



# June 2023 Final



**US13 SIDEWALK GAPS** 



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.

The preparation of this document was financed in part with funds provided by the Federal Government, including the Federal Transit Administration, through the Joint Funding Simplification Program, and the Federal Highway Administration of the United States Department of Transportation.

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, *US13 Sidewalk Gaps*. Funded by FHWA, FTA, DelDOT, and the City of Dover, this resource is intended to identify the areas along US Route 13 in Dover that lack adequate sidewalks, pedestrian paths, or other relevant amenities. This information can then be used to improve the overall pedestrian network, focusing on the most critical areas, which will make conditions safer for pedestrians and separate them from passing motorists. Appendices in the study include a map of the existing conditions, and a list of segments with associated landmarks and recommended improvements.

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

#### **Historical Context**

The Dover Kent County Metropolitan Planning Organization (Dover Kent MPO) was created in 1993 after becoming eligible when the 1990 Census documented a central Delaware Urbanized Area of sufficient size. Since then, the City of Dover has regularly been a naming sponsor for transportation studies. Dover Kent MPO was created to coordinate the activities of the Delaware Department of Transportation (DelDOT), with the needs of the Urbanized Area and the communities that are part of it. Shortly after creation, Dover Kent MPO was granted the privilege of representing the residents and communities in all of Kent County.

A primary document required of Dover Kent MPO is a Long-Range Transportation Plan (LRTP) that documents transportation priorities for the next 25 years. The plan is developed every four years; this timeframe is determined by the air quality conformity determination results for Dover Kent MPO's region. The Metropolitan Transportation Plan (MTP) titled "Innovation 2045" was the latest LRTP developed by Dover Kent MPO, approved in January 2021.

Dover Kent MPO requests areas and sites of concern from the constituent municipalities and Kent County as the annual Unified Planning Work Program (UPWP) is developed. The City of Dover is unique among the communities in that it has codified a process for providing Dover Kent MPO and DelDOT with its highest-priority road or traffic issues each year.

#### **Purpose of Study**

The City of Dover's nomination of the need for sidewalks along US Route 13 predates the City's prioritized list of projects and has been included in its highest-priority list since its inception in 2014, though lists had been provided previously. The project has been in the MTP since the 2025 RTP adopted in 2001 and was submitted as a project in 1997 as an attempt to encourage DelDOT to correct the problems rather than wait for parcels to be redeveloped. The City of Dover would ask that the sidewalks be installed or brought up to standard during any development or redevelopment activity in any neighborhood. Projects along US13 are a frequent subject considered by the Dover Planning Commission but there are uses that were created before the requirement for sidewalks that have not been required to update their parcels to meet current standards.

Due to the abundance of businesses and other destinations along US13, the study area is a critical location for the addition of sidewalks and other pedestrian amenities. The goal of this study is to provide an inventory of several existing conditions, namely: 1) The sidewalk gaps along US13 in Dover; 2) Other substandard facilities along US13. Using these findings, the City of Dover can then coordinate with DelDOT and other stakeholders to improve US13 walking conditions. This will be beneficial to pedestrians as well as motorists that rely on US13 for transportation.





Figure 1 (1): US13 northbound, next to KFC and Burger King. The elevated curbs in front of these properties are not suitable for use as sidewalks.

Figure 2 (r): US13 southbound, next to Valvoline Instant Oil Change. There are no sidewalks in front of this property.

#### **Existing Policy and Improvements**

As mentioned, the City of Dover has recognized and promoted the need for sidewalks in various sections of US13 in recent years. In that time, the City has approved development proposals for several sites that would require installation of sidewalks as a condition for a Certificate of Occupancy (C of O), the final step in the building permit process. Dover Kent MPO's recognition of the need for sidewalks has also been adopted by the DelDOT Active Transportation staff, who program funds for bicycle and pedestrian facilities in Delaware. Finally, the City of Dover, Dover Kent MPO, and DelDOT have recognized the need for sidewalks through several publications, most notably the 2015 City of Dover Pedestrian Plan. Another example of this is found in the 2020 Dover Bicycle and Pedestrian Plan, which provides a more updated list of the segments of US13 in need of improvement.

There have been several DOT projects that addressed the missing sidewalks as documented by the US13 Pedestrian Safety Study performed by Whitman Requardt & Associates in 2019. The 2019 Safety Study brought together representatives from the DelDOT Traffic Management Center, their consultants, and staff members of various DOT divisions, the City of Dover, and Dover Kent MPO for a bus ride to document the pedestrian improvements needed to make the highway running through the City safer. It also catalogued pedestrian improvements made over the past several years, including the area between Martin Luther King Jr. Boulevard (known as Court Street at the time) and East Loockerman Street, major development projects like the area between Division Street (DE8) and Kings Highway/White Oak Road with the development of

Bicycle-and-Pedestrian-Plan-2020-FINAL-1.pdf.

<sup>&</sup>lt;sup>1</sup> City of Dover Pedestrian Plan. City of Dover, 2015. <a href="http://evogov.s3.amazonaws.com/media/27/media/74334.pdf">http://evogov.s3.amazonaws.com/media/27/media/74334.pdf</a>. <sup>2</sup> Dover Bicycle and Pedestrian Plan. City of Dover, 2020. <a href="https://doverkentmpo.delaware.gov/files/2021/04/Dover-plan">https://doverkentmpo.delaware.gov/files/2021/04/Dover-plan</a>.

the former Playtex site and the construction of several retail stores, and the improvements made in North Dover by DelDOT from Townsend Boulevard to Leipsic Road.<sup>3</sup>

The DelDOT-led pedestrian facility improvement projects set the standards for assessments in this inventory, including width of sidewalks, crosswalks for all driveway entrances and exits, and

crosswalks at all streets intersecting with US13. The commercial development of the former Barry Van Lines site on the east side of US13, just south of Leipsic Road, was heard by the City Planning Commission and approved before the improvements were made. The proposal has since been heard by the Planning Commission in 2022 and sidewalk improvements, both internal to the site and along US13, are included.

The DelDOT projects set the standard but the City set the limits for acceptable facilities. The City of Dover recently completed a new "Americans with Disabilities Act Transition Plan: Pedestrian Facilities in the Public Right-of-Way" (ADA Plan) that assessed pedestrian facilities across the City including the portions of US13 in the City.

Dover's survey of ADA facilities identified a barrier as:

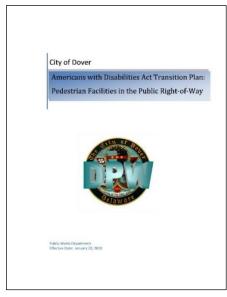


Figure 3: The City of Dover's ADA Plan, updated in 2022.

- 1. No ramp where one is needed.
- 2. Sidewalk width less than 36".
- 3. No truncated domes.
- 4. Poor slope = cross slope > 3%, running slope > 8.33% (1" on 12").
- 5. Sidewalk connectivity not present.<sup>4</sup>

The City's priority matrix in the document cites government facilities as primary, commercial and employment as secondary, and the remaining deficiencies with tertiary priority. There are a few State facilities along US13 south of Martin Luther King Jr. Boulevard on the west side and the State Police Headquarters on the east side further north. Most land uses in the balance of US13 in the City are commercial and employment uses.

<sup>&</sup>lt;sup>3</sup> "US13 Pedestrian Safety Study: Scarborough Road to Puncheon Run Connector". DelDOT, 2019. https://deldot.gov/Programs/pedestrian\_council/pdfs/2019/Jul/KentCountyPedestrianSafetyAudit.pdf.

<sup>&</sup>lt;sup>4</sup> Americans with Disabilities Act Transition Plan: Pedestrian Facilities in the Public Right-of-Way. City of Dover, 2022.

 $<sup>\</sup>frac{https://www.cityofdover.com/media/Public\%20Works/ADA\%20Transition\%20Plan\%20and\%20Response\%20Form/American\%20With\%20Disabilities\%20Act\%20Transition\%20Plan.03.07.22.pdf.$ 

#### Research Process

Dover Kent MPO relied primarily on remote sensing to inventory the pedestrian facilities along US13 in the City of Dover. Dover Kent MPO utilized two sources of photographic information on the status of sidewalks and other pedestrian facilities on US13. Staff created in-house working maps using imagery provided with ArcGIS Online that is relatively frequently updated. The latest imagery provided by FirstMap, the Delaware GIS repository, was taken in 2017 and, therefore, is significantly outdated. The data created that Dover Kent MPO primarily used to identify sidewalks was prepared by DelDOT, who is responsible for upkeep of the data represented. Sidewalk data from FirstMap and DelDOT was overlayed on the imagery and catalogued to identify areas of concern. The data on the GIS maps was used to identify areas that required a closer look, although the full extent of US13 in Dover was analyzed through inperson site visits.

The second source of photographic information was the online maps provided by Google and Bing. The photography provided online is seldom older than 2019. The photography is periodically updated for and displayed on the maps, with areas of frequent change updated more frequently. To assess the presence of sidewalks, Dover Kent MPO used the GIS maps as a first source. Because the corridor through the City is only six miles long, Dover Kent MPO followed up with a comprehensive review of the complete corridor via online maps and site visits. Dover Kent MPO found that oblique photography taken from the roads by the providers is not as frequently changed, so at times improvement to pedestrian facilities and even road construction is missing.

Dover Kent MPO staff reviewed images available from Google and Bing to find the most recent images of the subject section of sidewalk, missing or not. Both platforms offer the opportunity to copy the images for publication to use as images in the study. The sections included in Appendix B are copied from online maps via Google.

Remote sensing provides adequate preliminary data as do the aerial photographs utilized by the State. Photographs for any site are instantly dated. The images available require processing before they are published. All remote photography was verified via site visits traversing the full corridor and supplemented by staff photography. Each site required investigation to confirm changes have not taken place since the photograph. Dover Kent MPO staff have traveled the length of US13 from Webbs Lane to the entrance to the Puncheon Run Connector, to the Scarborough Road intersection, and on to West Denneys Road. The key areas of the corridor with missing sidewalks were noted and photographed by MPO staff; these are represented in Appendix B. During these site visits, staff took pictures of several examples of sidewalk intersections with parking lots and driveway aprons as examples of current policy questions regarding sidewalks.

There are areas along US13 that have noticeably small sidewalks, evident even in a remote sensing review. For example, if the ten-foot-wide sidewalks DelDOT recently installed in front of Hibachi Japanese Steak House and Tasty Crab House are the standard, then the five-foot-wide

sidewalks installed at the TD Bank across the street, while relatively new, do not have the same set of uses or capacity. The three-foot-wide sidewalks in front of the Delaware Agricultural Museum are functionally inadequate but meet the City of Dover's standard as expressed in the City's 2022 ADA Plan. These were not added to the inventory of missing sidewalks.

Similarly, the "bubble" sidewalks that are fully encased by cubing and typically isolated islands in front of older businesses frequently reach three feet or more but are noted as not meeting standards in the ADA Plan. These are not missing but are required to be replaced while installation of missing sidewalks or any related construction project happening in the area. As stated in the ADA Plan:



Figure 4: The "bubble" sidewalks located in front of Crab Du Jour, formerly Shuckers Pier 13. Source: Google Street View.

• Whenever there is an intersection improvement project, new construction project, or repaving project, any affected curb ramps, sidewalks, and crosswalks will be rebuilt to these ADA design guidelines, where feasible and reasonable.<sup>5</sup>

These are generally located between East Loockerman Street and the area of White Oak Road, and then between Lepore Drive and College Road.

Please note that this was an inventory-type study, and therefore it did not rely on public workshops as is the case with other MPO studies. However, input from the MPO Council, Committees, and the general public was still taken into account during the draft phase of the study's completion.

 $\frac{https://www.cityofdover.com/media/Public%20Works/ADA\%20Transition\%20Plan\%20and\%20Response\%20Form/American%20with%20Disabilities%20Act%20Transition%20Plan.03.07.22.pdf.$ 

<sup>&</sup>lt;sup>5</sup> City of Dover, 2022.

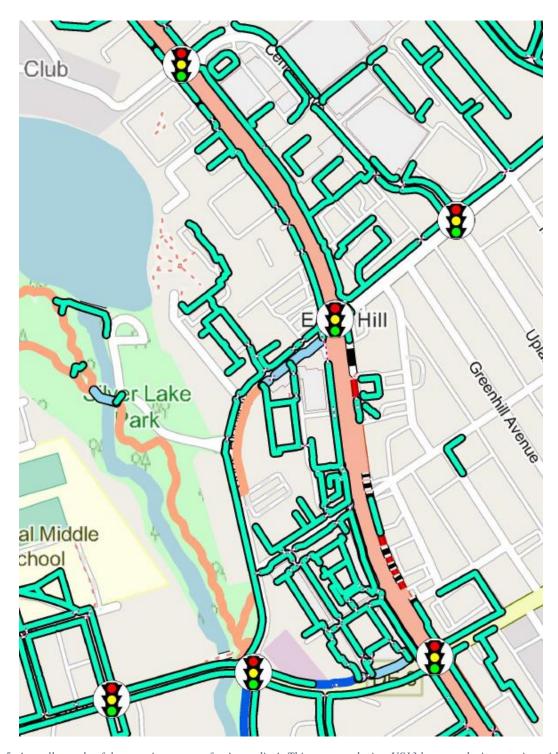


Figure 5: A small sample of the mapping process for Appendix A. This segment depicts US13 between the intersection with East Division Street and the intersection with Centre Drive. Existing sidewalks are displayed in green and sidewalk gaps are in red.

### **Findings**

#### **General Findings**

Development along US13 has taken place since the early 20th century. Land use controls that considered the pedestrian were not used until the last few decades, so any site improvements before this time, particularly commercial uses, were not required to include sidewalks. There are six miles of US13 in the City of Dover. In that distance, there are 9,260 feet (1.75 miles) on the west side of the highway with missing or substandard sidewalks. Included in that measurement are 66 driveway entrances and exits that do not include a crosswalk.

On the east side there are similar issues. The distance is smaller because of the enclave of the Rustic Lane/Kentwood Estates neighborhood and the City ends at Scarborough Road, but the issues are the same. There are over 8,600 feet (1.63 miles) on the east side of the highway in the City with missing or substandard sidewalks, while there is an additional 1,150 feet in front of parcels under County jurisdiction totaling 8,620 feet. There are 73 driveway entrances to US13 that do not include crosswalks and nine streets that do not include crosswalks. Lastly, there are eight crosswalks missing that would help pedestrians cross US13 at significant intersections.





Figure 6 (1): A satellite view of the US13 intersection with Lakeview Drive and Townsend Boulevard. Several different sidewalk measurements are used in this area. Source: Google Maps.

Figure 7 (r): US13 northbound, at the intersection with Lakeview Drive and Townsend Boulevard. Some sidewalks are already present at this location, though they are of varying sizes.

There remain several areas along US13 in the City of Dover that require improvements. There is currently 8,600 feet of sidewalk missing in the 5.8 miles on the east side of US13 in the City (but that includes 0.38 miles of enclave total, 1,160 feet of sidewalk, north of Harriet Lane to Wilmington University that technically is not in the City), and another 9,200 feet of sidewalk missing in the six miles in the City of Dover on the west side. That totals almost 3.4 miles of sidewalk missing along the 11.45 miles of sidewalks along US13 (Webbs Lane to West Denneys

Road, two sides) in the City of Dover. Appendix B provides a summary of the sites along each side of US13, as well as a list of segments based on its priority in terms of likely pedestrian improvement. Each citation begins with the street immediately to the south of the block, and it continues until it reaches another landmark (such as a different street or a nearby business). The length of sidewalk gaps is provided for each segment.

#### Sidewalk Width

Appendix B provides a chart of the sections of missing sidewalks identified by Dover Kent MPO for each side of US13. These are catalogued from south to north by the intersecting street just to the south of the deficient section. In Dover Kent MPO's analysis, any sidewalk present based on aerial photographs, regardless of width, is a sidewalk. The sidewalks recently installed by DelDOT on the east side of US13, from the north entrance to Capital Commons to the Speedway Café, are considered to be the standard for pedestrian facilities combined with bicycle facilities along the arterial in the City. However, most of the sidewalks present along US13 do not reach this width.

The sidewalks along US13 range from three feet wide, the minimum width in the City's ADA assessment, to ten feet wide (as seen in the previously mentioned segments). While these all meet the requirements of the ADA Assessment, most do not meet the preference of the Active Transportation Program at DelDOT. The preference of DelDOT is to install surfaces that are wide enough to service pedestrians and bicycle riders, at the same time. The standard identified meets the preferences of the program. Going forward, the use of uniform sidewalk dimensions throughout the corridor would help in simultaneously meeting both DelDOT and ADA requirements.





Figure 8 (1): A satellite view of US13 by Hibachi Japanese Steak House and Tasty Crab House. Source: Google Maps.

Figure 9 (r): US13 northbound, facing the ten-foot sidewalks in front of Tasty Crab House.

#### **Paved Entrances and Parking Lots**

US13 is a commercial corridor for much of the six miles it traverses Dover and has been for most of the past century. The City of Dover expanded in 1925 as Route 13 was being built in Kent County and about the time the National Highway System was being designated. Prior to the expansion, the City did not extend east beyond the St. Jones River. Shortly thereafter, Dover was reincorporated as a city in 1929 and included portions of the DuPont Highway, what is now US13. The core of Dover's portion of US13 was between Loockerman and Division Streets and quickly extended to White Oak Road. This core part of US13 in Dover was developed when the road was proven as a preferred traffic route. Many sites are first- or second-generation development, which means they existed before land use regulations were widely used to require sidewalks and improve modes of transportation other than personal vehicles.

As commercial and retail developed along the DuPont Highway, the buildings were located adjacent to be as visible as possible with parking in front of the building. The parking was adjacent to the right-of-way or provided area to back out and turn around, leaving little room for subsequent installation of sidewalks. Along US13 in Dover, there are examples of pedestrian right-of-way that crosses driveway entrances and parking lots.





Figure 10 (1): A satellite view of the intersection of US13, Kings Highway NE, and White Oak Road. Source: Google Maps.

Figure 11 (r): US13 northbound, next to Rita's Italian Ice. Here the right-of-way crosses the property's US13 entrance.

#### **Priorities**

Some sections of US13 attract frequent pedestrian activity, while others are essentially secluded from either businesses that attract pedestrians or from neighborhoods that produce pedestrians. Therefore, the commercial/retail areas along US13 between East Water Street and Holiday Boulevard are the highest priority for installation and repair of sidewalks and other pedestrian facilities. The remainder of Dover's US13 corridor, from Webbs Lane to East Water Street and north of Holiday Boulevard, is considered secondary.

Near-term projects (FY2021-2025) in the MTP include a few relatively small sections of sidewalks that had funding committed. They include:

- US13 Sidewalks Dover: Townsend Boulevard to Leipsic Road (fill in sidewalk gaps)
- US13 Sidewalks Dover: Leipsic Road to Rustic Lane (fill in sidewalk gaps)<sup>6</sup>

The few other pedestrian activities on US13 included in the near-term projects were related to installation of crosswalk signs at Rustic Lane and the north entrance to Dover Mall. The more generic description of filling all the pedestrian facility gaps along US13 was included in the midterm projects (FY2026-2034) within the MTP. As described in the City of Dover's Comprehensive Plan:

• US13 Sidewalk Construction: Construction of multi-use paths along US13 continues to be a priority. Construction of sidewalks is required when properties are developed or redeveloped, but significant sections of the sidewalk system are either in deteriorated condition or missing.<sup>7</sup>





Figure 12 (1): US13 northbound, next to the Best Buy parking lot. Sidewalks are present at this location.

Figure 13 (r): US13 southbound, facing a crosswalk at the intersection with Martin Luther King Jr. Boulevard.

<sup>&</sup>lt;sup>6</sup> "Innovation 2045." Dover Kent County MPO, 2021. <a href="https://doverkentmpo.delaware.gov/innovation-2045/">https://doverkentmpo.delaware.gov/innovation-2045/</a>.

<sup>&</sup>lt;sup>7</sup> City of Dover 2019 Comprehensive Plan. City of Dover, 2020.

https://www.cityofdover.com/media/2019%20Adopted%20Comprehensive%20Plan/Dover%202019%20Comprehensive%20Plan%20Adopted%201-13-2020%20Complete wRevised%20LDP%20Maps.pdf.

#### Recommendations

Dover Kent MPO's primary recommendation to the City of Dover is to fill any remaining sidewalk gaps along the US13 corridor. This is most critical in areas with a high volume of foot traffic, such as where pedestrians regularly walk to businesses or other destinations. According to Dover Kent MPO's analysis, the primary area in need of sidewalk improvements is located between East Water Street and Holiday Boulevard on US13, as this is the central part of the corridor and the location of the majority of businesses. Outside of this portion, there are still locations in need of new sidewalks and crosswalks; please refer to Appendix A to see the complete corridor.

Coordinating with DelDOT is a first step in working towards filling sidewalk gaps on US13. However, an alternative would be for the City of Dover to take responsibility for installation or replacement of sidewalks. The City does provide this service in the residential neighborhoods, primarily as a mechanism to reduce liability for property owners and the City of substandard or missing sidewalks. This is particularly true in areas that do not meet the requirements for the use of Federal Highway funds. In these instances, creating a budget in the Capital Improvement Plan would be an important step towards filling sidewalk gaps within Dover's city limits.

It should also be noted that in some cases, property owners or developers may be required to fill sidewalk gaps. According to Chapter 98, Article IV of the Dover Code of Ordinances, properties must contain sidewalks along the public street frontage, particularly those with access to existing pedestrian networks. As stated in the municipal code:

18.3 Pathway design standards and location requirements. Sidewalks or other pathways according to the requirements of this section shall be installed on a property by the property owner or developer under the following circumstances:

- When the property is part of a development proposal which is subject to planning commission site development plan review.
- When the property is part of a development proposal which is subject to planning commission site development master plan review.
- When the property is part of a request for a conditional use permit which also requires site development plan review or site development master plan review.
- When the property is part of a development proposal which is subject to administrative site plan review, provided the proposal involves construction of an entire new building.

For the full language regarding sidewalk requirements for properties, please refer to the Delaware Code of Ordinances.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> "Article 5 - Supplementary Regulations. Section 18. - Pedestrian, bicycle, and multi-modal access requirements." Dover, Delaware - Code of Ordinances.

https://library.municode.com/de/dover/codes/code of ordinances?nodeId=PTIICOOR APXBZO ART5SURE.

To address the issue of pedestrians crossing driveways and parking lots, Dover Kent MPO recommends the City consider the appropriate policy alternatives. These could include requiring the installation of cementitious sidewalks through paved right-of-way to clearly define the pedestrian way, requiring the painting of crosswalks across the paved right-of-way in driveways and parking lots, or another prescribed mechanism to clearly define the pedestrian way in front of businesses. Designating via the use of paint would be considerably easier to complete than adding new sidewalks, making it a feasible short-term goal until a cement walkway could be added over a driveway. An example of a crosswalk running across a parking lot entrance may be seen in Figures 14 and 15.

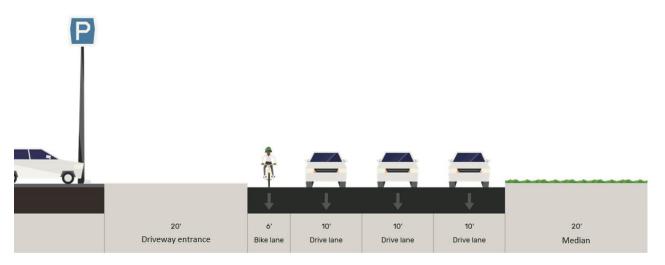


Figure 14: US13 southbound, in front of Valvoline Instant Oil Change, as it currently appears. Note that other existing conditions such as telephone poles may be present. Created using Streetmix.

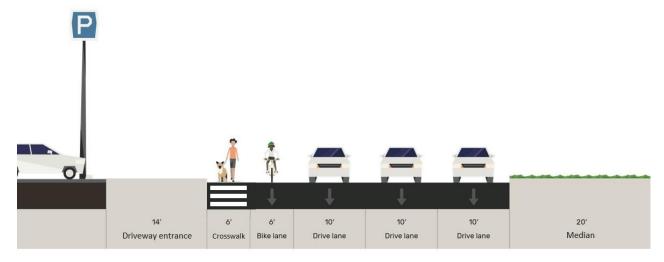


Figure 15: US13 southbound, in front of Valvoline Instant Oil Change, as it would appear with the addition of a crosswalk at the parking lot entrance. Note that other existing conditions such as telephone poles may be present. Created using Streetmix.

#### Conclusion

The issue of sidewalk gaps along US13 is one that the City of Dover is looking to improve. Through its analysis of the site, Dover Kent County Metropolitan Planning Organization has determined several critical areas that have the greatest need of improvement. However, the entire US13 corridor through Dover would benefit from either additional or improved pedestrian facilities. These changes do not all need to be long-term solutions; for example, the addition of clearly visible crosswalks at property driveways is a simple but effective means of making conditions safer for pedestrians, while new sidewalks are intended to offer more permanent improvements.

The resources used in this study are available for anyone interested in these topics. These include the City of Dover's bicycle and pedestrian plans, the City's Comprehensive Plan, the City's ADA Plan, Dover Kent MPO's Metropolitan Transportation Plan "Innovation 2045," and the Dover Code of Ordinances. The list is not meant to be all-encompassing, but rather, to provide a starting point for interested stakeholders.

By improving the pedestrian network along US13, several benefits are likely to occur. The most obvious of these are an improvement in safety for pedestrians and enhanced ADA accessibility. Those who cannot drive or do not own a personal vehicle also benefit greatly from additional sidewalks. Another advantage is the economic benefits for businesses due to the increased foot traffic. The overall health of the community would improve as people would be more active while walking to their destination, without having to rely on a personal vehicle. Finally, pedestrian facilities are a benefit to motorists, who become less likely to strike a pedestrian when designated sidewalks and crosswalks are available. For these reasons, it is recommended that the City of Dover work with DelDOT, Dover Kent MPO, property owners, and other stakeholders to add to the US13 pedestrian network in a way that provides the best possible connectivity.

#### Appendix A - Study Area Map

The following map depicts the entirety of the US13 corridor within the City of Dover, with the current sidewalk and crosswalk conditions. Existing sidewalks are displayed in green, and the gaps are displayed in red. Symbols for existing traffic lights and some of the nearby destinations are also included. Dover Kent MPO created this map by combining available information related to US13's conditions; the map was then used to complete the analysis and determine the areas with the greatest need of improvement.

Note that the north arrow of the lefthand image (or the northern section of the corridor) is not aligned with the north arrow of the righthand image (or the southern section of the corridor). This is due to the direction of US13, which runs from southwest to northeast in the southern section, but southeast to northwest in the northern section; in other words, the lefthand image is rotated so that the entire corridor fits onto the single page.



### Appendix B - Index of Existing Conditions

The first table in Appendix B lists the segments along US13, both northbound and southbound, along with both the existing conditions and recommended improvements. Information provided in the table includes the limits of each segment (marked by intersections with various streets), the length of sidewalks needed to fill the gaps, the length of driveway crossings, and MPO recommendations. Satellite images are provided for reference. Rows highlighted in yellow indicate locations outside of the City of Dover.

Appendix B also contains a list of locations with their corresponding priority, or the importance of improving pedestrian facilities at each location. When the study was presented to the MPO Council in May of 2023, it was recommended that each segment be prioritized to facilitate future improvements. The prioritization process is as follows:

- Segments in a primarily commercial part of US13 that are also within a block of residences are given a 1, designating them the highest priority;
- Segments in a primarily commercial part of US13 or in an area of connection are given a **2**, designating them a secondary priority;
- Segments in a primarily undeveloped section are given a 3, designating them a tertiary priority.

Those listed with a priority of 1 would offer the greatest benefit to pedestrians if completed; those listed with a priority of 3 would offer fewer benefits. Rows highlighted in yellow indicate locations outside of the City of Dover.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Google	Webbs Lane	Webbs Lane	Puncheon Run light	1525.8	42.4	Construct sidewalk/SUP in the ROW from Webbs Lane to the ramp for the Puncheon Run Connector. Construct sidewalk/SUP from the Connector ramp to the traffic light. Explore a crosswalk across the entrance ramp, the exits at the traffic light, and the northbound exit ramp.
Google	Puncheon Run exit	Puncheon Run light	State Street	1334.3	37.5	Construct a sidewalk/SUP from the northbound exit ramp to State Street. Explore ways for pedestrians to span the Puncheon Run.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
	State Street	State Street	Hertrich lot	874.8	176.3	Construct a sidewalk/SUP from State Street to the existing sidewalk at the south end of the Hertrich Capital Mazda parcel. Add crosswalks for four driveways. Developer will configure driveways for the vacant lot as needed and will be required to install crosswalks and sidewalks by COD.
County	Evergreen Drive	Evergreen Drive	Lotus Street	210.9	73.2	Remove or make accessible the bubble islands at Car Dealership, at adjacent retail stores, and at Romano's. Clear pedestrian ROW at car lot. Construct sidewalk/SUP from Romano's to Lotus Street. Add crosswalks at five driveways.

Appendix B-1

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Google	Lotus Street	Lotus Street	Bridge over St. Jones River	535.6	0	Construct sidewalk/SUP from Lotus Street to the St Jones bridge. Explore closed drainage at this site.
Google	Bridge over St. Jones River	Bridge over St. Jones River	Laurel Drive	822	0	Construct a sidewalk/SUP from the north side of the bridge to Laurel Drive. Explore closed drainage at this site.

Appendix B-1

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Control Model of Transport of T	Bay Road	North end of Target parcel	E. Loockerman Street	604	108.9	There are no sidewalks through the various islands at the divergence of US13 and Bay Road. This block requires study and clarification of ROW for modes. Clarify the need for the access road connecting to E. Loockerman Street. Determine most appropriate place for pedestrian and bicycle facilities.
Coccle	Spring Garden Lane	Spring Garden Lane	Maple Parkway	376.1	194.8	Remove or make accessible curbed buffers (grassed bubble islands). Create buffers in front of parcel before Maple Parkway. Construct sidewalk/SUP from Spring Garden to Maple Parkway as reconfigured. Add crosswalks for four driveways.

Appendix B-1

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Coosis	Maple Parkway	Maple Parkway	Hollywood Restaurant	123.9	271.3	Remove or make accessible bubble islands. Construct sidewalk/SUP from Maple Parkway to island in front of Hollywood Diner. Reconfigure driveways, as necessary. Add crosswalks at seven driveways.
N.D. Departitions	Maple Parkway	North of "South of the Canal" business complex	Rita's Italian Ice	24.1	158.7	Construct sidewalk/SUP from existing sidewall at "South of the Canal" to Rita's Italian Ice. The sidewalk at Rita's puts pedestrians in a parking space. Determine a path for a pedestrian way to crosswalk. Remove or make bubble islands accessible. Reconfigure driveways, as necessary. Add crosswalks for five driveways with access to US13.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
to the state of th	Centre Drive	Driveways only	N/A	0		Add crosswalk on Mission BBQ north driveway. Add crosswalk for the Chamber of Commerce offices. Add crosswalk for US Gas at the corner of Townsend Boulevard.
	Jefferic Blvd	Speedway Café	New Citizen Bank	252.1	64.5	Vacant parcel, former Barry Van Line site. Sidewalks and driveways to be placed by developer who will construct the sidewalks/SUP and mark the crosswalks.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
	Leipsic Road	Leipsic Road	El Azteca	91.4	01 2	Add two crosswalks on driveway. Remove non-ADA bubble island. Add/mark shared use path.
A Department of the Coordinate	Leipsic Road	El Azteca	McDonalds	0	104.7	Add crosswalk at two driveways for El Azteca and one crosswalk for Yukon Korean BBQ & Sushi Bar. Remove or make accessible bubble islands at Korean restaurant. Add/mark shared use path for Korean restaurant.

## **US13** in Dover: Facilities Missing East Side

East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Leipsic Road	McDonalds	Applebee's	101.6	159	Remove non-ADA bubble islands. Install shared use paths with grass buffer. Reconfigure driveways, as necessary. Create crosswalks at all driveways.
State Police	Applebee's	Wawa	0	122 1	Install crosswalks on four driveway access points. Note: Sidewalks are currently five feet wide.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Occupied to the second	Yellow cells are parcels not part of the City but will be annexed upon request.  Rustic Lane	Wawa	Maxwell Street	112.9	40.6	Install two crosswalks at Wawa and Car Care Center driveways. Install Shared Use Path in front of Car Care Center. Sidewalk at Wawa currently about 5.5 feet wide.
Congle	Maxwell Street	North of Dunkin Donuts	Woodford Street	446.7	62.1	Install shared use path in front of two parcels. Install crosswalk across driveways. Install crosswalk across Maxwell Street.

Appendix B-1

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
This state of the	Yellow cells are parcels not part of the City but will be annexed upon request.  Woodford Street	Woodford Street	Smith Street	192.2	285.8	Install shared use path in front of all parcels in the block.  Define driveways for four uses between Woodford and Smith by adding curbs and buffers.  Install crosswalks on driveways.  Install crosswalk on Woodford Street.
to the state of th	Smith Street	Smith Street	Kentwood Drive	15.5	58.1	Remove bubble islands. Install accessible shared use path. Define driveways with curbing and buffers. Define corner of Smith Street intersection with curbing. Install a crosswalk at Smith Street.

## **US13** in Dover: Facilities Missing East Side

	East side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
To the state of th	Yellow cells are parcels not part of the City but will be annexed upon request.  Kentwood Drive	Atlantic Homes vacant parcel	Wilmington University entrance	389.9	56.3	Install a shared use path at front of parcel. Install a crosswalk at Kentwood Drive.
Google  Finger 81/31 (MST Aleis, son Foreign 1) 5. Contain 1-2 in (MSC-PIS-COS), but does 6100.	Kentwood Drive	Wilmington University entrance	Scarborough Road	586.3	57.9	Install shared use path across full frontage. Install crosswalk across Wilmington University driveway entrance. Explore a crosswalk at Scarborough Road entrance to SR1.
Totals				8620.1	2207.3	

## **US13** in Dover: Facilities Missing West Side

West side closest treet to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	driveway crossings (ft)	Recommendations
ebbs Lane	Hertrich	Governors Avenue connector	1332.1	323.5	Construct sidewalk/SUP in ROW from existing sidewalk in front of Hertrich Chevrolet to the Governors Ave connector. Crosswalks for seven driveways.
overnors Avenue	Avenue	State Street	864.1	403.2	Remove or make accessible bubble island at Dover Animal Hospital. Construct sidewalks/SUP from Animal Hospital to State Street in ROW. Explore alternatives for crossing Puncheon Run creek. Crosswalks for eight driveways.
	ebbs Lane overnors Avenue nnector	South of Hertrich Chevrolet  Governors Avenue Avenue	South of Governors Hertrich Avenue Chevrolet connector  Governors Avenue Avenue State Street	South of Governors Hertrich Avenue connector  Governors Avenue Avenue State Street  South of Governors Avenue State Street  State Street  South of Governors Avenue State Street  State Street	South of Governors Hertrich Avenue connector  Governors Avenue Avenue State Street 864.1 403.2  Hertrich Chevrolet State Street 864.1 403.2

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Cook	State Street	State Street	Carroll Building entrance	1077.1	118.9	Construct sidewalk/SUP from State Street to existing sidewalk at Quest Diagnostics. Crosswalks at four driveways.
Towns - Goods West (1997) (199	Roosevelt Avenue	Roosevelt Avenue	Vacant lot	375.4	80.7	Remove or make bubble islands accessible (Developer responsibility). Install sidewalk/SUP from Roosevelt through grass buffer at L&D Cycles. Crosswalks for seven driveways (some developer responsibility). Explore driveway entrance/exit consolidation (developer responsibility).

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Duodings Co.	Roosevelt Avenue	100' south of Lotus Street alley	Lotus Street	344.4	28.9	Construct sidewalk/SUP from last driveway of the vacant lot through the alley to Lotus Street. Crosswalk at alley behind homes on Lotus Street.
Guerth Maria Congress (American	Lotus Street	Lotus Street	Bridge over St. Jones River	720	0	Install sidewalk/SUP in ROW.

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
Coople	Bridge over St. Jones River north side	North side St. Jones Bridge	River Road	972.7	208.2	Install sidewalk from Bridge to River Road. Remove or make bubble island at Life Church accessible. Crosswalks at six driveways.
Coogle	Lakeview Drive	North side of Shupback Kitchen	Garden Lane	217.8	105.5	Continue sidewalk/SUP from Shupback Pakistani Kitchen to Garden Lane. Explore expanding Burns & Ellis buffer and define an entrance and an exit. Crosswalks at four driveways.

Dover US13 Corridor Missing Sidewalks

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
For second willing the second will be second with the second will be second will be second with the second will be second wi	Garden Lane	Garden Lane	North side of Dover Pawn	311.9	170	Remove or make accessible the bubble islands at Valero Fuel Station. Reconfigure the entrance and exit driveways for Valero and Dover Pawn.  Correct the crosswalks at Residential Mortgage Services/FCCB.
Success of	Garden Lane	North of Residential Mortgage Services	South of multi- tenant building	49.3	17.5	Install a sidewalk/SUP at Exit Central Realty to match the parcels adjacent. Install a crosswalk at Exit Central Realty driveway.

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
	Lepore Drive	Michael Angelo's Hair	South of TD Bank	247.2	265.5	Install sidewalk/SUP in ROW from north of Michael Angelo's driveway to TD Bank sidewalk. Install curbing and buffers to define entrances and exits with crosswalks. Explore putting an entrance at Universal Assembly and an exit at Harrington Realty, with crosswalks, similar to the pair of parcels immediately to the south.
Pro Boy Company Compan	State Street	North of Dover Pools	College Road crossing	1627.1	56.7	Three feet wide sidewalks are adequate per City's ADA Assessment. Should be replaced for modern standards with 5' sidewalk to 10' wide shared use path. Crosswalks at two driveways.

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
	Cedar Chase Drive	North entrance to Tiger Mart	Holiday Boulevard crossing	176.2	85.5	Make bubble island in front of Rene Delyn accessible. Install sidewalks at two sides of entrance for First State Inn. Crosswalks at four driveways.
Total Congle	Holiday Boulevard	North boundary of McDonalds	Scarborough Road crossing	216	0	Install shared use path from end of sidewalk at the edge of McDonalds property to Scarborough Road.

## **US13** in Dover: Facilities Missing West Side

	West side closest street to the South	Southern Limit	Northern Limit	Length of sidewalks needed (ft)	Length of driveway crossings (ft)	Recommendations
W Dennys Rd W De	Scarborough Road	Scarborough Landing	DTCC Trail	290	0	Install a Shared Use Path to connect the landing at Scarborough Road to the DTCC path 290 feet inland. Alternative: build a 1,122-foot shared use path in the ROW.
N Dupont Hwy N Dupont Hwy	Scarborough Road	DTCC Trail	West Denneys Road	222	0	Install a Shared Use Path to connect the landing at West Denneys Road to the DTCC path 222 feet inland. Alternative: build a 1,122-foot shared use path in the ROW.
Totals				9043.3	1864.1	

## Appendix B PRIORITIZATION

US13 in Dover: Facilities Missing East Side							
Closest street to the South	Southern Limit	Northern Limit	Priority				
Webbs Lane	Webbs Lane	Puncheon Run light	3				
Puncheon Run exit	Puncheon Run light	State Street	3				
State Street	State Street	Hertrich lot	2				
Evergreen Drive	Evergreen Drive	Lotus Street	1				
Lotus Street	Lotus Street	Bridge over St. Jones River	3				
Bridge over St. Jones River	Bridge over St. Jones River	Laurel Drive	3				
Bay Road	North end of Target parcel	E. Loockerman Street	2				
Spring Garden Lane	Spring Garden Lane	Maple Parkway	1				
Maple Parkway	Maple Parkway	Hollywood Restaurant	1				
Maple Parkway	North of "South of the Canal" business complex	Rita's Italian Ice	1				
Centre Drive	Driveways only	N/A	1				
Jefferic Blvd	Speedway Café	New Citizen Bank	2				
Leipsic Road	Leipsic Road	El Azteca	2				
Leipsic Road	El Azteca	McDonalds	2				
Leipsic Road	McDonalds	Applebee's	2				
State Police	Applebee's	Wawa	2				
Rustic Lane	Wawa	Maxwell Street	1				
Maxwell Street	North of Dunkin Donuts	Woodford Street	2				
Woodford Street	Woodford Street	Smith Street	1				
Smith Street	Smith Street	Kentwood Drive	1				
Kentwood Drive	Atlantic Homes vacant parcel	Wilmington University entrance	3				
Kentwood Drive	Wilmington University entrance	Scarborough Road	3				

## Appendix B PRIORITIZATION

## US13 in Dover: Facilities Missing West Side

Closest street to the South	Southern Limit	Northern Limit	Priority
Webbs Lane	South of Hertrich Chevrolet	Governors Avenue connector	2
Governors Avenue connector	Governors Avenue connector	State Street	2
State Street	State Street	Carroll Building entrance	2
Roosevelt Avenue	Roosevelt Avenue	Vacant lot	1
Roosevelt Avenue	100' south of Lotus Street alley	Lotus Street	1
Lotus Street	Lotus Street	Bridge over St. Jones River	2
Bridge over St. Jones River north side	North side St. Jones Bridge	River Road	2
Lakeview Drive	North side of Shupback Kitchen	Garden Lane	1
Garden Lane	Garden Lane	North side of Dover Pawn	1
Garden Lane	North of Residential Mortgage Services	South of multi- tenant building	2
Lepore Drive	Michael Angelo's Hair	South of TD Bank	2
State Street	North of Dover Pools	College Road crossing	2
Cedar Chase Drive	North entrance to Tiger Mart	Holiday Boulevard crossing	1
Holiday Boulevard	North boundary of McDonalds	Scarborough Road crossing	3
Scarborough Road	Scarborough Landing	DTCC Trail	3
Scarborough Road	DTCC Trail	West Denneys Road	3

