



Hudson County PVision ZERO

MAKING SAFER STREETS

Developing Focus Corridors for a Vision Zero Safety Action Plan



What is Vision Zero?

The Hudson County Safety Action Plan adopts the Vision Zero initiative: a goal of zero roadway fatalities or serious injuries. While traditional approaches focus on reducing crashes by placing responsibility on individuals to follow traffic rules, Vision Zero takes a more holistic stance, recognizing that humans inevitably make mistakes but these mistakes should not result in severe injuries or fatalities. This means creating forgiving roadway systems that reduce severe outcomes when crashes occur.

At the heart of Vision Zero is the Safe System Approach, created by the Federal Highway Administration (FHWA). This approach emphasizes shared responsibility among road users, urban planners, transportation engineers, and vehicle manufacturers. It prioritizes safer road designs, lower speed limits, and crash-resistant vehicles to work in concert, minimizing the likelihood of severe outcomes. Rather than waiting for incidents to happen, the Safe System Approach is proactive—identifying risks and addressing them before they

Data is the driving force behind Vision Zero, helping jurisdictions better identify where crashes are happening, and the factors that lead to a higher risk of fatal and serious injury crashes. Hudson County analyzed crash data from New Jersey Division of Highway Traffic Safety (NJDHTS) for the five-year period from 2017 to 2021, the most recent full-year data at the time this Plan was developed. The study area includes all county roads, Tonnelle Avenue/US 1&9 in North Bergen and local roads outside the jurisdictions of Hoboken, Jersey City, and the Meadowlands District, as those jurisdictions have their own Vision Zero Action Plans. Based on stakeholder feedback as well as the severity and frequency on crashes on Tonnelle Avenue/Route 1&9, the project team decided to include this road in the overall study area. However, the team chose not to consider recommendations for this road, but instead, they plan to work closely with the existing working group dedicated to the improvement of Tonnelle Avenue, which is led by the Hudson County Prosecutor's Office and

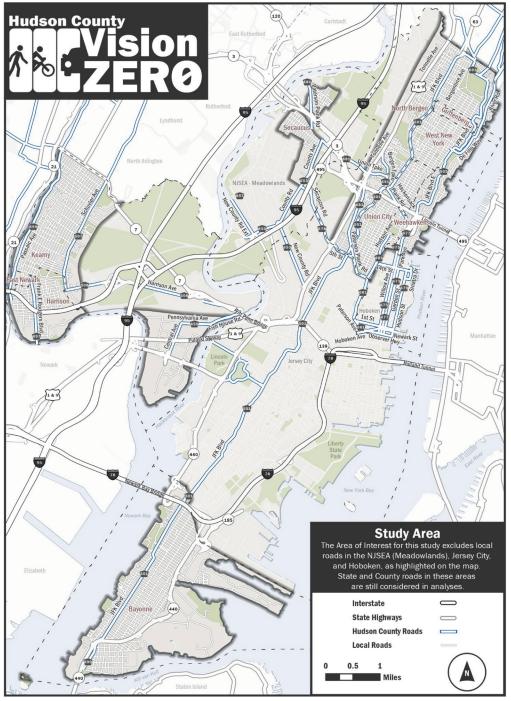


Fig. 1 - Map illustrating the extent of the study area, which encompasses Hudson County But excludes Jersey City, Hoboken, and the Hackensack Meadowlands District Boundary

A Commitment

Hudson County is committing to the goal of consistently having zero deaths or serious injuries as a result of traffic violence by 2034. This Vision Zero Action Plan is the foundation on which the County will end traffic deaths and severe injuries on our streets and details our approach to getting there together. The Plan is driven by data and guided by the lived experiences of people throughout the County. Throughout the process, we have heard from residents and stakeholders about the issues they see and experience on county roads, and the opportunities investment in safe streets can enable for our community. We have worked to ensure that diverse perspectives throughout our community are incorporated in this Plan, specifically focusing on engaging with those who are most impacted by traffic crashes.

For Hudson County, adopting Vision Zero will mean committing to eliminating fatalities and serious injuries by implementing thoughtful, long-term changes that put people first. Vision Zero is about creating streets that protect everyone, from the most vulnerable pedestrians to drivers. Through collaboration, data-driven decision-making, and a firm commitment to safety, we can move toward a future where traffic deaths are no longer a part of

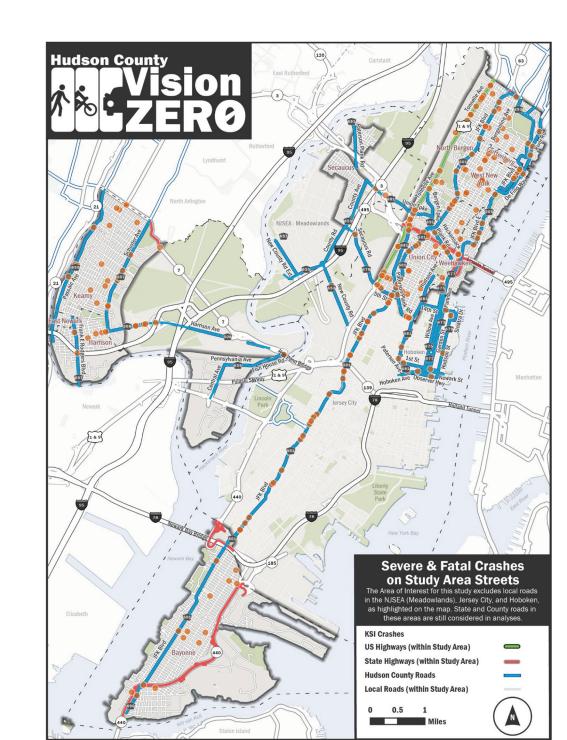
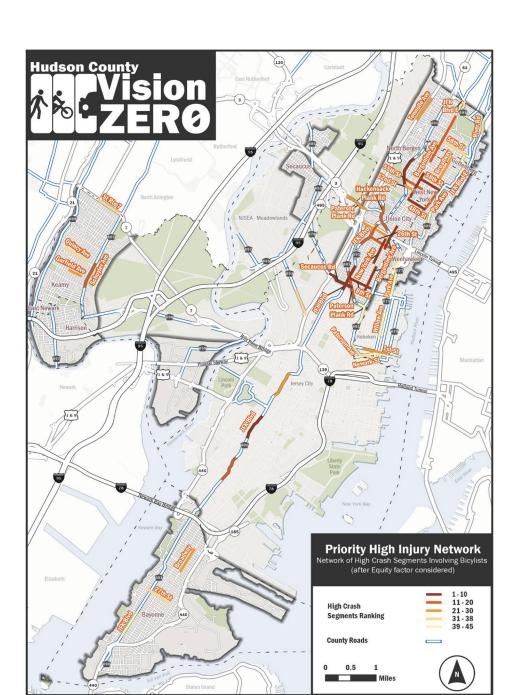


Fig. 2 - Map illustrating classes of roadways in the Study Area with KSI Crash data overlaid

High Injury Network

A high-injury network (HIN) consists of roadway segments where there is a higher concentration of severe crashes than the rest of the segments within a set geographic area. The development of a HIN is a data-driven process that identifies high-crash locations to prioritize for further analysis and investment in support of Vision Zero goals. As a key component of a Vision Zero Action Plan, the HIN helps pinpoint focus areas for targeted safety improvements. For the Hudson County Vision Zero Action Plan, the initial HIN was further refined using equity data, task force input, and other considerations to create the final HIN. In line with the crash analysis, the project team utilized crash data from NJDHTS's Numetric tool covering the latest five years (2017-2021) to develop the HIN. Consistent with the overall Plan, the HIN analysis focuses on the study area, including all county roads, Tonnelle Avenue/US 1&9 in North Bergen, and local roads outside Hoboken, Jersey City, and the Meadowlands District to avoid duplicating existing Vision Zero initiatives.





0 16 20 24 29 37 0 0.5 1 Miles

Equity & Traffic Safety

An equity analysis is key to a successful Vision Zero Action Plan. Prioritizing equity in planning acknowledges that all stakeholders have the right to a safe and healthy environment regardless of demographics or where they live. The Plan ensures that all stakeholders are actively involved in decision-making processes that impact their environment. Equity was a guiding principle throughout its development, influencing everything from community outreach efforts to the prioritization of the High-Injury Network (HIN) and focus corridors.

It is important to acknowledge that every community has a wide variety of stakeholder groups, each facing different barriers to safe travel and a variety of unique travel needs. Certain stakeholder groups have been traditionally underserved, have less access to resources, and typically experience more burdens. The equity analysis conducted for this Plan helped identify the locations of underserved populations, and helped prioritize recommendations based on that analysis. The equity analysis was conducted using the NJTPA Equity Analysis Tool, which assesses census tracts based on the status of populations included in US Executive Order 12898 on Environmental Justice and in Title VI of the US Civil Rights Act. The latest equity dataset is based on the ACS 2017-2021 5-year estimates. There are 11 factors through which populations are assessed in this tool based on their respective share of each factor.

A detailed analysis was conducted on the distribution of fatal and severe injury crashes within the equity priority areas. Between 2017 and 2021, these areas accounted for a disproportionately high share of crashes compared to their population share. Of the total, 1,203 crashes (69%) resulted in fatalities or severe or minor injuries, categorized as KAB crashes. This include

- 74% of fatal crashes (K)
- 69% of severe injury crashes (A) 69% of minor injury crashes (B)

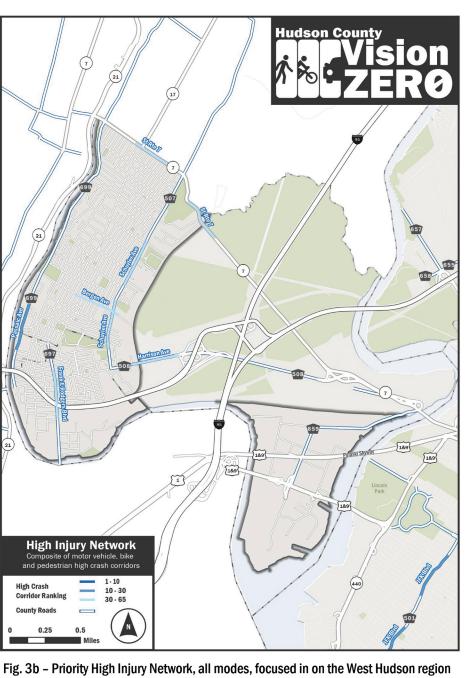
Note that the census tracts' borders are drawn along roads, meaning many crashes lie on the borders of the equity focus areas. While 15% of all KAB crashes occurred along the boundary of the equity priority areas, crashes are still overrepresented in these areas. Without considering boundary crashes, equity priority areas still account for 53% of all KAB crashes, whereas other areas only account for 31% of all KAB crashes or 46% if including crashes along their boundaries with equity focus areas.

The over-representation is likely driven by major roads like JFK Boulevard (CR 501) and Tonnelle Avenue (US 1&9), which run primarily through the equity focus

The areas identified with a higher concentration of underserved populations were then prioritized while identifying the focus corridors (see Focus Corridors) for transportation investment. The composite equity scores were combined with crash data to further refine the high-injury network and prioritize locations for additional analysis and project development.



Fig. 3a – Priority High Injury Network, all modes, focused in on the North Hudson region



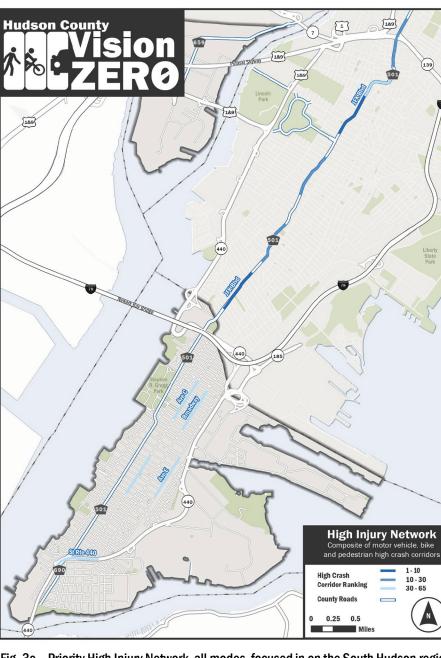


Fig. 3c – Priority High Injury Network, all modes, focused in on the South Hudson region

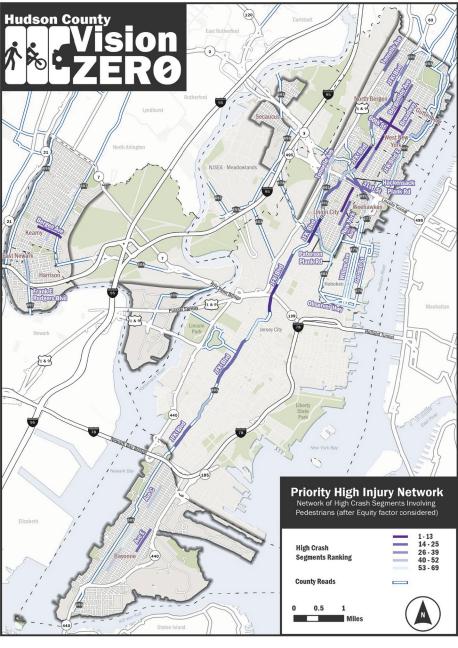


Fig. 5 – Priority High Injury Network, derived from crashes involving pedestrians

Map it!

Participants were asked to place a pin near their home, and 96 percent of respondents who placed a home pin indicated they live in Hudson County. The distribution of home pins demonstrates that we received feedback on transportation challenges, opportunities, and safety concerns from residents throughout the entire County. As part of the survey's mapping exercise, participants placed 1,729 map pins highlighting location-specific concerns related to various transportation modes within the study area. The majority of these pins were concentrated along County roads, including John F. Kennedy Boulevard (between Communipaw Avenue and Bleecker Street), Paterson Avenue, and the 14th Street Viaduct in Hoboken; Park Avenue and John F. Kennedy East in Weehawken; Avenue E in Bayonne; Kearny Avenue in Kearny; and Frank E. Rodgers Boulevard in Harrison.

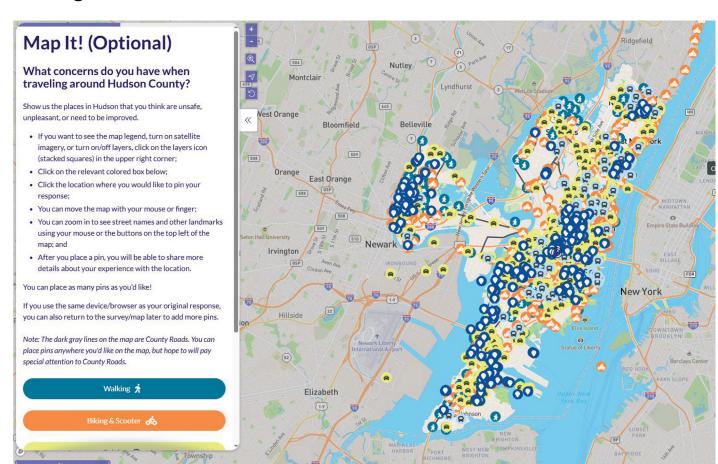


Fig. 6 – Online Map Survey interface allowed users to drop pins commenting on various classes of suggested improvements

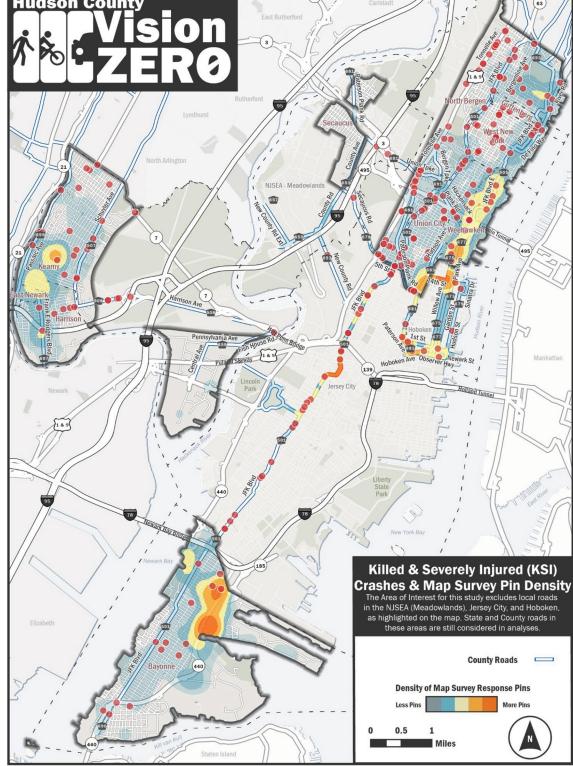


Fig. 7 - KSI Crashes point data overlaid atop map survey responses density surface

Survey & Map Tool

The public outreach process featured an online survey and an interactive map to collect insights into the current and future transportation demand, desired street and/or safety improvements, and anticipated transportation priorities in Hudson County. The survey collected information about participants' current travel habits, their preferred modes of travel for the future, and their perceived safety while using these modes. An interactive mapping component allowed participants to pinpoint location-specific concerns and other site-specific opportunities. The survey included optional demographics questions and was available in six languages: English, Spanish, Hindi, Arabic, Chinese, and Portuguese. Ultimately, the online survey and map yielded 1,720 validated responses.



Fig. 8 – All modes HIN segments, ranked, overlaid atop map survey responses density surface

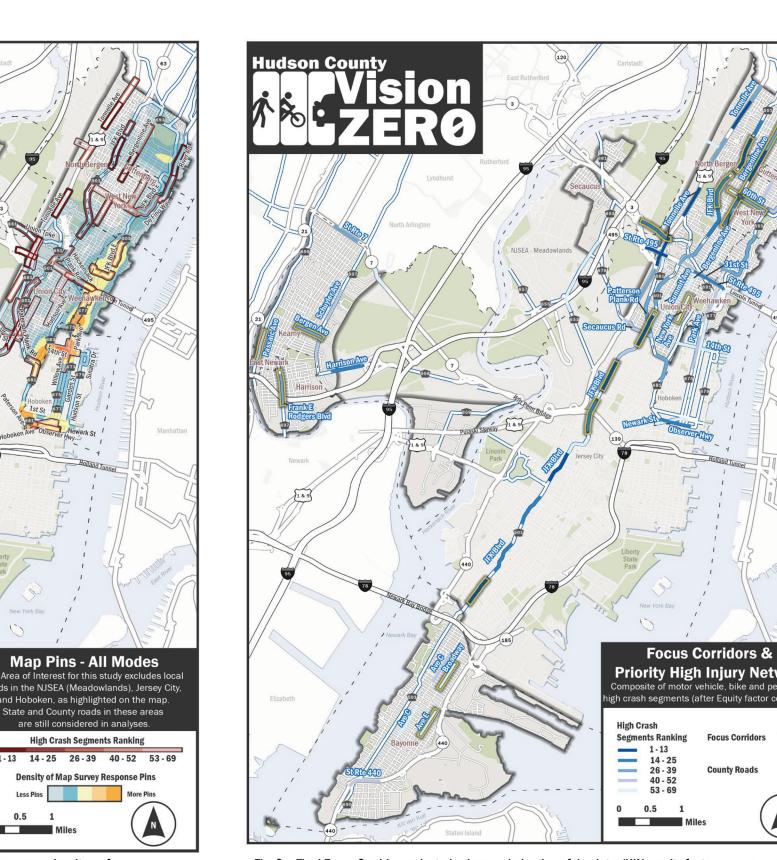


Fig. 9 - Final Focus Corridors selected using a culmination of the data (HIN, equity factors, survey responses)

Focus Corridors

Once the final High Injury Network (HIN) was established, the team developed a set of criteria to identify focus corridors. These priority corridors were selected for further analysis and matched with proposed safety countermeasures from the Countermeasures Toolkit. The goal of this effort is to lay the groundwork for practical traffic safety solutions at these priority locations, ensuring efficient resource allocation and effective intervention strategies.

The following additional criteria were utilized to identify the focus corridors: • Outreach Identification: Segments along roads identified through the outreach process • HIN Overlap: Segments overlapping one or more HINs (All Modes, Pedestrian, and Bicycle) • New KSI: The crash data from 2022-2024 was not available during the initial HIN development due to incomplete reporting. Any segments that had severe or fatal crashes in 2022, 2023 or 2024 were prioritized

.All three criteria were applied to the three Priority HINs to identify focus corridors for each. Priority HIN Segments which met all three criteria, and some that met two of three but had significant crashes, were added to a list of focus corridors for each HIN. The fourth criteria, which was applied after this process, was to ensure the focus corridors were geographically distributed in Hudson County. Some roadways in the core of the county see more traffic and more crashes, but as a county-wide effort it is important to ensure all municipalities are represented if possible. After including all segments meeting all the criteria and including at least one segment from each municipality in Hudson County, a final list of 19 corridors was created.









