

# Way2Go Warwick

Mobility and Safety Improvements for a  
More Walkable and Accessible Community

## Village of Warwick Transportation Safety Action Plan

Revision History		
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# Introduction

## Executive Summary

The Transportation Safety Action Plan presented herein offers a comprehensive overview of the transportation and pedestrian safety challenges faced by the Village of Warwick. This Plan serves as a valuable resource as the Village seeks funding opportunities to address these critical issues. With a focus on community feedback and input, the Safety Action Plan summarizes the key challenges, highlights their significance, and provides guidance on prioritization.

Warwick's current transportation and pedestrian infrastructure pose significant obstacles, hindering accessibility, safety, and overall quality of life for residents. Moreover, these challenges impact economic competitiveness and growth, limiting tourism potential and inhibiting the involvement of minority, woman, and veteran-owned businesses in infrastructure projects.

Warwick's transportation infrastructure inadequacies are apparent in the lack of crosswalks, curbs, curb ramps, and sidewalks, particularly in spatially constrained areas. This deficiency undermines connectivity and mobility, limiting options for non-motorized travel and disproportionately affecting underrepresented groups and those living in remote areas. Enhancing pedestrian safety is a key priority, with a focus on improving streets leading to the downtown area and enhancing pedestrian and bicycle circulation throughout the Village.

To address these challenges, the Village has developed a comprehensive plan that encompasses streetscape improvements, intersection enhancements, corridor improvements, and the integration of existing and proposed facilities, trails, parks, and sidewalks into a comprehensive Active Transportation Plan. These initiatives prioritize pedestrian and bicycle infrastructure, aiming to create a more accessible and safe transportation system. Additionally, reducing vehicular traffic speeds, implementing design features that distinguish village roads from rural highways, and conducting parking studies are integral components of the plan.

The Village of Warwick recognizes the importance of intersection improvements to enhance the safety and mobility of all road users. Measures such as crosswalks, curb extensions, timed countdown signals, and proper signage are being implemented to improve visibility, shorten crossing distances, and enhance overall intersection safety.

Review of contributing factors for crashes resulting in injury in and immediately adjacent to the Village of Warwick over the last 15 years indicates that the vast majority of crashes for which causes are known (76-percent) involve driver inattention, failure to yield, speeding, improper passing, intoxication, and other avoidable driver behavior-related factors. This points to the need for interventions that increase attention and modify the behaviors of drivers entering,

exiting, and within the Village, as well as reducing vehicle miles traveled per person as possible (such as improving access and usage of transit and Dial-A-Bus opportunities).

Obtaining grant funding is crucial for the Village of Warwick as a small community with limited resources. With the majority of taxpayer funds allocated to ongoing activities, securing grants becomes essential to support capital improvement projects

The grant funding sought will support critical initiatives aimed at addressing transportation and pedestrian safety challenges. It will enable the Village to enhance infrastructure, implement traffic calming measures, and develop innovative strategies for parking management and accessibility. Moreover, the funding will support the creation of inviting public spaces, flexible outdoor areas, and passive use areas in parks and linear corridors that can help separate pedestrians and bicyclists from vehicles and encourage other modes of transportation, while fostering a sense of community and improving the overall quality of life for Warwick residents.

By leveraging grant funding, the Village of Warwick will strengthen its commitment to improving transportation safety, promoting active transportation, and enhancing the quality of life for all who reside or visit the Village. The proposed initiatives align with the Village's comprehensive approach to address these challenges, which includes community engagement, ongoing assessment, and collaboration with stakeholders.

This Safety Action Plan underscores the Village's vision of a vibrant, accessible, and safe community that thrives economically while prioritizing equity, sustainability, and a high quality of life for its residents.

## ***Way2Go Warwick: Mobility and Safety Improvements for a More Walkable and Accessible Community***

The Village has embraced the comprehensive initiative titled "Walkable Warwick: Complete Streets to Basic Needs" to underscore the significance of fostering a pedestrian-friendly environment that fulfills the fundamental requirements of the community. This approach recognizes that a walkable Village not only enhances safety and accessibility but also yields numerous benefits, including improved public health, heightened economic vitality, strengthened social connections, and a more sustainable and dynamic community. By integrating this initiative into all aspects of Village operations, it underscores the unwavering commitment to crafting a walkable and livable Village that prioritizes the well-being and quality of life for every resident.

The Village of Warwick faces notable challenges concerning transportation and pedestrian safety, which profoundly impact the community, infrastructure, and economic development. These challenges encompass inadequate and outdated transportation infrastructure, limited accessibility and safety for pedestrians, obstacles to economic competitiveness and tourism growth, and the imperative to revitalize the main street while promoting equitable land-use productivity. Additionally, the Village must address the maintenance requirements of existing

infrastructure, engage a diverse array of stakeholders, coordinate with other projects, and explore innovative approaches to project delivery and financing. By diligently addressing these challenges, the Village aspires to enhance the quality of life, foster sustainability, and cultivate a vibrant and prosperous community that caters to the needs of all residents.

## Plan development process

### Planning Structure

#### *Planning: Comprehensive Plan Committee*

The Comprehensive Plan Committee, appointed by the Village Board, comprises a diverse group of residents representing various areas within the Village of Warwick. This committee plays a vital role in shaping the Village's future direction through the development of a Comprehensive Plan. The Comprehensive Plan establishes goals and recommended actions that guide the Village government in setting priorities. Extensive community engagement was conducted during regular meetings in 2021 and 2022, where resident feedback was identified as a prominent theme, particularly regarding transportation and pedestrian safety issues.

Leveraging the thorough and inclusive planning process led by the Comprehensive Plan Committee, the Village utilized their expertise and community input to develop the Comprehensive Plan, forming the foundation of the Safety Action Plan. To ensure a comprehensive approach, the Committee enlisted consulting services from Alta Engineering for a transportation study as part of the process (see Appendix).

The Comprehensive Plan Committee, along with its recent and comprehensive planning process, serves as the essential structure for providing the necessary planning framework for the Safety Action Plan. This committee's diligent efforts, community engagement, and incorporation of consulting services, including the transportation study, ensure that the concerns and priorities of the community are thoroughly reflected.

#### *Implementation and Monitoring: Village Board*

The Village Board, consisting of the Mayor and four Trustees, serves as the governing body responsible for implementing the recommendations and findings resulting from the Comprehensive Plan. The Village Board assumes a crucial role in driving the execution and monitoring the progress of the Safety Action Plan. With its authority and oversight, the Village Board plays a vital role in ensuring the successful implementation of the Safety Action Plan, making it an imperative component for its effective execution and ongoing monitoring.

# Engagement

## Public Engagement Process and Feedback Loop

The engagement process for the formation of the Safety Action Plan was a robust and inclusive endeavor, driven by a commitment to community involvement and feedback. Through a series of meetings, focus groups, and online surveys, the Village actively sought input from residents, businesses, civic organizations, and diverse community groups. The sessions provided valuable opportunities for dialogue, where participants shared their perspectives, concerns, and aspirations regarding transportation and pedestrian safety.

The engagement process was designed to foster a continuous feedback loop, ensuring that the community's voice remained central to the planning and decision-making. Feedback gathered during meetings and focus groups, as well as insights from the online community survey, were meticulously analyzed and incorporated into the development of the Safety Action Plan. This iterative approach allowed for a dynamic exchange of ideas, enabling the Village to align the plan with the specific needs and priorities of the community.

The engagement efforts were documented and summarized in the Comprehensive Plan, providing transparency and accountability in the process. Residents can access the appendices of the Comprehensive Plan to review the details of the meetings, focus groups, and the results of the community survey. The Village has continued to follow up on this feedback, as well as new data gathering, through Board working sessions held open to the public, as well as through regular Village Board meetings, highlighting the importance of this topic to the community. This commitment to transparency reinforces the Village's dedication to inclusive governance and ensuring that the Safety Action Plan truly reflects the concerns and aspirations of the community.

By establishing an effective feedback loop, the engagement process has played a pivotal role in informing the development of the Safety Action Plan. It has empowered community members, fostering a sense of ownership and collective responsibility for enhancing transportation and pedestrian safety in the Village of Warwick.

# Partnerships

## Intergovernmental Cooperation

### **New York State Department of Transportation (NYS DOT)**

Regular communication and collaboration with NYS DOT regarding improvements to State Route 94 and State Route 17A, the main State roads in the Village.

Planned repaving of both State roads in 2024, with special considerations for ADA accessibility, including: Installation of accessible curb ramps at key intersections, construction of tactile paving to aid visually impaired pedestrians, implementation of audible pedestrian signals for safe crossings.

### **Town of Warwick**

Recognizing the Village as a "downtown" area for the greater Town of Warwick, fostering cooperation on streetscape improvements. Collaborative efforts with the Town on previous grant applications and ongoing coordination to ensure positive outcomes for the entire community. Future collaboration to expand transportation safety planning townwide.

### **Warwick Valley Central School District (WVCSD)**

Cooperation with the WVCSD to address transportation and pedestrian needs of students attending the schools in close proximity to the Village.

Collaboration to establish safe routes to school for students walking to and from Park Avenue Elementary School (within Village boundaries), as well as students from the middle school and high school walking along West Street in the Village.

### **Orange County**

The Village collaborates with Orange County in addressing transportation and pedestrian challenges related to Orange County-owned streets and bridges within the Village.

Recent collaboration includes the overhaul of the Bank Street bridge, which was previously closed due to unsafe conditions. The partnership resulted in the reopening of the bridge to both vehicles and pedestrians, with improved sidewalks.

In 2023, the Village receives assistance from Orange County through the Community Block Development Grant to replace deteriorating sidewalks in the Village. While this partnership is beneficial, there is still a significant need for further improvements on many streets.

The ongoing cooperation with Orange County is essential to prioritize areas of need, seek grant funding opportunities, and enhance sidewalks throughout the Village. Given Warwick's status as a destination within Orange County, this collaboration is crucial in creating a safe and accessible environment for residents and attracting tourists.

## First Responder Organizations

The **Warwick Police Department** actively supports the Village's initiative for safe streets. Collaboratively, the Village and Police utilize radar speed capture devices to gather data on speeding metrics in various Village roads. This data is shared with the Police to assist in directing enforcement activities effectively.

The Police Department plays an active role in the community, participating in events like the annual National Night Out held in the Village. These initiatives aim to foster goodwill and strengthen the relationship between the Police and the community.

The Village Board consults the Police Department on all transportation and mobility safety issues, seeking their expertise to ensure the Village's plans align with public safety objectives.

The **Warwick Fire Department** also contributes to the Village's safety efforts by collaborating on events such as the annual Fireman's Carnival. The Village and Fire Department work together to ensure safe access and parking arrangements for the event, aligning with the overarching goals of the Safe Streets to Basic Needs initiative.

## Community Partners

One example of a community partner that the Village collaborates with is **Wickham Works**, a non-profit dedicated to building community through the arts. This organization hosts numerous events in the Village, including parades and gatherings in public parks. They actively participate in discussions surrounding safe pedestrian access and transportation to ensure the community can safely enjoy these events.

The **Warwick Community Center** is another important community partner. They organize parades and events in public spaces, and their involvement in conversations regarding safe pedestrian access is crucial. Working together, the Village and the Warwick Community Center prioritize the safety of participants and attendees, recognizing the importance of creating a secure environment for public events.

### Chamber of Commerce

Collaboration with the Chamber of Commerce, which plays a vital role in organizing significant events in the Village, including the Farmers Market and Apple Fest.

Recognizing the importance of the Farmers Market as a crucial food source for Village residents due to the absence of grocery stores, the Village cooperates with the Chamber to ensure a safe and accessible pedestrian environment for residents to access this essential resource.

With events like Apple Fest drawing a large number of visitors and vehicles (50,000+ visitors in a single weekend), the Village works closely with the Chamber to manage the increased demand for parking and prioritize pedestrian safety, creating an environment that supports local businesses and enhances the vibrancy of the downtown area.

### **Dial-a-bus**

Warwick Dial-a-bus is a system of buses run by the Town of Warwick offering low cost transportation to all residents. Local service covers the entire 104.87 square foot miles of the Town. This service includes regular daily runs to grocery stores, Houses of Worship, doctors offices and the local hospital. There are twenty four regular stops and reservations for added stops for any destination within the town limits. The Wallkill, Monroe and Goshen service lines provide transportation to neighboring towns which have larger shopping areas, doctors offices, hospital and social services in the County Seat of Goshen. The Village of Warwick and Dial-a-bus have been collaborating to increase access to transit opportunities for those who need and desire them.

### **Intra-Government Cooperation**

The Village Board maintains a close working relationship with the **Department of Public Works (DPW)** to implement various safety measures. This collaboration involves activities such as installing radar speed capture devices, safety signage, barricades for public events, sidewalk repairs, and street maintenance. Regular meetings between the Village Board and the DPW Supervisor are held to prioritize safety-related matters and address concerns raised by Village residents. However, due to limited resources, the Village recognizes the need to seek external funding to tackle significant transportation safety challenges effectively.

The Village also closely collaborates with the **Building and Planning department**. This department serves as the Village's "eyes and ears," identifying potential issues related to buildings and infrastructure, including sidewalk disrepair. By maintaining a strong partnership with the Building and Planning department, the Village Board remains informed and can proactively address safety concerns to ensure the well-being of the community..

# Plan Monitoring and Future Plan Development

## Tracking to Implementation

The Village of Warwick recognizes the importance of ongoing monitoring and evaluation to ensure the successful implementation of the Safety Action Plan. To facilitate this, the plan will be updated every five years to reflect evolving needs and priorities.

Annual progress updates will be provided to assess the advancements made towards achieving the plan's objectives. These updates will serve as a check-in to review the implementation status, identify challenges, and make any necessary adjustments to stay on track.

The tracking process will be conducted at multiple levels, including monitoring progress by initiative, overall goals, and safety metrics. By employing a comprehensive tracking system, the Village can assess the effectiveness of its actions, measure outcomes, and ensure accountability in improving transportation safety and pedestrian infrastructure.

## Where to Find Progress Updates

The Village of Warwick is committed to ensuring transparency and accessibility regarding the progress of the Safety Action Plan. Regular updates will be provided through various channels to keep the community informed.

The Village website will serve as a central hub for accessing progress updates. Residents, stakeholders, and interested parties can visit the designated section on the website to find the latest information on the implementation of the plan, including achievements, milestones, and ongoing initiatives.

Board meeting minutes will also provide a platform for sharing progress updates. During Village Board meetings, dedicated agenda items will be allocated to discuss the status of the Safety Action Plan, allowing for public engagement and feedback.

Additionally, an annual working session will be conducted to gather input from community members and stakeholders. This interactive session will provide an opportunity to review progress, address concerns, and generate ideas for future improvements.

To ensure easy access and widespread dissemination of progress updates, relevant information will be regularly posted on the Village website, including key achievements, upcoming projects, and ongoing initiatives. This proactive approach will facilitate community engagement and foster a sense of shared responsibility for the success of the Safety Action Plan.

## Scope of this Plan and Ambitions for the Future

The scope of this Safety Action Plan encompasses all the recommended actions that have been identified through extensive research, community engagement, and the expertise of various stakeholders. It reflects a comprehensive approach to address transportation and pedestrian safety challenges in the Village of Warwick.

Looking to the future, the Village recognizes the need to leverage higher-level expertise and conduct a thorough evaluation of the existing plan. While substantial groundwork has been laid, the Village acknowledges the importance of engaging Transportation Planners to provide valuable insights and identify any gaps or areas for improvement.

To further advance the objectives of the Safety Action Plan, the Village is committed to ongoing community engagement and participation. Continued dialogue with residents, stakeholders, and experts will enable the identification of additional projects and the refinement of existing initiatives.

The Village also plans to implement demonstration projects as a means of testing and validating ideas before broader implementation. These pilot projects will serve as valuable learning experiences, allowing the Village to assess the effectiveness of different strategies and replicate successful models in other areas as appropriate.

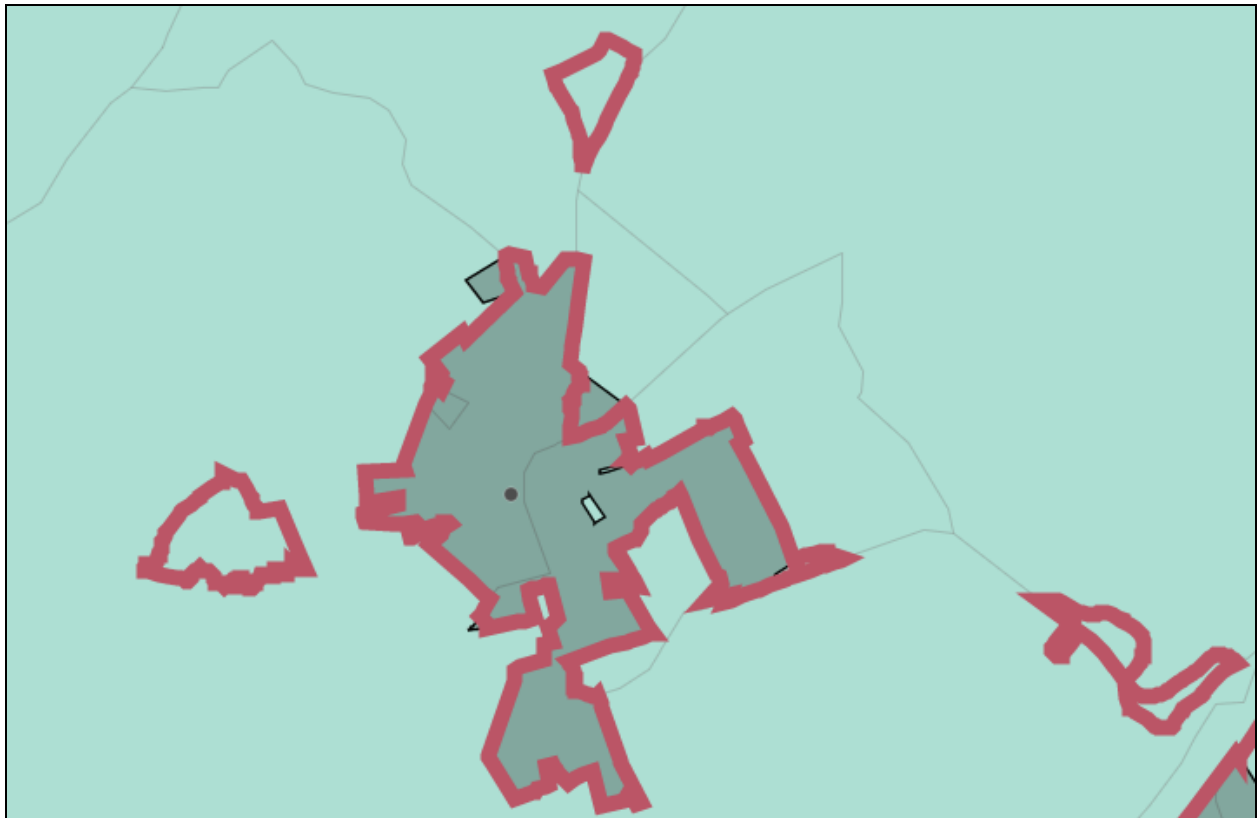
It is essential for the Village to seek external expertise to ensure a comprehensive and well-informed approach to transportation and pedestrian safety. By collaborating with Transportation Planners, the Village aims to identify areas where improvements can be made, address any gaps in the current plan, and optimize the overall effectiveness of the initiatives.

While this Safety Action Plan represents a significant step forward, the Village recognizes the importance of continuous improvement and adaptation. By seeking expert guidance, engaging in ongoing evaluation, and fostering collaboration, the Village of Warwick is committed to enhancing the plan's scope and ambitions for the future, ultimately creating a safer and more vibrant community for all residents.

# Study Area

Transportation data does not always align perfectly with jurisdictional boundaries. As such, the study area encompasses four census tracts that intersect with the Village of Warwick, as outlined below. Wherever analyses were possible within or immediately adjacent to the Village's jurisdictional boundaries, such evaluations were prioritized to help with development of solutions and support decision making in the best interest of the Village.

The Village of Warwick lies within one Urban Zone Area (UZA) and is part of four census tracts, according to USDOT's [Equitable Transportation Community Explorer](#). In the image below, the dark gray area (except for the lower right hand corner) is the Village jurisdictional boundaries, the red outline is the UZA, and the light gray lines delineate census tracts. Each of these delineations are described in greater detail below.



*Figure 1: Village of Warwick (dark grey) shown overlaid with the Urban Zone Area (outlined in red) and intersecting four census tracts (green with light grey lines)*

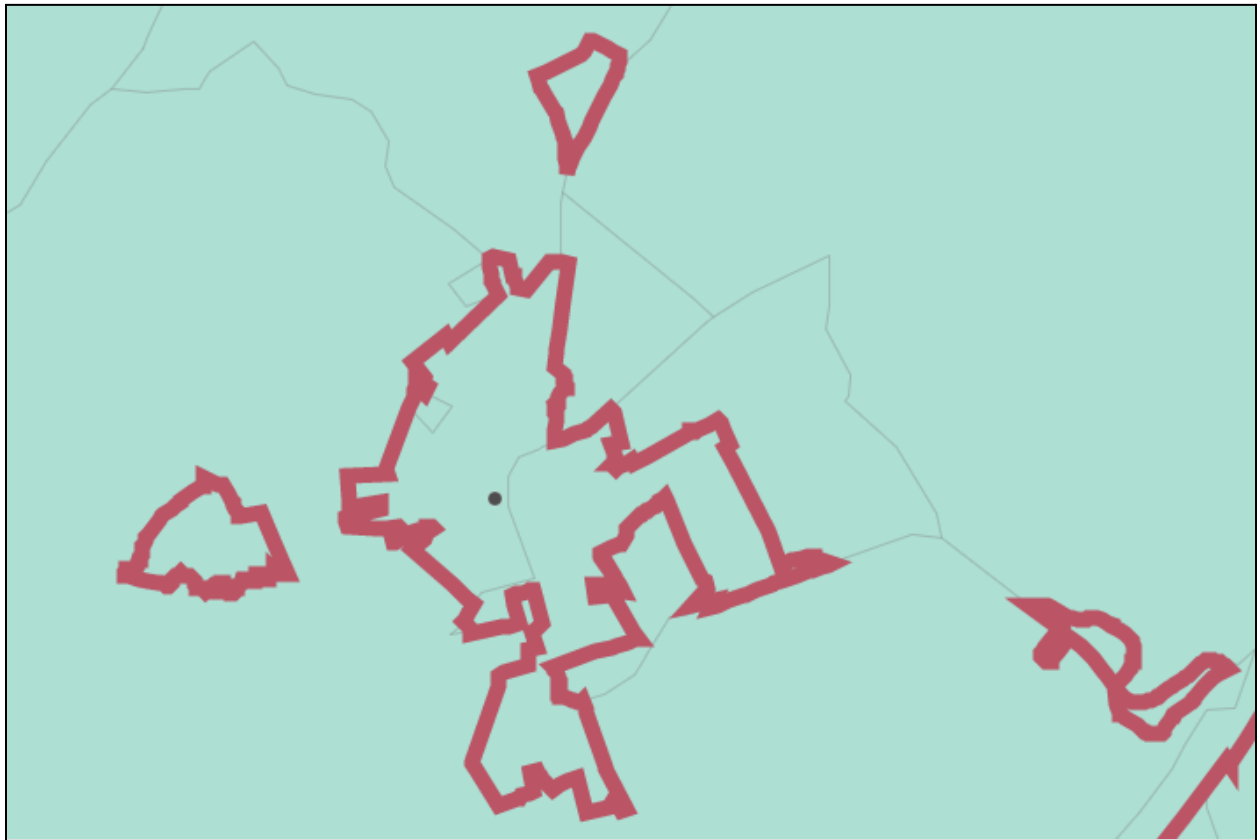
*Source: [USDOT Equitable Transportation Community Explorer](#)*

## Study Area Delineations

The below includes key statistics provided by USDOT for each study area delineation: urban zone area and the four census tracts.

### Urban Zone Area

<b>Urban Zone Area Name</b>	<b>Warwick, NY</b>
<b>Population</b>	<b>7,084</b>
<b>Housing Units</b>	<b>3,394</b>



*Figure 2: Urban Zone Area associated with the Village of Warwick, NY*

## Tract 1: Tract 36071014602 - Orange County, New York

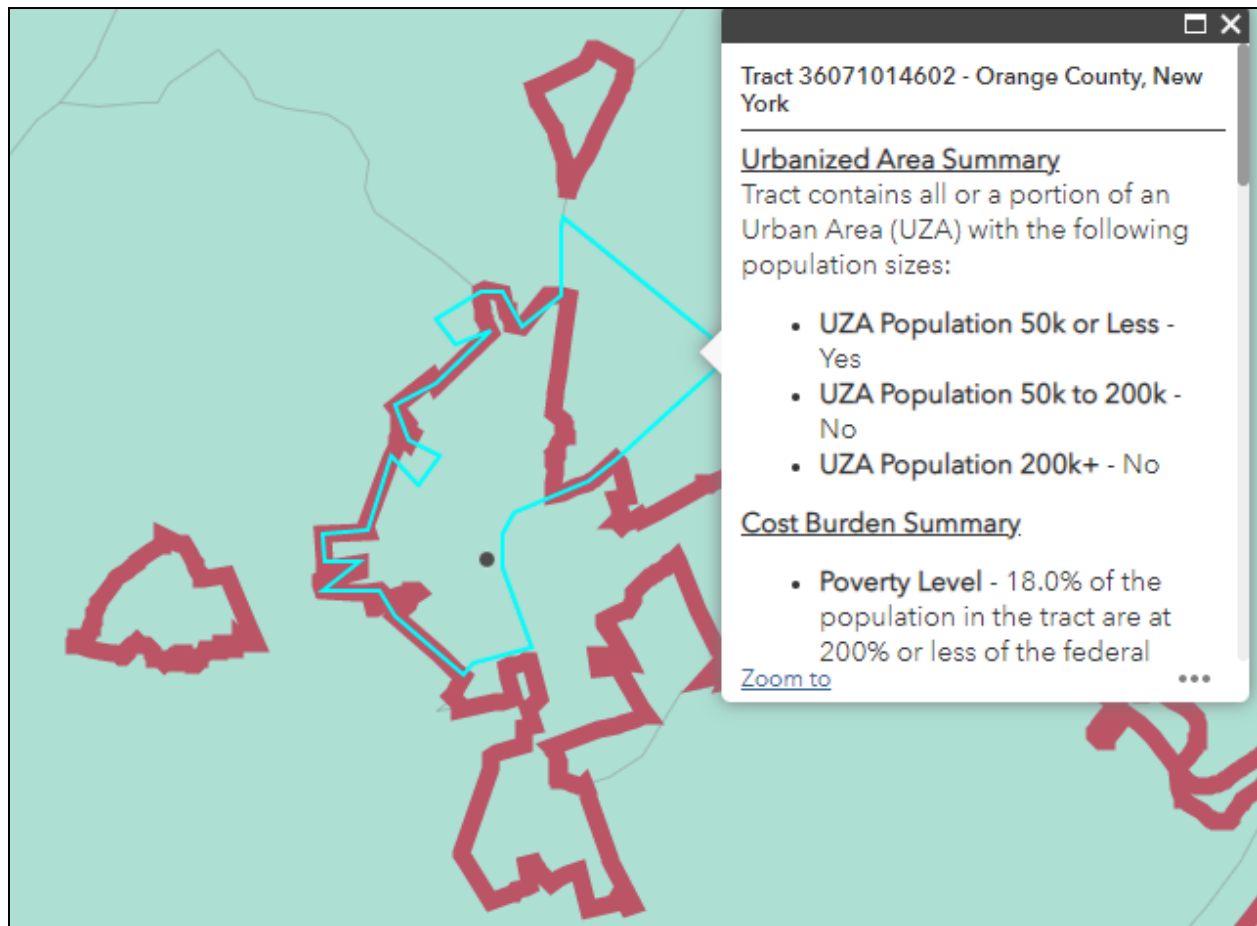


Figure 3: Tract 36071014602

### Urbanized Area Summary

Tract contains all or a portion of an Urban Area (UZA) with the following population sizes:

- **UZA Population 50k or Less** - Yes
- **UZA Population 50k to 200k** - No
- **UZA Population 200k+** - No

### Cost Burden Summary

- **Poverty Level** - 18.0% of the population in the tract are at 200% or less of the federal poverty level.
- **Median Household Income** - The median household income in this tract is \$114,167.
- **Transportation Cost Burden** - The average household in this tract spends 7.17% of their household income on transportation.

- **Estimated Cost of Transportation** - The average household in this tract spends an estimated \$11,930 on transportation.
- **Housing Cost Burden** - 34.90% of households in this tract spend more than 30% of their income on housing.

### **Access Burden Summary**

- **Number of Households with no Personal Vehicle** - An estimated 5.90% of households within this tract do not own vehicles.
- **Transit Availability** - Transit availability in this tract is not reported.
- **Estimated Drive Distances** - Estimated drive distances to various points of interest are summarized below:
  - Adult Education - 25 minutes
  - Grocery Stores - 5 minutes
  - Medical Facilities - 2 minutes
  - Parks - 3 minutes
- **Points of Interest within a 15 Minute Walk?**
  - Adult Education - No
  - Grocery Stores - No
  - Medical Facilities - Yes
  - Parks - No
- **Broadband Access** - 14.3% of households in this tract lack internet access.

### **Safety Summary**

Traffic fatalities estimated between 2017-2021 as reported by the fatality analysis reporting system.

- **Total Fatalities** - **[Numbers not reported]**
- **Total Motorist Fatalities** - **[Numbers not reported]**
- **Total Cyclist Fatalities** - **[Numbers not reported]**
- **Total Pedestrian Fatalities** - **[Numbers not reported]**
- **Total Other Fatalities** - **[Numbers not reported]**

## Tract 2: Tract 36071014601 - Orange County, New York

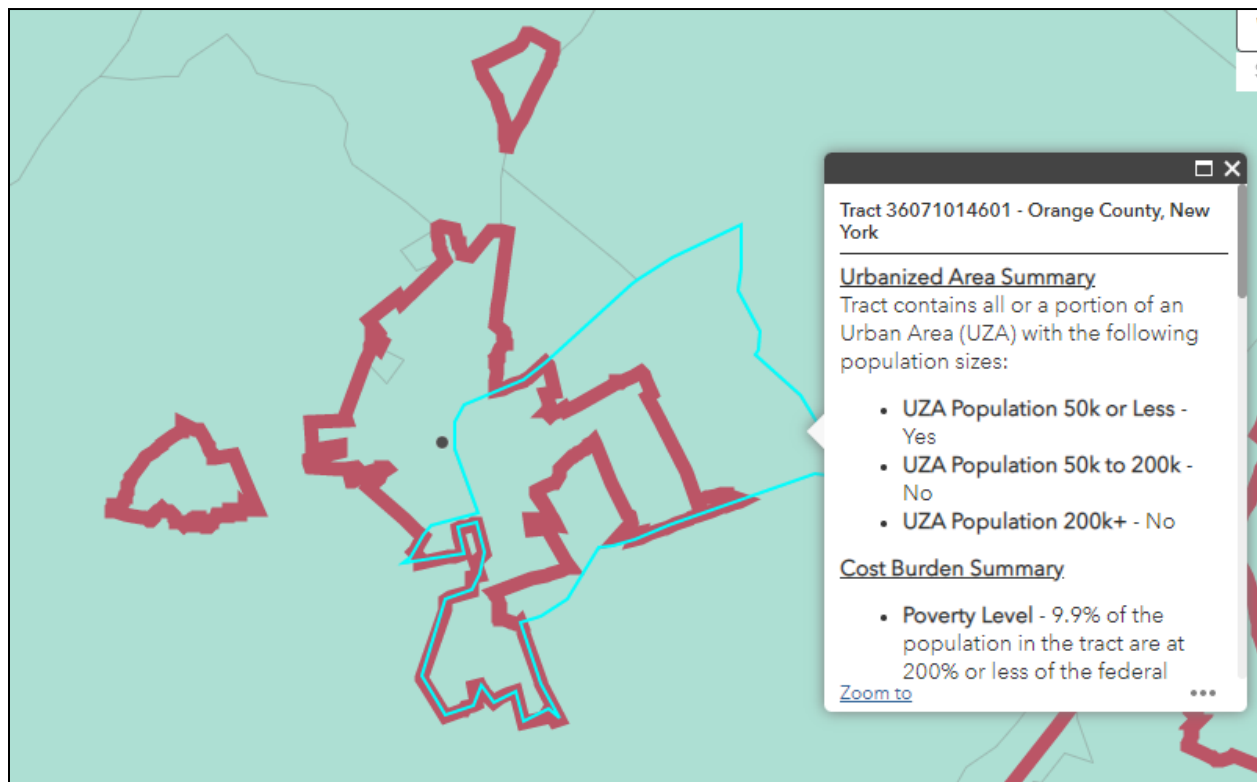


Figure 4: Tract 36071014601

### Urbanized Area Summary

Tract contains all or a portion of an Urban Area (UZA) with the following population sizes:

- **UZA Population 50k or Less** - Yes
- **UZA Population 50k to 200k** - No
- **UZA Population 200k+** - No

### Cost Burden Summary

- **Poverty Level** - 9.9% of the population in the tract are at 200% or less of the federal poverty level.
- **Median Household Income** - The median household income in this tract is \$81,466.
- **Transportation Cost Burden** - The average household in this tract spends 10.02% of their household income on transportation.
- **Estimated Cost of Transportation** - The average household in this tract spends an estimated \$10,903 on transportation.

- **Housing Cost Burden** - 34.72% of households in this tract spend more than 30% of their income on housing.

### **Access Burden Summary**

- **Number of Households with no Personal Vehicle** - An estimated 11.60% of households within this tract do not own vehicles.
- **Transit Availability** - Transit availability in this tract is not reported.
- **Estimated Drive Distances** - Estimated drive distances to various points of interest are summarized below:
  - Adult Education - 27 minutes
  - Grocery Stores - 5 minutes
  - Medical Facilities - 5 minutes
  - Parks - 3 minutes
- **Points of Interest within a 15 Minute Walk?**
  - Adult Education - No
  - Grocery Stores - No
  - Medical Facilities - No
  - Parks - No
- **Broadband Access** - 12.3% of households in this tract lack internet access.

### **Safety Summary**

Traffic fatalities estimated between 2017-2021 as reported by the fatality analysis reporting system.

- **Total Fatalities** - [Numbers not reported]
- **Total Motorist Fatalities** - [Numbers not reported]
- **Total Cyclist Fatalities** - [Numbers not reported]
- **Total Pedestrian Fatalities** - [Numbers not reported]
- **Total Other Fatalities** - [Numbers not reported]

### Tract 3: Tract 36071014502 - Orange County, New York

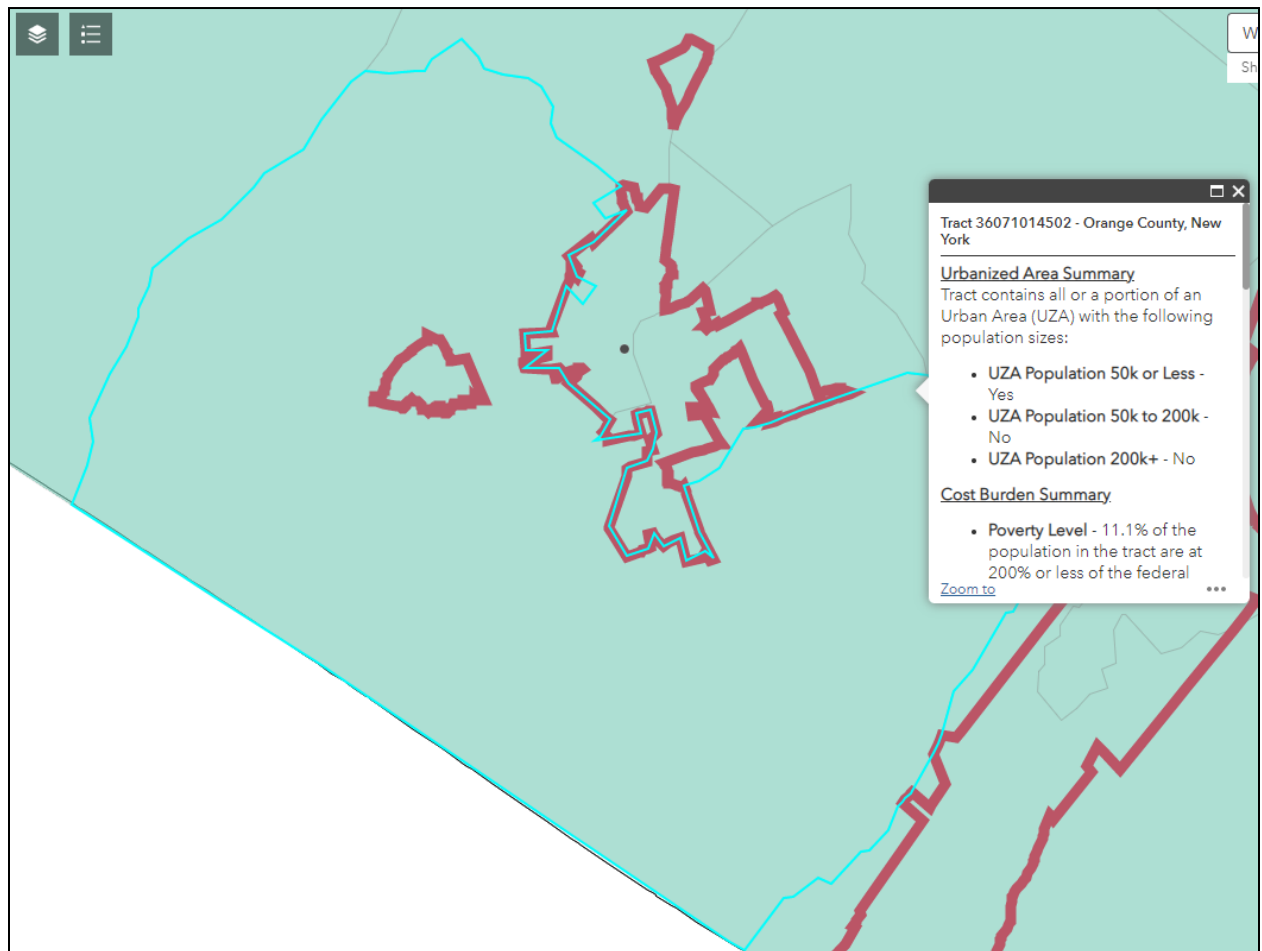


Figure 5: Tract 36071014502

#### Urbanized Area Summary

Tract contains all or a portion of an Urban Area (UZA) with the following population sizes:

- **UZA Population 50k or Less** - Yes
- **UZA Population 50k to 200k** - No
- **UZA Population 200k+** - No

#### Cost Burden Summary

- **Poverty Level** - 11.1% of the population in the tract are at 200% or less of the federal poverty level.
- **Median Household Income** - The median household income in this tract is \$152,883.
- **Transportation Cost Burden** - The average household in this tract spends 5.92% of their household income on transportation.

- **Estimated Cost of Transportation** - The average household in this tract spends an estimated \$13,362 on transportation.
- **Housing Cost Burden** - 39.72% of households in this tract spend more than 30% of their income on housing.

### **Access Burden Summary**

- **Number of Households with no Personal Vehicle** - An estimated 8.50% of households within this tract do not own vehicles.
- **Transit Availability** - Transit availability in this tract is not reported.
- **Estimated Drive Distances** - Estimated drive distances to various points of interest are summarized below:
  - Adult Education - 28 minutes
  - Grocery Stores - 5 minutes
  - Medical Facilities - 4 minutes
  - Parks - 3 minutes
- **Points of Interest within a 15 Minute Walk?**
  - Adult Education - No
  - Grocery Stores - No
  - Medical Facilities - No
  - Parks - No
- **Broadband Access** - 10.9% of households in this tract lack internet access.

### **Safety Summary**

Traffic fatalities estimated between 2017-2021 as reported by the fatality analysis reporting system.

- **Total Fatalities** - 2
- **Total Motorist Fatalities** - 2
- **Total Cyclist Fatalities** - 0
- **Total Pedestrian Fatalities** - 0
- **Total Other Fatalities** - 0

## Tract 4: Tract 36071014400 - Orange County, New York

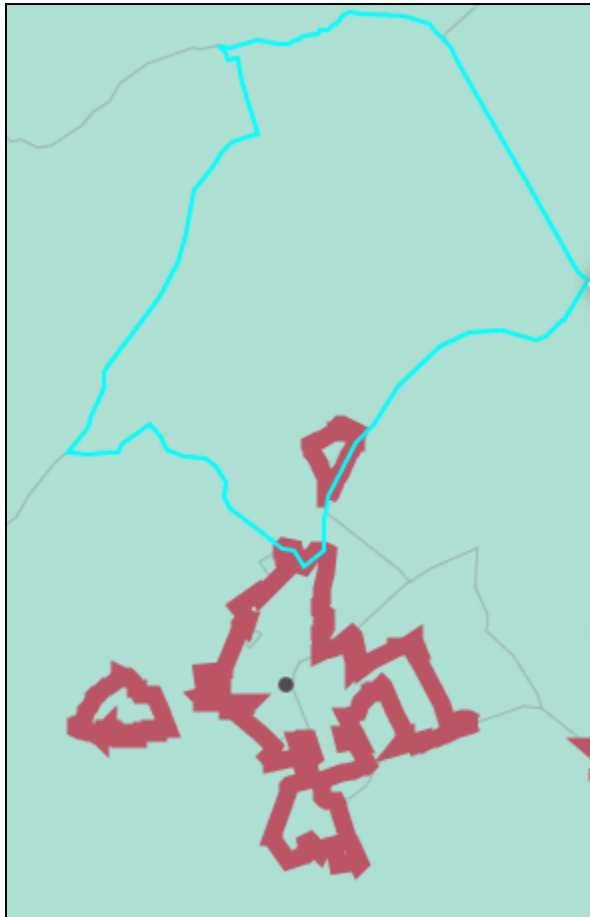


Figure 6: Tract 36071014400

### Urbanized Area Summary

Tract contains all or a portion of an Urban Area (UZA) with the following population sizes:

- **UZA Population 50k or Less** - Yes
- **UZA Population 50k to 200k** - No
- **UZA Population 200k+** - No

### Cost Burden Summary

- **Poverty Level** - 10.6% of the population in the tract are at 200% or less of the federal poverty level.
- **Median Household Income** - The median household income in this tract is \$103,795.
- **Transportation Cost Burden** - The average household in this tract spends 8.72% of their household income on transportation.

- **Estimated Cost of Transportation** - The average household in this tract spends an estimated \$12,394 on transportation.
- **Housing Cost Burden** - 30.47% of households in this tract spend more than 30% of their income on housing.

### Access Burden Summary

- **Number of Households with no Personal Vehicle** - An estimated 3.60% of households within this tract do not own vehicles.
- **Transit Availability** - Transit availability in this tract is not reported.
- **Estimated Drive Distances** - Estimated drive distances to various points of interest are summarized below:
  - Adult Education - 19 minutes
  - Grocery Stores - 5 minutes

- Medical Facilities - 3 minutes
- Parks - 2 minutes
- **Points of Interest within a 15 Minute Walk?**
  - Adult Education - No
  - Grocery Stores - No
  - Medical Facilities - No
  - Parks - No
- **Broadband Access** - 4.9% of households in this tract lack internet access.

### **Safety Summary**

Traffic fatalities estimated between 2017-2021 as reported by the fatality analysis reporting system.

- **Total Fatalities** - [Numbers not reported]
- **Total Motorist Fatalities** - [Numbers not reported]
- **Total Cyclist Fatalities** - [Numbers not reported]
- **Total Pedestrian Fatalities** - [Numbers not reported]
- **Total Other Fatalities** - [Numbers not reported]

## **Additional Study Area Statistics**

The USDOT Equitable Transportation Community (ETC) Explorer National Tool allows for the selection of specific jurisdictions, including the Village of Warwick. Nevertheless, this tool reports all four tracts in the study area as “Village of Warwick.” As such, the statistics in this section refer to the full study area.

### **Village Social Vulnerability**

According to USDOT’s Equitable Transportation Community (ETC) Explorer, [Understanding the Data](#):

**Social Vulnerability** is a measure of socioeconomic indicators that have a direct impact on quality of life. This set of indicators measure lack of employment, educational attainment, poverty, housing tenure, access to broadband, and housing cost burden as well as identifying household characteristics such as age, disability status and English proficiency.

According to USDOT, the Village of Warwick has particularly high social vulnerability in two key metrics: housing cost burden and age 65 and older. USDOT’s ETC Explorer provides the following explanation on each:

**Housing cost burden:** Communities with higher scores have a greater percentage of houses where the cost of housing is more than 30% of household income. When people spend a large portion of their income on housing, they have fewer resources to invest in other necessities like food, healthcare, and transportation. As a result, households may be unable to purchase cars or pay for public transportation, severely limiting their access to education, employment and other essential services.

**65 or older:** Communities with higher scores have a greater percentage of population aged 65 or older. This is an important consideration when assessing socioeconomic vulnerability, as older populations frequently face access barriers to healthcare and other essential services.

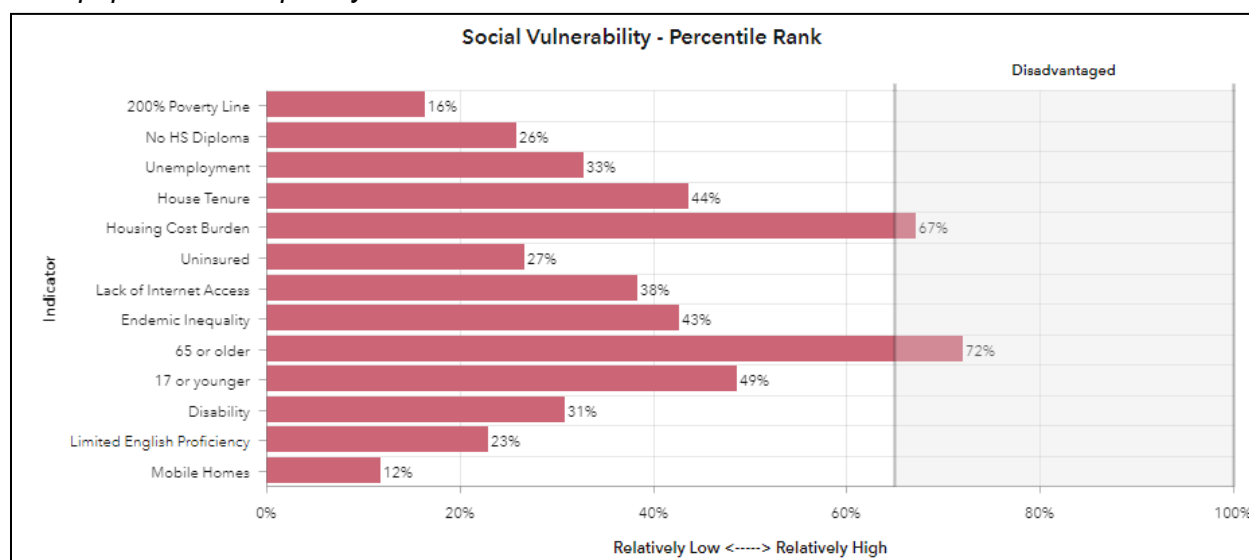


Figure 7: Social vulnerability across the four census tract Study Area, according to USDOT

Of Key Component Scores that USDOT tracks, the Village ranks highest in environmental burden and transportation insecurity. According to USDOT:

**Transportation Insecurity** occurs when people are unable to get to where they need to go to meet the needs of their daily life regularly, reliably, and safely. Nationally, there are well-established policies and programs that aim to address food insecurity and housing insecurity, but not transportation insecurity. A growing body of research indicates that transportation insecurity is a significant factor in persistent poverty.

**The Environmental Burden** component of the index includes variables measuring factors such as pollution, hazardous facility exposure, water pollution and the built environment. These environmental burdens can have far-reaching consequences such as health disparities, negative educational outcomes, and economic hardship.

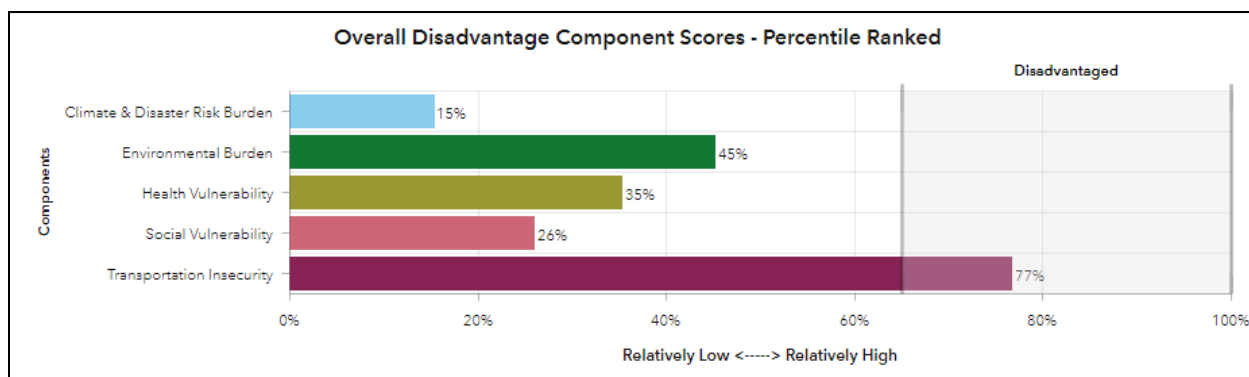


Figure 8: Disadvantage component scores across the Study Area, according to USDOT (Source: [ETC Explorer - National Results | US DOT Equitable Transportation Community \(ETC\) Explorer \(arcgis.com\)](#))

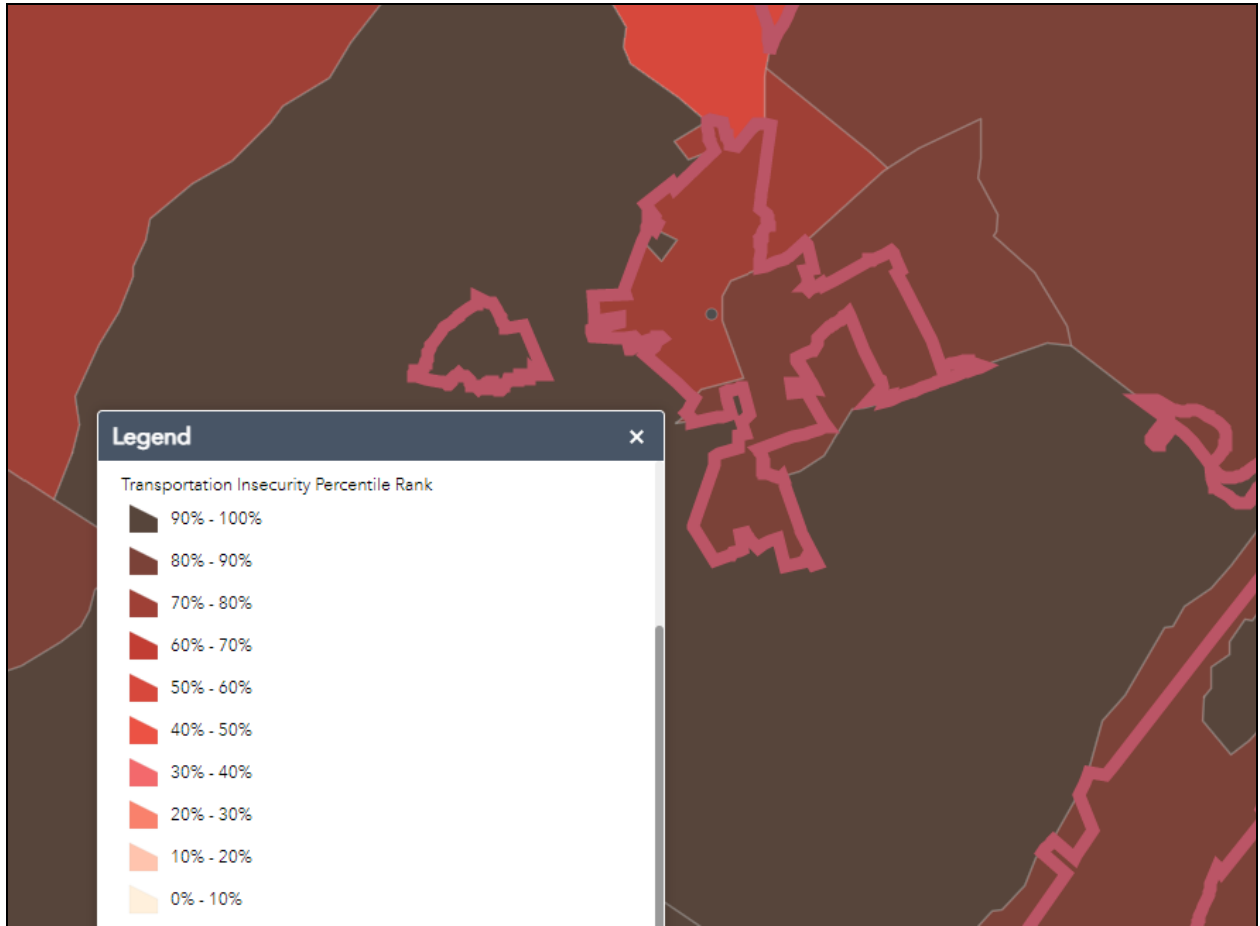
## Transportation Insecurity

According to USDOT's Equitable Transportation Community (ETC) Explorer, [Understanding the Data](#):

*Transportation Insecurity occurs when people are unable to get to where they need to go to meet the needs of their daily life regularly, reliably, and safely. Nationally, there are well-established policies and programs that aim to address food insecurity and housing insecurity, but not transportation insecurity. A growing body of research indicates that transportation insecurity is a significant factor in persistent poverty.*

- *Transportation Access- Communities with higher scores may experience longer commute times and difficulty traveling where they want to go via cars, walking and transit. Long commute times and limited access to personal vehicles or transit can create significant barriers to employment and resources.*
- *Transportation Cost Burden- Communities with higher scores spend a great percentage of household income on transportation, including transit costs; vehicle maintenance and insurance costs; gasoline and fuel, which leaves less money for housing, medical care and food potentially leading to households living in substandard housing with higher rates of chronic illness and obesity.*
- *Transportation Safety- Communities with higher score experience higher levels of fatalities per 100,000 persons related to motor vehicle crashes. For additional safety data please visit <https://cdan.dot.gov/query>*

The Village is in the 60-100th ranked national percentile for transportation insecurity, depending on the part of the Village.



*Figure 9: Transportation Insecurity Ranking (USDOT)*

The Village's highest source of transportation insecurity is transportation access, as demonstrated in Figure 10 below.

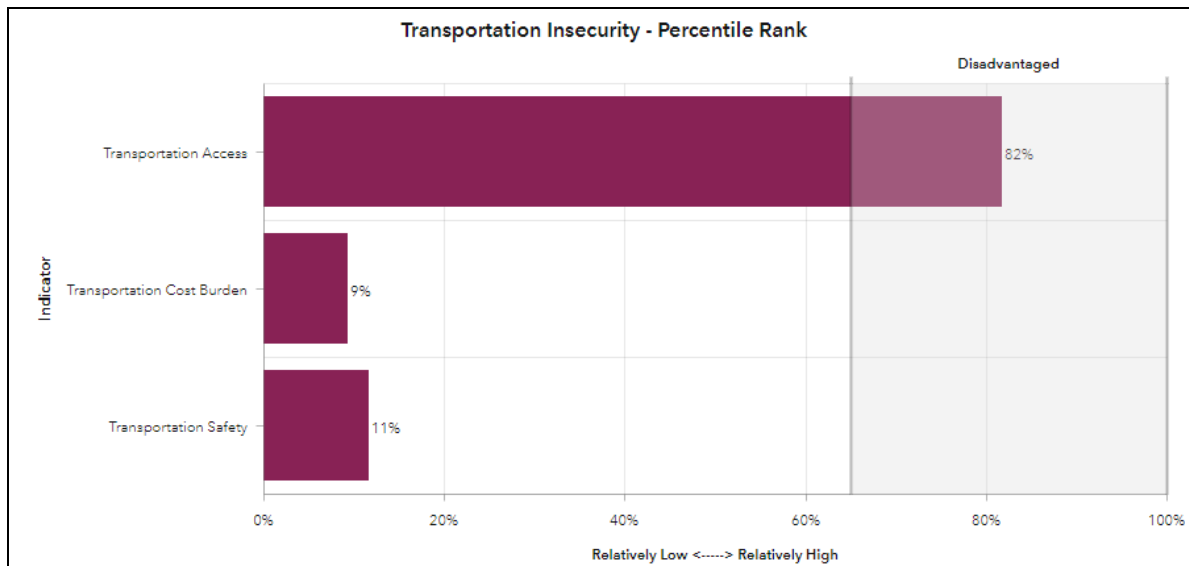


Figure 10: Transportation Insecurity Percentile Rank (Study Area, USDOT)

## Environmental Burden

The Village scores highest in Toxic Release Sites Proximity, Risk Management Sites Proximity and Impaired Surface Water, but is not classified as Disadvantaged in any of these areas.

**Toxics Release Sites Proximity-** Communities with higher scores have a greater percentage of their census tracts within 1 mile of a toxic release site. These sites are listed under the Environmental Protection Agency's Toxic Release Inventory and are defined as having 10 or more full-time employees and either manufacture or use more than a specified amount of toxic chemicals. Living close to TRI sites and other noxious land uses can result in increased stress from noise and odor.

**Risk Management Sites Proximity-** Communities with higher scores have a greater percentage of their census tracts within 1 mile of a risk management plan site. These facilities handle highly toxic or flammable chemicals and communities should have evacuation plans in place for responding to worst-case scenarios such as fires or explosions.

**Impaired Surface Water-** Communities with higher scores have a greater percentage of their census tracts' watershed area classified as impaired. An impaired body of water is one that does not meet water quality standards for designated uses, such as fishing or swimming, as set by the state or tribe with jurisdiction over the water. High levels of water pollution can result from a variety of sources, including industry, agriculture, and urban runoff.

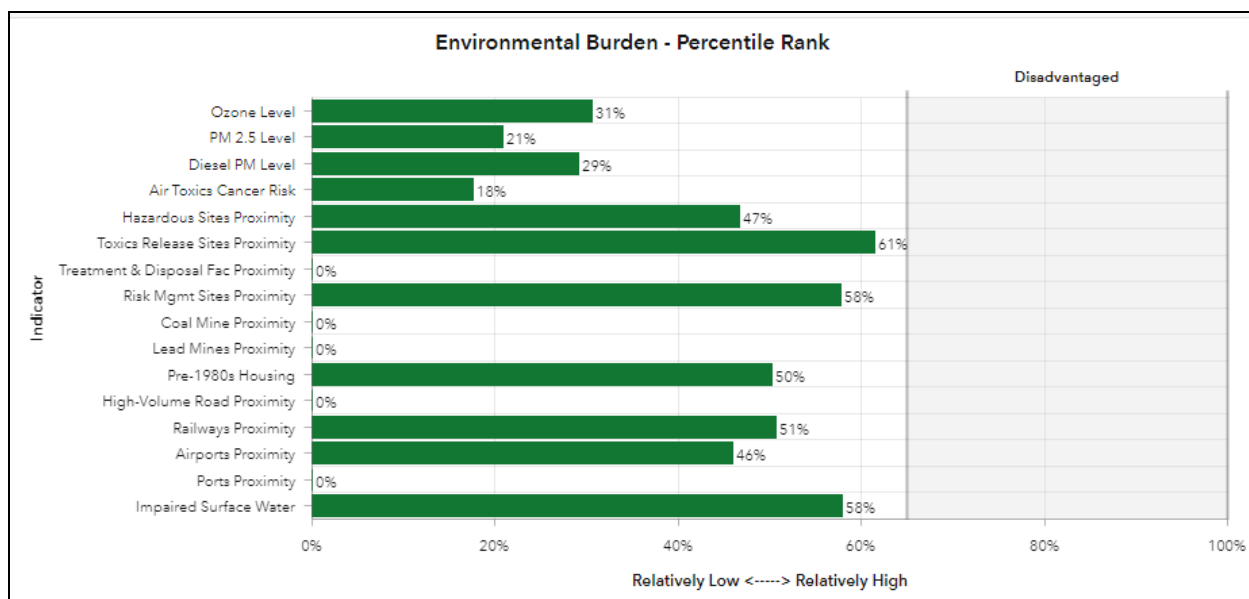


Figure 11: Environmental Burden (Study Area, USDOT)

## Safety concerns and considerations

### Crash Analysis Baseline

All traffic data below are based on data provided by NYSDOT's CLEAR Crash Data Viewer. According to NYSDOT:

*CLEAR Crash Data Viewer is an application provided by NYSDOT that is available to authorized users for the visualization, query and analysis of NYS crash data. The application provides users with pre-configured dashboards and reports, as well as robust query functionality allowing users to locate, search, visualize and analyze crashes using both a tabular grid and interactive map display.*

### Existing Conditions

The four tracts in the Study Area include about 17,300 people according to ETC or 17,587 according to American Community Survey data from 2021.

Between 2016 and 2022, there were four traffic fatalities in the Study Area. As of June 2023, there has been an additional fatality not yet present in the data. All four CLEAR documented fatalities occurred in or very near to the Village of Warwick, including the fifth fatality in 2023. Between the years 2007 and 2022, there were 16 traffic fatalities within the Study Area. Between 2016 and 2022, there was one traffic fatality within the jurisdictional boundaries in the Village of Warwick. An additional traffic fatality occurred in the Village of Warwick in November of 2015.

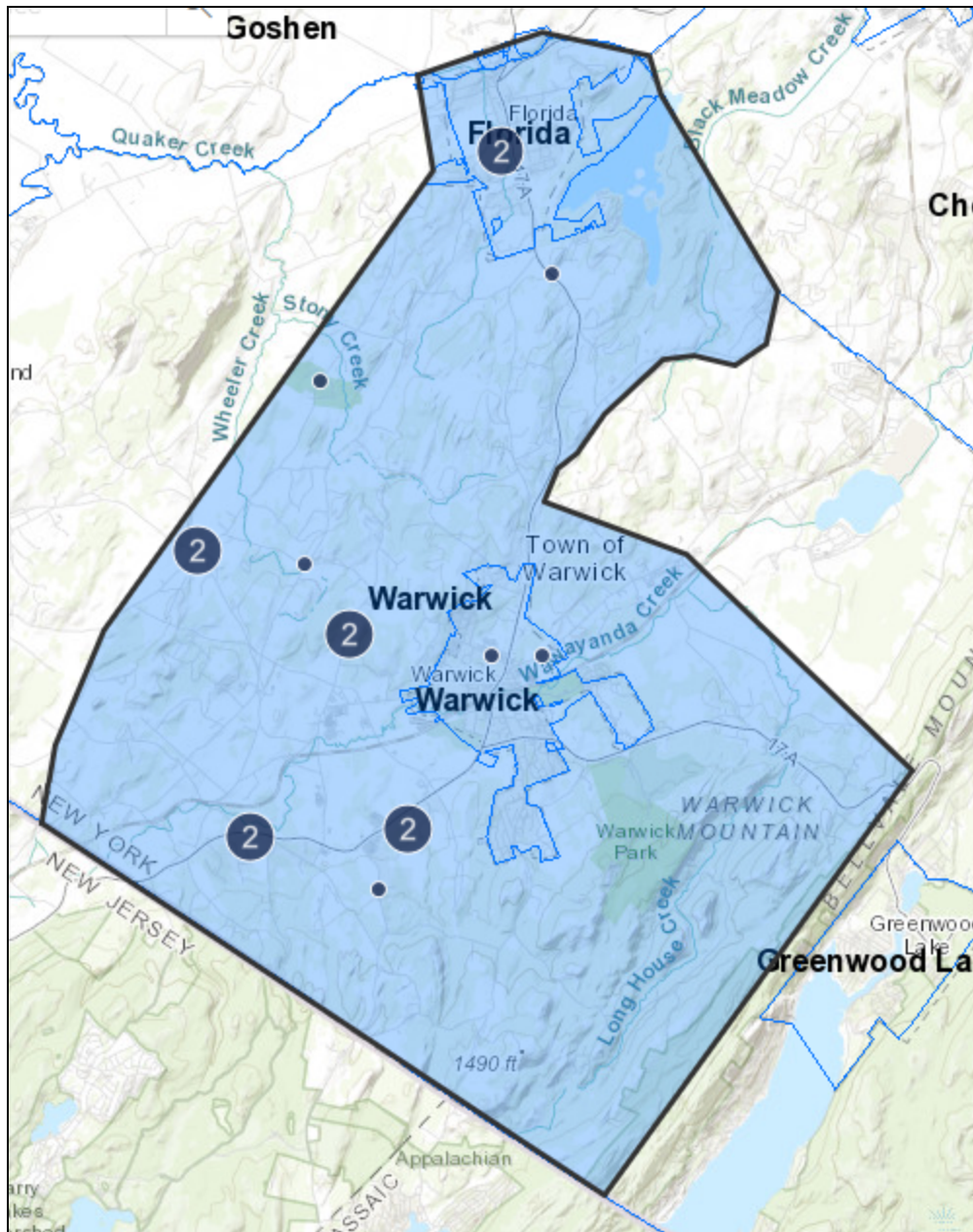


Figure 12: Image includes traffic fatalities within the four census tracts inclusive of the Village of Warwick between January 1, 2007 (which is as far back as accessible CLEAR data go) and 2022. Source: NYSDOT CLEAR Data Viewer

Between 2007 and 2022, there were 1207 crashes resulting in possible injury, injury, severe injury or fatality.

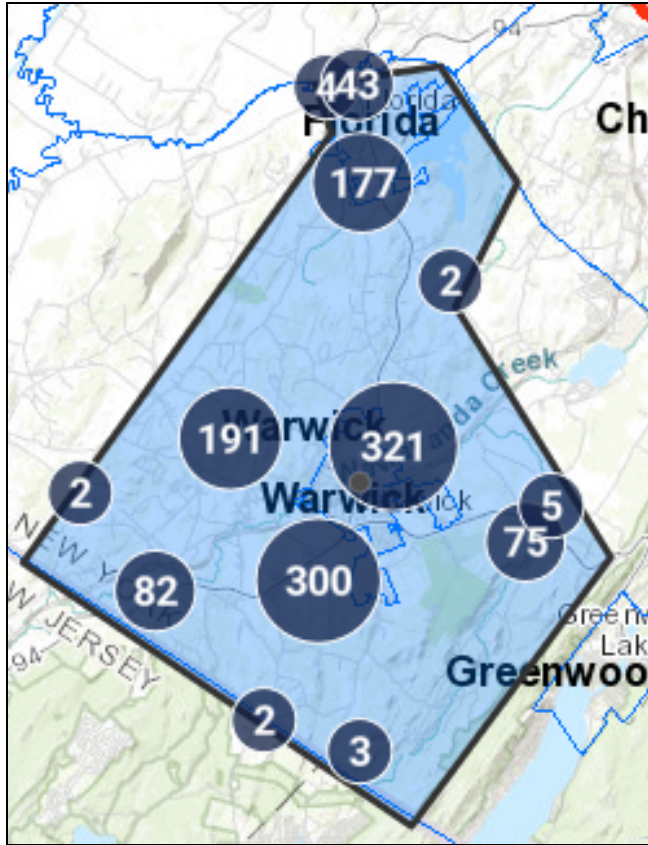
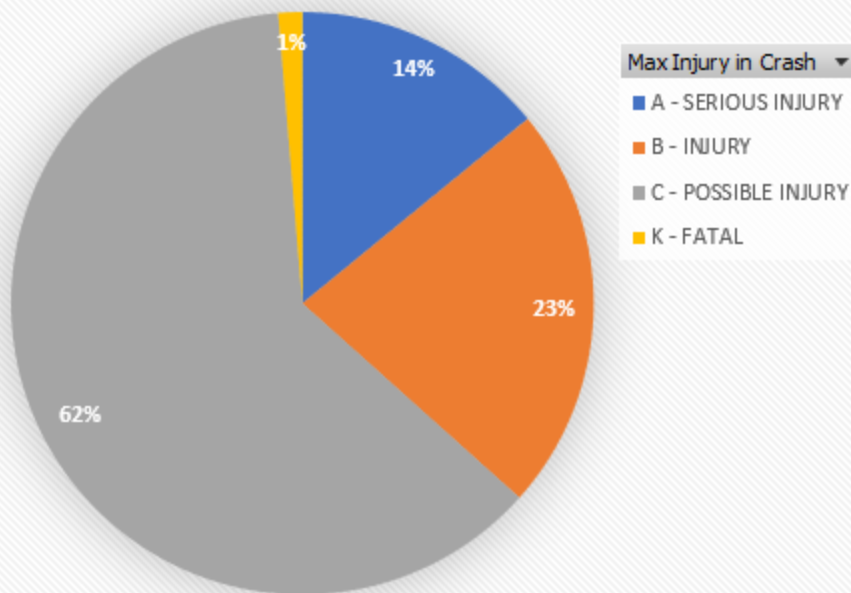


Figure 13: Image includes traffic injuries within the four census tract Study Area inclusive of the Village of Warwick between January 1, 2007 (which is as far back as accessible CLEAR data go) and 2022. Source: NYSDOT CLEAR Data Viewer

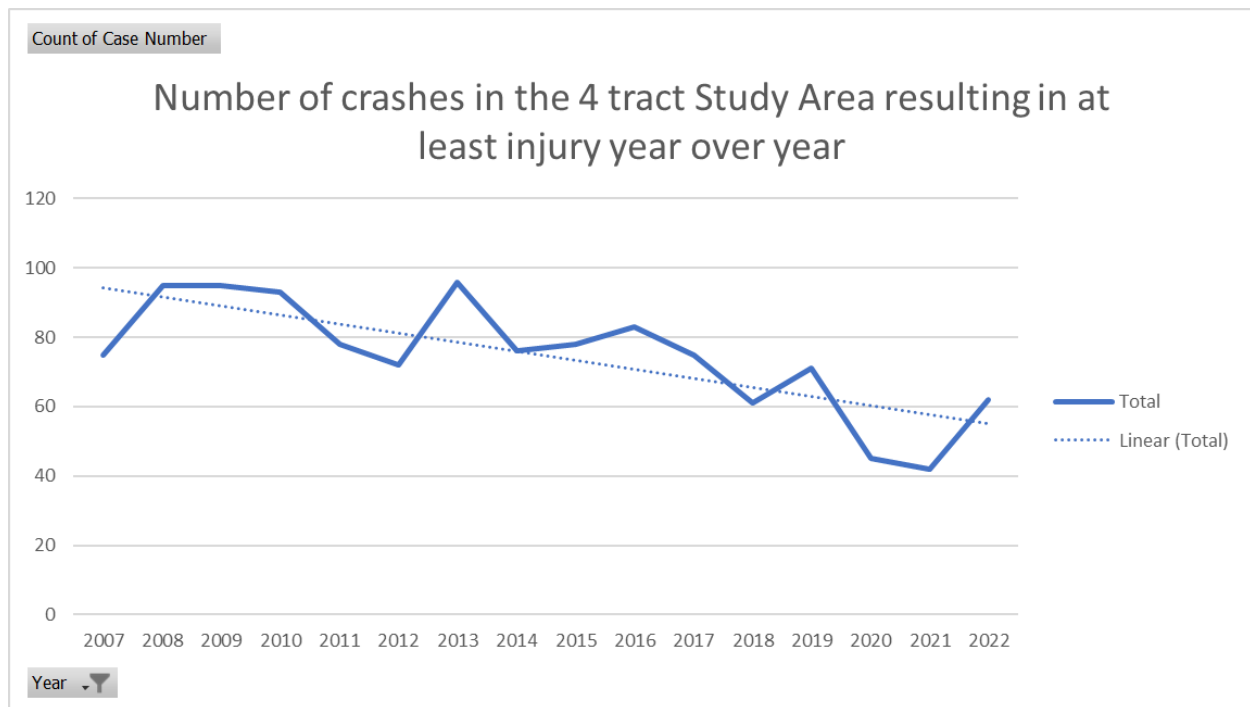
### Village of Warwick 4 census tracts Share of Crash by Injury Type - 2007 to 2022



*Figure 14: Share of crash by injury type, Village of Warwick four tract Study Area, 2007-2022 (NYSDOT CLEAR data)*

There have been over 1200 crashes resulting in injury or possible injury in the Study Area 2007 to 2022. Figure 14 shows the share of crashes by injury type.

## Historical Trends



*Figure 15: The number of crashes in the Village of Warwick four tract study area resulting in at least injury year-over-year since 2007 (NYSDOT CLEAR data)*

The number of crashes causing injuries in the Study Area has been trending downward, though the period of the pandemic likely skews the data a bit.

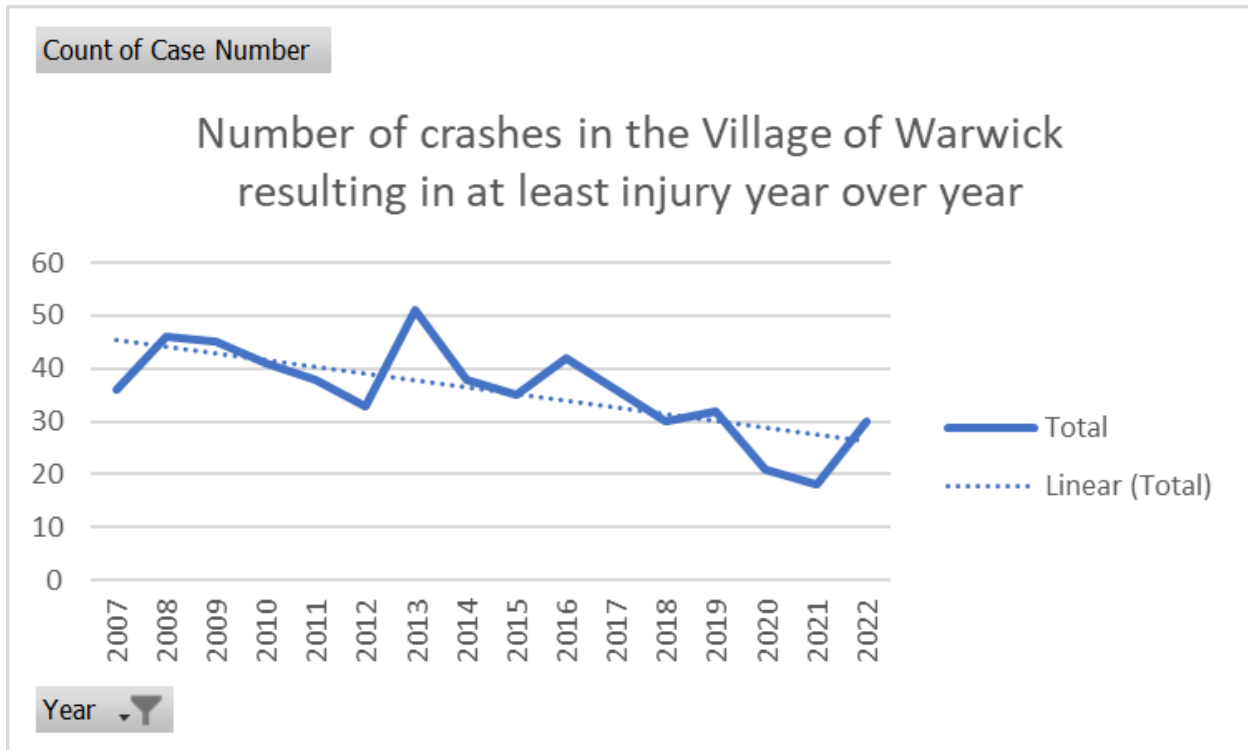


Figure 16: Number of crashes within the village of Warwick resulting in at least injury year over year since 2007 (NYSDOT CLEAR data)

While the trend of injury producing crashes has been trending downward, the data for 2020 and 2021 could be skewed by the pandemic reducing local travel. The Village sees an urgent need to reduce crashes causing injury given such a small area. Injuries in the Village have been trending similar to the overall Study Area, and consistently represents roughly half of all crash-caused injuries in the Study Area.

## Crash Site Locations

Within the four tract Study Area, crashes causing at least possible injury are most heavily concentrated in and around the Village of Warwick, as well as in and near the Village of Florida.

Within and immediately adjacent to the Village of Warwick (see Figure 17), most crashes resulting in injury 2007 to 2022 (579 crashes resulting in possible injury, injury, severe injury, or fatality within the area identified above) have occurred along Village “gateways”, roads that connect the Village to other parts of the community, where the Village has a history of speeding problems. These roads include South Street Extension, SR94 (Main St in the Village), SR17A (Galloway Rd in the Village), Maple Ave, and West St.

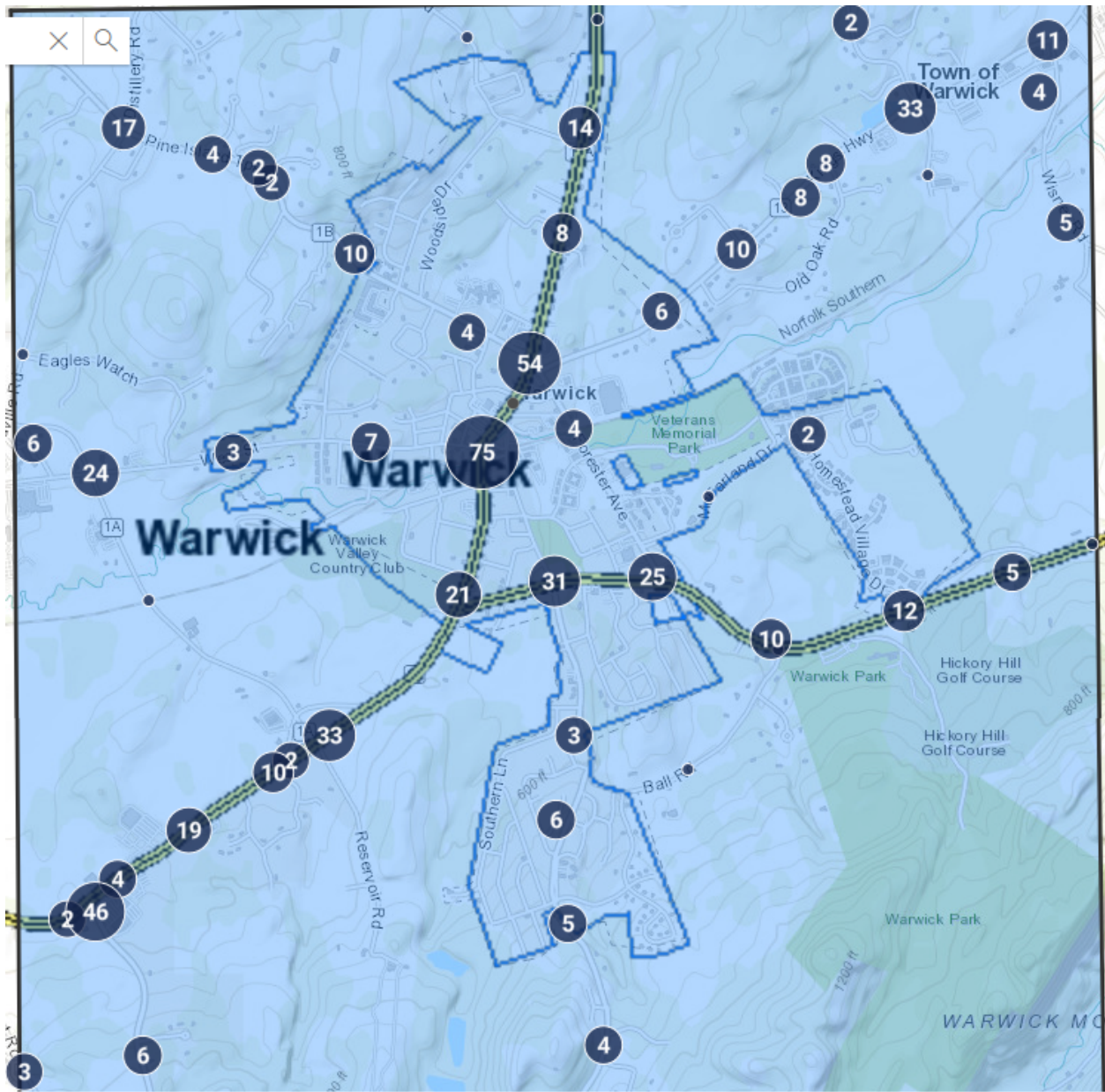


Figure 17: Crash (resulting in at least possible injury) locations in and around the Village of Warwick 2007 - 2022 (NYSDOT CLEAR data)

## Crash Types

Within the full 4 Tract Study Area

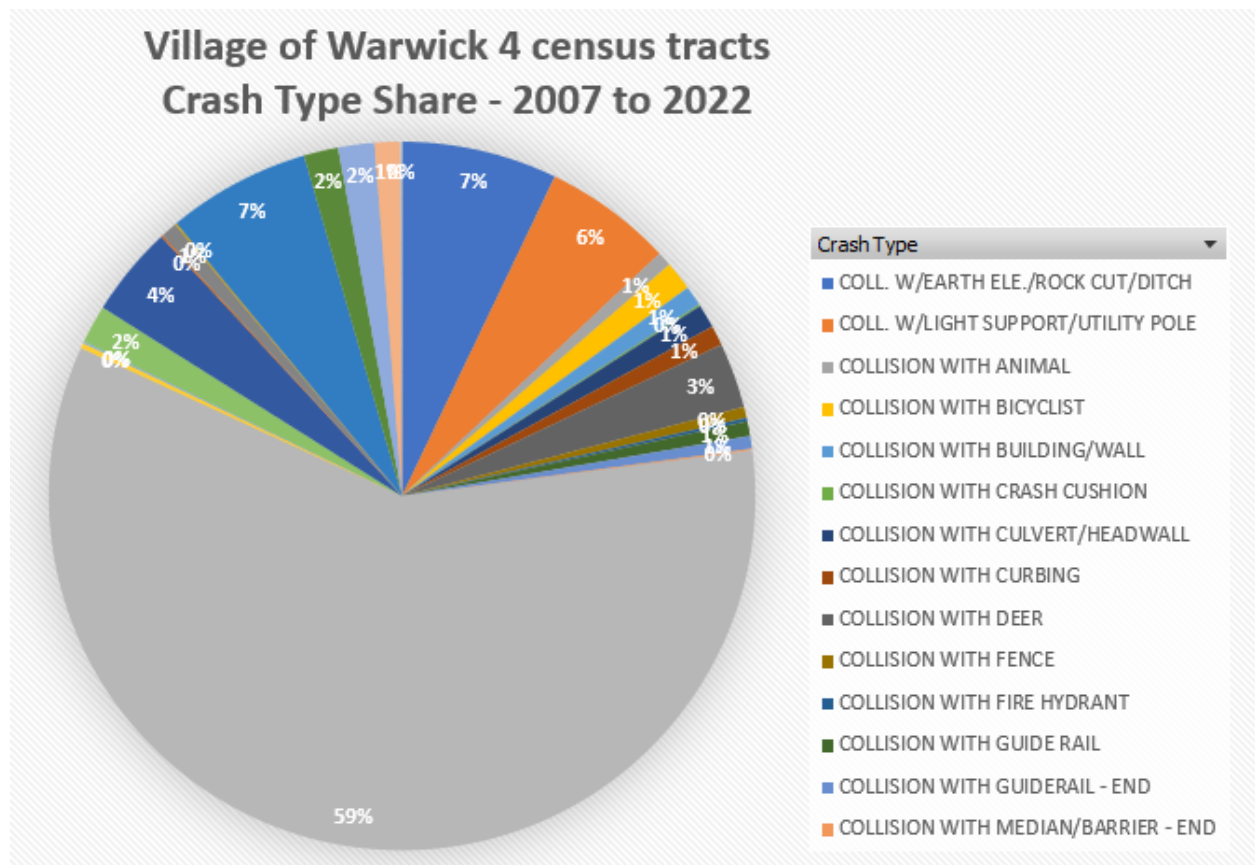


Figure 18: Crash types within the four tract Study Area 2007 - 2022

About 60-percent of crashes resulting in injury across the Study Area since 2007 have involved a collision with an animal.

### Village of Warwick 4 census tracts Crash Type Share with collisions with animals / deer removed - 2007 to 2022

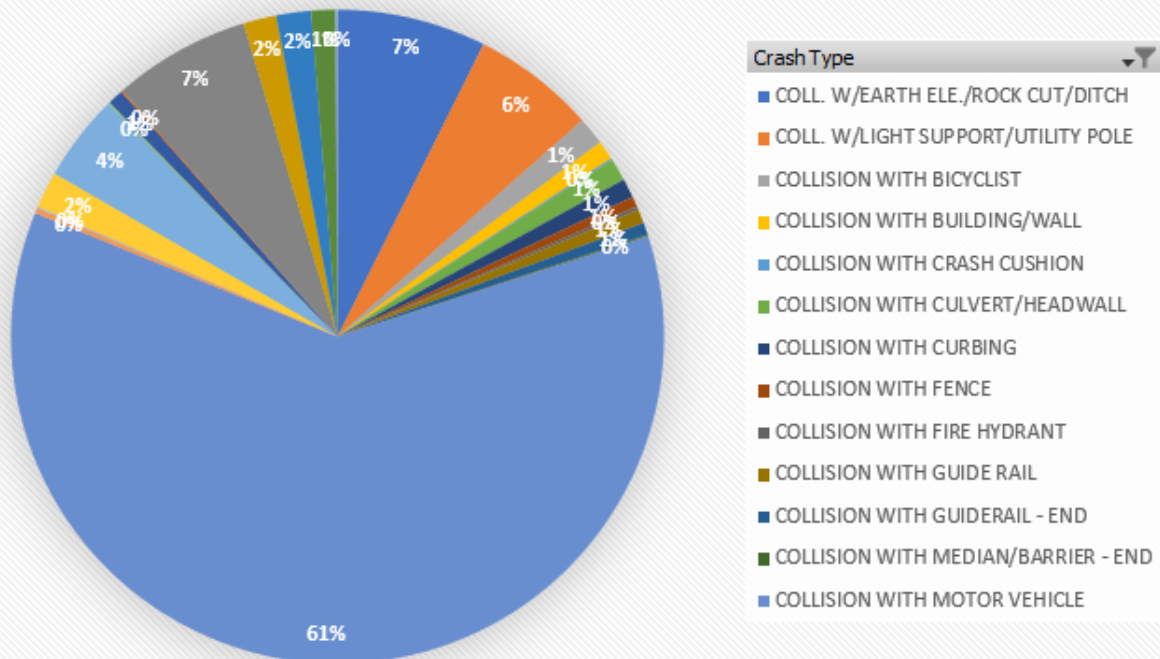
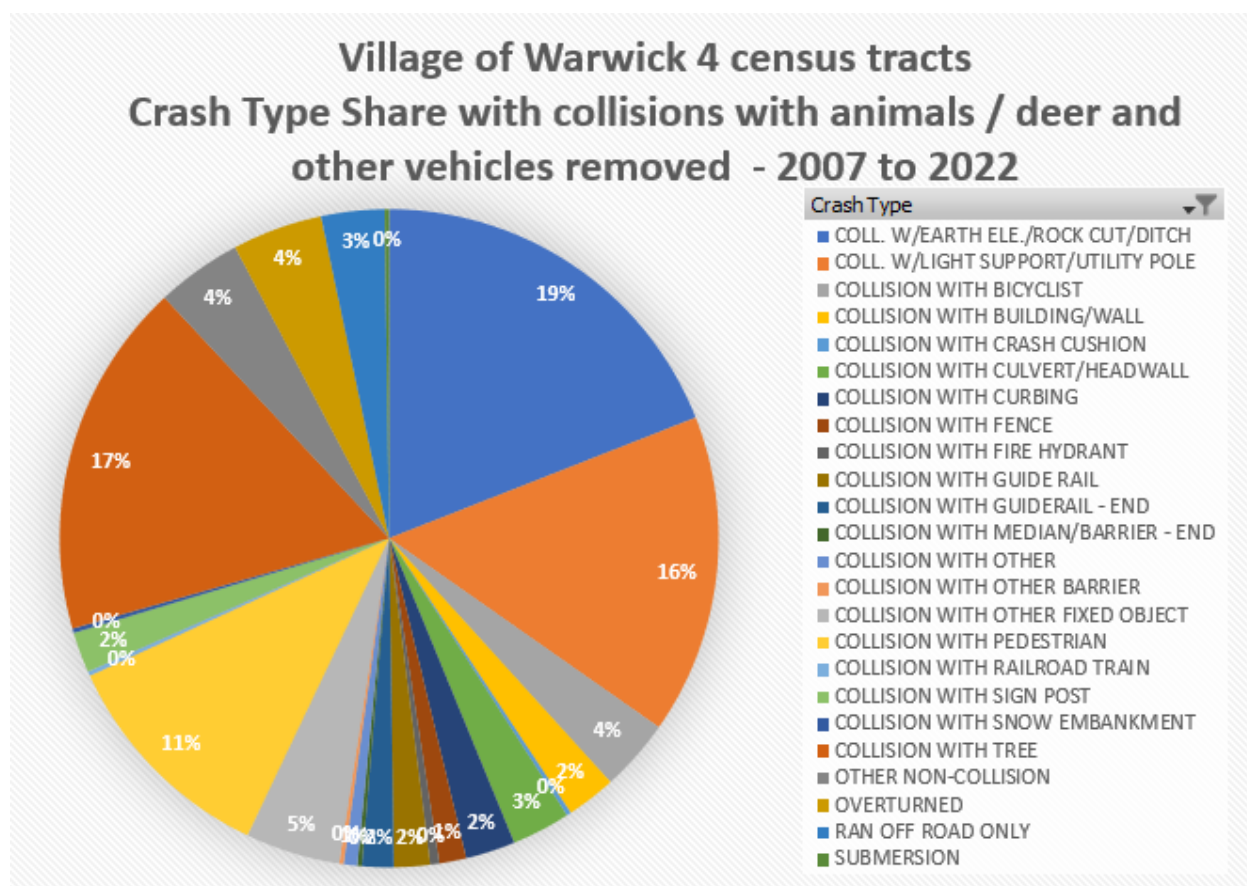


Figure 19: Remaining crash type ratios across the four tract Study Area once collisions with animals are removed (2007-2022)

After collisions with animals are removed, approximately 60-percent of crashes involved collisions with another vehicle.

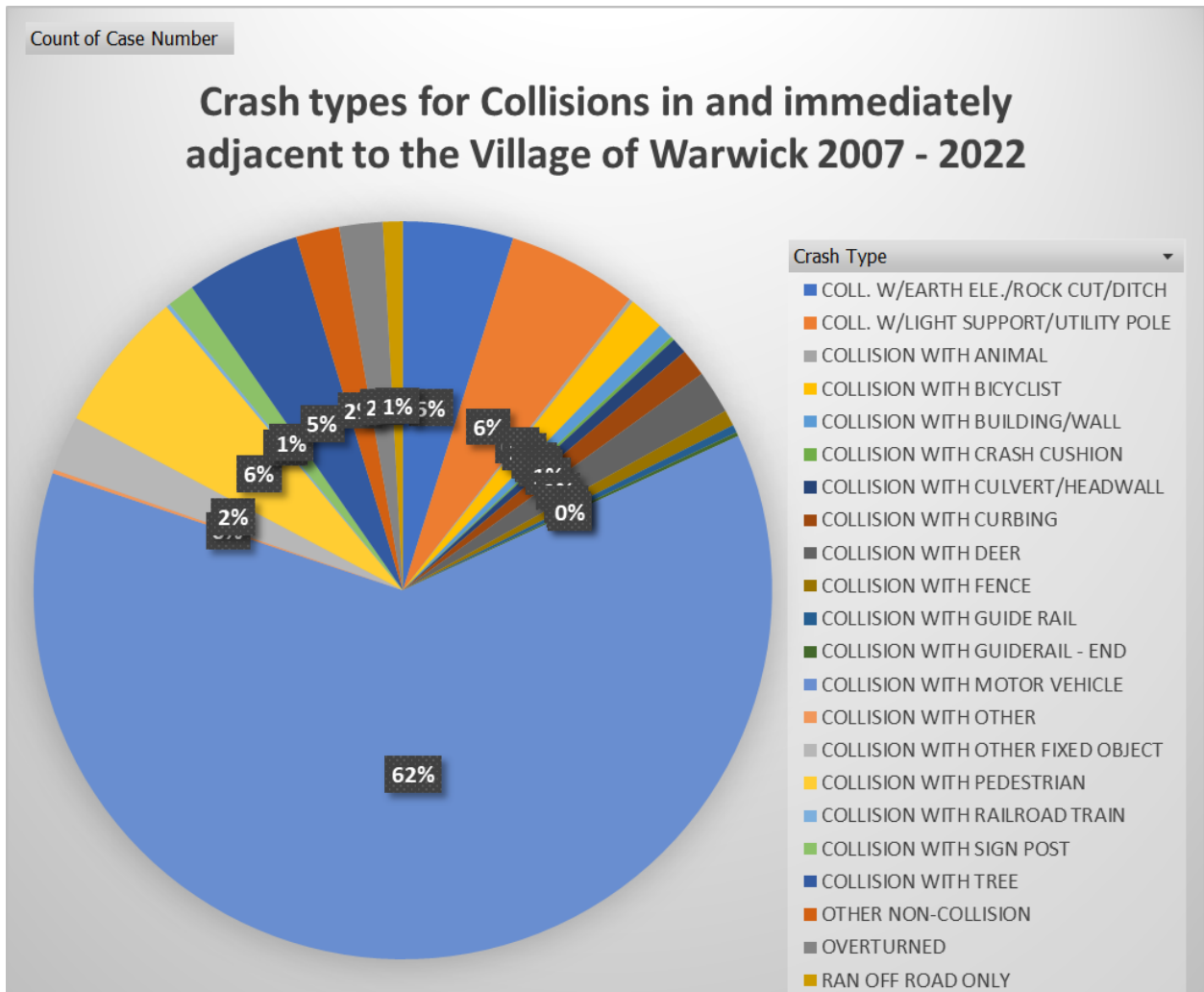


*Figure 20: Remaining crash type ratios across the four tract Study Area once collisions with animals and collisions with other vehicles are removed (2007-2022)*

Collisions with pedestrians, utility poles, earth elements and trees account for over 60-percent of the remaining crash types across the four tract Study Area once collisions with animals and other vehicles are removed.

#### Within and immediately adjacent to the Village

Crashes within and immediately adjacent to the Village of Warwick account for almost 50-percent of crashes causing at least possible injury 2007 to 2022. Nevertheless, the ratios of different types of crashes resulting in at least injury in and immediately adjacent to the Village of Warwick are different from those across the four tract Study Area, which is generally more rural in nature.



*Figure 21: Crash types within and immediately adjacent to the Village of Warwick 2007-2022*

Collisions with other motor vehicles represented over 60-percent of all crash types resulting at least in possible injury from 2007 to 2022.

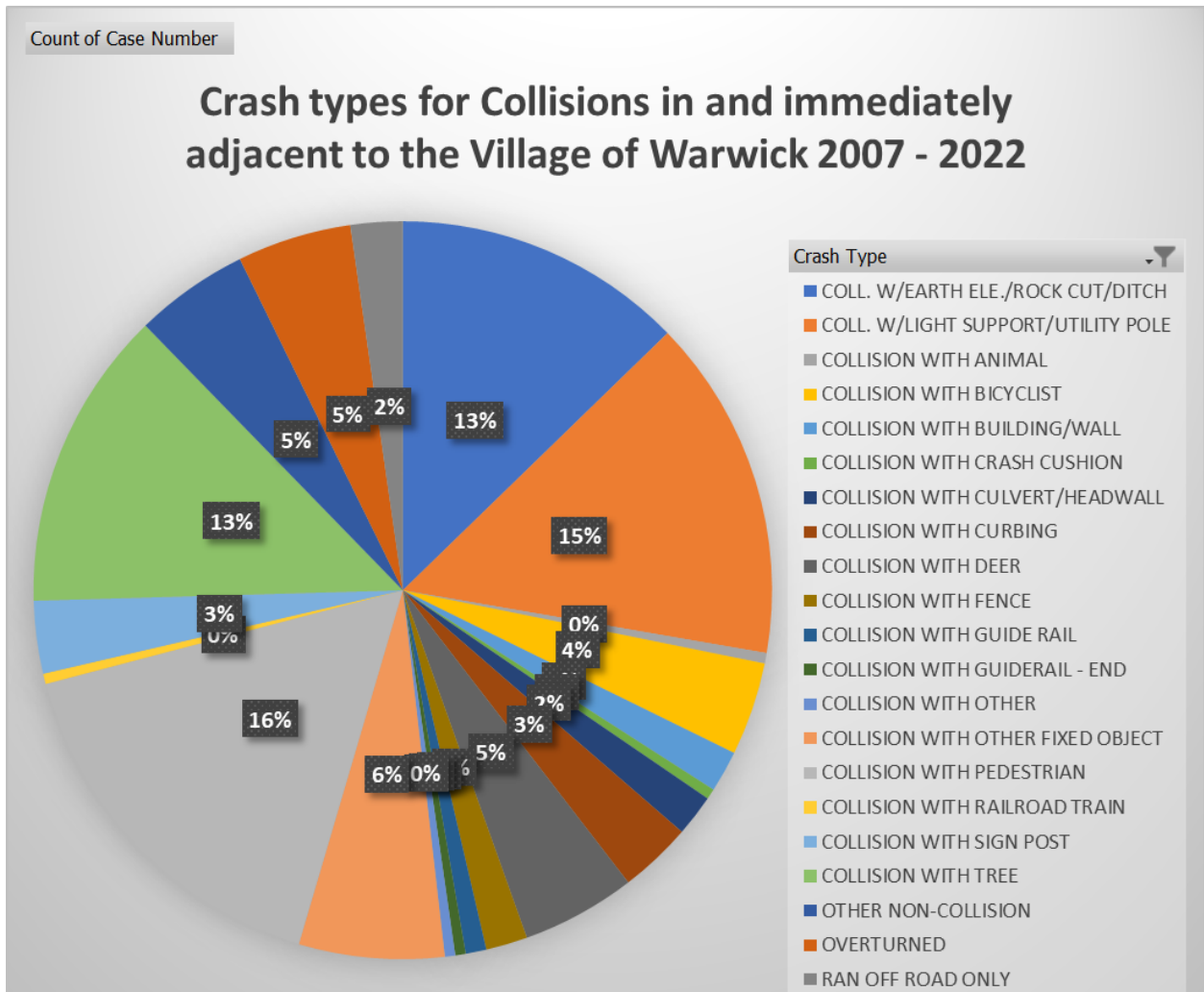
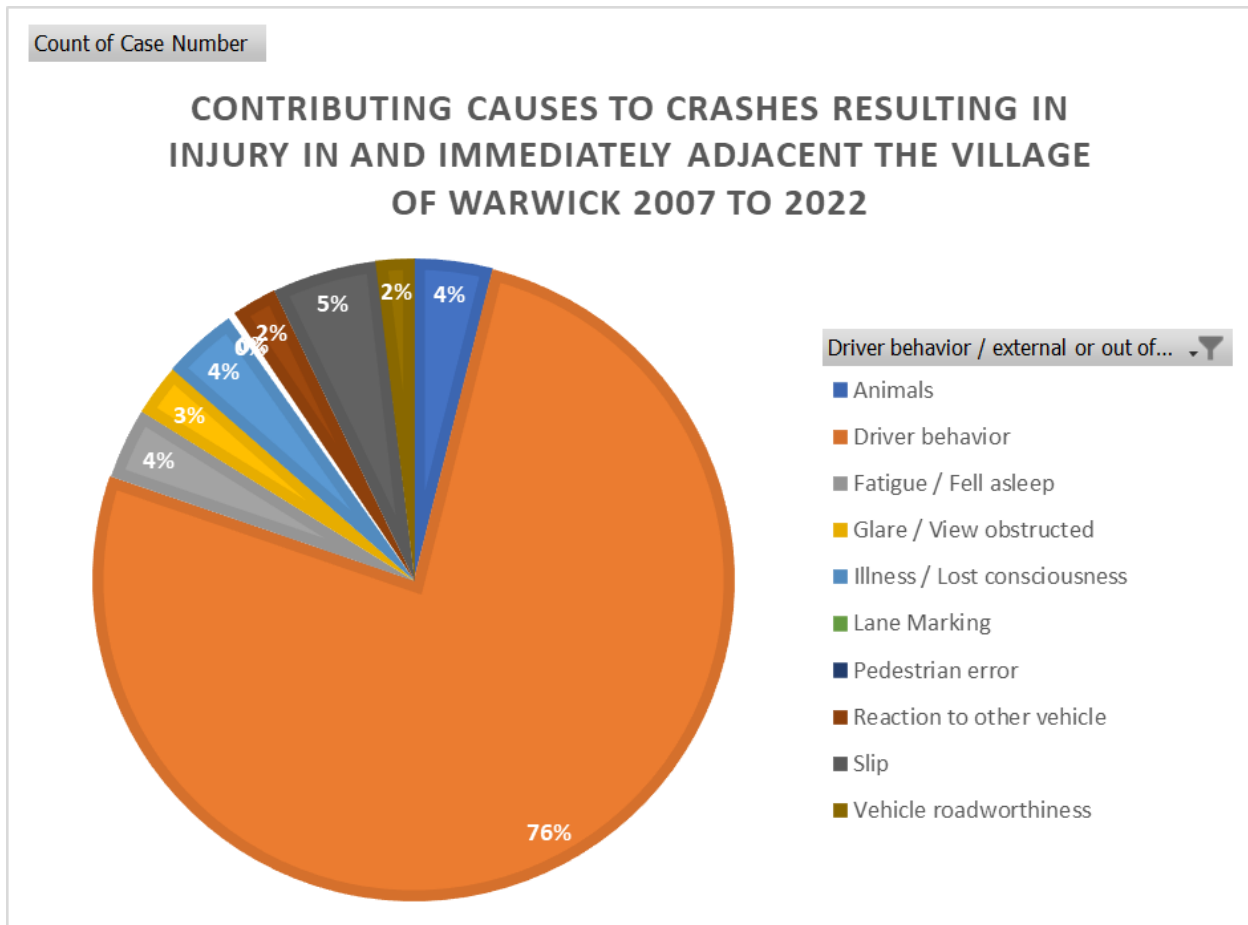


Figure 22: Remaining crash type ratios within and immediately adjacent to the Village once collisions with other vehicles are removed (2007-2022)

If the data for collisions with motor vehicles are removed, the next most common crash types are collisions with pedestrians, earth elements, utility poles or lights, and trees.

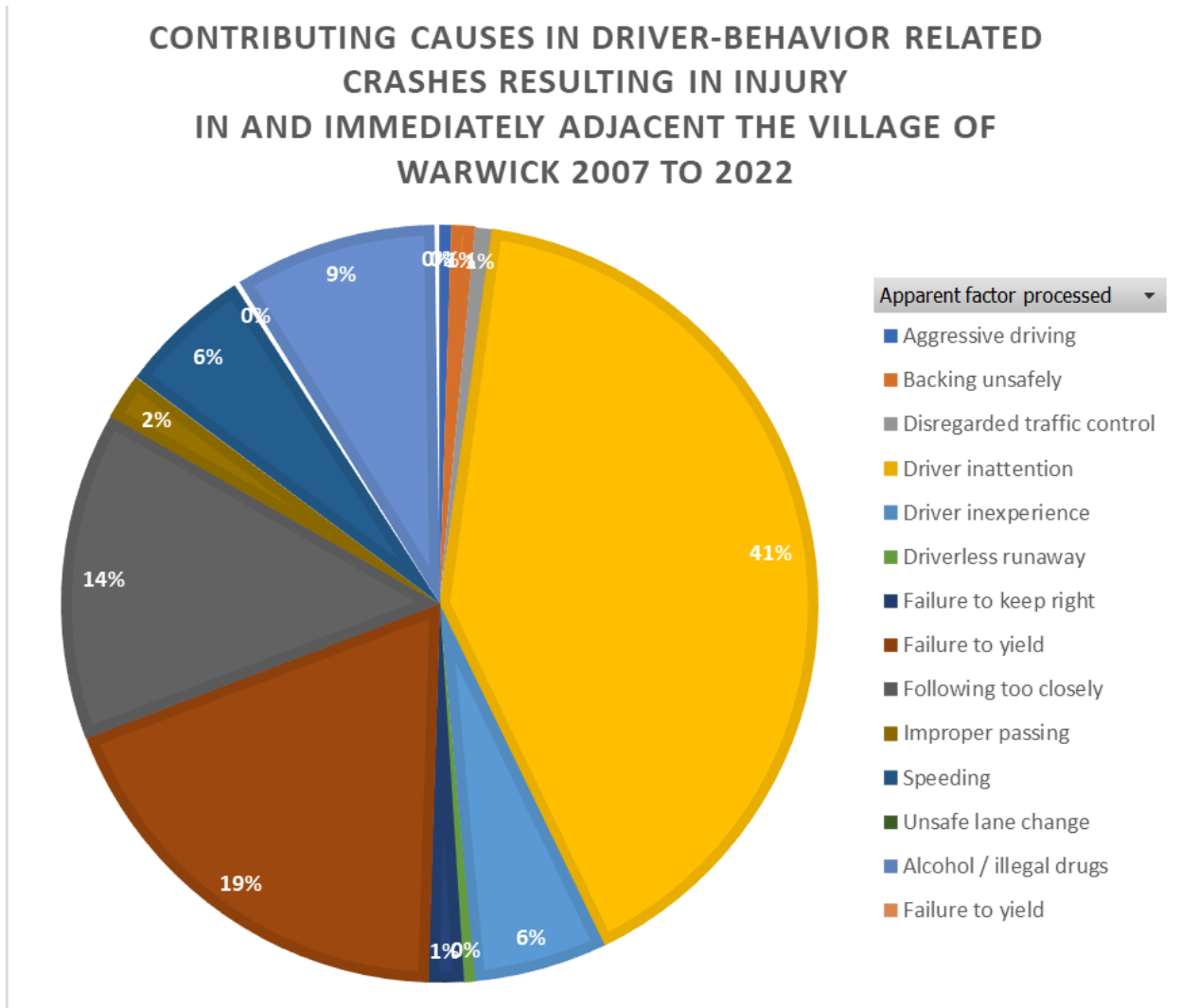
### Contributing Causes to Crashes in and Immediately Adjacent to the Village of Warwick

Because this plan focuses on strategies for the Village of Warwick, contributing causes have been reviewed only for those areas within and immediately adjacent to the Village.



*Figure 23: contributing causes to crashes resulting in injury in and immediately adjacent to the Village of Warwick, 2007 to 2022*

CLEAR data provides information about causes contributing to crashes. 76-percent of the crashes causing injuries in and immediately adjacent to the Village of Warwick 2007 to 2022 have been associated with driver behavior amongst instances where contributing causes are known. Driver behavior refers to factors like inattention, aggressiveness, failure to yield, traveling in the wrong lane, or intoxication. Even when factoring in crashes where the causes are not known, driver behavior was a contributing factor in over 70-percent of crashes where at least an injury occurred.



*Figure 24: Contributing causes in driver behavior related crashes resulting in injury in and immediately adjacent to the Village of Warwick, 2007 to 2022*

Over 40-percent of driver behavior caused crashes in and immediately adjacent to the Village of Warwick 2007 to 2022 were related to driver inattention. Additional major contributors included failure to yield, improper passing, speeding, intoxication, and driver inexperience.

## Equity Considerations

Equity plays a crucial role in the Village of Warwick's Complete Streets to Basic Needs initiative, as it addresses the unique needs and challenges faced by different segments of the community. The demographic data highlights the significance of equitable considerations within the planning process. For instance, with close to 20% of households consisting of individuals aged 65 and older living alone, and over 25% of residents under the age of 18, it is evident that a significant portion of Warwick's population comprises senior citizens, children, and young teens. Additionally, a notable percentage of households in certain census tracts lack vehicular access, particularly within the Village boundaries.

Furthermore, the Village recognizes the substantial contribution of the migrant and Latinx community, which is not fully captured in census data but plays a vital role in Warwick's culture, community, and economy. To address the unique needs of these underserved populations, as well as the disabled population, it is crucial to reimagine the current vehicle-centric infrastructure that fails to accommodate their specific requirements. Existing bus stops are inadequately marked, sidewalks are inaccessible or unsuitable for disabled or elderly walkers, and the absence of bicycle lanes poses additional challenges. As a result, residents are compelled to rely heavily on driving, exacerbating issues of vehicle dependence and limiting access to basic needs.

The primary goal of the Complete Streets to Basic Needs initiative is to improve access to essential destinations such as jobs, healthcare facilities, grocery stores, schools, places of worship, and recreation areas. This will be achieved through the enhancement and expansion of active transportation options, including the design of complete streets featuring accessible sidewalks, crosswalks, bicycle lanes, and traffic calming measures. By prioritizing active transportation, the Village aims to provide affordable transportation choices and reduce reliance on vehicles, particularly within underserved communities.

In addition to promoting accessibility, these active transportation improvements will also contribute to improved public health outcomes by encouraging walking and biking among residents. Recognizing the projected growth and the Governor's housing compact, which emphasizes denser development, the Village acknowledges the urgent need to proactively address equity issues. The holistic approach of ensuring walkable access to basic needs for the entire community is essential to maintain and enhance the overall quality of life in Warwick.

By centering equity considerations in the Complete Streets to Basic Needs initiative, the Village of Warwick is committed to creating a more inclusive and accessible community, where residents of all backgrounds and abilities can thrive.

## Inclusion of Underserved Communities through Data

The Village of Warwick recognizes the importance of addressing transportation inequities and ensuring the inclusion of underserved communities. According to the U.S. DOT Equitable Transportation Community (ETC) Explorer, which utilizes 2020 Census Tracts data, the Village is identified as disadvantaged in terms of Transportation Insecurity and Social Vulnerability. This aligns with both national and state benchmarks, highlighting the need for targeted interventions.

By leveraging data and insights from the US DOT, the Village aims to proactively address the cumulative burden experienced by underserved communities due to historical underinvestment in transportation. This data-driven approach allows for a more accurate understanding of the challenges faced by these communities, enabling the Village to develop targeted strategies and interventions that promote equitable access to transportation options and mitigate disparities.

Through the inclusion of underserved communities in the planning and decision-making processes, informed by the data from the US DOT, the Village of Warwick is committed to fostering a more equitable transportation system. By leveraging data-driven insights, the Village aims to prioritize investments, initiatives, and policies that address the unique needs of underserved populations, reduce transportation insecurity, and promote social equity within the community.

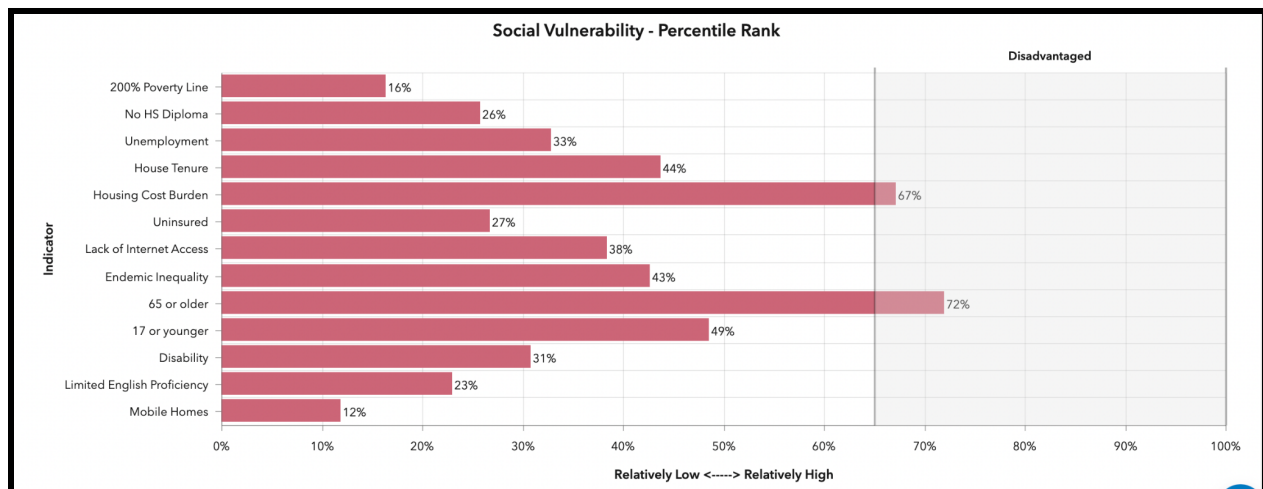
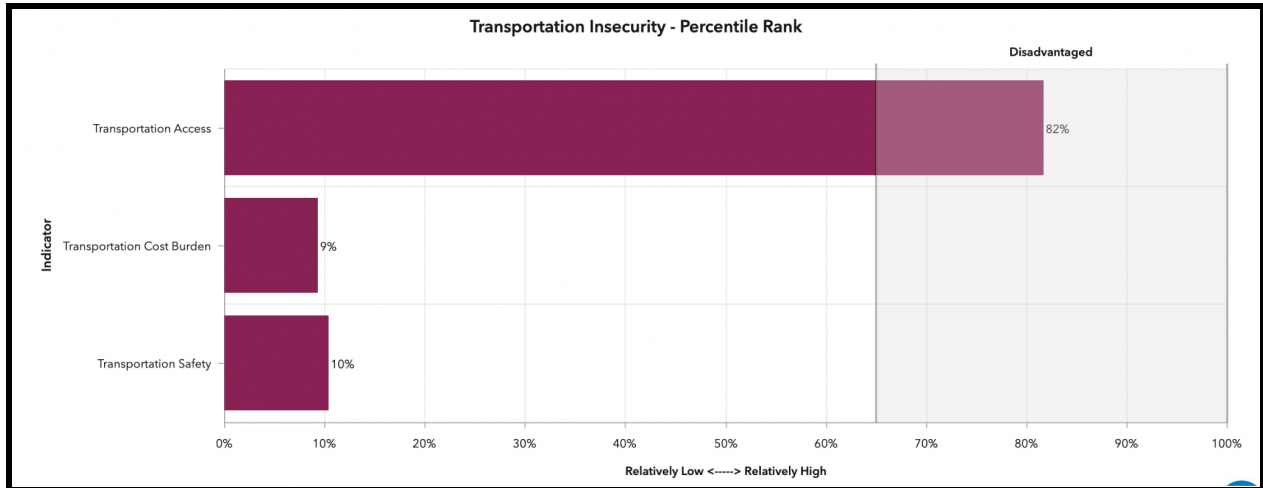
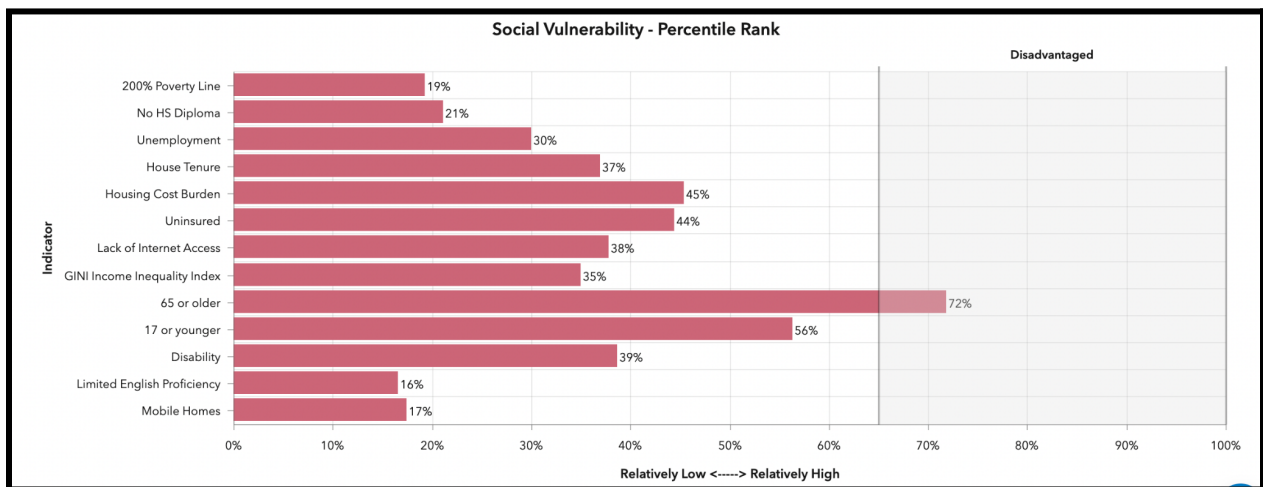


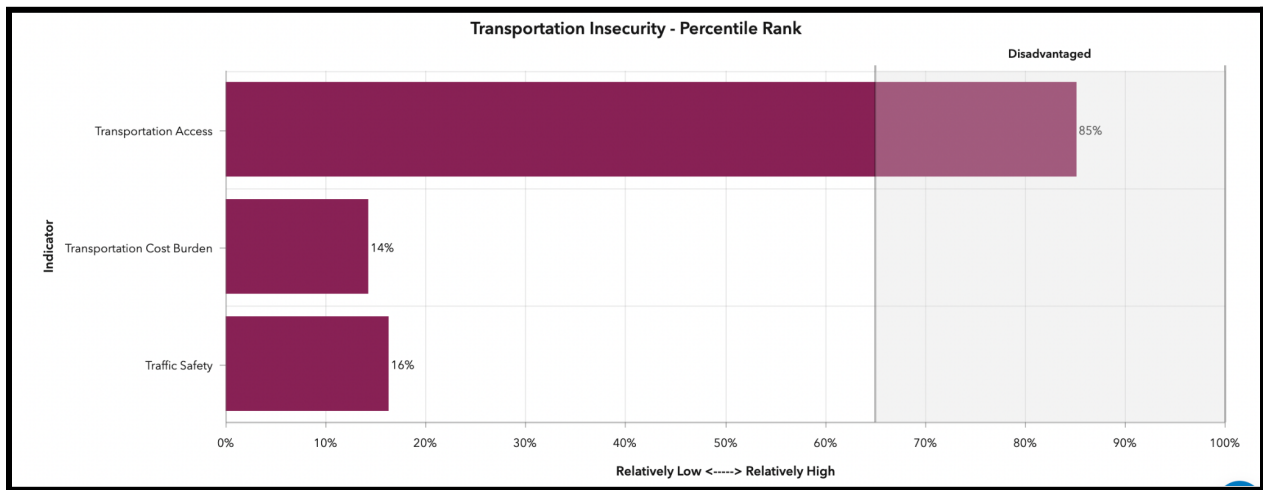
Figure 25: Village of Warwick Social Vulnerability Metric, as Compared to National Benchmark



*Figure 26: Village of Warwick Transportation Insecurity Metric, as Compared to National Benchmark*



*Figure 27: Village of Warwick Social Vulnerability Metric, as Compared to National Benchmark*



*Figure 28: Village of Warwick Transportation Insecurity Metric, as Compared to National Benchmark*

Data source: <https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/Homepage/>

## Equity Considerations of Projects

Equity considerations play a crucial role in the design and implementation of the following five example projects, as they aim to address the specific needs and challenges faced by different communities within the Village of Warwick:

- **West Street:** This project focuses on improving walkability along West Street, which serves as a vital connection between the downtown area, schools, churches, and community amenities. By extending sidewalks and creating a pedestrian-friendly environment, the project aims to provide safer and more accessible routes for residents, particularly students and individuals accessing essential services and community spaces.
- **South St Ext:** Currently lacking sidewalks and bike lanes, South St Ext poses challenges for residents seeking to access the vibrant downtown area and other amenities on foot or by bike. The project aims to enhance the streetscape and create a marked transition into the residential area, ensuring a higher quality of life for residents by providing safe and accessible pathways.
- **SR 17A / Galloway Road:** This project addresses the safety concerns associated with SR 17A, a major road that separates a significant portion of Village dwellings from the downtown area, schools, parks, places of worship, and healthcare facilities. With high speeding violations and limited traffic calming measures, the project aims to implement traffic calming strategies and complete street designs to enhance pedestrian safety and improve the overall quality of life for residents.
- **SR 94 Multi-Use Trail:** Recognizing the need for improved access to local grocery stores and shopping plazas along SR 94, this project proposes the design of a multi-use trail. By creating a safe and non-motorized transportation option, the trail will enhance food access, employment opportunities, and quality of life for residents who rely on walking or biking to meet their basic needs.
- **ADA Accessibility and State of Good Repair:** Addressing the existing condition of sidewalks in the Village, this project aims to enhance accessibility and ensure sidewalks are in a state of good repair. By making sidewalks ADA accessible and repairing damaged sections, residents will have the option to safely navigate the Village streets, improving their access to basic needs and enhancing their overall quality of life.

These projects focus on creating equitable and inclusive infrastructure that supports safe and accessible transportation options for all residents, regardless of age, ability, or mode of travel. By prioritizing these improvements, the Village seeks to reduce disparities, enhance community well-being, and promote a higher quality of life for all residents.

# Safety Needs and Solutions

This section encompasses two crucial areas: Policy and Projects/Strategies, as it pertains to the pursuit of a safer and more accessible transportation system. Through the evaluation of existing policies and the implementation of new ones, the Village aims to address the concerns and project opportunities identified in the Transportation Safety Action Plan. Additionally, by undertaking a range of projects and implementing effective strategies, the Village seeks to create tangible improvements that align with the goals outlined in the plan. Together, these solutions will contribute to a safer, more efficient, and inclusive transportation network for the benefit of all residents and visitors of the Village.

## Policy

The Village's commitment to transportation safety has led to the implementation of two key policies as well as the identification of several recommended new policies or updates to existing ones, which are highlighted in this section of the Safety Action Plan.

### Evaluation of Existing Policies

The Village has enacted two notable Policies in relation to Transportation Safety.

- **Village Wide Speed Limit.** The first policy addresses the Village-wide speed limit, which was set at 25 mph through a Resolution enacted in 2022. This decision was driven by the Village's unique characteristics, including its dense population, heavy pedestrian traffic, and the presence of wildlife in and around the area. With a vibrant central business district, schools, churches, a hospital, and various establishments, the lower speed limit aimed to mitigate the risks associated with collisions involving pedestrians and wildlife. However, the effectiveness of this policy has been limited, as speeding continues to be a significant concern. Notably, the Village faces challenges in reducing speed limits on two New York State roads, SR 94A and SR 17A, as the authority rests with the State.
- **Resolution Setting Forth a Framework for Complete Streets.** The Village enacted a Resolution in 2016 establishing a framework for Complete Streets. While this Resolution signifies the Village's intent to adopt a comprehensive Complete Streets policy, progress in implementing this policy has been slow since its inception. Complete Streets are designed and operated to prioritize the safety and accessibility of all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The current Village Board recognizes the importance of advancing this initiative as part of the overall Transportation Safety Action Plan.

### Recommended New Policies or Updates to Existing Policies

Existing policies lay the foundation for a safer and more inclusive transportation network, but further action is needed to achieve the desired outcomes. The Village acknowledges the

challenges and limitations faced in implementing these policies and remains committed to exploring additional strategies and solutions outlined in this plan. By addressing policy gaps, pursuing new policies, and leveraging best practices, the Village aims to create a comprehensive framework that prioritizes the safety and well-being of all residents and visitors.

- **State Road Speed Limit Changes.** The Village is actively pursuing a new policy focused on speed limit changes for State roads within its boundaries. While implementing this policy poses a challenge, as the authority to make changes rests solely with the State, the Village is determined to address the safety concerns on these roadways. Notably, two State roads, SR 94 (Main Street) and SR 17A, serve as important gateways into the Village and play a central role in the transportation network.

Currently, SR 94 has a speed limit of 45 mph on its outskirts, but as vehicles approach the downtown area, where the vibrant central business district is located, the lower speed limits are often disregarded. This poses risks to pedestrians and the overall safety of the Village. Similarly, SR 17A presents a significant challenge, as it transitions from a 55 mph zone into a school zone with a speed limit of 20 mph. Unfortunately, many vehicles fail to reduce their speed accordingly, leading to safety concerns within the school zone.

Despite multiple requests made to the State, progress in obtaining approval for speed limit changes has been limited. The State requires specific metrics and often mandates a full traffic study before considering any modifications. The associated resources and funding required for such studies present additional obstacles. However, the Village remains committed to pursuing this policy through the implementation of the Transportation Safety Action Plan and the deployment of additional strategies. The data highlights that these two roads experience a higher density of vehicular crash incidents, emphasizing the need for proactive measures.

By continuing to advocate for speed limit changes, engaging with State authorities, and leveraging the strategies outlined in the Action Plan, the Village aims to improve safety conditions on these State roads. The Village recognizes the significance of addressing these key areas and will persist in its efforts to enhance transportation safety for the benefit of all residents and visitors.

- **Traffic Ordinance Updates Through Resolution.** The Village is considering a policy change that would streamline the process of updating traffic ordinances. Currently, any modification to traffic regulations requires a comprehensive code change, which involves a lengthy and intricate process including public hearings and filing with the State. This complex procedure poses obstacles and can hinder the Village's ability to address traffic-related concerns efficiently.

To overcome these challenges, the Village is exploring the option of empowering the Village Board to enact changes to traffic regulations through a Resolution. This policy

change would simplify the process, removing unnecessary barriers and expediting decision-making. By streamlining the ability to update traffic ordinances, the Village aims to enhance governance effectiveness and address traffic concerns more swiftly and effectively.

This proposed policy change would enable the Village Board to respond promptly to evolving traffic needs and ensure that traffic regulations align with the Village's goals and priorities. By simplifying the process, the Village can enhance its capacity to implement necessary traffic improvements and enhance overall transportation safety within the community.

- **Complete Streets Policy.** Implementing a Complete Streets policy will help the Village to prioritize transportation safety. By adopting this policy, the Village ensures that its transportation infrastructure is designed and operated to accommodate the safety needs of all road users, including pedestrians, cyclists, and motorists. The policy emphasizes the creation of dedicated sidewalks, bike lanes, and safe crossings, which contribute to reducing accidents and enhancing overall road safety.

A Complete Streets approach promotes active transportation, such as walking and cycling, which inherently improves safety by reducing dependence on motor vehicles. Encouraging residents to engage in active transportation not only benefits their physical health but also reduces traffic congestion and the associated risks of accidents. By providing safe and accessible options for pedestrians and cyclists, the Complete Streets policy helps create a safer and more sustainable transportation environment.

- **Sidewalk Maintenance and Code Enforcement.** Sidewalk maintenance is a critical issue in the Village, directly impacting transportation safety. Many sidewalks have fallen into disrepair, posing hazards to pedestrians. Uneven surfaces and major cracks have resulted in reported falls and injuries. This situation is particularly concerning as the Village has a significant elderly and youth population, as highlighted in this document. The lack of ADA accessibility further restricts pedestrian access and poses additional challenges.

The deteriorating condition of sidewalks has led pedestrians to opt for walking on the streets instead. Given the narrow nature of the streets and the documented high vehicular speeds, this poses a significant safety risk. The current Village code places the responsibility of sidewalk maintenance on property owners, but limited enforcement has hindered the effectiveness of this approach. Consequently, the problem has persisted and worsened over time.

To address this issue comprehensively, the Village recognizes the need for a professional consulting firm to conduct a study. This study would provide insights, recommend best practices, and offer guidance on sidewalk maintenance. By

implementing the study's recommendations, the Village can proactively improve sidewalk conditions and enhance transportation safety for all residents and pedestrians.

## Strategies

The Village has developed a set of documented strategies that serve as the foundation for various ongoing and future projects. These strategies have been shaped through extensive public engagement sessions and discussions at the Village Board level. The key strategies identified are as follows:

- **Behavioral Change support.** This includes outreach and awareness campaigns, such as Slow Down Warwick, as well as planned pilot and demonstration projects to increase awareness and attention of drivers while they are in their vehicles.
- **Accommodations for all modes of transportation:** The Village recognizes the importance of accommodating multiple modes of transportation, including walking, biking, public transit, and driving. By designing infrastructure that supports the needs of all road users, the project seeks to reduce conflicts and improve safety for everyone.
- **Accommodations for people with disabilities:** The Village recognizes the importance of inclusivity and accessibility for all residents, including those with disabilities. Consideration will be given to their specific needs, ensuring that the transportation system caters to everyone and provides a safe and accessible environment.
- **Separated bike lanes:** The Village aims to establish dedicated infrastructure for bicyclists, creating separated lanes that reduce the risk of collisions with motor vehicles. By providing a safe and designated space for cyclists, this strategy encourages active transportation and enhances overall road safety.
- **Clear and accessible public transportation options:** Enhancing all-weather bus stops and other public transportation amenities is a priority. By improving the accessibility and convenience of public transit, the Village aims to make it safer for individuals to use these services, promoting sustainable and efficient transportation alternatives.
- **Village-wide sidewalk state of good repair:** The Village acknowledges the deteriorating condition of many sidewalks, particularly those made of slate. To address this, the Village plans to assess the state of these sidewalks and develop actions to bring them to a state of good repair. This initiative aims to meet current standards for inclusion and accessibility, promoting pedestrian safety and mobility.
- **Safe and accessible sidewalks and crosswalks:** Improving pedestrian infrastructure is a key aspect of the project. The aim is to enhance the safety and accessibility of sidewalks and crosswalks, making it easier and safer for pedestrians to navigate the

Village and reach their destinations.

These strategies serve as a roadmap for the Village's transportation initiatives, outlining key areas of focus to enhance safety, accessibility, and overall transportation experience for residents and visitors.

## Existing Projects

The Village has prioritized two key project areas: Sidewalks and Speeding. These areas have been identified as critical to reducing traffic-related injuries and fatalities. Several specific projects have been developed to address these concerns, along with additional projects resulting from a transportation study conducted by Alta Planning & Design in 2022.

In the realm of Sidewalks, the Village is committed to improving their condition and accessibility. Projects include repairing existing sidewalks and ensuring compliance with ADA standards. Furthermore, the Village aims to extend sidewalks to areas that currently lack pedestrian infrastructure, enhancing safety and providing alternative modes of transportation.

Addressing Speeding is another crucial component of the Transportation Safety focus. The Village has implemented a range of measures to combat excessive speeding on its roads. This includes the use of radar speed devices to collect data and identify areas with high rates of speeding. The data is then shared with local law enforcement to inform targeted enforcement efforts. The Village is also advocating for speed limit reductions on State roads, working closely with the New York State Department of Transportation to enhance safety in these areas.

In addition to these ongoing efforts, the Village has embarked on specific projects resulting from the 2022 transportation study from Alta Planning & Design. These projects were identified as critical to improving transportation safety within the community. By addressing sidewalk conditions, reducing speeding, and implementing data-driven initiatives, the Village is actively working towards creating a safer and more secure transportation environment for its residents and visitors.

## Sidewalks

The Village's commitment to improving sidewalks is rooted in its comprehensive planning process. The Village updated its Comprehensive Plan in 2022, which involved extensive community engagement to gather feedback and prioritize community needs. During this process, many residents expressed the importance of improving sidewalks in the Village.

As a result, bringing sidewalks into a state of good repair became a strategic initiative supported by the Comprehensive Plan. Recognizing the significance of sidewalks to transportation safety and the well-being of the community, the Village is dedicated to addressing this priority.

One upcoming project that aligns with this initiative involves replacing sidewalks on a stretch of

South Street and installing a new sidewalk on a block that currently lacks one. While the Village acknowledges the financial burden of sidewalk improvements on taxpayers, it actively seeks external funding opportunities, such as the Community Block Development Grant (CBDG) award from Orange County for the South Street sidewalks, to support these projects and alleviate the cost to the community.

Another recent initiative includes the Village's application for the federal RAISE grant in 2023 for design and planning work on key roads and intersections. While the grant has not been awarded at the time of this Action Plan, the application process has helped clarify the Village's intentions and prior efforts related to this Village-wide strategy.

The Village acknowledges the significance of its two state roads, SR 94 (Main Street) and SR 17A, which traverse the central business district. With New York State planning to repave these roads in 2024, ongoing discussions with the New York State Department of Transportation (NYSDOT) are underway. These discussions aim to align efforts and explore potential traffic calming measures when the repaving takes place.

To ensure a comprehensive approach to sidewalk improvements, the Village has hired a summer intern for 2023 to conduct an inventory of existing sidewalks. This inventory will help identify areas requiring immediate attention and guide future prioritization of sidewalk enhancement efforts.

These projects exemplify the Village's commitment to enhancing pedestrian safety and accessibility through sidewalk repairs, new installations, and improved crosswalks. The Village remains dedicated to collaborating with relevant authorities and stakeholders to achieve its transportation safety goals.

## Speeding

Speeding is a significant transportation safety concern in the Village, compounded by the existing infrastructure limitations and lack of modern design principles. The Comprehensive Plan, developed through community engagement, highlighted residents' concerns about feeling unsafe while walking due to sidewalk issues, leading to a higher reliance on cars for transportation.

To address this issue, the Village has implemented an initiative to study traffic speeding data using radar speed devices. These devices, purchased in 2022 and 2023, provide quantitative data on speeding patterns and help identify areas with excessive speeding. By sharing this data with the Warwick Police Department, the Village aims to inform targeted enforcement efforts in high-speed areas.

Efforts to address speeding extend beyond data analysis. The Village has requested the New York State Department of Transportation (NYSDOT) to reduce speed limits on the two State roads entering the Village, namely SR 94 and SR 17A. These roads have high speed limits upon entering the Village, posing safety risks in densely populated areas, including the vibrant

downtown and school zones.

Ensuring pedestrian safety at the Farmers Market on Bank Street is another ongoing initiative. This heavily pedestrian-trafficked area requires additional measures such as clearer signage, potential speed bumps, and possibly lowering the speed limit. These steps aim to mitigate risks and enhance safety for pedestrians.

One way the Village addresses the issue of speeding is to implement a cost-effective initiative using road stencils and paint to encourage drivers to slow down in areas with significant speeding concerns. Several stencils have already been painted on the road, serving as visual reminders to motorists to reduce their speed. This approach aims to increase awareness among drivers and potentially have an immediate impact on reducing speeding incidents. The Village plans to continue expanding the use of these stencils to additional locations where speeding is a prevalent problem, further emphasizing the importance of safe driving practices.

To raise awareness and promote responsible driving behavior, the Village has launched the Slow Down Warwick outreach campaign. This initiative shares collected data, including radar speed device readings and crash reports, to educate the community about the speeding issue and encourage collective efforts to prioritize safety for non-vehicle travelers.

Through these initiatives, the Village is actively addressing the challenges posed by speeding, striving to create a safer environment for all residents and visitors.

## Specific Project Recommendations

### Alta Planning & Design Recommendations

In 2021, the Village of Warwick commissioned Alta Planning & Design to complete a transportation study as part of the Village's master planning process. These recommendations are included herein.

Corridor Improvements	
Roads	Recommendations
Maple Avenue	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Sidewalk / Sidepath Improvements*</li> </ul>
Colonial Avenue	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Sidewalk improvements</li> </ul>
Forester Avenue	<ul style="list-style-type: none"> <li>• Sidewalk improvements</li> </ul>
Oakland Lane	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Sidewalk improvements</li> </ul>
West Street	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Sidewalk improvements</li> </ul>
Grand Street	<ul style="list-style-type: none"> <li>• Sidewalk improvements</li> </ul>
Memorial Park Drive	<ul style="list-style-type: none"> <li>• Shared-use path</li> </ul>
McFarland Drive	<ul style="list-style-type: none"> <li>• Shared-use path</li> </ul>
Park Lane	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Shared-use path</li> </ul>
Park Way/Park Place/Burt Street	<ul style="list-style-type: none"> <li>• Sidewalk improvements</li> </ul>
Galloway Road	<ul style="list-style-type: none"> <li>• Traffic calming streetscape improvements</li> <li>• Sidewalk improvements</li> </ul>
South Street Extension	<ul style="list-style-type: none"> <li>• Does the pencil meant to add a red line (traffic calming streetscape improvements)</li> </ul>
Southern Lane	<ul style="list-style-type: none"> <li>• Sidewalk improvements</li> </ul>

Intersection Improvements	
Colonial Avenue + Forester Avenue	Main Street + Colonial Avenue
Main Street + South Street	Forester Avenue + High Street
West Street + Pond Hill Avenue	West Street + Oakland Avenue
Overlook Drive + Galloway Road	Hawthorn Avenue + Galloway Road

\* Requires detailed design before considering a sidewalk or sidepath

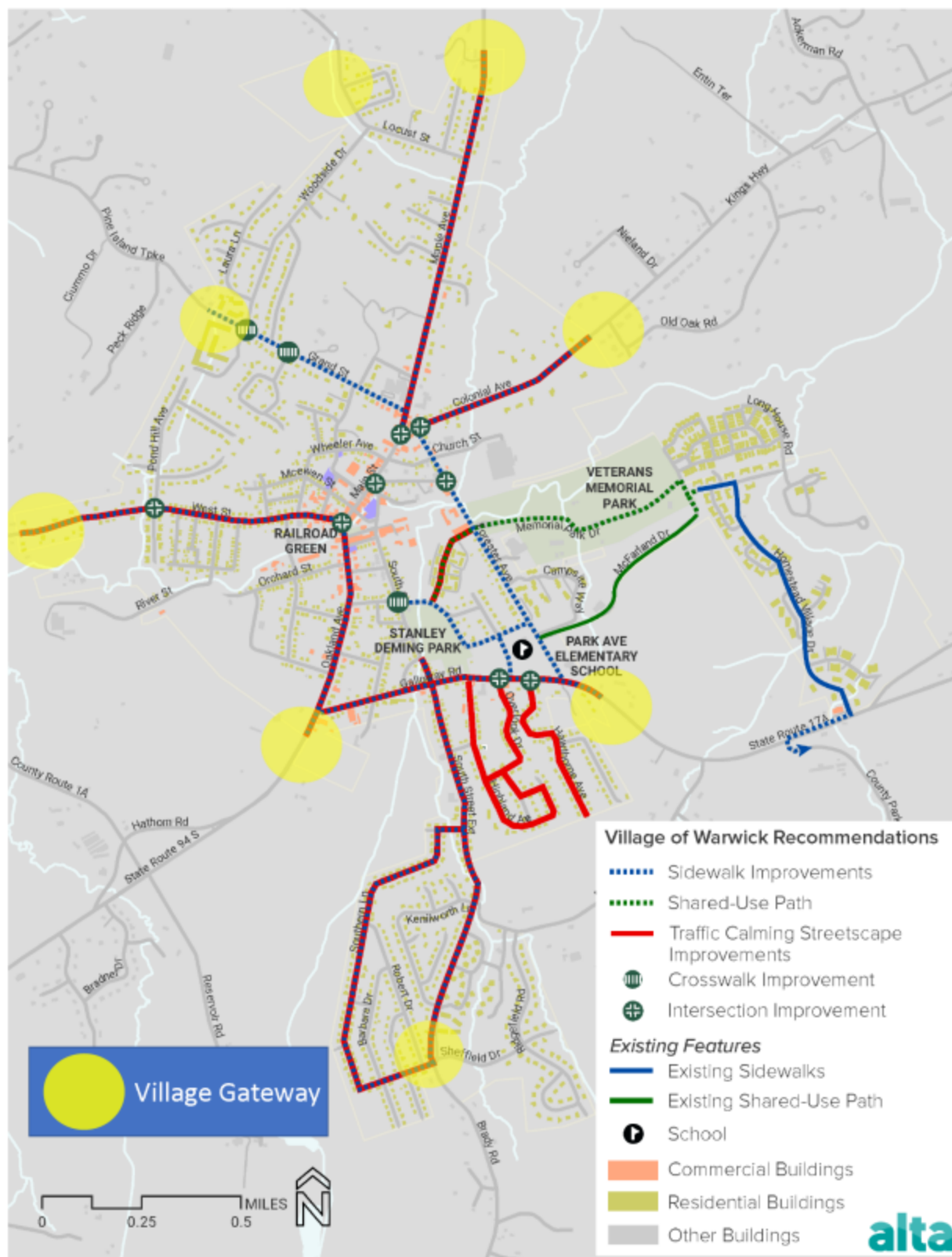


Figure 29: Safety improvements recommended by Alta, 2021

## Progress to date on Alta Planning & Design Recommendations

- **West Street.** West Street serves as a vital link connecting the Village of Warwick to St. Stephen's Church, the middle school and high school, and downtown amenities. However, concerns have arisen regarding the safety of pedestrians, particularly children, due to speeding vehicles. To address this issue, the project focuses on enhancing pedestrian safety along this route. The Village of Warwick has submitted a grant application under the RAISE program in early 2023 to support the design of these improvements.
- **SR 17A / Galloway Road.** This State-owned road cuts through the community from east to west, dividing neighborhoods and separating residents from downtown, parks, and an elementary school. The lack of consistent sidewalk and crosswalk infrastructure, coupled with the transition from a 55 mph speed limit to a 30 mph zone and subsequently a 20 mph school zone, creates hazardous conditions for pedestrians. The project aims to implement Complete Streets elements, including lowering the speed limit to 25 mph to align with the Village's speed limit. The Village of Warwick has been advocating to the New York State Department of Transportation (NYSDOT) for comprehensive improvements and speed limit reduction along SR 17A. Furthermore, the Village has submitted a grant application under the RAISE program to support the design of complete streets improvements. Signage and demonstration projects are also planned at the gateway to enhance safety measures.
- **South Street Extension.** Serving as an entry point to the Village from New Jersey, South Street Extension lacks sidewalks in a densely populated residential area. Speeding remains a concern, posing risks to the safety and walkability of children and residents accessing parks, schools, and downtown. Due to the road's narrowness, a detailed planning process is required to implement physical improvements. The Village of Warwick has submitted a grant application under the RAISE program to support the design of these enhancements. Additionally, measures such as "SLOW 25 mph" markings have been painted in multiple locations, periodic speed detectors have been installed, and signage and demonstration projects at the gateway are planned.
- **Oakland Avenue.** The Village has been collaborating with NYSDOT in an effort to lower the speed limit on this road. As part of the NYSDOT's repaving project scheduled for 2025, improvements to sidewalks and crosswalks are also planned.
- **Maple Avenue.** Similar to Oakland Avenue, the Village has been working with NYSDOT to reduce the speed limit on Maple Avenue. The road is slated for repaving in 2025, and improvements to the intersection at Maple and Colonial are included in the project.
- **Memorial Park Drive, Forester, and McFarland Drive.** These areas were identified as requiring improvements through the Veteran's Memorial Park master planning process conducted in 2022 and 2023. These enhancements, integrated into the draft master plan, include crosswalk improvements and complete streets upgrades. The Village is

submitting a grant application as part of the Safe Streets for All federal grant program, administered by USDOT, to support these improvements.

#### Additional projects

- **State Route 94 Multi-Use Trail.** The Village recognizes the need to improve safety conditions for pedestrians on SR 94, a major New York State highway that functions as the Village's "Main Street" and provides access to essential services such as grocery stores and employment opportunities. Currently, pedestrians face unsafe conditions as they walk along this roadway. To address this concern, the Village is pursuing Planning grants to design a multi-use trail. This trail will serve as a dedicated pathway, separate from vehicular traffic, providing a safer and more accessible route for pedestrians to reach their destinations, including jobs and grocery stores. By creating this multi-use trail, the Village aims to enhance the overall transportation experience and improve pedestrian safety along SR 94.
- **Traffic Signage and Roadway Painting.** To address the issue of speeding and promote safer driving behaviors, the Village is implementing a signage project that focuses on increasing awareness and encouraging drivers to slow down. The strategic placement of signage will primarily target the entry and exit points of the Village, also known as the "gateways." By strategically placing signage in these areas, the Village aims to effectively communicate the message that speeding is a problem and prompt drivers to exercise caution and reduce their speed.

Several specific locations have been identified for the installation of these signs, including:

- South Street near Bank Street
- Main Street
- Forester
- West Street
- South Street Extension
- Galloway
- Oakland

These locations have been selected based on their importance as entry and exit points, as well as areas where speeding is prevalent. By implementing these demonstration projects and increasing signage at these specific locations, the Village seeks to demonstrate the commitment to transportation safety and create a visible impact on driver behavior.

## Timeline

When it comes to timelines for the projects outlined in the Action Plan, it is important to note that they can vary depending on various factors, such as available budget and resource allocation. The 2022 Comprehensive Plan provides a comprehensive implementation schedule that categorizes the recommended actions into three priority levels: immediate, intermediate, and

long-term. The Village will refer to the implementation schedule outlined in the Comprehensive Plan as a guide for determining the timelines for the safety-related actions. However, it is essential to remain flexible as unforeseen circumstances and resource availability may impact the actual timelines for each project.

The Village is currently developing a capital improvements plan for 2023, which will integrate various projects and initiatives, including those related to transportation safety. However, the implementation of most of these projects is contingent upon funding availability. The plan will prioritize areas of concern and allocate resources accordingly to address transportation safety issues. Flexibility will be maintained to adjust timelines and priorities based on funding availability and to effectively meet the Village's transportation safety needs.

Projects will consistently be prioritized based on safety and the extent to which they promote multi-modal transportation to provide all residents safe transportation options.

In 2023, the Village has planned or initiated the following efforts:

- Coordination with the Town of Warwick, the Village of Florida and the Village of Greenwood Lake to seek funding for a comprehensive town-wide transportation safety plan, which would incorporate the Village of Warwick.
- Submitting funding applications for various capital projects, including:
  - Designing the "Slow Down Warwick" initial campaign.
  - Design and planning funding for West St, SR 94, Galloway, and South St. extension
  - Improving sidewalks on South Street from Galloway to 3rd St.
  - Collaborating with NYSDOT for potential enhancements to State roads.
  - Enhancing crosswalks at Main St and Village Hall.
  - Installing pedestrian safety signage at the Farmer's Market.
  - Acquiring a second speed radar device.

These endeavors reflect the Village's commitment to addressing transportation safety concerns and improving the overall safety and well-being of its residents.

# Appendices

## Village of Warwick 2022 Comprehensive Plan

<https://villageofwarwick.org/wp-content/uploads/FinalPlan122022.pdf>

## Alta Planning & Design Memorandum

Warwick Existing Parking Demand and Intersection and Streetscape Improvements, located at [https://villageofwarwick.org/wp-content/uploads/Warwick-Intersection\\_Streetscape-Improvement-Memo-FINAL-1.pdf](https://villageofwarwick.org/wp-content/uploads/Warwick-Intersection_Streetscape-Improvement-Memo-FINAL-1.pdf)