



Pedestrian
Action Plan

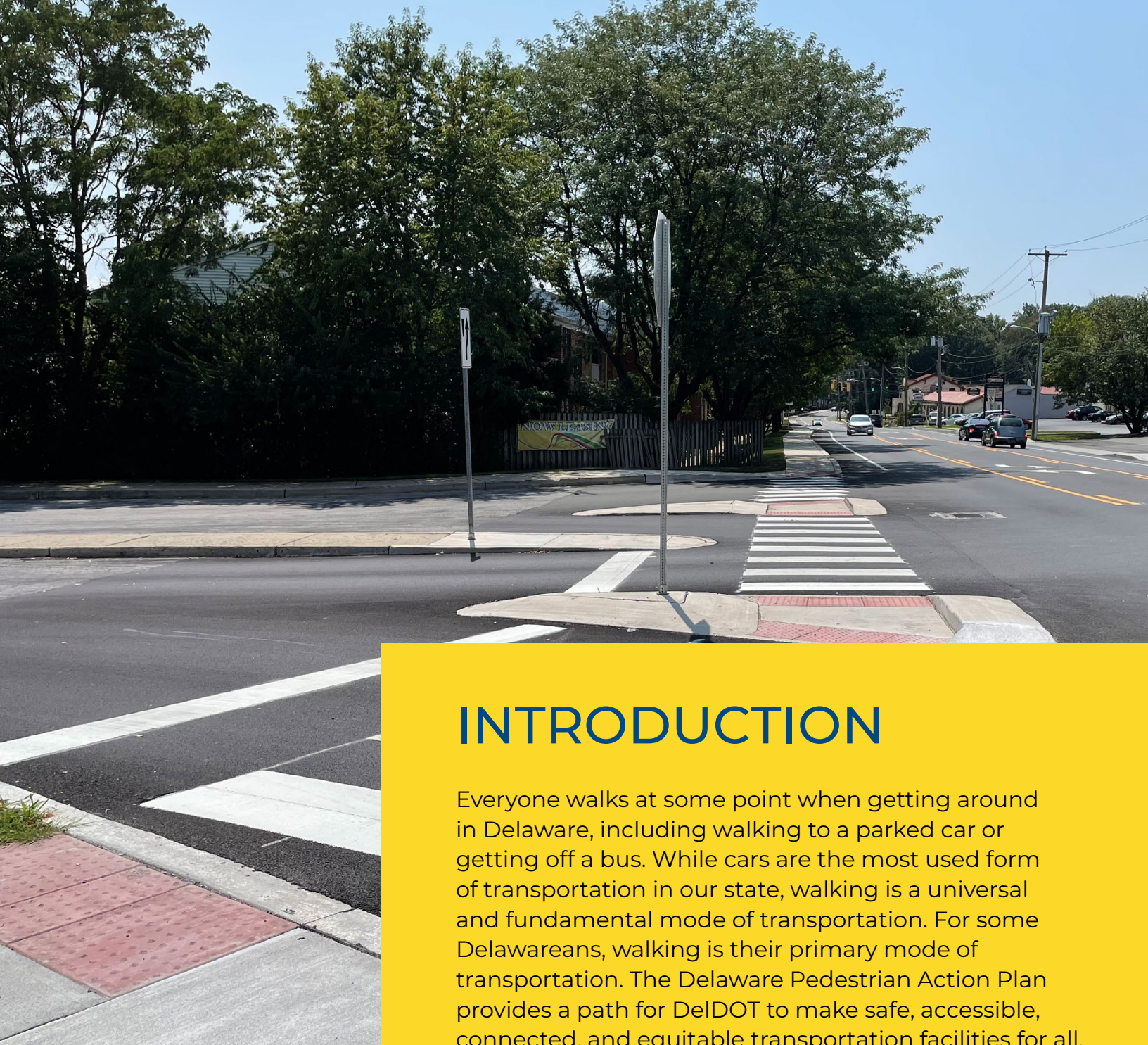
Phase I

2022



TABLE OF CONTENTS

<u>Introduction</u>	2
<u>Vision Statement</u>	3
<u>About the Plan</u>	4
<u>History</u>	6
<u>Current State Policies, Regulations, and Practices</u>	8
<u>Goals Summary</u>	15
<u>Next Steps</u>	32
<u>Call to Action</u>	33
<u>Statewide Statistics</u>	34



INTRODUCTION

Everyone walks at some point when getting around in Delaware, including walking to a parked car or getting off a bus. While cars are the most used form of transportation in our state, walking is a universal and fundamental mode of transportation. For some Delawareans, walking is their primary mode of transportation. The Delaware Pedestrian Action Plan provides a path for DelDOT to make safe, accessible, connected, and equitable transportation facilities for all.

This introduction describes how the Delaware Pedestrian Action Plan is being developed, some history on DelDOT's role in pedestrian transportation, and some of the interworking efforts occurring at DelDOT. It builds on previous planning work and provides a path forward to prioritize the needs of people walking along state-maintained roadways throughout the state.

VISION STATEMENT

“DelDOT continues to strive toward zero deaths in order to eliminate fatalities and serious injuries for all modes of travel. This plan will outline clear steps toward ensuring a safe, accessible, connected, and equitable network for pedestrians traveling along state-maintained roadways.”

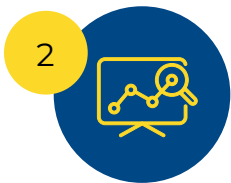
ABOUT THE PLAN

The Delaware Pedestrian Action Plan is an actionable plan that highlights the work already underway at DeIDOT to improve pedestrian safety, accessibility, connectivity, and equity and will provide an actionable framework for DeIDOT to continue working with planning partners and communities to improve pedestrian travel.

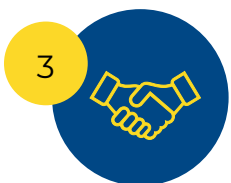
The Pedestrian Action Plan is being developed in three phases. **Phase 1 is focused on three main objectives.**



Review Existing Plans – Synthesize existing DeIDOT pedestrian-related planning documents, policies, programs, and initiatives.

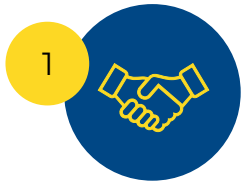


Initial Pedestrian Crash Data Analysis – Analyze pedestrian crash data statewide to identify potential pedestrian crash clusters and connectivity needs.



Public Engagement – Develop project website and begin public involvement via online survey and in-person engagement events.

Phase 2 of the Pedestrian Action Plan will focus on three main objectives.

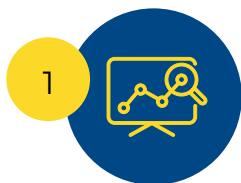


Public Engagement – Continue to engage with the public via online and in-person engagement.

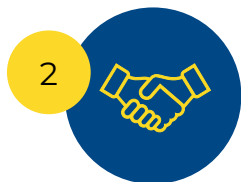


Internal DeIDOT Coordination – Explore changes to DeIDOT programs and policies to accomplish Phase 1 goals and identify any new goals, objectives, or action items.

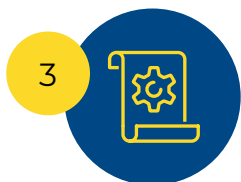
Phase 3 of the Pedestrian Action Plan will focus on four main objectives.



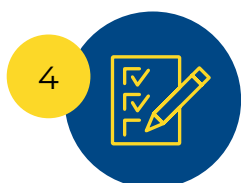
Additional Pedestrian Crash Data Analysis – Analyze pedestrian crash clusters, connectivity, and equity mapping to better understand and prioritize need.



Public and Stakeholder Engagement – Continue to engage with the public via online and in-person engagement. Expand engagement to include stakeholder group involving planning partners to refine or create new goals, objectives, and action items.



Implementation Plan – Develop a plan to implement changes to DeIDOT policies, programs, or procedures to achieve the goals, objectives, and action items of the Pedestrian Action Plan.



Evaluation – Explore performance measures and evaluation methods to track progress towards meeting the goals and objectives of the Pedestrian Action Plan.

HISTORY

Timeline of DeIDOT pedestrian planning efforts and investments since the the 2007 Statewide Pedestrian Action Plan.

2007



Delaware Statewide Pedestrian Action Plan published.

2010



DeIDOT Complete Streets Policy adopted.

2011



Trails and Pathways Program established to begin investing in trail networks. Trail network projects are now funded through the Delaware Statewide Bicycle and Pedestrian Program.

2012



Self-Assessment of the pedestrian network under DeIDOT's authority and control.

2013



Update to Sidewalk and Multi-Use Path Maintenance Policy.

2014



Pedestrian Access Routes (PAR) Program funding added to the Delaware Capital Transportation Program (CTP).

2015



- DeIDOT ADA Self-Assessment and Transition Plan published.
- DeIDOT Pedestrian Accessibility Standards (PAS) for Facilities in the Public Right-of-Way published.
- Delaware Advisory Council on Walkability and Pedestrian Awareness (the "Pedestrian Council") established to advise the Secretary of DeIDOT on ways to make walking a safe, convenient, efficient, and comfortable means of transportation.



Enhanced Pedestrian Crossings in Dover, Delaware



2018

- Update to DelDOT ADA Self-Assessment and Transition Plan.
- First update to Pedestrian Accessibility Standards (PAS) for Facilities in the Public Right-of-Way.

2020

The Pedestrian Council dissolved with a recommendation to form a stakeholder group of expanded membership to implement the Pedestrian Council recommendations and the Strategic Highway Safety Plan (SHSP) to improve safety and connectivity for pedestrians.

2021

Second update to Pedestrian Accessibility Standards (PAS) for Facilities in the Public Right-of-Way.

2022



Delaware Statewide Pedestrian Action Plan Phase 1 and website launched.

CURRENT STATE POLICIES, REGULATIONS, AND PRACTICES

Existing DeIDOT pedestrian-related plans, policies, standards, and initiatives already underway in Delaware were reviewed in developing the foundation of this plan. Results from this review shaped the plan's goals, objectives, and actions.

The review included DeIDOT planning documents, design guides and manuals, policies and programs, and other select state initiatives related to pedestrians. The summary of these review items is below.

DeIDOT Planning Documents Reviewed

Delaware Statewide Pedestrian Action Plan (2007)

The Delaware Statewide Pedestrian Action Plan (2007) is a policy analysis document that advocated for pedestrian transportation and summarized issues and concerns for pedestrians in Delaware. The document analyzed statewide, countywide, and select municipal policies, regulations, and practices in Delaware related to pedestrians and used that analysis to formulate goals, objectives, and recommended actions to promote pedestrian travel and safety.

DeIDOT Traffic Calming Design Manual (2012 Update)

The purpose of the Traffic Calming Design Manual is to provide administrative procedures needed to evaluate and implement traffic calming measures, as well as guidance on applications for traffic calming and on geometric design, signing, and pavement marking related to traffic calming measures. This guidance is geared toward DeIDOT personnel, local governments, and community groups, as well as individual citizens. The manual includes many traffic calming design solutions that improve pedestrian safety and comfort such as crosswalks, raised crosswalks, curb extensions, pedestrian median islands, among other solutions.

ADA Self-Assessment and Transition Plan (2018 Update)

The DeIDOT ADA Self-Assessment and Transition Plan is a document required for compliance with the Americans with Disabilities Act (ADA) of 1990. DeIDOT is currently working to update the Transition Plan and anticipates this update to be released in 2023. The purpose of the Transition Plan is to present the Department's ADA Self-Assessment and identify the actions DeIDOT will take to transition the transportation system under DeIDOT jurisdiction to be accessible in compliance with the requirements of the Americans with Disabilities Act (ADA).



Innovation in Motion, the Delaware Long Range Transportation Plan (2019)

Innovation in Motion, the Delaware Long Range Transportation Plan (2019) is DelDOT’s long range plan with a focus on embracing new technologies and strategies to improve the transportation system to adequately meet the needs of the traveling public into the future. This plan defines the statewide transportation goals, strategies, actions, and performance measures to make the state economy more competitive, our communities more vibrant, and our environment more sustainable for future generations.

This plan identified statewide pedestrian transportation challenges and innovations. It summarized existing funding programs used to implement pedestrian projects throughout the state and identified DelDOT divisions’ and additional partners’ roles and responsibilities related to planning for pedestrian travel within the state. It also identified specific actionable strategies focused on pedestrian transportation with recommended implementation timeframes and performance metrics and targets. The plan set a goal to reduce pedestrian fatalities and serious injuries by 50% by 2035.

2020 and 2021 Annual Supplements – Innovation in Motion, the Delaware Long Range Transportation Plan

The 2020 and 2021 Annual Supplements to the Long Range Transportation Plan continue the vision statement of the original plan and serve as a reporting mechanism for the progress towards goals outlined in the original plan. A major accomplishment reported in the 2020 supplement was DelDOT’s work on creating a GIS-based network system of ADA-compliant curb ramps and crosswalks on public roadways. The 2021 supplement reported the revamping of the “Report a Pedestrian Issue” website, allowing for citizens to notify DelDOT of pedestrian safety concerns.



Shared Use Path in Lewes, Delaware



Strategic Highway Safety Plan (2020)

The Delaware 2021-2025 Strategic Highway Safety Plan: Toward Zero Deaths is a comprehensive transportation safety plan seeking to reduce fatalities and serious injuries on public roads. The plan used crash data from various levels of government to formulate goals, objectives, emphasis areas, priorities, and countermeasures for Delaware to move towards zero deaths on public roads.

The plan has included pedestrian safety as one of the major emphasis areas since the first Strategic Highway Safety Plan (SHSP) in 2006. Pedestrian fatalities accounted for 25% of all fatalities and 9% of all serious injuries from 2015 through 2019. Emphasis areas represent key factors contributing to crashes for which the development of strategies and detailed actions could have the greatest potential to reduce fatalities and serious injuries. The plan set a goal to reduce pedestrian fatalities and serious injuries by 15% (76 to 64) over the next 5 years. The plan provided 5-year crash data on numbers of pedestrian fatalities and serious injury crashes, the gender and ages of pedestrian crash victims, when crashes were occurring, and where crashes were occurring. This data was used to develop strategies and actions to increase pedestrian safety on state-owned and -maintained roadways.

DeIDOT Design Guides and Manuals Reviewed

DeIDOT Road Design Manual (2011 Update)

The purpose of the DeIDOT Road Design Manual was to ensure that DeIDOT plans, designs, and implements projects that serve existing and future transportation needs, including the need for alternate modes that are safe and have a long service life and low maintenance costs. The Road Design Manual included design guidelines focused on safety, as well as access and mobility. It included guidance and standards for roadway improvement projects to assure that roadways are consistently designed with consideration of appropriate levels of traffic service, safety, and economy, consistent with the environmental and social context of the area.

Delaware Manual on Uniform Traffic Control Devices (MUTCD) (2011 Update)

The Delaware Manual on Uniform Traffic Control Devices (MUTCD) is used as the state standard for all traffic control devices installed on any state-owned or -maintained street, highway, bikeway, or private road open to public travel. The policies and procedures of the Delaware MUTCD are used to obtain basic uniformity of traffic control devices, including for pedestrian facilities.

DeIDOT Traffic Design Manual (2015 Update)

This manual sets forth the latest design concepts and standard practices for DeIDOT engineers and technicians when preparing plans and specifications for traffic system design projects. This manual represents DeIDOT's practices, techniques, and procedures that will be applied in developing plans, special provisions, standards, and specifications for any new or modified traffic system devices that will be installed or maintained by DeIDOT. The manual includes pedestrian signal guidelines for timing, phasing, and ADA compliance.



Pedestrian Accessibility Improvements Completed by the Pedestrian Access Routes (PAR) Program



Sidewalk Link Installed through the Pedestrian Access Routes (PAR) Program



DeIDOT Development Coordination Manual (2019 Update)

The purpose of the DeIDOT Development Coordination Manual is to set forth DeIDOT requirements for the planning, design, construction, and acceptance of subdivision streets and how they connect to state-maintained roadways. It is intended to regulate and control the location, design, and operation of access points and transportation facilities maintained by DeIDOT. The manual includes pedestrian considerations, including connectivity requirements for shared use paths, sidewalks, walkways, and transit facilities, among other forms of pedestrian infrastructure.

Pedestrian Accessibility Standards (PAS Manual) (2021 Update)

DeIDOT developed this manual to document all pertinent pedestrian accessibility standards, as well as subsequent guidance and best practices to be used in the design, construction, and maintenance of pedestrian facilities within the public right-of-way along streets and highways under DeIDOT's jurisdiction. This manual is to be used by all designers and contractors who design for or work within the public right-of-way. The manual was originally published in 2015 with updates in 2018 and 2021.

DelDOT Policies and Programs Reviewed

Sidewalk and Multi-Use Path Maintenance Policy (2013 Update)

The Sidewalk and Multi-Use Path Maintenance Policy outlines which roads DelDOT has maintenance responsibility for and what kinds of maintenance DelDOT will perform. The original policy was published in 1995 and was revised in 2013. DelDOT's sidewalk maintenance responsibility includes all sidewalks in the state right-of-way, excluding sidewalks owned or maintained by municipalities, privately-owned sidewalks, and sidewalks maintained by others through an agreement or other written obligation. DelDOT does not maintain sidewalks in subdivisions. On the roads that DelDOT has maintenance responsibility for, DelDOT will perform structural repairs, vegetation control, and snow removal. Other maintenance (sweeping, trash removal, etc.) will be performed as resources are available.

Pedestrian Access Routes (PAR) Program (2014)

The Pedestrian Access Routes (PAR) Program was initiated in 2014 to supplement other DelDOT programs with a primary focus on the accessibility of DelDOT's existing pedestrian network and Americans with Disabilities Act (ADA) compliance identified in the DelDOT ADA Self-Assessment and Transition Plan. The Pedestrian Access Routes (PAR) Program has a dedicated source of funding in the Capital Transportation Program (CTP). The program was initially funded in 2014 at \$3 million and is currently receiving \$4.5 million in funding. The Pedestrian Access Routes (PAR) Program is used to supplement other DelDOT programs but can also be used to implement independent projects that address pedestrian accessibility deficiencies identified in the DelDOT Transition Plan.

ADA Compliance Inspection Application (ACIA) (2019)

The ADA Compliance Inspection Application (ACIA) is a web-based application that is used to assess facilities (curb ramps, sidewalks, bus pads, etc.) in the state's right-of-way at the end of project construction. The information from the application is used by DelDOT's Engineering Support Group to create an ADA compliance review report that is provided to the project manager. The ADA compliance review report lists all of the facilities on the project along with each facility's compliance status based on the applicable ADA standard. Accepting pedestrian facilities into DelDOT's inventory is subject to ADA Title II/Section 504 Coordinator approval, which ensures that ADA compliance is achieved.

Report An Issue Web Tool

DelDOT maintains an online application where members of the public can report pedestrian (or other modal) issues or conditions that they have observed along roadways of concern. The tool is available online and in a mobile application format.

DelDOT Lighting Policy (2020)

The purpose of the DelDOT Lighting Policy is to provide improved visibility for those traveling on roadways at night. Lighting can provide an additional level of comfort for a driver that sometimes cannot be achieved through the installation of raised pavement markers, pavement striping, roadway signing, or other effective passive methods. All customers that utilize the state-maintained roadway network system in Delaware, including drivers, pedestrians, and bicyclists, can benefit from improved visibility in nighttime conditions. The policy establishes a method for DelDOT to evaluate roadway lighting needs, considering pedestrian safety in addition to many other factors.



Other State Pedestrian-Related Initiatives Reviewed

Delaware's Annual Traffic Statistical Report (2020)

This document is an annual report completed by the Delaware State Police (DSP). It is a compilation of crash statistics for crashes occurring on public roadways which produced injuries and/or property damage over \$1,500. The report includes general traffic statistics, general crash statistics, vehicle and driver statistics, other special topics, alcohol-related crash statistics, and DSP statistics. The summary of 2020 pedestrian crashes is as follows: 307 pedestrian-involved crashes, 8% of crashes were fatal, 61% were personal injury crashes, 31% were property damage only, and 17 of the 25 pedestrians killed were under the influence of alcohol or drugs. In 2020, the fatality rate for pedestrians involved in crashes was 5.8% in New Castle County, 8.6% in Kent County, and 19.6% in Sussex County.

Better Models for Development in Delaware

Better Models is a publication by the Delaware Office of State Planning Coordination. Its purpose is to encourage developers, citizen leaders, and local officials to make land use and development decisions that will deter suburban sprawl and promote walkable communities. The guide includes six principles: conserve farmland, open space, and scenic resources; maintain a clear edge between town and countryside; build livable communities; preserve historic resources; respect local character in new construction; and reduce the impact of the car. The guide puts emphasis on meeting the needs of all road users – non-motorized and motorized alike – in order to provide Delawareans with true transportation choice.

GOALS SUMMARY

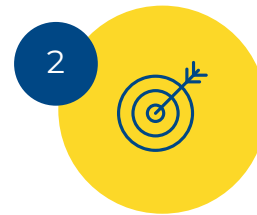
The following sections are organized by the four goals that were originally identified in the 2007 Delaware Statewide Pedestrian Action Plan. Each goal includes a list of items that have been completed since the 2007 plan as well as objectives with corresponding actions that are either ongoing or are actions DeIDOT plans to take. For the actions that DeIDOT plans to undertake, a time frame has been included for each action item indicating when DeIDOT plans to accomplish the item. The time frames are listed as follows:

- Short-term – within 1 year.
- Mid-term – within 3 years.
- Long-term – within 5 years.



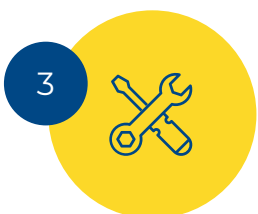
INVENTORY & PLAN

Provide and promote pedestrian mobility, connectivity, and accessibility.



STANDARDS & GUIDELINES

Revise and consolidate policies, plans, regulations, standards, and guidelines that ensure safe pedestrian access to all transportation facilities.



EDUCATION, OUTREACH, & IMPLEMENTATION

Develop programs and strategies to improve pedestrian safety through education, outreach, and implementation.



RESPONSIBILITY & FUNDING

Enhance operation and maintenance for all pedestrian facilities and identify funding responsibilities.

Goal 1:

INVENTORY & PLAN

Provide and promote pedestrian mobility, connectivity, and accessibility.

Georgetown to Lewes Multi-Use Trail



What has been completed since the 2007 plan:

Pedestrian Facilities Inventory Database – DeIDOT created inventory databases of existing pedestrian facilities throughout the state that serve as asset management tools to track location, width, length, materials used, maintenance responsibility, and compliance status to the Americans with Disabilities Act (ADA) of sidewalks, shared use paths, and curb ramps. The inventory is regularly updated by pulling data from counties, municipalities, and the DeIDOT ADA Construction Inspection Application (ACIA).

DeIDOT ADA Self-Assessment and Transition Plan – DeIDOT developed the DeIDOT Self-Assessment and Transition Plan in 2018, and an updated plan is set to be released in 2023. The plan identifies all deficiencies in pedestrian facilities, programs, services, and activities that serve people with disabilities and do not meet ADA requirements.

DeIDOT Complete Streets Policy – The DeIDOT Complete Streets Policy was adopted in 2010 to ensure that DeIDOT system modifications are routinely planned, designed, constructed, operated, and maintained in a way that enables safe and efficient access for all users.

Organizational Changes – DeIDOT developed an organizational structure to address ADA compliance. The new organizational structure includes a full-time DeIDOT Title II ADA Coordinator, a Bicycle Coordinator, and a Pedestrian Coordinator. Additional technical and support staff are provided, as needed.

Objective 1.1 – Promote land use and transportation facilities that encourage walking and environmental stewardship.

DelDOT's ongoing actions include:

Coordination with Land Use Partners through Transportation Improvement Districts (TIDs) – DelDOT integrates transportation planning with local government land use planning through Transportation Improvement Districts (TIDs) to comprehensively identify, plan, and fund needed transportation improvements. TIDs consider pedestrian travel and accessibility needs in the identification and cost estimation of needed transportation improvements. The lists of TID improvements eligible for TID funding include locally prioritized pedestrian improvements.

Private Development Coordination – DelDOT reviews all private development requests for subdivision streets and access to state-maintained roadways to ensure that the site land use and any access modifications are designed to provide safe and reasonable access to the site while providing the least impact on the existing roadway system and its users. In 2021, DelDOT reviewed over 200 of these types of development site projects.

Objective 1.2 – Minimize institutional and procedural barriers to the implementation of pedestrian facilities.

DelDOT's ongoing actions include:

Consistent Administration of Policies, Standards, and Guidelines – DelDOT is continuing to improve consistency in the administration of policies, standards, and guidelines. For example, DelDOT has adopted shared use path and sidewalk policies that were included as appendices to the Development Coordination Manual. DelDOT is also considering further revisions to the Development Coordination Manual to require additional pedestrian infrastructure improvements related to new developments.

Provide Technical Assistance to Local Jurisdictions – DelDOT provides assistance to local jurisdictions to develop and implement pedestrian plans and projects linking local and state-owned pedestrian facilities that expand the overall network. DelDOT continues to encourage municipalities without pedestrian plans to apply for funding from metropolitan planning organizations (MPOs) to develop their own plans and also provides technical support to municipalities to implement existing plans. For example, the Dover-Kent MPO helped the City of Dover establish its pedestrian plan while DelDOT helped in its implementation.

Objective 1.3 – Utilize, adapt, and test new technologies and data-based tools to better inventory and plan for pedestrian infrastructure improvements.

DeIDOT's ongoing actions include:

Pedestrian Origin-Destination Data Capture – In December 2016, the Delaware Criminal Justice Information System (DelJIS) added pedestrian origin and destination fields to E-Crash. E-Crash is an electronic reporting system that responding officers use to document crashes when they happen. Police officers are now being automatically prompted to enter pedestrian origin and destination data for pedestrian crashes. This data helps engineers and planners analyze pedestrian crashes. DeIDOT will continue to implement best practices for the use of this new pedestrian origin-destination data to capture improved data about pedestrian travel patterns and crashes.

DeIDOT plans to undertake the following actions in support of Goal 1, as well as explore additional actions during Phase 2 of this plan:

Improve Data Collection of Pedestrian Crashes and Monitor Trends:

- (short-term) – Study and understand correlations between pedestrian crashes and population changes associated with summer resort seasons, holiday shopping, and other times that increase pedestrian activity and, if necessary, identify appropriate pedestrian safety countermeasures.
- (short-term) – Implement best practices for the use of new pedestrian origin-destination data to capture improved data about pedestrian travel patterns and crashes.
- (mid-term) – Study and understand correlations between pedestrian crashes and income levels/homeless populations in Delaware and, if necessary, identify appropriate pedestrian safety countermeasures.
- (mid-term) – Work with the Division of Substance Abuse and Mental Health (DSAMH) to share data to link mental health issues and substance abuse with traffic and pedestrian travel patterns to improve educational outreach to vulnerable populations.

Update Curb Ramp ADA Deficiencies using the Pavement and Rehabilitation Program (mid-term) – DeIDOT has an annual obligation listed in the Transition Plan to update 100 curb ramps using the Pavement and Rehabilitation Program. DeIDOT has met this goal each year and is tracking how many curb ramps have been updated each year. However, DeIDOT is working on a better process for estimating the number of future curb ramps to be updated in the Pavement and Rehabilitation Program each year.

Better Integrate the Paving Program with the PAR Program and Other DeIDOT Programs (mid-term) – Continue to better connect the Paving Program with the DeIDOT Pedestrian Access Routes (PAR) Program and other DeIDOT programs and projects with the intention of incorporating remediation of additional noncompliant pedestrian features into paving projects where feasible. The PAR Program will continue to be used for standalone pedestrian projects, such as closing sidewalk network gaps and updating curb ramps as well.

E-Construction Technology Mobile Application (mid-term) – Develop a mobile application using e-construction technology to enable construction inspection staff to make real-time sidewalk inventory updates and provide more timely reporting to the public and the Federal Highway Administration (FHWA).

Identify New Pedestrian Performance Measures (mid-term) – Establish pedestrian performance standards with measurable outcomes. For example, through pedestrian safety audits (PSAs), safety countermeasures could be tracked and used on projects with similar crash trends and roadway geometries.

Address Pedestrian Crashes on Freeways (mid- to long-term) – Freeways are a dangerous place for pedestrians, with 5% of pedestrian fatalities occurring on them. Sometimes this involves stranded motorists who have exited their vehicles, and other times it simply involves pedestrians who are illegally walking on the freeway. Strategies that should be considered to address this issue include: improving driver education and outreach regarding what to do if you break down on a freeway; reviewing and potentially upgrading existing freeway signage regarding contacting 911 for emergencies and #77 for traffic-related issues, such as stalled vehicles; and evaluating DeIDOT's Motorist Assistance Patrol (MAP), which provides free roadside assistance during peak traffic periods to improve safety for stranded motorists and to help them get back on the road, to determine if expansion is possible and what additional resources would be required.

Pedestrian Project Priority Area Program (long-term) – Establish a pedestrian project priority area program to promote walkability, connectivity, safety, and equity, while prioritizing pedestrian improvement projects in environmental justice (EJ) communities to increase safety, foster economic growth, and revitalize communities.

Return on Investment Analysis (long-term) – Conduct an annual comprehensive return on investment report, including pedestrian counts throughout the state, to assess if there is a correlation between pedestrian facility investments in business districts and increases in foot traffic, local economic development trends, and other public benefits.

Goal 2: STANDARDS & GUIDELINES

Revise and consolidate policies, plans, regulations, standards, and guidelines that ensure safe pedestrian access to all transportation facilities.



What has been completed since 2007 plan:

Design Process and Subdivision Review Enhancements – To improve consistency in the administration of policies, standards, and guidelines, DelDOT implemented the new [DelDOT Standards and Regulations for Subdivision Streets and State Highway Access](#) to coordinate the review of development proposals. DelDOT modified the design process and subdivision review process to include plan review by the Title II ADA Coordinator, Pedestrian Coordinator, and Bicycle Coordinator.

[Pedestrian Accessibility Standards \(PAS\) Requirements](#) – Pedestrian Accessibility Standards (PAS) requirements are included in all permits as a condition of approval and a condition of acceptance of subdivision streets.

[Traffic Lighting Policy \(2020 Update\)](#) – The DelDOT Traffic Lighting Policy was updated in 2020 and provides guidance on lighting along state-maintained roadways to create safer facilities for all road users, including pedestrians. The updated policy takes into consideration aspects such as a high pedestrian presence or the presence of marked sidewalks to help justify more lighting, both in terms of area illuminated and the level of illuminance. The policy also provides guidance to collect detailed pedestrian data for consideration when evaluating a facility.

Goal 2 Objectives

Objective 2.1 – Incorporate Complete Streets concepts into planning, design, maintenance, and operations within the public right-of-way.

DeIDOT's ongoing actions include:

Complete Streets Design Guide – DeIDOT is currently developing a Complete Streets design guide which will be used by DeIDOT staff to ensure that complete streets considerations are included in every project during the planning phase of project development. This guide is anticipated to be completed by 2023.

DeIDOT Road Design Manual Updates – In summer 2022, DeIDOT adopted an updated Road Design Manual with new measures promoting design practices that reduce vehicular speeds and promote pedestrian safety. Some of these new measures include guidance on design speeds that are the same as the posted speed limit, 11-foot lane and 5-foot shoulder widths on most roads, and 10-foot lane widths on low-speed roads.

In addition, the manual includes language that gives designers guidance on the target level of service (LOS) for most projects. Under the new guidance, the motor vehicle LOS for most projects should generally be LOS "E." This change will generally result in projects that have fewer motor vehicle lanes and will therefore be more friendly towards pedestrians and bicyclists, compared to projects designed for LOS "C" or "D" which have traditionally been used as the LOS guideline.

Roundabout Design Guidance Memorandum Updates – DeIDOT is in the process of updating design guidance regarding roundabouts. When planned and designed properly, roundabouts can result in fewer crashes, lower vehicular speeds, and improved multimodal safety compared to other types of intersections. One of the goals of this design update is to provide guidance allowing smaller roundabouts in certain situations. Smaller roundabouts can be installed more quickly, at lower cost, and with fewer impacts on property and the environment, and therefore more roundabouts will be able to be installed with the same amount of funding.

Collaboration with Other Governmental Agencies – Collaborate with agencies across all levels of government to build consistent and compliant Complete Streets engineering practices and standards.

Objective 2.2 – Meet Americans with Disabilities Act (ADA) compliance to the maximum extent feasible using sound engineering judgment.

DelDOT plans to undertake the following actions in support of Goal 2, as well as explore additional actions during Phase 2 of this plan:

Create Formal Request Process for Pop-Up Projects (mid-term) – Pop-up projects are temporary demonstration installations that are used to give the public an idea of what permanent projects could look like or achieve. Examples include temporarily painted curb extensions, traffic circles, or bike lanes, among others. DelDOT supports pop-up projects and plans to create a formal process for communities that would like to install pop-up demonstration projects along DelDOT-owned or -operated roadways.



Goal 3:

EDUCATION, OUTREACH, & IMPLEMENTATION

Develop programs and strategies to improve pedestrian safety through education, outreach, and implementation.

US 13 Sidewalk at Boulden St



What has been completed since 2007 plan:

Statewide Pedestrian Safety Campaign – DeIDOT has continued statewide pedestrian safety campaigns to promote a change in behavior by drivers, bicyclists, and pedestrians with the intent to reduce avoidable pedestrian fatalities and injuries. These campaigns have included content regarding pedestrian safety displayed on electronic variable message signs, pop-up events, handing out educational and reflective materials at various community outreach events, and press events with the Delaware State Police (DSP) and Office of Highway Safety (OHS). Additionally, DeIDOT has participated in numerous activities during Pedestrian Safety Month (October), including visiting homeless shelters, talking with residents, hosting pop-up demonstration events, passing out pedestrian safety information, and attending walk to school events.

Increased School Participation in Safe Routes to School Program – DeIDOT developed strategies with the Safe Routes to School program to increase school participation in the program. These strategies included updating the [Safe Routes to School Guidelines](#) and [Sourcebook](#), developing a strategy to determine which schools would benefit most from the program or infrastructure improvements, and increasing outreach through partnership with Safe Kids Delaware and local law enforcement and through general solicitation of the Transportation Alternatives Program (TAP).

Since 2007, DeIDOT has worked on infrastructure, education, or assistance with logistics with the following schools:

- Banneker Elementary
- Bayard Elementary
- Carrcroft Elementary
- Clayton Elementary
- Cooke Elementary
- Downes Elementary
- Eisenberg Elementary
- North Dover Elementary
- WB Simpson Elementary
- Lake Forest
- McCullough Middle
- Wilmington Montessori

2015 Delaware Pedestrian Council – The Pedestrian Council was reestablished in October 2015 by Governor Jack Markell to address concerns related to the high number of pedestrian fatalities, lack of awareness about pedestrian laws, and desire to improve the walkability of the state. The Pedestrian Council was charged with advising the Secretary of DeIDOT on making walking a safe, convenient, efficient, and comfortable means of transportation. For five years, members of the Pedestrian Council and its three subcommittees worked on analyzing data, reviewing policies, developing recommendations, and raising public awareness to help improve pedestrian safety in Delaware.

Driver’s Manual Revisions – Section 4 of the Driver’s Manual was first revised in 2012 and is annually updated to emphasize pedestrian fatalities, awareness of nonmotorized roadway users, and safety instructions for pedestrians. In addition, the Defensive Driver curriculum was amended in May 2021 to include discussions of situations on the road with vulnerable users including, but not limited to, pedestrians, pedestrian safety, yielding to pedestrians, the White Cane Law, and active traffic devices for pedestrian crossing such as HAWK signals and rectangular rapid flashing beacons (RRFBs). With new laws related to vulnerable users, such as the White Cane Law, and with new traffic control devices, such as pedestrian-dedicated traffic signals, it is important that Delaware’s drivers be educated on how they operate.

Rectangular Rapid Flashing Beacons (RRFBs) – DeIDOT has installed 43 rectangular rapid flashing beacons (RRFBs) throughout the state since 2016 to increase the awareness of pedestrian crosswalks and increase the number of vehicles yielding to pedestrians. DeIDOT continues to perform before-and-after studies to understand the success rates of RRFBs and to plan for future RRFBs throughout the state. These studies have shown improvement in motorist yielding between 2% and 59% for the 35 RRFBs studied.

Goal 3 Objectives

Objective 3.1 – Improve pedestrian safety through enhancement of existing programs and development of new programs and implementation strategies.

DeIDOT's ongoing actions include:

Pedestrian Safety Audits (PSAs) – Through the [Delaware Strategic Highway Safety Plan \(SHSP\)](#), the Department is conducting pedestrian safety audits (PSAs) at locations with high pedestrian crashes and installing countermeasures to improve safety. Since 2007, DeIDOT has completed 13 PSAs and continues to track recommendations from audits and work toward implementing those recommendations. DeIDOT plans to incorporate pedestrian behavioral surveys into these audits.

Partner to Incentivize Active Lifestyles – DeIDOT partners with regional organizations and employers to encourage and provide incentives for active lifestyles that include regular walking.

Before-and-After Studies – DeIDOT will continue ongoing research and before-and-after studies for traffic calming features such as radar speed signs, vertical traffic calming measures, and road diets to evaluate the effectiveness in increasing pedestrian safety as well as overall road user safety. DeIDOT will continue to expand these types of before-and-after studies to evaluate and identify the most effective pedestrian safety treatments with the intent of developing new guidance for the use of these measures on Delaware roadways.

Pilot Installation Studies – DeIDOT is working to identify pilot studies using Safe System concepts and traffic calming measures to reduce vehicular speeds and improve pedestrian safety. As the pilot studies are implemented, DeIDOT will summarize lessons learned through the pilot studies that may be applied to other projects and eventually may lead to updated design guidance and manuals.



*Temporary Traffic Circle at 16th Street,
Wilmington, Delaware*



*Temporary Bike Lanes on Delaware
Avenue, Newark, Delaware*



Jack A. Markell Trail in New Castle County, Delaware

Objective 3.2 – Use the 6 E’s of safe transportation planning – engagement, equity, engineering, encouragement, education, and evaluation – to promote safe travel for pedestrians by continuing cooperative statewide public education efforts.

DelDOT’s ongoing actions include:

Implement Complete Streets Projects, Incorporating Educational Outreach –

Continue to utilize DelDOT’s various funding programs to implement Complete Streets projects and infrastructure that comply with the DelDOT Complete Streets Policy and reduce pedestrian exposure and the potential for pedestrian/vehicle conflicts and increase pedestrian visibility. As DelDOT continues to construct Complete Streets projects, the Department will continue to increase awareness regarding pedestrian infrastructure improvements and incorporate educational outreach in conjunction with implementation of pedestrian improvement projects.

Collaboration with Enforcement Agencies – DelDOT will continue to collaborate with enforcement agencies to: build consistent enforcement methods; conduct high-visibility enforcement campaigns targeting both pedestrians and drivers to promote pedestrian safety; provide reflective equipment and educational materials to troopers to be distributed to pedestrians; educate members of the public about pedestrian safety at high pedestrian crash areas working with Delaware State Police (DSP) and the Office of Highway Safety (OHS); and continue to utilize a strategic law enforcement and social services approach to address substance abuse related to pedestrian crashes and behaviors.

Provide Public Education and Awareness Campaigns – DelDOT regularly hosts booths at safety and community events to spread public awareness and educate the public on the importance of pedestrian safety. DelDOT’s public education and awareness campaigns focus on pedestrian safety, rights and responsibilities, and increasing targeted public outreach based on specific data-driven trends (e.g., impairment, visibility, etc.).

Promote Pedestrian Education for School Children – DelDOT is continuing to develop and formalize an educational outreach program for school children, targeting pedestrian safety issues. DelDOT partners with the Office of Highway Safety (OHS) to print and distribute the D.E. Walker coloring book to elementary school students in English and Spanish. DelDOT and OHS continue to work together to provide educational materials and outreach for school children to promote pedestrian safety.

Support Legislative Action – DelDOT is continuing to support legislative action to strengthen pedestrian safety laws and enforcement measures. For example, DelDOT supports the expansion of legislation permitting the use of automated speed enforcement in Delaware.

DelDOT plans to undertake the following actions in support of Goal 3, as well as explore additional actions during Phase 2 of this plan:

Initiate a Pedestrian Stakeholder Focus Group (short-term) – Initiate a pedestrian stakeholder focus group with membership from appropriate state agencies, advocacy groups, and the public to identify new pedestrian action plan goals, objectives, and action items focusing on safety and connectivity improvements, policy updates, and improved collaboration between state and local agencies.

Crossing Guard Certification Requirements (mid-term) – Develop and implement formal crossing guard certification requirements, similar to programs for flaggers in highway work zones.

Evaluate Pedestrian Safety Behavior Modification Class (long-term) – Evaluate the need for a pedestrian safety behavior modification class and require those charged with various pedestrian safety violations to participate in the class.

Pedestrian Detection at Signalized Intersections (long-term) – Research and, where appropriate, implement innovative pedestrian detection at signalized intersections and at other locations along high-risk corridors where driver feedback can be provided via signs and signals.

Goal 4: RESPONSIBILITY & FUNDING

Enhance operation and maintenance for all pedestrian facilities and identify funding responsibilities.



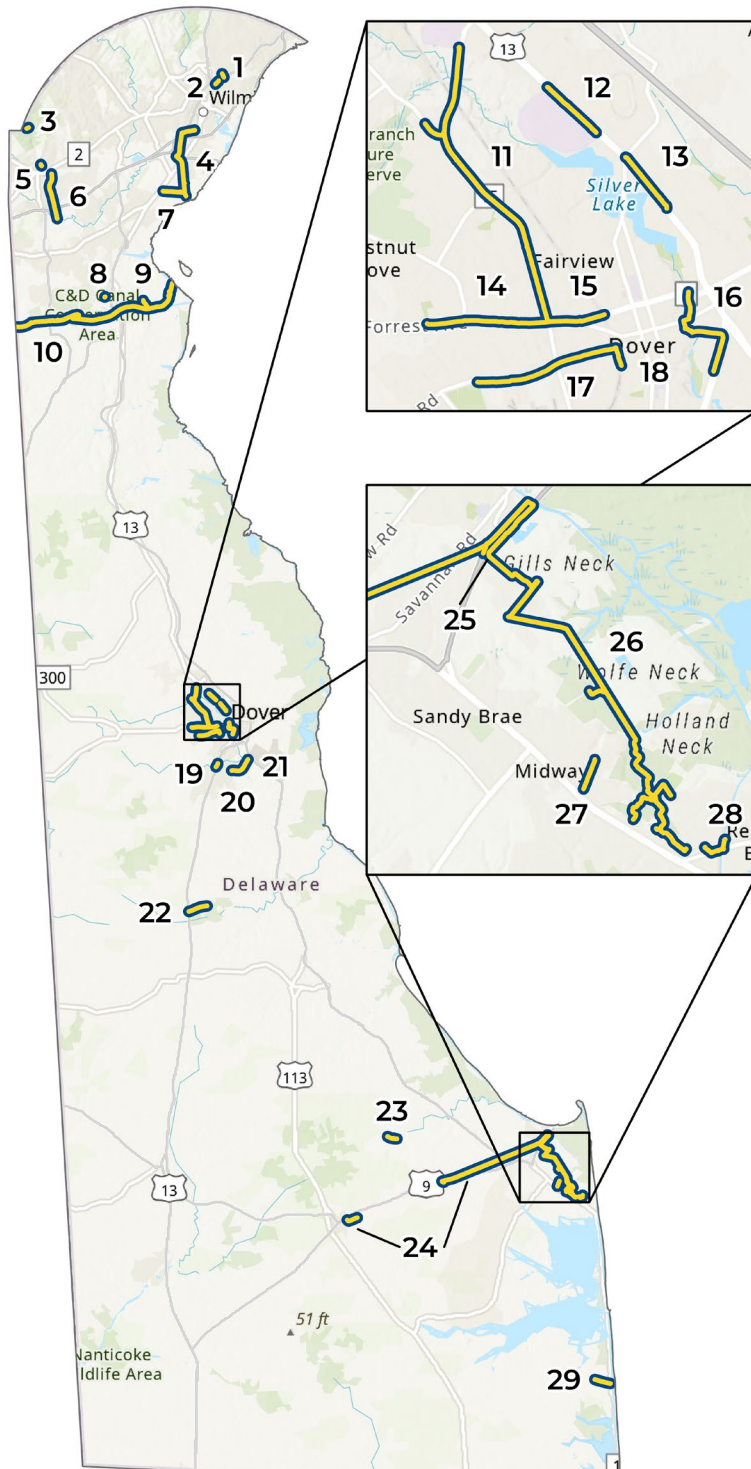
What has been completed since 2007 plan:

Sidewalk and Multi-Use Path Maintenance Policy – DelDOT adopted its Sidewalk and Multi-Use Path Maintenance Policy effective June 17, 2013. It is DelDOT's goal to ensure that all efforts are undertaken in determining the need and justification for installing, reconstructing, improving, requiring, or extending sidewalks for its transportation projects as well as for other initiating parties in public or private development. The policy specifies that DelDOT will assume maintenance responsibility for sidewalks (including structural repairs, vegetation control, and snow removal) located in the state right-of-way so long as the sidewalks are not:

- Owned or maintained by municipalities.
- Located in subdivisions.
- Privately owned.
- Maintained by others through an agreement or other written obligation.

Millions Invested in Trails – DelDOT has invested millions of dollars on trails and shared use paths across the state both for recreational use and as an alternative mode of transportation. These investments were made through the former Trails and Pathways Program, whose vision was to create a truly multimodal transportation network in Delaware. The Trails and Pathways Program has since become the DelDOT Statewide Bicycle and Pedestrian Program, which has dedicated funding in the DelDOT Capital Transportation Program (CTP). The projects completed since 2007 include the Jack A. Markell Trail which connects the cities of New Castle and Wilmington, the Georgetown to Lewes Trail and the Junction & Breakwater Trail in Sussex County, and the Capital City Trail in Kent County, among others.

Investments in Trails over the Last 10 Years



- 1 - Talley Road Trail Improvements
- 2 - Miller Road Streetscape
- 3 - Hopkins Road Ped. Improvements
- 4 - Jack Markell Trail
- 5 - White Clay Creek Bike/Ped. Bridge
- 6 - SR 72 Trail Resurfacing
- 7 - SR 273 Multi-Use Trail
- 8 - McCoy Road Ped. Bridge
- 9 - St. Georges and Biddle Point Access Road Repaving
- 10 - C&D Canal Trail
- 11 - Saulsbury Road Trail Resurfacing
- 12 - Delaware State University Ped. Safety Improvements
- 13 - US 13 Sidewalks
- 14 - Forest Ave Trail Resurfacing
- 15 - Senator Bikeway
- 16 - Capital City Trail
- 17 - North Street Trail Resurfacing
- 18 - West Street Connector
- 19 - Brecknock Park Trail
- 20 - Capital City Trail Phase III, Gateway to South State Street
- 21 - SR 10 Bridge Crossing to Gateway Shopping Center
- 22 - Killens Pond Road Trail Resurfacing
- 23 - Milton Rail Trail
- 24 - Georgetown to Lewes Trail, Phase 8 & 1-3
- 25 - Savannah Road Sidewalk
- 26 - Junction & Breakwater Trail
- 27 - Munchy Branch Trail
- 28 - Junction & Breakwater Trail, Rehoboth Avenue Extension
- 29 - Garfield Parkway Ped. and Bicycle Improvements

Goal 4 Objectives

Objective 4.1 – Clarify maintenance responsibilities of the state, counties, municipalities, and private parties for all pedestrian facilities.

DeIDOT's ongoing actions include:

Update Maintenance Responsibilities to Reflect State and Local Codes –

DeIDOT will continue to review state and local codes that address maintenance responsibilities and revise or recommend revisions as necessary to clarify any confusion in implementation.

Snow Removal on Primary Sidewalks – Continue full maintenance of “primary” sidewalks, which include sidewalks located along principal and minor arterials and that are included within DeIDOT's Sidewalk Snow Removal Program.

Objective 4.2 – Create a sustainable funding mechanism for pedestrian facilities and safety education.

DeIDOT's ongoing actions include:

Share Funding Information with Partners – DeIDOT will continue researching and sharing all available funding sources at the federal, state, county, and municipal levels as well as private resources to help partner agencies and local municipalities provide safety education and finance pedestrian facilities.

Dedicated Funding for Match – DeIDOT currently has dedicated line items in the Transportation Alternatives Program (TAP) and the Bicycle and Pedestrian Program that can be used to cover matching funding shortfalls for state and community projects applying for federal grant awards. DeIDOT plans to expand these grant matching funds by establishing a dedicated line item in the Capital Transportation Program (CTP) to be used for state match dollars to pursue federal grant programs to implement pedestrian facilities.

Better Leverage Local Funding Programs to Enhance Pedestrian Accessibility – Leverage programs such as the Community Transportation Fund (CTF) and Municipal Street Aid by encouraging the recipients of those grant and allocation funds to invest in projects that will address noncompliant ADA features.



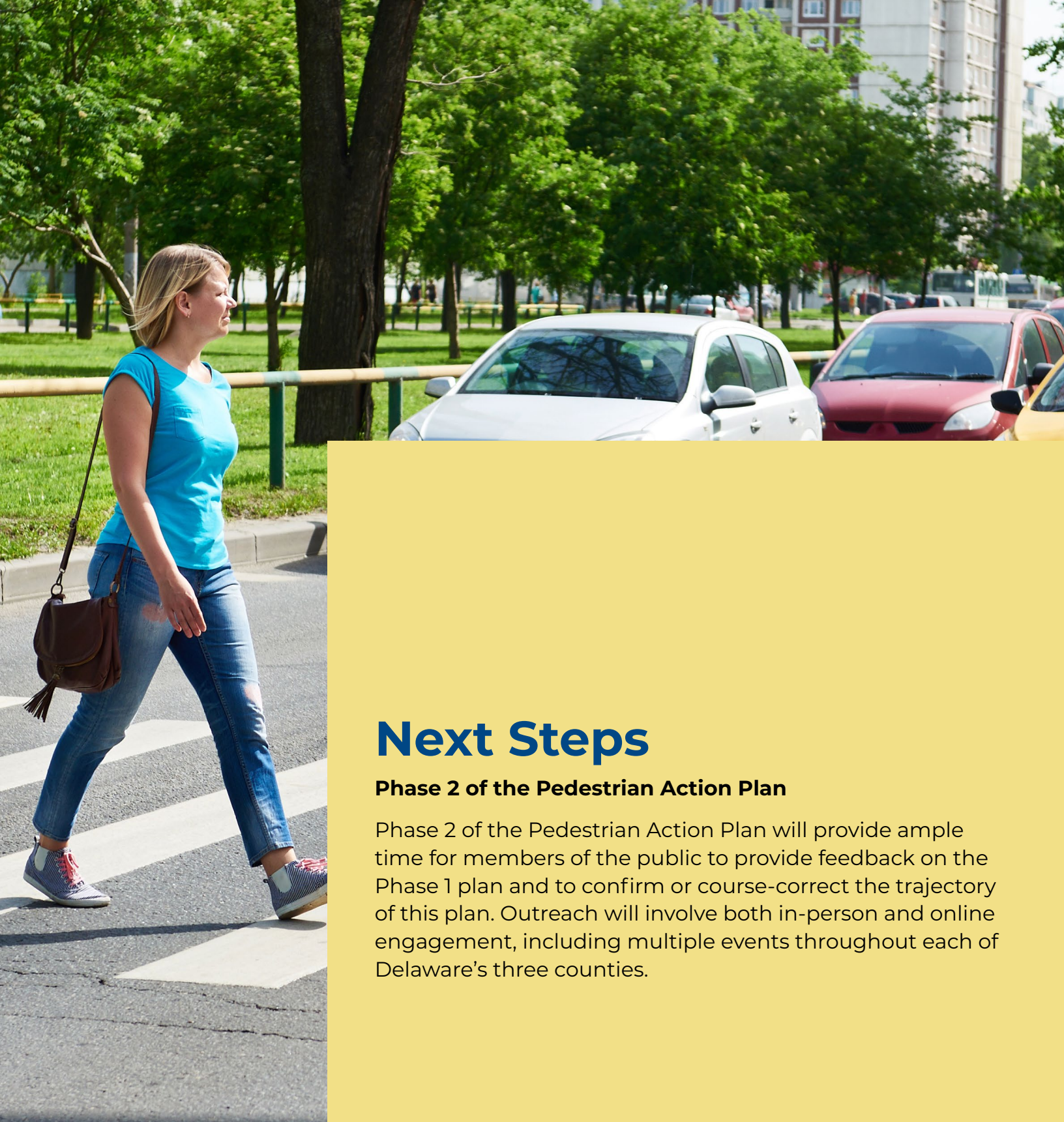
Create Capital Projects to Expand Pedestrian Network – Continue to evaluate opportunities to plan and implement capital projects that improve existing routes and strategically expand the pedestrian network by working with local municipalities and metropolitan planning organizations (MPOs) to complete pedestrian safety and connectivity studies and to prioritize projects where the need is greatest.

Objective 4.3 – Establish financial incentives to encourage counties and municipalities to create and implement pedestrian facilities.

DelDOT plans to undertake the following actions in support of Goal 4, as well as explore additional actions during Phase 2 of this plan:

Model Maintenance Program (mid-term) – Develop model maintenance programs for adoption by the state, counties, and municipalities.

DelDOT Sidewalk Maintenance Policy Update (mid-term) – Update the DelDOT Sidewalk Maintenance Policy by developing an annual review and repair program.



Next Steps

Phase 2 of the Pedestrian Action Plan

Phase 2 of the Pedestrian Action Plan will provide ample time for members of the public to provide feedback on the Phase 1 plan and to confirm or course-correct the trajectory of this plan. Outreach will involve both in-person and online engagement, including multiple events throughout each of Delaware's three counties.

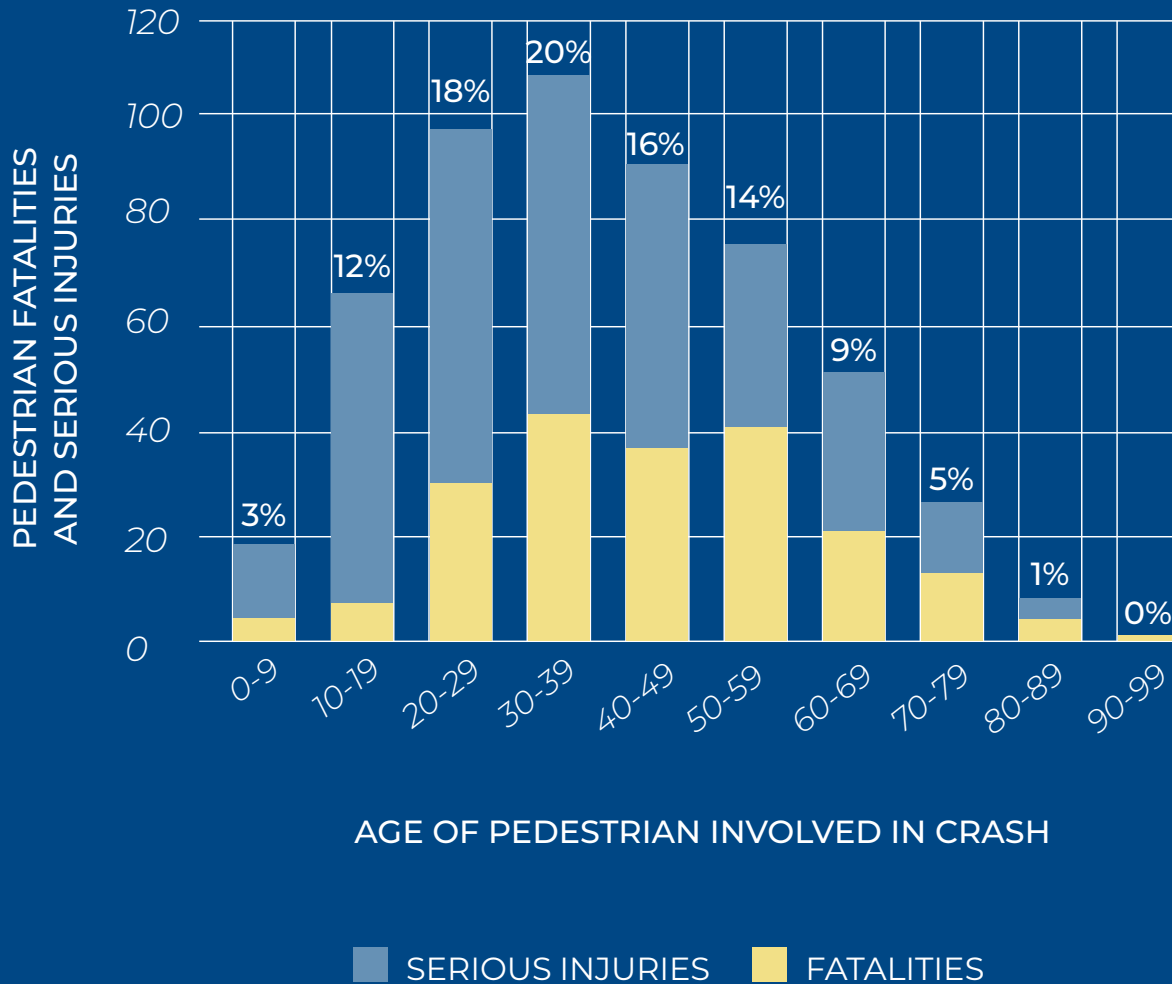
CALL TO ACTION



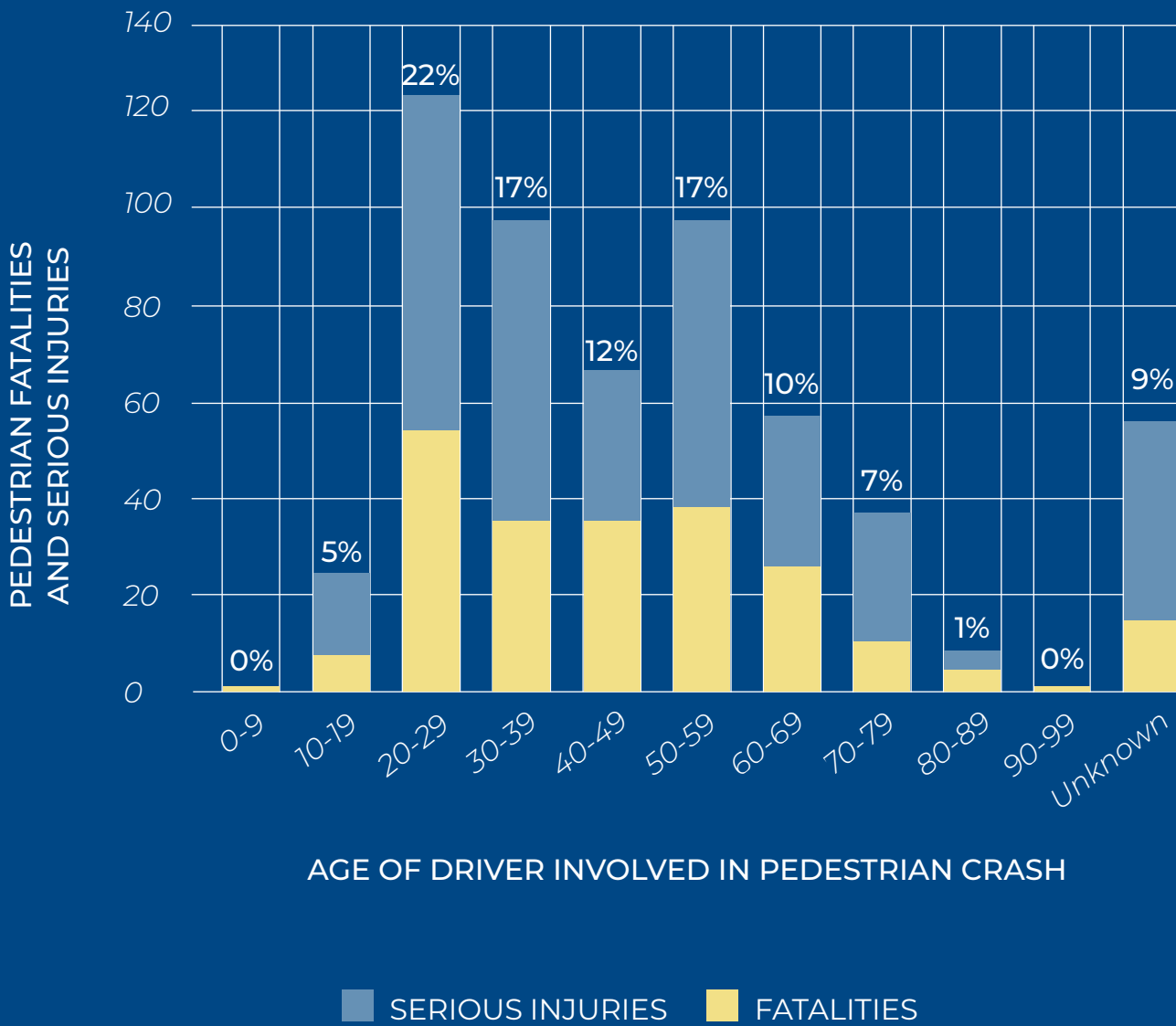
Please visit the project’s “Get Involved” page [here](#), where you can provide DeIDOT with general comments on the Pedestrian Action Plan, fill out the full online survey to help inform Phase 2 of the plan, or sign up for the project email list to stay up-to-date on upcoming events.

DeIDOT will be attending a variety of community events in the coming months to hear from the public and discuss ideas, concerns, or actions that they would like DeIDOT to consider in Phase 2 of this plan.

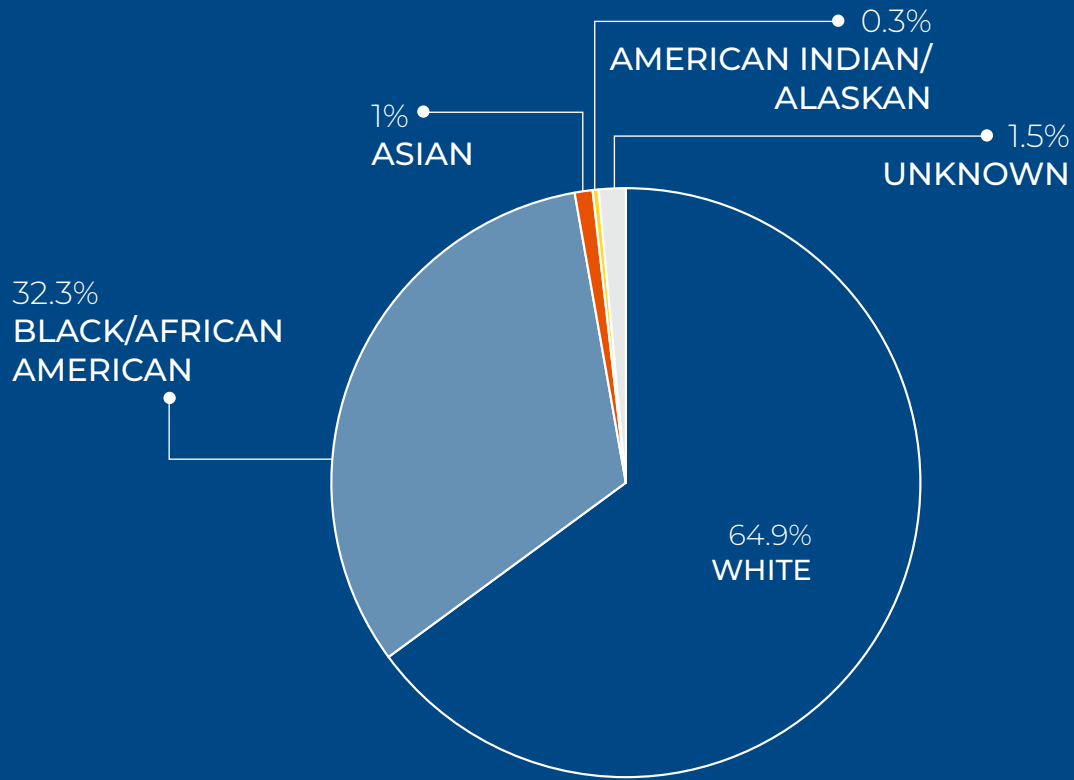
PEDESTRIAN SAFETY IN DELAWARE STATEWIDE STATISTICS (2015-2021)



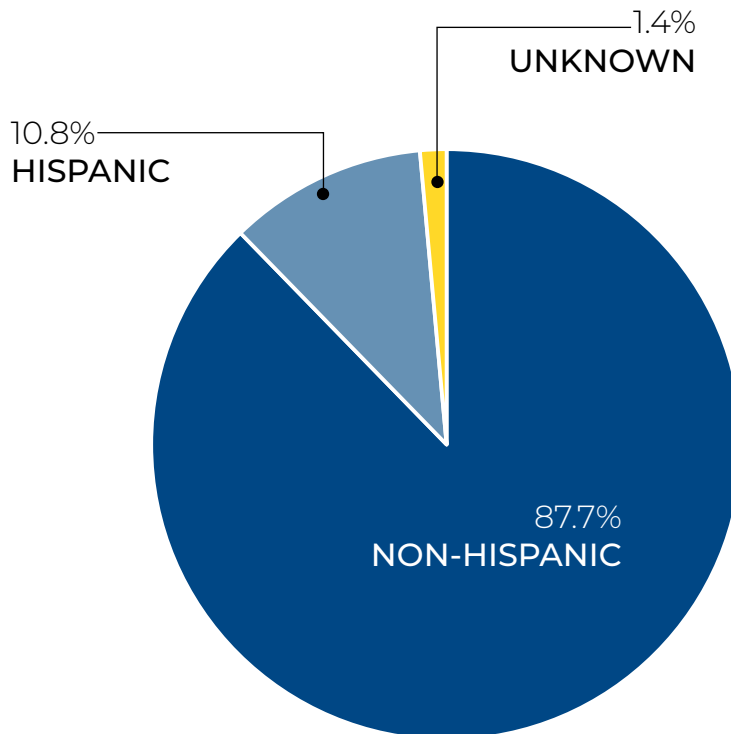
- Pedestrian crashes accounted for 13% of all fatal and serious injury crashes in Delaware between 2015 and 2021.
- Pedestrian fatalities accounted for 24% of all fatal crashes in Delaware between 2015 and 2021.



- Between 2015 and 2021, 51% of pedestrian fatalities and 14% of seriously injured pedestrians involved were impaired pedestrians.



PEDESTRIAN FATALITIES & SERIOUS INJURIES BY RACE



PEDESTRIAN FATALITIES & SERIOUS INJURIES BY ETHNICITY

WHERE PEDESTRIAN CRASHES OCCUR

88%

ON URBAN
ROADWAYS

76%

AWAY FROM
INTERSECTIONS

34%

WITHIN THE
TRAVEL LANE

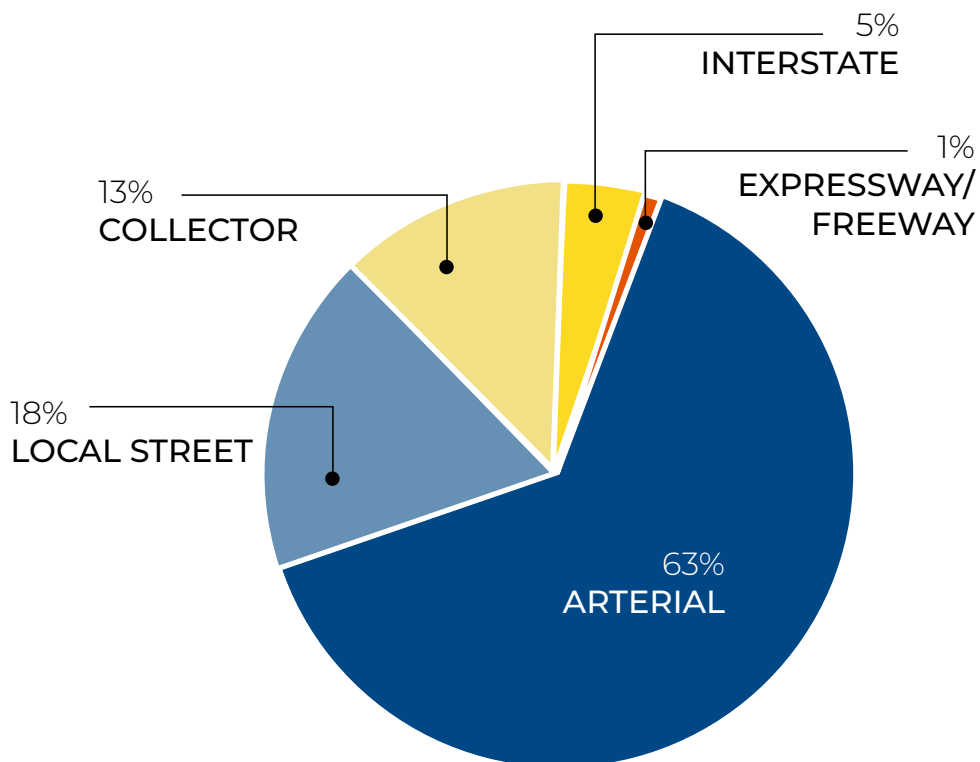
20%

ON THE SHOULDER/
ROADSIDE AREA

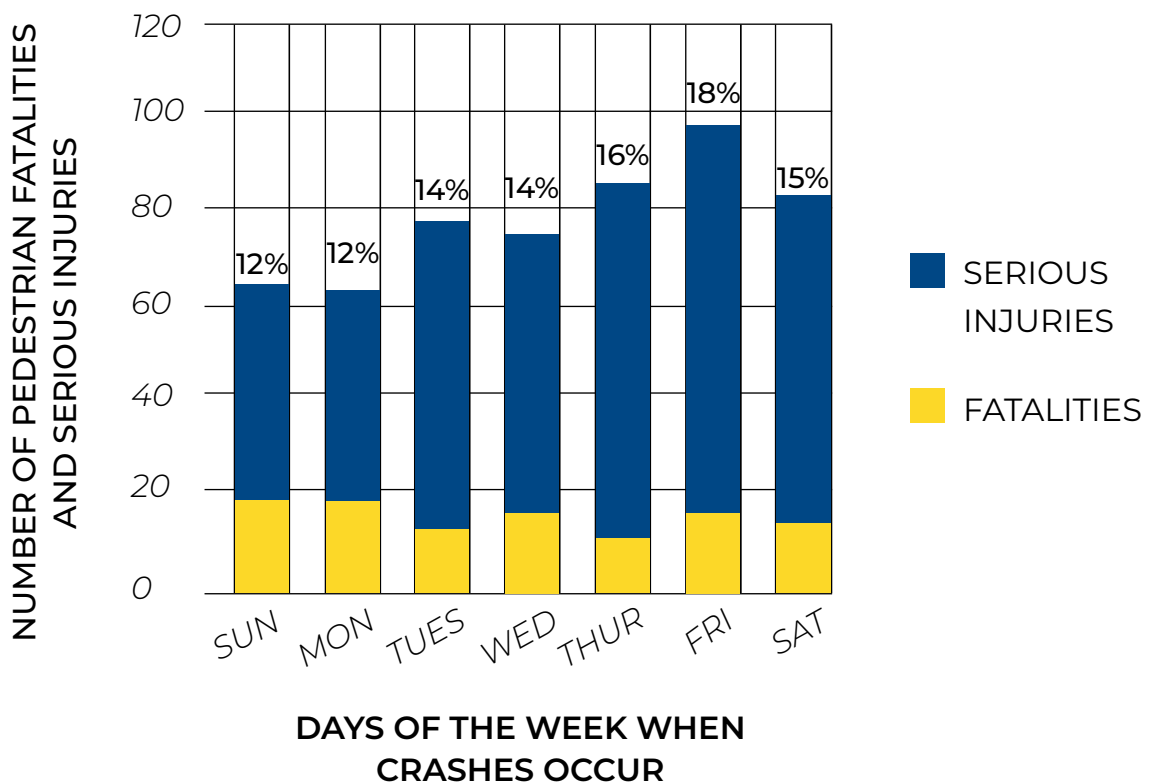
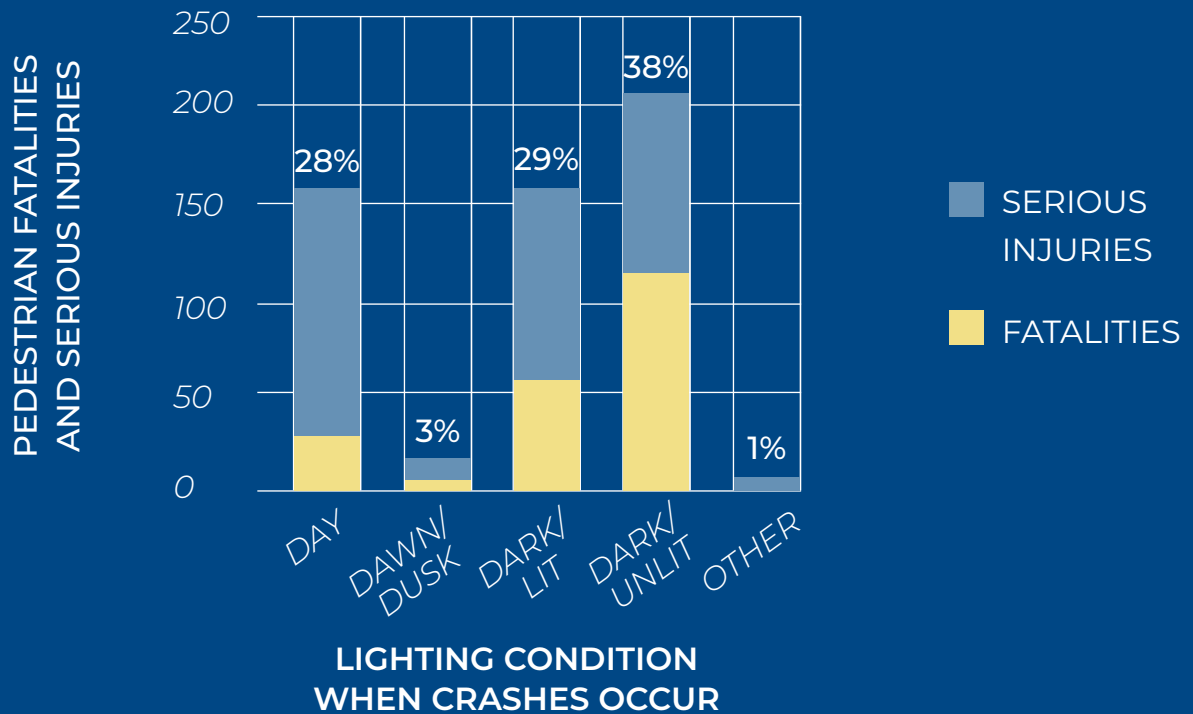
12%

ON RURAL
ROADWAYS

**PEDESTRIAN FATALITIES & SERIOUS INJURY CRASHES
BY ROADWAY FUNCTION CLASS
(2015-2021)**



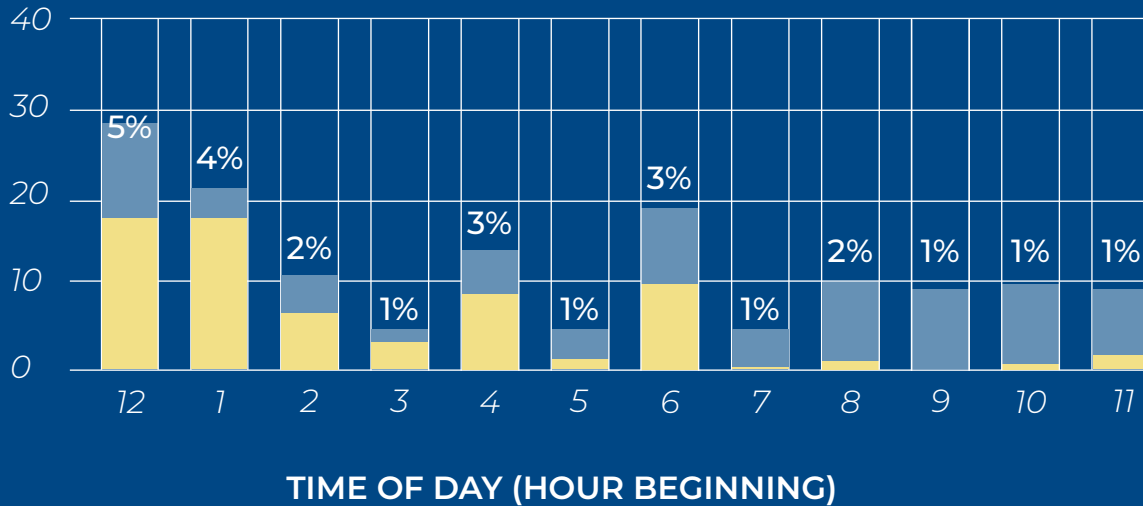
WHEN PEDESTRIAN CRASHES OCCUR (2015-2021)



WHEN PEDESTRIAN CRASHES OCCUR (2015-2021)

PEDESTRIAN FATALITIES AND SERIOUS INJURIES

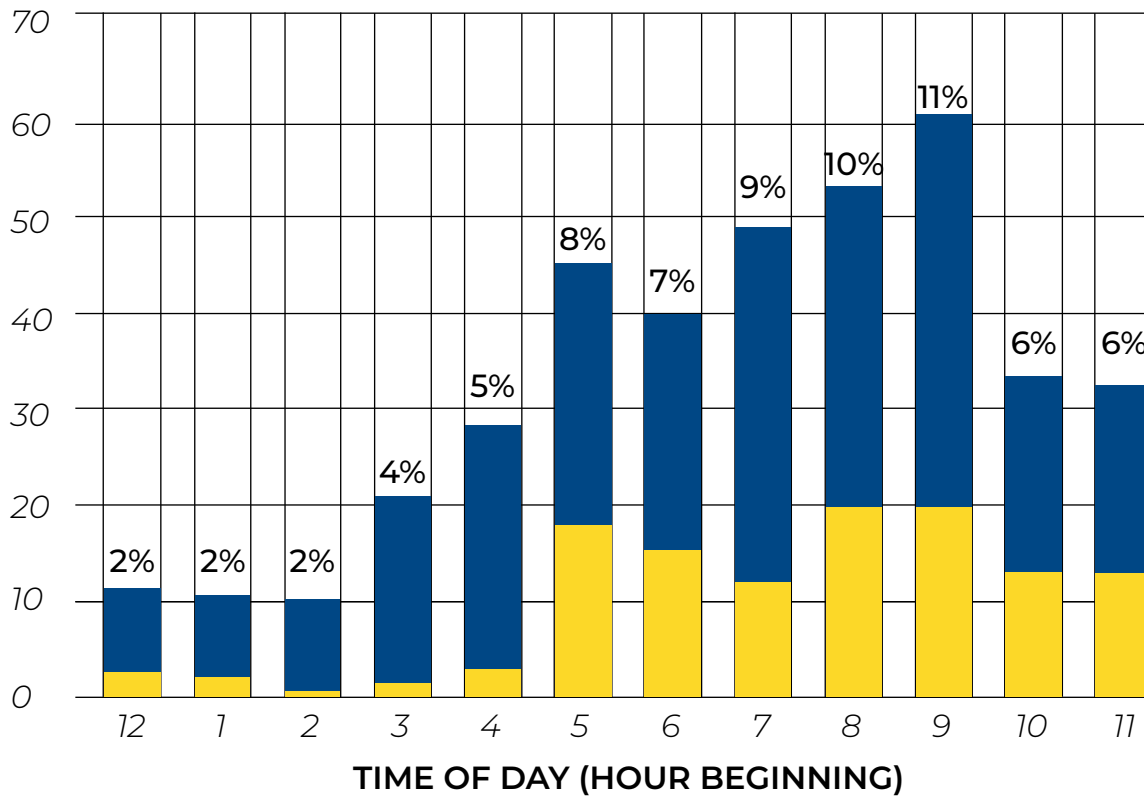
AM CRASHES



■ SERIOUS INJURIES ■ FATALITIES

PM CRASHES

PEDESTRIAN FATALITIES AND SERIOUS INJURIES



■ SERIOUS INJURIES
■ FATALITIES

NEW CASTLE COUNTY PEDESTRIAN CRASH STATISTICS (2015-2021)

PEDESTRIAN CRASH LOCATION

2,227

TOTAL
PEDESTRIAN CRASHES

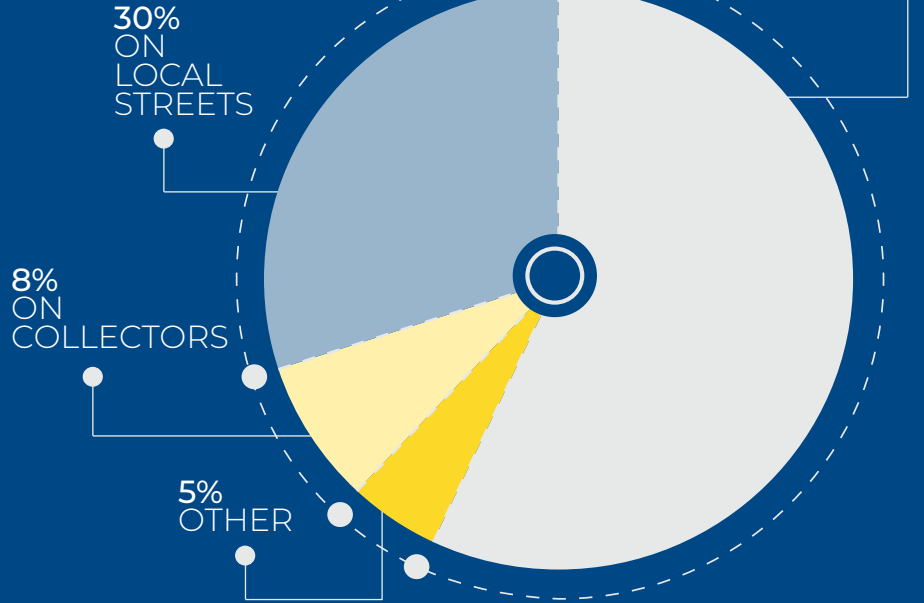
1,458

PERSONAL INJURY
PEDESTRIAN CRASHES

123

FATAL
PEDESTRIAN CRASHES

57%
OF PEDESTRIAN CRASHES
OCCURRED ON ARTERIALS



Data Source: Delaware Public Crash Data 2.0 provided by Delaware Department of Safety and Homeland Security (DSHS).

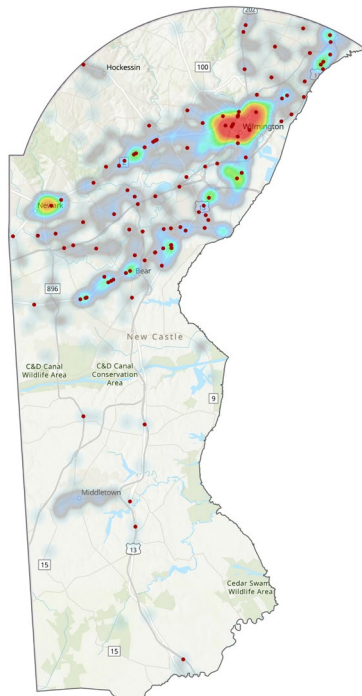
PEDESTRIAN CRASHES IN NEW CASTLE COUNTY

PEDESTRIAN CRASH DENSITY (ALL PEDESTRIAN CRASHES)



PEDESTRIAN FATALITIES

40



LAND USE CONTEXT & PEDESTRIAN FATALITIES



99% OCCURRED ALONG URBAN ROADWAYS



1% OCCURRED ALONG RURAL HIGHWAYS



570,719

NEW CASTLE COUNTY
POPULATION
(2020 CENSUS)

KENT COUNTY PEDESTRIAN CRASH STATISTICS (2015-2021)

489

TOTAL PEDESTRIAN CRASHES

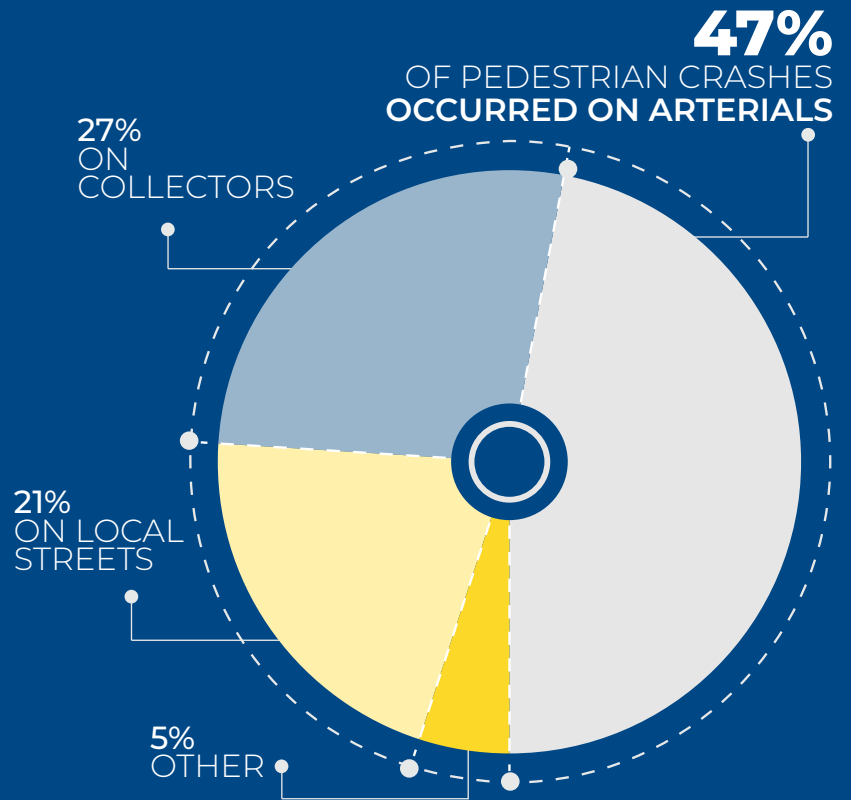
241

PERSONAL INJURY PEDESTRIAN CRASHES

32

FATAL PEDESTRIAN CRASHES

PEDESTRIAN CRASH LOCATION



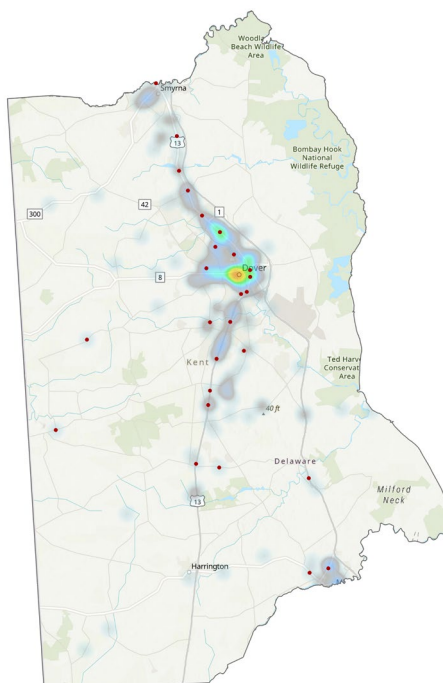
Data Source: Delaware Public Crash Data 2.0 provided by Delaware Department of Safety and Homeland Security (DSHS).

PEDESTRIAN CRASHES IN KENT COUNTY

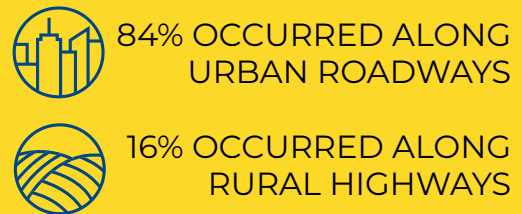
PEDESTRIAN CRASH DENSITY (ALL PEDESTRIAN CRASHES)



PEDESTRIAN FATALITIES



LAND USE CONTEXT & PEDESTRIAN FATALITIES



181,851

KENT COUNTY POPULATION (2020 CENSUS)

SUSSEX COUNTY PEDESTRIAN CRASH STATISTICS (2015-2021)

PEDESTRIAN CRASH LOCATION

535

TOTAL
PEDESTRIAN CRASHES

247

PERSONAL INJURY
PEDESTRIAN CRASHES

43

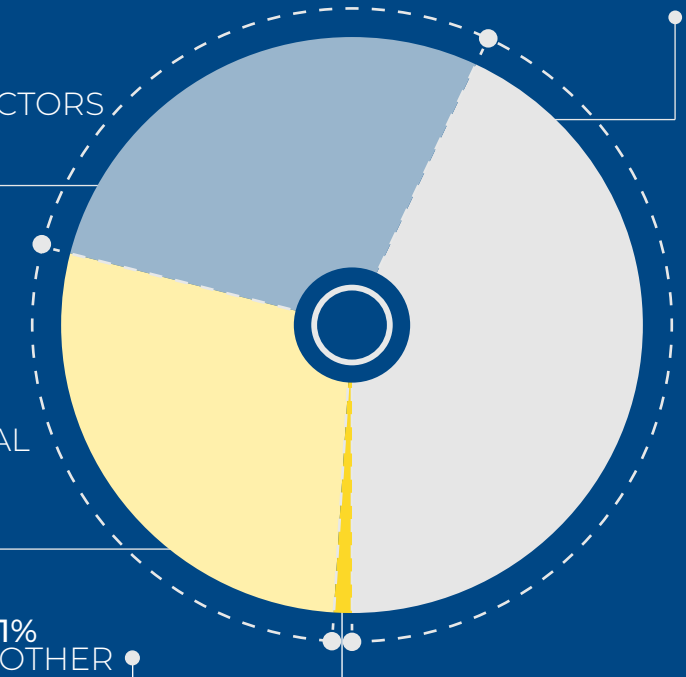
FATAL
PEDESTRIAN CRASHES

43%
OF PEDESTRIAN CRASHES
OCCURRED ON ARTERIALS

28%
ON
COLLECTORS

28%
ON LOCAL
STREETS

1%
OTHER



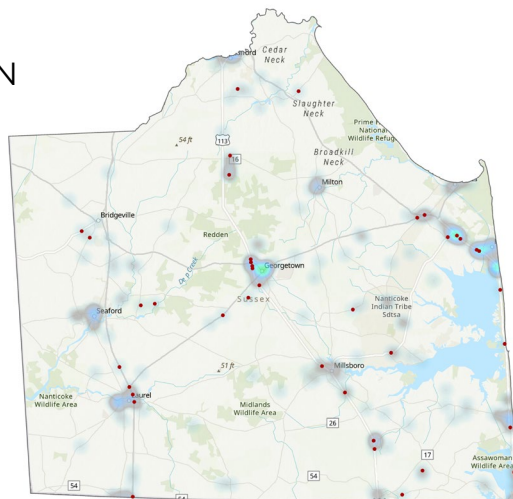
Data Source: Delaware Public Crash Data 2.0 provided by Delaware Department of Safety and Homeland Security (DSHS).

PEDESTRIAN CRASHES IN SUSSEX COUNTY

PEDESTRIAN
CRASH DENSITY
(ALL PEDESTRIAN
CRASHES)



PEDESTRIAN
FATALITIES



LAND USE CONTEXT & PEDESTRIAN FATALITIES



60% OCCURRED ALONG
URBAN ROADWAYS



40% OCCURRED ALONG
RURAL HIGHWAYS



237,378

SUSSEX COUNTY
POPULATION
(2020 CENSUS)



Prepared by:

