Town of Hammonton Bicycle and Pedestrian Master Plan

July 2021

Amended August 2022

TOWN OF HAMMONTON

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1. INTRODUCTION

1. Introduction

The New Jersey Department of Transportation, Bureau of Safety, Bicycle and Pedestrian Programs (NJDOT-BSBPP) provides interested and qualified communities with technical assistance as part of the Local Technical Assistance (LTA) Program. The Town of Hammonton (Hammonton) requested technical assistance as part of the LTA Program to improve the safety and mobility of biking and walking in the community and to develop a Townwide Bicycle and Pedestrian Master Plan (the Plan). NJDOT-BSBPP assigned consultant Sam Schwartz Consulting, LLC (Sam Schwartz) to provide technical planning, engineering, and outreach assistance in developing the Plan.

Why Develop a Bicycle and Pedestrian Master Plan?

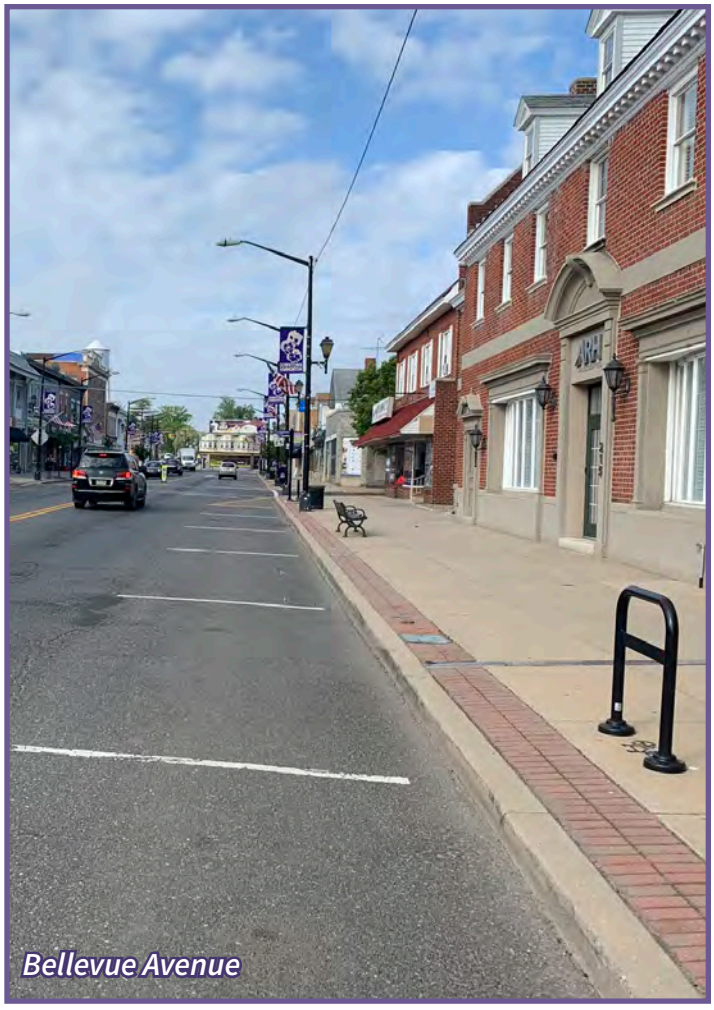
Hammonton is a vibrant community committed to improving the quality of life for both residents and visitors by providing walking and bicycling as convenient, comfortable, and healthy modes of transportation and recreation. As a town with a vibrant downtown community and as the blueberry capital of the world, Hammonton draws visitors from across New Jersey and beyond.

The Bicycle and Pedestrian Master Plan is a critical tool for guiding town staff and the development community in building a balanced transportation system that is pedestrian and bicycle friendly and encourages residents to use these modes of transportation. The goal is a shift from driving single occupancy vehicles to more walking and bicycling as a normal part of daily life.

Purpose of the Plan

This Bicycle and Pedestrian Master Plan establishes a long-term vision for improving walking and bicycling in Hammonton. The Plan provides a strategy to develop a comprehensive bicycling and walking network to provide access to transit, schools, and downtown , alongside supporting facilities like bicycle parking and pedestrian amenities. These network improvements are paired with education, encouragement, enforcement, and evaluation programs. This document identifies a plan to implement these projects and programs through prioritization and phasing to ensure implementation is manageable and fundable. This Plan represents a long-term, aspirational vision for walking and bicycling in Hammonton, and recognizes that limited funding and resources will require phased implementation of the proposed improvements over many years.

The Plan process provided opportunities for elected and appointed members of the Town's Boards, Commissions, and the public to participate in the development process of the Plan by evaluating, commenting and suggesting ideas for walking and bicycling. Ideally, this Plan should be reviewed every few years to update maps, project lists, and priorities as facilities are completed and to keep pace with the development landscape.



Bellevue Avenue

2. VISION & GOALS

2.1 Overview

The goals of the Plan reflect the priorities expressed by the community throughout the public outreach phase of the Plans development. Discussions with Town departments, best practices across the state, and input from community stakeholders have shaped the proposed strategies and policies intended to help the Town achieve these goals.

All of the following goals, strategies and plicies support the larger townwide "Complete Streets" policy, which instructs staff to consider the needs of all modes of travel when developing any transportation facility. The goals, strategies, and policies are designed to guide the work of Town staff and elected officials, partner agencies, and private developers to improve the livability, economic vitality, and non-motorized accessibility for residents and visitors throughout Hammonton. Reducing the amount of driving and automobile ownership is an overarching vision embodied in the Plan.

2.2 Vision

Hammonton is a community where walking and bicycling is the optimal and safe choice for active transportation.

2.3 Goals

1: Increase Access and Favorability.
Design bicycle and pedestrian facilities that are accessible and comfortable for all people of all ages and abilities to use.

Performance Measures:
- Increase the share of people walking and bicycling to work to 5% by 2025 and 10% by 2040.
- Increase the share of students walking or bicycling to school to 10% by 2025 and 20% by 2040.
- Reduce the number of severe and fatal collisions.
- Complete Short Term projects recommended in this Plan by 2030 and High Priority projects by 2040.

2: Maintain and Expand the Network
Identify, develop and maintain a complete and convenient bicycle and pedestrian network.

Performance Measures:
- Complete Studies recommended in this Plan by 2040.
- Double the number of short-term and secure long-term bicycle parking locations by 2040
- Maintain adequate pavement quality, striping, and sign visibility and signal/beacon functionality on all bicycle and pedestrian facilities.
- Start tracking and begin publishing annual bicycle and pedestrian counts by 2025.

3: Support a Culture of Walking and Bicycling
Increase awareness and support of bicycling and walking through programs and townwide initiatives.

Performance Measures:
- Increase the share of people walking and bicycling to work to 5% by 2025 and 10% by 2040.
- Increase the share of students walking or bicycling to school to 10% by 2025 and 20% by 2040.

3. HAMMONTON TODAY...

3.1 How it started...

The Town of Hammonton, located in Atlantic County, New Jersey is a town of approximately 15,000. It is located between Philadelphia and Atlantic City, and is along the former route of the Pennsylvania Railroad which is currently used by NJTRANSIT's Atlantic City Line. Hammonton has a thriving downtown area surrounded by Blueberry fields. The town is also famously known as the Blueberry Capital of the World. Based on the existing street network, the locations of schools, transit stops and stations, and the downtown area along with feedback from the Steering Committee and the public, ten (10) priority corridors were identified for this plan. These corridors are:

- Central Avenue (CR 542)
- Bellevue Avenue/12th Street (SR 54)
- Egg Harbor Road (CR 602)/Moss Mill Road
- Fairview Avenue/13th Street
- Chew Road
- 1st Road
- 2nd Road
- Main Road
- Park Avenue
- Broadway

In addition to the roadways listed above, Old Forks Road, Walnut Street, Road to Excellence, 4th Street, and Seagrove Avenue were considered for bicycle facility recommendations but were not included in other analyses and are not considered Priority Corridors.

It is important to note that County Roads are under the jurisdiction for maintenance and improvements by Atlantic County, while municipal roads are the responsibility of Hammonton. However, for the implementation of bicycle facilities that require pavement markings an agreement would be made between Atlantic County and Hammonton in which the municipality would be responsible for the installation and maintenance of those markings.

To identify potential deficiencies that need to be addressed during the development of the Bicycle and Pedestrian Master Plan, the project team performed an assessment of the existing conditions of Hammonton's key corridors and intersections. The data collected includes sidewalk conditions and widths, bicycle compatibility, intersection geometry and signal timings, road widths, and speed limits. For the inventory an initial desktop review was performed, followed by a field visit on Monday, May 18, 2020, of all priority corridors.

Roadway elements were inventoried along these corridors which included roadway width, lane and shoulder width, sidewalk width and condition, median and buffer presence and width, speed limit and presence of bicycle facilities. This data was utilized during the existing conditions analysis to provide a bicycle level of traffic stress analysis, identify safety concerns, and determine appropriate improvement treatments. The inventoried roadway data can be found in Appendix X.

Central Avenue

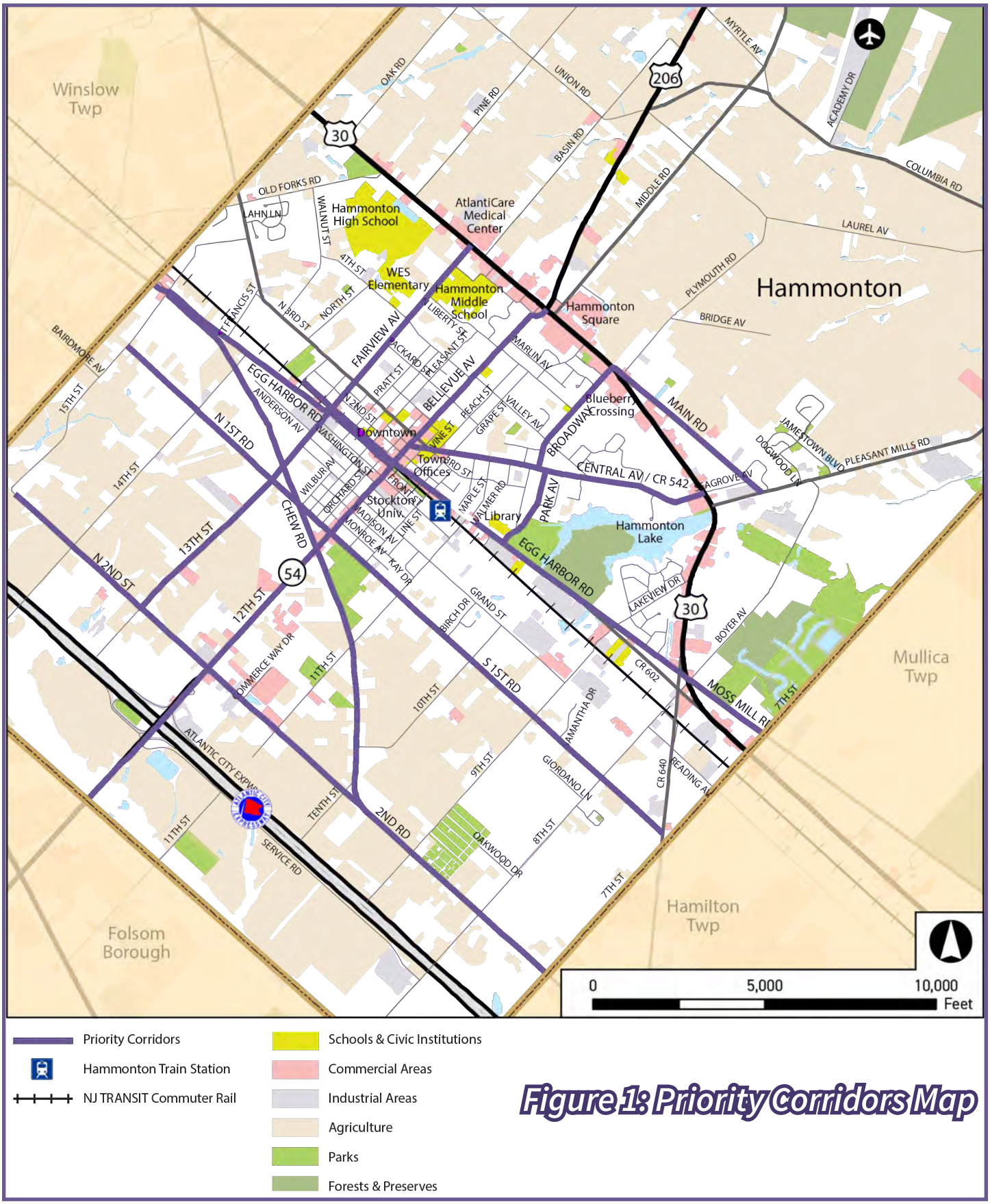


Figure 1: Priority Corridors Map

3.2 Data Collection & Analysis

Bicycling and Walking Today...

Locations of existing and proposed pedestrian and bicycle facilities (including bicycle routes), shared use paths, and other active transportation networks in Atlantic County and adjacent communities were identified using the Atlantic County Master Plan. In Hammonton, there are not any existing facilities that connect to a larger regional network. The Atlantic County Master Plan identifies two NJDOT proposed facilities, one on US 30 and the other on State Route 54. There are no proposed facilities by the County on County Roadways.

The proposed facility on State Route 54 has completed the Concept Development phase and is anticipated for construction in the next couple of years. The Limited Scope Concept Development Project through NJDOT for State Route 54 spans from US 40 to US 30. It recommends improvements to the intersections along the roadway, sidewalk improvements and the striping of the 6' bicycle compatible shoulder.

Existing Shared-Use Path on Moss Mill Road

Existing and Future Bicycle and Pedestrian Facilities

Locations of existing bicycle and pedestrian facilities were inventoried throughout Hammonton, in addition, information was provided by the Town on planned multimodal infrastructure projects. Currently, Hammonton has an inconsistent sidewalk network with several neighborhoods offering incomplete or missing sidewalk networks. The following summarizes the existing and proposed multimodal facilities.

Existing:

- South Egg Harbor Road and Moss Mill Road, Shared use path from Moss Mill Road to Hammonton Lake Park baseball field along S. Egg Harbor Road and then along Moss Mill Road to Lakeview Drive. The path is on the westbound side and is protected by concrete parking blocks typically used in parking lots.
- Hammonton Lake Park/Smith Conservation Area Trails, there are three bicycle and pedestrian paths, all of which have entrances on Egg Harbor Road.

Proposed:

- Bike Path Extension: The Town is planning to extend an existing bike path. This path will run along 11th Street starting at the entrance to the train station, it will then continue onto the old Reading Railroad right-of-way until it reaches Veterans Way, it then turns left and ends at Egg Harbor Road.

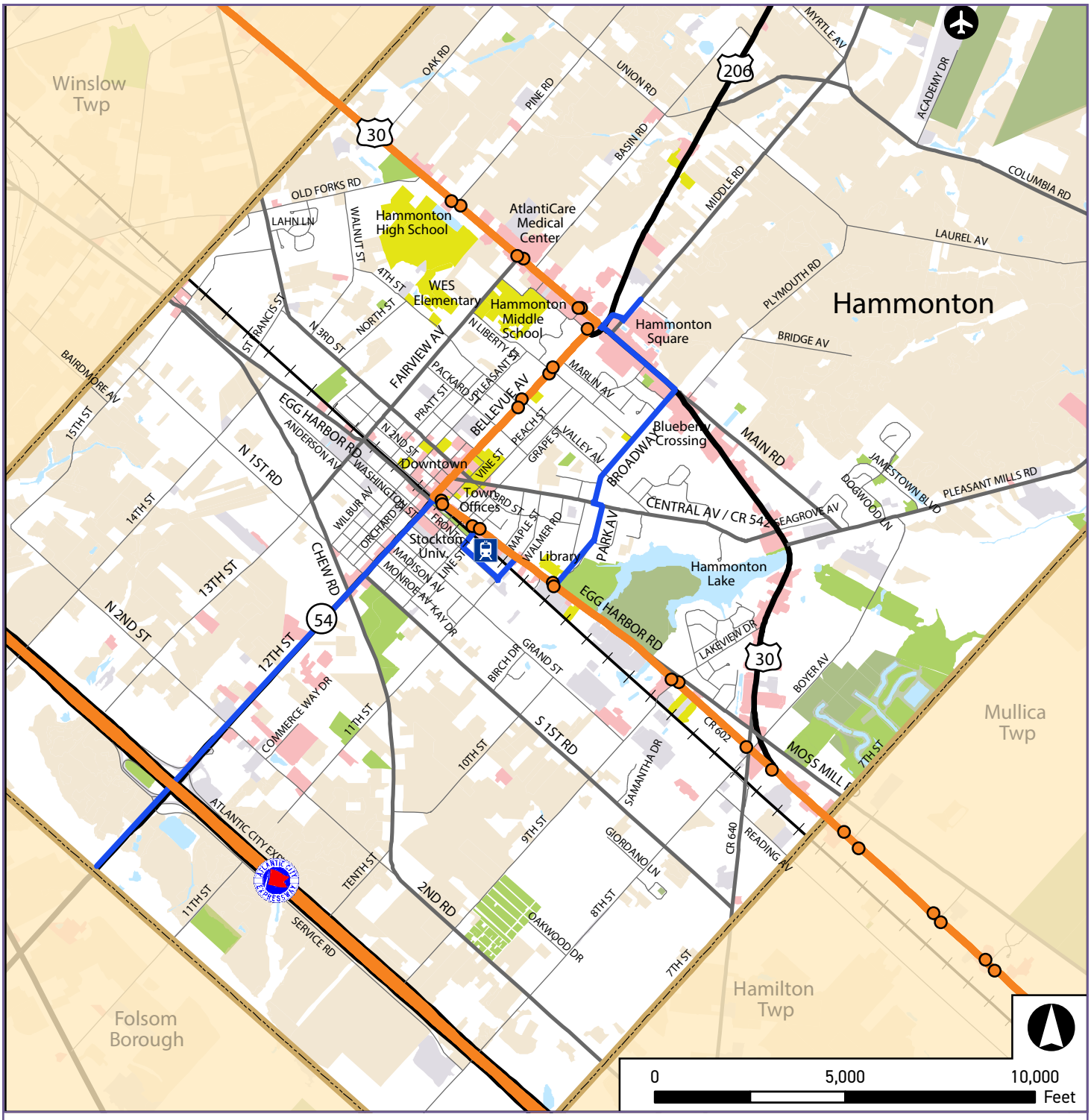


Figure 2: Regional Connections Map

3.3 Crashes

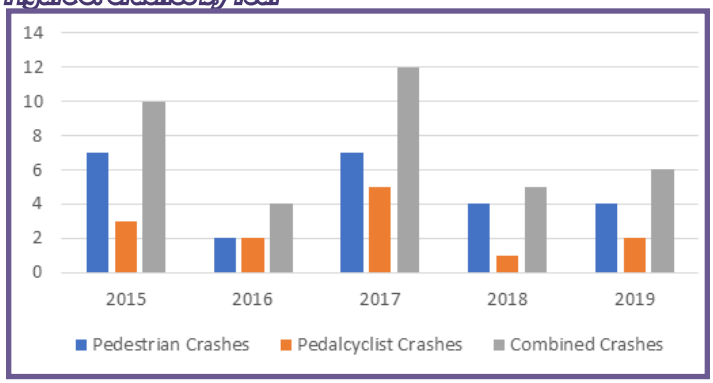
The bicycle and pedestrian crash review was prepared using crash records obtained for the most recent five-year period available (2015-2019) from NJDOT Safety Voyager crash database, provided in Appendix X. Over this period, there were 39 crashes in the Town of Hammonton that involved pedestrians or pedalcycles (bicyclists and other cyclists including riders of non-motorized vehicles of any number of wheels, powered solely by pedals). Of those 37 crashes, 24 (65%) involved pedestrians and 13 (35%) involved pedalcycles.

The crash data is summarized in the figures and tables below. Additionally, a table summary containing data from each crash, along with a crash location map is included in Appendix X. Results of the crash review will be considered during the development of potential safety improvement alternatives to mitigate overrepresented crash types at specific locations and identified safety concerns.

Crashes by Year

Figure 3 below shows the distribution of pedestrian and pedalcyclist crashes within the Town of Hammonton over the latest five years of available crash data.

Figure 3: Crashes by Year



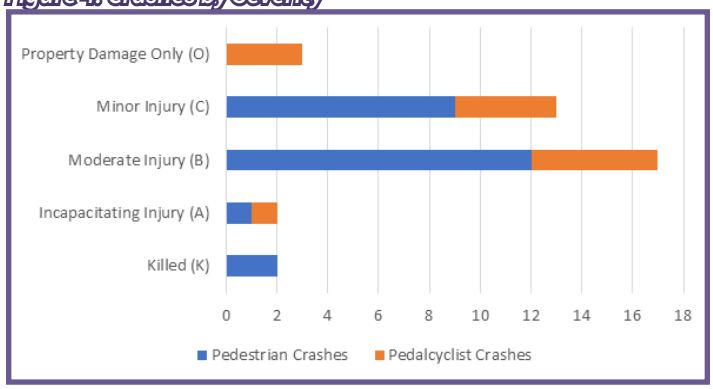
Crashes by Route

Pedestrian and pedalcyclist crashes were predominantly concentrated along major state highways and county routes in Hammonton. 48% of crashes occurred along two roadways (NJ 54 and US 30).

Crash Severity

Pedestrian and pedalcyclist crashes were analyzed based on injury severity. Figure 4 below shows a distribution of pedestrian and pedalcyclist crashes by injury severity based on the KABCO injury severity scale. Pedestrian crashes were more severe, with 62% of crashes resulting in a moderate injury or worse, while 46% of bicycle crashes involved a moderate or incapacitating injury with no deaths. Roadway conditions and locations of severe crashes (those involving deaths and incapacitating injuries) are noted, as pertinent, within this crash review summary.

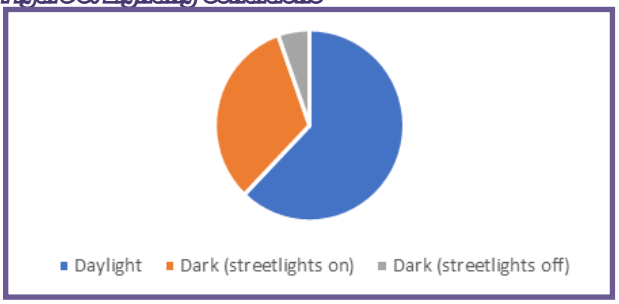
Figure 4: Crashes by Severity



Lighting Condition

The roadway lighting condition was obtained from each pedestrian and pedalcyclist crash record. A distribution of crashes by lighting condition is shown in Figure 5 below. The majority of crashes occurred during daylight hours. While streetlights were noted as on during most nighttime crashes, there were two crashes reports without streetlights on.

Figure 5: Lighting Conditions



3.4 User Experience and Perceived Comfort

Traffic stress is the perceived sense of danger associated with riding in or adjacent to vehicle traffic. Studies have shown that traffic stress is one of the greatest deterrents to bicycling. The less stressful – and therefore more comfortable – a bicycle facility is, the wider its appeal to a broader segment of the population. A bicycle network will attract a large portion of the population if it is designed to reduce stress associated with potential motor vehicle conflicts and if it connects people bicycling with where they want to go.

Bikeways are considered low stress if they involve very little traffic interaction by nature of the roadway's vehicle speeds and volumes (e.g. a shared low-traffic neighborhood street) or if greater degrees of physical separation are placed between the bike facility and travel lane on roadways with higher traffic volumes and speeds (e.g. a separated bikeway on a major street).

Types of Bicyclists

Research indicates that most people in the United States (56-73%) would bicycle if dedicated bicycle facilities were provided. However, only a small percentage of Americans (1-3%) are willing to ride if no facilities are provided. (https://www.portlandoregon.gov/transportation/article/158497)

This research into how people perceive bicycling as a transportation choice has indicated that most people fall into one of four categories, illustrated below.

1-3% Strong and Fearless: Very comfortable and willing to ride on streets without designated facilities.

5-10% Enthusiastic & Confident: Very comfortable, but prefer streets with designated bike lanes.

50-60% Interested, but concerned: comfortable on trails and streets with buffered or separated bike lanes and interested in biking more.

30% Not currently interested: physically unable or very comfortable even on streets with separated bike lanes.

Bicycle Level of Traffic Stress (Bike LTS)

To better meet the needs of the "Interested, But Concerned" bicyclist, planners developed the Bicycle Level of Traffic Stress (Bicycle LTS) analysis as an objective, data-driven evaluation model to help identify streets with high levels of traffic stress. The analysis uses roadway network data (i.e. posted speed limit, street width, number of travel lanes, intersection conditions, presence and character of bike facilities, and lane use context) to determine bicyclist comfort level.

The combination of these criteria creates four level of traffic stress for the existing roadway network. The lower the number, the lower the stress and the higher the level of comfort for people on bicycles. LTS 1 & 2 roads are typically the roadways that appeal to the "Interested, but Concerned" cyclists.

Level 1: all ages and abilities

Level 1 includes off-street shared use paths and some very low-stress roadways suitable for all ages and abilities.

Level 2: average adult

Level 2 includes roadways that are comfortable enough that the mainstream adult population would ride a bicycle on them.

Level 3: confident adult

Level 3 includes arterial roadways with bicycle facilities that are probably only comfortable for an experienced, confident bicyclist.

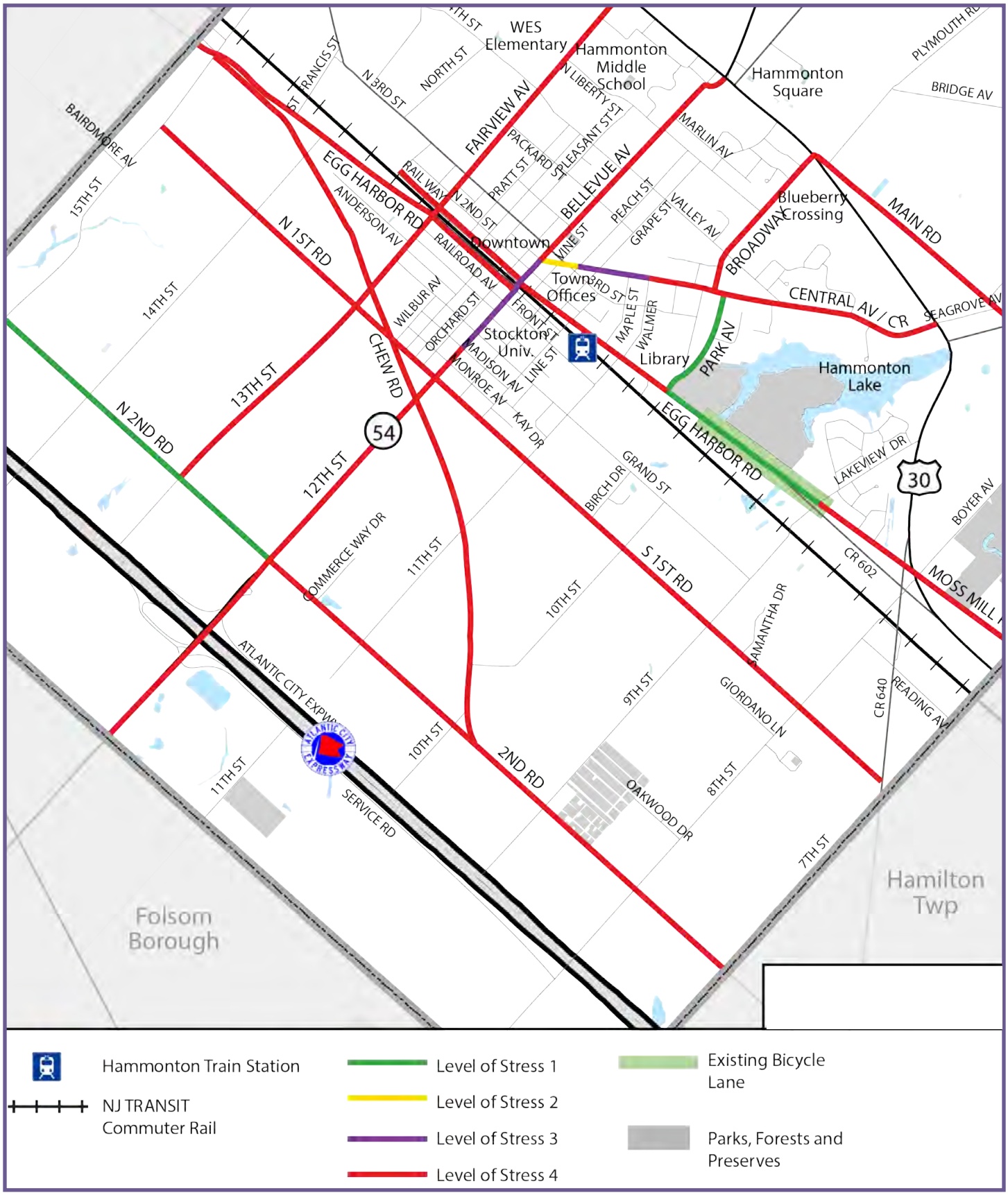
Level 4: fearless adult

Level 4 includes arterial roadways with no bicycle facilities ridden only by strong or fearless bicyclists.

Results

The Bicycle LTS results map approximates the user experience for the majority of Hammonton residents, however people may have differing opinions of traffic stress depending on their own experiences.

Figure 6: Bicycle Level Of Traffic Stress Map



4. PUBLIC ENGAGEMENT

4.1 Meetings

Engaging the Hammonton community was a priority throughout the Plan development process. A variety of outreach opportunities were used to seek input from Hammonton residents and community members. Ongoing outreach ensured a continuous feedback loop that informed the final implementation matrix and overall goals. Though the project team was unable to promote outreach in-person due to the COVID-19 Pandemic, efforts were promoted virtually both through the Steering Committee's efforts and through Town Social Media platforms. This chapter presents an overview of the format and approach for each outreach opportunity, along with a summary of feedback received.

Steering Committee

A Steering Committee was formed of local, county and state officials, as well as other stakeholders identified by the NJDOT-BSBPP and Hammonton. The Steering Committee assisted with identifying deficiencies and opportunities for active transportation facilities within Hammonton and provided feedback on potential improvements. Representatives of the following offices, organizations and constituencies were invited to participate:

- Mayor of Hammonton
- Hammonton Town Administrator
- Hammonton Engineer
- Hammonton Public Works
- Hammonton Public Safety
- Hammonton Parks & Recreation
- Hammonton Green Team/Environmental Commission
- Hammonton BPAC / Kickstand Crew
- Hammonton School District
- Main Street Hammonton
- Atlantic County Planner
- South Jersey Transportation Planning Organization
- NJTRANSIT
- Cross County Connection TMA

Two Steering Committee Meetings were held. The first was a kick-off meeting with the purpose of presenting the scope, goals, and final deliverables of the project, as well as, identifying stakeholder, roles and responsibilities. This meeting was held on June 10, 2020. The second meeting, held on September 10, 2020, presented the Steering Committee with initial data collection efforts and findings.

Public Information Centers

Throughout the project, three public information centers (PIC) were held to present results to the public and to receive additional input and feedback. All meetings were held virtually due to COVID-19. These PICs were held on July 29, 2020 September 30, 2020 and November 30, 2020. Each of these meetings presented a different component of the project. The first PIC presented the data collection efforts, the second presented the existing conditions analysis components and the third described the recommended improvements that would be included in this report. At each of these meetings the public had the opportunity to ask questions and provide feedback. These meeting materials from all the public outreach efforts can be found in Appendix X.

4.1 Meetings (cont.)

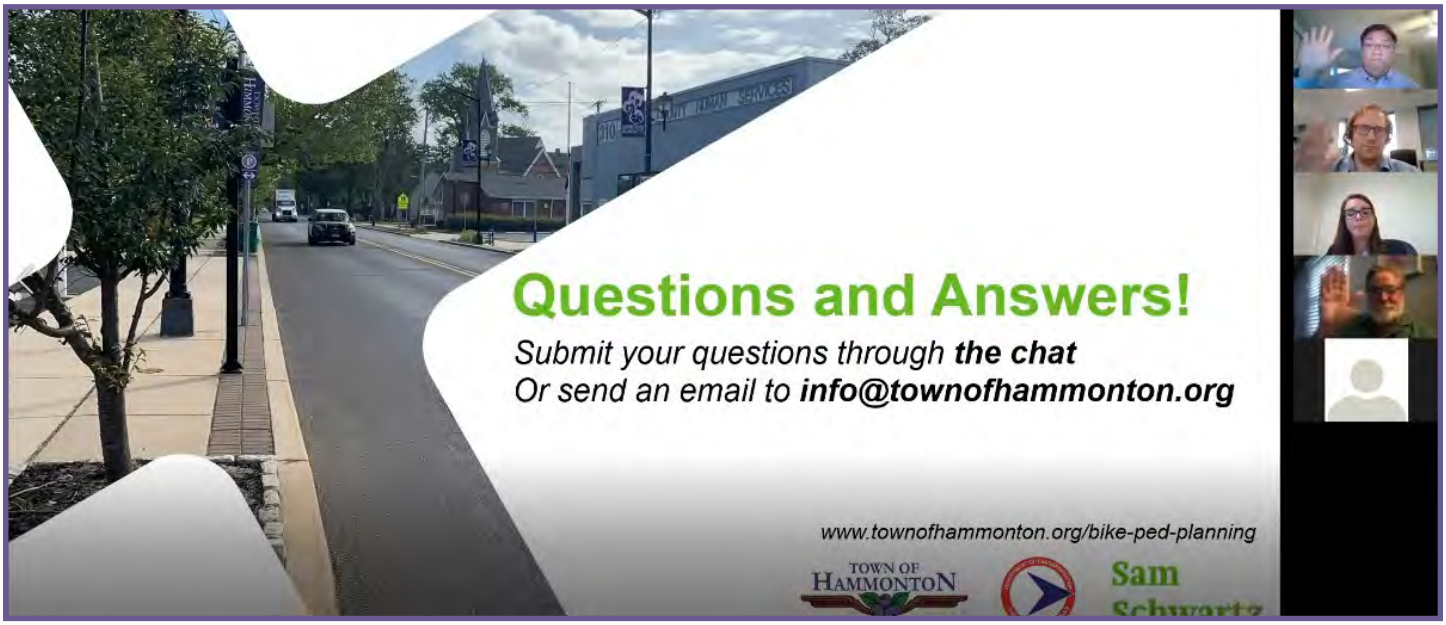
Meetings with Local Officials

The Project Team attended one meeting of the Public Works & Transportation Committee (August 20, 2020), one meeting of the Planning Board (January 20, 2021), and one meeting that hosted a variety of municipal officials and representatives from the City Council and Planning Board (January 28, 2021). These meetings provided individuals on these committees/boards an opportunity to learn about the progress of the project, potential recommendations to be included, and provide feedback on all aspects of this project.

4.2 Digital Engagement

Project Webpage

A project webpage was developed at the start of the study. It was developed by the Town of Hammonton and was a page included in their existing municipal website. This page was used to post links and information about the project. The meeting registrations and recordings were also advertised on this webpage. The name of the webpage was determined with assistance from the steering committee (https://www.townofhammonton.org/bike-ped-planning/) Bike/Ped Planning was chosen because this page can not be utilized to track and advertise their future efforts.



4.2 Digital Engagement (cont.)

Interactive Map

In addition to the public outreach survey, an interactive map was developed using WikiMap. The map was available from mid-July through August 31st 2020. There were a total of 157 interactions with the mapping tool. An interaction is defined as placing something on the map, using the "Agree" or "Disagree" button on an existing feature, or commenting on an existing feature.

Individuals that went to the mapping page could choose to place a route or make a comment. The options in the route tool were: Desired Biking Route, Desired Walking Route and Other. While the options in the comment tool were: Obstruction to Walking, Obstruction to Biking, Desired Destination, Safety Concern, Bike Parking Needed, and Other. These locations will be evaluated and taken into consideration when developing alternatives. The results from this map can be found in Appendix X.

Public Outreach Survey

The Public Outreach Survey was available online through Survey Monkey. The link to access the survey was posted on the webpage for the project and advertised through social media. The survey was available from mid-July through August 31st, 2020. A total of 69 completed surveys were received.

Based on the data collected, 59% of people believe that there are enough destinations within walking and biking distance in Hammonton. While respondents also note that if they are walking it is more frequently for dog walking or fitness. When asked what respondents like the least about walking in Hammonton, 50% said that tree roots & other hazards make it hard (or impossible) to use sidewalks, while 68% of respondents stated the thing they like the least about biking is that sharing the road with cars feels unsafe.

When asked about what respondents would like to see more of, 60% said they would like to see more protection for pedestrians/bicyclists from speeding cars and off-street paths. 55% of respondents said they would like to see on-street bicycle lanes.

Respondents were asked which streets felt unsafe & stressful for pedestrians, more than 50% said that Egg Harbor/Moss Mill Road, Chew Road, 1st Road, 2nd Road, Central Avenue, Bellevue Avenue/12th Street, and Fairview Avenue/13th were unsafe & stressful to walk or bike on.

5. HAMMONTON TOMORROW...

5.1 Pedestrian Facility Recommendations

Inventory of the existing sidewalk was conducted on the ten priority corridors identified. The inventory included determining if there were areas with missing sidewalk, and areas where sidewalks are not compliant with the Americans with Disabilities (ADA) Act.

Based on the sidewalk condition inventory, Hammonton has an extensive sidewalk network. However, some sidewalks have missing connections. The inventory collected locations of missing sidewalks, sidewalk width, and sidewalk conditions.

Central Avenue (CR 542) has good sidewalk conditions throughout the corridor except for a section between Broadway (CR 680) and White Horse Pike (US 30), where the sidewalk is missing. Other corridors with missing sidewalks include: a section between the Hammonton Town Border and Chew Road (CR 559) on Bellevue Avenue, three sections on Egg Harbor Road (CR 602), a section between the Hammonton Town Border and 12th Street on Chew Road, a section between the Hammonton Town Border and Pleasant Mills Road on Main Road, two sections on Broadway, a section between Central and Valley Avenue and a section Liberty and Brynmaur Avenue, and the entire 2nd Road corridor. There is only one section between Grape Street and 13th Street on Egg Harbor Road with poor sidewalk conditions.

In addition to the priority corridors, it is also recommended, that Hammonton close existing gaps on Old Forks Road, Walnut Street, and 4th Street due to the presence of the Elementary School.


Chew Road

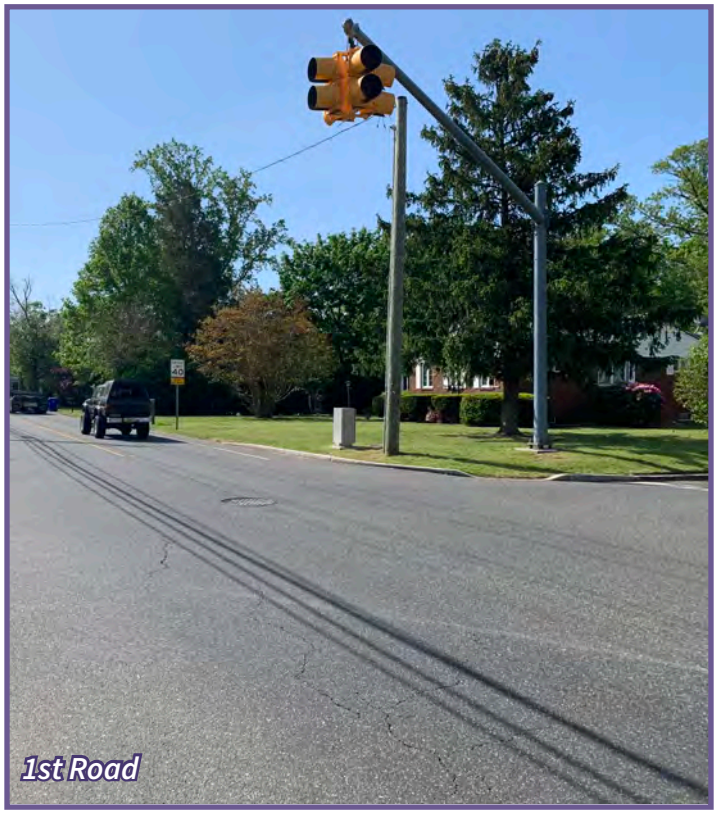
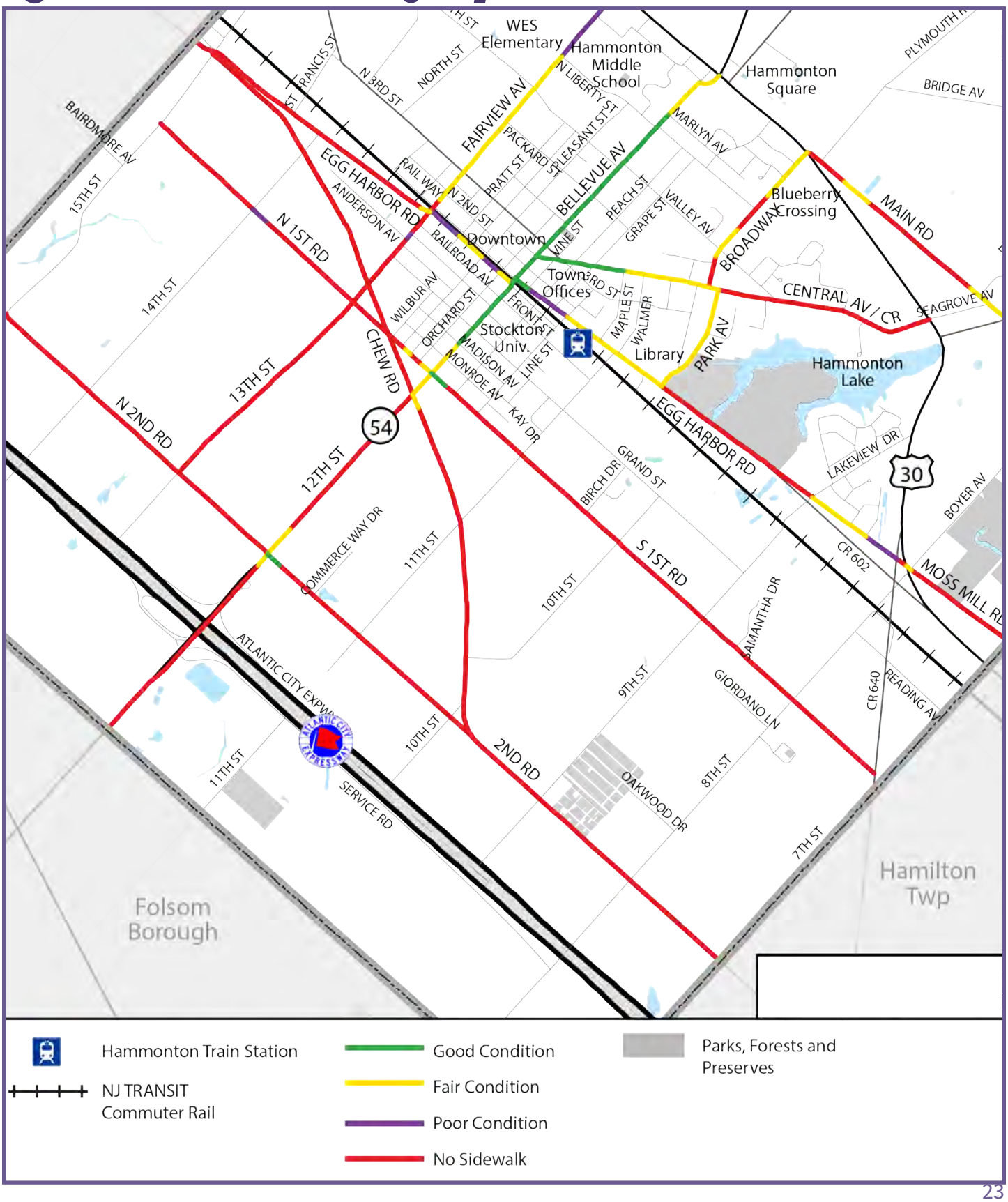

1st Road

Figure 7: Sidewalk Inventory Map



5.2 Bicycle Facility Recommendations

The implementation of bicycle facilities is a critical step towards encouraging cycling in an area as an essential form of transportation. However, it is important that bicycle facilities are properly designed to ensure that they are safe, comfortable and useful to most people. According to the New Jersey Complete Streets Guidelines there are five guiding principles to achieve effective implementation:

- Continuous: many bicycle lanes disappear at intersections and other stressful locations. To be successful, bicycle lanes must be continuous through these locations.
- Connected: Gaps in a bicycle network can discourage potential riders. Bicycle routes should be interconnected to create a robust network that connects where people live and where they want to go.
- Convenient: Bicycle networks must conveniently and directly connect cyclists to key destinations to encourage higher rates of cycling.
- Complete: A successful network considers what happens when a bicycle ride ends. This means considering how complete a street is, including the presence of sidewalks, bicycle parking, and access to transit
- Comfortable: A bicycle network should be comfortable and inviting for riders of all ages and abilities, providing the sense that bicycling is a safe and convenient activity.

The New Jersey Complete Streets Design Guide outlines types of on-road bicycle facilities.

The recommended bicycle facilities are proposed to improve bicycle compatibility and accessibility in Hammonton. They include a variety of bicycle facility treatments such as “sharrows,” bicycle lanes, buffered bicycle lanes, and shared use paths. The recommendations are intended to be implemented within the existing cross-section of the roadway as part of re-surfacing, restriping or other roadway reconstruction projects.

Bike lanes are a common on-road bicycle facility and there are several opportunities to install them on roadways throughout Hammonton. In locations where sufficient roadway width is available; a buffer could be included between the bike lane and the parking lane or between the bike lane and the travel lane. A buffer may be preferred by less skilled bicyclists when higher traffic volumes and speeds are present.

In locations where space is constrained, and bike lanes cannot be accommodated, sharrows are proposed. Sharrows may be used to indicate a shared environment for bicycles and automobiles. Under these conditions, it is recommended that “Share the Road” signs and Shared Lane Markings be incorporated to reinforce the shared lane concept.

The following table outlines the recommended bicycle facilities and roadway conditions necessary for the recommendation. These recommendations follow the guidelines in the New Jersey Complete Street Design Guide. Additional bicycle facilities with design guidance can be found in the New Jersey Complete Streets Design Guide. The proposed cross section alternatives for each priority corridor can be found in Appendix X. Many of the locations have several alternatives, guidance from the State of New Jersey should be utilized to determine which alternative will be best for Hammonton.

Table 1: Bicycle Facility Types

Facility Type	Facility Width	Roadway Speed Limit (MPH)	Average Daily Traffic (ADT)
Bicycle Lane	5'	25-35	< 10,000
Buffered Bicycle Lane	5' Bike Lane 3' Buffer	25-45	< 15,000
Separated Two-Way Bike Lane	12’	≤ 45	Any
"Sharrow"	----------	≤ 25	< 10,000
Advisory Bike Lane	5’	≤ 25	< 6,000
Shared-Use Path	10-14'	Any	Any

"Sharrows"

Also known as shared lane markings, are used on roadways when it is not feasible to have a dedicated bicycle facility. Shared lane markings are used to show that the roadway environment is to be shared between bicycles and automobiles. These markings should not only show that the roadway is shared but should also suggest exactly where on the roadway the bicyclist should ride. This helps motorists to anticipate the presence of bicyclists.

Bicycle Lane

According to the New Jersey Complete Streets Design Guide, bicycle lanes provide an exclusive space for bicyclists using pavement markings and signage. It is the preference to paint these lanes green to draw awareness to them and further increase bicycle safety. Bicycle lanes are meant for one-way travel and typically are located on both sides of two-way streets and one side of one-way streets. Bicycle lanes can enable bicyclists to ride at their preferred speed, without interference from motorists. The minimum bicycle lane width with no-on street parking is 5' adjacent to a curb.

Buffered bicycle lanes

Buffered Bicycle Lanes follow the same guidelines as typical Bicycle lanes, plus they include a marked buffer space that separates the bicycle lane from the adjacent travel lanes or parking lanes. Buffers decrease the risk of conflict between bicyclists and motor vehicles. The preferred width of a buffered bicycle lane is 5'.

Two-way separated Bicycle Lanes

Two-way separated bicycle lanes are physically separated bicycle lanes that allow bicycle movement in both directions on one side of the road. Two-way separated bicycle lanes share many of the same design characteristics as one-way buffered bicycle lanes but might require additional considerations at driveway and side street crossings. The preferred width of two-way separated bicycle lanes is 12', the minimum permitted is 10'.

Shared Use Path

Shared use paths are similar to bike lanes however, they can be used by other modes of non-motorized transportation such as walking, running or skateboarding. They are also more distinctly separated from the roadway. Shared use paths should be located outside of the roadway pavement width, separated from traffic by either open space or a barrier. Unlike bike lanes, shared use paths are designed for two-way travel. The minimum width for a shared-use path is 10'.

Advisory Bike Lane (Yield Street)

Advisory Bike Lanes are also recommended on several corridors in Hammonton. This bicycle facility type is outlined in the FHWA Small Town and Rural Multimodal Networks Guide. Advisory Bike Lanes may also be referred to as Yield Streets. They are placed on low-volume low-speed two-way roads. The two travel lanes are converted into one wide lane and an advisory bike lane is striped on either side with dashed striping. Vehicular traffic shares the one lane in the middle and as needed (with no bicyclists present) may go into the bicycle lane when passing a vehicle coming in the opposite direction. There is street signage that can be placed to explain this to drivers and bicyclists on the roadway. It is recommended that the advisory bike lane be 5' in width, similar to the conventional bike lane.

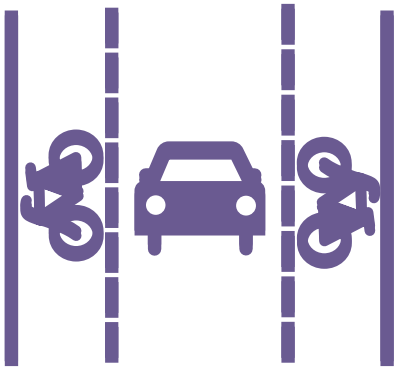
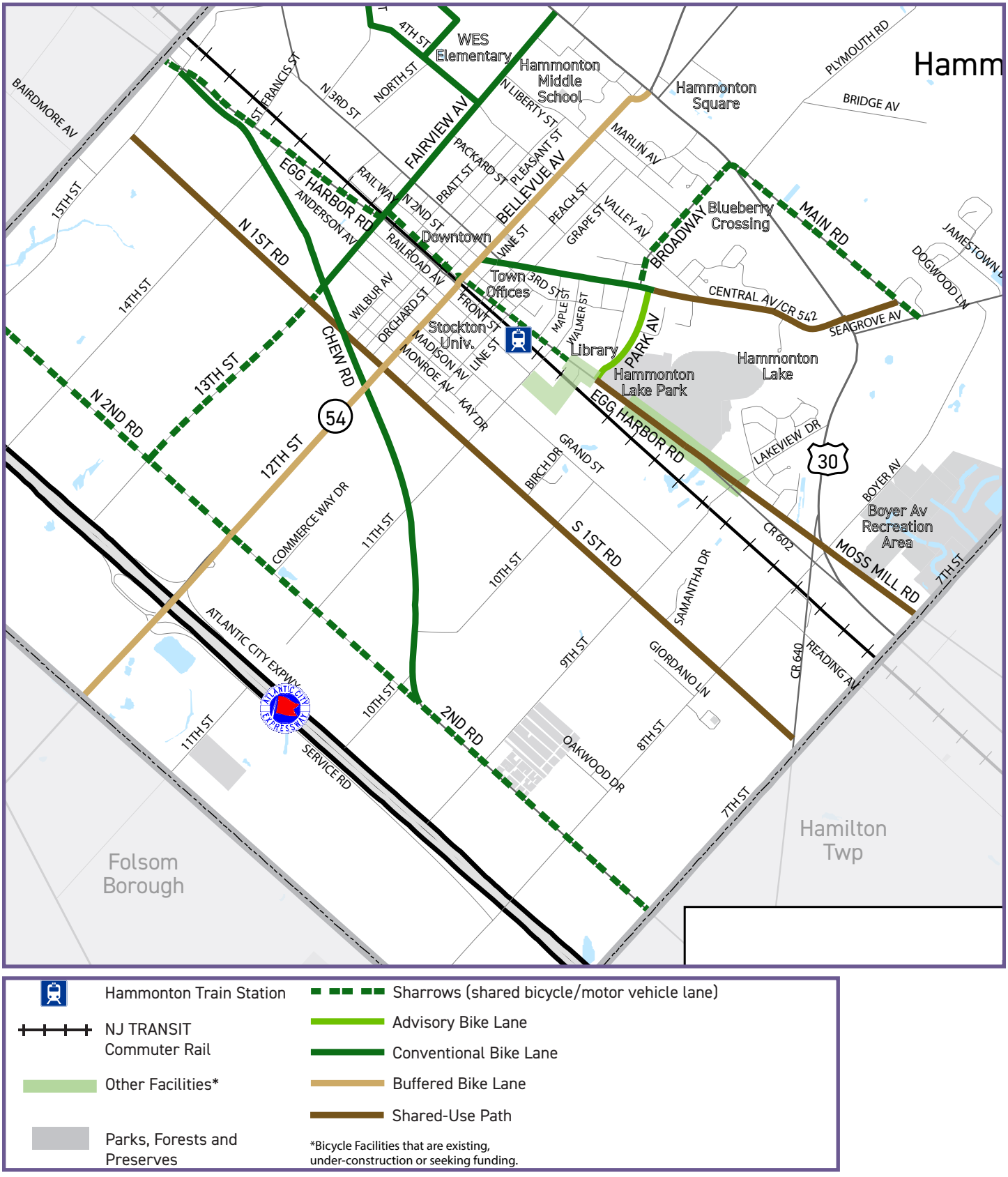


Figure 8: Bicycle Network Map

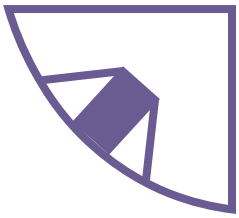


5.3 Intersection Recommendations

Intersections are one of the most critical parts of any transportation network. They are key points for all users as they travel through a street network and can act as important nodes of activity for community life. While they can have positive impacts on community life they also account for the most serious and frequent conflicts between all travel modes. If an intersection is not functioning properly, it can dramatically reduce mobility and safety for all modes. However, a well-designed intersection that facilitates visibility and predictability for all users can reduce crashes. Intersection design should allow the street space to be effectively shared by pedestrians, bicyclists and drivers.

Pedestrians are encouraged to cross at signal-controlled intersections. These signalized intersections should be properly delineated for pedestrian crossings. Additionally, crosswalks must be ADA compliant and signalized intersections should include countdown pedestrian signal heads. At intersections within commercial districts and areas conducive to pedestrian traffic, crosswalks should be properly signed and striped, and the use of longitudinal thermoplastic stripes should be considered to delineate crosswalks. Along with signage and striping, signalized intersections should have lighting and where feasible and traffic calming measures. The following are different strategies and traffic calming measures recommended throughout Hammonton.

High Visibility Crosswalks: A crosswalk is a portion of a roadway designated for pedestrian to cross streets. The striping of crosswalks is important, it creates a high level of visual contrast with the surface of the roadway to draw both pedestrian and drivers attention. Some striping styles are more visible than others. It is recommended that Hammonton use a ladder style striping or red brick paver crosswalks. These have been shown to be the most visible and are recommended in the New Jersey Complete Streets Guidelines.



Curb Ramps: ADA guidelines require appropriately designed curb ramps at all pedestrian crossings. These curb ramps are essential to provide easy access at crossings for pedestrians of all ages and abilities. Curb ramps assist in providing a smooth transition from the sidewalk level to the street level and back again. Additional to the curb ramp, detectable warning surfaces should also be included. These warning surfaces assist people with visual impairments to determine safe crossing locations.

Curb Extensions: are an example of a traffic calming measure. These can also be referred to as bulb-outs or bump-outs. A curb extension extends the curb line and sidewalk into the existing roadway, thus expanding the available pedestrian realm. The benefits of curb extensions include the following:

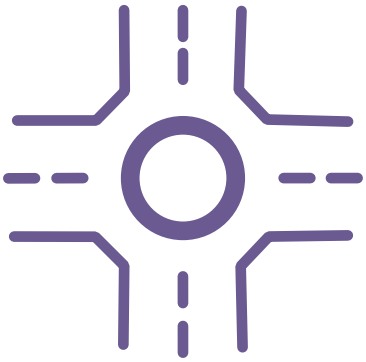
- Increased visibility for pedestrians and drivers
- Reduction of pedestrian crossing distance
- Traffic calming
- Shields on-street parking from intersection
- Expands pedestrian realm

Rectangular Rapid Flashing Beacons (RRFBs): are a lower cost alternative to traffic signals and hybrid signals that are shown to increase driver yielding behavior at crosswalks significantly when supplementing standard pedestrian crossing warning signs and markings. RRFBs are user-actuated amber LEDs that are recommended at unsignalized intersections or mid-block crosswalks, they can be activated by pedestrians manually by a push button or passivley by a pedestrian detection system.

5.3 Intersection Recommendations (cont.)

Leading Pedestrian Interval (LPI): give pedestrians the opportunity to enter an intersection 3-7 seconds before vehicles are given a green indication. With this head start pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn left. LPIs provide the following benefits:

- Increased visibility of crossing pedestrians
- Reduced conflicts between pedestrians and vehicles
- Increased likelihood of motorists yielding to pedestrians
- Enhanced safety for pedestrians who may be slower to start into the intersection.



Roundabout: recently the modern roundabout has been recommended as an alternative to traditional signzalized intersections for several reasons. The primary reason to recommend a modern roundabout is because they have been shown to reduce the frequency of certain crash types as well as reduce crash severity. According to the FHWA Roundabout Informational Guide, within acceptable parameters, roundabouts provide better operational performance than a signal in terms of stops, delay, vehicle queues, fuel consumption, safety, and pollution emissions. The safety benefits of modern roundabouts are attributed to several factors:

- A reduced number of vehicle conflict points. There are 32 conflict points for a conventional intersection and only eight conflict points for an equivalent roundabout.
- Reduced number of crashes. Speeds in roundabouts are generally slower giving motorists more time to assess potential conflicts and react. Reduces right angle and head-on crashes.
- Reduces crash severity. The lower speeds entering roundabouts reduce crash severity. Right angle and head-on crashes typically create the most severe injury types.
- Safer pedestrian crossings. There are also a reduced number of vehicle/pedestrian conflict points. With a pedestrian refuge island, pedestrians cross one direction of traffic at a time.

Roundabouts have also been shown to improve operations of roadways. This can be attributed to the fact that vehicles do not need to come to a complete stop when traveling in a roundabout, therefore vehicles typically experience less delay than in other types of intersections. Additionally, roundabouts do not have as many on-going maintenance costs when compared to signalized intersections.

Raised/Textured crossings and intersections: increase driver awareness to the presence of pedestrians. They force vehicular traffic to slow down as they pass through the crossing or intersection. This strategy has also been shown to increase the rate at which motorists comply with the "stop for pedestrians law" per the New Jersey Complete Streets Design Guide. Raised crossing and intersections work best when applied on minor streets with access to major pedestrian destinations, such as routes to school.

Intersection recommendations are proposed for the following intersections:

- *US 206 / US 30 / NJ 54*
- *Vine Street and Egg Harbor Road*
- *Cherry Street / Line Street / Egg Harbor Road*
- *Central Avenue / Third Street / Vine Street*

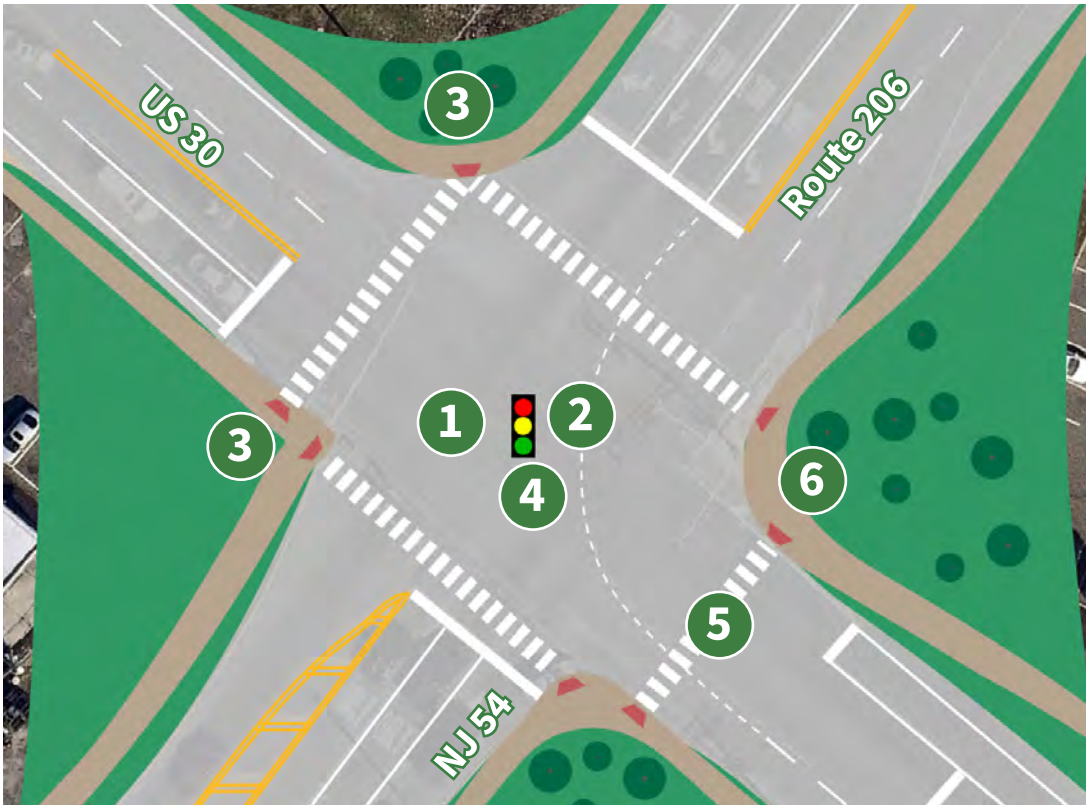
Concepts for each of these recommendations can be found on the following pages. These recommendations have been vetted by NJDOT Traffic Engineering. Additional consideration in the future should be given to the US 30 corridor through Hammonton as a whole.

Recommendations for signalized intersection timings can be found in Appendix X.

5.3 Intersection Recommendations (cont.)

US 206, US 30, and NJ 54

1. Installation of Pedestrian Signal Heads and Push Buttons
2. ADA Compliant Curb Ramps
3. Sidewalk Installation
4. Curb Extensions
5. Installation of crosswalk on the eastern side of US 30
6. Removal of existing slip lane



5.3 Intersection Recommendations (cont.)

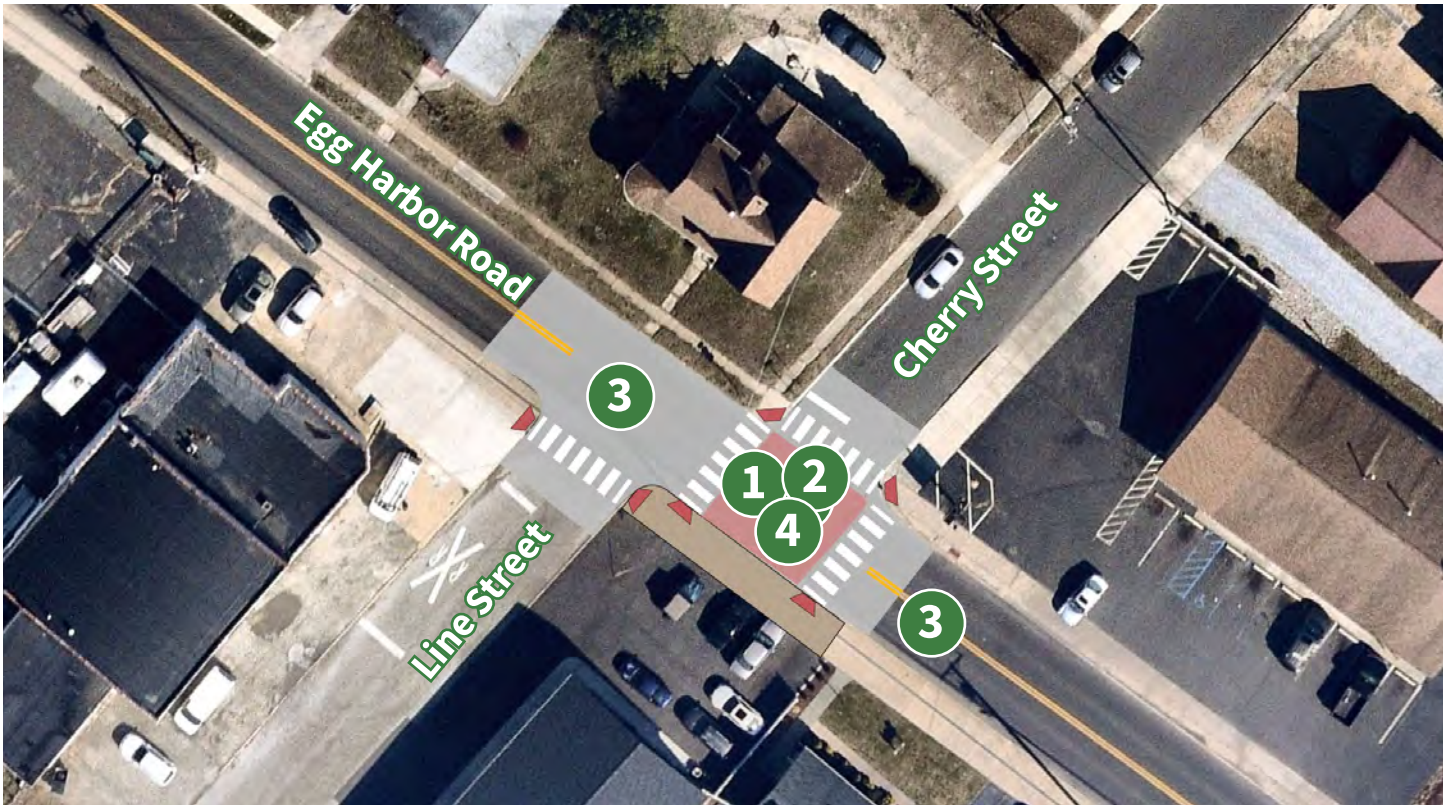
Vine Street and Egg Harbor Road

1. Installation of High Visibility Crosswalk
2. ADA Compliant Curb Ramps
3. Installation of Rectangular Rapid Flashing Beacons (RRFB)
4. Installation of textured intersection
5. Bus Turnouts

5.3 Intersection Recommendations (cont.)

Cherry Street, Line Street and Egg Harbor Road

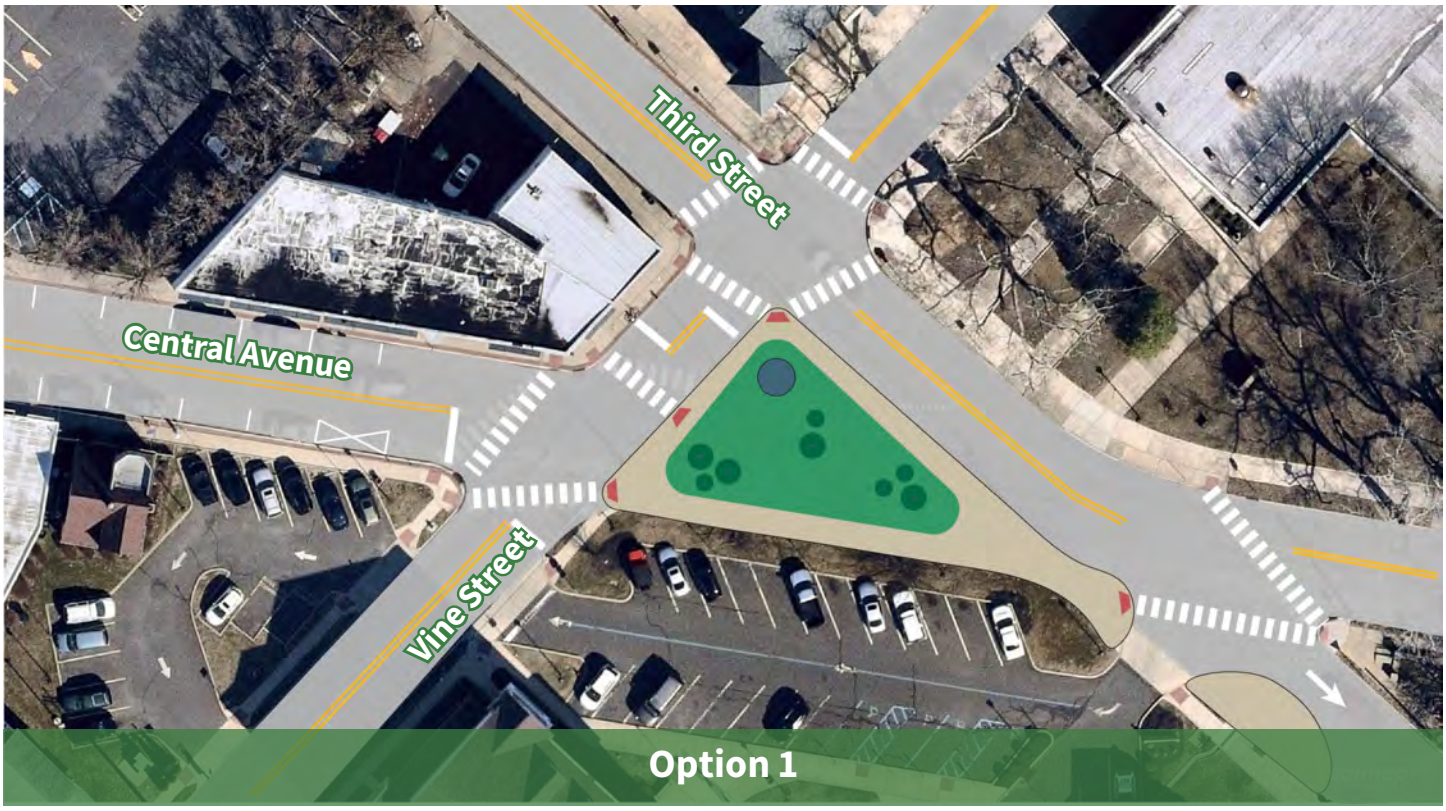
1. Installation of High Visibility Crosswalk
2. ADA Compliant Curb Ramps
3. Installation of Rectangular Rapid Flashing Beacons (RRFB)
4. Installation of textured intersection



5.3 Intersection Recommendations (cont.)

Central Avenue, Third Street and Vine Street

Existing



Option 1

5.3 Intersection Recommendations (cont.)

Central Avenue, Third Street and Vine Street

Option 2

Option 3

5.4 Townwide Recommendations

In addition to specific infrastructure projects and related programmatic efforts, some amenities are needed townwide to complete the active transportation network. These amenities should be installed as a matter of policy in conjunction with any project as opportunities arise, or when development occurs. Amenities recommended in this Plan include a comprehensive wayfinding program and secure bicycle parking.

Wayfinding Recommendations

An important step in advertising and promoting the facility improvements being made to these priority corridors are wayfinding signage. The National Association of City Transportation Officials (NACTO) defines a bicycle wayfinding system as comprehensive signing and/or pavement marking that guide bicyclists to their destinations along preferred bicycle routes. Typically, signs are placed at decision points along bicycle routes, this could be at intersections of other major locations. Wayfinding signage helps to make less experienced bicyclists more comfortable in the environment and encourage these bicyclists to use the safest routes available.

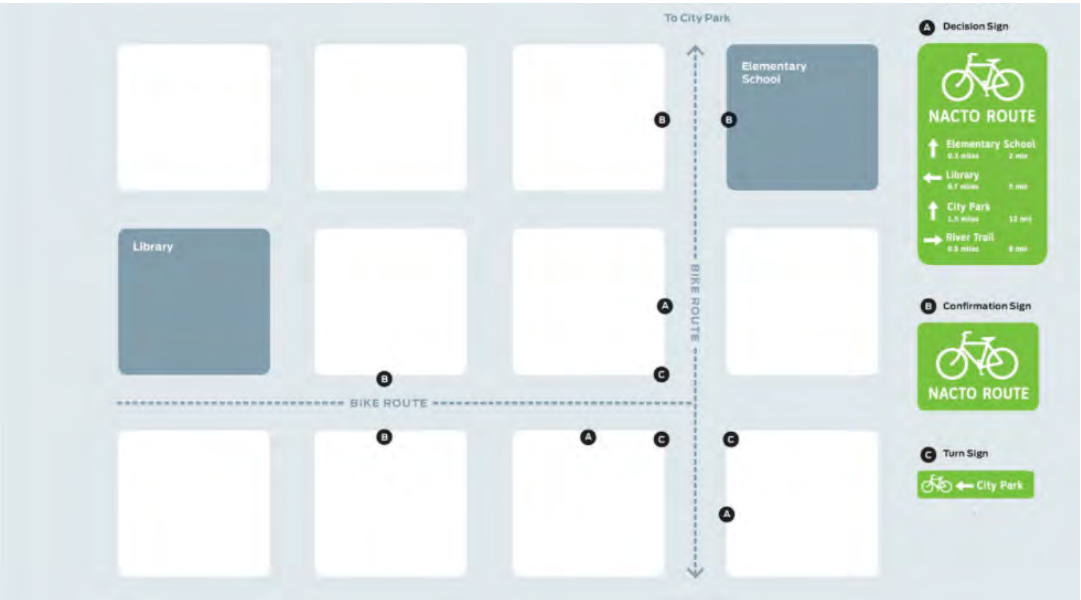
Wayfinding systems can be implemented and designed formally by a municipality or business improvement district. However, in many cases walking and biking advocates have organized informal wayfinding systems.

Benefits:

- Familiarize bicyclists with the bicycle network
- Identify preferred routes to key destinations
- Increase awareness of the bicycle network to drivers
- Increase accessibility and convenience of the bicycle network to visitors and casual users
- If mileage and/or travel time information is included it can minimize the tendency to overestimate the amount of time necessary to travel to a destination

The New Jersey Complete Streets Design Guide outlines some design guidance for wayfinding:

- Signage should maintain a clean, visible, and consistent design
- Signs should be on both sides of the street or trail
- Maps should be properly oriented so that the direction the user is facing is at the top
  - A “You Are Here” symbol should be included
- Distances should be provided by the time needed to reach the destination

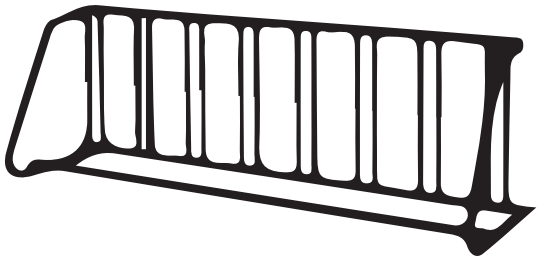


Source: NACTO Bike Route Wayfinding Signage Design Guidance

5.4 Townwide Recommendations (cont.)

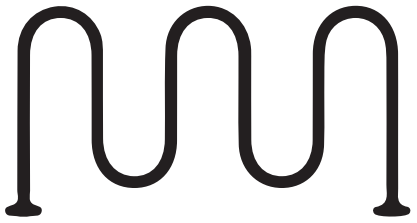
Bicycle Parking Recommendations

No bicycling network is complete without convenient and secure bicycle parking. Bicycle parking can take many forms, from a simple bicycle rack to secure storage in a locker or gated area. The Plan recommends the town continue to expand it's bicycle parking as opportunities arise and new development occurs.



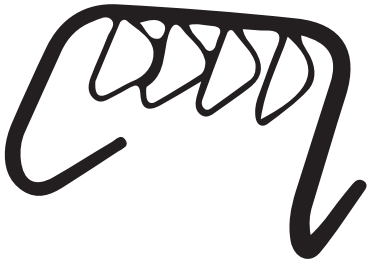
Short Term Bicycle Parking

Bicycle parking can be categorized into short-term and long-term parking. Bicycle racks are the preferred device for short-term bicycle parking. These racks serve people who leave their bicycles for relatively short periods of time, typically for shopping or errands, dining or recreation. Bicycle racks provide a high level of convenience and moderate security. The rack types illustrated on the right and recommended for use in Hammonton are consistent with the School Bike Parking Guide from NJDOT. The Town may also choose to partner with local artist groups to pursue customized racks that serve as bicycle parking in addition to public art. Where possible, on-street bicycle corrals can be used to provide increased bicycle parking where high demand or limited sidewalk space exists.



Long Term Bicycle Parking

Long-term bicycle parking includes bike lockers and secure parking areas and serves people who intend to leave their bicycles for longer periods of time. Bike lockers may vary in design and operation including keyed lockers that are rented to one individual on an annual or monthly basis or e-lockers that can be reserved online in hourly increments and unlocked with a credit card or an access code.



These facilities provide a higher level of security than bicycle racks, and are typically found at transit stations, multifamily residential buildings, commercial buildings and in other areas where bicyclists running multiple errands would benefit from a secure place to store parcels in addition to their bicycle.

Source: NJDOT School Bike Parking Guide

5.4 Townwide Recommendations (cont.)

Pedestrian-Scale Lighting

Pedestrian scale lighting is a type of lighting with frequent lampposts at low height that illuminate the walking area. This typically includes poles 12 to 15 feet high spaced 25 to 30 feet apart, directly above walking areas. Pedestrian scale lighting not only increases visibility of pedestrians for drivers at night, it contributes to a more comfortable and inviting streetscape for people walking at night.

Pedestrian scale lighting should be appropriately designed to illuminate only the areas needed and be no brighter than necessary. Street tress should be appropriately maintained so they do not obstruct illumination from the lighting along sidewalks and pathways.

This Plan recommends the Town evaluate locations where pedestrian scale lighting may improve pedestrian comfort and encourage walking, including Downtown, the areas near schools, and trails.

Amenities

Sidewalk and trail furnishings like benches, shade structures, restrooms, water fountains, and trash receptacles contribute to a cleaner, more comfortable, and more pedestrian-oriented public realm. These elements not only encourage the activation of Hammonton's sidewalk and trail networks, they contribute to a more accessible pedestrian network for all residents. The Plan recommends the Town identify and pursue opportunities to provide amenities in the downtown, near transit stops and along trails in the community.

Intersection of US 206 / NJ 54 / US 30

5.5 Policy & Actions

Planning

Policy 1: Integrate bicycle and pedestrian network and facility needs into all city planning documents and capital improvement projects.

- **Action 1.1:** Review the existing Complete Streets policy and update based on the Complete & Green Streets for All: Model Complete Streets Policy & Guide. Include and utilize the Complete Streets Checklists to assure consideration of pedestrian and bicycle facility needs in Town transportation projects and roadway improvements.
- **Action 1.2:** Follow a multi-disciplinary project scoping process that incorporates the needs of all modes and stakeholders, both internal and external. The design process should include the Town divisions, departments, and staff responsible for emergency response, parking, law enforcement, maintenance, and other affected areas.
- **Action 1.3:** Evaluate all streets during pavement resurfacing to determine if bicycle facilities can be provided (e.g. bike lanes, wider shoulders) when the striping is reapplied.
- **Action 1.4:** Ensure that all traffic impact studies, analyses of proposed street changes, and development projects address impacts on bicycling and walking facilities. Specifically, the following should be considered:
  - Consistency with the Master Plan, and the Bicycle and Pedestrian Master Plan policies and recommendations
  - Impact on the existing bikeway and pedestrian network.
  - Degree to which bicycle and walking travel patterns are altered or restricted by the projects
  - Safety of future bicycle and pedestrian operations
- **Action 1.5:** Require new development or reconstruction if applicable to address the pedestrian and bicycle circulation element based on the above considerations.
- **Action 1.6:** Conduct regular pedestrian and bicycle counts before and after project implementation.
- **Action 1.7:** Continue to implement the guidelines set forth in this report for all new development projects to support integration of transportation into land use planning decisions.

Policy 2: Coordinate with other agencies and stakeholders to incorporate Hammonton Bicycle and Pedestrian Master Plan elements.

- **Action 2.1:** Work with adjacent governmental entities, public service companies, coordinating agencies, and transit agencies to ensure the Plan recommendations are incorporated into their planning and areas of responsibility, and vice versa.
- **Action 2.2:** Work with transit providers (NJTRANSIT) to improve bicycle and pedestrian access (first/last mile connections) to transit stations and the comfort of transit stops and onboard transit vehicles, especially during peak commute hours, and to provide secure bike parking, benches, and covered waiting areas at stations and stops.

Design

Policy 3: Design a Low Stress Bikeway Network suitable for the "Interested but Concerned" to include people of all ages and ability levels riding bicycles.

- **Action 3.1:** Design a network of continuous Low Stress Bikeways as identified in this plan. Projects that improve comfort at intersections and along corridor with high stress should be prioritized.
- **Action 3.2:** Utilize the design guidelines in this plan, guidance from the New Jersey Complete Streets Design Guide, the North American City Transportation Officials (NACTO), and most recent State and Federal design standards and guidelines to develop plans for on-street bicycle facilities along additional corridors and at intersections.
- **Action 3.3:** Follow a multi-disciplinary design process that incorporates and balances the needs of all modes and stakeholders, both internal and external; the design process should include the Town divisions, departments and staff responsible for emergency response, parking, law

5.5 Policy & Actions (cont.)

enforcement, maintenance, and other affect areas as well as other responsible external stakeholder agencies.

Policy 4: Design a connected, convenient and comfortable pedestrian network to serve people of all ages and abilities.

- **Action 4.1:** Include sidewalks on all new or retrofitted roadways.
- **Action 4.2:** Identify and construct sidewalks in areas where they are incomplete.
- **Action 4.3:** Enforce sidewalk maintenance to ensure that adjacent property owners maintain the sidewalk properly.
- **Action 4.4:** Plan and develop well-connected streets, sidewalks, and pathways that provide the most direct paths of travel for pedestrians. Remove barriers to walking where feasible.
- **Action 4.5:** Install leading pedestrian interval phases in traffic signal timing both in the downtown and outside of the downtown, as warranted, to encourage walking and facilitate crossing busy regional or high-volume transitional streets.
- **Action 4.6:** Review signal locations on an annual basis to identify and adjust for increased pedestrian clearance time where needed.
- **Action 4.7:** Routinely evaluate locations for enhancing crosswalks.

Policy 5: Design accessible, comfortable and continuous off-street paths that contribute to the framework of Hammonton's active transportation network.

- **Action 5.1:** Utilize the design guidelines in this Plan and most recent State and Federal design standards and guidelines to develop plans for ADA-compliant off-street trails.
- **Action 5.2:** Utilize Crime Prevention Through Environmental Design (CPTED) principles in the design of trails.
- **Action 5.3:** Identify opportunities for trailhead enhancements to include gateway treatments, public art, wayfinding, and placemaking.

Policy 6: Develop an easy to read, unified and comprehensive wayfinding system for bicyclists, pedestrians and trail users.

- **Action 6.1:** Pursue grant funding to develop a consistent citywide wayfinding program and replace all prior wayfinding signs.

Operations And Maintenance

Policy 7: Maintain designated facilities to be comfortable and free of hazards to bicycling and walking

- **Actions 7.1:** Trim overhanging and encroaching vegetation to maintain a clear path of travel along pedestrian and bicycle facilities.
- **Action 7.2:** Incorporate maintenance needs into design of separated bikeways to ensure proper maintenance after construction.

Policy 8: Maintain bicycle parking

- **Action 8.1:** Develop a procedure for inspection and prompt replacement of damaged bicycle racks.
- **Action 8.2:** Remove abandoned bicycle from bicycle racks and donate to local non-profit community bicycle shops for use in youth education programs.

Evaluation

Policy 9: Measure bicycling and walking activity through an annual count program.

- **Action 9.1:** Establish an annual count program at key locations around the city.
- **Action 9.2:** Make the data publicly available on an on-going or at least annual bases.

Policy 10: Report annually on the implementation of this plan.

- **Action 10.1:** Prepare and present a report on the progress in:
  - Achieving the three Goals of the Plan in terms of their specific performance measures.
  - Implementing the Policies and Action of this Plan.

6. IMPLEMENTATION

6. Implementation

The recommendations outlined in the Bicycle and Pedestrian Master Plan provide an opportunity to enhance biking and walking throughout Hammonton. There are multiple opportunities to improve bicycle and pedestrian access and mobility. The following sections provide guidance on coordination, planning, education, and funding sources that can serve as a resource for advancing and implementing the proposed facilities throughout Hammonton.

Coordination

Coordination between Hammonton, neighboring communities, and Atlantic County should be initiated to advance improvements for bicycle and pedestrian accommodations on roadways. A potential next step could be the formation of a working group (e.g., Complete Streets Task Force) to spearhead a public information campaign and pursue opportunities and resources to support the design and implementation of facilities. The working group would be led by a Complete Streets "Champion" and could assist with advancing priority recommendations and build upon the preliminary network and regional connections identified in this plan, as well as, identify opportunities for improving biking and walking through future development. An alternative to creating a new working group, the tasks around this project could be implemented into the tasks of an existing group, such as the existing Environmental Protection Committee, Open Space Committee, or a Neighborhood Green Team in the Town of Hammonton.

The working group should create partnerships within the Town of Hammonton community to advance the Bicycle and Pedestrian Master Plan. Within the community, businesses, private developers and neighborhood associations can be important allies in providing ongoing support. Partnerships with neighboring municipalities, Atlantic County, and NJDOT can help to achieve consistency in design treatments for roads operated by different agencies.

Additionally, it is recommended that Hammonton adopt this plan into their existing Master Plan.

Educational Programming

To encourage safe use of existing and proposed facilities and more walking and bicycling trips, it is recommended that the Town of Hammonton promote walking and bicycling and implement educational programs on best practices and safety. Education programs are recommended for all types of users of all ages. Efforts should be made to educate bicyclists, pedestrians and motorists on the rules of the road and how to safely share the road. Widespread education efforts can contribute to safer roadways for all. Encouragement is also needed to promote the spread of bicycling and walking as means of transport, recreation, and physical activity.

Safe Routes to School (SRTS) is a federally funded program with the goal of making it safer for students, including those with disabilities, to walk and bike to school. NJDOT provides funding to schools and communities to improve walking and bicycling conditions to schools through a SRTS Infrastructure Grant Program. At the local levels, assistance to schools and communities with Non-Infrastructure Programs is provided by the New Jersey SRTS Resource Center and the eight Transportation Management Associations.

Cross County Connection is a non-profit Transportation Management Association located in Burlington County that provides free Safe Routes to School (SRTS) programming to its service area, which includes the Town of Hammonton. Cross County Connection advocates for safe walking and biking to school for students K-8 with educational programs such as Walk to School events, Bicycle Learn-To-Ride's, and in-class activities that teach students the rules of the road. Cross County Connection also provides evaluation programs such as walkability audits and the development of School Travel Plans. SRTS and Cross County Connection can provide an educational component of Complete Streets to students in the Town of Hammonton schools. To set up programming, the Town of Hammonton is encouraged to contact the Safe Routes to School Coordinator at Cross County Connection. Additional SRTS resources can be found on the New Jersey SRTS Resource Center website and the National Center for Safe Routes to School website.

6. Implementation (cont.)

In addition to SRTS Cross County Connection also provides programming for the Street Smart Campaign. Street Smart is a public education, awareness and behavioral change campaign. The program utilizes visibility enforcement, education and public awareness to address pedestrian safety issues. Street Smart is organized by the North Jersey Transportation Planning Authority (NJTPA), the goals of this initiative are below.

- Change pedestrian and motorist behavior to reduce pedestrian crashes, injuries and fatalities in New Jersey.
- Educate motorists and pedestrians about their roles and responsibilities in safely sharing the roadways.
- Increase enforcement of pedestrian safety laws.
- For more information visit the Cross County Connection or NJTPA website.

Promotional Activities

A wide variety of programs are available to encourage Hammonton residents to walk or bike more often. Below are some recommended educational programs:

Walk to School Day: This is one of the most fundamental strategies for encouraging younger residents to walk or bicycle. Although sometimes referred to as "Walk and Roll to School Day," this event has been popularized in the past as "Walk to School Day," and the typical focus has been on encouraging walking and biking to school. As one idea, walking and bicycling could be one of the units available in physical education classes. In the fall or spring, physical education teachers could enroll students in walking and bicycling events for a minimum number of miles. Cross County Connection can provide assistance in coordinating Walk to School events.

Join a Walking or Bicycling Club: Residents of Hammonton can start a club to encourage other residents to log on a certain number of miles per week on foot or bicycling.

Special Events: A Walk to School Day is an example of a special event; other examples include Trails Day, Car Free Day, Traffic Safety Day, and Bike to Work Day.

Awareness Campaign: Public service announcements on cable television, posters, brochures, and bumper stickers promote increased use of walking or bicycling in general for errands, work trips, school and other purposes, or to promote special event days.

Commuter of the Month: Hammonton businesses, public agencies, or Cross County Connection could recognize the employee that walks or bicycles to work with the greatest frequency.

CROSS COUNTY CONNECTION
TRANSPORTATION MANAGEMENT ASSOCIATION

SUSTAINABLE JERSEY
• CERTIFIED •
A Better Tomorrow, One Community at a Time

NEW JERSEY Safe Routes to School

6. Implementation (cont.)

Enforcement

An important component of a safe and well-traveled transportation system is an enforcement program for traffic regulations as they apply to each type of roadway user: motorists, bicyclists, and pedestrians. The Town of Hammonton can improve travel habits and behavior through enforcement. This process should include reviewing current ordinances and traffic regulations to identify elements that may unnecessarily affect certain roadway users, such as bicyclists. As bicycle facilities are installed, it is recommended that local ordinances and regulations be developed or revised to clarify items such as: application of vehicle laws to bicyclists, permitted movements on and across bicycle facilities (e.g., permitted motor vehicle movements across bicycle lanes), bicycling on sidewalks, and bicycle parking requirements.

In addition, a review of enforcement regulations and practices may assist in identifying opportunities to partner with community, county, or state organizations to inform users about safe bicycle travel behavior, such as the required use of helmets by bicyclists under the age of 17 (N.J.S.A 39:4-10.1), the N.J.S.A 39: 4-36 which requires motorists to stop for pedestrians in the crosswalk, or the N.J.S.A 39:4-14.2 which requires bicyclists to ride in single file.

Outreach and promotion through community channels and events is a critical piece in reminding motorists, bicyclists, and pedestrians of applicable laws and recommended travel practices. The Street Smart campaign is one method that could be utilized.

Capital Improvements Projects

The Town of Hammonton should review their Capital Improvement Projects to determine where bicycle and pedestrian improvements can be integrated. The majority of bicycle facility recommendations outlined within this plan can be implemented as part of regular roadway resurfacing and/or restriping projects. When implemented as part of a larger maintenance or construction project the added cost for roadway markings and signage is minor within the scope of the larger project.

Funding The Improvements

Several federal and state programs are commonly used to fund bicycle and pedestrian improvement projects. Table 2 provides a list of programs, the program administrator, who is eligible to apply, and the estimated amount of funding available for an individual allotment. Note: The estimated amounts are based on previous amounts awarded to municipalities and counties. The Town of Hammonton can use this Implementation Plan to pursue funding through these programs.

South Jersey Transportation Planning Organization (SJTPO) works with its federal partners, NJDOT, its subregions and other state and local agencies to make travel safer and more reliable for all who use Southern New Jersey's transportation system. To support these efforts, SJTPO solicits candidate projects for implementation several different programs. Details of each can be found in the South Jersey Bicycle & Pedestrian Funding Guide developed by Cross County Connection.

Many improvements (e.g., installing "Share the Road" or Wayfinding signage or striping a bike lane) can be implemented quickly and at a relatively low cost. There are a number of opportunities for grants to fund bicycle and pedestrian improvements. Additionally, the Town should coordinate with Atlantic County on county road projects that run through Hammonton.

The recommended concepts for both bicycle and pedestrian projects could be eligible for the following potential funding sources:

NJDOT Municipal Aid: Each year NJDOT invites municipalities to apply for funds to go towards road improvement projects. This includes, resurfacing, rehabilitation or reconstruction and signalization. NJDOT has set a goal to award up to 10% of the Municipal Aid program funds to projects such as pedestrian safety improvements, bikeways and streetscapes.

6. Implementation (cont.)

NJDOT County Aid: these funds are used for the improvement of public roads and bridges that are under county jurisdiction. Public transportation and other transportation projects are also included.

NJDOT Safe Routes to School: provides federal-aid highway funds for infrastructure projects that enable and encourage children in grades K-8, including those with disabilities, to safely walk and bicycle to school. Bonus points on the grant are given to applicants with School Travel Plans, a Complete Street Policy and Transit Village Designation.

NJDOT Safe Streets to Transit: provides funds to construct safe and accessible pedestrian linkages to transit facilities, to promote increased usage of transit by all segments of the population.

NJDOT Transportation Enhancements/ Transportation Alternatives Program: provides federal funds for community based "non-traditional" transportation projects designed to strengthen the cultural, aesthetic and environmental aspects of the nation's intermodal system. Bonus points on the grant are given to municipalities that have an adopted Complete Street Policy and Transit Village Designation.

Sustainable Jersey: provides capacity building awards to municipalities to support local green teams and their programs to make progress toward Sustainable Jersey Certification.

New Jersey Healthy Communities Network: this is a partnership of grantees, funders, and advocate organizations who seek collective impact on a community's well-being by supporting healthy eating and active living. The Community Grant Program provides the opportunity to develop healthy environments for people to live, work, learn and play by funding policies, projects and programs that support walking and biking.

New Jersey Transportation Bank: provides low interest loans to local government units for transportation infrastructure projects. It is a partnership between NJDOT and the New Jersey Infrastructure Bank (I-Bank).

NJDEP Recreational Trails Grant: The Federal Highway Administration's Recreational Trails Program provides financial assistance to states for developing and maintaining trails and trail facilities. New Jersey Department of Environmental Protection administers the program in New Jersey.

Implementation Matrix

It is recommended that Hammonton determine a practical means for implementing the recommendations made in this plan. An Implementation Matrix for the proposed improvements is included as Table 3 to assist Hammonton. The Implementation Matrix is intended to assist the Town in prioritizing the recommendations for a phased implementation, as well as identifying costs and the appropriate agency to coordinate carrying them out. Prioritization is determined by the proximity of the locations to the Central Business District, Schools and other points of interest. It can also be affected by other projects that may be occurring in the same space, for example, a road resurfacing project, or new developments.

6. Implementation (cont.)

Table 2: Funding Opportunities

Program Name	Program Administrator	Estimated Award ($)	Eligibility	Additional Notes
Municipal Aid	NJDOT	$100,000 - $500,000	Municipalities are eligible to apply for improvement of any public road or bridge governed by the municipality.	
County Aid	NJDOT	$5 Million - $10 Million	Counties are eligible to apply for improvement of public roads and bridges under county jurisdiction.	Each county must develop an Annual Transportation Program. The City of Absecon should coordinate with Atlantic County to list projects on county roads.
Safe Routes to School	NJDOT	Under $500,000	Any county, municipality, school, school district, or board of education are eligible to apply.	Funds are intended to be used for projects that facilitate walking and/or bicycling to school.
Safe Streets to Transit	NJDOT	Under $500,000	Counties and municipalities are eligible to apply.	
Bikeway Grants	NJDOT	$100,000 - $300,000	Counties and municipalities are eligible to apply	Funds support the State's goal of constructing 1,000 new miles of dedicated bicycle paths.
Transportation Enhancements / Transportation Alternatives Program	NJDOT	$100,000 - $500,000	Counties and municipalities are eligible to apply.	
Sustainable Jersey Grants Program	Sustainable Jersey	$1,000 - $35,000	Municipalities are eligible to apply.	
NJ HCN Community Grant Program	New Jersey Healthy Communities Network	N/A	Municipalities, non-profit organizations, parks and recreation departments, school boards, are eligible to apply.	
New Jersey Transportation Bank	NJDOT and New Jersey Infrastructure Bank	N/A	Municipalities, counties, regional transportation authorities, or any other political subdivision of the state are eligible to apply.	
Recreational Trails Grant	New Jersey Department of Environmental Protection	Under $50,000	Government agencies and non-profit organizations are eligible to apply.	

6. Implementation (cont.)

Table 3: Implementation Matrix

Type	*Improvement*	*Location*	*Timeframe*	*Cost*	*Priority*	*Responsble Agency*
Engineering	Sidewalk Installation	12th Street (SR 54)	Short	Low	Low	NJDOT
		13th Street (CR 678)	Short	Low	Medium	County
		1st Road (CR 688)	Short	Low	Low	County
		2nd Road (CR 559)	Short	Low	Low	County
		Broadway (CR 680)	Short	Low	Medium	County
		Central Avenue (CR 542)	Short	Low	Medium	County
		Chew Road	Short	Low	Low	Hammonton
		Egg Harbor Road (CR 602)	Short	Low	High	County
		Main Road (CR 679)	Short	Low	Medium	County
		Route 206/US 30/NJ 54	Short	Low	High	NJDOT
	"Sharrows"	13th Street/Fairview Avenue (CR 678)	Short	Low	High	County/Hammonton
		2nd Road (CR 559)	Short	Low	Low	County/Hammonton
		Broadway (CR 680)	Short	Low	Medium	County/Hammonton
		Egg Harbor Road (CR 602)	Short	Low	High	County/Hammonton
		Main Road (CR 679)	Short	Low	High	County/Hammonton
	Advisory Bike Lanes	Park Avenue	Medium	Low	High	Hammonton
	Bike Lanes	4th Street	Long	Low	Low	Hammonton
		Central Avenue/CR 542 (from Bellevue Avenue to Walmer Street)	Long	High	Medium	County/Hammonton
		Chew Road	Short	Low	Low	Hammonton
		Old Forks Road	Long	Low	Low	Hammonton
		Road to Excellence	Long	Low	Low	Hammonton
		Walnut Street	Long	Low	Low	Hammonton
	Buffered Bike Lanes	12th Street/Bellevue Avenue (SR 54)	Short	Low	Low	NJDOT
	Shared-Use Path	1st Road (CR 688)	Long	High	High	County/Hammonton
		Central Avenue/CR 542 (from Walmer Street to US 30)	Long	High	Medium	County/Hammonton
		Moss Mill Road	Long	High	High	Hammonton
		Seagrove Avenue	Long	High	Low	Hammonton
	Bicycle Parking	Key Trip Generators Townwide	Short	Low	High	Hammonton
	Wayfinding/Bike Route Signage	Along all Priority Corridors	Medium	Low	Medium	Hammonton
	ADA Compliant Curb Ramps	Cherry Street/Line Street/ Egg Harbor Road	Short	Low	High	Hammonton
		Route 206/US 30/NJ 54	Short	Low	High	NJDOT
		Vine Street and Egg Harbor Road	Short	Low	High	Hammonton
	Textured Intersection	Cherry Street/Line Street/ Egg Harbor Road	Medium	Medium	Low	Hammonton
		Vine Street and Egg Harbor Road	Medium	Medium	Low	Hammonton
	Curb Extensions	Route 206/US 30/NJ 54	Medium	Medium	Medium	NJDOT
	Eliminate Slip Lane	Route 206/US 30/NJ 54	Long	High	Low	NJDOT
	High Visibility Crosswalk	Cherry Street/Line Street/ Egg Harbor Road	Short	Low	High	Hammonton
		Route 206/US 30/NJ 54	Short	Low	High	NJDOT
		Vine Street and Egg Harbor Road	Short	Low	High	Hammonton
	Leading Pedestrian Interval	Route 206/US 30/NJ 54	Short	Low	High	NJDOT
	Pedestrian Plaza & Road Closures	Central Avenue / Third Street / Vine Street	Long	High	Medium	Hammonton
	Pedestrian Scale Lighting	Project Areawide	Medium	Medium	High	Hammonton
	Pedestrian Signal Heads and Push Buttons	Route 206/US 30/NJ 54	Medium	Medium	High	NJDOT
	Rectangular Rapid Flashing Beacons (RRFB)	Cherry Street/Line Street/ Egg Harbor Road	Medium	Low	Medium	Hammonton
		Vine Street and Egg Harbor Road	Medium	Low	Medium	Hammonton
	Roundabout	Central Avenue / Third Street / Vine Street	Long	High	Medium	Hammonton
	Bus Turnouts	Egg Harbor Road (CR 602)	Long	High	Medium	Hammonton/NJTRANSIT
	Streetscaping/Amenities	Project Areawide	Medium	Low	Low	Hammonton
Policy	Update Complete Streets Policy	Town wide	Short	Low	Low	Hammonton
Educational	Safe Routes to School	Town wide	Short	Low	Low	Hammonton/CCC
Encouragement	Awareness Campaign	Town wide	Short	Low	Low	Hammonton
	Creation of Complete Streets Working Group	Town wide	Short	Low	Low	Hammonton

Amendments

August 2022

Diversity, Equity and Inclusion Considerations

Identification of Underserved Communities Through Data.

Hammonton has a vibrant and diverse socio-economic makeup and is home to a substantial immigrant community. The Hispanic and Latino population is notably higher in Hammonton at 23%, compared to 19% for Atlantic County and 20.4% for the State. According to the 2020 ACS 5-Year Demographic Profile Racial and Ethnic breakdowns within the Town, approximately 72% is White (10,701), 23% is Hispanic or Latino (3,163), 3% is Black or African American (443), and 1% is Asian (158).

Regarding economic equality, the poverty rate within the Town is 12.4%-- notably higher than the County's (12.1%) and the State's (10.9%). Atlantic County, where the Town of Hammonton is located, was devastated more than most counties by the COVID-19 pandemic. The county's economic health is strongly based on the tourism and gaming industries. As Federal and state mandates were created preventing these industries from operating during the pandemic, the unemployment rate in Atlantic County skyrocketed. According to the *U.S. Bureau of Labor Statistics*, the county unemployment rate was over 34% in April and June, 2020 and peaked in May at over 36%. And, while some areas of the country have rebounded economically from the pandemic, as of March 2021, the county's unemployment rate was still an overwhelming 11.6% (*BLS*). The town is also the 85th most distressed of all of New Jersey's 565 municipalities, according to the *New Jersey Department of Community Affairs' 2020 Municipal Revitalization Index*.

Equitable & Inclusive Processes Utilized.

The Town of Hammonton recognizes that the strength of its community is with its diversity and the Bicycle and Pedestrian Master Plan process was focused on the most underserved and underrepresented in the community. It was this diversity that enabled the community to thrive as both an agricultural and artistic hub as well. To ensure that the community continues to grow, the local government, residents, organizations, and stakeholders have focused on ensuring that diversity, equity, and inclusion is at the forefront of all decision making. To that end, the community has organized several cross-sector organizations, including the Diversity, Equity and Inclusion Committee, Hammonton Heart & Soul Initiative. the Hammonton Health Coalition and Hammonton Connectors, to provide services and gage community needs. Many of these grass-root organizations have found that the number one priority for residents is the desire for better and more safe, walkable and bicycle-friendly, accessible public spaces. In addition, all stakeholders were included in the decision-making process for this Master Plan. The primary public-facing project website had a Spanish language conversion tool to easily navigate the site and provide feedback. Ongoing outreach to the Latin American members of the community is continuous for efforts as part of the charter of the Hammonton Connectors, a group of Spanish-speaking residents who helps build trust and mutual respect between residents, government, non-profits and businesses.

As a Town with a vibrant downtown area, walkability and safe access to businesses, professional services, and Town events is a priority for residents' sense of belonging. Implementing the projects in the Town's Bicycle and Pedestrian Master Plan will help increase mobility for those who need it the most -- approximately 15.8% of the population who have a disability. Of the 2,189 disabled population, which includes all manner of disabilities measured by the US Census Bureau, 1,256 (9.4%) have ambulatory disabilities, 337 (2.4%) have vision disabilities, and 424 (3.1%). The total population figure does not include the seasonal population who come to the Town over a typical summer or fall weekend, which can see thousands of visitors for various festivals and celebrations. While the population of those with ambulatory, hearing, and vision disabilities is high, the reality is that many more individuals will benefit from the project outlined herein.

Key DEI Representatives and Partners Involved.

Cassie Iacovelli serves on the Bicycle & Pedestrian Master Plan Steering Committee. Mrs. Iacovelli has been promoting diversity, equity and inclusion for decades throughout New Jersey and was recently honored by the statewide charity, Allies in Caring, with the Inclusivity Pathfinder Award. The award was presented to her because of her efforts in Hammonton, including with the Bicycle and Pedestrian Master Plan process, to help create new ways for those who have been historically excluded and underrepresented to develop a sense of belonging by exploring untraversed approaches to create new social conditions necessary to support everyone attaining their highest level of well-being.

Denise Mazzeo is the Town of Hammonton's official representative on the Hammonton Heart & Soul initiative, the Hammonton Diversity, Equity and Inclusion Committee and the Hammonton Health Coalition. The Health Coalition fosters collaborations among members of the community, particularly those that are underserved and under-represented, public and private agencies, to help all residents improve their physical and psychological health by implementing creative programs that draw on local wisdom, respect residents' needs and aspirations, and take advantage of Hammonton's unique economic, cultural and natural landscapes.

Jim Donio is the Downtown Advocate, along with a connector to Hammonton Pride, New Jersey's Gathering Ground's Elevating Equity representative from Hammonton and has a 30 year history of advocating for the most underserved members and neighborhoods in the greater Hammonton area. His involvement in the Bicycle and Pedestrian Master Plan Steering Committee encouraged the use of innovative concepts to use data and networking to reach those residents whose voices are most often left out of processes such as this. Mr. Donio has strong relationships with Allies in Caring, that provides support and advocacy to people of Latin-American descent, economically and socially disadvantaged, along with deaf and hard of hearing in Hammonton and throughout the region. He also has a long history of support and connection with the Puerto Rican Civic Association, which is one of the longest-running organizations of its kind in the State of New Jersey.

Pre-Design Estimate of Probable Construction Costs

taylor design group

Hammonton USDOT (SS4A) Grant Estimate

Hammonton, NJ

Town of Hammonton

Wednesday, September 7, 2022

Item #	SS4A Budget Category	Description	Unit Price	Unit	1 13th Street /Fairview Avenue (CR 678)		2 1st Road (CR 688)		3 2nd Road (CR 559)		4 Broadway (CR 680)		5 Central Avenue (CR 542)		6 Chew Road		7 Egg Harbor Road (CR 602)		8 Main Road (CR 679)		10 Park Avenue		11 4th Street		12 Old Forks Road		13 Road to Excellence		14 Walnut Street		15 Moss Mill Road		16 Seagrove Avenue		17 Cherry St/ Line Street/ Egg Harbor Road		18 Vine Street/ Egg Harbor Road		19 Central Ave/ Third St/ Vine Street		Total	
					Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount
		Sharrows (Shared Bicycle/Motor Vehicle Lane) per lane																																						
1	9. Construction	Sharrows @ intersections and every 250 lf (31sf)	$225.00	UT	60	$13,500			200	$45,000	50	$11,250					150	$33,750	64	$14,400																			524	**$117,900**
2	9. Construction	Regulatory signage (Bike may use full lane) @ intersection and every 250 lf (18"x24")	$150.00	UT	60	$9,000			200	$30,000	50	$7,500					150	$22,500	64	$9,600																			524	**$78,600**
3	9. Construction	Wayfinding/Bike Route Signage @ 1000 lf (18"x24")	$150.00	UT	12	$1,800			42	$6,300	8	$1,200					26	$3,900	12	$1,800																			100	**$15,000**
		Bicycle Lane - Single Lane unless noted																																						
4	8. Demolition and Removal	Remove and install new vehicular guide rail (when present)	$40.00	LF									0	$0	0	$0							0	$0	0	$0	0	$0	0	$0							0	**$0**
5	8. Demolition and Removal	Misc Demo at driveways, repair aprons	$2,000.00	UT									0	$0	0	$0							0	$0	0	$0	0	$0	0	$0							0	**$0**
6	8. Demolition and Removal	Stripping Toposoil (4' wide) at narrow cartway areas	$1.20	LF									1,600	$1,920	32,800	$39,360							0	$0	0	$0	0	$0	0	$0							34,400	**$41,280**
7	8. Demolition and Removal	Remove exisitng traffic strips/markings	$1.50	LF									1,600	$2,400	32,800	$49,200							4,800	$7,200	900	$1,350	3,700	$5,550	2,100	$3,150							45,900	**$68,850**
8	9. Construction	Modify inlets at new curb locations	$2,100.00	UT									0	$0	30	$63,000							0	$0	0	$0	0	$0	0	$0							30	**$63,000**
9	9. Construction	Install bicycle safe inlet grates	$675.00	UT									10	$6,750	80	$54,000							12	$8,100	4	$2,700	10	$6,750	8	$5,400							124	**$83,700**
10	9. Construction	Remove and replace concrete curbing (6x8 x18)	$50.00	LF									0	$0	0	$0							0	$0	0	$0	0	$0	0	$0							0	**$0**
11	9. Construction	Sawcut or prep exsiting asphalt edge to receive new asphalt	$2.00	LF									0	$0	32,800	$65,600							0	$0	0	$0	0	$0	0	$0							32,800	**$65,600**
12	9. Construction	4' wide asphalt paving at narrow cartway areas (6" DGA, 4" HMA base, 2" HMA surface)	$24.00	LF									0	$0	32,800	$787,200							0	$0	0	$0	0	$0	0	$0							32,800	**$787,200**
13	9. Construction	4" Traffic Marking (thermoplastic)	$0.75	LF									1,600	$1,200	32,800	$24,600							4,800	$3,600	900	$675	3,700	$2,775	2,100	$1,575							45,900	**$34,425**
14	9. Construction	Bikelane marking @ begin/end, intersections, and every 1000 ft	$225.00	UT									10	$2,250	90	$20,250							9	$2,025	3	$675	6	$1,350	4	$900							122	**$27,450**
15	9. Construction	Regulatory signage (Bike Lane) @ intersection begin/end, intersections, and every 1000 ft	$150.00	UT									10	$1,500	90	$13,500							9	$1,350	3	$450	6	$900	4	$600							122	**$16,300**
16	9. Construction	Wayfinding/Bike Route Signage @ 1000 lf	$150.00	UT									2	$300	70	$10,500							5	$750	1	$150	4	$600	2	$300							84	**$12,600**
		Shared Use Path - One Side of Road Only																																						
17	7. Site Work	Construction Sign	$2,000.00	UT			0	$0					0	$0			0	$0													4	$8,000	4	$8,000					8	**$16,000**
18	7. Site Work	Construction Layout	$17,500.00	MILE			4	$70,000					1.6	$28,000			0.6	$10,500													1.30	$22,750	0.30	$5,250					8	**$136,500**
19	7. Site Work	Mobilization (10% construction cost)	$10,000.00	UT			21.96	$219,595					8.96	$89,555			13.62	$136,210													12.31	$123,110	2.31	$23,055					59	**$591,525**
20	7. Site Work	Traffic Control	$10,000.00	MILE			4	$40,000					1.6	$16,000			0.6	$6,000													1.30	$13,000	0.30	$3,000					8	**$78,000**
21	7. Site Work	Site Field Office	$10,000.00	LS			0	$0					0	$0			0	$0													1	$10,000	1	$10,000					2	**$20,000**
22	2. Land, Structures, ROW, Appraisals	Land / Easement Acquistion (5' width) ($100,000/AC)	$12.00	LF			21,100	$253,200					6,700	$80,400			3,000	$36,000													6,800	$81,600	1,400	$16,800					39,000	**$468,000**
23	8. Demolition and Removal	Tree removal / Site Clearing (45- 18" trees/mile)	$75,000.00	MILE			0	$0					0	$0			0.0	$0													1.30	$97,500	0.30	$22,500					2	**$120,000**
24	8. Demolition and Removal	Demolition (concrete paving, curbing, etc. when present)	$50,000.00	MILE			0	$0					0	$0			0	$0													1.30	$65,000	0.30	$15,000					2	**$80,000**
25	8. Demolition and Removal	Misc Demo at driveways, repair aprons	$2,000.00	UT			0	$0					0	$0			0	$0													35	$70,000	2	$4,000					37	**$74,000**
26	9. Construction	Silt Fence	$6.00	LF			21,100	$126,600					6,700	$40,200			3,000	$18,000													6,800	$40,800	1,400	$8,400					39,000	**$234,000**
27	9. Construction	Inlet Protection	$200.00	UT			0	$0					0	$0			0	$0													10	$2,000	4	$800					14	**$2,800**
28	9. Construction	Stripping Toposoil (15' width)	$3.50	LF			21,100	$73,850					6,700	$23,450			0	$0													6,800	$23,800	1,400	$4,900					36,000	**$126,000**
29	9. Construction	Earthwork	$50,000.00	MILE			4	$200,000					1.6	$80,000			0	$0													1.30	$65,000	0.30	$15,000					7	**$360,000**
30	9. Construction	Utility Relocation (minor, guy wires etc.)	$25,000.00	MILE			4	$100,000					1.6	$40,000			0	$0													1.30	$32,500	0.30	$7,500					7	**$180,000**
31	9. Construction	Remove and replace concrete curbing (6x8 x18), includes removal of concrete curb stops when present	$50.00	LF			0	$0					0	$0			3,000	$150,000													3,000	$150,000	0	$0					6,000	**$300,000**
32	9. Construction	Asphalt Path - 10' width (6"DGA, 3" HMA surface)	$50.00	LF			21,100	$1,055,000					6,700	$335,000			3,000	$150,000													6,800	$340,000	1,400	$70,000					39,000	**$1,950,000**
33	9. Construction	Curb Ramps 4" Concrete (1'x8') w detectable warning (2' x 10')	$1,750.00	UT			0	$0					20	$35,000			0	$0													14	$24,500	2	$3,500					36	**$63,000**
34	9. Construction	Bollards at roadway intersection	$2,500.00	UT			19	$47,500					24	$60,000			12	$30,000													8	$20,000	2	$5,000					65	**$162,500**
35	9. Construction	4" Trail Marking (thermoplastic) 50' @ intersection approaches, curves, etc.	$100.00	UT			19	$1,900					134	$13,400			60	$6,000													8	$800	2	$200					223	**$22,300**
36	9. Construction	Misc Traffic Markings at Intersection approach	$1,000.00	UT			19	$19,000					20	$20,000			4	$4,000													8	$8,000	2	$2,000					53	**$53,000**
37	9. Construction	Roadway Crosswalk Markings at intersections (thermoplastic)	$1,000.00	UT			19	$19,000					20	$20,000			4	$4,000													8	$8,000	2	$2,000					53	**$53,000**
38	9. Construction	Regulatory Signage (16 per intersection, and misc locations)	$150.00	UT			400	$60,000					150	$22,500			4	$600													140	$21,000	40	$6,000					734	**$110,100**
39	9. Construction	Wayfinding/Bike Route Signage @ 1000 lf	$150.00	UT			22	$3,300					8	$1,200			4	$600													7	$1,050	2	$300					43	**$6,450**
40	9. Construction	Topsoil and Seeding (3' each side)	$6.00	LF			21,100	$126,600					13,400	$80,400			6,000	$36,000													6,800	$40,800	1,400	$8,400					48,700	**$292,200**
41	9. Construction	Misc repairs at driveways (mailboxes, etc.)	$1,000.00	UT			0	$0					0	$0			0	$0													35	$35,000	2	$2,000					37	**$37,000**
42	9. Construction	Landscaping (replacment trees, and residential landscape beds)	$1,000.00	UT			0	$0					0	$0			0	$0													50	$50,000	10	$10,000					60	**$60,000**
43	9. Construction	Remove and install new vehicular guide rail (when present)	$40.00	LF			0	$0					0	$0			260	$10,400													0	$0	0	$0					260	**$10,400**
44	9. Construction	Pedestrian Bridge - Includes bridge structure, hellical piles, and concrete abutment	$3,000.00	LF			0	$0					0	$0			300	$900,000													0	$0	0	$0					300	**$900,000**
		Advisory Bike Lanes - Single Lane																																						
45	9. Construction	Install bicycle safe inlet grates	$675.00	UT																	10	$6,750															10	**$6,750**
46	8. Demolition and Removal	Remove exisitng traffic strips/markings	$1.50	LF																	2,600	$3,900															2,600	**$3,900**
47	9. Construction	4" Traffic Marking (thermoplastic)	$0.75	LF																	2,600	$1,950															2,600	**$1,950**
48	9. Construction	Bike lane marking @ begin/end, intersections, and every 1000 ft	$225.00	UT																	16	$3,600															16	**$3,600**
49	9. Construction	Regulatory signage (Bike Lane) @ intersection begin/end, intersections, and every 1000 ft	$150.00	UT																	16	$2,400															16	**$2,400**
50	9. Construction	Wayfinding/Bike Route Signage @ 1000 lf	$150.00	UT																	3	$450															3	**$450**
		Sidewalk Installation - Both Sides of Road; 1 Side Only if shared use path is present (Replace all sidewalk in Fair, Poor, or Missing Condition)																																						
51	7. Site Work	Construction Sign	$2,000.00	UT	4	$8,000	4	$8,000	4	$8,000	4	$8,000	4	$8,000	4	$8,000	4	$8,000	4	$8,000																	32	**$64,000**
52	7. Site Work	Construction Layout	$17,500.00	MILE	5.50	$96,250	4	$70,000	8	$140,000	1.50	$26,250	3.20	$56,000	6.20	$108,500	8.0	$140,000	2.50	$43,750																	39	**$680,750**
53	7. Site Work	Mobilization (10% construction cost)	$10,000.00	UT	34.82	$348,248	35.32	$353,208	39.86	$398,615	9.99	$99,913	19.75	$197,543	33.05	$330,460	52.83	$528,325	13.39	$133,935																	239	**$2,390,246**
54	7. Site Work	Traffic Control	$10,000.00	MILE	5.50	$55,000	4	$40,000	8	$80,000	1.50	$15,000	3.20	$32,000	6.20	$62,000	8.0	$80,000	2.50	$25,000																	39	**$389,000**
55	7. Site Work	Site Field Office	$10,000.00	LS	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000																	8	**$80,000**
56	8. Demolition and Removal	Tree removal / Site Clearing (45- 18" trees/mile)	$75,000.00	MILE	5.50	$412,500	8	$600,000	8	$600,000	1.50	$112,500	3.20	$240,000	6.20	$465,000	8.0	$600,000	2.50	$187,500																	43	**$3,217,500**
57	8. Demolition and Removal	Demolition (concrete paving, curbing, etc. when present)	$50,000.00	MILE	5.50	$275,000	8	$400,000	8	$400,000	1.50	$75,000	3.20	$160,000	6.20	$310,000	8.0	$400,000	2.50	$125,000																	43	**$2,145,000**
58	8. Demolition and Removal	Misc Demo at driveways, repair aprons	$2,000.00	UT	230	$460,000	350	$700,000	100	$200,000	60	$120,000	150	$300,000	175	$350,000	260	$520,000	70	$140,000																	1,395	**$2,790,000**
59	9. Construction	Silt Fence	$6.00	LF	29,040	$174,240	21,100	$126,600	42,200	$253,200	7,500	$45,000	9,900	$59,400	32,800	$196,800	39,000	$234,000	11,600	$69,600																	193,140	**$1,158,840**
60	9. Construction	Inlet Protection	$200.00	UT	50	$10,000	40	$8,000	50	$10,000	20	$4,000	20	$4,000	40	$8,000	100	$20,000	20	$4,000																	340	**$68,000**
61	9. Construction	Stripping Toposoil (5' width)	$1.25	LF	29,040	$36,300	21,100	$26,375	42,200	$52,750	7,500	$9,375	9,900	$12,375	32,800	$41,000	39,000	$48,750	11,600	$14,500																	193,140	**$241,425**
62	9. Construction	Earthwork	$25,000.00	MILE	5.50	$137,500	4	$100,000	8	$200,000	1.50	$37,500	3.20	$80,000	6.20	$155,000	8.0	$200,000	2.50	$62,500																	39	**$972,500**
63	9. Construction	Utility Relocation (minor, guy wires etc.)	$10,000.00	MILE	5.50	$55,000	4	$40,000	8	$80,000	1.50	$15,000	3.20	$32,000	6.20	$62,000	8.0	$80,000	2.50	$25,000																	39	**$389,000**
64	9. Construction	Remove and replace concrete curbing (6x8 x18)	$50.00	LF	8,500	$425,000	2,700	$135,000	2,000	$100,000	3,000	$150,000	10,000	$500,000	1,900	$95,000	22,000	$1,100,000	2,200	$110,000																	52,300	**$2,615,000**
65	9. Construction	Concrete Paving - 4' width	$34.00	LF	29,040	$987,360	21,100	$717,400	42,200	$1,434,800	7,500	$255,000	9,900	$336,600	32,800	$1,115,200	39,000	$1,326,000	11,600	$394,400																	193,140	**$6,566,760**
66	9. Construction	Curb Ramps- 4" Concrete (4'x8') w detectable warning (2' x 4')	$875.00	UT	70	$61,250	60	$52,500	40	$35,000	20	$17,500	46	$40,250	36	$31,500	100	$87,500	20	$17,500																	392	**$343,000**
67	9. Construction	Remove and reinstall traffic signage	$100.00	UT	110	$11,000	60	$6,000	100	$10,000	40	$4,000	100	$10,000	70	$7,000	200	$20,000	20	$2,000																	700	**$70,000**
68	9. Construction	Topsoil and Seeding (1' each side)	$2.00	LF	29,040	$58,080	21,100	$42,200	42,200	$84,400	7,500	$15,000	9,900	$19,800	32,800	$65,600	42,000	$84,000	11,600	$23,200																	196,140	**$392,280**
69	9. Construction	Misc repairs at driveways (mailboxes, etc.)	$1,000.00	UT	160	$160,000	300	$300,000	100	$100,000	60	$60,000	50	$50,000	100	$100,000	200	$200,000	50	$50,000																	1,020	**$1,020,000**
70	9. Construction	Landscaping (replacment trees, and residential landscape beds)	$500.00	UT	100	$50,000	300	$150,000	200	$100,000	40	$20,000	50	$25,000	80	$40,000	250	$125,000	50	$25,000																	1,070	**$535,000**
71	9. Construction	Remove and install new vehicular guide rail (when present)	$40.00	LF	0	$0	0	$0	2,200	$88,000	0	$0	0	$0	1,850	$74,000	0	$0	60	$2,400																	4,110	**$164,400**
		Miscelaneous																																						
72	9. Construction	Bike Racks, Repair Stations, Wayfinding/Bike Route Signage, Streetscape elements- Common to All Segments	$25,000.00	UT	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000	18	**$450,000**

Overall Checklist Items & Task List

TDG	**Sidewalk Installation**
TDG	**"Sharrows"**
TDG	**Advisory Bike Lanes**
TDG	**Bike Lanes**
~~TDG~~	~~**Buffered Bike Lanes - EXCLUDED**~~
TDG	**Shared-Use Path**
TDG	**Bicycle Parking**
TDG	**Wayfinding/Bike Route Signage**
TDG	**Streetscaping/Amenities**
~~ARH~~	~~**ADA Compliant Curb Ramps - EXCLUDED**~~
ARH	**Textured Intersection**
~~ARH~~	~~**Curb Extensions - EXCLUDED**~~
~~ARH~~	~~**Eliminate Slip Lane - EXCLUDED**~~
~~ARH~~	~~**High-Visibility Crosswalk - EXCLUDED**~~
~~ARH~~	~~**Leading Pedestrian Interval - EXCLUDED**~~
ARH	**Pedestrian Plaza & Road Closures**
ARH	**Pedestrian Scale Lighting**
~~ARH~~	~~**Pedestrian Signal Heads and Push Buttons - EXCLUDED**~~
~~ARH~~	~~**Rectangular Rapid Flashing Beacons (RRFB) - EXCLUDED**~~
ARH	**Roundabout**

Hammonton USDOT (SS4A) Grant Estimate

Hammonton, NJ
Town of Hammonton
Wednesday, September 7, 2022

Item #	SS4A Budget Category	Description	Unit Price	Unit	13th Street /Fairview Avenue (CR 678) Quant.	13th Street /Fairview Avenue (CR 678) Amount	1st Road (CR 688) Quant.	1st Road (CR 688) Amount	2nd Road (CR 559) Quant.	2nd Road (CR 559) Amount	Broadway (CR 680) Quant.	Broadway (CR 680) Amount	Central Avenue (CR 542) Quant.	Central Avenue (CR 542) Amount	Chew Road Quant.	Chew Road Amount	Egg Harbor Road (CR 602) Quant.	Egg Harbor Road (CR 602) Amount	Main Road (CR 679) Quant.	Main Road (CR 679) Amount	Park Avenue Quant.	Park Avenue Amount	4th Street Quant.	4th Street Amount	Old Forks Road Quant.	Old Forks Road Amount	Road to Excellence Quant.	Road to Excellence Amount	Walnut Street Quant.	Walnut Street Amount	Moss Mill Road Quant.	Moss Mill Road Amount	Seagrove Avenue Quant.	Seagrove Avenue Amount	Cherry St/ Line Street/ Egg Harbor Road Quant.	Cherry St/ Line Street/ Egg Harbor Road Amount	Vine Street/ Egg Harbor Road Quant.	Vine Street/ Egg Harbor Road Amount	Central Ave/ Third St/ Vine Street Quant.	Central Ave/ Third St/ Vine Street Amount	Total Quant.	Total Amount
					1		2		3		4		5		6		7		8		10		11		12		13		14		15		16		17		18		19			
					13th Street/ Fairview Avenue (CR 678)		1st Road (CR 688)		2nd Road (CR 559)		Broadway (CR 680)		Central Avenue (CR 542)		Chew Road		Egg Harbor Road (CR 602)		Main Road (CR 679)		Park Avenue		4th Street		Old Forks Road		Road to Excellence		Walnut Street		Moss Mill Road		Seagrove Avenue		Cherry St/ Line Street/ Egg Harbor Road		Vine Street/ Egg Harbor Road		Central Ave/ Third St/ Vine Street		Total	
		TOTAL			$3,880,028		$6,325,828		$4,491,065		$1,143,988		$3,199,393		$4,787,270		$7,395,035		$1,524,085		$44,050		$48,025		$31,000		$42,925		$36,925		$1,379,210		$278,605		$85,000		$85,000		$1,381,000		$36,158,431
		Section Length (Miles)			5.5 Miles		4.0 Miles		4.0 Miles		0.71 miles		1.57 Miles		6.21 Miles		3.90 Miles		1.10 Miles		0.49 Miles		0.91 Miles		0.17 Miles		0.70 Miles		0.40 Miles		1.29 Miles		0.27 Miles									
		Section Length (LF)			29,040 LF		21,100 LF		21,100 LF		3,750 LF		8,300 LF		32,800 LF		20,600 LF		5,800 LF		2,600 LF		4,800 LF		900 LF		3,700 LF		2,100 LF		6,800 LF		1,400 LF									
		Per 250 LF (for sharrows calculation)			24/total LF		-		84/total LF		15/Total LF		-		132/total LF		50/Total LF		24/Total LF		-		19/Total LF		4/Total LF		15/Total LF		9 Total LF		27 Total LF		6 Total LF									
		Total Intersections			3 Intersections		19 intersections		12 Intersections		8 Intersections		15 Intersections		10 intersections		22 Intersections		8 Intersections		5 intersections		4 intersections		2 intersections		2 intersections		2 intersections		9 intersections		2 intersections									
		Sharrows			Two-Way		-		Two-Way		Two-Way		-		-		Two-Way		Two-Way		-		-		-		-		-		-		-									
		Bike Lanes			-		-		-		-		One-Way		Two-Way		-		-		-		Single lane: road of excellence to walnut. 2-Way: road of excellence to fairview		One-Way		One-Way		One-Way		-		-									
		Shared Use Path			-		One Side		-		-		One Side		-		One Side		-		-		-		-		-		-		One Side		One Side									
		Advisory Bike Lane			-		-		-		-		-		-		-		-		Single Lane		-		-		-		-		-		-									
		Sidewalks			Both Sides		One Side		Both Sides		Both Sides		One Side		Both Sides		One Side		Both Sides		Single Lane		-		-		-		-		One Side		One Side									
		Assumptions for Cost Estimate Purposes													Two-Way Bike Lanes at 30' wide uncurbed road and 32-34' wide curbed road								One-Way Bike Lane with no road widening and no removal of existing curb from Road of Excellence to Walnut. Two-Way Bike Lanes from Road of Excellence to Fairview with no road widening and no removal of existing curb		One-Way Bike Lane with no road widening		One-Way Bike Lane with no road widening and no removal of existing curb		One-Way Bike Lane with no road widening and no removal of existing curb									
		Additional Comments					duplicate numbers done on concrete sidewalk section						*Removed 6,700 LF portion of sidewalk that will be duplicate due to shared use path **does not include reconfigured intersection or central ave "plaza" in calculations ***info removed from bike lanes: - guide rail, demo, driveways, modify inlets, curbing, tree removal, construction signs		All driveway totals done w/ concrete sidewalk section.																									

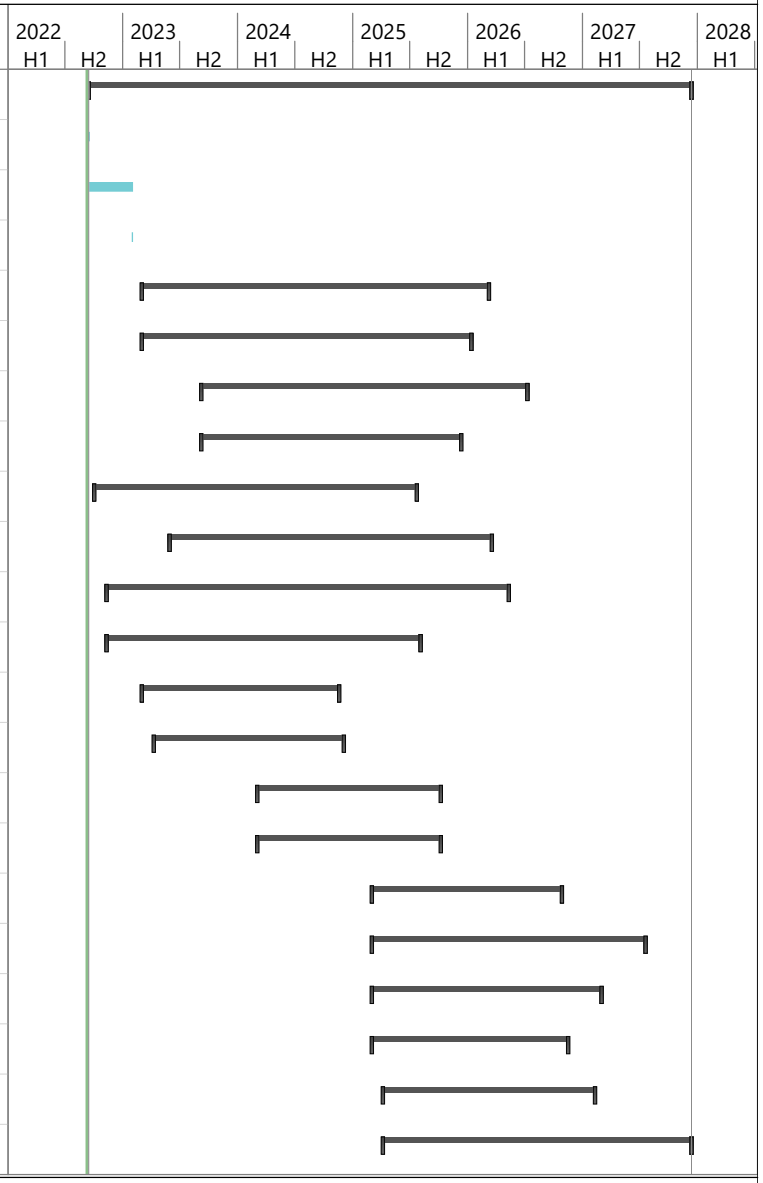
NJDOT/STATE ROAD - EXCLUDED
TDG - SCOPE/ESTIMATION
ARH - SCOPE/ESTIMATION
TOWN OF HAMMONTON SCOPE
N/A - NOT APPLICABLE

This estimate does not include design, legal, and contract administration fees.

Classification Number	Cost Classification	Total Cost
2	Land, structures, rights-of-way, appraisals, etc.	$468,000
7	Site Work	$4,446,021
8	Demolition and removal	$8,540,530
9	Construction	$22,918,880
10	Equipment	$0
11	Miscelaneous	$0
	SUB-TOTAL	**$36,373,431**

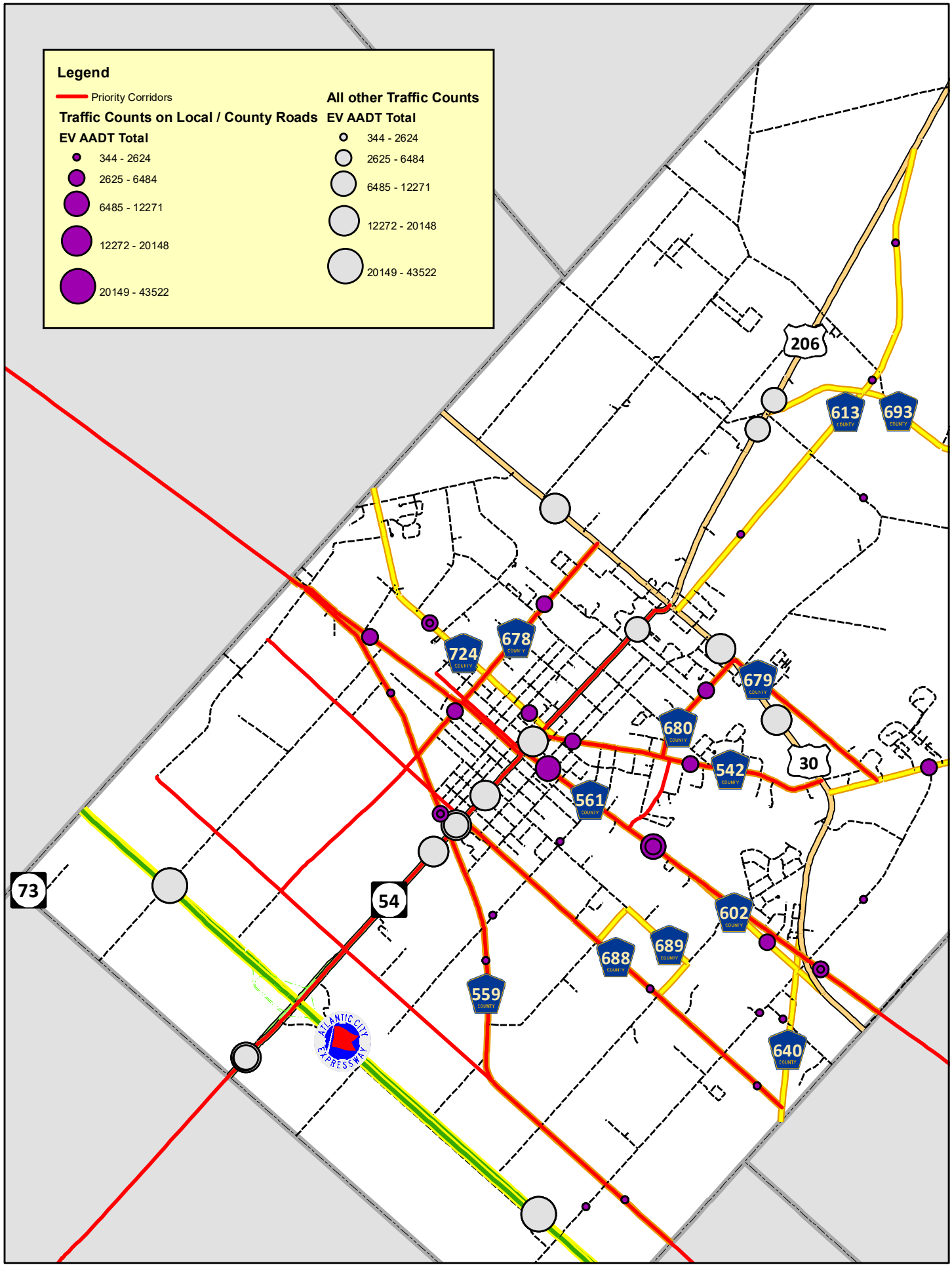
TOWN OF HAMMONTON
USDOT GRANT APPLICATION 09/2022
PROJECT SCHEDULE

Task Name	Start	Finish
Hammonton USDOT (SS4A) Grant	Thu 9/15/22	Mon 12/13/27
Application Submission	Thu 9/15/22	Thu 9/15/22
Implementation Grant Review and Selection Process	Fri 9/16/22	Tue 1/31/23
Grant Award	Tue 1/31/23	Tue 1/31/23
13th Street/Fairview Avenue (CR 678)	Fri 3/3/23	Mon 3/9/26
1st Road (CR 688)	Fri 3/3/23	Mon 1/12/26
2nd Road (CR 559)	Fri 9/8/23	Thu 7/9/26
Broadway (CR 680)	Fri 9/8/23	Thu 12/11/25
Central Avenue (CR542)	Mon 10/3/22	Wed 7/23/25
Chew Road	Tue 5/30/23	Wed 3/18/26
Egg Harbor Road (CR 602)	Fri 11/11/22	Mon 5/11/26
Main Road (CR 679)	Fri 11/11/22	Mon 8/4/25
Park Avenue	Fri 3/3/23	Mon 11/18/24
4th Street	Mon 4/10/23	Tue 12/3/24
Old Forks Road	Mon 3/4/24	Tue 10/7/25
Road to Excellence	Mon 3/4/24	Tue 10/7/25
Walnut Street	Mon 3/3/25	Tue 10/27/26
Moss Mill Road	Mon 3/3/25	Tue 7/20/27
Seagrove Avenue	Mon 3/3/25	Tue 3/2/27
Cherry Street/Line Street/Egg Harbor Road	Mon 3/3/25	Mon 11/16/26
Vine Street/Egg Harbor Road	Mon 4/7/25	Tue 2/9/27
Central Avenue/Third Street/Vine Street	Mon 4/7/25	Mon 12/13/27



TOWN OF HAMMONTON

09-09-2022
ARH #P2022.0409


Legend
Priority Corridors
Traffic Counts on Local / County Roads
EV AADT Total
344 - 2624
2625 - 6484
6485 - 12271
12272 - 20148
20149 - 43522
All other Traffic Counts
EV AADT Total
344 - 2624
2625 - 6484
6485 - 12271
12272 - 20148
20149 - 43522
206
613
693
678
724
679
680
542
30
561
73
54
602
689
688
559
640
ATLANTIC CITY EXPRESSWAY

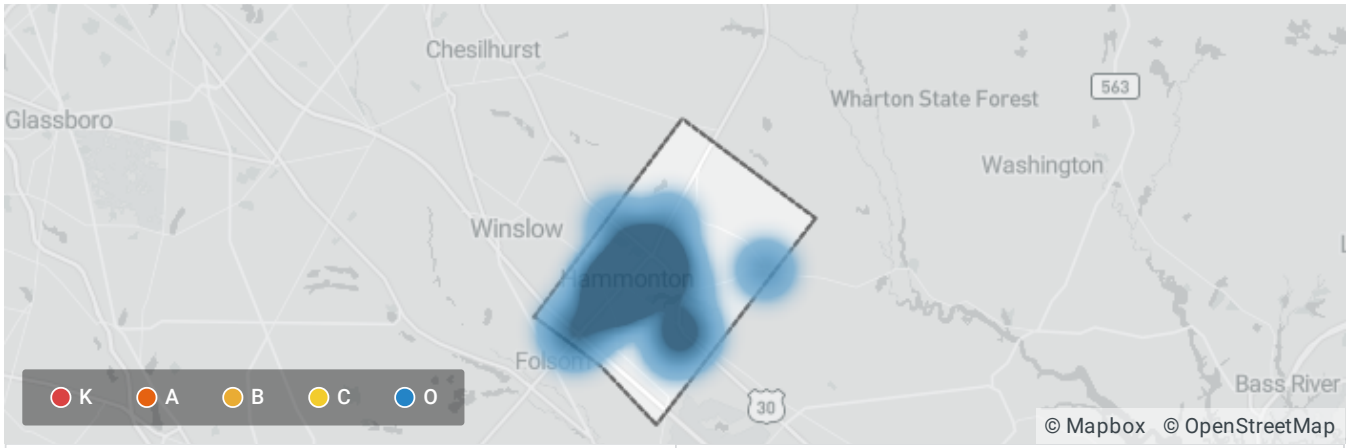
CRASH SUMMARY REPORT

Pedestrian & Bicyclist involved crashes 2010-2022

Created on September 14, 2022
Created by Kevin Friel
Data extents: January 1, 2010 to July 14, 2022

Applied Filters

Shape: Polygon | NJ DHTS Crash Summary = Bicyclist Involved | NJ DHTS Crash Summary = Pedestrian Involved



Total Crashes	64	Fatal Crashes	4

NJ DHTS Crash Summary	Crashes	
Total Crashes	64	100.00%
Injury Crashes	56	87.50%
Pedestrian Involved	44	68.75%
Bicyclist Involved	20	31.25%
Distracted Driving Involved	15	23.44%
Older Driver (65+) Involved	15	23.44%
Alcohol Involved	8	12.50%
Young Driver (16-20) Involved	4	6.25%
Fatal Crashes	4	6.25%
Unsafe Speed Involved	1	1.56%
Drugged Driver Involved Motorcycle Involved Unrestrained Occupant Involved	0	0.00%

Crash Severity	Crashes	
Possible Injury	25	39.06%
Suspected Minor Injury	24	37.50%
Suspected Serious Injury	7	10.94%

Fatal Injury	4	6.25%
No Apparent Injury	4	6.25%

Date & Time (Year)		Crashes
2021	5	7.81%
2020	3	4.69%
2019	6	9.38%
2018	5	7.81%
2017	8	12.50%
2016	2	3.13%
2015	8	12.50%
2014	8	12.50%
2013	5	7.81%
2012	5	7.81%
2011	7	10.94%
2010	2	3.13%
2022 2009 2008 2007 2006	0	0.00%

Date & Time (Month of Year)		Crashes
January	3	4.69%
February	3	4.69%
March	5	7.81%
April	6	9.38%
May	9	14.06%
June	1	1.56%
July	8	12.50%
August	6	9.38%
September	8	12.50%
October	7	10.94%
November	2	3.13%
December	6	9.38%

Date & Time (Day of Week)		Crashes
Monday	9	14.06%
Tuesday	6	9.38%
Wednesday	14	21.88%
Thursday	13	20.31%

Friday	7	10.94%
Saturday	9	14.06%
Sunday	6	9.38%

Date & Time (Hour of Day)		Crashes
12 am - 2 am	1	1.56%
4 am - 6 am	2	3.13%
6 am - 8 am	2	3.13%
8 am - 10 am	3	4.69%
10 am - 12 pm	5	7.81%
12 pm - 2 pm	8	12.50%
2 pm - 4 pm	14	21.88%
4 pm - 6 pm	11	17.19%
6 pm - 8 pm	5	7.81%
8 pm - 10 pm	11	17.19%
10 pm - 12 am	2	3.13%
2 am - 4 am	0	0.00%

Crash Characterics		Crashes
Pedestrian Involved	44	68.75%
Bicyclist Involved	20	31.25%
Older Driver Involved	15	23.44%
Young Driver Involved	4	6.25%
Curve Related	2	3.13%
Run Off Road	1	1.56%
+ 5 more	0	0%

Driver Contributing Factors		Crashes
Distracted Driving	15	23.44%
Alcohol Related	8	12.50%
Cell Phone In Use	1	1.56%
Unsafe Speed	1	1.56%
+ 2 more	0	0%

Crash Type		Crashes
Pedestrian	44	68.75%
Pedalcyclist	20	31.25%
+ 17 more	0	0%

Hammonton Police Department
Town Crash Data Detail

Crash ID	10404049	14658091	14658131	3607225	3902913	4186603	8183015	8227519	9442757	9695596
Date & Time	9/9/2020 12:50	7/5/2016 16:34	8/10/2016 16:58	4/27/2011 12:19	7/21/2012 15:11	7/3/2013 16:09	5/12/2014 22:12	12/15/2014 17:34	3/5/2018 21:11	10/24/2018 19:31
SRI	542	1000680	542	1000678	542	1000680	542	561	1000678	542
Mile Post	0.16	0.63	0.24	0	0.16	0.56	0.99	22.19	1.55	0.16
Crash Severity	Suspected Minor Injury	No Apparent Injury	Suspected Serious Injury	Suspected Minor Injury	Suspected Minor Injury	Suspected Minor Injury	Suspected Minor Injury	Possible Injury	Possible Injury	Suspected Minor Injury
Cities / Municipalities	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town	Hammonton Town
County	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic	Atlantic
Crash Type	Pedalcyclist	Pedalcyclist	Pedalcyclist	Pedalcyclist	Pedalcyclist	Pedalcyclist	Pedestrian	Pedestrian	Pedestrian	Pedestrian
Environmental Condition	Rain	Clear	Clear	Clear	Clear	Rain	Fog / Smog / Smoke	Clear	Clear	Clear
Light Condition	Daylight	Daylight	Daylight	Daylight	Daylight	Daylight	Dark - Street Lights On (Continuous)	Dark - Street Lights On (Continuous)	Dark - Street Lights Not Present	Dark - Street Lights On (Continuous)
Crash Location	Central Ave/County ROUTE 542	1st Road/ ATLANTIC COUNTY 680	Central Ave/County ROUTE 542	13th Street /Fairview Avenue / ATLANTIC COUNTY 678	Central Ave/County ROUTE 542	1st Road/ ATLANTIC COUNTY 680	Central Ave/County ROUTE 542	ROUTE 561	13th Street /Fairview Avenue / ATLANTIC COUNTY 678	Central Ave/County ROUTE 542
Location Direction		South	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		
DHTS Region	South	South	South	South	South	South	South	South	South	South
Dot Web ID	2.02001E+17	20160113I-2016-13697	20160113I-2016-16086	20110113I-2011-07475	20120113I-2012-12556	20130113I-2013-11040	20140113I-2014-07414	20140113I-2014-19687	20180113I-2018-04067	20180113I201818040
Functional Class	Urban Minor Arterial	Urban Collector	Urban Minor Arterial	Urban Minor Arterial	Urban Minor Arterial	Urban Collector	Urban Minor Arterial	Urban Minor Arterial	Urban Collector	Urban Minor Arterial
MPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO	SJTPO
Jurisdiction	County	County	County	County	County	County	County	County	County	County
Police Department	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD	HAMMONTON PD
Total Pedestrians Killed	0	0	0	0	0	0	0	0	0	0
Road Surface Type	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop	Blacktop
Road System	County	County	County	County	County	County	County	County	County	County
Total Killed	0	0	0	0	0	0	0	0	0	0
Total Injured	1	0	1	1	1	1	1	1	1	1
Total Drivers Involved	1	0	1	1	1	1	1	1	1	1
Total Bicyclists Killed	0	0	0	0	0	0	0	0	0	0
Total Vehicles Involved	1	1	1	1	1	1	1	1	1	1
Total Suspected Serious Injuries	0	0	1	0	0	0	0	0	0	0
Total Occupants Involved	1	0	0	1	1	1	1	2	0	0
Total Bicyclists Involved	1	1	1	1	1	2	0	0	0	0
Total Bicyclists Injured	1	0	0	1	1	1	0	0	0	0
Total Pedestrians Injured	0	0	0	0	0	0	1	1	1	1
Total Pedestrian And/Or Bicyclist Involved	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Total Pedestrians Involved	0	0	0	0	0	0	1	1	1	1
Curve Related	No	No	No	No	No	No	No	No	No	No
Alcohol Involved	No	No	No	Yes	No	No	No	No	Yes	No
Bicyclist Involved	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Distracted Driving Involved	No	No	No	No	No	Yes	Yes	Yes	No	No
Drowsy Driver Involved	No	No	No	No	No	No	No	No	No	No
Drugged Driver Involved	No	No	No	No	No	No	No	No	No	No
Hazmat Involved	No	No	No	No	No	No	No	No	No	No
Head On Collision Involved	No	No	No	No	No	No	No	No	No	No
Live Animal Involved	No	No	No	No	No	No	No	No	No	No
Motorcycle Involved	No	No	No	No	No	No	No	No	No	No
Older Driver (65+) Involved	No	No	Yes	No	No	Yes	No	No	No	No
Driver Contributing Factors				Alcohol Related		Distracted Driving	Distracted Driving	Distracted Driving	Alcohol Related	
Pedestrian Involved	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Run Off Road Involved	No	No	No	No	No	No	No	No	No	No
Unrestrained Occupant Involved	No	No	No	No	No	No	No	No	No	No
Unsafe Speed Involved	No	No	No	No	No	No	No	No	No	No
Young Driver (16-20) Involved	No	No	No	No	No	No	Yes	No	No	No

Data Analysis

The crash data below was sourced from New Jersey's Safety Voyager, a software application that was designed to provide a quick and easy visual perspective of crash data.

Upon analyzing the Town's data, including the cluster map and heatmap, it became obvious that there are certain regions of the Town that are more unsafe than others. The Town has identified the following corridors of high priority:

- NJ Route 54/Bellevue Avenue/12th Street
- Central Avenue
- Egg Harbor Road

In addition, seven intersections and other areas of concern have been identified:

- NJ Route 54/Egg Harbor Road/Railroad Avenue
- Hammonton Train Station
- Hammonton Lake Park
- Egg Harbor Road/Moss Mill Road
- NJ Route 54/Central Avenue/3rd Avenue
- Northwest Connector surrounding Hammonton Middle School
- NJ Route 54/US Route 30/US Route 206

These interconnected regions are referred to as the Corridor in the data below. Encompassing only 1.95 square miles, or only 4.75% of the Town's area, this region receives 35.45% of the Town's crashes. This is the Town's High-Injury Network.

	Hammonton	Corridor	Corridor %
Total Crashes	**2051**	**727**	**35.45%**
Killed	17	4	23.53%
Incapacitated	45	10	22.22%
Moderate Injury	285	90	31.58%
Pain	575	210	36.52%
Property Damage Only	1421	514	36.17%

Table 1 – Total Crashes by Severity

	Hammonton	Corridor	Corridor %
Pedestrian	21	13	61.90%
Pedalcyclist	12	9	75.00%

Table 2 – Total Crashes by Pedestrian and Pedalcyclist Involvement

		Hammonton	Corridor	Corridor %
Occupant	**Killed**	14	4	28.57%

	Incapacitated	39	8	20.51%
	Moderate Injury	273	83	30.40%
	Pain Complaint	562	198	35.23%
	Unknown	3	2	66.67%
Pedestrian	**Killed**	3	0	0.00%
	Incapacitated	5	2	40.00%
	Moderate Injury	5	5	100.00%
	Pain Complaint	10	6	60.00%
Cyclist	**Killed**	0	0	-
	Incapacitated	1	0	0.00%
	Moderate Pain	7	6	85.71%
	Pain Complaint	3	2	66.67%

Table 3 – Crashes by Injury Severity

		Hammonton	Corridor	Corridor %
Road Condition	Wet	366	104	28.42%
	Dry	1606	609	37.92%
	Slush	11	2	18.18%
	Snowy	43	12	27.91%
Light Condition	Daylight	1475	573	38.85%
	Dusk	49	18	36.73
	Dawn	34	9	26.47%
	Dark (Lit)	360	117	32.50%
	Dark (Unlit)	112	8	7.14%
Environmental Conditions	Clear	1669	623	37.33%
	Overcast	52	19	36.54%
	Rain	264	69	26.14%
	Snow	48	16	33.33%

Table 4 – Crashes by Conditions

	Hammonton	Corridor	Corridor %
Right Angle	465	209	44.95%
Backing	90	46	51.11%
Same Direction – Rear End	453	186	41.06%
Same Direction – Sideswipe	165	64	38.79%
Opposite Direction – Head-On	31	11	35.48%
Opposite Direction – Sideswipe	23	6	26.09%
Struck Parked Vehicle	100	68	68.00%
Fixed Object	413	51	12.35%
Non-Fixed Object	27	2	7.41%
Left Turn/U-Turn	99	46	46.46%
Overturned	25	1	4.00%
Encroachment	10	5	50.00%
Railcar-Vehicle	1	1	100.00%
Other	27	5	18.52%
Alcohol Involved	107	28	26.17%

Table 5 – Crashes by Crash Type

	Killed	Incapaci-tated	Moderate Injury	Pain	Property Damage Only
Bellevue Avenue | Egg Harbor Road					
Bellevue Avenue | 3rd Street					
Hammonton Middle School					
Bellevue Avenue | U.S. Route 30					
Hammonton Lake Park					
Egg Harbor Road | Moss Mill Road					

Table 6 – Crashes by Severity within Project Areas

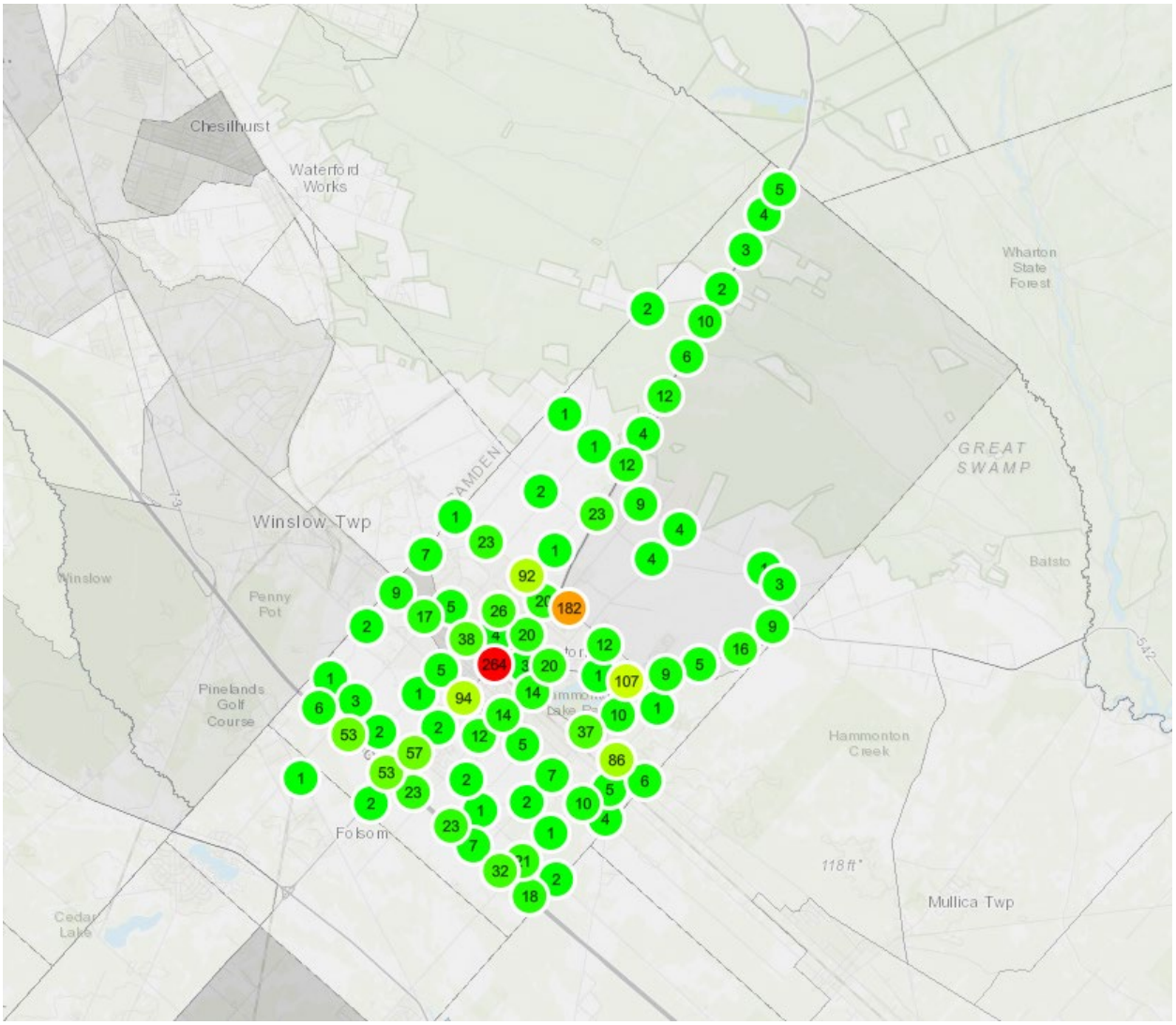


Figure 1 – Safety Voyager Cluster Map

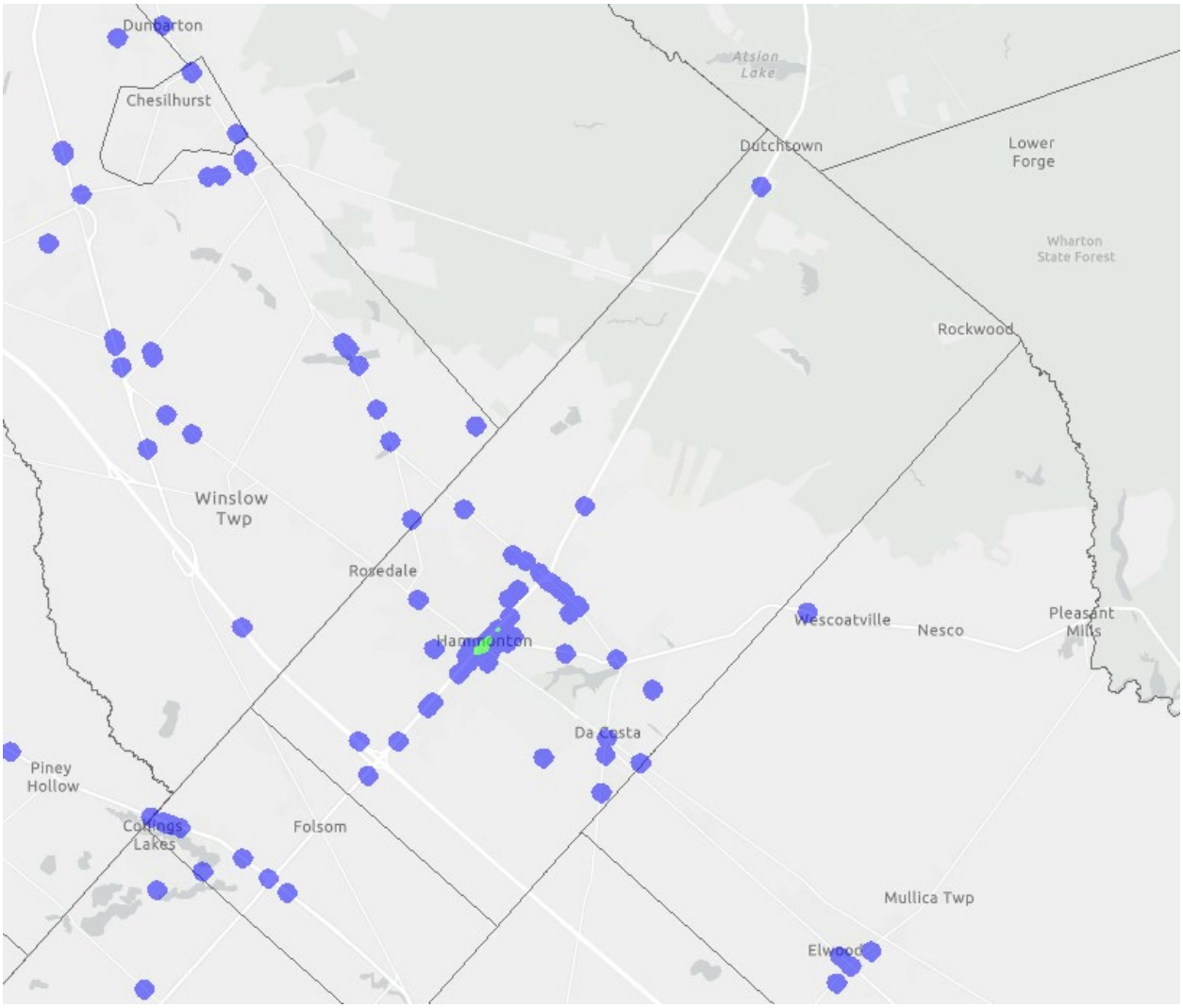


Figure 2 – Safety Voyager Pedestrian and Pedalcyclist Heatmap

Analysis of Systemic and Specific Safety Needs

Through the Town's outreach coupled with the assessment of crash data and financial considerations, the Town has determined the following six locations as requiring the most pressing improvements. Further, the projects listed below are in highly used areas, and, working together, these projects link schools, parks, and intermodal mass transit facilities with each other and with Downtown Hammonton.

Regardless of location, throughout all of the project areas, the Town plans to repair and replace poor sidewalks, expand bicycle parking, provide bicycle repair stations, develop wayfinding kiosks, expand accessible parking opportunities, create publicly accessible electric vehicle charging infrastructure, repair and repaint existing benches and seating, improve public parking wayfinding and signage, embrace safe outdoor dining, expand seating, and provide unified trash and recycling receptacles. Additional pedestrian and pedalcyclist safety enhancements throughout the project area will include the Proven Safety Countermeasure (PSC) of high-visibility ladder crosswalk striping, rapid-flashing beacons at intersections, upgraded curb ramps, and possible curb extension bump-outs.

In addition to the project locations below, the Town intends to specifically address three corridors. The full length of NJ Route 54/Bellevue Avenue will receive dedicated bike lanes, with this corridor having seen 170 crashes with 55 injuries over the past five years. The Central Avenue corridor will see extensive sidewalk work, with that corridor having experienced 47 crashes with 16 injuries. The Egg Harbor Road corridor will see the extensions of the pedalcyclist and footpaths described below, with that corridor having seen 20 crashes with nine injuries.

Bellevue Avenue | Egg Harbor Road | Atlantic City Rail Line | Railroad Avenue | Front Street

The most dangerous intersection in Hammonton lay in the epicenter of Town. The north-south Bellevue Avenue is intersected at-grade by NJ Transit's Atlantic City Rail Line. Immediately north of this crossing is Bellevue Avenue's intersection with Egg Harbor Road (Atlantic County Route 602) and immediately south is Bellevue Avenue's intersection with Railroad Avenue to the west, then 80 feet further south is Bellevue Avenue's intersection with Front Street. In this region, there are four crossings of Bellevue Avenue within 200 feet, creating a wildly confusing and incredibly dangerous area. Over the past five years, 107 crashes have taken place here, with 30 injuries and one fatality.

Compounding this situation is the fact that there are five mass-transit stops within a half-mile of this intersection, with numerous pedestrians and pedalcyclists attempting to navigate this intersection in order to access these stops. There are two stops by the 54/40 Community Shuttle, two stops by the NJ Transit 554 bus, and Hammonton Station along the Atlantic City Line. Within a few hundred feet, mass transit riders can connect both to small towns a few miles south of Hammonton, as well as Philadelphia and Atlantic City. Essentially, for users of mass transit in Hammonton, this incredibly dangerous intersection is their connection to the world.

Further complicating the safety of this area is the lack of pedestrian or pedalcyclist facilities. There is currently no pedestrian or pedalcyclist access to Hammonton Station. A pedestrian or

pedalcyclist must enter through the vehicular entrance on Line Street in order to access the facility. In addition, there is a significant lack of wayfinding to direct potential riders to the facility, with many first-time riders finding it difficult to locate the station at all. Over the past five years, there have been six crashes in this area, with three injuries and one fatality. (These numbers are not included in the totals given two paragraphs prior.)

The Town seeks to address these deficiencies in a multitude of ways. First, they intend to institute a number of roadway and intersection traffic-calming improvements, such as further defining travel lanes with striping and arrows for through and turning movements to improve vehicular circulation predictability (a Proven Safety Countermeasure [PSC]); reducing lane and cartway widths where possible to decrease crossing distances for pedestrian and pedalcyclist safety; replacing sidewalks which are in poor condition, particularly those at the railroad crossing; improve lighting at the railroad crossing area (a PSC); and stripe or paint roadway lane gores in the railroad crossing area. In addition, they intend to create a new Pedestrian Piazza at Bellevue and Railroad Avenues, with decorative pavement, benches, bike racks, an information and wayfinding kiosk, accent lighting, and other amenities. Further, they intend to reduce the width of Railroad Avenue, increasing pedestrian and pedalcyclist safety while crossing this street.

In addition, to improve pedestrian and pedalcyclist access to the NJ Transit and 54/40 Community Shuttle stops, the Town intends to install offset, dedicated bus pull-off lanes at these stops on Egg Harbor Road, along with pedestrian enhancements, decorative pavement, benches, bike racks, and other amenities, as well as constructing an architectural shelter with furnishings for transit riders. In addition, for enhanced pedalcyclist safety, the Town intends to install sharrows within the roadway of Egg Harbor Road and buffered bike lanes along Bellevue Avenue – both Proven Safety Countermeasures.

Further, to improve the currently non-existent pedestrian and pedalcyclist access to Hammonton Station, the Town intends to direct riders eastward along Front Street with clearly defined, transit-focused wayfinding signage, improved pedestrian and pedalcyclist connections from the station to the Downtown through additional wayfinding, a more permanent identification sign, enhanced sidewalks, decorative pavement, decorative lighting, and accent plantings.

It is important to note that the disadvantaged Census Tract 34001011100 is on the western side of Bellevue Avenue at this intersection, while all five mass-transit stops are on the eastern side of Bellevue Avenue, forcing the disadvantaged residents of 34001011100 to cross this incredibly dangerous intersection to gain access to public transportation.

Bellevue Avenue | 3rd Street | Central Avenue

The confluence of Bellevue Avenue, 3rd Street, and Central Avenue has long been a headache for the Town, with numerous heavy-duty over-the-road trucks and other vehicles using 3rd Street because of its westerly connection with US Route 30: rather than continuing their route through the Town, this centralized road allows motorists a central access to US Route 30 – essentially the hypotenuse of the right triangle created by Bellevue Avenue and US Route 30.

According to the crash data supplied in Appendix TK , the 3rd Street/Bellevue Avenue intersection is the second-most dangerous intersection along Bellevue Avenue, after the road's

intersection with Egg Harbor Road, with 80 crashes over the past five years with 26 injuries. With Central Avenue's approach to Bellevue Avenue being at an angle measuring approximately 120° some 300 feet south of the intersection of Bellevue Avenue and 3rd Street, the danger of this area is exacerbated. Further complicating matters is the fact that Vine Street, running parallel to Bellevue Avenue, intersects Central Avenue only 80 feet south of its intersection with 3rd Street. Most importantly, this is all immediately adjacent to Hammonton Town Hall and Hammonton Post Office.

The Town seeks to employ Corridor Access Management, a Proven Safety Countermeasure (PSC), by vacating portions of 3rd Street and Central Avenue, directing southbound traffic along Central Avenue to 3rd Street in order to approach Bellevue Avenue at a right angle and using portions of the vacated 3rd Street as ingress/egress to the Post Office. Further, this project proposes the addition of a myriad of traffic calming measures in this area, including the addition of a Central Piazza and Pedestrian Promenade at the intersection of Central and Bellevue Avenues. This will include decorative pavement, benches, bike racks, an informational and wayfinding kiosk, a raised retention wall with plantings, accent lighting, and other amenities.

Further, this plan seeks to remove the potential left-hand turn from Central Avenue onto Bellevue Avenue by eliminating the southbound lane on Central Avenue, allowing only one-way northbound traffic between 3rd Street and Bellevue, eliminating the potential left turn from Central Avenue onto Bellevue Avenue. In addition, the vacated southbound lane will be converted into a pedestrian walkway, thus reducing the pedestrian crossing length between the north and south sides of Central Avenue. Moreover, the intersection of Central Avenue at Bellevue Avenue will be realigned to approach at a right angle. Further pedalcyclist safety enhancements include the continuation of the buffered bike lanes along Bellevue Avenue and the addition of dedicated bike lanes along 3rd Street.

This area is of both historic and potential value: the original Bank of Hammonton sits at the corner of Central and Bellevue Avenues, with the Town currently seeking funding to transform this building into a venue to provide greater advantages to the public. Moreover, this intersection was the site of a stump speech by then-President Reagan while on the campaign trail in 1984.

In the vacated areas of 3rd Street and Central Avenue, directly adjacent to Town Hall, the Town proposes a Town Hall Green and Event Plaza, creating a large downtown civic space by potentially relocating the current fountain in the triangle created by Central Avenue, Vine Street, and 3rd Street, adding decorative pavement, accent planting, picnic tables and benches, lighting, bike racks, and potential vendor tent locations with available electricity, as well as a shade and event pavilion. Additionally, this will create additional pedalcyclist and pedestrian safety by directing bike and foot traffic along Central Avenue through this Town Hall Green instead of along Central Avenue. In addition, the Town intends to realign the parking in the Town Hall/Post Office area, eliminating the need for motorists to back out over the sidewalk.

Northwest Connector

The region surrounding Hammonton Middle School is referred to as the Northwest Connector. Currently, the roads in this region are insufficient to accommodate motorists, bicyclists, and pedestrians simultaneously. Where there are sidewalks, they are narrow and cannot accommodate more than two people walking abreast – and this project is in the vicinity of a

middle school where students frequently walk in groups much larger than two. There are no sidewalks on Linda Avenue until the culvert at Cedar Brook (approximately 1,922'), nor is there any lighting, and there are no bike paths in the area. Current crosswalks are ill-defined and in need of striping. Further, an unofficial and unsafe "desire path" has arisen through years of foot traffic, connecting Linda Avenue with Liberty Street, cutting alongside the property of the Middle School.

The sports facilities at the Middle School are incredibly well used. In addition to the area accommodating the 868 students in grades sixth through eight (2020-2021 school year), 68 educators, and 17 staff members at Hammonton Middle School, the sports fields at the Middle School are home to numerous teams. Eight different youth sports programs use the facilities a combined total of 122 times each year, for practices and games. Each program, particularly the Hammonton Hawks youth football team, brings numerous fans and attendees.

Over the past five years, this region has seen 145 crashes, with 97 injuries. In the region immediately surrounding Hammonton Middle School, this project proposes to add several shared-use bicycle/pedestrian lanes (a Proven Safety Countermeasure), remediate several existing crosswalks with additional striping and signage (a PSC), add additional curb ramps and painted sidewalks (a PSC), sharrows and signage throughout the area, and continue the buffered bike lanes along Bellevue Avenue. In addition, this project proposes to add significant pedestrian lighting and the PSC of several high-visibility, mid-block bicycle and pedestrian crossings.

Bellevue Avenue | U.S. Route 30 | U.S. Route 206

As discussed earlier in this narrative, Bellevue Avenue intersects U.S. Route 30 at the northern terminus of this project area before becoming renumbered as U.S. Route 206 and leading through South Jersey to the state capital in Trenton. Having developed into a commercial district in the middle of the 20th century, Route 30 has remained a relatively high-speed thoroughfare, presenting numerous safety implications upon its approach to the Bellevue/Route 206 intersection. While certainly not as walkable or bikeable as Bellevue Avenue, this stretch of road nonetheless receives its fair share of pedestrian and pedalcyclist traffic in addition to its AADT of 20,148. Sidewalks in the region are intermittent and in need of repair. This intersection has seen 98 crashes with 28 injuries and one fatality over the past five years.

To improve the situation at this intersection, the Town proposes removing the current slip lane which would reduce the pedestrian crossing distance of Route 206, installing pedestrian signal heads and push buttons, bringing the current curb ramps into ADA compliance, and installing additional crosswalks, curb extensions, and lighting, all of which are Proven Safety Countermeasures.

Hammonton Lake Park

A verdant oasis nestled approximately three-quarters of a mile from Downtown Hammonton and within walking distance of Hammonton Station, Hammonton Lake Park is the Town's primary recreational facility. At over 30 acres, the Park features playgrounds, seating areas, numerous baseball fields, and the centerpiece of the facility, Hammonton Lake. On the lake's eastern shore lay an additional 90 acres of wooded area with numerous well-maintained trails and a white-cedar swamp. The entrance to this park saw an AADT of 6,484 in 2019, with twelve crashes and six injuries taking place here over the past five years.

While the graphic included in Appendix TK includes plans for park improvements that are not being requested as part of this application, the Town would like to extend the planned pedestrian and pedalcyclist trail, currently financed with $745,000 of funding from the New Jersey Department of Transportation, extending the 8-foot-wide pedalcyclist path along Egg Harbor Road, while redirecting the 10-foot-wide pedestrian trail through the Park, along a footbridge over Hammonton Lake, and connecting to the trails within the wooded area adjacent to the Park. Both the pedestrian and pedalcyclist paths will connect to those described in the area surrounding Egg Harbor Road | Moss Mill Road | Lakeview Drive | 9th Street described below.

Egg Harbor Road | Moss Mill Road | Lakeview Drive | 9th Street

At this incredibly dangerous intersection, 9th Street crosses Egg Harbor Road to the north, becoming Lakeview Drive and crossing Moss Mill Road. With two intersections on 9th Street/Lakeview Drive less than 170 feet apart and Moss Mill Road intersecting Egg Harbor Road at a treacherous 5.3° angle only 1,300 feet to the east, this area – less than a mile from Hammonton Lake Park – is in desperate need of attention. The AADT of Egg Harbor Road's approach to this intersection was 5,032 in 2015, and in the area immediately surrounding this intersection, there have been a total of 42 crashes with 40 injuries over the past five years.

The Town of Hammonton seeks to ameliorate this situation by vacating the area of Moss Mill Road between Lakeview Drive and Egg Harbor Road, thus removing the hazardous intersection of Moss Mill Road and Egg Harbor Road, making the intersection of Moss Mill Road and Lakeview Drive a three-way intersection, and removing the left-hand turn from Moss Mill Road onto Egg Harbor Road, a PSC. The vacated stretch of Moss Mill Road will be transformed into a 10-foot-wide pedestrian and pedalcyclist shared path with extensive green infrastructure including a rain garden for bioretention with vegetative swales and native plantings including songbird and pollinator species. The pedestrian and pedalcyclist paths will split at the vacated intersection, with the 10-foot-wide pedestrian path leading to existing and planned trails throughout Hammonton Lake Park described above and the pedalcyclist trail continuing along Egg Harbor Road. Additional striping and gore will be added between the connector trail and Egg Harbor Road.

Measuring Progress of Safety Improvements

The safety impact of the projects suggested in this plan will be measured periodically and systematically based on accident data.

Primarily, this data will be collected from the Hammonton Police Department, who are required to report crash data to state and federal agencies. This data will be reviewed regularly and periodically to analyze the impact of the safety improvements.

In addition to crash data from the police department, Safety Voyager – the data-gathering application that was utilized to select the project areas in this plan – will be monitored annually to determine the impact of the projects on the safety of pedestrians and pedalcyclists in the Town.

In both cases, crash data will be compared to the data gathered in the development of this plan to determine if a decrease in accidents and injuries has occurred as a result of the projects proposed herein. Should that be the case, further analysis will take place to determine if additional improvements should be planned to further reduce incidents in the project areas. Information from the impacts of these improvements will also be utilized to help plan for the reduction of incidents in other areas of the town with similar safety concerns.

TOWN OF HAMMONTON
COUNTY OF ATLANTIC
RESOLUTION #096-2023

RESOLUTION TO ADOPT THE US DEPARTMENT OF TRANSPORTATION'S (US DOT) "TOWARD ZERO DEATHS" INITIATIVE OF ZEOR ROADWAY FATALITIES AND SERIOUS INJURIES AND TO ADOPT THE TOWN'S REVISED BICYCLE AND PEDESTRIAN SAFETY MASTER PLAN

WHEREAS, the Town of Hammonton intends to adopt a goal of zero roadway fatalities and serious injuries, known as "Vision Zero" or "Toward Zero Deaths" by 2050 for the Town; and

WHEREAS, the Town of Hammonton Bicycle and Pedestrian Master Plan has been developed by committee to support the goal of zero roadway fatalities and serious injuries, originally adopted in 2021 and amended in 2022; and

WHEREAS, the Town of Hammonton Bicycle and Pedestrian Master Plan has been further amended in 2023.

NOW THEREFORE BE IT RESOLVED that the Town of Hammonton hereby adopts the "Toward Zero Deaths" initiative and commits to develop the tools to help strengthen the community's approach to roadway safety and save lives; and

BE IT FURTHER RESOLVED that the Town of Hammonton does adopt and commit to the goal of zero roadway fatalities and serious injuries in the Town by 2050; and

BE IT FURTHER RESOLVED that the Town of Hammonton hereby adopts the Town of Hammonton Bicycle and Pedestrian Master Plan and correlating supportive planning documents, including all revisions made in 2022 and 2023.

Adopted: June 26, 2023

Mayor, Stephen DiDonato

Municipal Clerk, Frank Zuber

TOWN OF HAMMONTON

Sam Schwartz