmark goals:

- Goal of zero deaths and serious injuries on all surface streets in East Chicago by 2045.
- Goal to reduce fatal and serious injuries from traffic crashes by 50% within 10 years.

Further, East Chicago acknowledges that achieving these goals will require significant and ongoing coordination with partner agencies including INDOT, FHWA, Lake County, the Northwestern Indiana Regional Planning Commission (NIRPC), and neighboring communities. The city also understands that there is a significant staff and financial need required to meet the goal over a sustained period, and that prioritizing safety investments must be elevated in the planning of future projects and policies. The Active Transportation Alliance authored the Chicago Regional Crash Report[2] in January 2020. East Chicago and Lake County are included in the data along with crash disparities. A few notable statistics found in this report include:

Goals for this Plan:

- An in-depth analysis of the factors that contribute to fatal and serious injury crashes throughout East Chicago;
- An understanding of the areas most impacted by traffic crashes, and the needs of those areas;
- A description of projects that use strategies proven to reduce crash incidence and severity;
- Policy recommendations that change the way the city selects and design future projects;
- Recommendations for programs involving enforcement, education, and partnerships with other agencies;
- A focus on equity to ensure that projects are selected, funded, designed, and implemented in a way that aligns with the city's goals; and
- A roadmap for implementing the strategies in this Plan, including detailed guidance for the next five years and ten years.

[2] https://activetrans.org/busreports/wp-content/uploads/2021/11/2019-crash-report-final.pdf

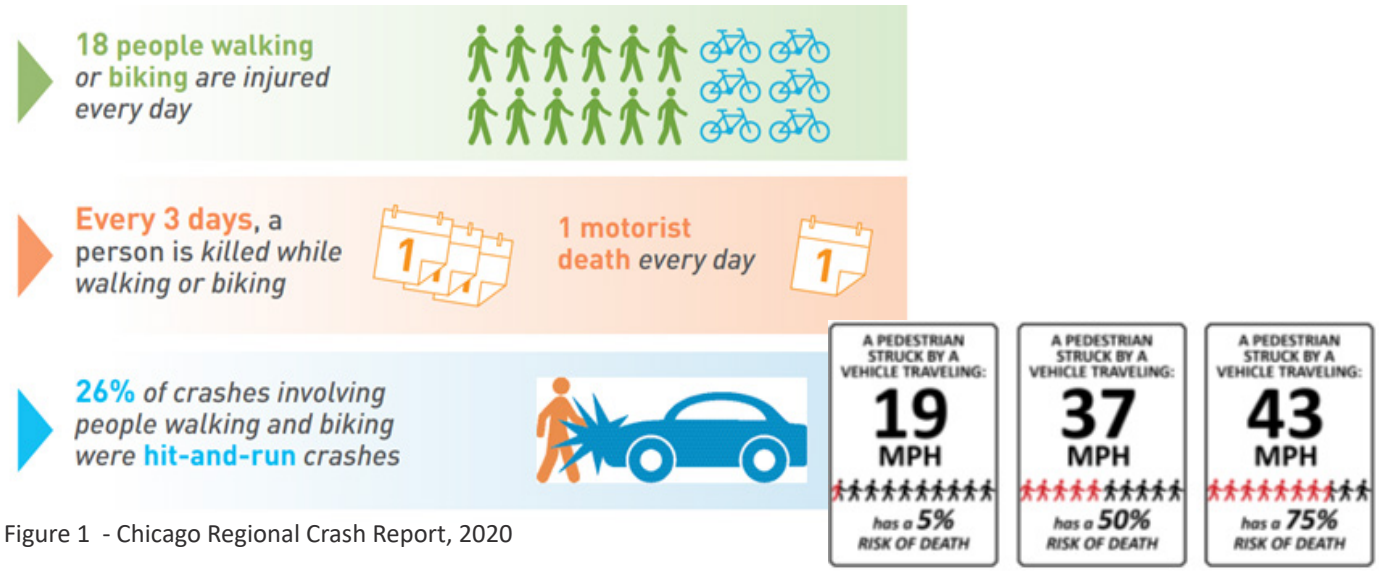


Figure 1 - Chicago Regional Crash Report, 2020

3. SAFE SYSTEMS APPROACH

This Plan utilizes the Safe System Approach to traffic safety, a method of improving transportation safety. The Safe System Approach, which has been officially endorsed by the United States Department of Transportation, includes a major focus on speed management, improving safety for all roadway users, and designing roadways to prioritize safety.

This plan focuses on these elements, which the City of East Chicago can influence through roadway design, engineering, and education strategies. East Chicago's first responders are responsible for post-crash care.

Safety improvements must encompass safety for all users of the street, often achieved through traffic-calming design interventions. Speed management has proven to be an effective method of reducing the severity of crashes, especially when involving pedestrians and cyclists. A 2019 USDOT study found that the risk of death for a pedestrian struck at about 43 miles per hour is 75 percent, while at closer to 19 miles per hour the risk is significantly reduced to just five percent.

1. Safe Road Users

Working towards a culture of safety starts with developing a network of civic partners, educating road users, and creating personal connections to the community's Vision Zero efforts.

2. Safe Vehicles

Making vehicles safer can be done through advanced driver assistance systems and by ensuring future technology prioritizes vulnerable roadway users.

3. Safe Speeds

Slower vehicle speeds increase visibility and reaction times for drivers and reduce impact forces when a crash occurs. Moving towards safe speeds can be done through speed limit reduction, traffic calming, and roadway design.

4. Safe Roads

Safer roads come from providing physical separation (like separated bike lanes and sidewalks) as well as designing to accommodate human mistakes.

5. Post-Crash Care

A system-wide approach means working towards safety even after a crash has occurred. This comes from improving emergency response, traffic incident reporting, and traffic management.



4. PRIORITIZING EQUITY

The 2020 U.S. Census lists the population of East Chicago at 26,370. East Chicago is economically and socially diverse and in great need of investment within their community. Unlike other communities in the region, this community has the fewest resources to invest in infrastructure improvements and are the most likely to be marginalized. Figure 2 shows how the city has a greater concentration of minority populations than the overall United States. Figure 3 shows that 100% of the Census Tracts within the City of East Chicago are “disadvantaged” according to USDOT’s ETC Tool. This means that every improvement that is derived from this Plan is prioritizing equity. Of the minority population, the largest ethnicity present are Hispanic or Latino at 57.8% of the 26,370 people.

	East Chicago	United States
Non-Minority	23.90%	76.30%
Minority	76.10%	23.70%
Non-Hispanic or Latino Origin	42.20%	81.50%
Hispanic or Latino Origin	57.80%	18.50%

Figure 2 - Race and Ethnicity, 2020

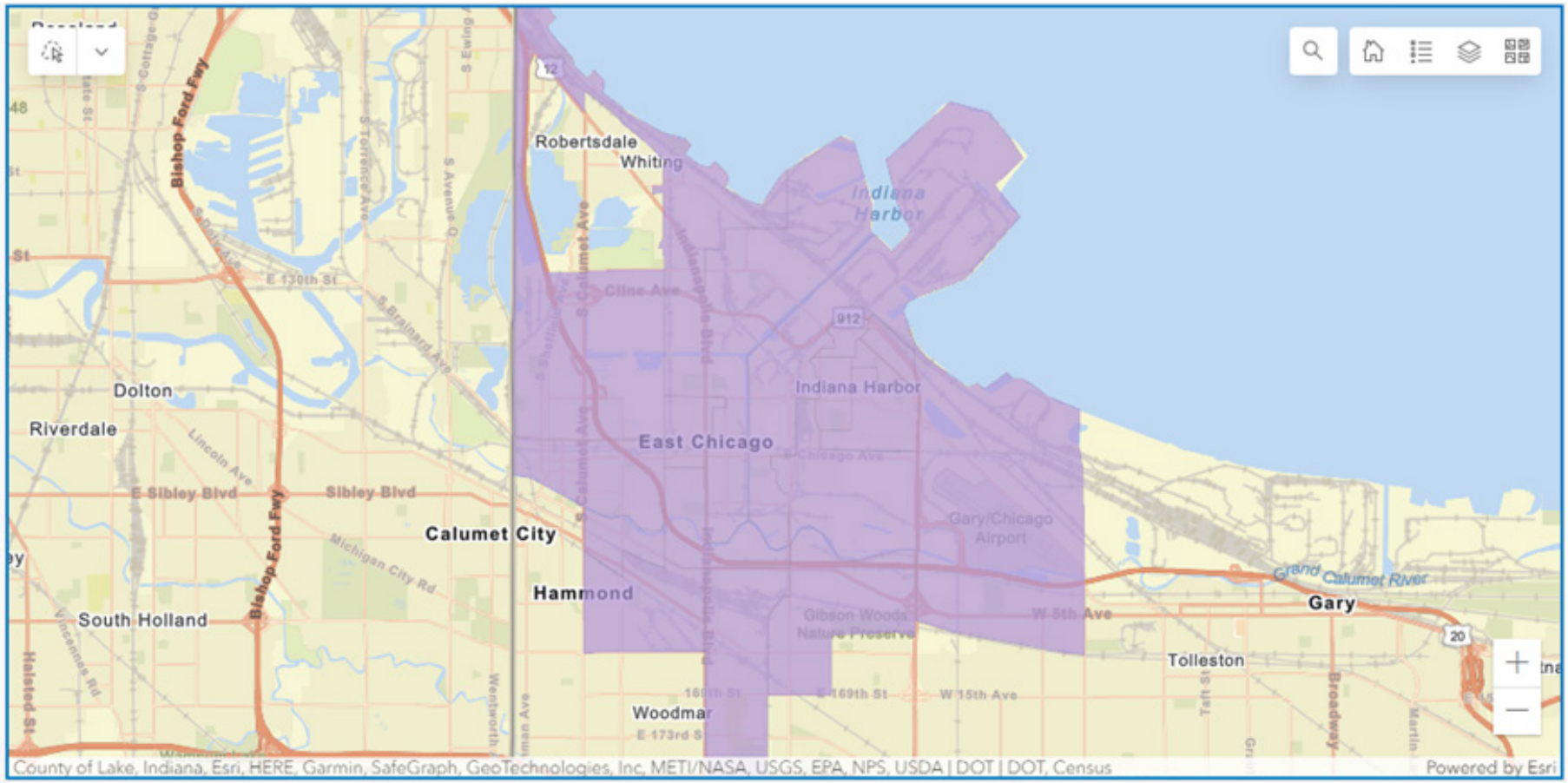


Figure 3 - Equity Priority Areas (USDOT ETC Tool)

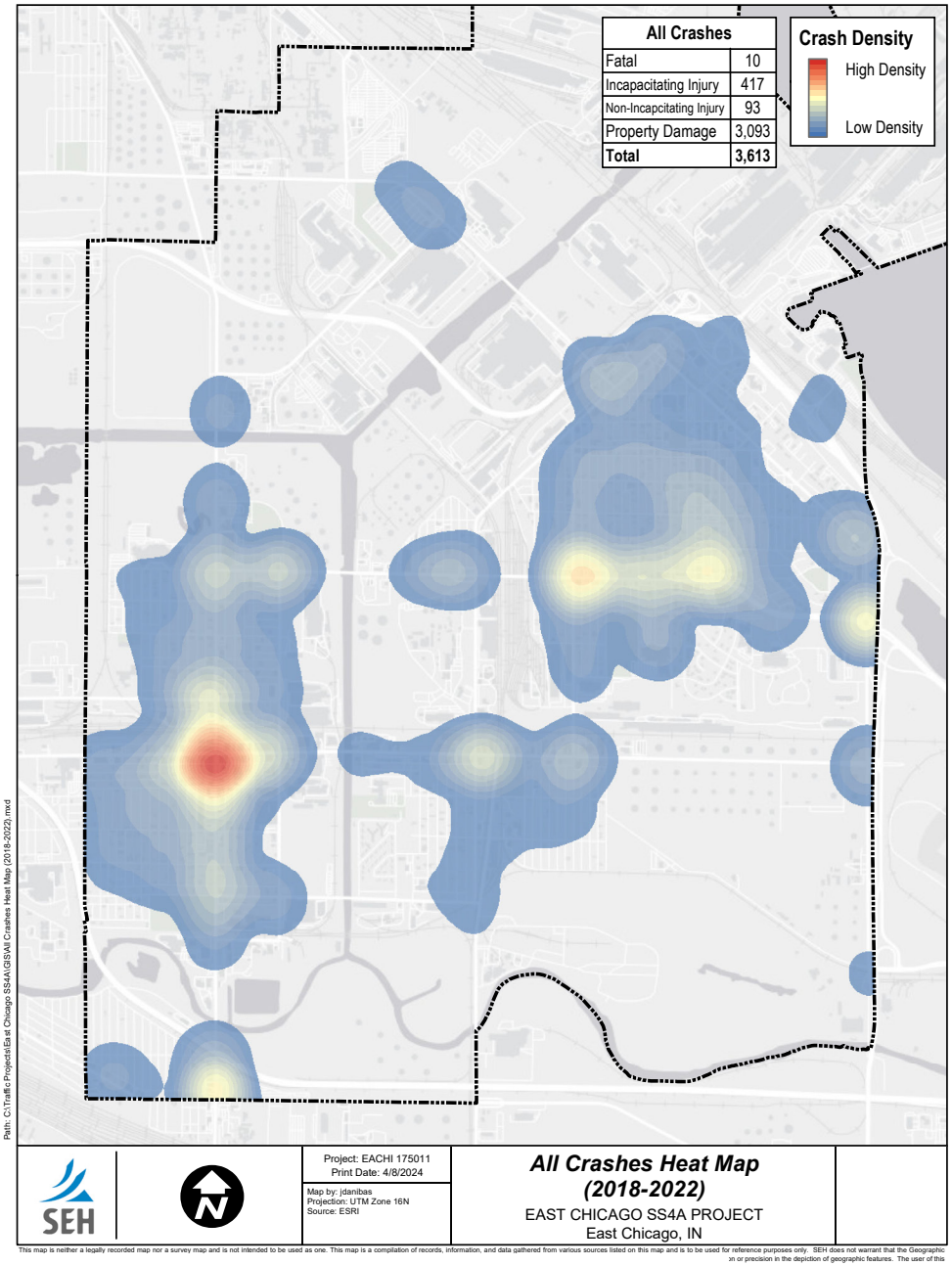


Figure 4 – All Crashes Heat Map, 2018-2022

5. CRASH TRENDS

This analysis is based on all crashes within the City of East Chicago from January 1, 2018, through December 31, 2022. During this period, there were 169 crashes on surface streets which are the focus of this analysis. The crash analysis identifies significant trends over the five-year analysis period. The takeaways identified below are detailed in the full Crash Analysis document, available in the appendix.

a. Spatial Patterns of Fatal and Serious Crashes

Figure 4 shows the spatial patterns of all crashes throughout the city. Looking at the trends shown in this figure, it is seen that high traffic corridors, such as: Cesar Chavez Memorial Dr, W Chicago Ave, Indianapolis Blvd, and other similar areas have the highest crash rates.

There are similar takeaways when looking at crashes resulting in fatal or incapacitating injury, furthering the need for improvements in these areas. Figure 5 on the next page shows the spatial patterns of fatal and serious injury crashes throughout the city. These crashes follow the same general pattern of the 'all crash data', with more fatal and serious crashes on the western and southern sides of the city, concentrations along major streets, and throughout downtown.

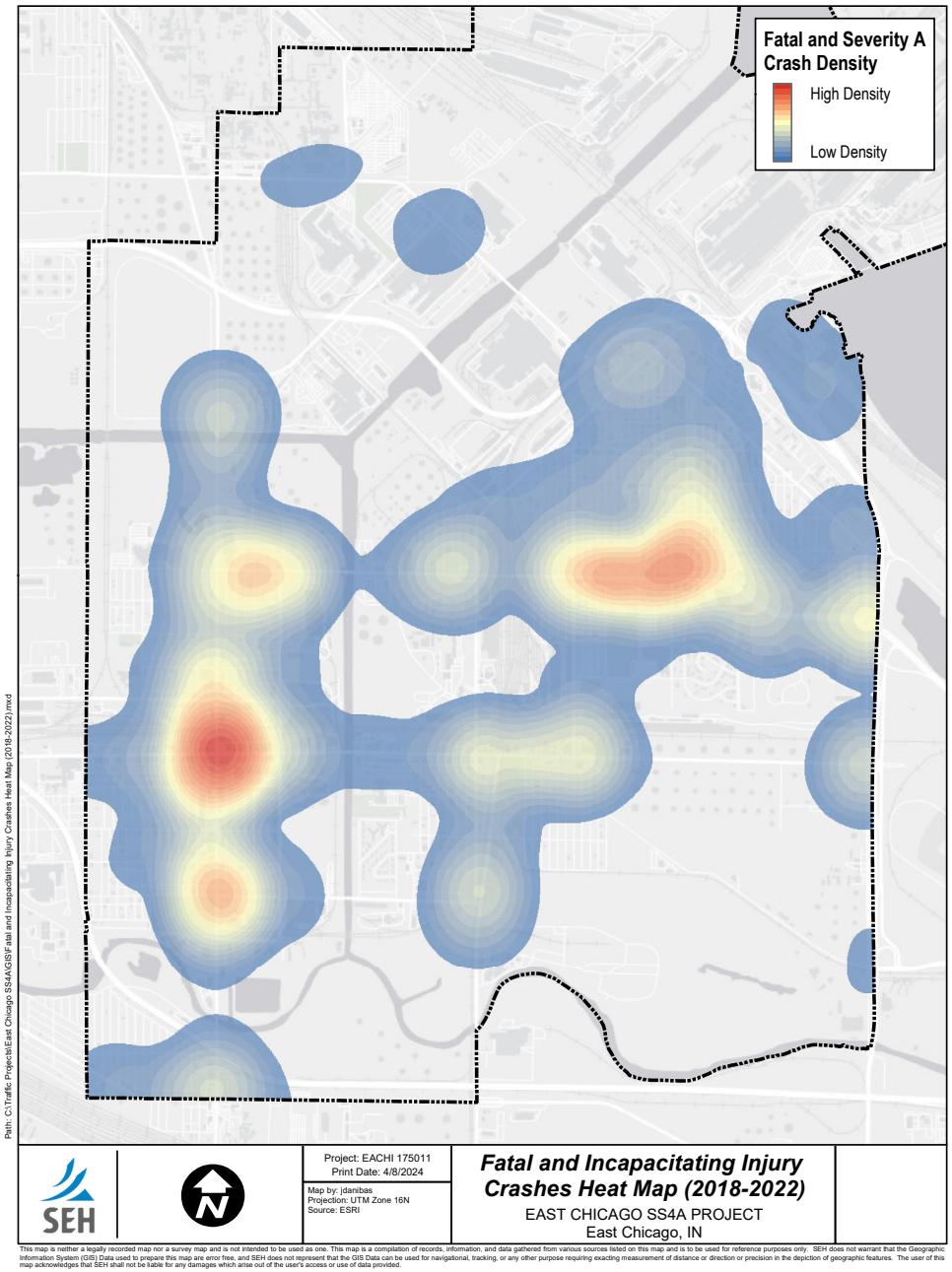


Figure 5 - Fatal and Serious Injury crashes in East Chicago, 2018-2022

b. Vulnerable Road Users



This Plan places an emphasis on improving safety for vulnerable road users (VRU). A vulnerable road user is anyone who is not protected by being inside a vehicle – including pedestrians, cyclists, people using wheelchairs or scooters, and people walking to and from transit. Unlike drivers, vulnerable road users also represent users from all ages and walks of life, from infants in strollers to the elderly. We're all pedestrians at some point while traveling.

VRUs are especially exposed to roadway crashes. Historically, roadway design has prioritized the needs of drivers to reach their destination quickly over the safety needs of other road users. VRUs crossing busy roads are at particular risk and those hit at higher speeds are more likely to be killed than those hit by low-speed drivers. Survey results show that over 40% of respondents walk or bike to get around East Chicago.

Seven crashes resulted in fatalities. One of these fatalities was a pedestrian crash. The primary factor of this crash was 'pedestrian action'.

This Plan illustrates the acute dangers faced by vulnerable road users, and it represents not only an opportunity to understand their safety challenges, but also to intentionally move project selection criteria, design, and city policy in the direction of promoting lower traffic speeds and designs that promote and improve VRU safety and visibility on East Chicago streets.



Alder St - Columbus Dr intersection poses risk for vulnerable road users.

c. Crashes by Roadway Ownership and Functional Classification

Targeting safety interventions along INDOT-owned roads should be a priority strategy for decreasing fatal and serious injury crashes. Principal arterial and major collector roadways were shown to be the roadway classifications with the most crashes. Targeting safety measures along these roads should be a priority for decreasing fatal and serious injury crashes. Figure 6 shows how the crash data throughout the city aligns with roadway classification.

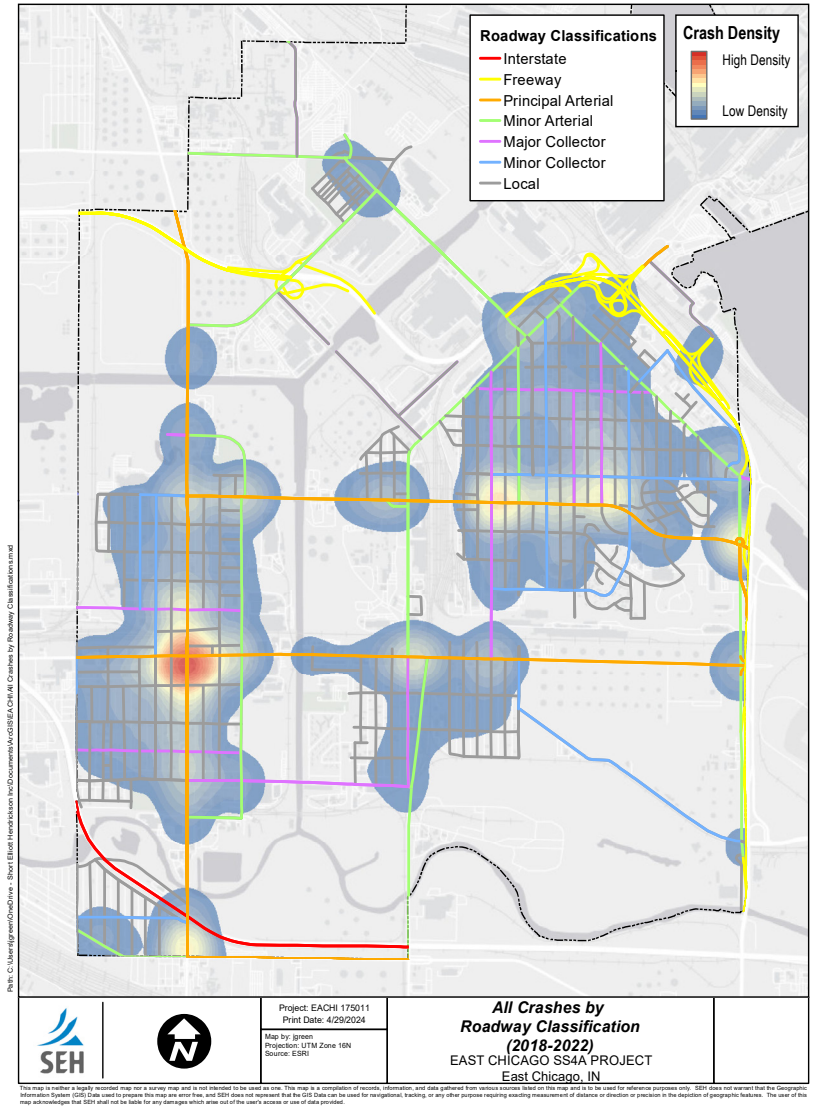


Figure 6 – All Crashes by Roadway Classification, 2018-2022

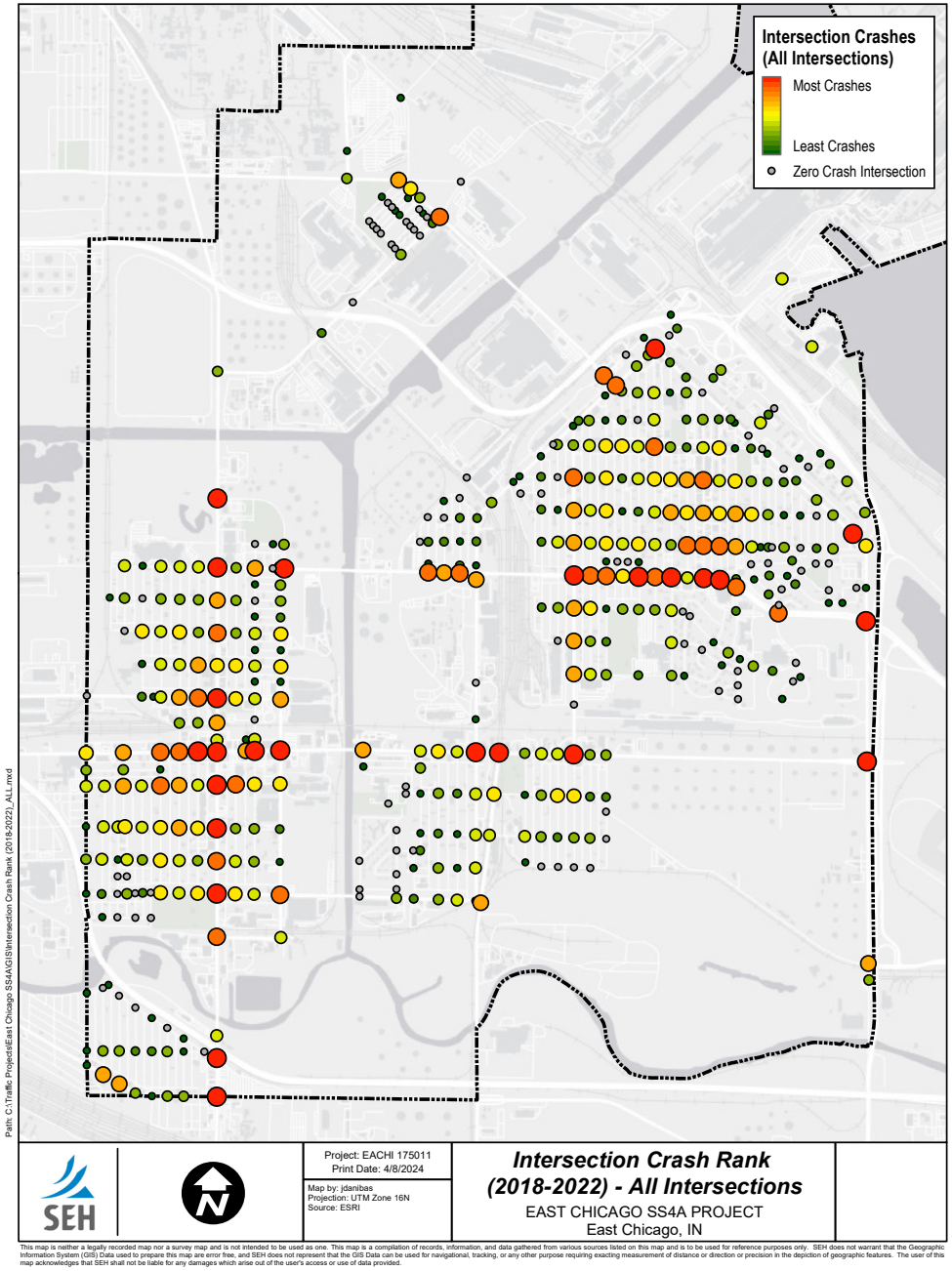


Figure 7 – Intersection Crash Rank, 2018-2022

d. Intersection Crash Trends

About 38 percent of all crashes occurred at an intersection. Additionally, 59 percent of fatal & serious injury crashes occurred at intersections. Targeting intersection safety improvements at signalized intersections is likely to have a high impact on crash reduction. Figure 7 shows which intersections throughout the city have the highest crash rates.

Another area of conflict throughout the city is the many waterway crossings. As these navigable waterways support the local commerce, these same crossings create mobility barriers for the pedestrians. Figure 1 Fatal and incapacitating injury crashes (2018- 2022) indicates areas of conflict for the street users. Contributing factors of the narrowing of the roadway or the transition from the sidewalk to pedestrian bridge deck plays a role in adding to the conflict points of serious Incapacitating injury crash locations in correlation with the waterway crossings in the community.

Historically, these waterways were integral to the commerce of the Indigenous peoples and later gave way to the industrial boom. Today the canal and waterways role has shifted. Current efforts are focused on cleaning and restoring these waterways to improve environmental quality and support local ecosystems with the revitalization of greenspace.



Chicago Ave. Waterway Crossing

e. Crossing Roads Dangerous for Vulnerable Road Users

According to Purdue Universities LTAP statistics[3], pedestrians and cyclists are frequently hit when they are crossing traffic (especially at intersections with a marked crosswalk). 67 percent of all pedestrian and bicyclist accidents occur at intersections, while 72 percent of fatal / serious injury accidents involving pedestrians and bicyclists occur at intersections. Turning vehicle movements are much more likely to result in a pedestrian or bicycle crashes, compared with all crashes. These trends indicate that intersection projects that improve safety for cyclists and pedestrians, especially those that reduce conflicts and speed of turning vehicles will improve safety for vulnerable road users.

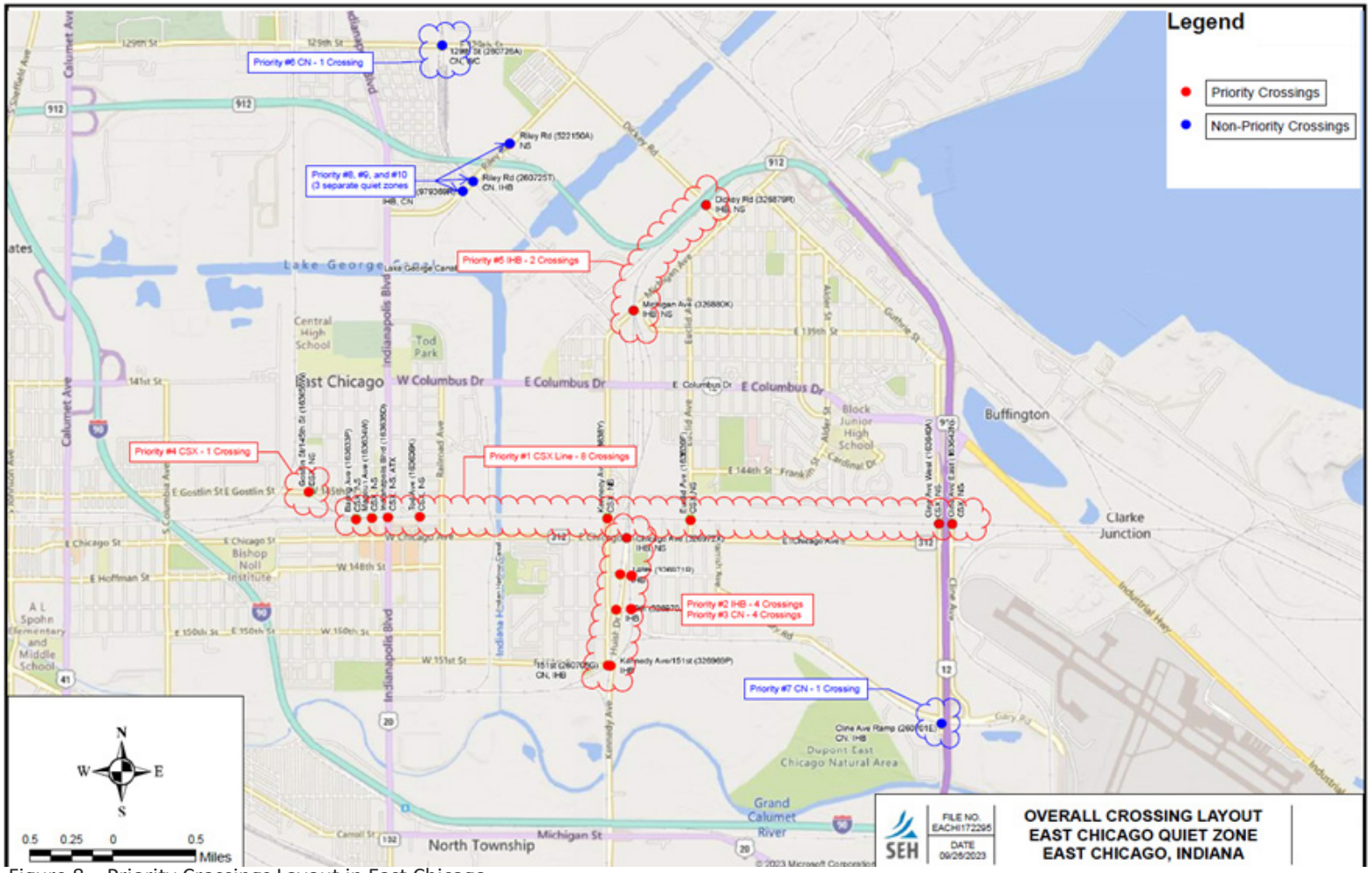


Figure 8 – Priority Crossings Layout in East Chicago

[3] Purdue University LTAP Crash Data, 2018-2022

f. Behavioral Factors



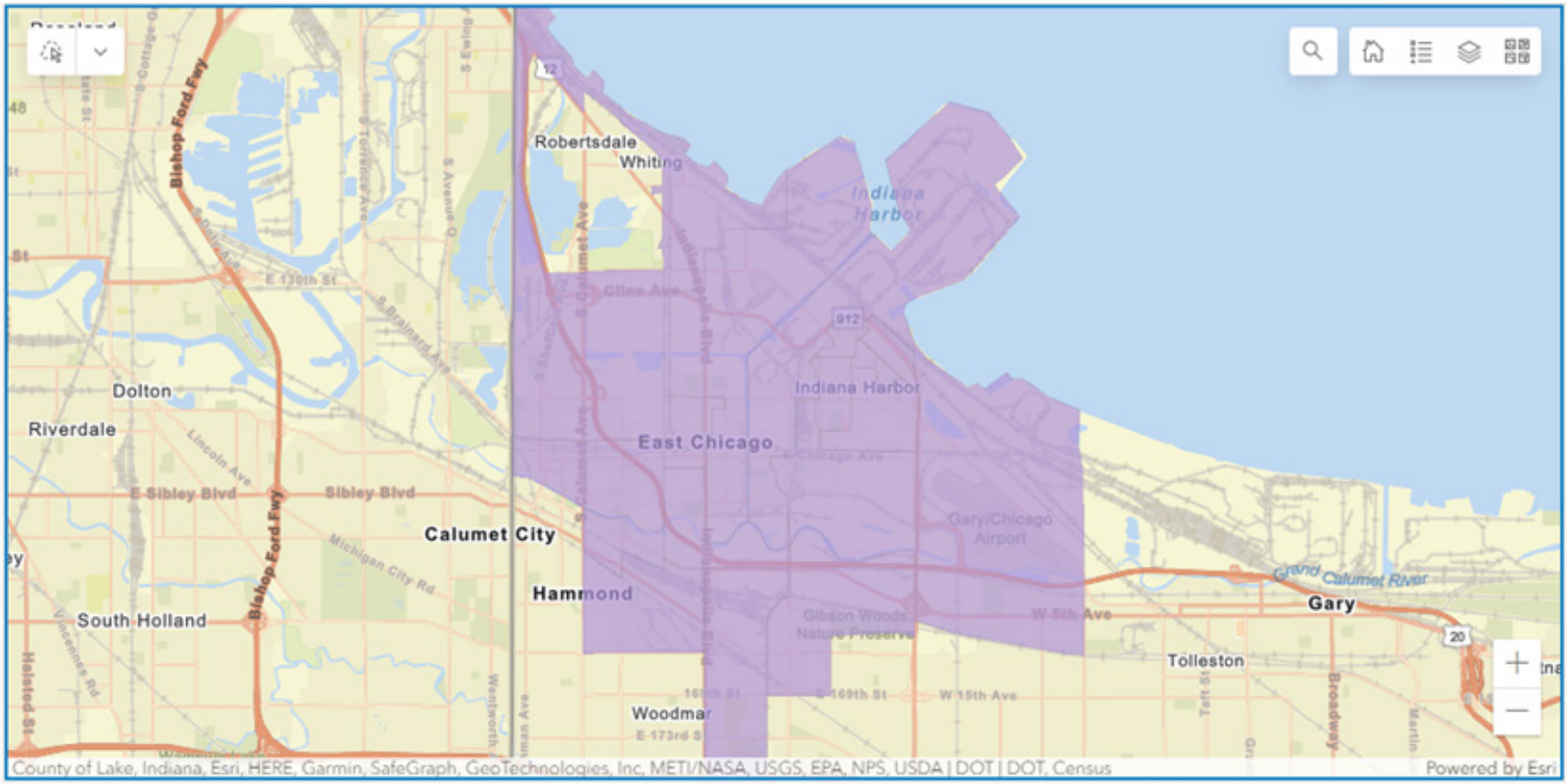
The proportion of all crashes caused by speeding, improper lane usage, reckless driving, and failure to yield increased significantly over the past five years. Crash types such as rear-ending, right-angle crashes and sideswipes were by far the most prominent types of crashes in the past five years. Crashes involving speeding, reckless or careless driving, and failure to yield are also more likely to cause serious injuries or death than other crash types. This plan should identify design-based methods to reduce driver speeds, as well as possible behavioral strategies to reduce reckless or careless driving through partnerships with other agencies. Figure 9 breaks down the most prominent behavioral factors leading to crashes throughout the City.

g. Equity Analysis

Traffic safety is an equity issue. Nationally, People of Color and low-income communities bear a disproportionate burden of traffic-related injuries and fatalities. The entire City of East Chicago is an Equity Priority Area as shown in Figure 10. Equity Priority Areas bear a disproportionate burden of traffic-related serious injuries and fatalities. This analysis indicates that the population within these areas are disproportionately affected by traffic crashes, and the Plan should prioritize improvements in these areas to mitigate these disparities.

Count of Collision Date Row Labels	2018	2019	2020	2021	2022	2023	Grand Total
ACCELERATOR FAILURE OR DEFECTIVE				1			1
ANIMAL/OBJECT IN ROADWAY	1	1	1				3
BRAKE FAILURE OR DEFECTIVE	1	4		1	1	3	10
CELL PHONE USAGE			1	1	3	1	6
DISREGARD SIGNAL/REG SIGN	16	21	17	25	22	21	122
DRIVER ASLEEP OR FATIGUED	4	5	2	2	4	1	18
DRIVER DISTRACTED - EXPLAIN IN NARRATIVE	3	7	4	5	1	8	28
DRIVER FATIGUE		1					1
DRIVER ILLNESS	2	2		3			7
FAILURE TO YIELD RIGHT OF WAY	51	55	45	60	42	33	286
FOLLOWING TOO CLOSELY	37	41	25	21	18	20	162
HOLES/RUTS IN SURFACE					1		1
IMPROPER LANE USAGE	64	53	64	64	77	48	370
IMPROPER PASSING	7	6	2	4	6	4	29
IMPROPER TURNING	27	28	19	22	21	19	136
INSECURE/LEAKY LOAD		1					1
LEFT OF CENTER	7	3	4	8	7	10	39
OTHER (DRIVER) - EXPLAIN IN NARRATIVE	3	10	9	3	11	13	49
OTHER (ENVIRONMENTAL) - EXPLAIN IN NARR	2				1		3
OTHER (VEHICLE) - EXPLAIN IN NARRATIVE	1	1		2			4
OVERCORRECTING/OVERSTEERING	22	12	12	5	9	8	68
OVERSIZE/OVERWEIGHT LOAD				1			1
PEDESTRIAN ACTION	2	4	3	3	3		15
RAN OFF ROAD RIGHT	6	8	6	6	6	8	40
ROADWAY SURFACE CONDITION				1			1
SPEED TOO FAST FOR WEATHER CONDITIONS	3	9	5	4	4	8	33
STEERING FAILURE		1	2			4	7
TIRE FAILURE OR DEFECTIVE			1				1
UNSAFE BACKING	46	33	31	36	24	28	198
UNSAFE LANE MOVEMENT	40	21	28	50	39	20	198
UNSAFE SPEED	6	10	12	11	10	12	61
VIEW OBSTRUCTED	2			1	1	2	6
WRONG WAY ON ONE WAY		1		2	3	3	9
(blank)							
Grand Total	**353**	**338**	**293**	**342**	**314**	**274**	**1914**

Figure 9 – Behavioral Factors



Total Population Living in the Selected Project Area

60.1k

Total Population Living in Disadvantaged Census Tracts in the Selected Project Area

60.1k

% of Disadvantaged Census Tracts in the Selected Project Area

100%

Figure 10 - Equity Priority Areas (USDOT ETC Tool)

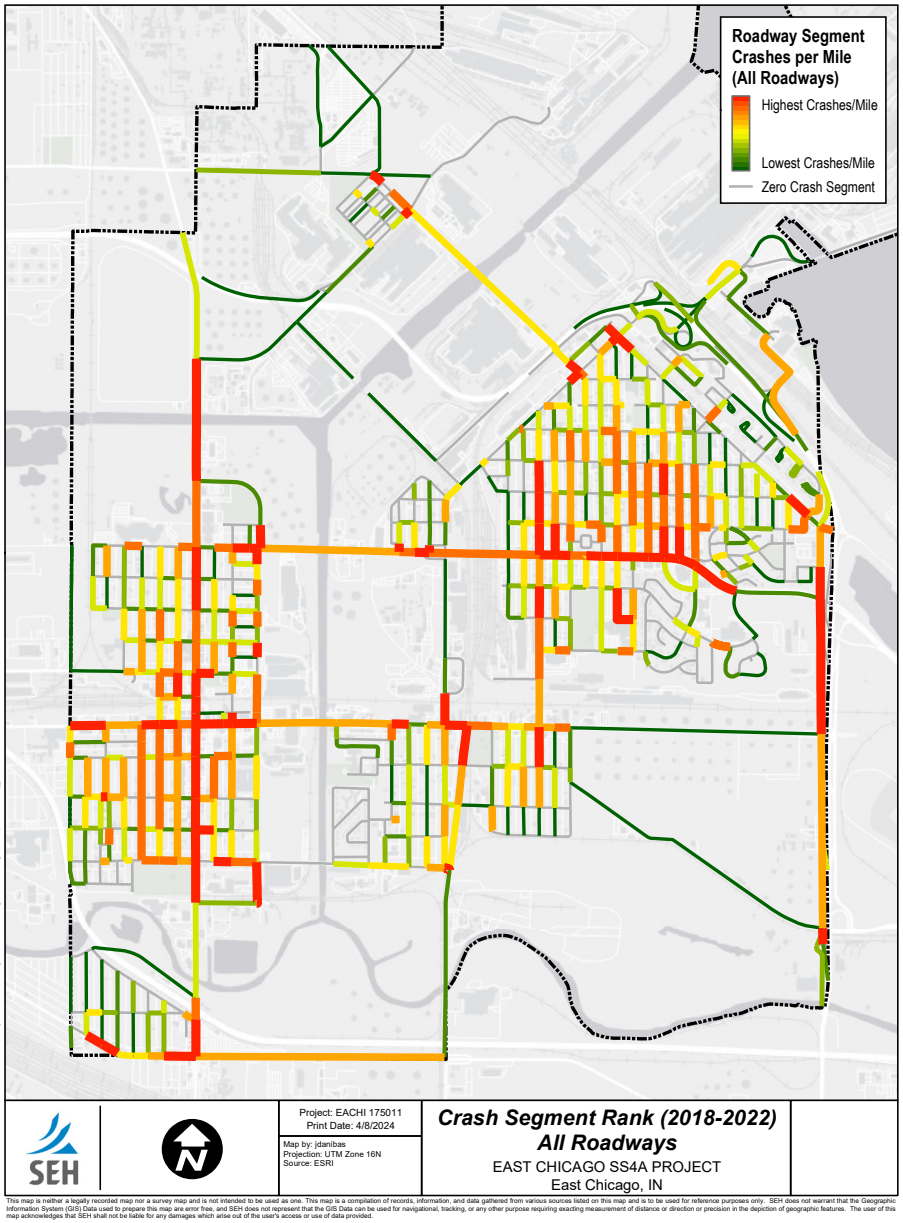


Figure 11 – Crash Segment Rank, 2018-2022

h. High Injury Network and High Crash Network

The High Injury Network (HIN) is a series of streets where more severe crashes occur. A High Vulnerable Road Users Crash Network (HCN) is a series of road segments with the highest number of bicycle and pedestrian crashes per mile, or segments with a high number of total bicycle and pedestrian crashes. Concentrating investments along the identified streets that have both high fatality/injury rates and high rates of vulnerable road user crashes have the potential to significantly improve traffic safety.

To identify these areas, an examination of crash data was conducted throughout the last 5 years (2018-2022). This analysis showed several areas throughout the city which were deemed to be High Injury Networks. Figure 11 displays crash data by road throughout the city. The analysis identified four corridors which were deemed the High Injury Network:

- Kennedy/151st
- E140th from Elm to Pulaski
- 138th from Fir to Pulaski
- Euclid Ave from 138th to 142nd

In identifying the HCN, there were a combined 81 bike and pedestrian crashes out of the total 1,914 crashes in which data was received. A large proportion of these crashes occur between 138th and 140th from Elm to Alder and along the Euclid Ave corridor. There is significant overlap between the HCN and HIN.

It is recommended that the city target specific HIN's and HCN's and implement FHWA proven countermeasures[3] to improve safety in these areas. This will be discussed at length in section 9, "Crash Mitigation Strategies."

6. COMMUNITY ENGAGEMENT - WHAT PEOPLE ARE SAYING

From November 2023 – May 2024, the city conducted community engagement to better understand transportation safety challenges that people using East Chicago streets experience. Engagement efforts prioritized historically disadvantaged, low-income, and BIPOC communities impacted by vehicle, pedestrian, and bike crashes.

Engagement for this Plan included an online survey, three public open houses, and direct outreach to organizations throughout the city. The city used social media, email, a project webpage, emails to the Council.

The online survey was open from November 8, 2023 to May 20, 2024 and received 75 responses. The focus of analysis on both the survey and map were the priority areas. Additionally, the city hosted three open house events at different locations throughout the city. The first was at Heritage Hall on the east side of the city, the second was at Unity Hall on the west side of the city, and the third came back to Unity Hall.

The Steering Committee (SC) included a variety of stakeholders and decisionmakers who are involved in implementing transportation projects in East Chicago. The SC met two times per month throughout the plan development process and provided feedback on plan materials, insight into policy and project priorities and helped define the overall project direction. The SC will continue to meet regularly into the implementation phase of projects to finalize prioritization and policy recommendations, as well as to continue communications with partner agencies.

Agencies represented on the Steering Committee include:

- East Chicago Planning
- East Chicago Engineering
- East Chicago Street Engineering and Construction
- East Chicago Public Works
- East Chicago Parks Department
- School City
- Indiana Department of Transportation
- Purdue University Local Technical Assistance Program (LTAP)



Figure 12 – Facebook invite to public meetings and survey.

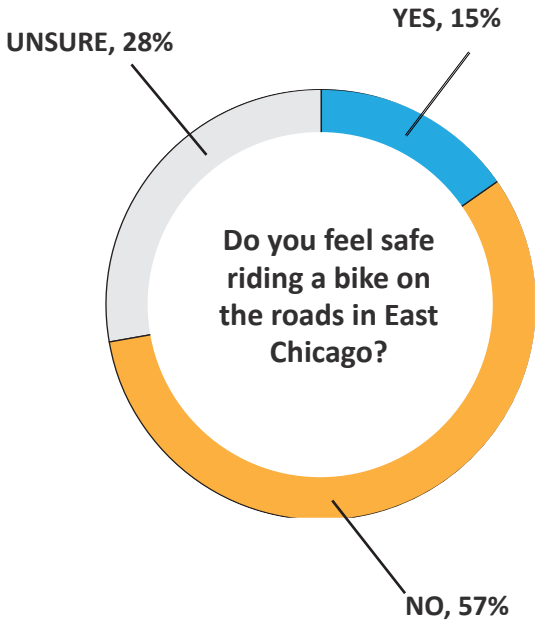
Community Feedback

The city learned about key transportation safety concerns and ideas for improvement from the public involvement.

Driver behavior stood out as a primary safety concern for people using all forms of transportation. Speeding and reckless driving concerns were mentioned in nearly every engagement interaction. Engagement participants also noted drivers failing to yield and drivers running red lights and stop signs as a safety concern.

Safer pedestrian crossings were mentioned repeatedly both citywide and in the priority areas. This ties in with driver behavior, as the project team often heard reports of drivers not stopping at designated crosswalks.

Bicycle infrastructure came up repeatedly, primarily through the survey and public meetings. Engagement participants would like to see more bike lanes, protected bike lanes, and better maintenance of existing bike infrastructure.



7. PLAN, POLICY, AND BEST PRACTICE REVIEW

In addition to physical projects that address safety and improve on-the-ground infrastructure, policies are important for improving safety because they shift the way that the city does business and prioritize projects. Improving road safety while maintaining the status quo is difficult. Changing road safety policies that address topics such as speed, street design, project selection and evaluation is important to get closer to reaching zero road deaths and serious injuries.

A thorough plan and policy review was conducted of existing East Chicago documents to identify policies and strategies that have previously been identified as needs or opportunities to improve traffic safety in the city and assess the existing policies that impact traffic safety. This was coupled with a review of Vision Zero and safety action plans and practices from peer jurisdictions through plan reviews. In addition to the peer jurisdiction review, a high-level review of international approaches to Vision Zero and safety was also completed. Findings from these reviews were used as a lens to assess East Chicago's existing policies and identify opportunities that will help the city design, build, and maintain safe streets for everyone on a routine basis. Four local and regional plans we're reviewed in-depth to inform the development of this plan. The four plans are listed below:

NIRPC Economic Recovery and Resilience Plan (September 2022)

https://nirpc.org/wp-content/uploads/2022-09-14-NIRPC-Economic-Recovery-and-Resilience-Plan-1.pdf

City of East Chicago Comprehensive Plan (November 2008)

https://eastchicago.com/DocumentCenter/View/314/Comprehensive-Plan-PDF



The Marquette Plan: The Lakeshore Reinvestment Strategy

https://nirpc.org/wp-content/uploads/MarquettePlan1.pdf

Indiana Strategic Highway Safety Plan:

SHSP2022.pdf (in.gov)



"Phase I was a collaborative effort of the lakefront communities of East Chicago, Gary, Hammond, Portage and Whiting, the office of Congressman Pete Visclosky and the Indiana Department of Natural Resources to develop a comprehensive land use vision to guide reinvestment efforts to reclaim Indiana's lakefront – from the Indiana / Illinois state line to the Burns Harbor International Port in Portage, Indiana – as a livable lakefront. The Plan highlights a changing landscape where more compact viable industries co-exist with public parks, mixed-use neighborhoods, and business-oriented developments. It's a Plan about balance – between nature and industry, between public access and privacy, between old jobs and new economies, between redevelopment and restoration and between heritage and a new way of life." - The Marquette Plan: The Lakeshore Reinvestment Strategy

i. Review of Existing Documents

Various East Chicago plans were reviewed for policy content including, the NIRPC Economic Recovery and Resilience Plan (September 2022), City of East Chicago Comprehensive Plan (November 2008), The Indiana Strategic Highway Safety Plan (November 2022) and The Marquette Plan: The Lakeshore Reinvestment Strategy.

All these plans include broad strategies related to safety, generally recommending the implementation of existing bicycle and pedestrian plans and improved pedestrian and biking infrastructure. Several safety-related themes were prominent throughout many of the planning documents, including:

- **Street Design:** The Comprehensive Plan, The Marquette Plan and the Highway Safety Plan all mention the impact that Street Design has on Vulnerable Road Users and how strategies related to bikeway design, pedestrian crossings, and sidewalks to create better multimodal networks.
- **Funding and Implementation:** Several plans called out the need for increased and consistent funding for safety improvements and expansions of the bicycle and pedestrian networks. Programs such as the Surface Transportation Program, Safe Routes to School and the Recreational Trails Program, along with many others, can offer funding to improve safety for Vulnerable Road Users.
- **Speeding-Related Concerns:** The Strategic Highway Safety Plan strongly emphasizes the importance of speeding-related countermeasures in improving safety for both vehicular travel and vulnerable road users. Implementing various speed management countermeasures throughout the city is recommended to improve safety concerns for all road users.
- **Engagement and Education:** Some past plans included specific recommendations on ways to engage the public on traffic safety issues, in addition to a theme of needing to raise awareness among the public about traffic safety initiatives and issues.
- **Evaluation:** Strategies focused on collecting and evaluating data to ensure that safety efforts are having the desired impact on the local community.

j. Peer City and Best Practice Review

Staff from peer jurisdictions that have developed and started to implement Vision Zero and safety action plans were reviewed to learn from their successes and challenges. Peer jurisdictions included Ann Arbor, MI; Denver, CO; Jersey City, NJ; and Madison, WI. A high-level review of international practices supplemented the peer jurisdiction review. Key takeaways from the peer city and best practice review highlighted the importance of:

- Project prioritization that puts safety at the forefront above other metrics and incorporates equity into the process. (Ann Arbor, Denver, International)
- Project development processes that incorporate safety in all projects early in the process and systematize interventions. (Ann Arbor, Denver, Jersey City, International)
- Aligning funding streams with the city's goals on safety and equity. (Denver, Madison) Streamlining construction contracts to facilitate implementation. (Jersey City)
- Design and operations policies that standardize the design and implementation criteria of safety countermeasures, with safety prioritized over other metrics, such as traffic delay. (Ann Arbor, Denver)

- Importance of high-quality data, including crash data and project metrics, in identifying the
- right solutions. (Denver)
- Consistent and continual public engagement to keep Vision Zero and specific messages on traffic safety in the spotlight. (Ann Arbor, Jersey City, Madison)
- Strong leadership from the highest level of government on Vision Zero and safety issues. (Jersey City, International)
- Emphasis on speed management and a safe systems approach. (International)

The lessons learned from peer cities, as well as national best practice guidance, can be used to inform how East Chicago moves forward in implementing this plan.

k. Key Policy Opportunities

Based on this review, East Chicago has several key opportunities to institutionalize practices and policies that will lead to better safety outcomes within the transportation system, including:

- Connect to regional trails like the Marquette Greenway.
- Strategically implement FHWA proven countermeasures in specific high-risk locations to improve safety efficiently.
- Develop standards and/or guidelines for traffic safety measures to be incorporated into project development processes.
- Utilize funding to implement safe recreational trails for pedestrians and bicyclists through programs such as the Recreational Trails Program or Safe Routes to School.
- Revise the Capital Improvement Program process to incorporate safety as a prominent criterion in project selection.
- Evaluate existing funding streams and levels in comparison to desired capital improvement targets.

As East Chicago implements its Safety Action Plan, the city can build upon safety strategies listed in the existing plans outlined in this review, as well as precedents from other cities and national and international guidance to create a safer, more comfortable, and more multimodal city.

8. PROJECT IDENTIFICATION AND PRIORITIZATION

The crash analysis identified the top high-crash roadway segments and intersections throughout the city, based on a combination of factors: total crash rate, total number of crashes, total crash cost. The team then Identified road safety problems and a list of projects to address those problems.

1. US 12 / Columbus Drive / Alder Drive Pedestrian Bridge.
2. Construct Railroad crossing quiet zones.
3. Roxana and Indianapolis intersection reconstruction.
4. School Zone areas, signage and striping should be replaced.
5. HAWK installations.
6. Fire Department (5) – Ambulance staking areas (see as school zones with lights).
7. Michigan Avenue to the beach – bike/ped trail…INDOT bridge to marina, past casino, to the beach.

Priority #1: US 12 / Columbus Drive / Alder Street Intersection – Pedestrian Bridge

TOP 5 reasons…

1. INDOT owned and managed a bridge since 1968 in this location and an underground pedestrian tunnel for 30 years prior to that.

2. INDOT removed the deteriorating bridge in 2021 without replacing it.

3. The new bridge is shovel ready. Planning and design are complete.

4. US 12 / Columbus Drive was identified as a barrier for residents' access to civic uses, major employers, and daily essentials like a groceries and prescriptions.

5. Local, state, and federal support for the project.

Project Readiness

- The design and environmental document have been completed and this project is deemed shovel ready.
- The pedestrian bridge will reclaim the intersection for people of all ages and physical abilities by prioritizing the pedestrian. The community of this dense urban area has relied upon this crucial amenity for over 50 years to safely cross US 12 (Columbus Drive) until it was removed in 2021.
- $13,000,000. City is ready to pay up to 20% as match.

Land Use

- East Chicago operates the two schools located south of the proposed pedestrian bridge. These two schools accommodate nearly 1,000 students, within an age range from kindergarten through eighth grade.
- The East Chicago Public Library, a critical educational and programming resource for many of the students, is also in the project area.
- Students walk from neighborhoods north of US 12. The intersection of US 12 and Alder Street is a high-traffic location, situated west of a curve in the US 12 roadway. Visibility can be challenging, and many motorists, especially those heading eastbound do not observe the posted speed limit. Crossing US 12 at street level at this intersection is a significant safety concern for students.
- It is extremely difficult for pedestrians with mobility concerns to cross what amounts to five lanes of roadway space at street level, and removal of the previously existing pedestrian bridge has hindered crossing for these patrons.



Pedestrian bridge removed in 2021

- The installation of the proposed project will remove a barrier within the City of East Chicago and will physically connect individuals to key destinations and institutions in the community. The proposed pedestrian bridge will serve as an important link between a primarily low-income and minority population, providing an affordable option to bicycle or walk to work for employees of the following government, institutional, and major employers:
    - East Chicago Public Library
    - Washington Elementary School
    - Joseph L Block Middle School
    - East Chicago City Courts
    - East Chicago City Clerk
    - ArcelorMittal R&D
    - St. Mark Church
    - St. Catherine Hospital
- The area is vibrant with retail and restaurants also which are easily navigable only by car. Linking pedestrian routes is a needed improvement. Some of these include:
    - Pharmacy
    - Grocery Store
    - Credit Union

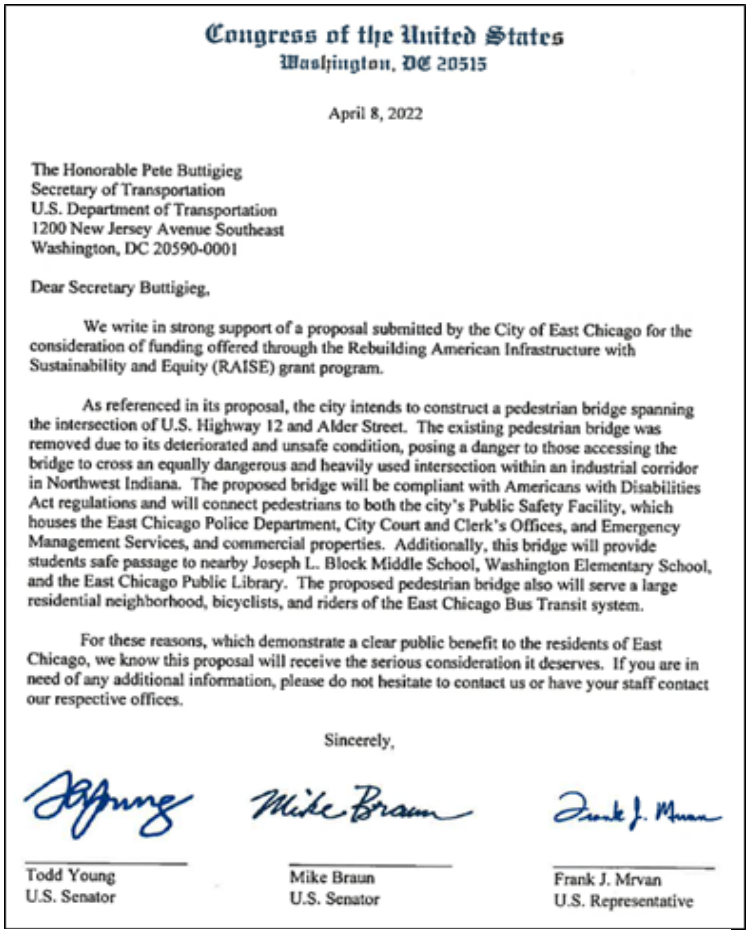
    - Bank
    - Sandwich Shop
    - Dollar Store
    - Convenience Stores/Gas Stations
- The area is not a “hot spot” for crashes.
    - Alder/Columbus – 2 crashes. 2019 pedestrian and 2020 rear end.
    - Alder/141st – 1 crash. 2021 head on between 2 vehicles.
    - Pulaski/Columbus – 3 crashes. 2020 backing crash, 2022 left turn, 2023 same direction sideswipe.

Project Support

- Todd Young, US Senator
- Mike Braun, US Senator
- Frank Mrvan, US Representative
- School City of East Chicago
- Police Department
- City Council
- Indiana House of Representatives
    - Earl Harris Jr.
- Indiana Senate
    - Ed Charbonneau
    - Eddie Melton
    - Rick Niemeyer
    - Greg Taylor



Pedestrian bridge - Construction footprint



Congress of the United States
Washington, DC 20515

April 8, 2022

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue Southeast
Washington, DC 20590-0001

Dear Secretary Buttigieg,

We write in strong support of a proposal submitted by the City of East Chicago for the consideration of funding offered through the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program.

As referenced in its proposal, the city intends to construct a pedestrian bridge spanning the intersection of U.S. Highway 12 and Alder Street. The existing pedestrian bridge was removed due to its deteriorated and unsafe condition, posing a danger to those accessing the bridge to cross an equally dangerous and heavily used intersection within an industrial corridor in Northwest Indiana. The proposed bridge will be compliant with Americans with Disabilities Act regulations and will connect pedestrians to both the city's Public Safety Facility, which houses the East Chicago Police Department, City Court and Clerk's Offices, and Emergency Management Services, and commercial properties. Additionally, this bridge will provide students safe passage to nearby Joseph L. Block Middle School, Washington Elementary School, and the East Chicago Public Library. The proposed pedestrian bridge also will serve a large residential neighborhood, bicyclists, and riders of the East Chicago Bus Transit system.

For these reasons, which demonstrate a clear public benefit to the residents of East Chicago, we know this proposal will receive the serious consideration it deserves. If you are in need of any additional information, please do not hesitate to contact us or have your staff contact our respective offices.

Sincerely,

Todd Young
U.S. Senator

Mike Braun
U.S. Senator

Frank J. Mrvan
U.S. Representative

Figure 13 - Pedestrian bridge project support

Priority #2: Safe Railroad Crossings Throughout City

Pedestrian Crossings

- At a minimum it is recommended that detectable warning devices (truncated domes) be placed on all sidewalks before the railroad tracks approximately two feet in advance to gate arms (MUTCD 8D.04).
- Pedestrian advanced warning signage (W10-9P and R15-8) are recommended at all sidewalk crossings.
- Recommended having a bell at each sidewalk crossing.
    - If a bell exists, it must be maintained to be in working condition.

9. CRASH MITIGATION STRATEGIES

The City of East Chicago has identified proven strategies to create safer streets and to promote safe driving, walking, and bicycling outcomes and behaviors. The crash mitigation strategies identified by the city are informed by the high-risk behaviors and locations identified in the Crash Analysis and Evaluation. Data-driven and proven strategies that address these high-risk behaviors and locations were then identified, and a set of prioritization criteria for the strategies was developed. As the city implements this Plan, these criteria can be used to organize a toolbox of strategies that identify when and where each strategy should be implemented. The findings from each step of this process are summarized in the following sections.

FHWA provides content related to proven safety countermeasures[4]. It's a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries. Each countermeasure addresses at least one safety focus area – speed management, intersections, roadway departures, or pedestrians/bicyclists – while others are crosscutting strategies that address multiple safety focus areas. This Plan uses these in addition to other more robust infrastructure like grade separations.

I. Target High-Risk Behaviors and Locations

1. **High-Risk Behaviors**

The Crash Analysis and Evaluation identified speeding and reckless / careless driving as among the top high-risk behaviors. Targeted safety improvements focused on speed management and reducing reckless / careless driving are likely to have a high impact on crash reduction.

a. Speeding

The proportion of all crashes caused by speeding increased significantly over the 5-year period. Speeding was cited as a primary cause of two percent of all crashes between 2018 and 2023. However, it is important to note that speeding is likely a contributing factor in many more crashes in East Chicago, as several crashes do not have a contributing factor listed.

[4] https://highways.dot.gov/safety/proven-safety-countermeasures

b. Reckless / Careless Driving

Reckless / careless driving is a high-risk behavior identified through the crash analysis. Reckless / careless driving is comprised of several driving behaviors, notably: failure to yield, following too closely and cell phone usage. Reckless / careless driving was cited one of the leading high-risk behaviors through the crash analysis.

2. High-Risk Locations

The Crash Analysis and Evaluation identified principal arterial and major collector roadways, intersection crossings, and signalized intersections as the top high-risk locations. Targeted safety improvements to reduce conflicts at these locations are likely to have a high impact on crash reduction.

a. Principal Arterials and Major Collectors

Through a spatial analysis of East Chicago, it was found that both principal arterial and major collector roadways have seen the most crashes throughout the 5-year study. In order to improve safety and reach the goals identified in this plan, targeting these roadways will be crucial.

b. Signalized Intersections

38% of all vehicular crashes occur at intersections. Additionally, about 59% of all fatal and serious injury vehicular crashes occurred at an intersection. These results indicate that intersections throughout the city need safety improvement. Targeting intersection safety improvements at signalized intersections is likely to have a high impact on crash reduction. FHWA countermeasures intended to reduce crashes and injury at intersections, such as: 'roundabouts', 'dedicated right and left turn lanes at intersections' and 'yellow change intervals' could improve safety at these locations.

c. Intersection Crossings for Pedestrians and Bicyclists

A high proportion of both pedestrians and cyclists are hit when they are crossing traffic (especially at intersections with a marked crosswalk). About 67 percent of all accidents involving pedestrians and bicyclists occurred at these locations, with 72 percent of all serious injury and fatal pedestrian and bicyclist accidents occurring at intersections. Turning vehicle movements are much more likely to result in a pedestrian or bicycle crashes, compared with all crashes. These trends indicate that intersection projects that improve safety for cyclists and pedestrians, especially those that reduce conflicts and speed of turning vehicles will improve safety for vulnerable road users.

The city conducted a street sign survey to find missing or incorrect signs. This ensures drivers know what to expect and can easily identify which road they are on.

An American's with Disabilities Act (ADA) assessment was started at all intersections. This has helped identify where curb ramps are inconsisent or non-existent.

m. Data-Driven and Proven Strategies

The city identified data-driven and proven strategies to address these two high-risk behaviors and high-risk locations identified through the crash analysis. These strategies are guided by federal, state, city, and industry best practices to eliminate fatalities and serious injuries.



In order to further reduce accidents and fatalities, it is recommended that the city implement FHWA's Proven Safety countermeasures that address these high-risk behaviors and locations. Implementing the 'Appropriate Speed Limits' and 'Variable Speed Limits' countermeasure to address speed-related concerns, and 'roundabouts', 'yellow change intervals', etc. to address intersections-related concerns is an effective way to significantly reduce these types of accidents from occurring in the future.

Table 1 below lists the FHWA proven strategies and countermeasures to address the high-risk and behaviors and locations identified above. The strategies are categorized by the targeted locations in which they are primarily intended (i.e., intersection vs. roadway countermeasures). These strategies are highly context-sensitive and factors such as physical constraints, operating conditions, and implementation and maintenance costs impact where each strategy could or should be implemented. As an action item of this plan, the city should review, update, or develop policies to guide the implementation of these strategies that will provide the best overall safety impact in an equitable and sustainable fashion given the wide range of variables that must be considered for each type of treatment.

	Speeding	Reduce Reckless / Careless Driving	Principal Arterials	Signalized Intersections	Pedestrian / Bike Safety Crossing
Speed Management					
Appropriate Speed Limits	X	X			X
Speed Safety Cameras	X	X	X		
Variable Speed Limits	X	X			
Pedestrian / Bicyclist					
Bicycle Lanes	X	X	X		X
Crosswalk Visibility Enhancements			X	X	X
Leading Pedestrian Interval			X	X	X
Pedestrian Refuge Islands			X	X	X
Pedestrian Hybrid Beacons	X			X	X
Rectangular Rapid Flashing Beacons			X		X
Road Diets (Roadway Reconfiguration)	X	X	X	X	X
Walkways			X		X

Roadway Departures					
Enhanced Delineation for Horizontal Curves	X	X	X		
Longitudinal Rumble Strips and Stripes	X	X	X		
Median Barriers	X	X	X		X
Roadside Design Improvements at Curves	X	X	X		
Wider Edge Lines		X	X		
Intersections					
Backplates with Retroreflective Borders	X	X			
Corridor Access Management			X		
Dedicated Left- and Right-Turn Lanes		X	X	X	X
Reduced Left-Turn Conflict Intersections		X	X		
Roundabouts	X	X		X	X
Yellow Change Intervals	X	X	X		
Crosscutting					
Lighting			X	X	X
Local Road Safety Plans	X	X	X	X	X
Pavement Friction Management	X	X		X	X
Road Safety Audit	X	X	X	X	X

Table 1 – FHWA proven strategies and countermeasures

10. IMPLEMENTATION

n. Tracking and measurement

Regular data collection, evaluation, and reporting are essential for accountability as the city implements the Transportation Safety Action Plan. The city will issue annual updates on the progress toward the overall goal of eliminating all traffic deaths and serious injuries and track key metrics and safety improvements since the initial implementation of this plan, as included in the City Council's March 2024 resolution. The Public Works Department will be primarily responsible for tracking progress on the Transportation Safety Action Plan.

Tracking will include a brief annual report evaluating the number of fatalities, injuries, and crashes, as well as an update on capital improvements, policies, and projects that are contributing to improving traffic safety overall. Additional metrics may be identified as the Plan moves through implementation, subject to identifying a reliable data source, measurement process, and staff resources.

o. Funding needs

Two major funding needs are required to implement the projects, policies and strategies identified in this plan: capital funding, and ongoing operations and maintenance resources. Capital funding, as with all transportation projects in the city, will be identified through a combination of federal, state, and local or regional sources.

Operations and maintenance resources (including staffing) are a major ongoing challenge for the city and will be an impediment to achieving the overall safety goal. The city's operations funding and staffing levels are currently inadequate to maintain the existing transportation network in an acceptable state of good repair and recommended additional projects and transportation facilities will only increase the gap. The city is aware of these current funding and resource challenges and is actively working to identify ways to overcome them. As part of the implementation of this plan, the city should develop and support an overall funding strategy that delivers ways to sustainably increase operations and maintenance funding and dedicate the resources required to make meaningful progress.

p. Equitable Implementation

Equity must be integrated into the Plan's implementation to ensure that the safety needs and concerns of all community members are centered in decision-making, particularly roadway users and communities that data shows are most vulnerable to transportation safety issues. Some areas to be particularly attentive to integrate equity in the plan's implementation:

- **Project prioritization:** Include equity in the project prioritization framework by using the equity priority areas as a criterion to rank or score the projects. Using the equity priority areas in the project prioritization will help target safety resources and interventions in neighborhoods most likely to be affected by transportation safety issues.
- **Data collection and monitoring:** Integrate equity into crash data collection and monitoring procedures to identify disparities in the distribution of crashes and their impacts on different communities over time.
- **Community engagement:** Identify opportunities for communities to inform decision-making as transportation safety actions are implemented. The process-oriented actions may have more opportunities for community engagement to influence decisions than the more technical design-oriented actions.
- **Community partnerships:** As the opportunity arises, foster relationships and partnerships with community organizations that serve the community. Community organizations often have deep-rooted connections and trust within the communities they serve. By collaborating with these organizations, East Chicago can learn from their knowledge, expertise, and understanding of local needs and dynamics. These organizations may also be able to reach people Building positive and trusting relationships with community organizations will help enhance the reach and effectiveness of the Plan. and communities that are distrustful of government and have been historically excluded from government decision-making.

- **Documentation:** Continue to document how equity is integrated into East Chicago's transportation safety actions and projects. Documenting the equity considerations, strategies, and actions taken during the project supports transparency and accountability by providing a record of the steps taken, creating a reference point for future projects, and providing an opportunity for evaluation and learning. Documenting strategies now will help future project teams assess the effectiveness of equity measures and learn from best practices and lessons learned to improve future transportation projects and refine strategies for achieving equitable outcomes.

q. Future studies

To provide additional guidance on specific priority areas identified in this plan, East Chicago should conduct the following further studies to build upon this plan:

- **Comprehensive Review of High Crash Intersections:** While this analysis identified the top high crash intersections within in East Chicago, it did not review the intersections in detail to identify the specific risk factors or mitigating improvements. A future review of high-crash intersections would more specifically provide improvement recommendations at those locations.
- **Downtown Crash Study:** Downtown East Chicago is a crash hot spot for all modes, likely due to high traffic volumes as well as high pedestrian and cyclist traffic. A future analysis of downtown crash trends would be necessary to identify a specific set of improvements aimed at improving safety in the downtown area.

r. Action Plan Timeline

As there is no dedicated funding stream for the projects identified in this plan, it is difficult to attach a timeline to their implementation. However, the prioritized list of projects should be reviewed regularly to identify upcoming opportunities for implementation. The city should also regularly review the list of priority projects against discretionary grant opportunities on a rolling basis to seek additional funding to advance the implementation timeline.

Action	Timing
Research and apply for capital funding to implement infrastructure improvements in areas identified as priorities in this plan.	Short
Evaluate and update prioritized traffic and street design policies and practices based on the opportunities identified in this Plan.	Short
Continue community engagement to ensure local priorities are adequately addressed in plan implementation.	Short
Complete a Comprehensive Review of High Crash Intersections to provide improvement recommendations at the identified locations.	Complete
Expand the current annual monitoring process to track progress more comprehensively against the fatality and serious injury reduction/elimination goal.	Medium
Complete a Comprehensive Review of Principal Arterials and Major Collectors identify potential future improvements.	Medium
Develop an overall funding and operations strategy that identifies the resources necessary to construct, maintain, and operate the projects and strategies included in this plan.	Medium
Identify an interagency safety working group, including members from the city, Lake County, and INDOT to continually evaluate opportunities for safety improvements.	Ongoing
Review procedures for how transportation safety projects are currently evaluated after implementation and how that information is used; develop a policy to guide what metrics projects should be evaluated by, based on the type and scale of the project.	Short
Using the prioritization criteria outlined in this plan, continue to develop, and maintain the top corridors, intersections, and locations to direct safety funding toward as funding opportunities arise.	Ongoing
Conduct ongoing crash equity analysis and engagement to share the findings of this analysis with community members, leaders, and partners findings of this analysis with community members, leaders, and partners and identify direction for future equity work related to traffic safety.	Ongoing

Table 2 – Action Plan Timeline

s. Progress and Transparency

Both this plan and any projects related to the plan will be posted online for the community to review and the public will have an opportunity to voice their opinions and feedback throughout the planning process.

There will also be annual updated public and accessible data online about the progress of the plan and the goal towards reducing roadway fatalities and serious injuries.

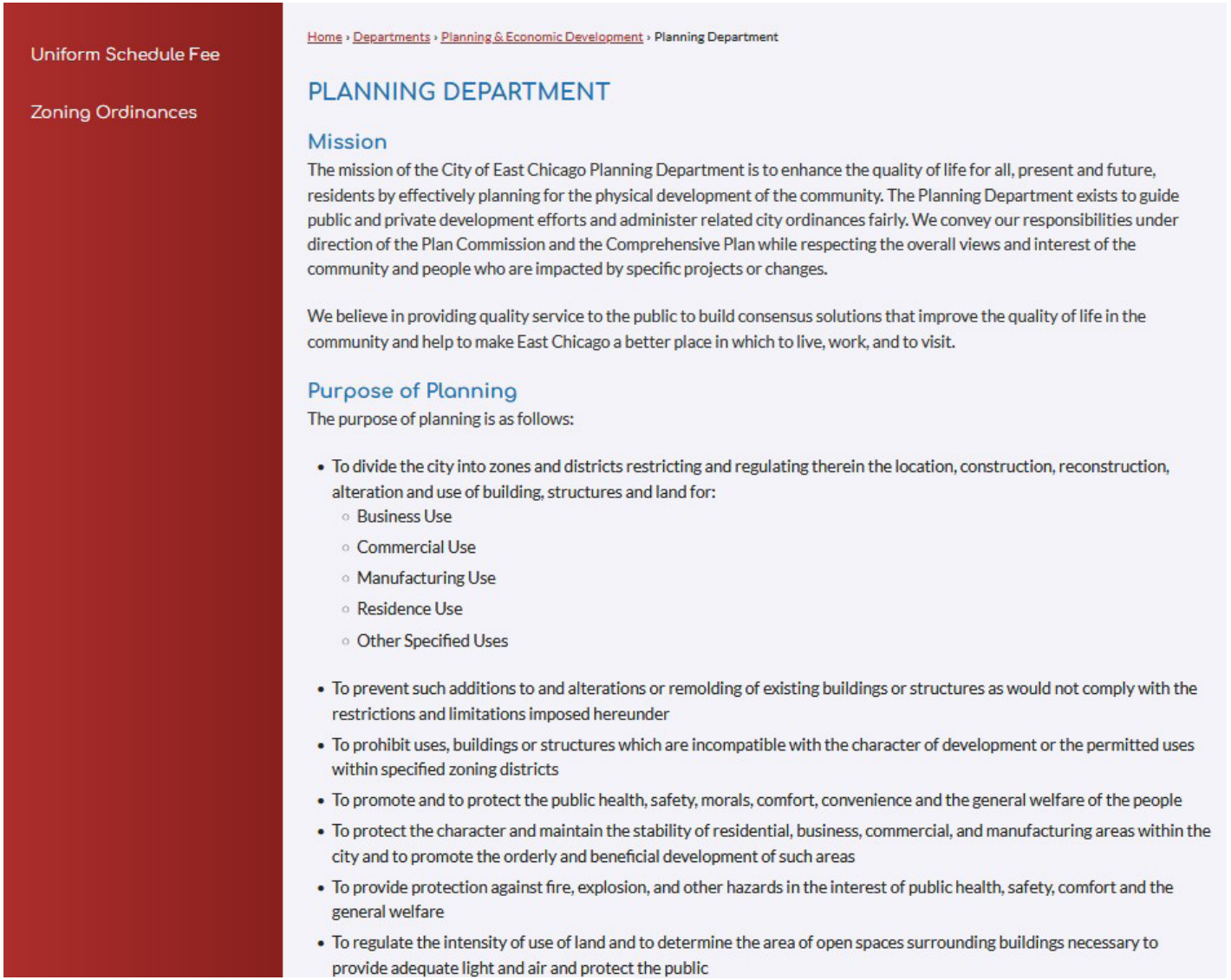


Figure 14 - City of East Chicago Planning Deparatment Website

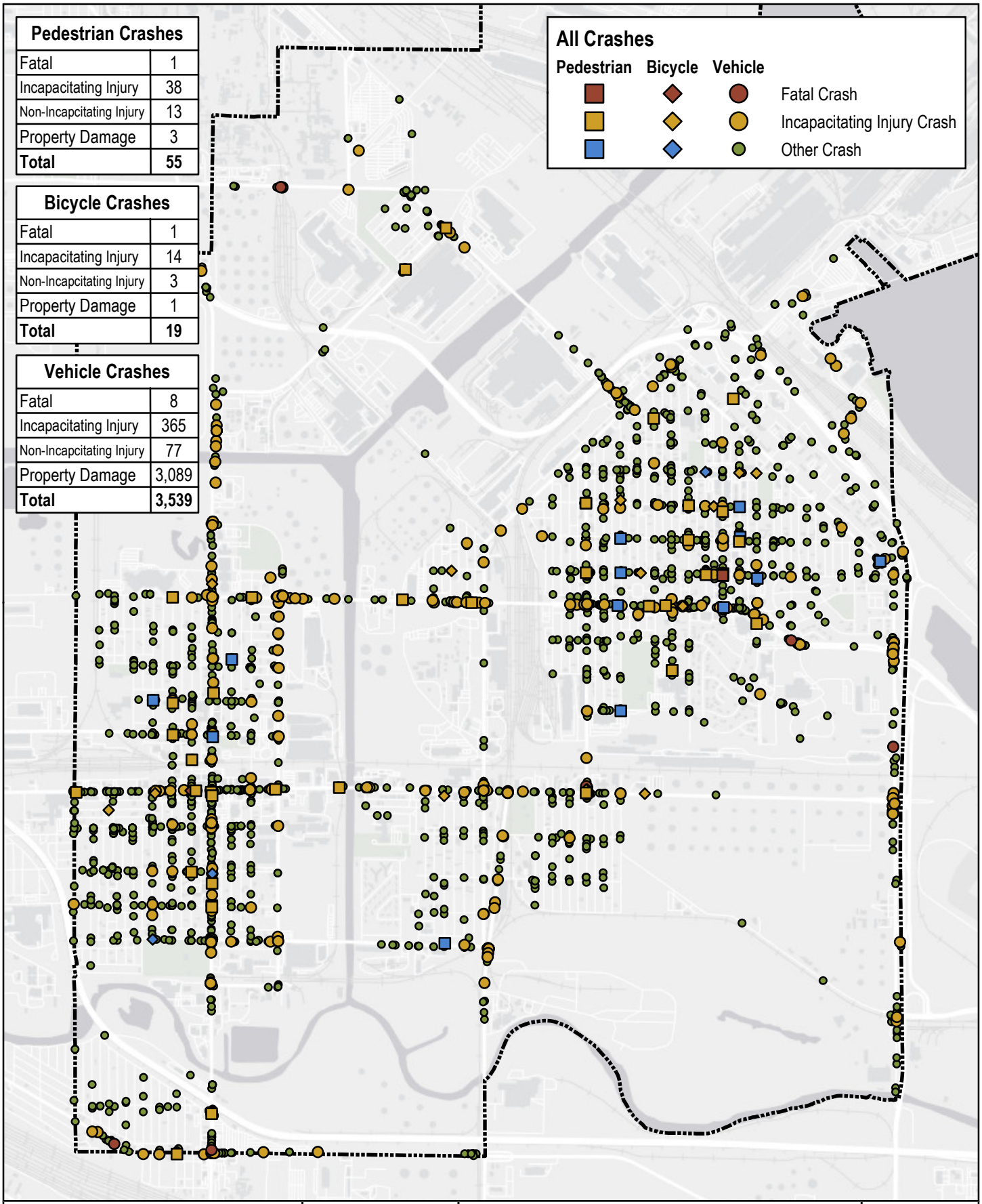
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Appendices

Appendix A

All Crashes (2018-2022)



Pedestrian Crashes	
Fatal	1
Incapacitating Injury	38
Non-Incapcitating Injury	13
Property Damage	3
Total	**55**

Bicycle Crashes	
Fatal	1
Incapacitating Injury	14
Non-Incapcitating Injury	3
Property Damage	1
Total	**19**

Vehicle Crashes	
Fatal	8
Incapacitating Injury	365
Non-Incapcitating Injury	77
Property Damage	3,089
Total	**3,539**

Path: C:\Traffic Projects\East Chicago SS4A\GIS\All Crashes (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

All East Chicago Crashes (2018-2022)

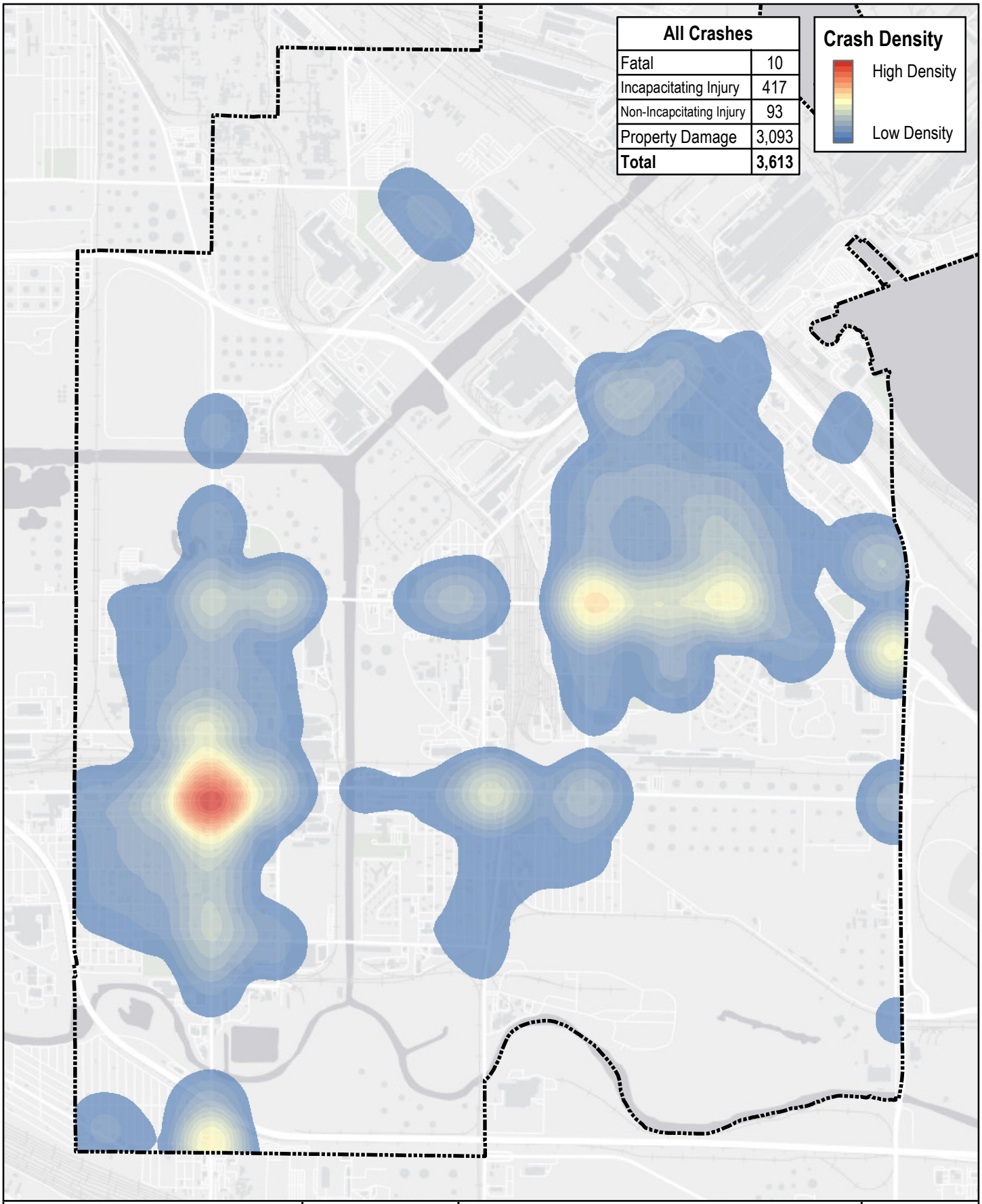
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix B

All Crashes Heat Map (2018-2022)



Path: C:\Traffic Projects\East Chicago SS4A\GIS\All Crashes Heat Map (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

All Crashes Heat Map (2018-2022)

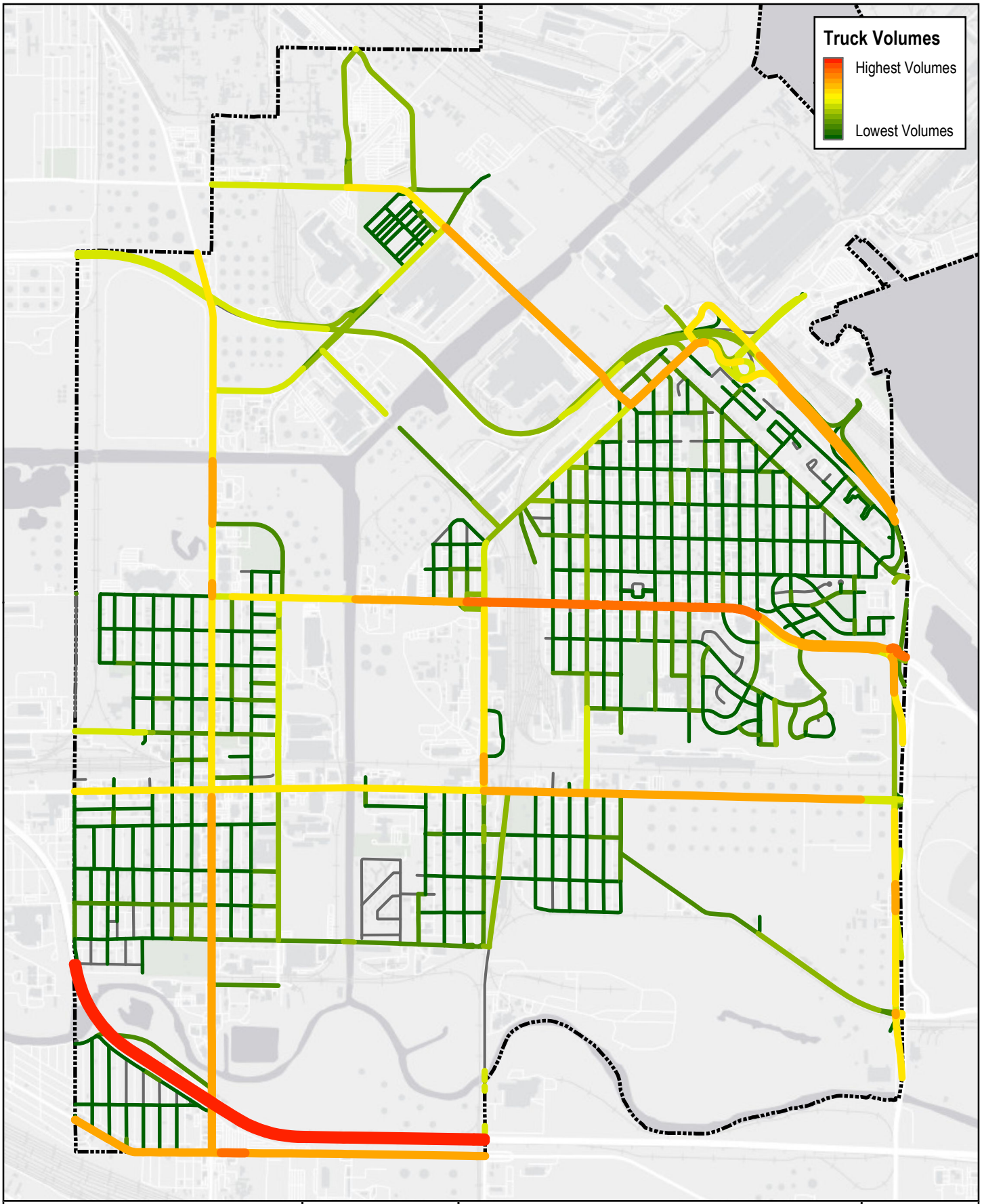
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Appendix C

All Truck Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\All Truck Volumes (StreetLight).mxd

SEH

Project: EACHI 175011
Print Date: 1/3/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

All Truck Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

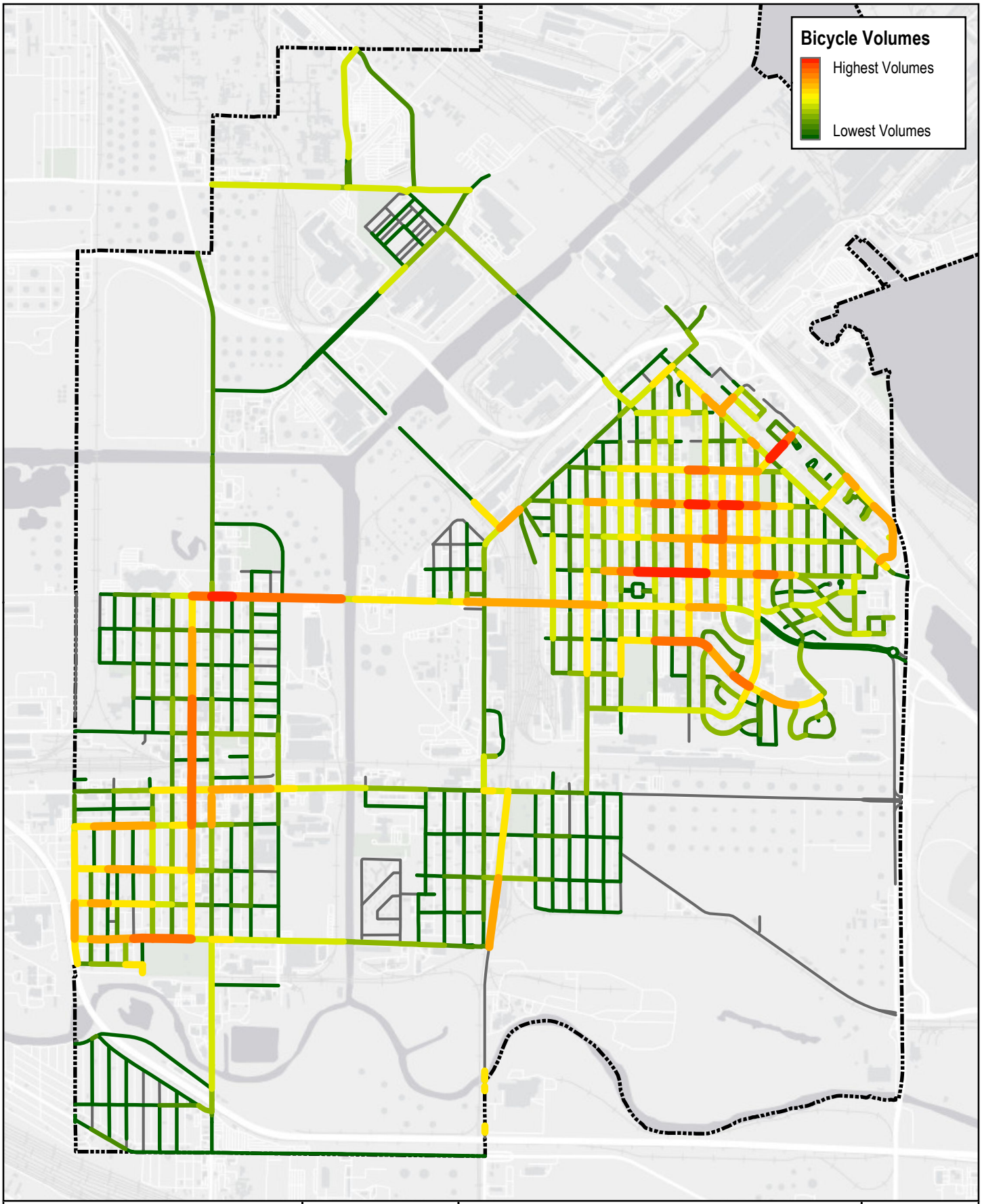
East Chicago, IN

Figure 5

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Appendix D

Bicycle Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Bicycle Volumes (StreetLight).mxd

SEH

Project: EACHI 175011
Print Date: 11/8/2023

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Bicycle Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

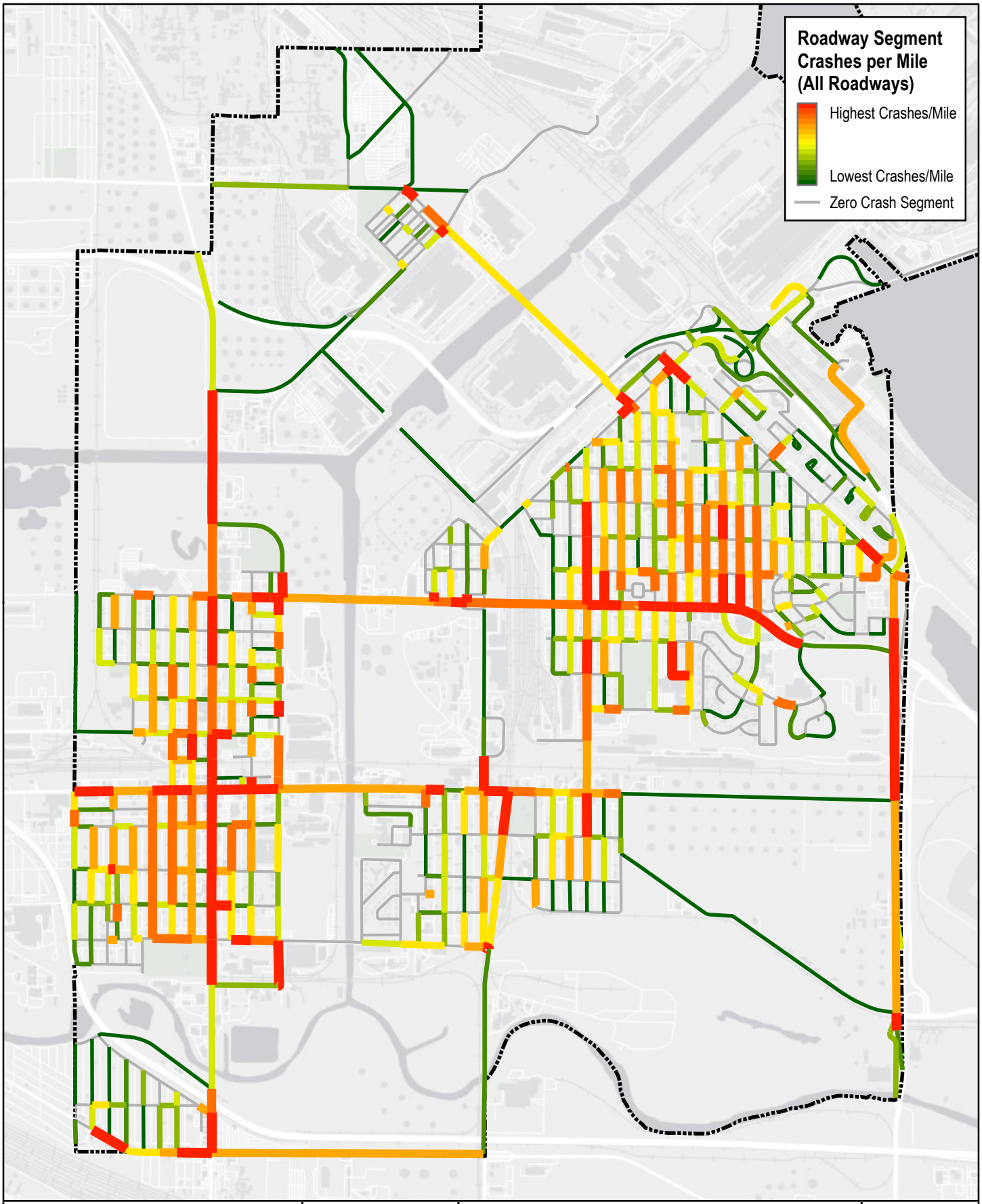
East Chicago, IN

Figure 4

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix E

Crash Segment Rank - All Roads



Path: C:\Traffic Projects\East Chicago SS4A\GIS\High Crash Segments (2018-2022)_ALL.mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Crash Segment Rank (2018-2022) All Roadways

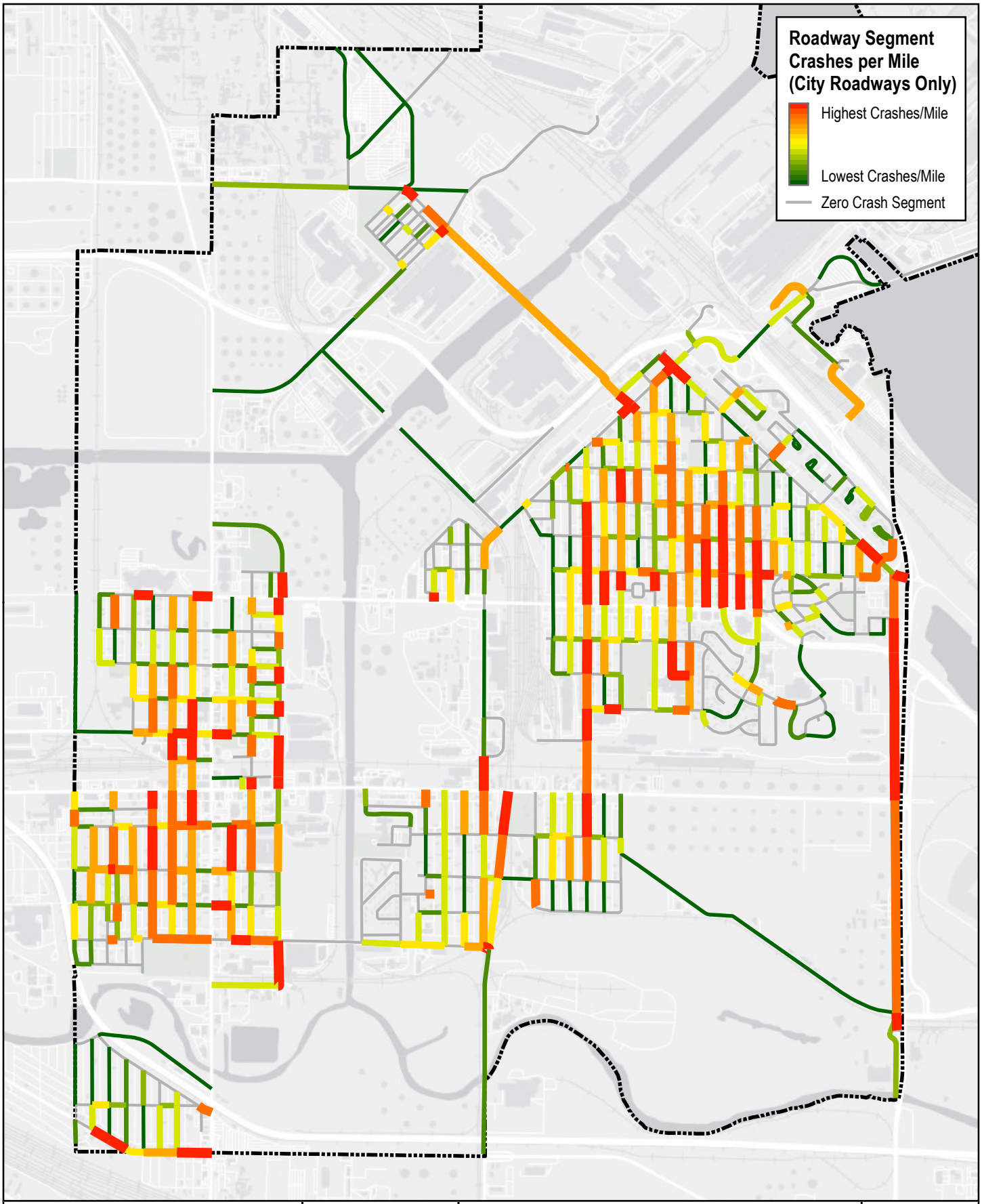
EAST CHICAGO SS4A PROJECT
East Chicago, IN

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This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix F

Crash Segment Rank - City Owned Roads



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Crash Segment Rank (2018-2022)_CITY ONLY.mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Crash Segment Rank (2018-2022)
City Roadways Only

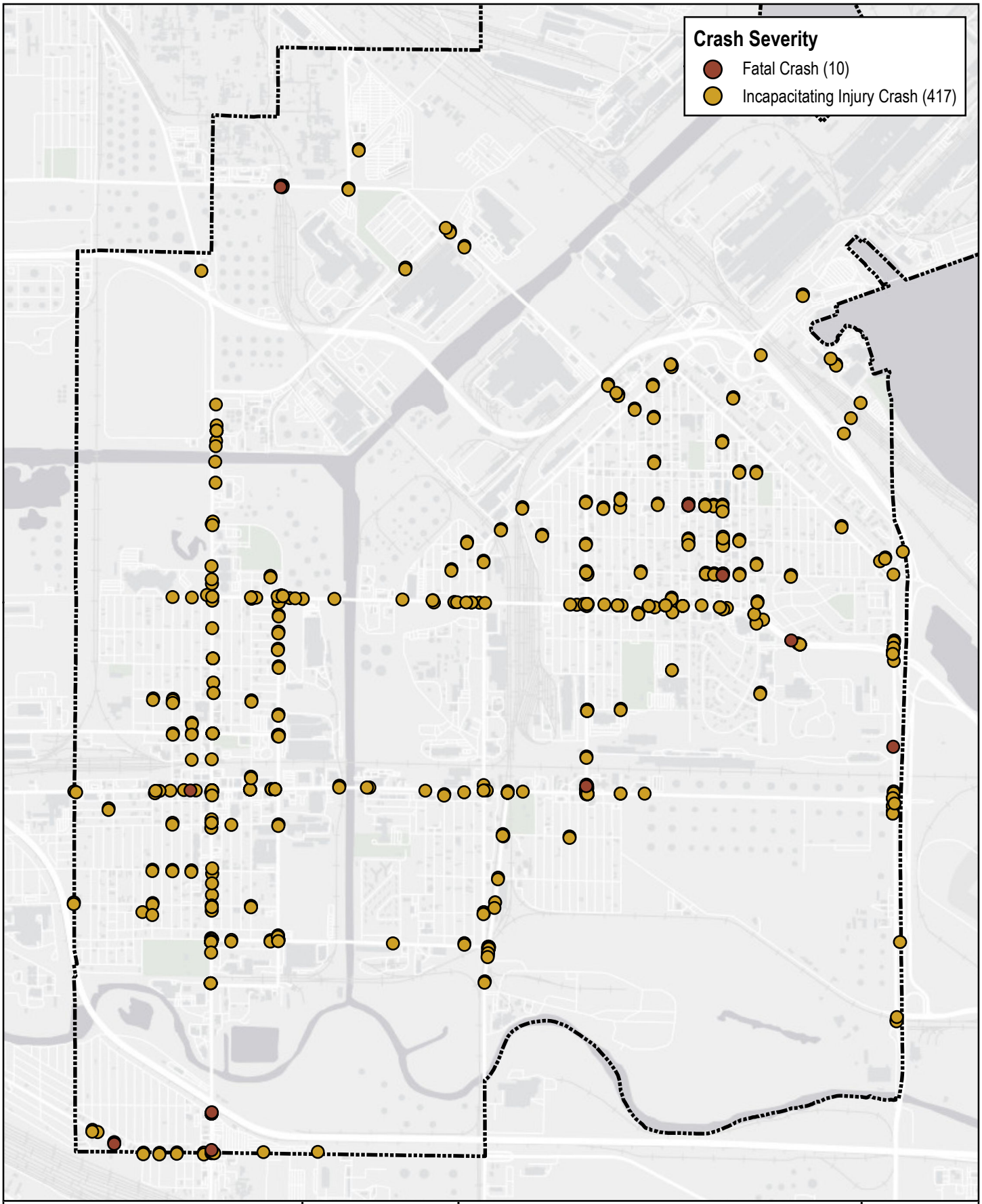
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

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Appendix G

Fatal and Incapacitating Injury Crashes (2018-2022)



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Fatal and Incapacitating Injury Crashes (2018-2022).mxd

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Fatal and Incapacitating Injury Crashes (2018-2022)

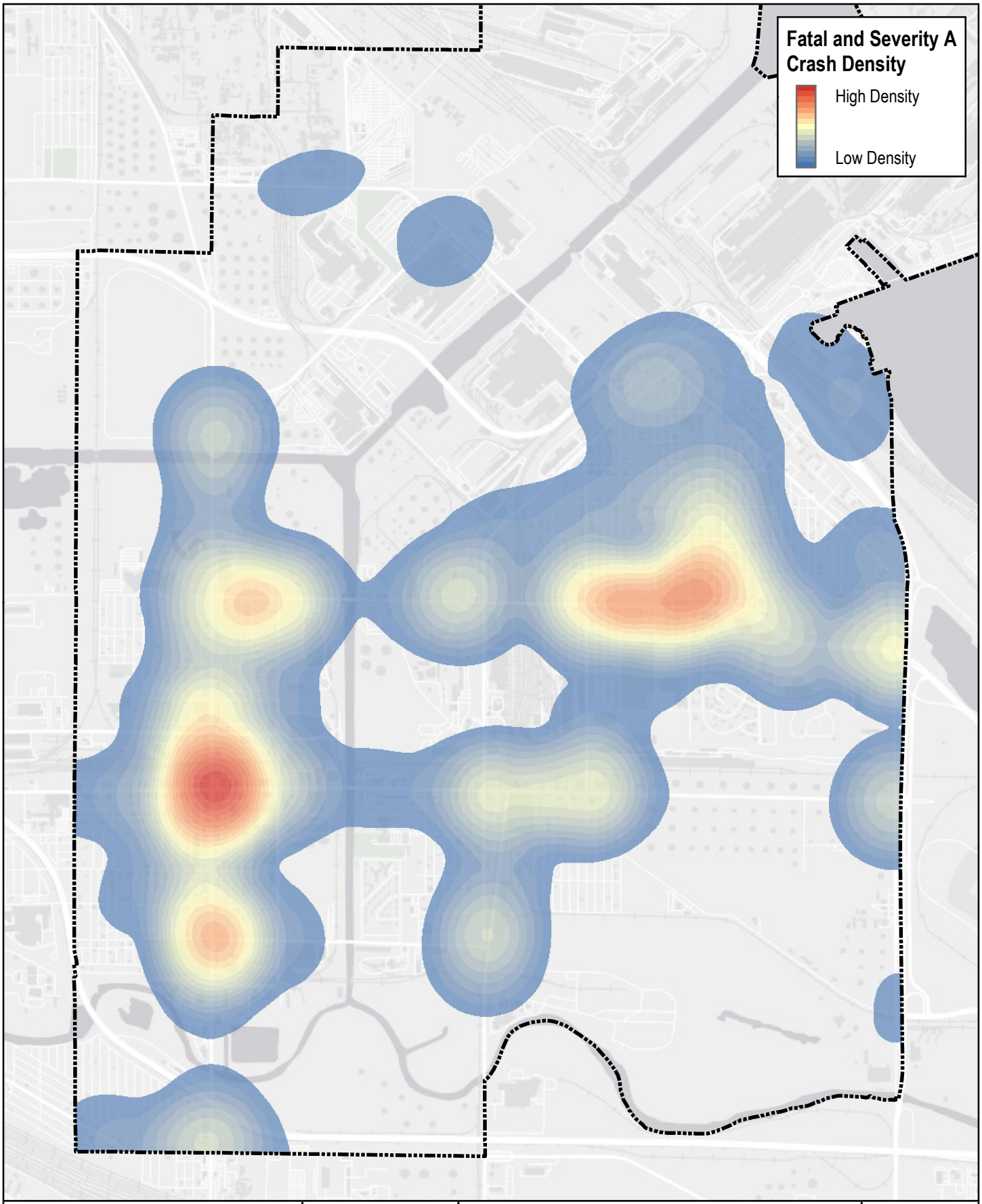
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix H

Fatal and Incapacitating Injury Crashes Heat Map (2018-2022)



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Fatal and Incapacitating Injury Crashes Heat Map (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Fatal and Incapacitating Injury Crashes Heat Map (2018-2022)

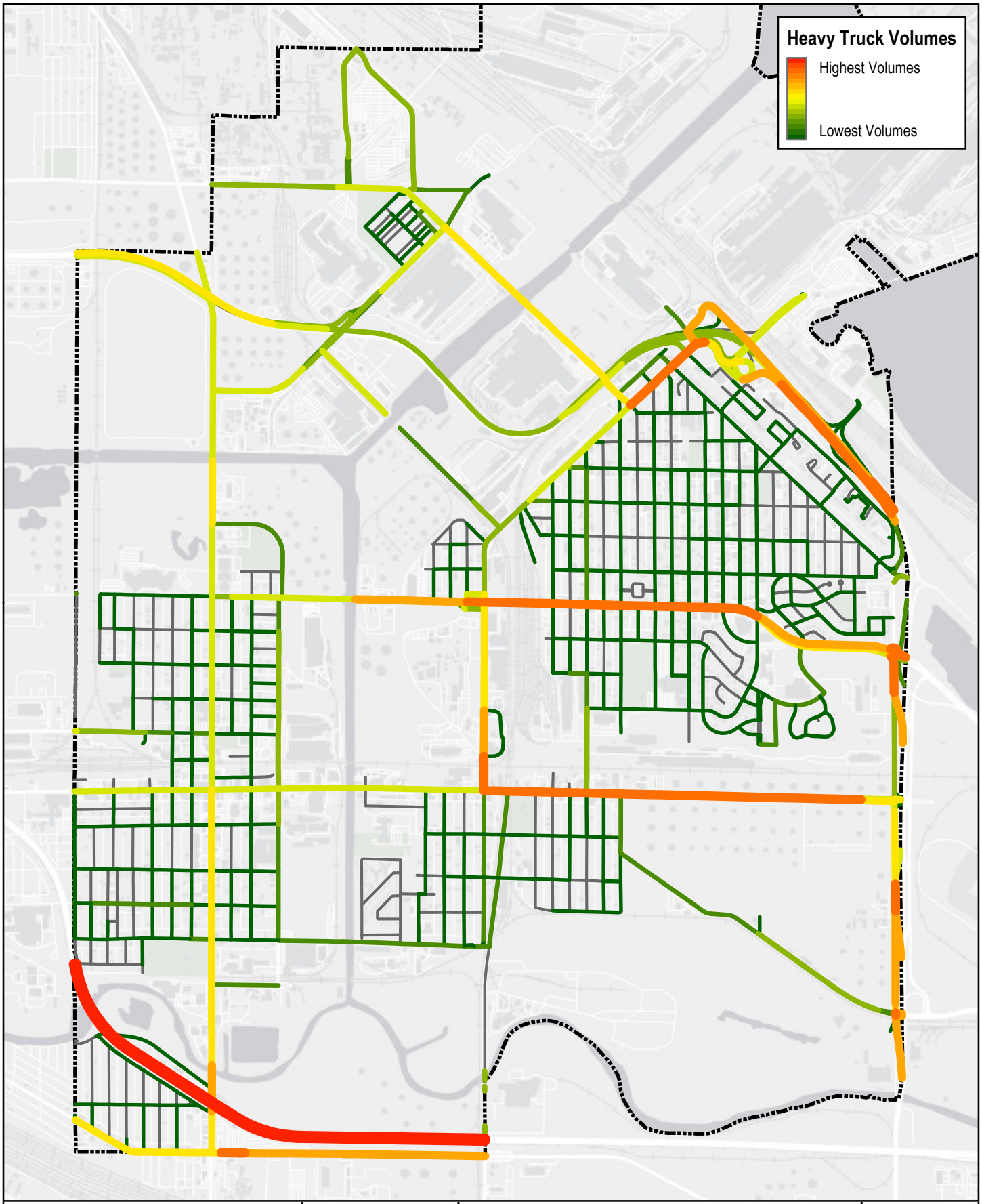
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix I

Heavy Truck Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Heavy Truck Volumes (StreetLight).mxd

SEH

Project: EACHI 175011
Print Date: 1/3/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Heavy Truck Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

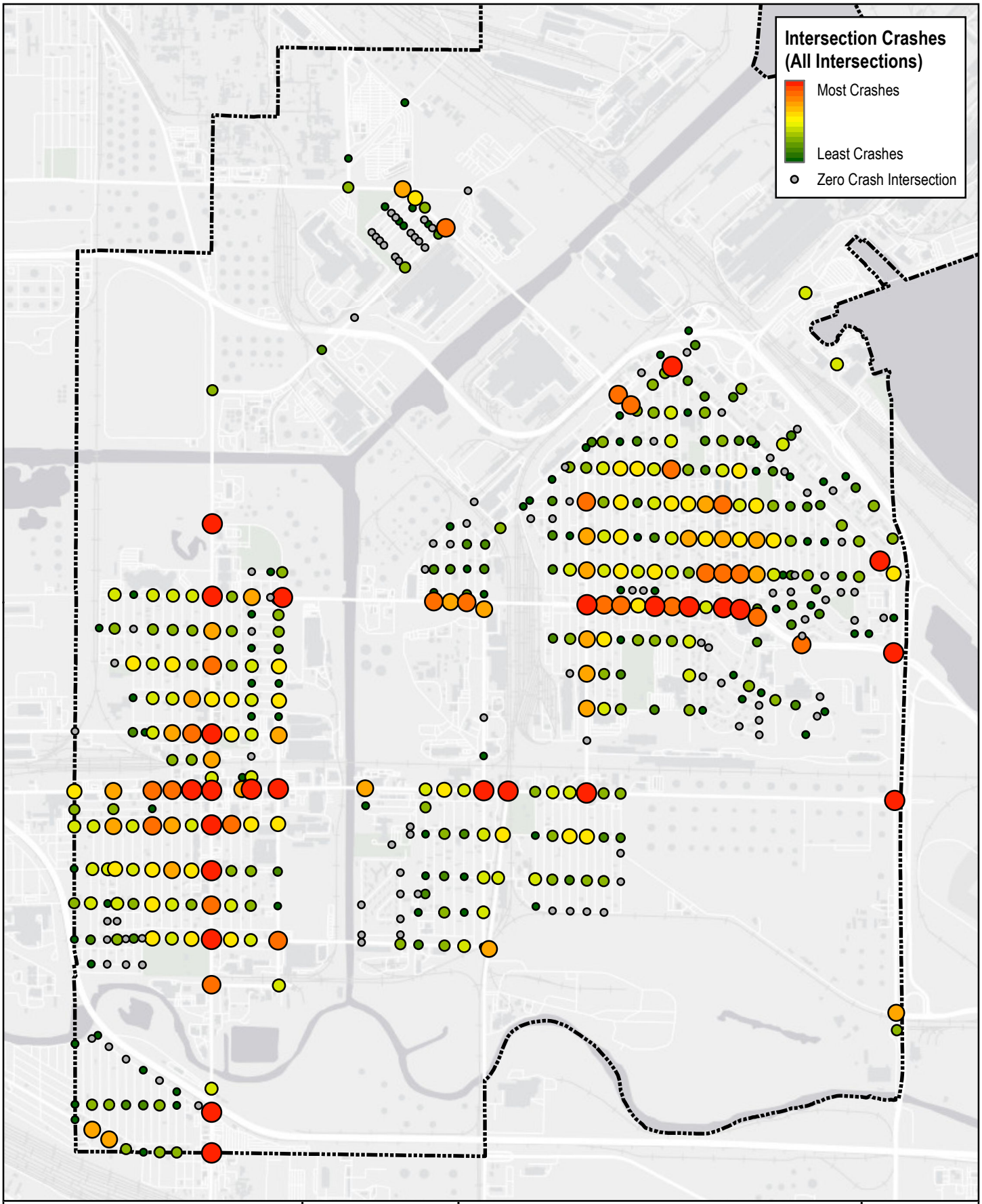
East Chicago, IN

Figure 7

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix J

Intersection Crash Rank (2018-2022) - All Intersections



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Intersection Crash Rank (2018-2022)_ALL.mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Intersection Crash Rank (2018-2022) - All Intersections

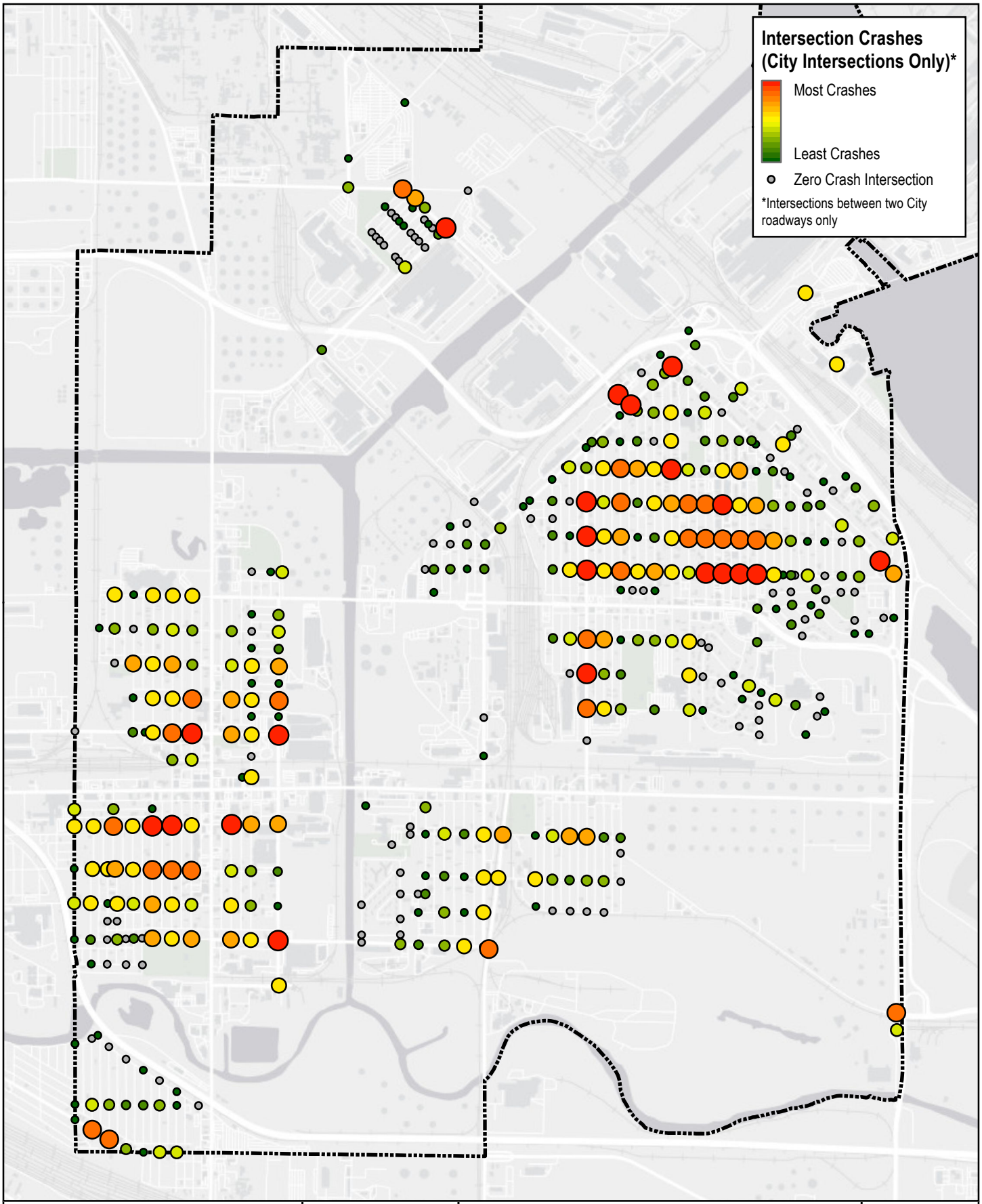
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix K

Intersection Crash Rank (2018-2022) - City Owned Intersections



Path: C:\Traffic Projects\KENCH - Kenosha County Safety Action Plan\GIS\Crashes\Intersection Crash Rank (2018-2022)_CITY ONLY.mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Intersection Crash Rank (2018-2022) - City Intersections Only

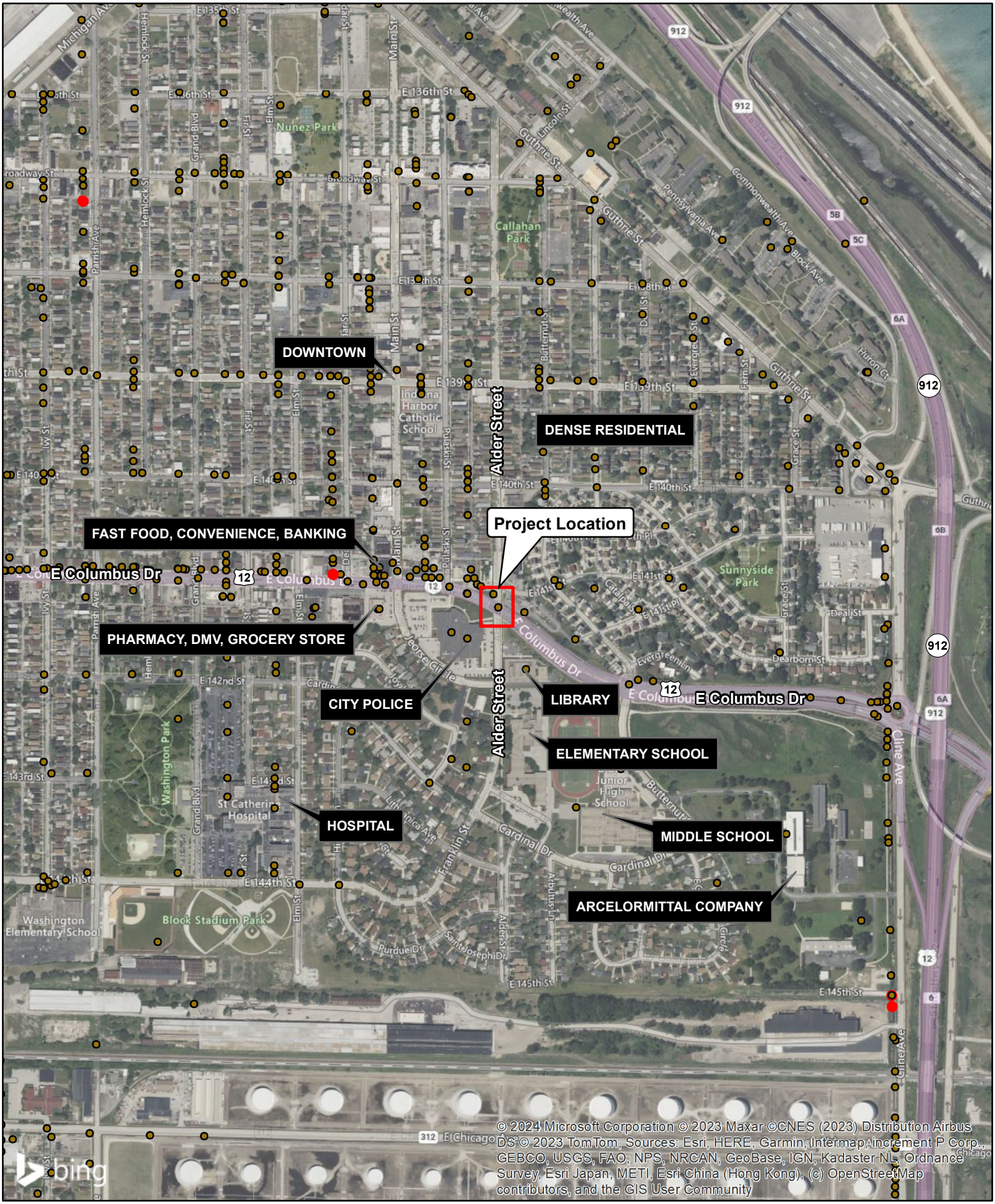
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix L

Land Use Map



SEH
6808 Odana Rd
Suite 200
Madison, WI 53719
(608) 620-6199

Print Date: 1/19/2024
Source: ESRI, IndianaMAP
Project No: EACHI 167017

Map by: mfalk
Projection: WISCRS, State Plane IN West (ft)

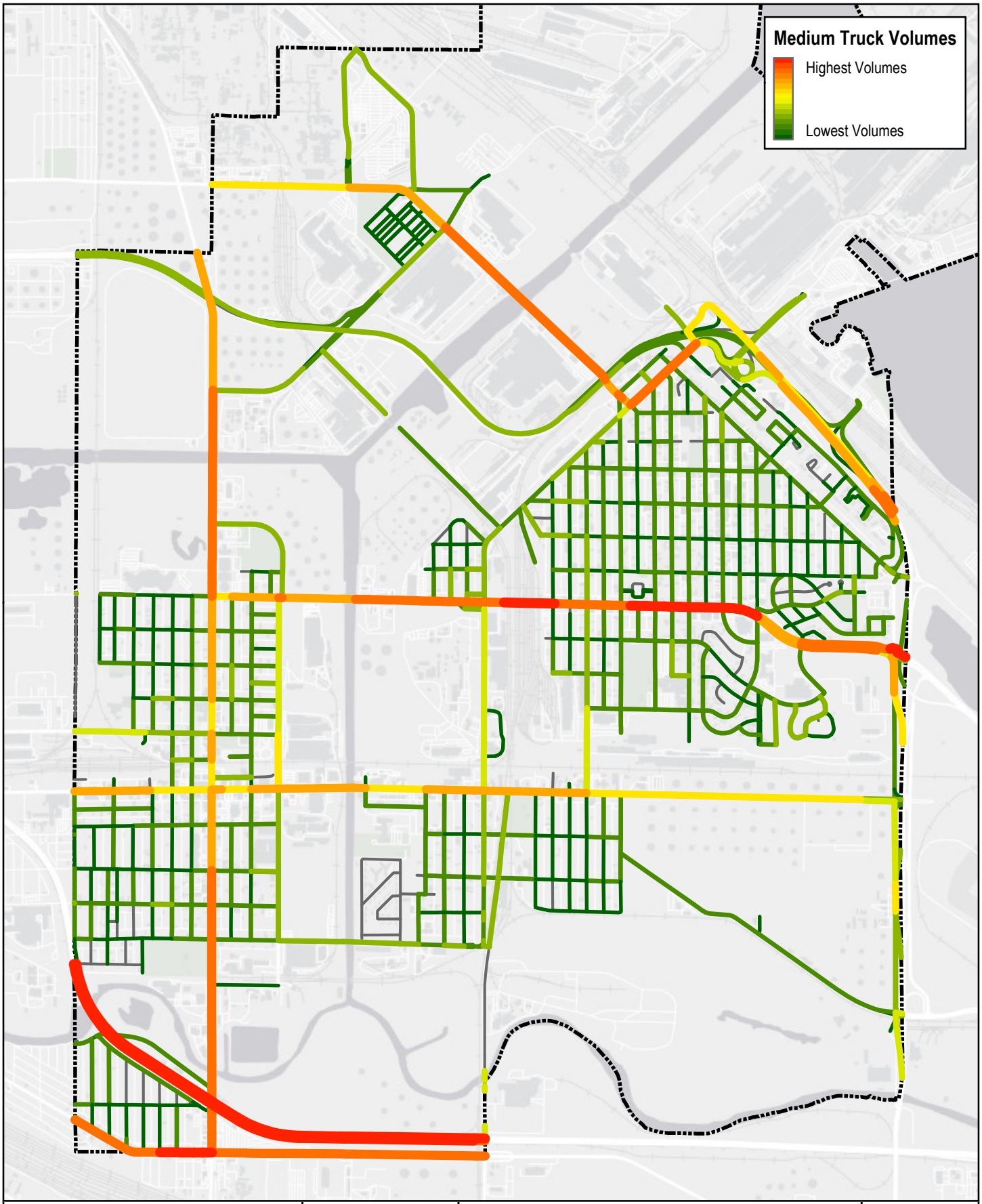
Half-Mile Radius Map
City of East Chicago, IN

0 400 800 Feet

N

Appendix M

Medium Truck Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Medium Truck Volumes (StreetLight).mxd

SEH

Project: EACHI 175011
Print Date: 1/3/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Medium Truck Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

East Chicago, IN

Figure 6

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Appendix N

Non-Motorized Crashes (2018-2022)

Pedestrian Crashes	
Fatal	1
Incapacitating Injury	38
Non-Incapcitating Injury	13
Property Damage	3
Total	**55**

Bicycle Crashes	
Fatal	1
Incapacitating Injury	14
Non-Incapcitating Injury	3
Property Damage	1
Total	**19**

Non-Motorized Crashes

Pedestrian	Bicycle	
		Fatal Crash
		Incapacitating Injury Crash
		Other Crash

Path: C:\Traffic Projects\East Chicago SS4A\GIS\Non-Motorized Crashes (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Non-Motorized Crashes (2018-2022)

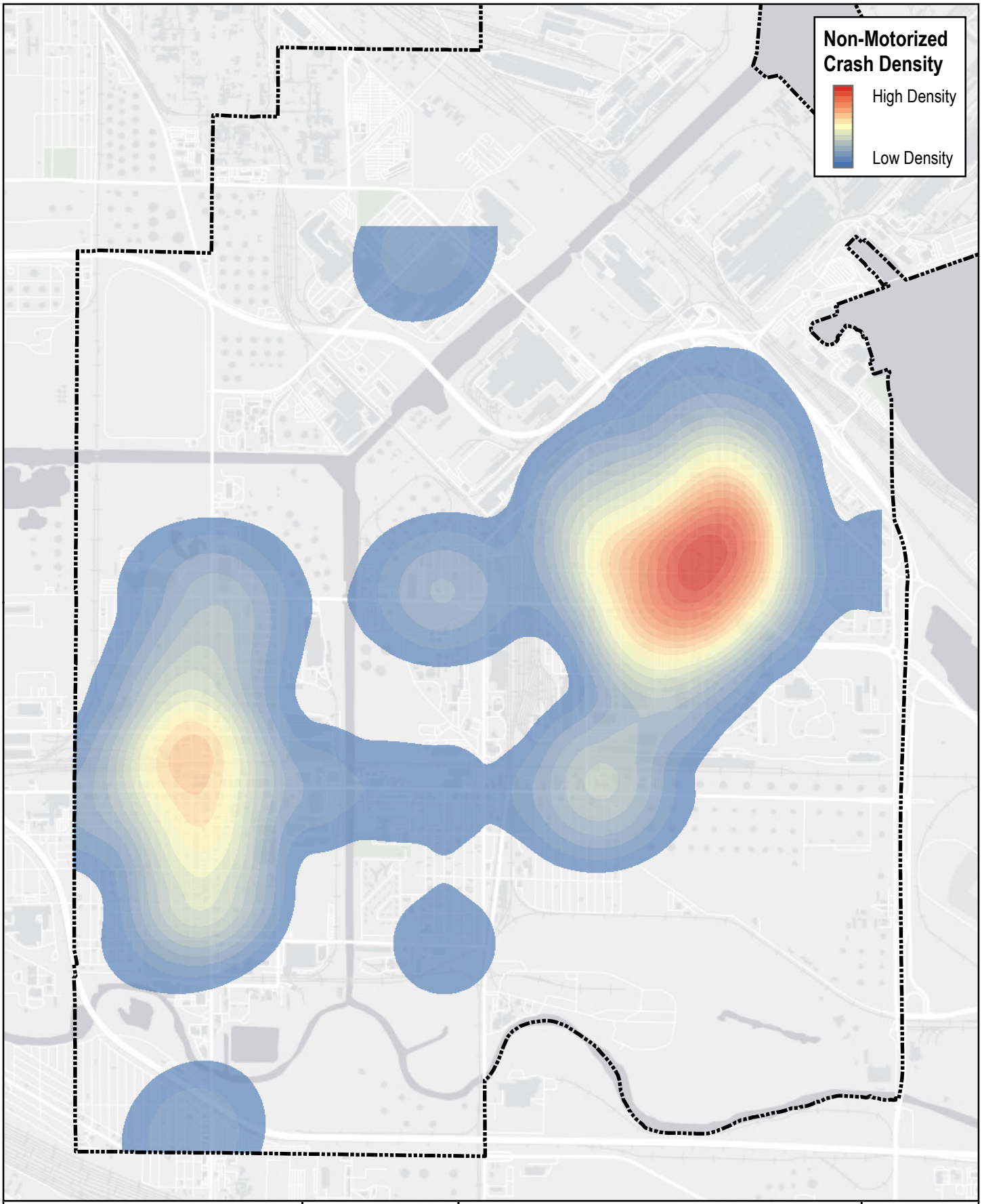
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

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Appendix O

Non-Motorized Crashes Heat Map (2018-2022)



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Non-Motorized Crashes Heat Map (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Non-Motorized Crashes Heat Map (2018-2022)

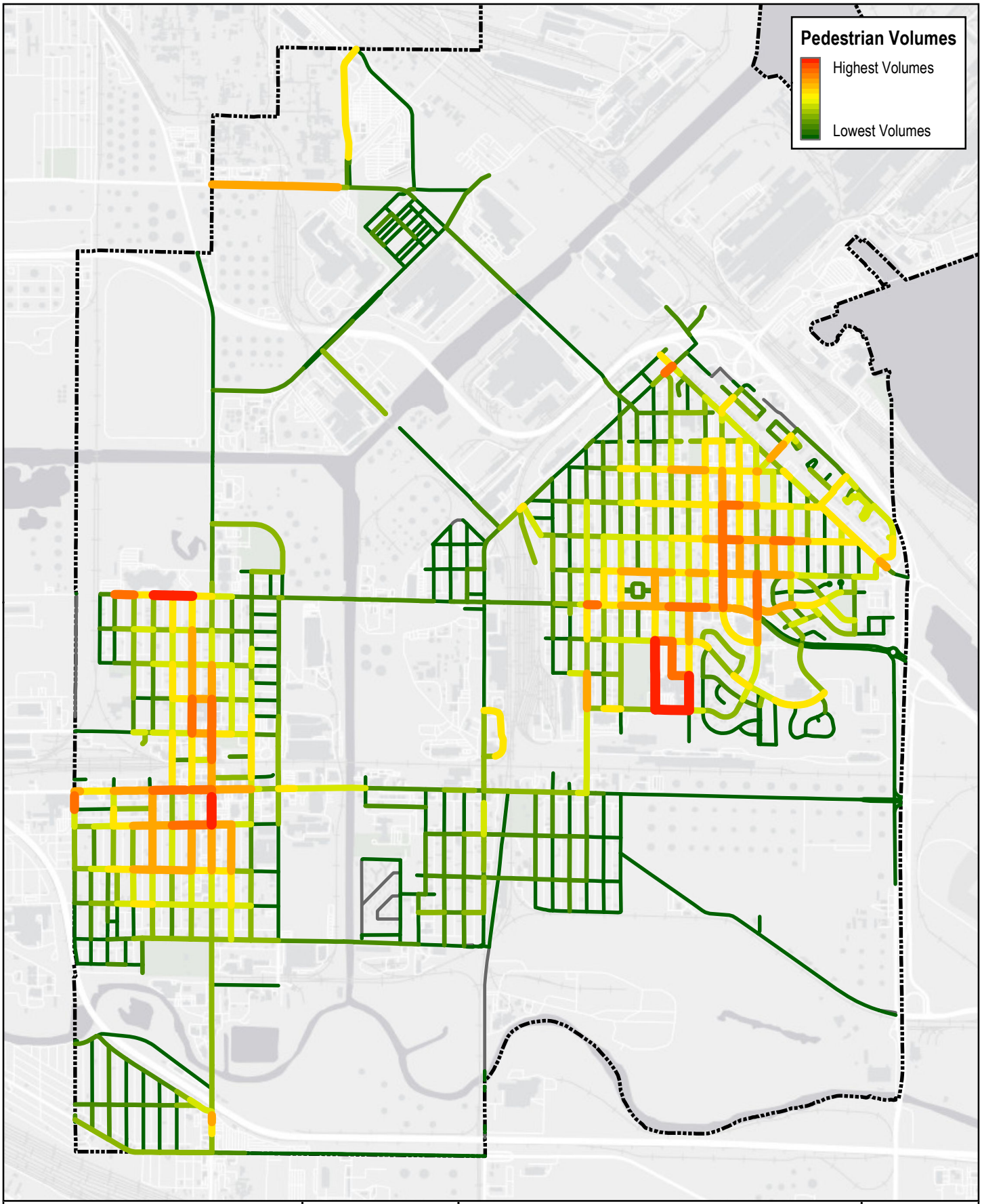
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

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Appendix P

Pedestrian Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Pedestrian Activity.mxd

SEH

Project: EACHI 175011
Print Date: 11/8/2023

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Pedestrian Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

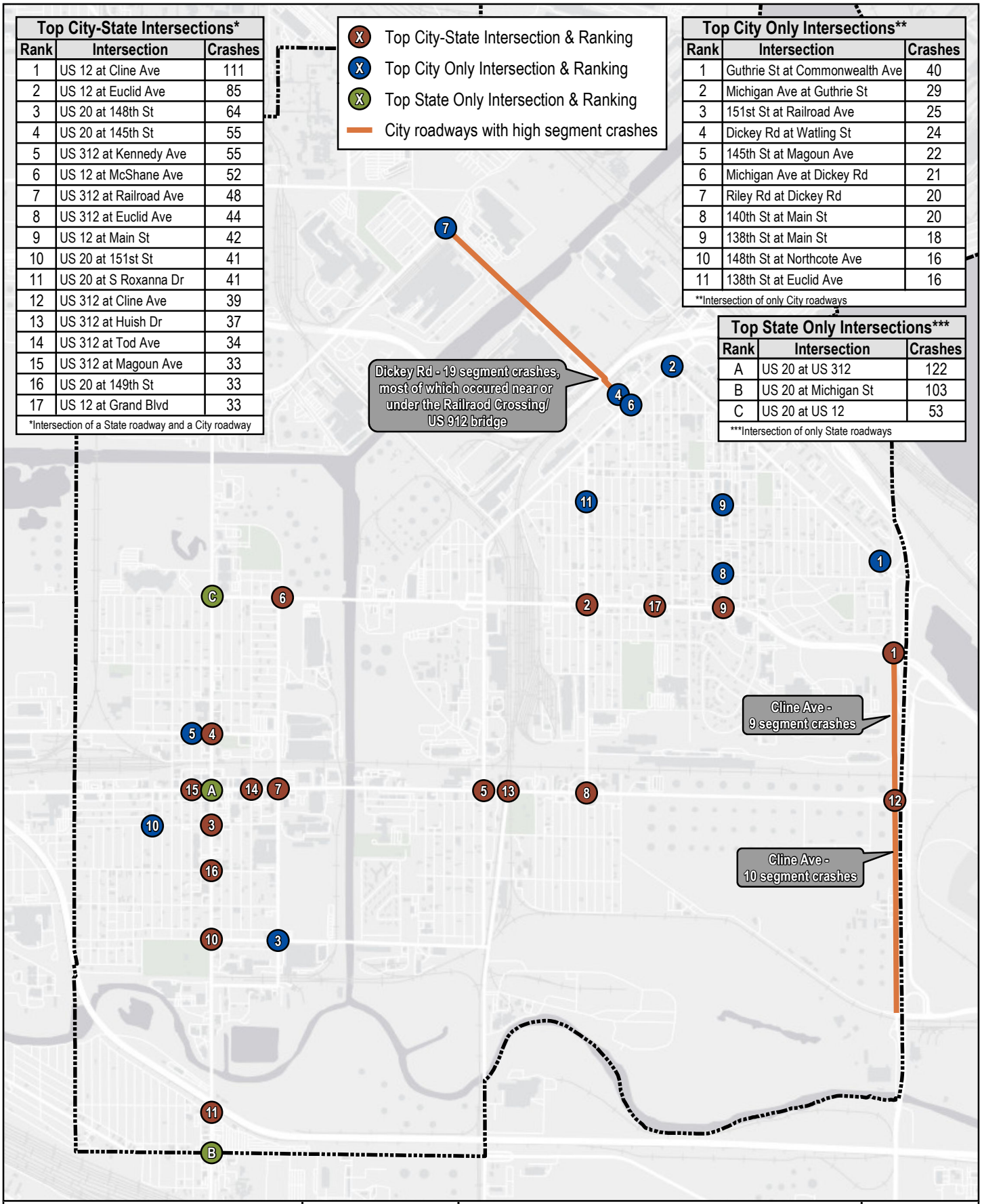
East Chicago, IN

Figure 3

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Appendix Q

Top Intersections and Segments Map (2018-2022)



Top City-State Intersections*

Rank	Intersection	Crashes
1	US 12 at Cline Ave	111
2	US 12 at Euclid Ave	85
3	US 20 at 148th St	64
4	US 20 at 145th St	55
5	US 312 at Kennedy Ave	55
6	US 12 at McShane Ave	52
7	US 312 at Railroad Ave	48
8	US 312 at Euclid Ave	44
9	US 12 at Main St	42
10	US 20 at 151st St	41
11	US 20 at S Roxanna Dr	41
12	US 312 at Cline Ave	39
13	US 312 at Huish Dr	37
14	US 312 at Tod Ave	34
15	US 312 at Magoun Ave	33
16	US 20 at 149th St	33
17	US 12 at Grand Blvd	33

*Intersection of a State roadway and a City roadway

Top City Only Intersections**

Rank	Intersection	Crashes
1	Guthrie St at Commonwealth Ave	40
2	Michigan Ave at Guthrie St	29
3	151st St at Railroad Ave	25
4	Dickey Rd at Watling St	24
5	145th St at Magoun Ave	22
6	Michigan Ave at Dickey Rd	21
7	Riley Rd at Dickey Rd	20
8	140th St at Main St	20
9	138th St at Main St	18
10	148th St at Northcote Ave	16
11	138th St at Euclid Ave	16

**Intersection of only City roadways

Top State Only Intersections***

Rank	Intersection	Crashes
A	US 20 at US 312	122
B	US 20 at Michigan St	103
C	US 20 at US 12	53

***Intersection of only State roadways

Path: C:\Traffic Projects\East Chicago SS4A\GIS\Top Intersections and Segments Map (2018-2022).mxd

SEH

Project: EACHI 175011
Print Date: 4/8/2024

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Top Intersections and Segments (2018-2022)

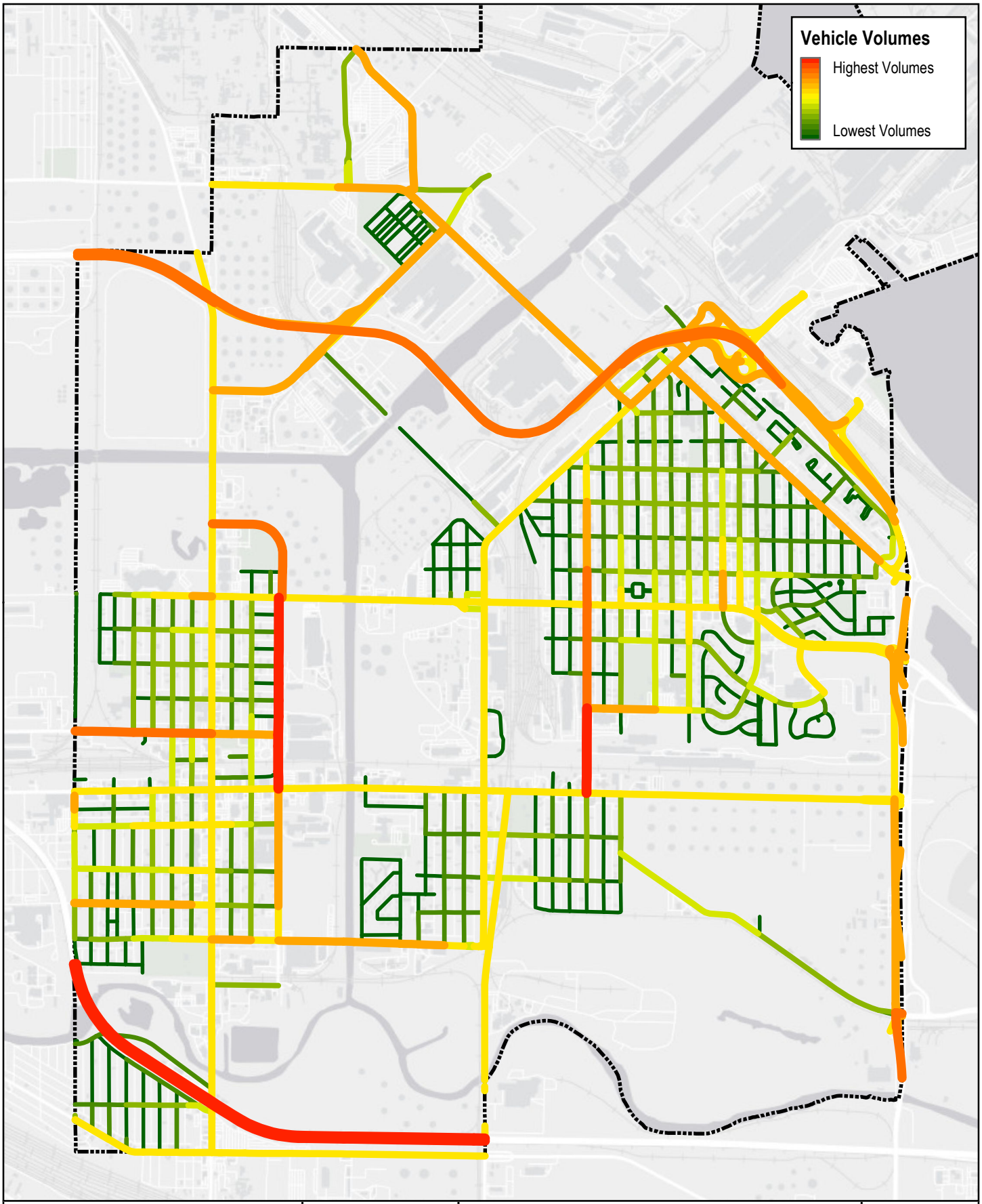
EAST CHICAGO SS4A PROJECT
East Chicago, IN

Figure 1

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Appendix R

Vehicle Volumes



Path: C:\Traffic Projects\East Chicago SS4A\GIS\Vehicle Volumes (StreetLight).mxd

SEH

Project: EACHI 175011
Print Date: 11/13/2023

Map by: jdanibas
Projection: UTM Zone 16N
Source: ESRI

Vehicle Volumes (StreetLight)

EAST CHICAGO SS4A PROJECT

East Chicago, IN

Figure 2

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