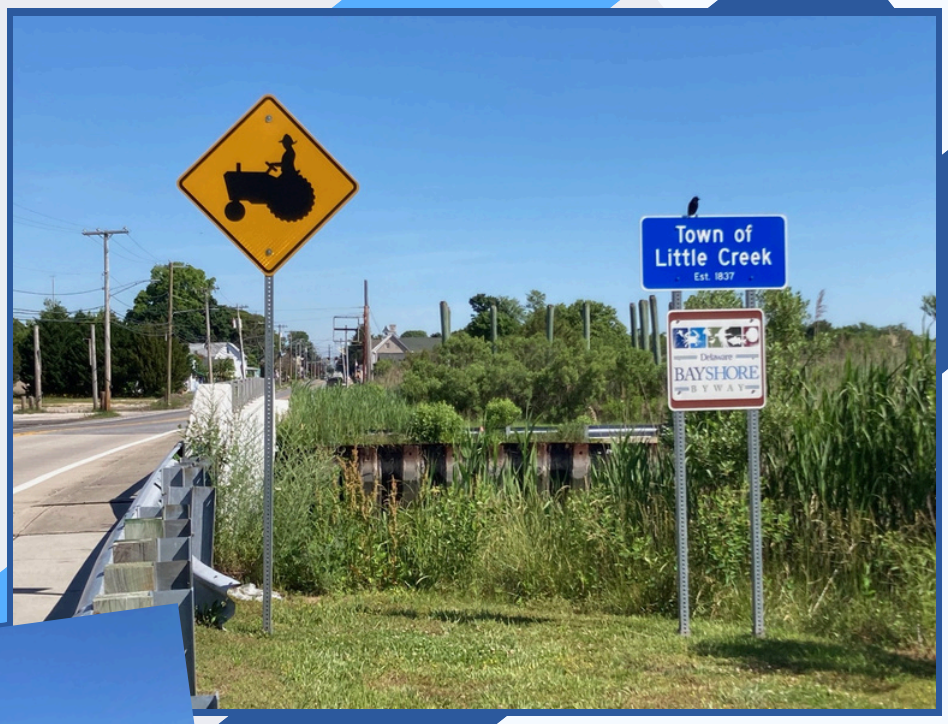
LITTLE CREEK SIDEWALK AND CROSSWALK IMPROVEMENT STUDY



August 2025 Final Draft

DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION

Little Creek
DELAWARE

The report reflects the views of the authors, who are responsible for the facts and accuracy of the research. The contents do not necessarily reflect the official view of FHWA, FTA, or DelDOT.

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Dover Kent County MPO is committed to Title VI compliance. Title VI states "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

The MPO has produced a Title VI Plan to guide the assessment of projects for racial and related discrimination. The study will include a written assessment on whether the area of the project is considered an area covered by the Title VI Plan and whether the project will have a negative impact, a positive impact, or no impact.

Preface

Dover Kent MPO is pleased to provide this publication, *Little Creek Sidewalk and Crosswalk Improvement Study*. Funded by FHWA, FTA, DelDOT, and the Town of Little Creek, this resource is intended to identify the areas within Little Creek that lack adequate pedestrian amenities and that are in need of safety improvements. By creating this inventory and recommending changes based on the most important findings, changes to the infrastructure in the Little Creek area can then be implemented.

Dover Kent MPO is responsible to ensure existing and future transportation projects are continuing, cooperative, and comprehensive and as such, appreciates continued support from FHWA, FTA, DelDOT, and our local MPO partners in order to ensure transportation policy information is shared. We are pleased to acknowledge the following collaborators on this project:

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Introduction

The Town of Little Creek is interested in locating deficiencies in its network of sidewalks and crosswalks. It hopes to improve walkability along Main Street and provide new connections between locations in and around the town. To address these topics, Dover Kent MPO has completed a study that explores some of the potential options for transportation safety and connectivity enhancement.

The study includes an inventory of existing conditions such as current sidewalks and crosswalks, popular destinations in the area, the flow of pedestrian traffic, vehicle speed data, and the distribution of vehicle and pedestrian crashes. Following these conditions is a list of recommendations to improve pedestrian safety in the area, including better connectivity and traffic-calming. This study is not focused on the engineering and geological specifics of new pedestrian amenities, and further analysis would be needed before extensive changes could be implemented.

The primary study area is the municipal boundaries of Little Creek, which are about 0.9 miles from north to south and about 0.15 miles from east to west. Adjacent locations that add to wider connectivity include Bayside Drive (SR 9), Port Mahon Road, North Little Creek Road (SR 8), and South Little Creek Road. These will be referenced throughout the study, but the most important task is to improve Main Street, which is the most heavily used road within the town.

Existing Conditions

History

The Town of Little Creek, in eastern Kent County, is located in the traditional lands of the Lenape people. The first permanent European settlers arrived in the late 18th and early 19th centuries, though smaller settlement efforts took place beforehand. The area became prosperous through the oyster industry, housing a large fleet of ships used for commercial harvesting. Vessels came to the working waterfront of Little Creek and Port Mahon for the purpose of transporting oysters, crabs, and other goods such as grain and marsh hay. Fishing shacks and oyster houses were present, as well as a cannery.[1] A lighthouse was once found at Port Mahon to assist in guiding ships; it was operational until the 1930s, and it was lost to a fire in 1984.

Oystering in Delaware Bay fell into sharp decline in the 1950s when disease led to a roughly 90% loss of the existing oyster population.[2] Little Creek was one of many communities who

[1] "History of Little Creek." Town of Little Creek, 2014. https://littlecreek.delaware.gov/history-of-little-creek/.
[2] *Town of Little Creek Working Waterfronts Initiative*. Town of Little Creek, 2016. https://www.cedarcreekplanners.com/wp-content/uploads/2017/03/Little-Creek-report-6-01-16.pdf.

were impacted by the rapid mortality. Between disease outbreaks and overharvesting by new technology, the fleet could no longer sustain itself. But despite the loss of the oyster industry, the river and marshes remain an integral part of life in Little Creek. For example, in recent years new docks were installed on the Little River for recreational purposes and for use by the Little Creek Volunteer Fire Company.

Figure 1 (l): The oyster fleet of Little Creek, 1924. Source: Delaware Public Archives (link).

Figure 2 (r): A general store and road in Little Creek, 1938. Source: Town of Little Creek (link).

According to the 2023 American Community Survey (ACS) from the US Census Bureau, Little Creek's total population is about 231. This number has not seen any dramatic increase or decrease in recent years. Little Creek's *Comprehensive Plan* explains that the town does not have an interest in large-scale development outside of its municipal boundaries; instead, it hopes to "improve conditions in Town and preserve adjacent farmland, open space and wetlands that provide numerous benefits to the Town and region."[3] Revitalizing Little Creek's working waterfront is an important part of achieving these goals.

Figure 3: The docks and boat ramps located on the Little River.

The primary road that passes through the town is Main Street, which is part of Delaware Route 9 (SR 9). It is used by personal vehicles, freight trucks, fire trucks, and large agricultural vehicles throughout the day. Adjacent streets include Thompson Lane, Wilson Lane, Bell Street, and Lowe Street; these have a much lower volume of daily traffic. There are several destinations that bring people into the area, such as the docks on the Little River, the Little Creek Grill, the Duck Shop, the town dog park, Little Creek Methodist Church, the

[3] *Little Creek Comprehensive Plan*. Town of Little Creek, 2016. https://delplan.org/wp-content/Plans/Little%20Creek/LC_CompPlan_adopted_Oct2016_with_appendices_reduced.pdf.

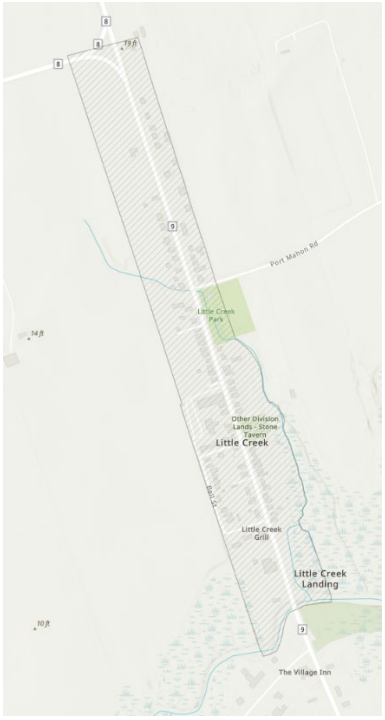

Figure 4: The municipal boundaries of Little Creek.

fishing pier at Port Mahon, Little Creek Wildlife Area, and Pickering Beach. The town also has a volunteer fire company and a post office. Most of the land outside of the town is either protected wetlands or agricultural lands.

Port Mahon currently serves as a location where fuel is offloaded for the US Department of Defense (DoD). This fuel is critical to the operations of Dover Air Force Base, which oversees the departure of military aircraft to locations across the globe. Aircraft used for air cargo, the transportation of personnel, dignified transfers, training, and other purposes depend on fuel from Port Mahon. Therefore, the continued use of the fuel pipeline requires an accessible roadway and a resilient coastline. DelDOT is responsible for the ongoing maintenance of Port Mahon Road, a road that is frequently flooded and damaged by storms. Several resiliency projects are taking place at this location, including the creation of a "living shoreline" that will protect the coastline, infrastructure, and wildlife habitat.

Little Creek Wildlife Area is home to many different native species. Mammals include whitetail deer, red foxes, and raccoons. Birds include Canada geese, great blue herons, laughing gulls, bald eagles, turkey vultures, various species of shorebirds, and even threatened migratory birds such as red knots. Pickering Beach, located next to the wildlife area, is an important gathering place for horseshoe crabs, whose spawning season occurs every year between May and June. The marshes are also home to diamondback terrapins, a threatened species of turtle that lives in brackish water. Little Creek Wildlife Area is a popular place for wildlife viewing, waterfowl hunting, kayaking, and other recreational activities.

Figure 5: A horseshoe crab at Pickering Beach during spawning season.

Little Creek and SR 9 are part of the Delaware Bayshore Byway, which runs for 100 miles along the coast of Delaware Bay. The "Discovery Zone" within this area encompasses Little Creek Wildlife Area and Pickering Beach. The Delaware Bayshore Byway offers an alternate north-south route that passes through protected salt marshes and other habitats.

Pedestrian and Bicycle Infrastructure

Main Street extends for 0.9 miles within Little Creek's municipal boundaries, running from north to south; outside of these boundaries, it is referred to as Bayside Drive.

Sidewalks are present along the majority of both the eastern and western sides of Main Street. However, these sidewalks are in need of updating in most places, as they are not wide enough, they are obstructed by utility poles, the surfaces are uneven, and they typically do not contain ADA ramps. Much of the sidewalk network is overgrown with grass. The southern end of town floods regularly, allowing mud to accumulate over the sidewalks.

On the eastern side of the road, the northern sidewalk limit is Port Mahon Road, and the southern limit is shortly before the Little River. On the western side of the road, the northern sidewalk limit is Port Mahon Road, and the southern limit is the Little Creek Grill. There are very few sidewalks on the other streets. However, the side streets such as Bell Street are considered low-stress, which means there is less of a need for sidewalks at these locations.

There are no crosswalks connecting the eastern and western sides of Main Street. Although both sides of the road have extensive sidewalk infrastructure, it is not possible to safely cross the road. Crosswalks in critical locations would help fill this gap in the pedestrian network. Pedestrian signals such as Rectangular Rapid Flashing Beacons (RRFBs) would ideally be included, but the bare minimum would be a painted crosswalk with ADA-accessible ramps. Signage that reminds motorists to adhere to pedestrians would also help at these locations, though too much signage in one location would be counterproductive.

Figure 6 (l): The southern extent of sidewalk in Little Creek, shortly before the Little River.

Figure 7 (r): A sidewalk gap at the southern end of Little Creek.

Most of the other streets do not have sidewalks. The north side of Wilson Lane has narrow, disconnected segments of sidewalk that are obviously outdated and have not been maintained over the years. These segments are situated right alongside the houses and porches of Wilson Lane, leaving no space in between. In their current condition and with their lack of connectivity, the sidewalks of Wilson Lane are not suitable for pedestrian travel.

One method of understanding bicycle safety is by analyzing the Level of Traffic Stress (LTS), which is measured on a scale between 1 and 4. An LTS of 3 or 4 suggests higher speed limits and a lack of separation, which means the road is largely inaccessible to most bicyclists. According to the existing data, the majority of Main Street (between Port Mahon Road and South Little Creek Road) has an LTS of 3, and the remainder of Main Street (between North Little Creek Road and Port Mahon Road) has an LTS of 2. Thompson Lane and Bell Street have an LTS of 1. Bayside Drive heading both northbound and southbound (away from the town) has an LTS of 4, and Port Mahon Road has an LTS of 3.[4] What this means is that most of Little Creek's major roads are unsafe for bicyclists, despite the 25-mph speed limit, and it is especially challenging for somebody to travel to or from the town without a personal vehicle.

Figure 8 (l): A utility pole obstruction on the sidewalk near the Little Creek Grill.

Figure 9 (r): Overgrown and uneven sidewalks on Main Street.

The use of Main Street by large agricultural vehicles should be considered when making changes to the roadway. In the past, when traffic-calming measures were proposed, the public expressed its concern over the potential impact on agricultural vehicles. The Town of Little Creek has recently tried to improve safety at the intersection of Main Street and Port Mahon Road by adding stop signs, though according to members of the public, the success of these efforts has been limited. Given the ongoing problem of speeding motor vehicles on Main Street, further steps should be taken to reduce speeds while still keeping in mind the needs of farmers.

[4] "Bicycle Level of Traffic Stress in Delaware." University of Delaware Institute for Public Administration (IPA), 2018. https://udel.maps.arcgis.com/apps/MapJournal/index.html?appid=0281bffd6e8d46849f95a000c182bff4.

Public Transit

Despite being just a few miles from Dover, Little Creek does not have any public transit service. Town officials have indicated that DART service within the town would be beneficial, and one of the transportation goals listed in Little Creek's *Comprehensive Plan* is to coordinate with Delaware Transit Corporation (DTC) to discuss making a new connection to Dover. Older residents would be among those who benefit the most from this change. However, based on the proposals of *DART Reimagined*, there are no plans to extend fixed route bus service or microtransit to Little Creek.

School Buses

The Town of Little Creek is part of Capital School District. School buses currently bring students to Dover High School, Dover Middle School, William Henry Middle School, and East Dover Elementary School. Typically, each bus picks up or drops off fewer than five (5) students from Little Creek at a time.

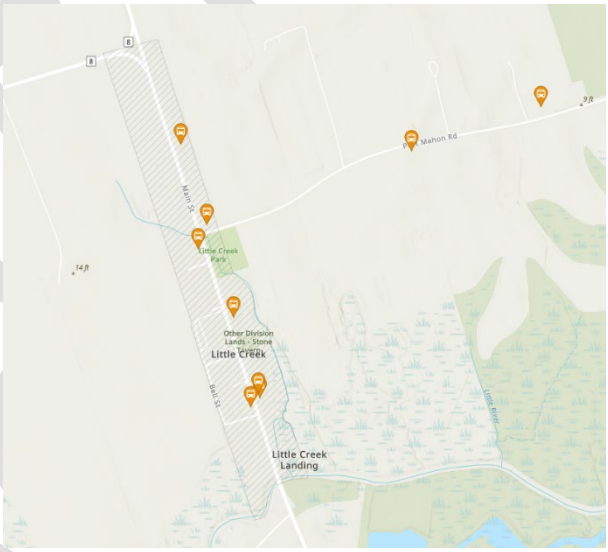

Figure 10: The locations of the nine (9) existing school bus stops on Main Street and Port Mahon Road, represented by an orange icon.

GIS software was used to map the locations of the current school bus pickup and drop-off locations in the area. Through this exercise, it was revealed that five (5) of the locations are on Main Street south of the post office, where sidewalks are present. Two (2) of the locations are on Main Street north of the post office, and two (2) are on Port Mahon Road; no sidewalks are available here. Given the relatively high volume of vehicles and the frequency of speeding vehicles, Main Street in particular should have a complete network of sidewalks, so that students are not in the path of traffic when waiting for the bus.

Traffic Flow and Crash Data

Main Street is a major collector road that has an annual average daily traffic count (AADT) of 2,064. The Town of Little Creek does not have its own police department, which makes it difficult to monitor speeding motor vehicles on Main Street and enforce the posted speed limit. A permanent radar speed sign is currently being used on SR 9 southbound, as well as a temporary radar speed sign on SR 9 northbound, and a stop sign is located at the intersection with Port Mahon Road. However, even with these measures in place, speeding remains a problem.

To highlight the extent of the issue, in recent years the town has collected data on vehicles driving through the town. This information includes the number of vehicles, the time of arrival, and the speed at which they were traveling. Data was collected between October of 2021 and April of 2023. Note that some days throughout this period were not recorded, which may have changed the total values.

Within the data collection period, the months with the highest volume of vehicle traffic were between July and November of 2022. Through conversations with town officials and members of the public, it was revealed that traffic tends to increase during the summer months, as motorists heading towards the beaches may be redirected onto SR 9 from Delaware Route 1 (SR 1), if their GPS determines it to be the faster route. This is especially true around holidays such as Memorial Day and Labor Day. As a result, people unfamiliar with the town may not adhere to the posted speed limit or existing stop signs, which leads to serious safety concerns. The data suggests a decrease in total vehicles during the winter months, but not in vehicle speeds.

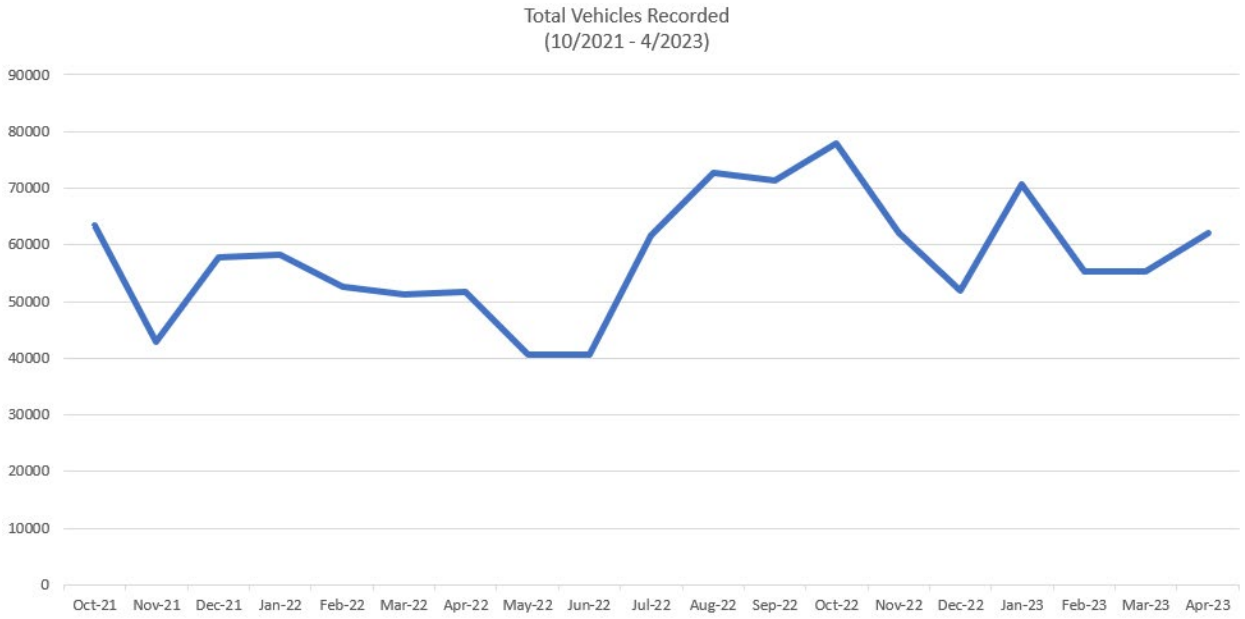

Figure 11: The total vehicles traveling through Little Creek by month, between October of 2021 and April of 2023. Source: Town of Little Creek (link).

During most months, more than 80% of vehicles travel through the town over 29 mph, which is an alarming statistic. This is not exclusive to summer months; in fact, the months with the most drivers traveling over 29 mph were between December of 2021 and January of 2022, and also between October of 2022 and March of 2023. Speeding in Little Creek is a year-round occurrence, and although some steps have been taken to reduce vehicle speeds and improve safety (such as the stop sign at the intersection with Port Mahon Road and the radar speed signs on SR 9), it remains one of the top concerns for the community. Note that new data has not been added to this dataset since the stop sign was installed.

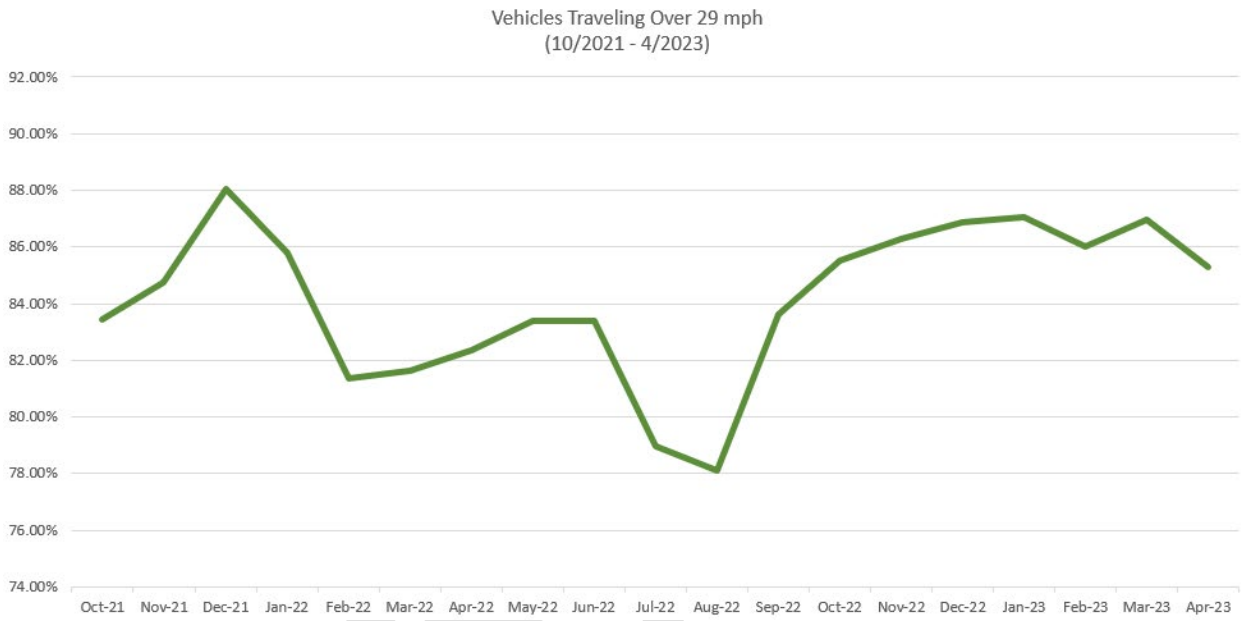

Figure 12: The percentage of vehicles traveling faster than 29 mph by month, between October of 2021 and April of 2023. Source: Town of Little Creek (link).

Crash data used in this study was collected between April of 2010 and September of 2023. During this 13-year timeframe, a total of 39 crashes were reported within Little Creek's municipal boundaries. Most of these occurred at the intersection of Main Street/Bayside Drive and North Little Creek Road (8 crashes), and at the intersection of Main Street and Port Mahon Road (6 crashes). At the latter location, the newly installed stop sign is expected to help in reducing crashes, but more recent data would be needed to confirm this.

Although it is technically outside of the municipal boundaries, the intersection of Main Street/Bayside Drive and South Little Creek Road is worth noting, as it experienced 11 crashes during the 13-year timeframe. Speed control measures, such as new stop signs, would be beneficial at this location. (Note that stop signs are planned for this intersection in FY2026.)

No fatal crashes were recorded during the timeframe, but given the high density of crashes at the three intersections and the patterns recorded in the speed data, roadway safety is nonetheless a major concern in Little Creek. None of the reported crashes involved a pedestrian or bicyclist.

Demographic Analysis

In order to understand the locations of vulnerable populations in Kent County, the MPO used two different tools. The first was census data from the US Census Bureau, which was used to complete the MPO's 2023 *Title VI Report*. The data features topics such as racial demographics, aging populations, poverty status, disability status, Limited English Proficiency (LEP), and personal vehicle access. It was collected at the census block group level. The second tool was the *DelDOT Equity Analysis Tool*, which was released in 2023. With a unique methodology, this tool determines which areas might be considered underserved due to the demographics as compared to the state average. Using these tools in tandem with one another provides the MPO with a more complete picture of vulnerable populations in Kent County.

According to the US Census Bureau, about 27.4% of Little Creek's population is below the poverty level. This is significantly higher than the state average of 10.5% and the Kent County average of 11.3%.[5] The *DelDOT Equity Analysis Tool* has similar results: much of Main Street and the intersection with South Little Creek Road are noted for having a median household income that is lower than the state average. The poverty percentage is also more than two times the state average. Given that Little Creek is a rural town with a relatively high poverty level, the community has a greater need for reliable transportation, including walkable and bikeable pathways as well as public transit. The Little Creek *Comprehensive Plan* addresses these needs, and it indicates that greater access to public transit would be beneficial to many residents.

Another factor that is worth noting is the age of the community. The median age of Little Creek is 41.5, which is only slightly lower than the state average of 42.0, and higher than the Kent County average of 39.0. Census data also indicates that 23.1% of Little Creek is over the age of 65, which is higher than the state average of 21.3% and the Kent County average of 18.8%.[6] The Town of Little Creek has expressed concern for its older residents due to the lack of walkability in some places and the lack of available public transportation. Both these issues are called out in the town's *Comprehensive Plan*.

One more relevant concern is the lack of facilities that are needed in the event of an emergency. These include hospitals, urgent care centers, nursing homes, and evacuation centers. The *Delaware Equitable Planning for Local Adaptation Needs* (*DE-PLANs*), created by the Delaware Emergency Management Agency (DEMA) and Delaware Sea Grant, provides data to assist with emergency planning for Delaware's elderly residents. The tool shows the Little Creek area as being largely devoid of these facilities.[7] With the exception of the Little Creek Volunteer Fire Company, there are few resources in or around the town. This is problematic for the older

[5] "2023 American Community Survey: Little Creek town, Delaware." United States Census Bureau. https://data.census.gov/table/ACSST5Y2023.S1701?t=Income%20and%20Poverty&g=160XX00US1042870.
[6] "2023 American Community Survey: Little Creek town, Delaware." United States Census Bureau. https://data.census.gov/table/ACSST5Y2023.S0101?t=Age%20and%20Sex&g=160XX00US1042870.
[7] *DE-PLANs*. Delaware Emergency Management Agency (DEMA). https://de-plans-udel.hub.arcgis.com/.

residents of the town, as these people will have a harder time evacuating during a storm or seeking medical assistance.

Environmental Factors

Figure 13: Severe flooding on Main Street during a nor'easter in March 2010. Source: Little Creek Comprehensive Plan (link).

One of the most pressing concerns for the community is the threat of flooding. This happens in Little Creek on a regular basis, and it has the potential to damage homes, businesses, and historic buildings, along with roadways, sidewalks, and other infrastructure. A second consequence of flooding is the blocking of roadways. Town officials have pointed out that during serious flooding events, both the northern and southern ends of Main Street become impassable. This is a risk for the Little Creek Volunteer Fire Company, which is why the fire department moves some of its engines to other locations before flooding takes place. It may also prevent people from evacuating the town if necessary. Floodwaters can come from tidal inundation, as well as through runoff during periods of heavy rain.

The southern end of town experiences inundation. This is primarily due to tidal flooding from the Little River. According to recently completed flood mitigation studies, the flooding is exacerbated by deficiencies in drainage ditches, pipes, and other parts of the storm sewer network. The modeling from these studies indicates that the full width of Main Street immediately south of the intersection with Lowe Street is likely to be inundated during any level of storm, even a 1-year storm event (or an event that has a 100% chance of occurring in a given year). The *DE-PLANs* tool also shows this as a common occurrence, with the southern extent of Main Street becoming impassable with as little as two feet of coastal inundation. Lowe Street and Bell Street are likely to be inundated during a 10-year storm event (or an event that has a 10% chance of occurring).[8]

At the northern end of town, much of the flooding comes from heavy rainfall and agricultural runoff. Water flows eastward via roadside ditches into a tributary of the Little River, but due to the presence of sediment and debris, drainage in this area is very poor. Consequently, the runoff tends to pool near the post office and dog park. The tidal wetlands in this area can also back up during storm events. During a 10-year storm event, the intersection of Main Street and Port

[8] *Southern Flood Mitigation Feasibility Study*. Town of Little Creek, 2024. https://littlecreek.delaware.gov/files/2024/04/Little-Creek-Southern-Flood-Mitigation-Study-Report.pdf.

Mahon Road is likely to flood, and the surrounding pipes and drainage ditches will be over-capacity. More intense storms will affect the adjacent properties as well as the roadway.[9]

Note that the southern extent of Main Street, particularly at the crossing of the Little River, is included in DelDOT's list of frequently flooded roadways.[10] Little Creek is also ranked #1 out of 20 segments of SR 9 for the *SR 9 Resiliency Study*, meaning the community and its people are especially vulnerable to flooding.[11] This study recommends several improvements to the road, such as improving the levees around Little Creek and raising the roadway by three (3) feet. Permeable pavement may also help reduce flooding impacts. However, the study notes that even if SR 9 were to be improved, flooding would still occur, and Little Creek requires additional mitigation strategies such as flood walls and improved drainage.

Figure 14: A "bathtub model" depicting the impact of five (5) feet of sea level rise in Little Creek. Data source: Delaware Geological Survey; accessed through Delaware FirstMap (link).

According to *Delaware's Climate Action Plan*, sea levels in Delaware are projected to rise by nine (9) to 23 inches above current levels by 2050, and as much as an additional five (5) feet by 2100.[12] This will have a disproportionate impact on low-lying communities such as Little Creek, where flooding is already a common occurrence. Dover Kent MPO uses sea level rise vulnerability as one of the criteria when determining whether a transportation project should be pursued. For example, it is not advised to build a new road from paved material in an area prone to flooding, as an increase in paved surfaces will exacerbate the runoff. Existing salt marshes should also be preserved, as these environments serve as a buffer against coastal inundation. Projects that negatively impact the environmental resilience of Little Creek will not be recommended as a part of this study.

[9] *Town of Little Creek Flood Mitigation Feasibility Study*. Town of Little Creek, 2022. https://littlecreek.delaware.gov/files/2022/02/flood_mitigation_feasibility_study_final_r.pdf.
[10] Layer: Frequently Flooded Roadways (accessed through Delaware FirstMap). Delaware Department of Transportation (DelDOT). https://enterprise.firstmaptest.delaware.gov/arcgis/rest/services/Transportation/DE_Roadways_Other/FeatureServer/2.
[11] *SR 9 Resiliency Study*. Delaware Department of Transportation (DelDOT), 2023. https://storymaps.arcgis.com/stories/501fd980ddb240c0afb929c04ad04cbc.
[12] *Delaware's Climate Action Plan*. Delaware Department of Natural Resources and Environmental Control (DNREC), 2021. https://documents.dnrec.delaware.gov/energy/Documents/Climate/Plan/Delaware-Climate-Action-Plan-2021.pdf.

For further information on the most recent flooding scenarios in Little Creek, please refer to the sources listed in Appendix F.

Current Coastal Resilience Projects

The following are short descriptions of the most important coastal resilience projects taking place in the area around Little Creek and Port Mahon. The information provided in this section is current at the time of the study's completion.

Port Mahon Living Shoreline and Oyster Reef Habitat Creation

Figure 15: Coastal erosion of Port Mahon Road. Source: Dover Air Force Base – Compatible Use Plan.

This project involves the creation of a hybrid living shoreline, oyster reefs, and breakwaters in Delaware Bay. It will ultimately have two benefits. The first is that it will enhance the resiliency of Port Mahon by defending community infrastructure and the Dover Air Force Base fuel pipeline. The second is that it will create marsh and subtidal habitats for species such as terrapin and horseshoe crab, which will reduce the mortality of native species. A National Coastal Resilience Fund (NCRF) grant of $1 million was awarded to carry out the design and permitting.[13] These steps began in December of 2024, and the final design is expected to be completed in June of 2026. Implementation of the living shoreline will begin in early 2027 and will likely take three years to complete. DelDOT, the University of Delaware, and Rummel, Klepper & Kahl, LLP (RK&K) are leading the Port Mahon living shoreline work. The University of Delaware is the primary applicant for the NCRF grant.

Little Creek Wetland Construction

Key locations in town, in particular the frequently flooded areas to the west of Main Street, are being considered for wetland construction. This work will reduce the impacts of flooding in Little Creek as well as protect access to the Dover Air Force Base Fuel Depot and Fuel Dock, the DNREC fishing pier, the Little Creek marine rescue boat, and the community boat launch. It is funded through the US Department of Defense (DoD) Readiness and Environmental Protection Integration (REPI) Program. Acquisition of parcels to be used for flood mitigation is ongoing.

[13] "National Coastal Resilience Fund: 2024 Grant Slate." National Fish and Wildlife Foundation (NFWF), 2024. https://www.nfwf.org/sites/default/files/2024-11/nfwf-ncrf-20241112-gs.pdf.

Storm Sewer Improvements and Ditch/Wetland Restoration

Little Creek will soon undergo changes to its storm sewer system in order to make the community more resilient against flooding. This project is funded through the FEMA Hazard Mitigation Grant Program (HMGP). Design and permitting are to take place in 2025, and construction will be completed in 2026. Verdantas is assisting with the project.

Marsh Restoration Project

DNREC's Division of Fish & Wildlife is involved with separate wetland restoration efforts in the marsh area to the north of Port Mahon Road. This project is intended to restore degraded wetlands and build up marsh habitat for native wildlife. The work requires the addition of sediment dredged from the Little River. Marsh restoration is currently in the early planning phase.

Research Process

Mapping and Fieldwork

Mapping was completed using ArcGIS Pro. Data used in the analysis included sidewalk extent, crashes within the municipal boundaries, and other existing conditions. The maps are also used to display the MPO's recommendations for transportation improvements in Little Creek. To view the full maps, please refer to Appendix A of the document.

Fieldwork was carried out throughout the study process, beginning in the summer of 2024 and concluding in the summer of 2025. This work involved walking throughout the study area, taking photographs of relevant locations, taking measurements of the existing infrastructure, and noting areas with significant need of sidewalk improvement. The findings of this work helped shape the study recommendations.

Literature Review

The MPO reviewed each of the existing documents pertaining to the Little Creek area. By doing so, the information in each source was used to inform the recommendations of this study and raise awareness of existing concerns. The most important documents were Little Creek's *Comprehensive Plan* (2016), the *Little Creek Conceptual Resilience Plan* (2021), and two recent flood mitigation feasibility studies. These sources are included in Appendix F. Additional sources are listed in footnotes throughout the study.

Outreach

Public Workshop 1

A public workshop for this study was held on February 6, 2025, at the Little Creek Volunteer Fire Company building. This was an opportunity for MPO staff to learn about the existing conditions in the community and the most pressing transportation safety needs. A total of 14 members of the public added their name to the sign-in sheet. Display boards were used to highlight locations throughout the town and to gather feedback.

The majority of written comments referred to the problems of speeding vehicles and a failure to adhere to the new stop signs. This was also expressed verbally by attendees. It was made clear that speeding is something the residents constantly worry about, and as a result of the problem they are less likely to walk and bike on Main Street. The community would like to see further measures to address this problem, including actions by law enforcement. A second concern

brought up in the written comments was the limited walkability in town, primarily due to outdated or missing sidewalks and a lack of crosswalks. These two issues are interconnected, as even with improved pedestrian infrastructure, the speed of motor vehicles still makes the walking conditions less safe.

The full list of comments from this public workshop can be viewed in Appendix E.

Figure 16: Attendees viewing the boards at the public workshop on February 6, 2025.

Public Workshop 2

A second public workshop for this study was held on July 10, 2025, at the Little Creek Volunteer Fire Company building. A total of nine (9) members of the public added their name to the sign-in sheet. Recommendations by the MPO were examined in greater detail, having been refined based on feedback from the first workshop. Overall, attendees were in support of the recommendations, though some solutions were more favored than others. It was strongly agreed that sidewalk condition and speeding vehicles are the two most significant transportation issues in town. The comments given at the second public workshop were used to inform this study's final recommendations.

The full list of comments from this public workshop can be viewed in Appendix E.

Collaboration with Little Creek

Throughout the study process, Dover Kent MPO met with municipal officials, including the mayor and the town council, to discuss concerns in the community, examine potential solutions, and prepare for upcoming engagement opportunities. Similarly to the public workshops, the input gathered during these meetings helped inform the study's final recommendations.

Safe System Approach

Safety is the primary concern of Dover Kent MPO. This objective informs each of the MPO's regular tasks, including interaction with DelDOT and municipalities, public outreach and education, and the completion of studies. Dover Kent MPO, DelDOT, and other Delaware agencies follow a "Safe System Approach" to transportation safety, which addresses several different aspects of the transportation network rather than focusing on a single aspect. The Safe System Approach is part of the national strategy known as "Toward Zero Deaths," which looks at the entire transportation system with the goal of eventually reducing the number of annual roadway deaths to zero.[14]

Figure 17: A graphic depicting the Safe System Approach, with additional elements used by DelDOT. Source: Delaware Department of Transportation (DelDOT).

The Safe System Approach uses six key principles to understand the serious issue of traffic fatalities in the United States:

- Deaths and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

The Safe System Approach also uses five elements that must be addressed simultaneously to improve roadway safety and work toward zero traffic fatalities:

- Safe Road Users
- Safe Vehicles
- Safe Speeds
- Safe Roads
- Post-Crash Care
- Safer Land Use (DelDOT additional element)

[14] "Zero Deaths and Safe System." Federal Highway Administration (FHWA). https://highways.dot.gov/safety/zero-deaths.

In 2023, Dover Kent MPO was awarded funding to complete a Comprehensive Safety Action Plan under the USDOT FHWA Safe Streets and Roads for All (SS4A) Grant Program. This award was part of the FY2023 grant cycle. The *Kent County Safety Action Plan* was completed and approved in June of 2025; it highlights the most critical transportation safety needs in Kent County, namely the locations that are found to be part of the High Injury Network (HIN) and the tools that may be used to alleviate the safety concerns at these locations. The findings can then be used to pursue Implementation Grants, which are also under the SS4A Grant Program. SS4A is a program that utilizes the Safe System Approach to address all aspects of the transportation system.[15]

Although Little Creek does not appear in Kent County's High Injury Network, the Main Street corridor and key intersections were still reviewed as part of the Safety Action Plan. While discussing the findings with the plan's Safety Working Group, members of the group shared ideas for improving the safety of Main Street and collaborating with law enforcement. These ideas were incorporated into the recommendations of this study along with the public feedback. The *Safety Action Plan* also features descriptions of safety countermeasures and their estimated cost, information that was used for putting together Appendix C of this study.

[15] *Kent County Safety Action Plan*. Dover/Kent County MPO, 2025. https://doverkentmpo.delaware.gov/files/2025/06/Kent-County-Safety-Action-Plan-FINAL-June-2025.pdf.

Recommendations

The following section contains descriptions of each of the key transportation recommendations for Little Creek. Some of these recommendations are "Proven Safety Countermeasures," which have been identified by the FHWA for their proven effectiveness at reducing fatalities and serious injuries. The information provided below includes locations that should be addressed, the observed challenges, and the benefits and drawbacks of each solution. Further details on the most relevant recommendations, including cost estimates, are available in Appendix C of the study.

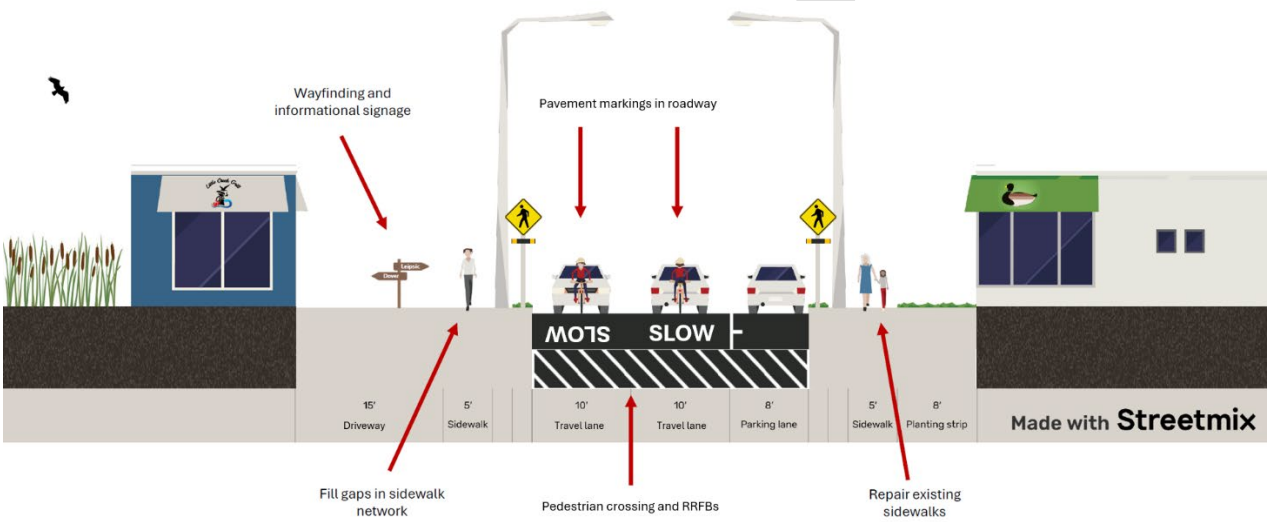

Figure 18: A design for Main Street depicting sidewalk improvements, a pedestrian crossing with RRFBs, pavement markings, and signage. Created using Streetmix.

Sidewalk Network

There are two key tasks that should be completed regarding the sidewalks in Little Creek: improving the existing sidewalks within town; and filling the remaining sidewalk gaps, including southward to the Little River and northward to North Little Creek Road (SR 8). The following information is intended to call out the most critical locations in need of improvement. Appendix B provides a full sidewalk inventory, which includes observations from fieldwork, current sidewalk extent, obstructions, and the estimated cost to replace or add sidewalks.

Improving Existing Sidewalks

As discussed at the beginning of this study, while most of Main Street in Little Creek has existing sidewalks, they are not up to the DelDOT standard. Mapping and fieldwork revealed that most of the sidewalks measured between three (3) and four (4) feet in width, though in reality it is much less than this in many places due to the overgrown grass and shrubs. Other

common obstructions included displaced slabs of concrete, cracks in the sidewalk, and utility poles. Accessible curb ramps are needed in many places. Finally, there are many driveway crossings that would hinder pedestrian movement, especially those built with a steep slope or in a gravel driveway. Each of these obstructions will be discussed briefly.

A few examples of overgrown grass and shrubs can be found across from the dog park on the western side of the road, south of Wilson Lane on the western side of the road, and north of the Little River on the eastern side of the road. These are places where the sidewalks need immediate attention. The grass and shrubs currently obstruct pedestrian movement and also lead to poor drainage at times. Dealing with these issues would improve the sidewalks even before they could be replaced in full.

Issues with the concrete are found throughout the study area on both sides of the road. Elevated slabs are a very common occurrence, and in some cases the slabs are elevated to a slope that would completely obstruct the movement of somebody using a wheelchair or a scooter stroller. In July of 2025 some of the slabs were adjusted in order to reduce tripping hazards, but to truly improve walkability, the sidewalk network would likely have to be replaced and upgraded.

Figure 19. (l): A utility pole obstruction at the corner of Main Street and Wilson Lane.

Figure 20 (r): Overgrown sidewalk on the western side of Main Street.

Utility poles in the sidewalk are located in front of the Little Creek Volunteer Fire Company, at the corner of Main Street and Wilson Lane, in between Wilson Lane and Lowe Street, and south of the Little Creek Grill; these are all on the western side of the road. In these instances, either the sidewalk should be widened to allow five (5) feet of clearance, or the pole should be moved to a new location.

Some of the existing sidewalks already have ADA curb ramps, but this is not always the case. Furthermore, some curb ramps are obstructed by mud and gravel that have accumulated on top of them. Ramps should always follow the current DelDOT and ADA standards, and they should use detectable warning surfaces.

Places where sidewalks cross an existing driveway are not always built to DelDOT and ADA accessibility standards. Certain driveways may need to be adjusted so that their slope is reduced, and with other driveways the frontage should be paved and the gravel needs to be removed. The entrance to the Little Creek Grill is an example of the latter, as the property has a wide, unpaved driveway entrance and disconnected segments of sidewalk.

When it comes to sidewalks in the road's shoulder, DelDOT uses the standard width of five (5) feet. The pedestrian facilities on Main Street should be replaced and upgraded to this width wherever it is not met. "Pinch points" could be used in specific instances, such as when there is not enough available space to add a 5-foot sidewalk, but according to the *DelDOT Pedestrian Accessibility Standards Manual*, this should be done as a last resort.[16]

Completing the Sidewalk Network

There are two major sidewalk gaps on Main Street in Little Creek, the first of these being between the Little Creek Grill and the bridge crossing the Little River. This gap is especially apparent on the western side of the road. During fieldwork, families returning from the dog park were observed walking southward in this area, in a place where no sidewalks are present. To alleviate this safety concern, sidewalks should be added to both sides of the road. By doing so, residents could then walk uninterrupted from the post office to the Little River docks, allowing them to safely reach nearly all of the major destinations in town. Drainage in the area should also be addressed, as water and mud tend to accumulate on the existing sidewalks at this location.

The second major gap is found on Main Street between Port Mahon Road and North Little Creek Road, with neither side of the road containing sidewalks. Dover Kent MPO recommends that this gap be filled to improve safety and connectivity in the town. While adding sidewalks to both sides of the road would have the greatest positive impact, it is worth noting that students currently wait for the school bus on the eastern side of the road, which makes it the more urgent of the two. In this area there is typically more than ten (10) feet of right-of-way between the edge of Main Street and the residential properties. However, if sidewalks were to be built here, various obstructions such as mailboxes and utility poles might have to be relocated.

Through discussions with town officials and members of the public, it was decided that sidewalks are not a high priority on the side streets, including Bell Street, Lowe Street, Wilson Lane, and Thompson Drive. There was expressed concern over residents losing the fronts of their properties or the space used to park their vehicles. According to the available data, these streets are low-stress environments that have a low AADT, and no crashes were reported on any of them. This means they are generally safe for pedestrians. For these reasons, Dover Kent MPO

[16] *DelDOT Pedestrian Accessibility Standards Manual*. Delaware Department of Transportation (DelDOT), 2021. https://deldot.gov/Publications/manuals/pedestrianAccessibility/pdfs/2021/Pedestrian-Accessibility-Standards-for-Facilities-in-the-Public-Right-of-Way-2021-Edition.pdf.

does not believe the addition of sidewalks on these streets is as urgent as the completion and repairing of the sidewalk network on Main Street.

Pedestrian Crossings

Through discussion with town officials and members of the public, it was determined that three (3) key locations on Main Street would benefit the most from a crosswalk: the post office; the Little Creek Methodist Church; and the Little Creek Grill. Each of the pedestrian crossings should meet ADA requirements, including the ramps, striping, and pedestrian signals. For Delaware-specific pedestrian crossing requirements, please refer to the *DelDOT Pedestrian Accessibility Standards Manual*.

Figure 21: A Rectangular Rapid Flashing Beacon (RRFB), flashing sign, and pedestrian refuge island in Dewey Beach. RRFBs are commonly used in the beach communities of Sussex County.

The crosswalks should include Rectangular Rapid Flashing Beacons (RRFBs) or other pedestrian signals whenever possible. RRFBs are a useful tool for alerting motorists to the presence of pedestrians: they can reduce crashes up to 47%, and in some cases they have been found to increase motorist yielding by up to 98%.[17] RRFBs are well-suited for roadways that have low speeds and a high volume of pedestrian traffic. They have been successfully implemented in several Delaware beach towns, such as on Rehoboth Avenue in Rehoboth Beach and on the Coastal Highway (SR 1) in Dewey Beach. Main Street in Little Creek, which has destinations on both sides of the road and a low speed limit, is the ideal location for this type of improvement.

Note that most RRFBs are activated using a button. They can be powered either by traditional power sources or by attached solar panels. There are similar devices that are built to flash continually and are not user-activated. These could help in calming traffic, as they would remind motorists to slow down even when they are not being used by pedestrians; however, a constantly flashing light may not be as effective as a light that flashes only when used by pedestrians, as motorists could become desensitized to its presence.

[17] "Rectangular Rapid Flashing Beacons (RRFB)." Federal Highway Administration (FHWA). https://highways.dot.gov/safety/proven-safety-countermeasures/rectangular-rapid-flashing-beacons-rrfb.

Bicycle Network

The addition of separated bicycle facilities would be difficult within the study area. For the majority of Main Street, only the eastern side of the road contains a shoulder. This shoulder is about eight feet in width, and it is used extensively for vehicle parking (including large trucks). By contrast, the western side of the road does not contain a shoulder. There are many impediments on both sides of the road, which include utility poles, mailboxes, driveways, and other features. This, combined with the on-street parking in the road's shoulder, leaves little room for a separated bicycle facility. Residents expressed their concerns regarding a separated bicycle facility and they did not believe it would be appropriate for the community, though some people also acknowledged that SR 9 regularly sees bicycle traffic in the warmer months.

Figure 22: An example of a "sharrow" marking in Dover, which reminds motorists to watch for bicyclists.

Given the various constraints, it would be more feasible and less costly to add "sharrows" or shared bicycle lanes to the roadway, which would signify the presence of bicyclists without the use of a separated bicycle facility. This improvement could help in making the town more friendly to bicyclists. DelDOT's *Complete Streets Design Guide* defines a sharrow as "pavement markings – designated with two upside-down V shapes above a depiction of a bicyclist – that indicate that a road is a preferred bicycle route and that drivers should be prepared to share the road with bicyclists."[18] They are most useful on a municipality's "main street" and on roadways that are too narrow for dedicated bicycle lanes. Given Main Street's relatively low AADT and low posted speed limit, the road would be well-suited for this type of improvement.

The majority of Main Street is measured to have a Level of Traffic Stress (LTS) of 3, and motor vehicles tend to speed through the town. Residents shared their apprehension towards bicycling in town unless incoming vehicles are slowed. Furthermore, sharrows provide no physical protection from vehicle traffic and bicyclists will still be at risk of being hit by a passing car. Therefore, sharrows would be most effective when used in tandem with traffic-calming measures that reduce the average speed of vehicles.

Sharrows are a form of pavement markings, a low-cost solution that will be discussed later in this section.

[18] *DelDOT Complete Streets Design Guide*. Delaware Department of Transportation (DelDOT), 2024. https://deldot.gov/Publications/pdfs/DelDOT-Complete-Streets-Design-Guide.pdf.

Traffic-Calming and Intersection Improvements

There are many tools available for calming traffic and improving safety on rural roads such as SR 9. In many cases, the most effective solutions are those which speeding motorists cannot ignore, such as speed bumps, speed humps, rumble strips, chicanes, road diets, pedestrian refuge islands, and roundabouts. Some of these solutions are listed as Proven Safety Countermeasures by the Federal Highway Administration (FHWA), meaning they are solutions that have a demonstrated history of reducing roadway fatalities and serious injuries.[19] However, not all of these will be feasible in Little Creek, given the frequent use of SR 9 by agricultural vehicles, freight vehicles, and first responders.

Given the conflicting needs of the corridor, Dover Kent MPO has chosen several solutions that would help in improving the safety of Little Creek's roadways without impeding the access of larger vehicles. These solutions are intended to balance the community's various needs.

Transverse Rumble Strips

There are several types of rumble strips used in roadway safety. Rumble strips are most commonly placed on the center line or in the road's shoulder in order to prevent vehicle departures and crashes. By contrast, those placed within the travel lane and perpendicular to the direction of travel (referred to as "transverse rumble strips") are used to alert motorists, which should reduce the speed of approaching vehicles. They can be used at intersections, toll plazas, construction zones, and other locations that would benefit from speed reduction. According to the *Delaware Manual on Uniform Traffic Control Devices* (*MUTCD*), in a roadway with a posted speed limit of 25 mph, transverse rumble strips must be spaced 24 inches from one another, and each set of strips must be 75 feet apart.[20]

Figure 23: Transverse rumble strips positioned across the travel lane. Source: visionzero.nd.gov (link).

Rumble strips have the advantage of reminding motorists to reduce their speed, without elevating the roadway as in the case of speed bumps. In addition, they are typically not as expensive as other safety improvements. However, rumble strips have the disadvantage of generating noise and vibrations, which means they should not be used in close proximity to residential areas. They might also need to be repaired periodically, as they can be worn down with enough use. Note that

[19] "Proven Safety Countermeasures." Federal Highway Administration (FHWA). https://highways.dot.gov/safety/proven-safety-countermeasures.

[20] "Part 3: Pavement Markings." *Delaware Manual on Uniform Traffic Control Devices (MUTCD)*. Delaware Department of Transportation (DelDOT), 2011. https://deldot.gov/Publications/manuals/de_mutcd/index.shtml.

some rumble strips may be designed in a way that reduces noise; these are sometimes known as "mumble strips" or "sinusoidal rumble strips."[21]

The town's northern and southern limits may be suitable locations for transverse rumble strips, as there are fewer residential properties and therefore the impacts of noise would not be as serious. The most beneficial location would likely be at the northern end of town, in the southbound travel lane. Motor vehicles tend to increase speed while rounding the corner from North Little Creek Road, but rumble strips at this location could remind motorists to reduce their speed.

It is recommended that transverse rumble strips be added to the southbound travel lane at the northern end of town. This would allow the community to test the effectiveness of rumble strips, and if the solution had a positive impact, rumble strips could then be considered for additional locations such as at the southern end of town.

Speed Cushions

The use of speed cushions may be appropriate in Little Creek. These roadway improvements do not elevate the road as much as traditional speed bumps, and they can often be built in a way that allows vehicles with wider axles to easily pass over them. These features ensure speed cushions have a limited negative impact on emergency vehicles. At the same time, they still act as traffic-calming devices, forcing motorists to reduce their speed at key locations. Given that they balance the many needs of communities, speed cushions are often recommended on emergency access routes where speeding is a regular occurrence.[22]

Based on feedback from residents, speed cushions are the less desired solution to reducing vehicle speed in town. Residents cited the fact that speed cushions elevate the roadway, which could adversely impact farm vehicles as well as personal vehicles. Transverse rumble strips were strongly preferred according to public feedback.

Pavement Markings

A low-cost solution to speeding in rural communities is the application of pavement markings or pavement legends, which consist of painted shapes and symbols in the roadway. These could depict the posted speed limit, words such as "SLOW," transverse lines running across the road, and other images. Sharrows, which were previously discussed, are a specific type of pavement marking.

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[21] "Rumble Strips." *Delaware Strategic Highway Safety Plan*. Delaware Department of Transportation (DelDOT), 2020. https://deldot.gov/Programs/DSHSP/index.shtml?dc=project-rumble-strips.
[22] "Speed Cushion." National Association of City Transportation Officials (NACTO). https://nacto.org/publication/urban-street-design-guide/street-design-elements/vertical-speed-control-elements/speed-cushion/.

There are few drawbacks to this solution, though its contribution towards speed reduction is noticeably less impactful than that of other improvements such as speed bumps.[23] Note that pavement markings are already used close to the new stop signs at the intersection with Port Mahon Road, spelling the words "STOP AHEAD." Other locations, such as the northern and southern limits of Little Creek, may be suitable locations for additional pavement markings, being visible to motorists as they enter the town.

Stop Signs

Stop signs are one of the tools available for making intersections safer. They are not considered a true traffic-calming measure, and studies have found that they do not always reduce vehicle speed. Within the context of this study, stop signs will be discussed as a tool for reducing the likelihood of a fatality or serious injury at an intersection, rather than calming traffic.

The intersection of Main Street and Port Mahon Road, next to the Little Creek post office, has recently been converted into a three-way stop. However, feedback from residents indicates that the stop signs are often ignored by both northbound and southbound traffic. Seeing as stop signs are already in place at this location, other improvements should be used to supplement their effectiveness, such as a crosswalk with an RRFB or similar pedestrian signal.

Figure 24: The new stop sign at the intersection of Main Street and Port Mahon Road.

There are two other places that could benefit from the placement of stop signs. The first of these is the intersection of Main Street/Bayside Drive and South Little Creek Road. During public workshops, most attendees showed support for turning this intersection into an all-way stop. It was also pointed out that from South Little Creek Road, visibility of southbound traffic is obstructed due to the tall grass and reeds at the roadway's corner. This should be addressed to reduce the risk of a crash. It was indicated that the placement of stop signs at this location is being considered by DelDOT, and that they should be added sometime in FY2026.

The final location discussed is the intersection of Main Street/Bayside Drive and North Little Creek Road. Currently, southbound traffic is expected to stop for vehicles turning right onto Main Street, but motorists do not always adhere to this stop sign. Some residents advocated for converting this intersection into a three-way stop, which would require northbound, southbound, and eastbound traffic to stop. However, the intersection would need to be realigned in order for

[23] "Pavement Markings: Legends." Iowa State University Institute for Transportation. https://ctre.iastate.edu/research-synthesis/rural-speed-management/pavement-markings/legends/.

this to happen. Other changes to the intersection, such as rumble strips or speed bumps, would be better suited for improving this intersection, as they would more effectively calm traffic and would not be as expensive a solution as a full realignment.

Radar Speed Signs

During the second public workshop, residents noted that the radar speed signs currently in use do not work all the time. It would be beneficial to utilize signs that do not have this issue. Some residents also advocated for radar speed signs that show more than just the vehicle's speed; for example, they can sometimes be designed to use red and blue flashing lights, or display a frowning face, to remind motorists to reduce their speed. It is possible that the more unique signage will be more likely to catch drivers' attention.

Note that radar speed signs are fairly easy to implement, but they do not directly slow down traffic. They are most effective when paired with other traffic-calming solutions.

Intersection Improvements

The intersection of Main Street/Bayside Drive and North Little Creek Road was cited during public engagement for its unsafe conditions, particularly due to the eastbound vehicles that increase their speed when rounding the bend in the road. Several options were discussed with residents and town officials, including adjustments to the curve in the roadway, a three-way stop, and a roundabout.

Figure 25: An agricultural vehicle traveling northward on Main Street.

While adjusting the curve in the roadway was the most favored of these long-term options during public workshops, as stated previously, a solution of this scale would be considerably more expensive than adding rumble strips or making other improvements to the roadway. It would also take far more time to implement. Therefore, short-term solutions should be considered before the intersection is realigned. Dover Kent MPO does not believe a long-term solution such as intersection realignment needs to be pursued at this time, though the town might want to revisit these options in the future.

Speed Enforcement

At the first public workshop, residents strongly emphasized their interest in a greater police presence in town, which would address the issue of speeding vehicles. As the Town of Little Creek does not have its own police department, other means of law enforcement would be needed. The town has previously tried hiring off-duty troopers through the "Jobs4Blue" program, but this has been unsuccessful. Another potential solution is through the US Department of Justice (DoJ) Office of Community Oriented Policing Services (COPS). This office provides various federal grants for hiring and training law enforcement officers and for seeking innovative strategies to make communities safer. COPS grant programs will be discussed in greater detail in Appendix D.

If the municipality were to create its own police force and hire part-time officers, the startup costs would be a significant challenge. Officers would require a vehicle, a uniform, a place to work from, and equipment; they would also need to have the necessary insurance. The municipality would then have to pay officers a competitive rate in order to retain their services. Much of the officers' time would be spent following up with prior incidents and attending court hearings, which would prevent them from enforcing speeding through their entire shift. While there are many long-term benefits to this solution, it would be one of the costliest to implement.

Figure 26: Southbound traffic on Main Street during Memorial Day weekend.

The use of automated speed cameras could be a more affordable alternative to the direct assistance of law enforcement. Through Delaware's Electronic Speed Safety Program (ESSP), speed camera technology has been successfully implemented elsewhere in the state, which then allows tickets to be sent to motorists who speed excessively. The amount of the fine is determined by the vehicle's speed and prior violations, and a "work zone fine" is factored in as well.[24] So far the cameras have seen the most use on interstates and other major roadways, and they are typically located within construction zones. While municipalities can apply for speed cameras through ESSP if certain conditions are met, it is also required that the municipality already have a police department in place. Therefore, the legislation would need to be revised so that small communities such as Little Creek could become eligible for the program. Alternatively, the Delaware State Police could assist with monitoring the speed cameras in place of a municipal police department.

[24] "Delaware Electronic Speed Safety Program (ESSP) Frequently Asked Questions." Delaware Department of Transportation (DelDOT), 2024. https://deldot.gov/Programs/DSHSP/pdfs/projects/ESSP%20FAQ%20April%202024.pdf?cache=1720462811997.

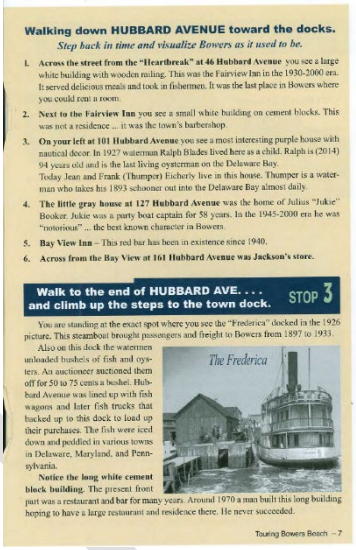
It may also be possible to utilize speed cameras that issue "warning tickets" in the mail. These cameras do not require the involvement of a municipal police department. They are intended to raise awareness of the issue, and they are most useful in areas where traditional speed cameras are not allowed. This would also be more cost-effective than traditional speed cameras. Some municipalities have tested this technology and have seen a decrease in the frequency of speeding vehicles. Such a solution may be suitable for Main Street in Little Creek, if the technology could be acquired.

Finally, some communities across the country have used old police cars and "dummy" officers to slow incoming traffic. This strategy has several benefits: for example, it has a relatively low cost compared to actual police enforcement, and it requires very little effort on the part of the municipality. The vehicle could be moved between the most effective locations, and it could also be shared with other municipalities if they have a similar problem. The primary challenge to this solution is deciding who will own the vehicle and move it between locations.

Whichever path is taken, better coordination between the town, the Delaware State Police, and the Office of Highway Safety is advised. Given the town's budgetary constraints and the lack of an existing police department, Dover Kent MPO recommends utilizing the traffic-calming measures listed previously rather than relying solely on law enforcement. These measures are far more cost-effective, especially due to the annual cost of maintaining a police presence. Alternative solutions such as speed cameras should still be considered as well.

Signage and Walking Tours

One means of promoting ecotourism in Little Creek would be through the use of informational signage. These signs could be positioned at strategic locations on Main Street that call attention to the town's natural and human history. Pamphlets, either in paper or digital format, could lead visitors on a walking tour and explain the relevance of each stop. Relevant locations could include the Old Stone Tavern, Little Creek Methodist Church, and the Little River. The history of the oyster industry should also be highlighted. Having a walking tour would be safer and more feasible once the pedestrian network is improved. The signs would then encourage people to walk on Main Street, which could enhance the "downtown" feel of the area.



Walking down HUBBARD AVENUE toward the docks.

Step back in time and visualize Bowers as it used to be.

1. **Across the street from the "Heartbreak" at 46 Hubbard Avenue** you see a large white building with wooden railing. This was the Fairview Inn in the 1930-2000 era. It served delicious meals and took in fishermen. It was the last place in Bowers where you could rent a room.
2. **Next to the Fairview Inn** you see a small white building on cement blocks. This was not a residence ... it was the town's barbershop.
3. **On your left at 101 Hubbard Avenue** you see a most interesting purple house with nautical decor. In 1927 waterman Ralph Blades lived here as a child. Ralph is (2014) 94 years old and is the last living oysterman on the Delaware Bay. Today Jean and Frank (Thumper) Eichorly live in this house. Thumper is a waterman who takes his 1893 schooner out into the Delaware Bay almost daily.
4. **The little gray house at 127 Hubbard Avenue** was the home of Julius "Jukie" Booker. Jukie was a party boat captain for 58 years. In the 1945-2000 era he was "notorious" ... the best known character in Bowers.
5. **Bay View Inn** – This red bar has been in existence since 1940.
6. **Across from the Bay View at 161 Hubbard Avenue was Jackson's store.**

Walk to the end of HUBBARD AVE. . . . and climb up the steps to the town dock. STOP 3

You are standing at the exact spot where you see the "Frederica" docked in the 1926 picture. This steamboat brought passengers and freight to Bowers from 1897 to 1933.

Also on this dock the watermen unloaded bushels of fish and oysters. An auctioneer auctioned them off for 50 to 75 cents a bushel. Hubbard Avenue was lined up with fish wagons and later fish trucks that backed up to this dock to load up their purchases. The fish were iced down and peddled in various towns in Delaware, Maryland, and Pennsylvania.

Notice the long white cement block building. The present front part was a restaurant and bar for many years. Around 1970 a man built this long building hoping to have a large restaurant and residence there. He never succeeded.

Touring Bowers Beach – 7

Figure 27: A page from the Bowers Beach historic walking tour. Source: Bowers Beach Maritime Museum.

An example of a walking tour can be found in the Town of Bowers, another stop along the Bayshore Byway, where the Bowers Beach Maritime Museum uses pamphlets to guide people to various numbered locations. Photographs show the former appearance of each location, which visitors can compare to the present day. The pamphlet also features a map of the town. Paper copies of these pamphlets are available through the Bowers Beach Maritime Museum.[25] Little Creek would similarly benefit from an historic walking tour, whether this is created through physical signage, paper or digital pamphlets, or a combination of these.

Wayfinding signage could also help in adding character to Main Street. These signs would have a consistent theme and would easily direct people towards their destination. Other coastal towns that have implemented wayfinding signage could be used as examples. The *Little Creek Conceptual Resilience Plan* (2021) gives several ideas for wayfinding signage in the town, as well as ideas for banners that can be attached to streetlights or utility poles.[26]

[25] "Museum." Town of Bowers. https://bowersbeach.delaware.gov/museum/.
[26] *Little Creek Conceptual Resilience Plan*. Coastal Resilience Design Studio (CRDS), 2021. https://cpb-us-w2.wpmucdn.com/sites.udel.edu/dist/7/9849/files/2021/02/21-DE-Little-Creek-ConceptReport.pdf.

Next Steps

This study is intended to be the first step in the process of implementing improvements to Little Creek's sidewalk network and Main Street corridor. It does not address issues such as the corridor's specific engineering needs or recommendations for flood mitigation in addition to the current efforts. Furthermore, the cost estimates are generated based on linear feet and are used primarily for budgetary purposes; they do not account for additional factors such as the location of utilities. However, the information provided in the study can be used as a resource for the Town of Little Creek and as strong justification for why the improvements are needed.

Dover Kent MPO will provide copies of the study to the sponsor and to DelDOT. The full document will also be included in the "Studies" page on the MPO's website.[27] The individual study recommendations can be pursued one or two at a time, or collectively, depending on the sponsor's goals and the available resources. Dover Kent MPO will maintain contact with the town in order to discuss potential avenues for implementing the recommendations.

The recommendations will be added to the MPO's Metropolitan Transportation Plan (MTP), a plan completed every four years that lists the necessary transportation projects over the next 25 years. This document outlines the MPO's goals, estimates population and employment changes in the region, highlights the most pressing transportation needs, and lists projects so that they are eligible for federal funding. The MPO completed the latest version of its MTP, *Innovations 2050*, in January of 2025.[28]

The MPO may choose to submit the more significant study outcomes for consideration in DelDOT's Capital Transportation Program (CTP), which is completed every two years. The CTP is a six-year program for capital investments, which can include bicycle and pedestrian connections but also consists of intersection improvements, new roads, and changes to existing roadways. The recommendations from MPO planning documents are important contributions to the CTP.[29]

Not all projects will rise to the level of a CTP project, and there may be other funding sources that could produce the recommended improvements in a faster timeline. These potential funding sources include the Transportation Alternatives Program (TAP), the Community Transportation Fund (CTF), and the DelDOT Bike/Ped Pool. Based on the relatively small scale of the study's recommendations as compared to the typical CTP project, this may be the better approach. Please see Appendix D for more information on these programs.

[27] "Studies." Dover/Kent County MPO. https://doverkentmpo.delaware.gov/projects/.
[28] *Innovations 2050*. Dover/Kent County MPO, 2025. https://doverkentmpo.delaware.gov/innovations2050/.
[29] "Capital Transportation Program (CTP)." Delaware Department of Transportation (DelDOT). https://deldot.gov/Publications/reports/CTP/.

Conclusion

Kent County, Delaware is home to many small communities that have real transportation needs, but are often overlooked and given considerably less attention than the larger municipalities. The Town of Little Creek is an example of such places. During public workshops for this study, residents expressed their concerns that the sidewalks are in need of upgrading, there are no crosswalks on Main Street, and motorists do not adhere to speed limits while driving through town. They want children to be able to walk around the town or wait for the school bus without having to enter the roadway, and they want Main Street to feel like a "real town" and not a shortcut for motorists. It is their hope that by adding safety improvements such as upgraded sidewalks, crosswalks, and traffic-calming measures, motorists will be reminded to slow down.

While there are other concerns in the community, they could not all be addressed through this study alone. For example, flooding remains a problem on both the northern and southern ends of town, though steps are currently being taken to reduce its impact. Dover Kent MPO recommends coordinating these efforts with any transportation improvements that are taking place, so that the roadway and sidewalks do not have to be replaced after they have already been upgraded. The end-result of this coordination would be more efficient and less costly projects in the town. It is also recommended that the town follow the recommendations of the recently completed flood mitigation feasibility studies, which primarily focused on solutions to the flooding problem.

This study recommends various improvements to address the most prominent transportation safety issues in town. It also provides resources such as cost estimates and potential funding sources, as the town made it clear that a lack of available funds is one of the key barriers to making improvements. These are available in the study's appendices. The recommended improvements, including sidewalk upgrades, crosswalks, RRFBs, and rumble strips, were chosen for their relatively low cost and their ability to have a positive impact on safety and connectivity. Through the resources provided in this study and continued engagement with the MPO, the Town of Little Creek will hopefully begin to meet its transportation goals and improve the safety of its residents.

Appendix A – Study Area Maps

The following is a collection of maps that correspond with the information provided in this study. The first map depicts the existing conditions in Little Creek, including the measured sidewalk width (not accounting for overgrown sidewalks) and the reported crashes within the municipal boundaries. The second map depicts the recommended improvements and the locations that would make them the most effective. Versions of these maps were used during public workshops and at meetings with municipal officials, so that MPO staff could ask members of the community exactly where they would like the improvements to happen.

Sidewalk Network

- Existing Sidewalk: 2 ft. +/- wide
- Existing Sidewalk: 3 ft. +/- wide
- Existing Sidewalk: 4 ft. +/- wide
- Existing Sidewalk: 5 ft. +/- wide
- Missing Sidewalks

Public Crash Data

- Non-Reportable
- Fatality Crash
- Personal Injury Crash
- Property Damage Only

LITTLE CREEK

Sidewalk & Crosswalk Improvement Study

Little Creek DELAWARE

DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION

N

RUMBLE STRIPS
(Located in the South Bound Lane)

SIDEWALKS
Fill in gaps with 5 ft. Sidewalk
5 ft.

SIDEWALKS
Fill in gaps with 5 ft. Sidewalk
5 ft.

CROSSWALKS
Add Crosswalks & RRFB (Rectangular Rapid Flashing Beacon)

SIDEWALKS
(Repair Existing Sidewalks)
- Existing along Main Street Replace with 5 ft. Sidewalk

SIDEWALKS
(Repair Existing Sidewalks)
- Existing along Main Street Replace with 5 ft. Sidewalk

CROSSWALKS
Add Crosswalks & RRFB (Rectangular Rapid Flashing Beacon)

SIDEWALKS
(Repair Existing Sidewalks)
- Existing along Main Street Replace with 5 ft. Sidewalk

CROSSWALKS
Add Crosswalks & RRFB (Rectangular Rapid Flashing Beacon)

SIDEWALKS
(Repair Existing Sidewalks)
- Existing along Main Street Replace with 5 ft. Sidewalk

SIDEWALKS
Fill in gaps with 5 ft. Sidewalk
5 ft.

RUMBLE STRIPS
(Located in the North Bound Lane)

3 WAY STOP
(Scheduled FY26)

LITTLE CREEK TOWN LIMITS
MAIN STREET
PORT MAHON ROAD
Post Office
Little Creek Volunteer Fire Company
Little Creek Grill
Boat Ramp
Little River
9

Project Name: SIDEWALKS - CAMDEN - LITTLE CREEK
Layout Name: Little Creek Sidewalk & Crosswalks
0 0.01 0.03 0.06 0.09 0.12 Miles

Sidewalk Network (Delaware Firstmap)
- Existing Sidewalk
- Missing Sidewalks

Public Crash Data (Delaware Firstmap)
- Non-Reportable
- Personal Injury Crash
- Property Damage Only

(Public Crash Data 1/2009 - 7/2024)

LITTLE CREEK
Sidewalk & Crosswalk Improvement Study

TOPIC
(Recommendation)

- Sidewalk Repair
- Sidewalk Gaps Fill In (5 ft.)
- Rectangular Rapid Flashing Beacon
- Rumble Strips
- 3 Way STOP

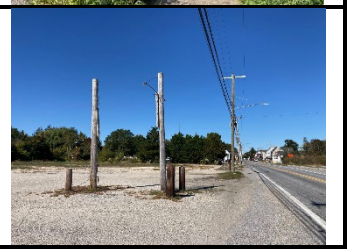
Little Creek
DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION

N

Appendix B – Sidewalk Inventory

The following is a description of the sidewalk conditions along Main Street in Little Creek. Sidewalk facilities are broken into segments, and intersections with other roads are used as boundaries. Each segment has corresponding information such as the linear distance of existing sidewalk, obstructions in the right-of-way, and the estimated cost to either replace and upgrade the sidewalk or add new sidewalk to fill a gap. A photograph is provided to indicate the current conditions of the segment. By studying the sidewalk network in this manner, it will be easier for the Town of Little Creek to understand the unique conditions of each segment and to pursue repairs for the most critical locations.

Note that the cost estimates are intended for budgetary purposes. They do not account for additional factors such as material and labor costs, surveying costs, right-of-way acquisition, drainage, or the cost of moving utilities. More detailed cost estimates will be required before a project can be completed.

Little Creek Main Street Sidewalk Inventory Western Side of Road						
Northern Boundary	**Southern Boundary**	**Corridor Length (ft)**	**Existing Sidewalk (ft)**	**Cost Estimate* ($)**	**Notes**	**Image**
N Little Creek Road	Port Mahon Road	1,900 ft	0 ft	$175,070	11 driveway crossings. No existing sidewalks.	
Port Mahon Road	Thompson Lane	800 ft	652 ft	$80,753	13 driveway crossings. Sidewalks are narrow and overgrown with grass. Cracks in concrete throughout most of this segment.	
Thompson Lane	Lowe Street	1,065 ft	772 ft	$91,678	12 driveway crossings. Overgrown with grass and shrubs in many places. Impediments such as utility poles.	
Lowe Street	Little Creek Boat Ramp	800 ft	268 ft	$87,377	3 driveway crossings. Grass needs to be removed. Large sidewalk gap north of Little River. Impediments such as utility poles.	

**Cost estimates based on $17 per square foot ($85 per linear foot) of sidewalk repair or construction; $20 per square foot ($100 per linear foot) of driveway improvement; and a 15% construction contingency. Does not include surveying, drainage, the relocation of utilities, and other additional costs.*

Little Creek Main Street Sidewalk Inventory Eastern Side of Road						
Northern Boundary	**Southern Boundary**	**Corridor Length (ft)**	**Existing Sidewalk (ft)**	**Cost Estimate* ($)**	**Notes**	**Image**
N Little Creek Road	Port Mahon Road	1,900 ft	0 ft	$189,417	15 driveway crossings. No existing sidewalks.	
Port Mahon Road	Thompson Lane	800 ft	637 ft	$81,011	6 driveway crossings. Sidewalks generally in good condition in front of dog park. Some deficient sidewalks near residential properties.	
Thompson Lane	Lowe Street	1,065 ft	892 ft	$93,120	18 driveway crossings. Some sections are wide enough, but others have upturned slabs and are overgrown with grass.	
Lowe Street	Little Creek Boat Ramp	800 ft	598 ft	$81,685	2 driveway crossings. Sidewalks often obstructed by water and mud (floods easily). Large sidewalk gap north of Little River.	

**Cost estimates based on $17 per square foot ($85 per linear foot) of sidewalk repair or construction; $20 per square foot ($100 per linear foot) of driveway improvement; and a 15% construction contingency. Does not include surveying, drainage, the relocation of utilities, and other additional costs.*

Appendix C – Recommended Improvements and Cost Estimates

The following is a summary of each of the key recommendations in this study. Information provided for each item includes the type of improvement, the location, the benefits and drawbacks, and the estimated cost. A photograph is provided as an example. This summary is an updated version of the display boards used during the second public workshop.

Note that the cost estimates are intended for budgetary purposes. They do not account for additional factors such as material and labor costs, surveying costs, right-of-way acquisition, drainage, or the cost of moving utilities. More detailed cost estimates will be required before a project can be completed.

Upgrade Sidewalk Network

Main Street, both eastern and western sides of road

Replace with new 5-foot sidewalk (DelDOT standard), fill gaps, and remove obstructions

$346,550 to upgrade sidewalks (based $85 per linear foot of sidewalk and $100 per linear foot of driveway)

Fill Sidewalk Gaps

Northern and southern ends of town

Complete the sidewalk paths leading to the north end of town and the boat ramp

$533,550 to fill northern and southern gaps (based $85 per linear foot of sidewalk and $100 per linear foot of driveway)

High Visibility Crosswalks with ADA Ramps

Main Street (US post office, Methodist church, and Little Creek Grill)

Designated ADA-compliant crossing location for pedestrians

$300 per crosswalk
$2,200 per curb ramp
$14,100 total

Rectangular Rapid Flashing Beacons (RRFB)

Main Street at designated crossing locations

Pedestrian-activated warning lights

Can be solar-powered

$30,000 per RRFB set (depending on number of crossings)

Sources:
https://doverkentmpo.delaware.gov/files/2025/06/Kent-County-Safety-Action-Plan-FINAL-June-2025.pdf
https://www.saferoutesnj.org/wp-content/uploads/2023/08/Cost-Guidelines_2023-1.pdf

Transverse Rumble Strips

Northern and southern ends of town

Grooves in the road that warn motorists

Can be designed so that excess noise is reduced

$600 per strip
$3,600 for a set of six

Speed Cushions

Northern and southern ends of town

Speed control designed for emergency vehicle access

Fairly inexpensive and easy to install

$2,000 per speed cushion
$4,000 total

Pavement Markings

Main Street within the roadway

Can include written messages or “sharrows”

Inexpensive and easy to implement, but less effective at calming traffic

$50 per letter
$150 per sharrow

Stop Signs

Intersection with S Little Creek Road (planned for FY2026)

Does not calm traffic, but can be used to make problematic intersections safer

An inexpensive solution

$600 per new stop sign
$6,000 per red flashing beacon

Sources:
https://doverkentmpo.delaware.gov/files/2025/06/Kent-County-Safety-Action-Plan-FINAL-June-2025.pdf
https://www.saferoutesnj.org/wp-content/uploads/2023/08/Cost-Guidelines_2023-1.pdf

Radar Speed Signs

Northern and southern ends of town (need to upgrade existing radar speed signs)

Reminds motorists to reduce their speed

Does not physically calm traffic

$8,000 per sign

Police Enforcement

Municipal limits

Acts as a deterrent, but an expensive solution that requires both up-front and annual costs

$50,000 - $100,000 per year for a part-time officer, **>$250,000** per year for a full-time officer (this may not include additional costs)

Automated Speed Cameras

Northern and southern ends of town

Does not calm traffic, but provides speed enforcement without relying on police and is less expensive than a part-time officer

Variable cost

Intersection Improvements

Intersection with N Little Creek Road

Adjust the curve in the roadway or carry out other realignments to improve the safety of motorists

Variable cost; would be more expensive and complicated than other solutions

Sources:
https://doverkentmpo.delaware.gov/files/2025/06/Kent-County-Safety-Action-Plan-FINAL-June-2025.pdf
https://www.saferoutesnj.org/wp-content/uploads/2023/08/Cost-Guidelines_2023-1.pdf

Appendix D – Potential Funding Sources

The following is a list of federal, state, and other funding sources that may be used to implement the recommendations of this study. Information provided includes the grant program's administrator, a summary of the grant program, and relevant links for further research.

The funding sources are accurate as of September, 2025, the date of the project's completion. The information in this appendix is subject to change, as the criteria of a particular grant may change, or the grant may not be renewed after a certain number of years. Please refer to the provided links for more information on each grant program.

Federal Transportation Funding Opportunities

Safe Streets and Roads for All (SS4A) Grant Program

- Organization: US Department of Transportation (USDOT)
- This grant program, which is part of the Infrastructure Investment and Jobs Act (IIJA), has two available grant types: Planning and Demonstration Grants, and Implementation Grants. Applicants first complete a Comprehensive Safety Action Plan through a Planning and Demonstration Grant, which then allows them to apply for Implementation Grants and carry out the recommended safety improvements. Eligible projects include complete streets, pedestrian safety enhancements, speed management, safe routes to school and transit, and other topics.
- In 2025, Dover Kent MPO completed a Comprehensive Safety Action Plan through a Planning and Demonstration Grant as part of the SS4A program. The goal of the plan is to use the Safe System Approach and a thorough analysis of the region's transportation network to assess the most critical safety needs. Building off the safety goals identified in this document, municipalities and other entities within Kent County can now apply for Implementation Grants to improve the safety of all modes of transportation.
- In order to be eligible for implementation funds, intersections and/or road segments must be identified in the High Injury Network (HIN). None of the locations in Little Creek meet this identification criteria. However, the *Kent County Safety Action Plan* still contains information relevant to Little Creek and its goals of improving pedestrian safety and connectivity.
- https://www.transportation.gov/grants/ss4a/implementation-grants
- https://www.transportation.gov/grants/ss4a/faqs

National Scenic Byways Program

- Organization: Federal Highway Administration (FHWA)
- The Delaware Bayshore Byway is a 100-mile coastal corridor along the Delaware River and Bay Estuary. The byway is an officially designated National Scenic Byway, and it is managed by a partnership between DNREC, DelDOT, Delaware Greenways, municipalities in all three of Delaware's counties, and other groups. Through the National Scenic Byways Program, eligible applicants can apply for funds to be used for developing the State Scenic Byway Program, planning activities, construction projects, conservation projects, and interpretive projects.
- The Delaware Bayshore Byway recently received funding through the National Scenic Byways Program, which is administered by the FHWA. This funding will be put towards a master plan for bicycle, pedestrian, and waterway connections throughout the corridor. Several communities have also received funding for visitor amenities. (The Town of Bowers, for example, has been provided funds for new restrooms and wayfinding signage; a 2022 bicycle and pedestrian study by Dover Kent MPO helped in acquiring this funding.)
- https://www.transportation.gov/rural/grant-toolkit/national-scenic-byways-program
- https://delawarebayshorebyway.org/about/
- https://delawaregreenways.org/wp-content/uploads/2021/02/DBB-CMP-Update-2020.pdf

State Transportation Funding Opportunities

Community Transportation Fund (CTF)

- Organization: Delaware Department of Transportation (DelDOT)
- The Community Transportation Fund (CTF) is an annual source of funding that each Delaware state legislator may use for transportation projects. Ideas for projects are brought up by constituents, and they are typically small endeavors that will have a significant positive impact in the community. Eligible projects must have a transportation component, they must be on public property or land dedicated to public use, and they must benefit more than one individual. Common examples of CTF projects include repaving, drainage, curb replacement, sidewalk repair, and safety measures such as traffic cones.
- https://deldot.gov/Publications/brochures/pdfs/ctf_brochure.pdf

Transportation Alternatives Program (TAP)

- Organization: Federal Highway Administration (FHWA) / Delaware Department of Transportation (DelDOT)
- The Transportation Alternatives Program (TAP) is a segment of the Infrastructure Investment and Jobs Act (IIJA). At the federal level, it is known as the Transportation Alternatives (TA) Set-Aside and is derived from the Surface Transportation Block Grant Program (STBG). The program provides funding for smaller transportation projects (less than $1.5 million each). Local governments and Metropolitan Planning Organizations are eligible project sponsors, and DelDOT oversees the grant program and reviews the applications. Projects require the sponsor to be responsible for 20% of the project costs.
- TAP projects can include projects such as pedestrian and bicycle facilities, shared-use pathways and overlooks, safe routes to school projects, conversion of abandoned rail corridors, community improvements, environmental mitigation related to stormwater and habitat connectivity, scenic and historic byways, and other topics. Projects are more likely to be selected if they contribute to improving safety and ADA accessibility are close to community centers, schools, parks, and bus stops; and reduce air pollution in the area, as well as other factors.
- https://deldot.gov/Programs/tap/index.shtml
- https://deldot.gov/Programs/tap/pdfs/TAP%20Pre%20submission%20Overview.pdf

DelDOT Bicycle and Pedestrian Pool Statewide Project Prioritization

- Organization: Delaware Department of Transportation (DelDOT)
- The DelDOT Bike/Ped Pool is a selection process that allows DelDOT to prioritize bicycle and pedestrian projects. Projects are scored based on the existing conditions, the connectivity outcomes, the cost-to-benefit ratio, and the number of people who will positively benefit. The result is a weighted ranking of each of the submissions according to how closely they meet the criteria. Submissions come from Metropolitan Planning Organizations. Submissions for the Bike/Ped Pool are gathered in October each year.
- Through the prioritization summary, DelDOT will highlight which Bike/Ped Pool projects have the greatest need, and what they recommend for a path forward. Projects that score better will be given a higher priority within the planning efforts of DelDOT. Bike/Ped Pool projects may also be selected for an application for federal grant programs.
- https://deldot.gov/Publications/plans/bikeandped/pdfs/DelDOTBikePlan043018FINAL.pdf#page=103

Bikeway Innovation Grant

- Organization: Delaware Department of Transportation (DelDOT)
- This grant is awarded annually by the Delaware Bicycle Council. It is used to fill gaps in the existing bicycle network and make conditions safer for cyclists. Projects are typically small in scope and are most often used for a feasibility study or project design. Municipal and county offices are eligible applicants for this grant. The project should be in a location where the applicant has jurisdiction over the right-of-way. The application process is designed in a way that is straightforward and accessible to local officials, which is not always the case with grant applications. No match is required for this grant.
- https://deldot.gov/Programs/bike/biking_in_delaware/index.shtml?dc=Infrastructure-Innovation

Outdoor Recreation, Parks and Trails Program (ORPT)

- Organization: Delaware Department of Natural Resources and Environmental Control (DNREC)
- Funds from this grant opportunity may be used for park land acquisition, planning and design of parks or trails, and construction of outdoor recreational facilities. The program is administered by DNREC, and applications are reviewed by the DNREC Parks and Recreation Advisory Council alongside other entities. Municipalities, counties, and park districts are eligible to apply. Grants generally require a 50% match, which can be cash or in kind.
- https://dnrec.alpha.delaware.gov/parks/planning/recreation-parks-trails/

Community Environmental Project Fund (CEPF)

- Organization: Delaware Department of Natural Resources and Environmental Control (DNREC)
- This grant is available to nonprofit organizations that are seeking to complete environmental projects in their community. Eligible projects may include pollution mitigation, environmental enhancement, and recreational opportunities. Preference is given to areas identified in the *DelDOT Equity Analysis Tool* as well as areas that have been previously affected by pollution. The program is administered by DNREC.
- https://dnrec.delaware.gov/environmental-justice/cepf/
- https://experience.arcgis.com/experience/b07afc2a90484f88b40fb5354ea491c7?org=DNREC

Other Funding Opportunities

Readiness and Environmental Protection Integration (REPI) Program

- Organization: US Department of Defense (DoD)
- REPI is a program that supports projects for reducing land use conflicts near military installations, addressing environmental issues, and enhancing military resilience. The program encourages collaboration between the DoD and various State and local entities. A REPI project is currently being carried out in Little Creek to mitigate flooding, and the wetland and drainage improvements are expected to protect both the community and nearby DoD facilities.
- https://www.repi.mil/
- https://www.repi.mil/Portals/44/REPI_101_FactSheet_022025_FINAL_1.pdf

State Transportation Innovation Council (STIC) Incentive Program

- Organization: Federal Highway Administration (FHWA)
- This program is designed to promote the use of transportation innovations, which can include a wide range of projects. States, Metropolitan Planning Organizations, and other entities can apply for a STIC project, provided it meets the requirements. Qualifying activities related to a specific innovation include developing training materials and demonstrations, collecting data and observing the outcome, and preparing standard operating procedures or technical guidance, as well as other activities. Dover Kent MPO has relied on STIC grants to initiate various projects, including setting up "parklets" at public events, and developing virtual reality (VR) training programs used to teach people about transportation planning.
- https://www.fhwa.dot.gov/innovation/stic/guidance.cfm

Office of Community Oriented Policing Services (COPS)

- Organization: US Department of Justice (DoJ)
- The COPS Office, part of the US DoJ, offers federal grant opportunities to assist State and local law enforcement agencies. Activities covered by these grants include innovative community policing strategies, mental health support, and school violence prevention, as well as many others. Training opportunities are also offered, covering a wide range of topics. The objectives of the COPS Office are to enhance community safety and to build partnerships between law enforcement and other stakeholders.
- https://cops.usdoj.gov/aboutcops
- https://cops.usdoj.gov/notice-of-funding-opportunities-finder

Land and Water Conservation Fund (LWCF) State and Local Assistance Program

- Organization: National Park Service (NPS)
- Municipalities, counties, state agencies and regional park authorities are eligible to apply for funds. The funding can be used for acquisition of land for parks and/or development or rehabilitation of certain public recreational facilities. The program requires a 50% match, which can be cash or in kind. For more information, see 23 U.S. Code § 133.
- https://www.nps.gov/subjects/lwcf/stateside.htm
- https://www.nrpa.org/our-work/advocacy/the-land-and-water-conservation-fund-lwcf/applying-for-lwcf-grants/

Appendix E – Public Workshops

The following is a list of comments written on the display boards during the two public workshops held at the Little Creek Volunteer Fire Company building. This data was used by MPO staff to understand the transportation challenges facing Little Creek and craft recommendations that are likely to have a positive outcome.

Comments from Public Workshop 1 (February 6, 2025)

- Police presence. Stop signs do not work when there are no repercussions for your actions. The kids matter in this town and they deserve to be safe!
- Cut "dips" across Main Street which will cause traffic to slow down? (i.e. The opposite of speed bumps.)
- Crosswalks with flashing lights.
- Whatever we are doing, it's not working. Stop signs are ignored; it's a racing strip.
- Speeding is out of control!
- Sidewalks are uneven, a tripping hazard. Too narrow in some places, nonexistent in other places.
- Speeding vehicles, no police help!
- Law enforcement to enforce speeding. Write speeding tickets! Gain a reputation. People don't obey signs, lights, etc.
- Circle at the north end of town?
- Won't bike due to speeding. Need law enforcement.
- Tractor-trailers and dump trucks through town.
- Stop signs are a joke.
- Speeding vehicles are a concern for me. We need answers because we have no help from police.
- Having 4-5-foot sidewalks would show drivers we are a real town – slow down!!
- Anytime Route 1 is backed up, traffic is rerouted through town.
- Who is responsible for sidewalk maintenance?
- Redo intersection of Route 9 and N. Little Creek Road; southbound vehicles don't stop.
- Kids wait for school bus where there are no sidewalks.
- Drivers don't stop at Port Mahon Road stop signs.
- Add a three-way stop at S. Little Creek Road?

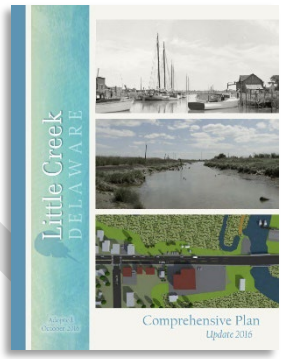
Comments from Public Workshop 2 (July 9, 2025)

- I walk and sometimes bike up Port Mahon Road and Route 9. We need sidewalks which I think will help distinguish us as a small town, and we need a lower speed limit through town. Also, any traffic calming would be appreciated.
- What happened to curb-to-curb maintenance from DelDOT?
- Slower vehicles. Noise abatement. Wide sidewalks on all Main Street as a visual cue to motorists that we are a real town with real people.
- Keep the plan you have.
- I like everything presented. DelDOT needs to agree to do the work.
- We pay taxes, why do we have to pay for police?
- I walk in town and I have witnessed people running stop signs and speeding through. I have concerns about safety for children and adults. We need real traffic calming measures. We pay our taxes but only receive assistance from DelDOT when it is convenient for DelDOT. It should not take someone getting injured or killed to get protection from traffic-related issues. Doing the right thing for our residents is of the utmost importance!

Appendix F – Relevant Resources

Little Creek Comprehensive Plan (2016)

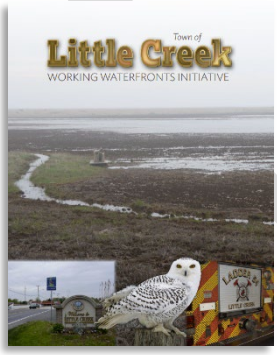
https://delplan.org/wp-content/Plans/Little%20Creek/LC_CompPlan_adopted_Oct2016_with_appendices_reduced.pdf



This document is the most recent *Comprehensive Plan* update for the Town of Little Creek. Some of the town's transportation goals are "to assure timely maintenance of streets and sidewalks, improve pedestrian connectivity and safety throughout the Town, and improve overall aesthetic and community character," as well as "to establish itself as a destination and attract travelers on the Bayshore Byway to stop and visit area attractions." Several gaps in the sidewalk network are mentioned. The first chapter lists the town's planning goals, many of which focus on resilience against coastal flooding and related natural hazards. The document also describes the infrastructure (both built structures and transportation) that will be affected by sea level rise. All of these findings are useful background information for the *Little Creek Sidewalk and Crosswalk Improvement Study*.

Town of Little Creek Working Waterfronts Initiative (2016)

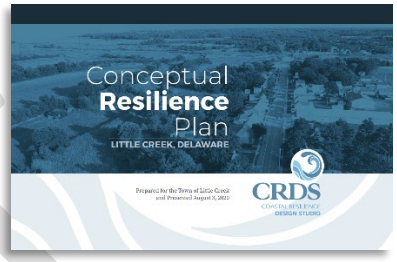
https://www.cedarcreekplanners.com/wp-content/uploads/2017/03/Little-Creek-report-6-01-16.pdf



A companion to the Town's *Comprehensive Plan*, this document provides insight into the local history and the current needs. It was completed through a collaboration between Delaware Sea Grant, the University of Delaware, and other organizations. The project findings indicate that flooding is a prominent concern among residents, and the areas near the post office and along the Little River were cited as frequently vulnerable to flooding. It was suggested by some residents that the town be made more walkable to promote ecotourism. Speeding and truck traffic were also brought up during survey work. Ultimately, the project highlights the importance of preserving Little Creek's working waterfront, reducing the impacts of flooding on homes and businesses, and ensuring the "small town feel" is not lost.

Little Creek Conceptual Resilience Plan (2021)

https://cpb-us-w2.wpmucdn.com/sites.udel.edu/dist/7/9849/files/2021/02/21-DE-Little-Creek-ConceptReport.pdf



This document was created by the University of Delaware's Coastal Resilience Design Studio (CRDS) for the Town of Little Creek. It offers potential solutions for some of the town's recurring challenges, including resilience against sea level rise, building complete streets, and preserving local history. Within the plan there are valuable ideas for transportation and recreation improvements such as filling sidewalk gaps, enacting traffic-calming measures on Main Street, and building trails and bikeways that connect to Little Creek Wildlife Area. The recommendations for the Waterman's Village commercial space are included within this larger document. The transportation solutions presented in the plan, along with other existing literature, acted as starting points for the *Little Creek Sidewalk and Crosswalk Improvement Study*.

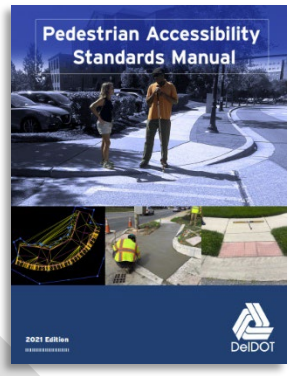
Waterman's Village Micro-Retail Pattern Book (2021)

https://littlecreek.delaware.gov/files/2021/02/LC-PatternBook-WatermansVillage.pdf

This short concept plan was created by the University of Delaware's Coastal Resilience Design Studio (CRDS) for the Town of Little Creek. It is a reimagining of the former Cavaliers East property on the south side of town to include new retail space such as a market, a bait and tackle store, and a kayak rental. Aspects of the plan include historic building design, native vegetation, and wayfinding signage. Permeable surfaces such as crushed oyster shells and rain gardens are recommended to reduce the impact of flooding in the area. Native plants such as marsh elder, red cedar, and fox sedge are listed. The intention of this concept plan is to encourage new commercial and tourism opportunities in Little Creek while simultaneously recognizing the town's storied history and preserving its historic character.

DelDOT Pedestrian Accessibility Standards Manual (2021)

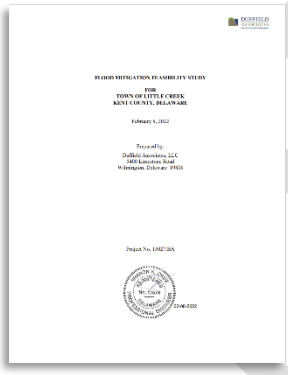
https://deldot.gov/Publications/manuals/pedestrianAccessibility/pdfs/2021/Pedestrian-Accessibility-Standards-for-Facilities-in-the-Public-Right-of-Way-2021-Edition.pdf



This 2021 manual is used by DelDOT as a thorough guide for creating accessible pedestrian facilities throughout the State of Delaware. Most relevant to this study are the required measurements for various pedestrian amenities. For example, the minimum width for a sidewalk is listed as 5 feet (or 6 feet when there is no buffer strip), and the minimum width for a shared use path is listed as 10 feet. Also included in the manual are requirements for turning areas, ramps, buffer strips, and other pedestrian facilities. Measurements such as these are useful to the *Little Creek Sidewalk and Crosswalk Improvement Study* because they give a baseline for how much space is needed for new amenities. This has guided the Dover Kent MPO when creating recommendations based on the existing constraints.

Town of Little Creek Flood Mitigation Feasibility Study (2022)

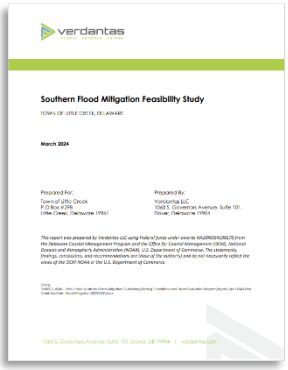
https://littlecreek.delaware.gov/files/2022/02/flood_mitigation_feasibility_study_final_r.pdf



This is the first part of the flood mitigation studies being done for Little Creek. It was completed by Duffield Associates in 2022, and it focuses on the northern part of town. The northern study boundary is the intersection of Main Street/Bayside Drive and North Little Creek Road, and the southern study boundary is the intersection of Main Street and Wilson Lane. Maps in the appendices show the location of natural resources such as wetlands, freshwater ponds, and areas prone to tidal flooding. The study contains extensive runoff modeling based on existing conditions such as drainage systems and annual rainfall. The modeling indicates that the intersection of Main Street and Port Mahon Road falls within the 10-year and 25-year floodplains, which puts the town at serious risk in the event of a storm that is not all that unlikely. Recommendations from the study include green infrastructure such as bioswales, porous pavement, improved drainage ditches, and restored wetlands. Cost estimates are also included.

Southern Flood Mitigation Feasibility Study (2024)

https://littlecreek.delaware.gov/files/2024/04/Little-Creek-Southern-Flood-Mitigation-Study-Report.pdf



This is the second part of the flood mitigation studies being done for Little Creek. It was completed by Verdantas in 2024, and it focuses on the southern part of town. The northern study boundary is the midpoint between Lowe Street and Wilson Lane, and the southern study boundary is the Little River. The intersection of Main Street and Lowe Street was a key study location. After covering the existing conditions, the study provides modeling data that represent various flooding scenarios. Lowe Street, Bell Street, and the southern end of Main Street are shown to be especially vulnerable to flooding, in part because of the insufficient drainage systems. The study concludes with recommended improvements to the drainage systems and other mitigation strategies, as well as cost estimates for each alternative.

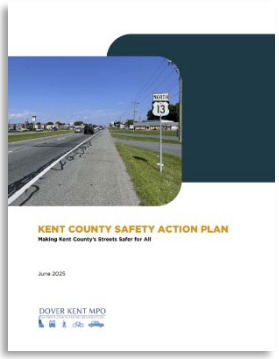
Innovations 2050 (2025)

https://doverkentmpo.delaware.gov/innovations2050/

Innovations 2050 is the most recent Metropolitan Transportation Plan (MTP) for Dover Kent MPO. It serves as a long-range transportation plan, guiding the regional planning efforts and indicating exactly what Kent County needs in the next 25 years. The document includes projections for population, households, and employment; the results of travel demand modeling; air-quality modeling; and a list of short-term, mid-term, and long-term transportation projects that should be undertaken. While putting together the document, MPO staff met with representatives from municipalities across the county, including Little Creek. The input these communities shared was used to shape the document's narrative as well as the project list. *Innovations 2050* was approved by the MPO Council in January of 2025. The MTP is renewed every four (4) years.

Kent County Safety Action Plan (2025)

https://doverkentmpo.delaware.gov/files/2025/06/Kent-County-Safety-Action-Plan-FINAL-June-2025.pdf



In June of 2025, the MPO Council approved the *Kent County Safety Action Plan*, a Planning and Implementation Grant belonging to the Safe Streets and Roads for All (SS4A) program. The plan identifies roadways in Kent County that are part of the High-Injury Network, which means they see a disproportionately high number of fatalities and serious injuries. Now that the plan has been approved, communities within the high-injury network can apply for Implementation Grants in order to complete the recommended safety improvements. Although Little Creek is not specifically called out in the High-Injury Network, the plan provides detailed information for various types of safety countermeasures to be used throughout Kent County. This includes when a countermeasure is most appropriate for a roadway, how effective it is at reducing crashes, and roughly how much it would cost. The latter information from the *Safety Action Plan* was used to inform the cost estimates in this study.

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DOVER/KENT COUNTY MPO

METROPOLITAN PLANNING ORGANIZATION