



## List of meeting materials

### Phase 2 Working Group Meeting #6

Monday, October 26, 2020, 6:00 pm  
Online

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## Agenda

### Phase 2 Working Group Meeting #6

Monday, October 26, 2020, 6:00 pm  
Online

1. Introduction
  - Summary of notebook materials
  - Approval of July 27, 2020 meeting minutes
2. Welcome: Nicole Majeski, Deputy Secretary, DeIDOT
3. Henlopen TID update
4. Map of active projects and studies in the area
5. Mulberry Knoll Road extension
6. Phase 2 implementation status
7. Presentation on DeIDOT's traffic activities in the study area
8. Public comment
9. Adjourn



# Phase 2 Working Group Meeting #6

**October 26, 2020**

- **Introduction**
- **Welcome: Nicole Majeski, Deputy Secretary, DeIDOT**
- **Henlopen TID update**
- **Map of active projects and studies in the area**
- **Mulberry Knoll Road extension**
- **Phase 2 implementation status**
- **Presentation on DeIDOT's Traffic/ITS work**
- **Public comment**

# How to raise your hand

3

The screenshot shows a Cisco Webex meeting interface. At the top, the title bar reads "Cisco Webex Events" and "Hide menu bar ^". Below this is a menu with "File", "Edit", "Share", "View", "Communicate", "Participant", "Event", and "Help". The main area displays a large circular profile picture with the initials "JC" for Jennifer Cinelli (Host). Below the profile picture is a toolbar with several icons: a microphone, a video camera, a hand icon (circled in red), a person icon, a speech bubble, a three-dot menu, and a red 'X' icon. A tooltip labeled "Participants" is visible over the hand icon. At the bottom, there is a gallery of video thumbnails for other participants: Jennifer Cinelli (Host), Adrienne Eiss, John Fiori, Shante Hastings, ANDREW BING, Tremica Cherry-Wall, and a partially visible participant on the right. The Windows taskbar is visible at the very bottom, showing various application icons and the system clock displaying "2:06 PM 7/23/2020".

# How to raise your hand

The screenshot shows a Cisco Webex meeting window. At the top, the title bar reads "Cisco Webex Events" and "Hide menu bar ^". Below it is a menu with "File", "Edit", "Share", "View", "Communicate", "Participant", "Event", and "Help". The main content area displays "Speaking: Jennifer Cinelli (Host)" and a large circular placeholder with the initials "JT" for Josh Thomas. At the bottom, a gallery of participants includes Jennifer Cinelli (Host), Josh Thomas, Kristen Ahlfeld, Shante Hastings, Andrew Bing, and John Fiori. On the right, a "Participants (12)" list shows names with status icons (hand, camera, microphone). A red circle highlights the hand-raising icon in the bottom right of the participants list. Below the list is a "Chat" section with a "Question..." input field. The Windows taskbar at the bottom shows the time as 2:03 PM on 7/23/2020.

- **Summary of notebook materials**
  - Agenda
  - Presentation
  - Draft minutes of July 27 Working Group meeting
  - List of upcoming meetings
  - Updated implementation plan
- **Approval of July 27, 2020 meeting minutes**



# Welcome



**Nicole Majeski**  
**Deputy Secretary,**  
**DeIDOT**



# HENLOPEN TID UPDATE



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# Henlopen TID update

- **MOU between DeIDOT and Sussex County signed on September 22**
- **DeIDOT presented on the TID agreement at the September 22 Sussex County Council meeting**
  - Presentation is on DeIDOT's TID website at <https://deldot.gov/Programs/transportation-improvement-districts/>
- **A vote on the TID agreement is on tomorrow's Sussex County Council meeting agenda**

# MAP OF ACTIVE PROJECTS AND STUDIES IN THE AREA



**Regional  
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Planning**



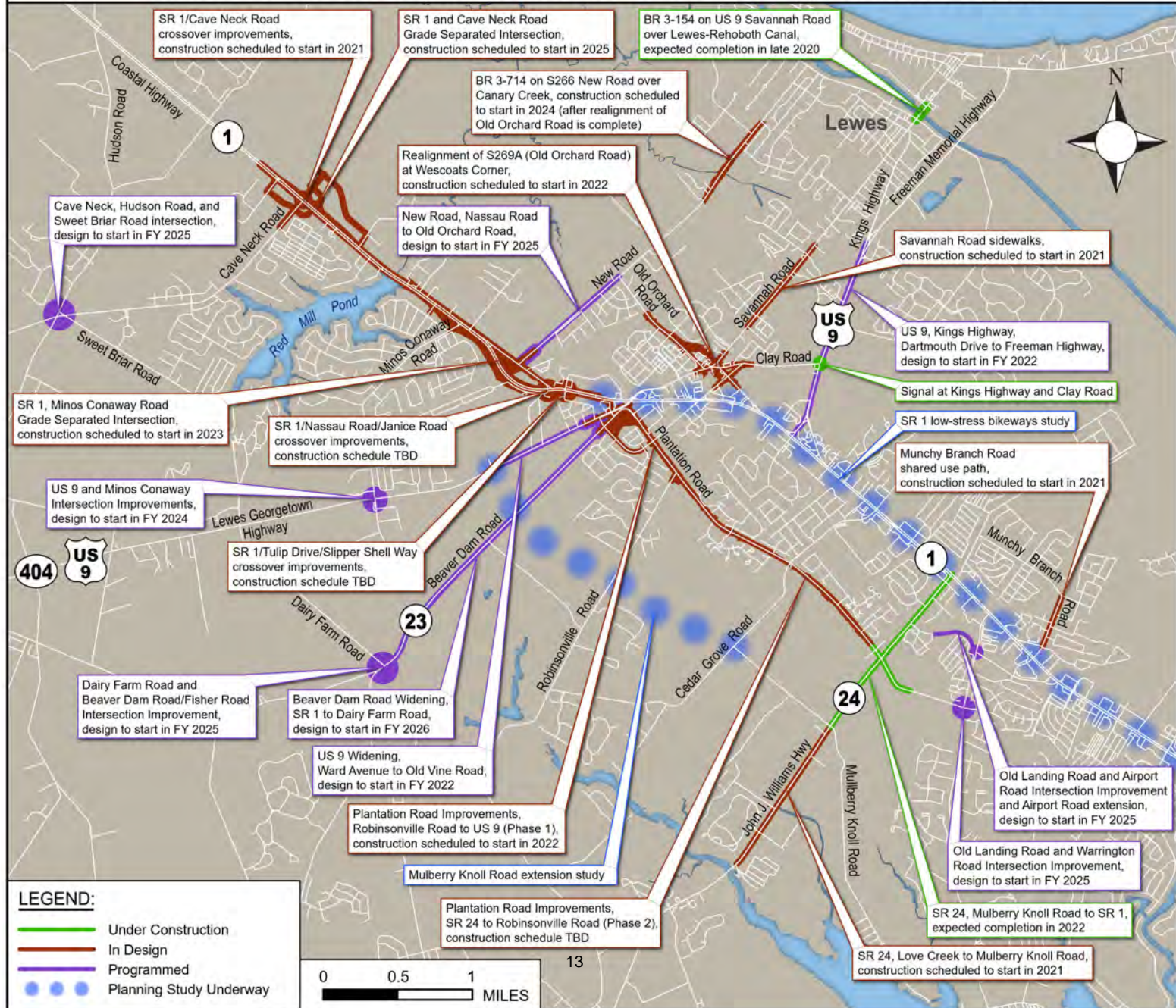
# Map of projects and studies

- **Created to show how DeIDOT's activities in the Five Points area fit together**
- **26 total**
  - 3 under construction
  - 12 in design
  - 2 planning studies underway
  - 9 programmed
- **Map is located on the Five Points website at [5points.deldot.gov](http://5points.deldot.gov)**



# FIVE POINTS TRANSPORTATION STUDY

## ACTIVE PROJECTS AND STUDIES IN THE AREA, OCTOBER 2020



# MULBERRY KNOLL ROAD EXTENSION

# Mulberry Knoll Road Extension

- **The extension of Mulberry Knoll Road to US 9 was a recommendation of both Phase 1 of the Five Points Transportation Study and the Henlopen TID study**
- **The study will include consideration of whether DeIDOT should:**
  - Extend Mulberry Knoll Road,
  - Widen Plantation Road between Robinsonville Road and Route 24, or
  - Both
- **Work is just beginning**

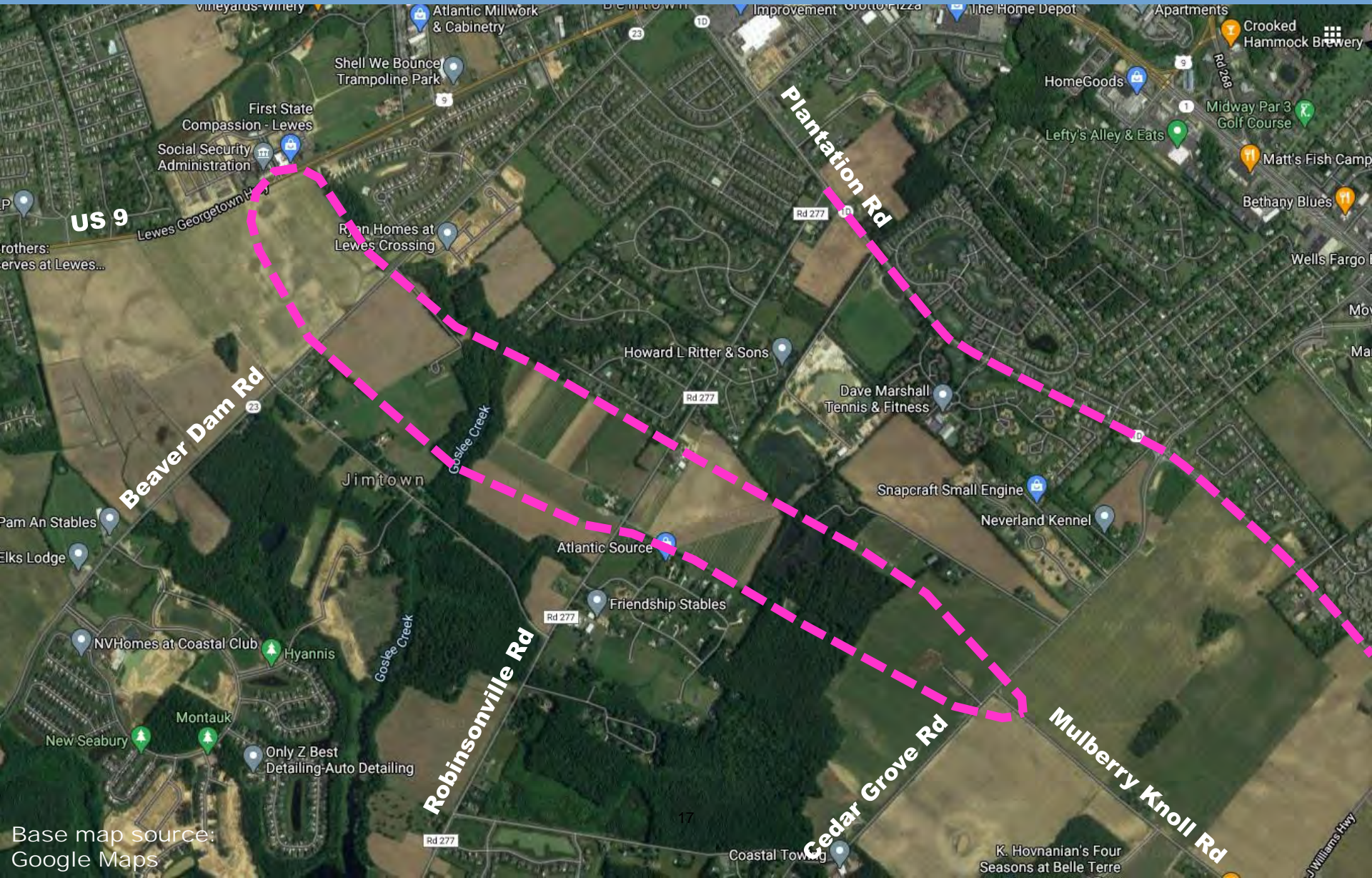


# Mulberry Knoll Road Extension

14

- **Inventory and mapping of wetlands and historic resources is underway**
- **Opportunities for public involvement will be provided during the study process**

# Mulberry Knoll Road Extension



Base map source:  
Google Maps

K. Hovnanian's Four  
Seasons at Belle Terre





# 78 recommendations

Recommendations to be implemented under current DeIDOT projects or initiatives (7 recommendations)

Implement policies and procedures to make the area more efficient, sustainable and beautiful (8 priorities out of 27 recommendations)

Make the most of existing roadway infrastructure (8 priorities out of 20 recommendations)

Make walking, bicycling, and transit more viable as alternatives to driving (5 priorities out of 15 recommendations)

Invest in new infrastructure to support anticipated growth (3 priorities out of 9 recommendations)

## 42 of 78 recommendations in progress, ongoing, or completed

- 7 of 7 in Category A – to be addressed by current DeIDOT projects or initiatives
- 12 of 27 in Category B – policies and procedures
- 13 of 20 in Category C – make the most of existing infrastructure
- 7 of 15 in Category D – bicycle, pedestrian, transit
- 3 of 9 in Category E – major infrastructure improvements

## 43 of 78 recommendations in progress, ongoing, or completed

- Another of the recommendations to be initiated in 2020 is now in progress
- 2 of 5 recommendations to be initiated in 2020 remain to be initiated in 2020

# Category A

being addressed by current DeIDOT projects and initiatives

## Number of recommendations by status

| Status      | Jul 2020 | Oct 2020 | Change |
|-------------|----------|----------|--------|
| COMPLETE    | 5        | 5        | -      |
| IN PROGRESS | 2        | 2        | -      |
| Total A     | 7        | 7        | -      |



### Number of recommendations by status

| Status                   | Jul<br>2020 | Oct<br>2020 | Change |  |
|--------------------------|-------------|-------------|--------|--|
| <b>COMPLETE</b>          | 4           | 4           | -      |  |
| <b>ONGOING</b>           | 3           | 3           | -      |  |
| <b>IN PROGRESS</b>       | 4           | 5           | -      |  |
| <b>Priority for 2019</b> | 2           | 2           | -      |  |
| <b>Initiate in 2020</b>  | 2           | 1           | -      |  |
| <b>Longer-term</b>       | 12          | 12          | -      |  |
| <b>Total B</b>           | 27          | 27          | -      |  |

- **B-3 – Study the feasibility and anticipated effectiveness of modifying signage, starting in Milford, to encourage through drivers (to points outside the Route 1 corridor between Lewes and Dewey Beach) to use Route 113, Route 5, Route 23, etc.**
  - DeIDOT has been testing display of (automated) travel time information on various variable message signs approaching the beach area (including information north of the SR 1 and US 113 split).
  - Electronic sign travel time display was tested in August and September and will begin regular operation in November.
  - This information is also available on the DeIDOT app.

- **B-7 – Continue TID studies both east and west of Route 1**
  - At its October 27 meeting, Sussex County Council will consider approval of the Henlopen TID agreement

- **B-21 – Study frequency and causes of emergency vehicle preemption and make recommendations to balance emergency vehicle access with traveler mobility**
  - New signal controllers that will enhance recovery from preemption were deployed along the corridor.
  - The vendor is working on firmware updates to take advantage of this feature.
  - More in tonight's Traffic/ITS presentation.

# Category C

## Make the most of existing roadway infrastructure

### Number of recommendations by status

| Status           | Jul 2020 | Oct 2020 | Change |  |
|------------------|----------|----------|--------|--|
| COMPLETE         | 4        | 4        | -      |  |
| ONGOING          | 1        | 1        | -      |  |
| IN PROGRESS      | 7        | 8        | +1     |  |
| Initiate in 2020 | 2        | 1        | -1     |  |
| Longer-term      | 6        | 6        | -      |  |
| Total C          | 20       | 20       | -      |  |

- **C-1 – Conduct a corridor study on Route 9 to determine the feasibility of widening to four lanes**
  - Was considered by Henlopen TID study, with limits from Ward Avenue to just west of Old Vine Boulevard.
  - A DeIDOT planning study is underway.
  - A project is programmed in the FY 21 - 26 CTP.
  - Design is scheduled to start in FY 2022.

- **C-3 – Initiate a capital project to improve the intersection of Old Landing and Warrington Road (developer funding and concept are available)**
  - A project is programmed in the FY 21 - 26 CTP.
  - Design is scheduled to start in FY 2025.



- **C-5 – Improve the intersection of Cave Neck Road, Sweet Briar Road, and Hudson Road**
  - A project is programmed in the FY 21 - 26 CTP.
  - Design is scheduled to start in FY 2025.
  - This schedule may be accelerated through FAST (Funding Accelerating Safety in Transportation), for which approval is pending.

- **C-6 – Study the feasibility of lengthening left- and right-turn lanes throughout the study area**
  - Now IN PROGRESS.
  - DeIDOT Traffic is evaluating locations suggested by Five Points Working Group members at the January 27, 2020 meeting.

- **C-19 – Study the feasibility of an all-way STOP at Beaver Dam Road and Kendale Road**
  - Considered by Henlopen TID study, which recommended a traffic signal by 2045.
  - Selection of appropriate traffic control will need to take into account crash history and the curvature of the road.

- **C-20 – Study the feasibility of replacing the HAWK signal with a full signal at Holland Glade Road, potentially with a fourth leg at the outlets**
  - Coordination continues with the developer.
  - Plan review is being completed by Planning's Development Coordination section.

# Category D

## Walking, bicycling, and transit

### Number of recommendations by status

| Status                  | Jul 2020  | Oct 2020  | Change     |
|-------------------------|-----------|-----------|------------|
| <b>COMPLETE</b>         | <b>0</b>  | <b>1</b>  | <b>+1</b>  |
| <b>IN PROGRESS</b>      | <b>7</b>  | <b>6</b>  | <b>- 1</b> |
| <b>Initiate in 2020</b> | <b>1</b>  | <b>1</b>  | <b>-</b>   |
| <b>Longer-term</b>      | <b>7</b>  | <b>7</b>  | <b>-</b>   |
| <b>Total D</b>          | <b>15</b> | <b>15</b> | <b>-</b>   |

- **D-14 – Study the feasibility of signing and/or pavement markings that will improve bicyclist comfort turning left from Dartmouth Drive onto Route 1**
  - Bike box is not feasible at Dartmouth Drive.
  - Bicyclists may cross SR 1 with pedestrian signals.
  - Additional safety measures may be considered as part of the Kings Highway CTP project, which includes this intersection.
  - D-14 is now COMPLETE.

- **D-15 – Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway.**
  - Rectangular Rapid Flashing Beacons (RRFBs) are now operating at the trail crossing of Freeman Highway near Cape Henlopen Drive.





# Category E

## New infrastructure

### Number of recommendations by status

| Status      | Jul 2020 | Oct 2020 | Change |
|-------------|----------|----------|--------|
| COMPLETE    | 0        | 0        | -      |
| IN PROGRESS | 3        | 3        | -      |
| Longer-term | 6        | 6        | -      |
| Total E     | 9        | 9        | -      |

- **E-2 – Evaluate the potential transportation benefits, costs, and impacts of a new road parallel to Plantation Road connecting Mulberry Knoll Road to Route 9; require any new development in this area to build this road to state specifications one parcel at a time.**
  - Planning study is underway as described earlier.

- **Next steps**

- Continue work on recommendations
- Provide email progress updates in November and December
- Convene the Working Group on January 25, 2021
- Prepare annual report for 2020, to be issued in spring of 2021

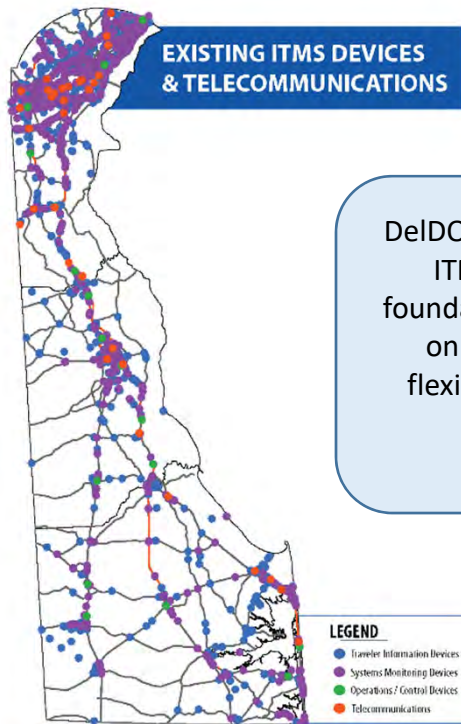
# TRAFFIC/ITS PRESENTATION



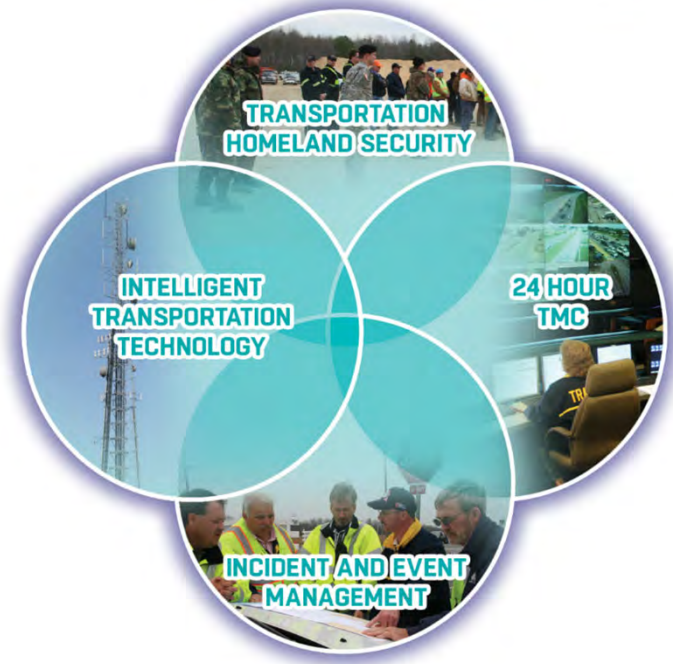
**Regional  
Systems  
Planning**



# DeIDOT's Integrated Transportation Management System (ITMS)



DeIDOT's existing multifaceted ITMS provides a robust foundation for innovation built on telecommunications, flexibility and an adaptable system



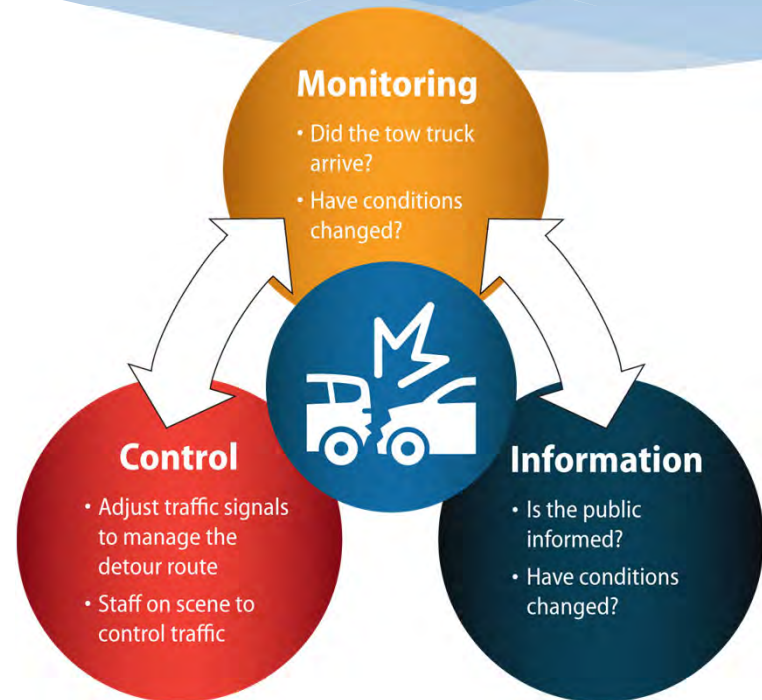
**A-ITMS**

<https://deldot.gov/programs/itms>

# DeIDOT's Integrated Transportation Management System (ITMS)

- **Innovative ITMS**

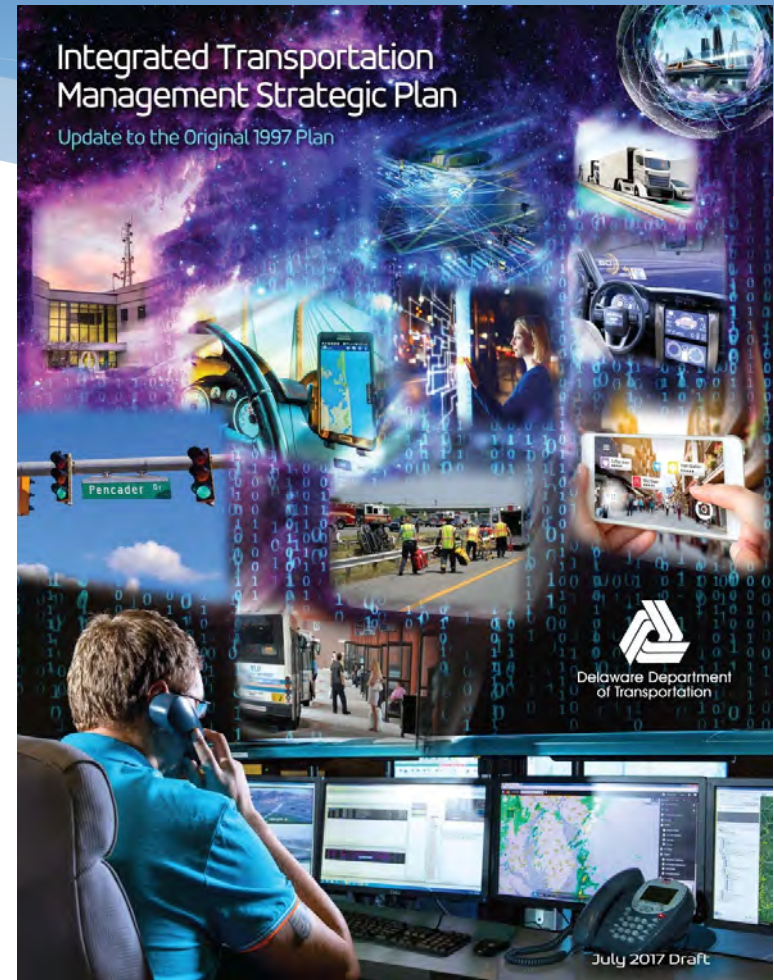
- Comprehensive monitoring system
- Integrating transit operations with highway operations
- DeIDOT App and Website
- Robust fiber and wireless telecommunications network
- Real-time monitoring and control
- Statewide computerized signal system





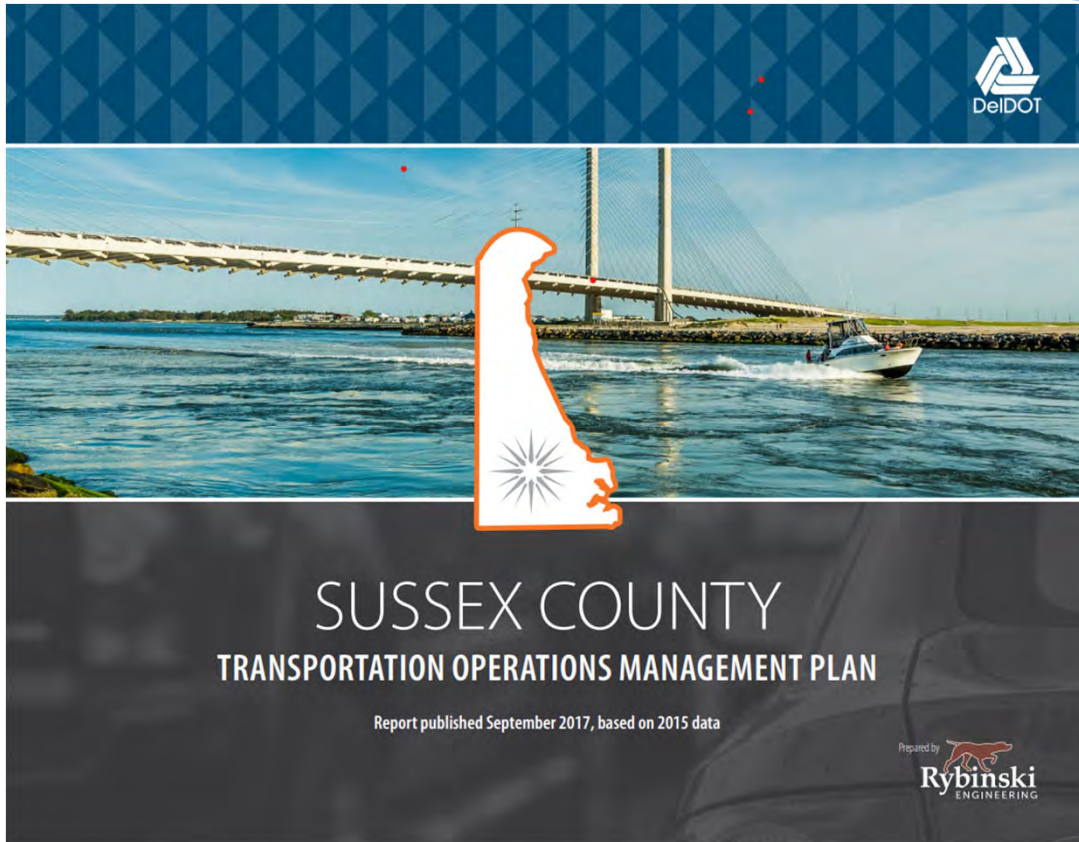
# DeIDOT ITMS Strategic Plan

- **2017 update to the ITMS Strategic plan**
- Addresses emerging technologies and DeIDOT's existing leverage for implementation:
  - Telecommunications Network
  - Traffic Signal and Intelligent Transportation System (ITS) Device Integration into Transportation Management Center (TMC)
  - Transit Integration
  - DeIDOT Mobile Application
- The next phase of ITMS will incorporate Artificial Intelligence (AI) and Machine Learning (ML)



Ai-ITMS

# TOMP

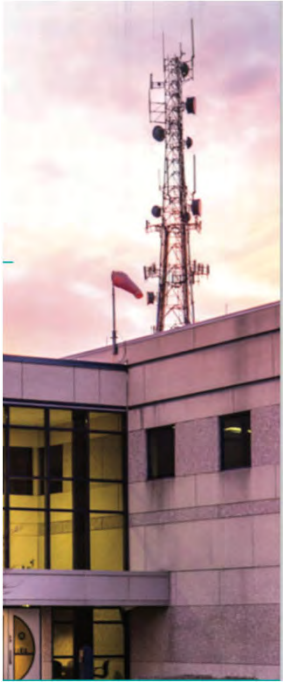


- Developed in coordination with Division of Planning
- TOMPS developed for New Castle, Kent and Sussex
- TOMP will now be done on a three year rotation
  - Kent – December, 2020
  - New Castle – 2022
  - Sussex - 2023

<https://deldot.gov/Publications/reports/ITMS/pdfs/ITMS-Sussex-County-TOMP.pdf>

# Transportation Management Center<sup>43</sup>

## TMC



- TMC first envisioned in 1997 ITMS Strategic Plan
- Single point of contact for statewide transportation management and operations
- 24/7/365 operation coordinates and manages DelDOT 's response to incidents and events impacting the state's multimodal transportation system.



DELAWARE DEPARTMENT OF TRANSPORTATION



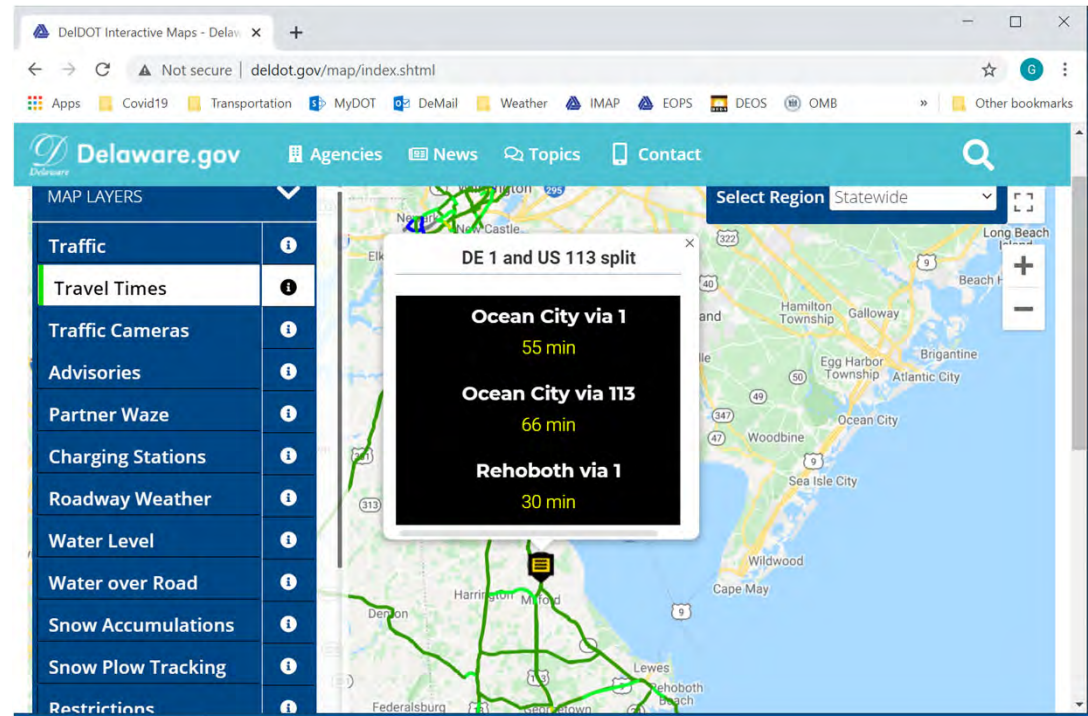
TRANSPORTATION MANAGEMENT CENTER





# Travel Times

- Travel Times
  - Links
  - Destinations
- Bluetooth/Wi-Fi technology
- Available
  - DeIDOT APP
  - DeIDOT Interactive Map (web)
  - Electronic Message Signs
    - Sign control software in process of being upgraded
    - Tested late summer
  - WTMC 1380 AM/98.5 FM (Delay information in season for beach routes)
    - Available on DeIDOT App and Web



# ITMS – Statewide Computerized Signal System

.... the core of DeIDOT's ITMS Program

45

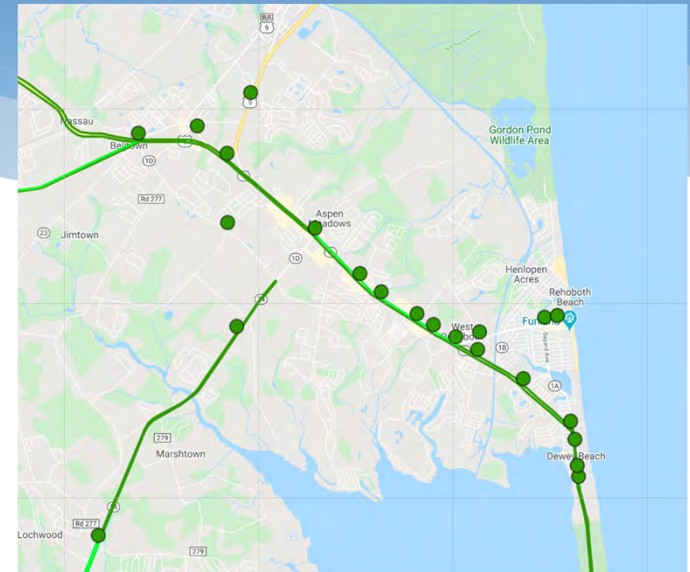
## Statewide Computerized Signal System

- Operated from 24 Hour Transportation Management Center (TMC) near Smyrna, DE
- As of January 2020 all of the approximately 1000 DeIDOT maintained signals on system
- Three types of traffic signal operation
  - **Isolated intersection**– Fully actuated
  - **Coordinated Groups (Zones)** – Semi-actuated operation
  - **Manual operation**



# ITMS – Statewide Computerized Signal System<sup>46</sup>

- **Coordinated Groups (Zones) – Semi-actuated operation**
  - Cycle Length – Total time from main street (DE1) red to red
  - Offset - (Coordination between signals referenced to central computer clock)
  - Splits- (Percentage of cycle length allocated to each signalized movement (signal phase), includes G/Y/R)
  - **Time of Day** – Signal timing patterns are selected by time of day
  - **Traffic Responsive** – Signal timing patterns are automatically selected by vehicle demand
  - “System” detectors located on far side of intersection provide volume/delay information to central computer.
- **Manual operation** - incidents, construction, events – TMC can adjust real time zone and intersection signal timing parameters



System Detector Locations



6'x6' inductance loop detector each lane



# ITMS – Statewide Computerized Signal System <sup>47</sup>

## Statewide Computerized Signal System

### DE1 Lewes-Rehoboth, Dewey Beach Zones

Sussex Zone 20 – DE1 US9 to Bay Vista Rd.

Traffic responsive

Cycle lengths 90, 120, 150, 165

Inbound (southbound), balanced, outbound (northbound)

Sussex Zone 19 - DE1 Spring Lake Dr. to Collins St.

Traffic responsive

Cycle lengths 90, 120, 150, 165

Inbound (southbound), balanced, outbound (northbound)



# ITMS – Statewide Computerized Signal System<sup>48</sup>

## Signal Operation/Timing Impacts

Demand vs Capacity – when demand exceeds capacity there will be delay

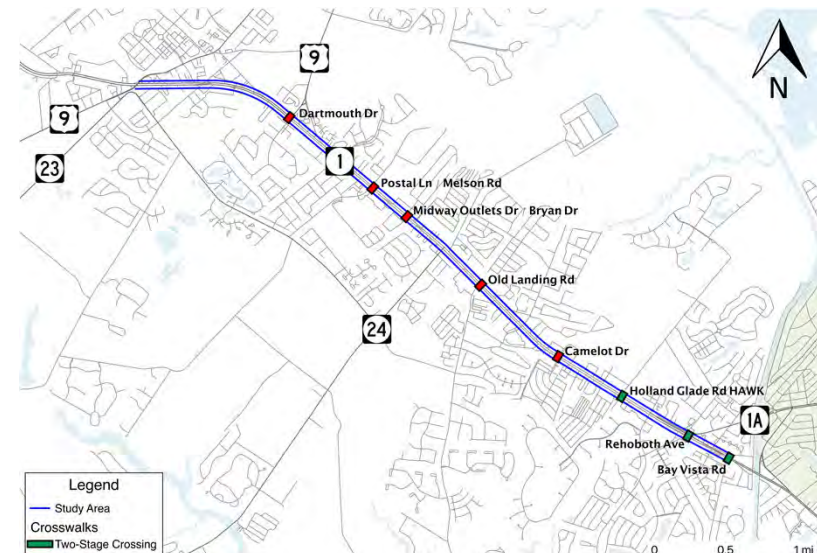
- Signal timings do not add capacity
- Number of signalized movements (Phases)
- Once a signalized intersection is over capacity, you are assigning percentage of delay to each movement
- Increasing the cycle length does not add capacity
- Above 120 to 150 second cycle lengths become less efficient because of the increasing gaps between vehicles



# ITMS – Statewide Computerized Signal System<sup>49</sup>

## Signal Operation/Timing Impacts

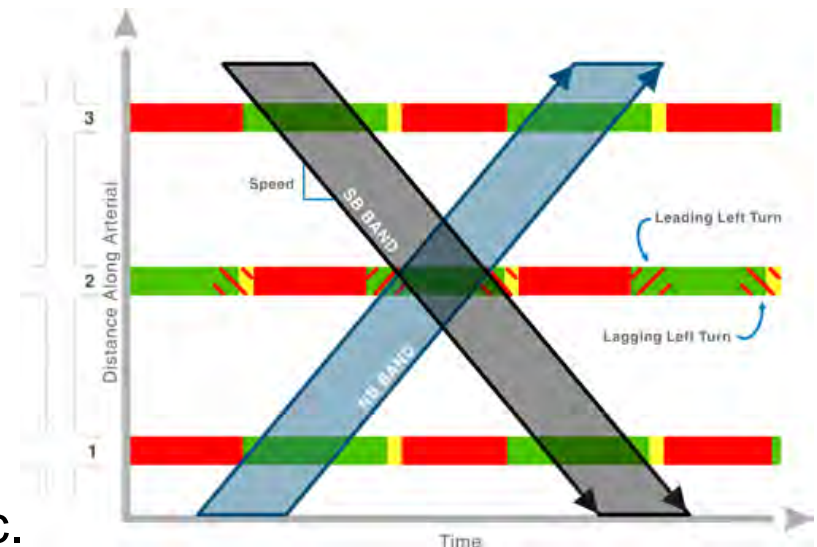
- Pedestrian Signal Timings
  - Width of DE1 ( in the Lewes to Rehoboth section, combined with narrow medians require 47 seconds ( 7 sec. W + 40 DW)
- Pedestrian impact on intersection level of service during peak periods.
  - DE 1 @ Camelot Dr:
    - LOS D w/o peds ( minor delay)
    - LOS F with peds ( one or > cycle delay ) Equivalent to 20 veh/lane/cycle



# ITMS – Statewide Computerized Signal System<sup>50</sup>

## Signal Operation/Timing Impacts

- Signal Coordination
  - “Early greens”, watch main street “Reds”
  - Intersection spacing impacts coordination
  - Directional pattern in operation, i.e. Inbound (southbound) pattern favors southbound progression, etc.
- Emergency Vehicle Signal Pre-emption



Traffic Signal Time Space Diagram

## AI-ITMS Artificial Intelligence-enhanced ITMS Objectives

- **Create** and **maintain** an enhanced ITMS that will predict traffic anomalies and adapt management and operations in real-time for current and predicted traffic conditions.
- Adopt and deploy **AI and ML** technologies to **automate** multimodal system tasks (e.g. data collection, analysis, decision support, and solution evaluation processes)
- **Monitor** all components of DeIDOT's ITMS and **optimize** performance to improve **safety, mobility, sustainability, economic vitality, and air quality**
- Prepare DeIDOT's TMC to integrate **emerging transportation technologies** more efficiently and effectively



## AI-ITMS Deployment

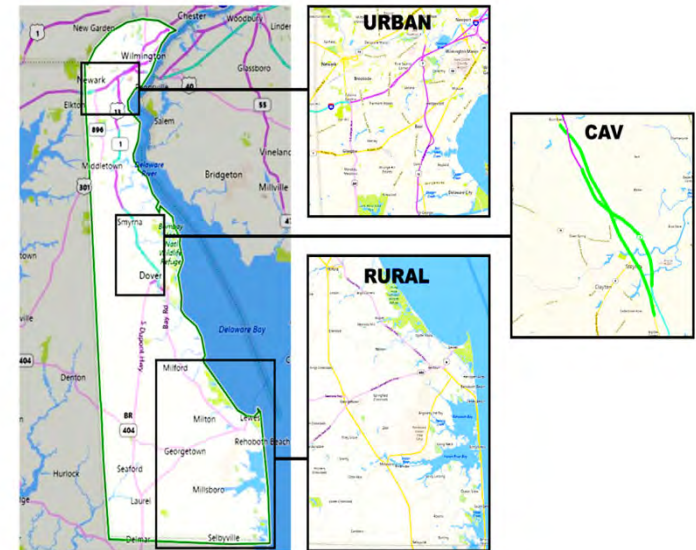
Implementation will occur over a duration of **three** years in **three** project areas.

The project team is led by the **DeIDOT Division of Transportation Solutions**, supported by:

**Jacobs Engineering** – Program Management Consultant

**Intelligent Automation, Inc. (IAI)** – Technical Consultants

**University of Delaware** – supporting program evaluation by monitoring and reporting on project and program benefits





# Thank You - Questions ?



Connected Vehicle

Automated Shuttles

Contact:  
Gene Donaldson  
[gene.donaldson@delaware.gov](mailto:gene.donaldson@delaware.gov)  
Cell: 302-222-5907

# Public comment

# Thank you for your participation!

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Next meeting  
**Monday, January 25, 2021**  
**6:00 pm**  
**Location TBD**

**Jenn Cinelli-Miller**

Project Planner

Delaware Department of Transportation

[jennifer.cinelli@delaware.gov](mailto:jennifer.cinelli@delaware.gov)

302.760.2549

DRAFT



## Meeting Minutes

### Phase 2 Working Group Meeting #5

July 27, 2020, 6:00 pm  
Online

Members present:

I.G. Burton  
Robert Fischer  
Scott Green  
DJ Hughes  
Carole Kohr  
Todd Lawson  
Sen. Ernesto B. Lopez  
Lloyd Schmitz  
Rep. Peter Schwartzkopf  
Kim Hoey Stevenson  
Josh Thomas  
Ann Marie Townshend  
Gail Van Gilder

Members absent:

Greg Christmas  
Dennis Forney  
Rev. Wendell B. Hall  
Christian Hudson  
Doug Hudson  
Rep. Steve Smyk  
Helen Truitt

This was a virtual meeting on DeIDOT's WebEx platform. The meeting began with a quorum of 13 Working Group members present.

Andrew Bing welcomed everyone and provided information to the public on how to use the online chat function to make comments or ask questions. He noted that the public would have the opportunity to comment at the end of the meeting.

Andrew went over the agenda and summarized the contents of the meeting packet that was emailed to the members of the Working Group prior to the meeting. The minutes of the January 27, 2020 Working Group meeting were approved unanimously.



# DRAFT

Ann Marie Townshend informed the group that Lewes had a municipal election and two new City Council members would be sworn in on August 7.

Gail Van Gilder commented that while the Five Points effort is very well coordinated, in her opinion the coordination for New Road and Kings Highway master plans needs improvement.

## Virtual Open House

Jeff Riegner summarized public feedback from the Virtual Open House, which was held to describe progress made in 2019 on implementation of study recommendations. Six drop-in sessions were held at various dates and times between May 18 and June 6 to maximize opportunities for the public to attend. 75 people attended. Polls conducted during the sessions revealed:

- 80% of poll respondents agreed the Five Points Transportation Study process is informative
- 53% of respondents are pleased with the progress of implementation in 2019
- The majority of respondents liked the online open house format, either in conjunction with or instead of in-person meetings.

## Implementation Plan Status

Jeff described the implementation plan status and progress that has been made since the April 27, 2020 update that is posted on the study website.

Two recommendations to be initiated in 2020 are now in progress:

- B-25 – Identify the costs and benefits of dedicating Nassau Commons Boulevard to public use
- C-12 – Study access management opportunities along Route 1 in the study area, including potential connections between businesses

Two recommendations are now Complete:

- C-8 – Study the feasibility of restriping two-lane sections of Savannah Road with a two-way left turn lane. The DeIDOT study is complete. The Byway Committee is investigating moving forward with a Savannah Road master plan that will consider whether a two-way left turn lane should be provided.



# DRAFT

- C-9 – Evaluate potential short-term safety and operational improvements at Route 9, Plantation Road and Beaver Dam Road while longer-term improvements are under development. Signing and striping improvements were completed in spring of 2020.

The progress of implementation since April 2020 is described in detail in the presentation slides and on the implementation plan status spreadsheet. This information is in the Working Group meeting packet, which is available to the public on the Five Points website at [5points.deldot.gov](http://5points.deldot.gov). A video of the presentation is also available on the Five Points website.

## Working Group Comments and Questions

For some of the recommendations, Working Group members raised questions or provided comments as described below.

### B-9 - Study enhancing New Road per the Byway Master Plan

There was extended discussion of B-9. The New Road Corridor Master Plan was endorsed by the Lewes Mayor and City Council, The Byway Committee is being transitioned to a citizen-led committee with representation from the City. Carole Kohr asked how the Master Plan is used by DeIDOT during design. She was also interested in Old Orchard Road, which does not have a master plan. Jeff Riegner responded that the New Road Corridor Master Plan was initiated by the Byway Committee and developed in conjunction with DeIDOT. The Byway Committee has not initiated a master plan for Old Orchard Road or Clay Road.

Whenever a DeIDOT project is along a road with a master plan, that plan is consulted from the beginning of design. New Road has not yet entered the design phase. DeIDOT's Old Orchard Road/Wescoats Road project has been in design for awhile. Although that project area doesn't have a master plan, the project goes through a standard review process with Planning input and public participation.

I.G Burton asked whether there is a plan that shows all the roads on the route from New Road to Old Orchard Road to Wescoats Road to Clay Road to King's Highway. If there is not, a plan should be produced.

I.G. also asked how much traffic will increase on the route from Nassau Road via Wescoats Road to Kings Highway. Jeff responded that traffic studies presented to the City of Lewes in 2019 showed about 200 vehicles per day diverting to this route as a result of the DeIDOT capital projects. However additional traffic would be added from new developments. Anne Marie said even though the impact from the DeIDOT projects may be low, people that live in the area are concerned about





# DRAFT

overall traffic increase. DJ Hughes expressed his opinion that the traffic studies underestimate the traffic volume that will use the New Road underpass of Route 1 after the Minos Conaway grade separated intersection project is completed.

DJ noted that the current plans for Clay Road do not have shoulders all the way to Kings Highway, and he believes shoulders should be added.

Gail mentioned there is a recent traffic study for private development in the area of Kings Highway and Gills Neck Road that shows the volume of traffic that must be planned for.

Bob Fischer said the plan for vehicles must coordinate with the shared use pathways for bicycles, for example the trail crossing of Old Orchard Road.

C-20 - Study the feasibility of replacing the HAWK signal with a full signal at Holland Glade Road, potentially with a fourth leg at the outlets.

Rep. Schwartzkopf said access from the outlets needs to be able to make a left turn to go north on Route 1, and it should be a 4-way intersection. Marc Coté, DeIDOT's Director of Planning, said DeIDOT is working with the developers on a plan for a 4-way intersection that will allow left turns from southbound Route 1 into Holland Glade Road as well as left turns out of Holland Glade Road and out of the outlets. This will reduce the need for U-turns and help the Shuttle Road intersection. DJ agreed this will be a significant safety and operational improvement.

D-11 Study the feasibility of providing context-sensitive bus shelters at bus stops is now in progress.

DTC has a statewide standard for bus shelter design. 13 shelters have been installed and DTC continues to look for opportunities to install more shelters at high demand stops. Rep. Schwartzkopf said he would be willing to fund a few shelters through the Community Transportation Fund. DTC can contact him or his assistant Eric Hastings.

Regarding potential transit service to Henlopen State Park, Gail commented that jitney service makes more sense than a fixed route extension into the Park. But in either case, the Park has a standard not only how many cars it can take, but how many people it can handle. Planning for bus service needs to coordinate with the Park so buses don't bring in more people than the Park can handle.



# DRAFT

## Presentation on DeIDOT's Bicycle Program

John Fiori, DeIDOT's Bicycle Coordinator, provided a presentation that covered the many aspects of DeIDOT's bicycle program. John has been with DeIDOT for 31 years and has been the Bicycle Coordinator since 2015. Presentation topics included:

- Bicycle-friendly accomplishments
- What DeIDOT has done to support bicycling and to improve infrastructure and safety
- Trail crossings at roadways
- Bicycle safety countermeasures
- Delaware bicycle laws
- Connections from developments to trails

After the presentation, Working Group members provided comments.

Gail said the trail crossing of Freeman Highway is not safe. Traffic moves at high speeds and bicyclists often don't stop. Blinking lights or something more is needed. John responded that this section of road is owned by DRBA. DRBA had the flashing lights removed and is currently monitoring the crossing with cameras.

Kim Hoey Stevenson commented that the trail map does not show parking locations for trail users. People show up and park on residential streets. Parking locations should be added to the trail map. John said DeIDOT tries to update the map every year, and parking locations can be added in the next update.

There was much discussion about trail crossing safety. I.G commented that at any crossing there is confusion over whether the motorist or the bicyclist has to yield. This is a serious safety issue, especially where the speed limit is 45 mph. Bob said a bicyclist is not required to stop if the crossing is a 2-lane road. John Fiori clarified that bikes can yield at a Stop sign if the coast is clear.

John noted all DeIDOT's efforts toward educating trail users, e.g. signing improvements, education for summer student workers, bike safety checkpoints, handing out brochures during summer season. However, there are new users all the time (recreational tourists) who are not familiar with the rules.

Several Working Group members believe the law is confusing. There is a need to funnel bicyclists into a stop or slow down mode at crossings.

Rep. Schwartzkopf said the Delaware Yield Law applies to public roadways and doesn't refer specifically to trails. Law enforcement agencies have different



# DRAFT

opinions. The Delaware Yield Law expires October 5, 2021. The law should be left to expire.

A second safety concern is the speed of some bikes and complaints from concerned pedestrians about close calls. DeIDOT tries to get the word out that the trails are for all users and “spandex riders” need to slow down when near other users. There has been one head-on bike/bike crash due to an unsafe passing maneuver.

John described the process for getting commercial and residential development connections to the trail. During design of a new trail section, DeIDOT will design and construct the connection within the state right of way, and the developer will then construct to the state right of way. New developments along existing trails may be required to extend a connection to the trail. Any connection made by a homeowner without DeIDOT approval can be removed. The main concern is that unauthorized connections could block the carefully designed drainage. At this time, DeIDOT is not removing these connections unless they are causing a problem.

At Cool Spring Road, the current plan for the Lewes - Georgetown Trail crossing of Route 9 is to keep the trail on the north side of Route 9 to the intersection of Hudson and Fisher Roads, cross at the traffic signal, go along the Dollar General Store property and then back to the rail line. The only alternative would be a grade separated crossing. I.G. said the Sussex Land Trust has partnered with others to do a feasibility study of a possible overhead pedestrian crossing.

The video recording of the meeting on the Five Points website includes the full bicycle presentation.

Jeff summarized the next steps in the Working Group process:

- Updates on the implementation plan will continue.
- The next meeting will be held October 26, 2020. It is yet to be determined whether this meeting will be in person or online.
- Email progress updates will be sent in August and September.
- An annual report of progress made in 2020 will be issued in spring 2021.

Andrew invited public comment.

## Public comments

- Kathleen Baker commented that the new bicycle facilities have drawn many added bicyclists from the neighborhood. She has also observed



# DRAFT

many new bicyclists including “athletic” bicyclists. She said the trails should be a place for all, and educational materials on how to behave on the trails should be aimed at all the different user groups. Regarding a possible overpass at Cool Spring Road, she said that would be a great place for an art project, creating something beautiful as well as useful.

- An unidentified caller asked for an update on the Plantation Road project. Shanté Hastings answered this question. Plantation Road is broken into two phases. Phase 1 goes from Route 9 to Robinsonville Road. Phase 1 is in design, and is scheduled to start construction in 2022. Phase 2 goes from Robinsonville Road to Route 24. DeIDOT is currently evaluating different alternatives, such as two lanes with added turn lanes, four lanes, different options for shoulders and bike facilities. DeIDOT will be evaluating costs, utility impacts and right of way impacts of widening for the different options. When the evaluation is complete DeIDOT will be presenting this information to the public.

Andrew adjourned the meeting at 8:06 pm.

## **Public attendance online**

Registration was not required, so the number of attendees is not available. Attendees’ names were not recorded unless they provided a comment during the public comments period.





## List of upcoming meetings

### Phase 2 Working Group

#### Meeting #7

January 25, 2021, 6:00 pm  
Location to be determined

#### Meeting #8

April 26, 2021, 6:00 pm  
Location to be determined

#### Meeting #9

July 26, 2021, 6:00 pm  
Location to be determined

**Meeting dates, times, locations, and agendas are subject to change.**

See the Delaware Public Meeting Calendar  
at [publicmeetings.delaware.gov](https://publicmeetings.delaware.gov)  
for official meeting notices.



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|---|----|----------|--------------|--|----------------------------|------------------------------------|------------|-----------------|-----------|----------------|--------------|----------------------------------|--|
| <b>A. Recommendations to be implemented under current DeIDOT projects or initiatives</b>                |    |          |              |  |                            |                                    |            |                 |           |                |              |                                  |  |
| A   | 1  | N/A      | 25           | Review the need for grade separating or restricting crossings between Frederica and Lewes before eliminating signals in this area  | DeIDOT - Traffic           |                                    | \$         | *               | N/A       | N/A            | N/A          | COMPLETE                         | Studies have been completed, with results presented to the Working Group in October 2019. DeIDOT is proceeding with a program of grade separations and crossover improvements.   |
| A   | 2  | N/A      | 42           | Evaluate Tulip Drive connection to Route 1 as part of the Minos Conaway Road grade separation project  | DeIDOT - PD South          |                                    | \$         | *               | \$\$      | **             | ◇◇           | COMPLETE                         | Tulip Drive connection is now part of the Minos Conaway project.   |
| A   | 3  | N/A      | 53           | Study the feasibility of increasing the proposed Route 24 bypass of Millsboro from one lane in each direction to two lanes in each direction   | DeIDOT - PD South          |                                    | \$\$       | **              | \$\$\$\$  | **             | ◇◇◇          | COMPLETE                         | This effort was completed as part of the US 113 Millsboro-South Area Supplemental DEIS. A two-lane bypass was found to be adequate for future demand.  |
| A   | 4  | N/A      | 54           | Study options for signage to direct appropriate traffic, i.e. local, boat, U of D and walking/biking areas, under the Nassau Bridge  | DeIDOT - PD South          |                                    | \$         | *               | TBD       | TBD            | TBD          | IN PROGRESS                      | This will be addressed as part of the Minos Conaway project. Documentation of signing will be available when semi-final plans are completed and the public will have the opportunity to comment. Coordinate with recommendation B-24.  |
| A   | 5  | N/A      | 55           | Evaluate one-way service roads as part of the Minos Conaway Road grade separation project  | DeIDOT - PD South          |                                    | \$         | *               | \$\$      | **             | ◇◇           | COMPLETE                         | Service roads are now part of the project; they are two-way to provide better mobility. Please see the project page for additional information. A ramp from northbound Route 1 to the east service road in the vicinity of Meineke is under consideration to serve local traffic.  |
| A   | 6  | N/A      | 82           | Study the feasibility of extending the eastbound widening of Route 24 to Love Creek  | DeIDOT - PD South          |                                    | \$         | *               | \$\$\$    | **             | ◇◇◇          | COMPLETE                         | The current project, design of which is nearing completion, extends the four-lane section on SR 24 to a point west of Beacon Middle School. Widening to three lanes (one through lane in each direction plus a center left-turn lane) will extend to the Love Creek bridge. The Henlopen TID study anticipates that widening of the bridge will be needed by 2040. |
| A   | 7  | N/A      | 83           | Study the feasibility of widening or adding through lanes on Plantation Road from Route 24 to Cedar Grove Road and Postal Lane   | DeIDOT - PD South/Planning |                                    | \$         | *               | \$\$\$    | **             | ◇◇◇          | IN PROGRESS                      | The Henlopen TID effort is studying widening of Plantation Road and an extension of Mulberry Knoll Road. See recommendations E-2 and E-3.  |
| <b>B. Implement policies and procedures to make the area more efficient, sustainable, and beautiful</b> |    |          |              |  |                            |                                    |            |                 |           |                |              |                                  |  |
| B   | 1  | Y        | 34           | Require new developments to plan for interconnections to any future development areas and monitor to ensure implementation   | Sussex County              | DeIDOT                             | \$         | *               | N/A       | N/A            | N/A          | Priority recommendation for 2019 | Addressed in the County's comprehensive plan and currently required for commercial properties. Implementation for residential developments will be considered.   |
| B   | 2  | Y        | 86           | Consider modifications to land development requirements and/or the Development Coordination Manual that require additional buffers/setbacks for all new developments for future road expansion | Sussex County              | DeIDOT                             | \$         | *               | N/A       | N/A            | N/A          | Priority recommendation for 2019 | Addressed in the County's 2018 comprehensive plan update; more work is needed.   |



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| B        | 3  | Y        | 4            | Study the feasibility and anticipated effectiveness of modifying signage, starting in Milford, to encourage through drivers (to points outside the Route 1 corridor between Lewes and Dewey Beach) to use Route 113, Route 5, Route 23, etc. | DeIDOT - Traffic                       | Private partner(s) such as Waze  | \$         | *               | \$\$      | *              | ◊            | COMPLETE                | An additional sign was installed on southbound SR 1 south of Thompsonville Road to identify municipal destinations and distances. Anticipated effectiveness of guide signs is decreasing as more and more people rely on GPS/route guidance systems. <b>DeIDOT has been testing display of (automated) travel time information on various variable message signs approaching the beach area (including information north of the SR 1 and US 113 split). Regular operation should begin in November. This information is also available on the DeIDOT app.</b> |
| B        | 4  | Y        | 91           | Improve advance acquisition process to allow DeIDOT to more quickly acquire land needed for transportation improvements and acquire available land within the Five Points Study Area (e.g., Creative Concepts)                               | General Assembly                       | DeIDOT   | \$         | **              | N/A       | N/A            | N/A          | COMPLETE                | New advance acquisition regulations were approved in 2018. Now proactive purchases will be feasible.  |
| B        | 5  | Y        | 50           | Study the feasibility of converting the Arby's driveway between Route 1 and Savannah Road into a publicly-accessible road  | DeIDOT - Planning                      | DeIDOT - Real Estate and PD South; property owners                     | \$         | *               | \$\$      | **             | ◊            | IN PROGRESS             | DeIDOT is reviewing potential options. Coordinate with B-1 and C-12.  |
| B        | 6  | Y        | 14           | Incorporate more walkable, bikeable, mixed-use town centers into the comprehensive plan  | Sussex County                          |  | \$         | *               | N/A       | N/A            | N/A          | Longer-term             |   |
| B        | 7  | Y        | 89           | Continue TID studies both east and west of Route 1   | DeIDOT - Planning                      | Sussex County, City of Lewes   | \$\$       | *               | TBD       | TBD            | TBD          | IN PROGRESS             | <b>At its October 27 meeting, Sussex County Council will consider approval of the Henlopen TID agreement.</b> The Henlopen TID recommendations are related to Five Points Recommendations A-6, A-7, C-1, C-3, C-7, C-19, E-2, and E-3. Because most available land on the east side of Route 1 has already been developed or approved for development, there is limited value to a TID in this area.  |
| B        | 8  | Y        | 62           | Study the feasibility of a parking management system to alert travelers when parking lots at major destinations are full   | DeIDOT - Planning, Traffic <b>DTC?</b> | DeIDOT Traffic, property owners, businesses, DNREC, private partner(s) | \$\$       | *               | \$\$\$    | **             | ◊            | To be initiated in 2020 | Coordinate with recommendation B-3.   |
| B        | 9  | N        | 69           | Study enhancing New Road per Byway Master Plan   | DeIDOT                                 | City of Lewes, Sussex County, Delaware Greenways                       | N/A        | N/A             | \$\$\$    | **             | ◊◊◊          | IN PROGRESS             | The New Road Master Plan was endorsed by the Lewes Mayor & City Council on July 13. In addition, they approved the Byway's request to transition to a citizen-led committee with representation from the City on the committee. The New Road bridge over Canary Creek is being designed in accordance with the Master Plan.   |
| B        | 10 | N        | 94           | Endorse "don't block the box" legislation with camera enforcement  | General Assembly                       | Delaware State Police, DeIDOT  | \$         | **              | \$\$      | *              | ◊            | Longer-term             |   |

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|----------|----|----------|--------------|--|-----------------------|--|------------|-----------------|-----------|----------------|--------------|-------------|---|
| B        | 11 | N        | 87           | Ensure cost savings from transportation projects within the study area are re-invested in projects within the study area   | General Assembly      |  | \$         | *               | N/A       | N/A            | N/A          | Longer-term |   |
| B        | 12 | N        | 15           | Study relaxed height limits as part of the comprehensive plan to increase density  | Sussex County         |  | \$         | *               | N/A       | N/A            | N/A          | Longer-term |   |
| B        | 13 | N        | 95           | Study alternatives to both meter and slow southbound traffic approaching Five Points   | DeIDOT                |  | \$         | *               | TBD       | TBD            | TBD          | COMPLETE    | DeIDOT has implemented speed reduction pavement markings along SR 1 southbound approaching the Nassau Bridge.   |
| B        | 14 | N        | 36           | Identify locations where trees can safely be planted within the right of way   | DeIDOT                |  | \$         | *               | \$\$      | **             | ◊            | Longer-term |   |
| B        | 15 | N        | 17           | Identify all locations in the study area with poor drainage and make recommendations for potential inclusion in the Capital Transportation Program or developer requirements | DeIDOT                | Sussex County                          | \$         | *               | \$\$\$    | ***            | ◊◊           | Longer-term |   |
| B        | 16 | N        | 16           | Increase the importance of considering noise and lighting impacts of major transportation project recommendations per regulations  | DeIDOT                |  | \$         | *               | N/A       | N/A            | N/A          | ONGOING     |   |
| B        | 17 | N        | 56           | Evaluate the use of land made available by narrowing lanes for landscape and multi-modal trails or parks   | DeIDOT                |  | \$         | *               | \$\$      | **             | ◊            | Longer-term |   |
| B        | 18 | N        | 26           | Study potential locations and designs for aesthetically pleasing gateways to coastal Sussex County   | Sussex County         | DeIDOT, City of Lewes, Byway Committee | \$         | *               | \$\$      | **             | ◊            | Longer-term |   |
| B        | 19 | N        | 75           | Study the feasibility of mounting clear, consistent, day/night address/block numbering signage along Route 1   | DeIDOT                | Sussex County Tourism                  | \$         | *               | \$\$      | *              | ◊            | Longer-term |   |
| B        | 20 | N        | 80           | Consider whether CTP funding should be allocated based on population growth  | DeIDOT                | Council on Transportation              | \$         | **              | N/A       | N/A            | N/A          | Longer-term |   |
| B        | 21 | N        | 7            | Study frequency and causes of emergency vehicle preemption and make recommendations to balance emergency vehicle access with traveler mobility                               | DeIDOT                | Emergency service providers            | \$         | *               | \$\$      | *              | ◊            | ONGOING     | Minimizing the impact of pre-emption is an ongoing effort. New signal controllers that will enhance recovery from preemption were deployed along the corridor. The vendor is working on firmware updates to take advantage of this feature. |
| B        | 22 | N        | 2            | Require bike parking as a condition of certain new developments  | Sussex County         |  | \$         | *               | N/A       | N/A            | N/A          | ONGOING     | Discussions with developers occur as plans are submitted. Bike parking recommendations are made for some site plans.  |
| B        | 23 | N        | 35           | Use an app to warn people of congestion on Route 1 and recommend alternative routes  | DeIDOT                |  | \$         | *               | N/A       | N/A            | N/A          | COMPLETE    | DeIDOT app is in place and continually being updated.   |
| B        | 24 | N        | 49           | Improve tourism-oriented destination signage along Route 1   | Sussex County Tourism | DeIDOT                                 | \$         | *               | \$        | *              | ◊            | IN PROGRESS | Sussex County Tourism is taking the lead on this effort in conjunction with municipalities. Coordinate with recommendation A-4.   |
| B        | 25 | N        | 28           | Identify the costs and benefits of dedicating Nassau Commons Boulevard to public use   | DeIDOT                | Sussex County, property owner          | \$         | *               | \$\$      | **             | ◊◊           | IN PROGRESS | DeIDOT is working with the developer of the Vineyards to upgrade the portion of the Boulevard adjacent to Route 9 and add turn lanes. Part of the Boulevard will be dedicated to public use as part of this project.                        |

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| B  | 26 | N        | 21           | Bring in nationally recognized planners and engineers to provide new, creative ideas that draw from examples in other parts of the country | DeIDOT                    | Sussex County  | \$         | *               | N/A       | N/A            | N/A          | Longer-term |   |
| B  | 27 | N        | 9            | Develop a better process for constituents to request transportation improvements   | DeIDOT                    | General Assembly, Sussex County, Council on Transportation | \$         | *               | N/A       | N/A            | N/A          | Longer-term |   |
| <b>C. Make the most of existing roadway infrastructure</b> |    |          |              |  |                           |  |            |                 |           |                |              |             |   |
| C  | 1  | Y        | 20           | Conduct a corridor study on Route 9 to determine the feasibility of widening to four lanes   | DeIDOT - Planning         |  | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | IN PROGRESS | Being considered by Henlopen TID study, with limits from Ward Avenue to just west of Old Vine Boulevard. <b>A DeIDOT planning study is underway for this effort. A project is programmed in the FY 21 - 26 CTP. Design is scheduled to start in FY 2022.</b>  |
| C  | 2  | Y        | 72           | Conduct a study at Route 9 and Minos Conaway Road to determine if a traffic signal is warranted and install a signal if warranted          | DeIDOT - Traffic          |  | \$         | *               | \$\$      | *              | ◊            | COMPLETE    | Study is complete, recommending installation of a southbound right-turn lane on Minos Conaway Road and keeping stop sign control. A project is proposed in the FY 21 - 26 CTP. It has been approved by the COT, and DeIDOT will be seeking federal approval of the FY 21 – FY 26 CTP in September 2020.   |
| C  | 3  | Y        | 64           | Initiate a capital project to improve the intersection of Old Landing and Warrington Road (developer funding and concept are available)    | DeIDOT - PD South         |  | N/A        | N/A             | \$\$\$    | **             | ◊◊           | IN PROGRESS | <b>A project is programmed in the FY 21 - 26 CTP. Design is scheduled to start in FY 2025.</b>  |
| C  | 4  | Y        | 11           | Improve the Canary Creek bridge on New Road to reduce flooding   | DeIDOT - Bridge           |  | N/A        | N/A             | \$\$\$    | **             | ◊◊◊          | IN PROGRESS | A project has been initiated under DeIDOT's Bridges/State of Good Repair budget. Construction cannot begin until after the Old Orchard Road/Savannah Road intersection project is complete, in order to maintain adequate traffic circulation.  |
| C  | 5  | Y        | 92           | Improve the intersection of Cave Neck Road, Sweet Briar Road, and Hudson Road  | DeIDOT - PD South         |  | \$         | *               | \$\$\$    | **             | ◊◊           | IN PROGRESS | <b>A project is programmed in the FY 21 - 26 CTP. Design is scheduled to start in FY 2025. This schedule may be accelerated through FAST (Funding Accelerating Safety in Transportation), for which approval is pending.</b>  |
| C  | 6  | Y        | 102          | Study the feasibility of lengthening left- and right-turn lanes throughout the study area  | DeIDOT - Traffic          |  | \$         | *               | \$\$\$\$  | ***            | ◊◊◊          | IN PROGRESS | <b>DeIDOT Traffic is evaluating locations suggested by Five Points Working Group members at the January 27, 2020 meeting.</b>   |
| C  | 7  | Y        | 104          | Study the feasibility of improving Minos Conaway Road with appropriate lane widths, shoulder widths, turn lanes, curvature, etc.           | DeIDOT - Planning/Traffic |  | \$         | *               | \$\$\$    | ***            | ◊◊◊          | IN PROGRESS | A curve compliance study completed in February 2019 and signage improvements were implemented in March 2019. A preliminary concept is being considered as part of the Henlopen TID study.   |
| C  | 8  | Y        | 103          | Study the feasibility of restriping two-lane sections of Savannah Road with a two-way left-turn lane                                       | DeIDOT - Traffic          |  | \$         | *               | \$\$      | **             | ◊            | COMPLETE    | DeIDOT's assessment is complete. Providing a two-way left-turn lane is potentially feasible, but there are pros and cons to this idea. Implementation would likely involve more than striping. The Byway Committee is investigating moving forward with a master plan for Savannah Road that will consider whether a two-way left-turn lane should be provided. |

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| C        | 9  | Y*       | 73           | Evaluate potential short-term safety and operational improvements at Route 9, Plantation Road, and Beaver Dam Road while longer-term improvements are under development | DeIDOT Traffic/PD South           |  | \$         | *               | \$        | *              | ◊            | COMPLETE    | Signing and striping was implemented in spring of 2020 to better organize and direct westbound Route 9 traffic flow. Potential direct access to Lowe's from Route 1 may reduce traffic at this location.  |
| C        | 10 | Y*       | 32           | Continue to improve traffic signal phasing, timing and coordination using real time monitoring and control technologies   | DeIDOT - Traffic                  |  | \$         | *               | \$        | *              | ◊            | ONGOING     | This is a core function of DeIDOT Traffic, and is done on an ongoing basis. Pre-emption improvements are in progress; see recommendation B-21.  |
| C        | 11 | N        | 68           | Develop concepts and estimates for bringing roads in the study area to DeIDOT standard, including shoulders   | DeIDOT                            |  | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | Longer-term | Sussex County recently introduced an ordinance to upgrade standards for new roads as they are built.  |
| C        | 12 | N        | 98           | Study access management opportunities along Route 1 in the study area, including potential connections between businesses   | DeIDOT                            | Sussex County                                | \$         | *               | \$\$\$    | **             | ◊◊◊          | IN PROGRESS | Consideration of direct access to Lowe's from Route 1 may be considered in the short term. Sussex County is actively pursuing interconnectivity in all commercial projects along Route 1.   |
| C        | 13 | N        | 22           | Study the feasibility of eliminating unsignalized crossovers on Route 1   | DeIDOT                            |  | \$         | *               | \$\$      | **             | ◊            | Longer-term | This recommendation refers to crossovers between Five Points and Route 24.  |
| C        | 14 | N        | 51           | Study the feasibility of installing a "YOUR SPEED" display on southbound Route 1 at Nassau Road   | General Assembly                  | DeIDOT                                       | \$         | *               | \$        | *              | ◊            | Longer-term |   |
| C        | 15 | N        | 38           | Study the feasibility of lengthening the southbound acceleration lane on Route 1 at Minos Conaway Road  | DeIDOT                            |  | \$         | *               | \$\$      | *              | ◊            | COMPLETE    | Construction was completed in spring 2020.  |
| C        | 16 | N        | 84           | Study the feasibility of providing driveway access from Beacon Middle School and Love Creek Elementary School onto Mulberry Knoll Road                                  | DeIDOT                            | Sussex County, Cape Henlopen School District | \$         | *               | \$\$\$    | **             | ◊◊           | Longer-term |   |
| C        | 17 | N        | 27           | Conduct capacity analyses at study area intersections to identify the need for turn lanes   | DeIDOT                            |  | \$\$       | *               | \$\$\$\$  | **             | ◊◊           | Longer-term |   |
| C        | 18 | N        | 60           | Improve lane markings and signs at identified intersections: Five Points, Dartmouth Drive/Kings Highway, Plantation Road/Beaver Dam Road                                | DeIDOT                            |  | \$         | *               | \$        | *              | ◊            | Longer-term | Immediate maintenance concerns are being addressed now.   |
| C        | 19 | N        | 78           | Study the feasibility of an all-way STOP at Beaver Dam Road and Kendale Road  | DeIDOT                            |  | \$         | *               | \$        | *              | ◊            | IN PROGRESS | <b>Considered by Henlopen TID study, which recommended a traffic signal by 2045. Selection of appropriate traffic control will need to take into account crash history and the curvature of the road.</b>   |
| C        | 20 | N        | 48           | Study the feasibility of replacing the HAWK signal with a full signal at Holland Glade Road, potentially with a fourth leg at the outlets                               | DeIDOT - Development Coordination |  | \$         | *               | \$\$      | *              | ◊            | IN PROGRESS | In conjunction with proposed development of Coastal Station on the west side of Route 1 at Holland Glade Road, the HAWK signal will be removed. Coordination is underway to determine which turning movements will be provided at the intersection. <b>Plan review is being completed by Planning's Development Coordination section.</b> |

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| Category  | ID | Priority | Old idea no. | Working Group recommendation   | Assumed lead agency                           | Other responsible parties (if any) | Study cost | Study timeframe | Imp. cost | Imp. timeframe | Imp. impacts | Status                  | Remarks  |
|---|----|----------|--------------|--|---|------------------------------------|------------|-----------------|-----------|----------------|--------------|-------------------------|--|
| <b>D. Make walking, bicycling, and transit more viable as alternatives to driving</b> |    |          |              |  |   |                                    |            |                 |           |                |              |                         |  |
| D   | 1  | Y        | 79           | Study the feasibility of a hop-on, hop-off van or jitney service loop for Lewes similar to free service in Cape May (Five Points, hospital, Lloyds Grocery Store, downtown Lewes, Library, Lewes Beach, Ferry, State Park, etc.) | City of Lewes, DRBA                           | DTC, DNREC                         | \$         | *               | \$\$      | *              | ◇            | IN PROGRESS             | Primary lead would be the municipality. DTC's role would be advisory to determine feasibility, and to serve as a partner to any study effort.  |
| D   | 2  | Y        | 5            | Study the feasibility of potential connections for walking and bicycling between existing neighborhoods, along streets, and to trails  | Sussex County (as part of comprehensive plan) | DeIDOT - Planning                  | \$\$       | *               | \$\$\$    | ***            | ◇◇           | Longer-term             | A new Mobility Committee is proposed under the comprehensive plan. This committee and/or the Working Group could play a role in this effort.   |
| D   | 3  | Y        | 96           | Develop design guidance to separate pedestrians and bicyclists from highway traffic using aesthetic treatments   | DeIDOT  | Sussex County                      | \$         | *               | TBD       | TBD            | TBD          | Longer-term             |  |
| D   | 4  | Y        | 90           | Develop concepts and estimates for filling all sidewalk gaps along New Road and Old Orchard Road   | DeIDOT - Planning                             |                                    | \$         | *               | \$\$\$    | **             | ◇◇◇          | IN PROGRESS             | Portions will be built by current CTP projects on Old Orchard Road and SR 1/Minos Conaway Road, as well as by developer projects. The New Road Master Plan will identify remaining gaps on New Road.   |
| D   | 5  | Y        | 71           | Develop concepts and estimates for filling all sidewalk gaps along Savannah Road between Lewes and Five Points   | DeIDOT - Planning                             |                                    | \$         | *               | \$\$\$    | **             | ◇◇◇          | IN PROGRESS             | Portions will be built by current CTP projects on Old Orchard Road and on Savannah Road (between the Georgetown-Lewes Trail and Quaker Road). Assessment of remaining gaps is underway. To be coordinated with C-8. The Byway Committee is investigating moving forward with a master plan for Savannah Road.  |
| D   | 6  | Y*       | 52           | Study the feasibility of pedestrian bridges over Route 1 at specific locations   | DeIDOT  |                                    | \$         | *               | \$\$\$    | ***            | ◇◇           | Longer-term             |  |
| D   | 7  | N        | 59           | Study the feasibility of transit service to tie the Milton/Red Mill Pond/Minos Conaway Road area into the transit network  | DTC   |                                    | \$         | *               | \$\$      | *              | ◇            | IN PROGRESS             | DTC studied the feasibility of providing traditional fixed route transit service to Milton/Red Mill Pond/Minos Conaway Road area and presented the findings to the 5 Pts. Transportation Advisory Group in January 2020 as not feasible at this time. DTC has improved service connections for transit transfers between Routes 206 and 303, which make the connection from the Lewes Transportation Center to Milton. DTC is studying other types of non-traditional transit service options to this area that are better suited to operate given the economic, road geometry and environmental factors. Statewide, DTC is looking to create micro transit service delivery options in select areas, to operate as a pilot. Additionally, DTC will be applying for grants to support these proposals. |
| D   | 8  | N        | 81           | Study the feasibility of a park and ride lot on Route 24 at the edge of the study area   | DTC   | DeIDOT                             | \$         | *               | \$\$\$    | **             | ◇◇◇          | Longer-term             | DTC supports implementing a Park and Ride along SR 24. An exact location needs to be determined.   |
| D   | 9  | N        | 23           | Identify potential connections to and from the Lewes Transit Center  | DeIDOT  |                                    | \$         | *               | \$\$      | **             | ◇            | To be initiated in 2020 |  |
| D   | 10 | N        | 6            | Study the feasibility of a barrier in the median of Route 1 to deter pedestrian crossings at inappropriate locations   | DeIDOT  |                                    | \$         | *               | \$\$\$    | **             | ◇            | Longer-term             |  |



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| D  | 11 | N        | 67           | Study the feasibility of providing shelters at bus stops - Context Sensitive i.e. cottage beach style shelters   | DTC                         |   | \$         | *               | \$\$      | *              | ◊            | IN PROGRESS | DTC has upgraded and improved transit shelters in the Five Points study area. 13 shelters have been installed in the Rehoboth Beach/Lewes area and along the Route 1 corridor at the higher ridership locations.   |
| D  | 12 | N        | 41           | Identify publicly- and privately-owned land in the study area that may be used for trails  | DeIDOT                      |   | \$         | *               | \$\$\$\$  | ***            | ◊◊           | Longer-term |  |
| D  | 13 | N        | 1            | Identify locations in the study area where bike parking can be provided  | DeIDOT                      |   | \$         | *               | \$        | *              | ◊            | Longer-term |  |
| D  | 14 | N        | 43           | Study the feasibility of signing and/or pavement markings that will improve bicyclist comfort turning left from Dartmouth Drive onto Route 1   | DeIDOT - Traffic            |   | \$         | *               | \$        | *              | ◊            | COMPLETE    | A bike box is not feasible at Dartmouth Drive. Bicyclists may cross SR 1 with pedestrian signals. Additional safety measures may be considered as part of the Kings Highway CTP project, which includes this intersection.   |
| D  | 15 | N        | 47           | Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway  | DeIDOT, DRBA                |   | \$         | *               | \$\$      | **             | ◊            | IN PROGRESS | Signs were installed in May 2018. Additional pedestrian facilities may be included with the Kings Highway CTP project as proposed by the Kings Highway/Gills Neck Road Byway Master Plan. Rectangular Rapid Flashing Beacons (RRFB) are now operating at the trail crossing of Freeman Highway near Cape Henlopen Drive. |
| <b>E. Invest in new infrastructure to support anticipated growth</b> |    |          |              |  |                             |   |            |                 |           |                |              |             |  |
| E  | 1  | Y        | 66           | Study the feasibility of a grade separation at Five Points   | DeIDOT - Planning           |   | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | Longer-term | This effort will depend on the results of studies under A-7, E-2, and E-3. Additionally, the shorter term improvements and CTP projects will impact the scope of the study as well.  |
| E  | 2  | Y        | 70           | Evaluate the potential transportation benefits, costs, and impacts of a new road parallel to Plantation Road connecting Mulberry Knoll Road to Route 9; require any new development in this area to build this road to state specifications one parcel at a time | DeIDOT - Planning           | Sussex County                                 | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | IN PROGRESS | Idea is being considered as part of the Henlopen TID study. DeIDOT has initiated a planning study for this effort. Inventory and mapping of wetlands and historic resources is underway. Opportunities for public involvement will be provided during the study process. Coordinate with A-7 and E-3.                    |
| E  | 3  | Y        | 8            | Develop a plan for grid road patterns where land is available, working with property owners and developers, including a series of roads that connect Route 9, Route 23, and Route 24 between Plantation Road and Dairy Farm Road                                 | DeIDOT - Planning           | Sussex County, property owners and developers | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | IN PROGRESS | Idea is being considered as part of the Henlopen TID study. Coordinate with A-7 and E-2.   |
| E  | 4  | N        | 29           | Evaluate the potential transportation benefits, costs, and impacts of a new road connecting Route 1 north of Five Points and the Vineyards   | DeIDOT                      |   | \$\$       | **              | \$\$\$    | ***            | ◊◊◊          | Longer-term |  |
| E  | 5  | N        | 44           | Look at east/west traffic as a system: Minos Conaway (starting at Route 9), New, Old Orchard, and Clay Roads   | DeIDOT - Planning, PD South |   | \$\$       | *               | TBD       | TBD            | TBD          | Longer-term |  |
| E  | 6  | N        | 57           | Study the feasibility, benefits, costs, and impacts of potential service roads along Route 1, including whether narrowing the median would facilitate provision of service roads   | DeIDOT                      |   | \$\$       | **              | \$\$\$\$  | ***            | ◊◊◊          | Longer-term |  |

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| E        | 7  | N        | 77           | Evaluate the potential transportation benefits, costs, and impacts of a new through road connecting Postal Lane with the intersection of Old Landing Road/Airport Road | DeIDOT              |                                    | \$\$       | **              | \$\$\$    | ***            | ◊◊◊          | IN PROGRESS |         |
| E        | 8  | N        | 85           | Evaluate the potential transportation benefits, costs, and impacts of a new road to connect Route 24 near Beacon Middle School with Old Landing Road near Arnell Creek | DeIDOT              |                                    | \$\$       | **              | \$\$\$    | ***            | ◊◊◊          | Longer-term |         |
| E        | 9  | N        | 30           | Revisit and consider feasibility of recommendations from 2003 SR 1 Land Use and Transportation Study   | DeIDOT              |                                    | \$\$       | *               | \$\$\$\$  | ***            | ◊◊◊          | Longer-term |         |

