

List of meeting materials

Phase 2 Working Group Meeting #11

Monday, January 31, 6:00 pm Online

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Agenda

Phase 2 Working Group Meeting #11

Monday, January 31, 2022, 6:00 pm Online

- 1. Introduction
 - Welcome and introductions
 - Summary of notebook materials
 - Approval of October 25, 2021 meeting minutes
- 2. Roundabout refresher
- 3. Trees in the right of way
- 4. Phase 2 implementation status
- 5. Public comment
- 6. Adjourn







Phase 2 Working Group Meeting #11

January 31, 2022





Agenda

- Introduction
- Roundabout refresher
- Discussion on trees in the right of way
- Phase 2 implementation status
- Public comment





How to raise your hand

- For Working Group members:
 - If you are on Zoom on your computer or tablet, click on "Raise Hand" at the bottom of your screen as shown below.
 - If you are on your phone, raise your hand by pressing *9.







Introduction

- Introductions
- Summary of notebook materials
 - Agenda
 - Presentation
 - Draft minutes of October 25, 2021
 Working Group meeting
 - List of upcoming meetings
 - Updated implementation plan
- Approval of October 25, 2021 meeting minutes







Delaware Roundabouts

Everything You Need to Know





What is a Roundabout?

- A circular intersection that moves traffic around a central island
- Features traffic calming qualities
- Eliminates direct left turns, which are a major cause of intersection crashes
- Is a proven FHWA safety countermeasure



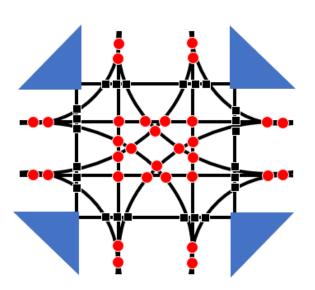
https://safety.fhwa.dot.gov/intersection/roundabouts/



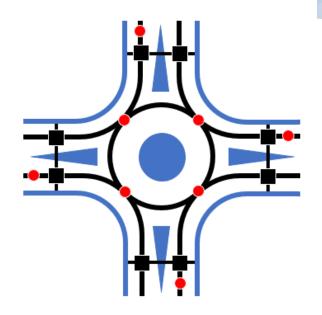


Why is a Roundabout Safer?

Traditional Intersection vs. Roundabout



- 32 Vehicle Conflicts
- 24 Pedestrian Conflicts



- 8 Vehicle Conflicts
- 8 Pedestrian Conflicts

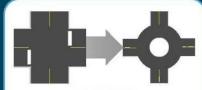
SOURCES

1. AASHTO. The Highway Safety Manual, American Association of State Highway Transportation Professionals, Washington, D.C., (2010).



Safety Benefits:

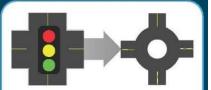
Two-Way Stop-Controlled Intersection to a Roundabout



82%

reduction in fatal and injury crashes.¹

Signalized Intersection to a Roundabout



78% reduction in fatal and injury crashes.¹

For more information on this and other FHWA Proven Safety Countermeasures, please visit https://safety.fhwa.dot.gov/provencountermeasures/ and https://safety.fhwa.dot.gov/intersection/roundabouts/index.cfm.



How Roundabouts Keep Traffic Moving

Channelized approaches

Pavement markings and raised islands direct traffic in to a one-way, counterclockwise flow

Yield control of entering traffic

Traffic entering the circle yields to traffic already in the circle

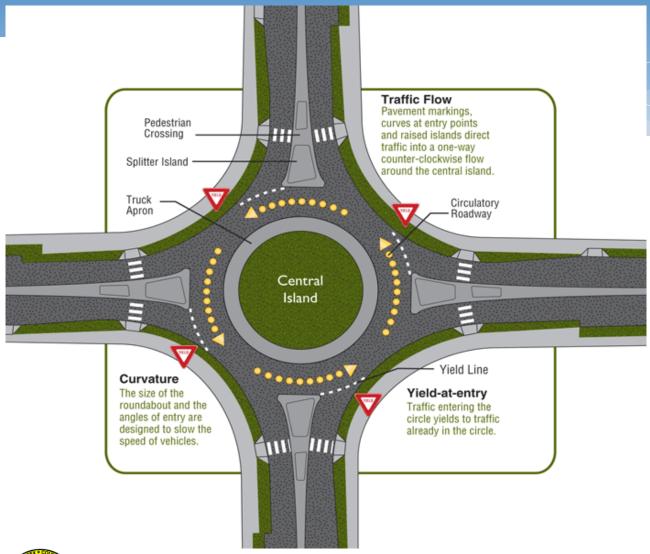
Geometric curvature

The radius of the circular road and the angles of entry can be designed to slow the speed of vehicles





How Roundabouts Keep Traffic Moving







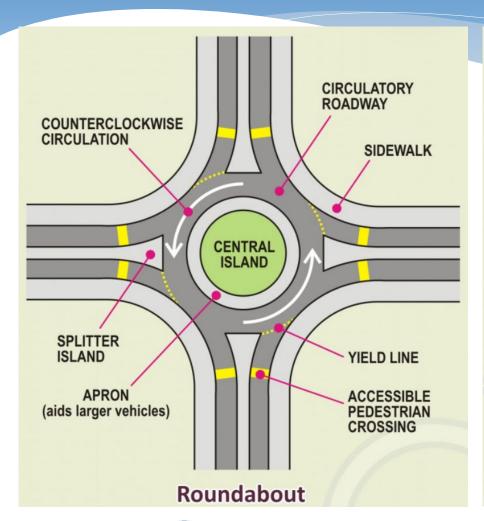
Roundabouts vs. Traffic Circles

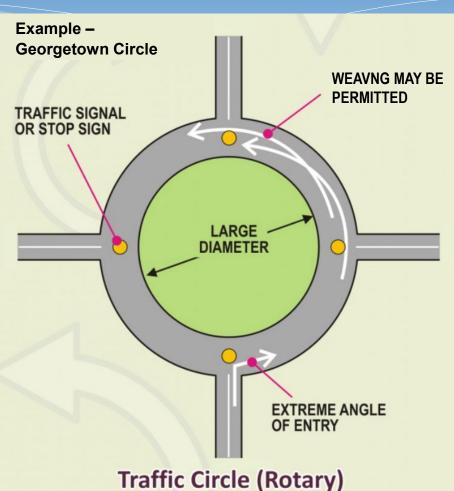
- Modern roundabouts are significantly different than older style traffic circles and rotaries in how they operate and are designed
- Rotaries and traffic circles are typically much larger than the modern roundabout
- The compactness of a modern roundabout keeps speeds low and makes it easier for drivers to stay oriented and judge the speed of vehicles before entering the roundabout





Roundabouts vs. Traffic Circles









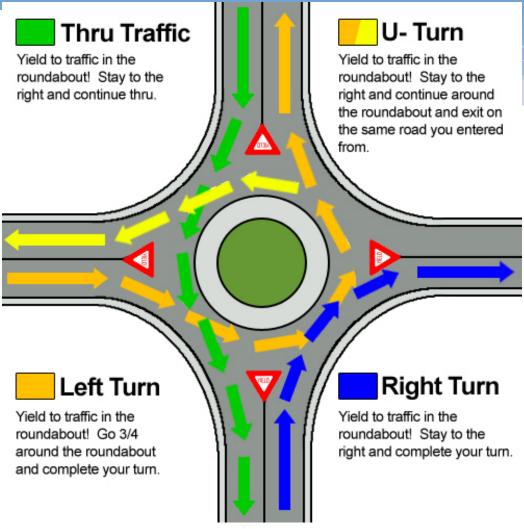
How to Use a Roundabout: In a Car

- Upon approaching the roundabout, stay to the right of the island and SLOW DOWN
- Watch for pedestrians and bicyclists
- YIELD to traffic already in the roundabout
- Once you're in the roundabout, do not stop except to avoid a collision
- Always keep to the right of the central island and travel in a counterclockwise direction
- Maintain a slow speed and DO NOT PASS other vehicles
- Follow the roundabout until your exit





How to Use a Roundabout: In a Car







How to Use a Roundabout: On a Bike

- For safety reasons, there are no separate bike lanes within the roundabout
- Bicyclists have several options

Lower speed.

Traffic speed at any road or intersection is vitally Important to the safety of everyone, and especially non-motorized users. Lower speed is associated with better yielding rates, reduced vehicle stopping distance, and lower risk of collision injury or fatality. Also, the speed of traffic through a roundabout is more consistent with comfortable bicycle riding speed.







How to Use a Roundabout: On a Bike

Ride like a car with traffic







Walk like a pedestrian using sidewalks and crosswalks

Use a shared bicycle/pedestrian path if available





How to use a Roundabout: As a Pedestrian or On a Bike

NEVER cross into the central island

- Always use the crosswalk and sidewalk around the perimeter of the roundabout
- Look towards the roundabout when crossing the exit lanes
- Look towards approaching traffic when crossing the entry lanes
- Use the pedestrian refuge (if available) in the splitter island







How to use a Roundabout: As a Pedestrian

- Only cross when it is safe
- Before entering the crosswalk, make sure that drivers see you and stop, or wait for an adequate gap in traffic
- When crossing an entry or exit with more than one lane, be sure that vehicles in both lanes stop









More Roundabouts Scheduled in the Five Points Study Area



- Beaver Dam Road –
 October 2021
- 2. Plantation Road
- 3. Wescoats Road at Marsh Road
- 4. Minos Conaway
 - Nassau Road/New Road
 - Janice Road/New Road
 - Minos Conaway
 Road/Service Road A





More Roundabouts Scheduled in the Five Points Study Area

Roundabouts are a preferred intersection improvement considered by transportation specialists nationwide because "Roundabouts are a safer alternative to traffic signals and stop signs... Roundabouts improve traffic flow and are better for the environment."

Insurance Institute for Highway Safety (IIHS)

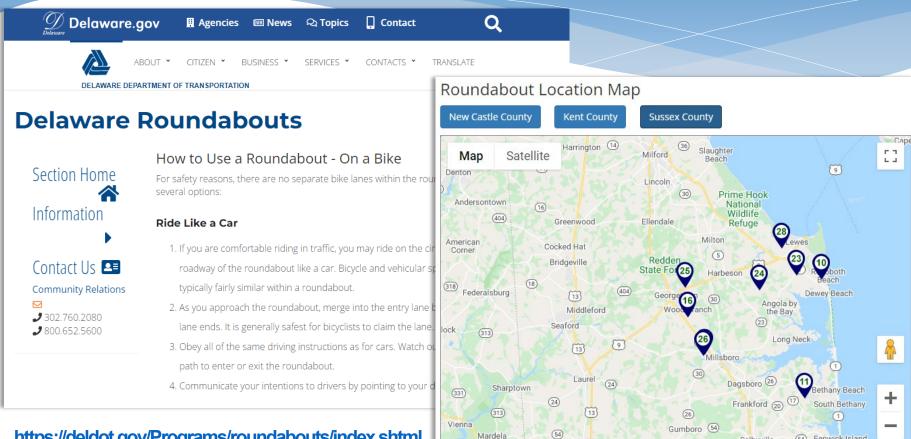
https://iihs.org/topics/roundabouts

Roundabouts are considered on a case-by-case analysis of traffic flow and geometric design considerations including right-of-way, environmental impacts, drainage, and utility impacts.





More information on Roundabouts in Delaware

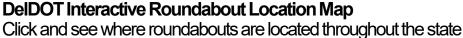


Googlerings

https://deldot.gov/Programs/roundabouts/index.shtml











Trees within the Right-of-Way





Trees within the Right-of-Way

- Recommendation B-14 Identify locations where trees can safely be planted within the right of way
 - This recommendation was initiated in 2021
 - DelDOT will need Working Group input to move this recommendation forward
 - Tonight's presentation provides background to the Working Group on guidelines that apply to trees in the right of way.





Trees within the Right-of-Way

- When are trees/landscape placed within the right-of-way?
- Where are trees/landscape permitted within the right-of-way?
- What type of trees/landscape are permitted within the right-of-way?
- Who maintains trees/landscape within the right-of-way?





When are trees/landscape placed within the right-of-way?

- 1. To meet regulatory requirements such as the Landscaping and Reforestation Act
- 2. When requested by the community and meet certain conditions





- Starts in project planning
 - During planning efforts, like Five Points
 - As part of project development, e.g. Old Orchard Road realignment and Minos Conaway GSI
- Planning coordinates with DelDOT South Maintenance District and Roadside Environmental
- A major deciding factor is maintenance

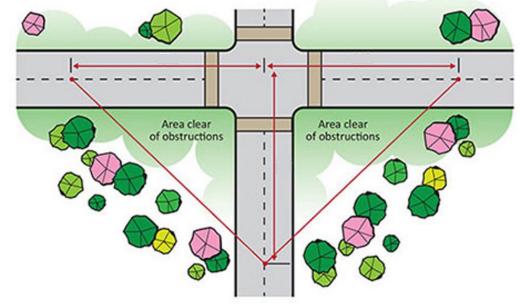




Where are trees/landscape permitted within the right-of-way?

Safety first!

- Trees can cause hazards along roadway
- Line of sight needs to be maintained to allow safe turning movements

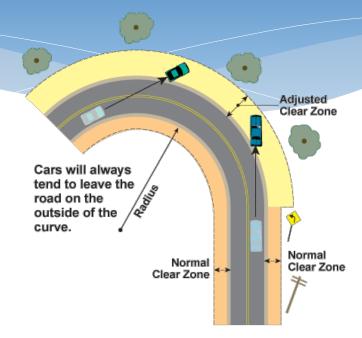


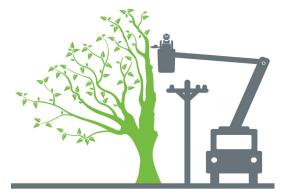




Where are trees/landscape permitted within the right-of-way?

- Lateral offset
 - Roadway classification
 - Curbing/barrier
 - Adjacent Land Use
- Conflicts with utilities
 - Above ground
 - Below ground









What type of trees/landscape are permitted within the right-of-way?

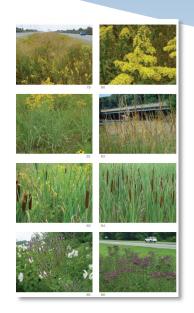
- Species selection
 - Should consider salt spray tolerance, wind tolerance, and sandy soil conditions
 - Invasive species prohibited by law
 - Native species may soon be required
 - Recommended species list under development



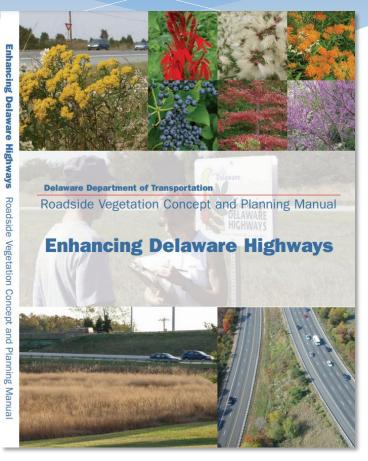


What type of trees/landscape are permitted within the right-of-way?

 Enhancing Delaware's Highway initiative – established guidelines



https://deldot.gov/Publications/manuals/edh/index.shtml







Who maintains trees/landscape within the right-of-way?

- Short-term maintenance
 - Cost can be included in installation cost
 - Must consider maintenance of traffic requirements and safety for access
- Long-term maintenance
 - Critical to success of landscape
 - DelDOT can mow, apply preemergent, and perform some tree pruning
 - Naturalized landscapes (i.e. meadow along a highway) may reduce mowing requirements





Who maintains trees/landscape within the right-of-way?

- Landscape Maintenance Agreements
 - Required for all projects where extensive landscape elements are desired
 - Between DelDOT and established entity with financial capacity to maintain landscape over time
 - Must consider maintenance of traffic cost
 - Volunteer organizations







Phase 2 Implementation Plan Update

FIVE POINTS TRANSPORTATION STUDY RECOMMENDATIONS BAUT for DelDOT internal review February 5, 2055					\$ <\$200K \$\$ \$200K-\$2M \$\$\$ \$2M-\$20M \$\$\$\$ \$20M-\$200M \$\$\$\$\$ >520M		<3 years 3-10 years >10 years	000	Medium				
Category	ID	Priority	Old idea	Working Group recommendation	Assumed lead agency	Other responsible partie	Study	Study timeframe	Imp.	Imp.	Imp.	Status	Remarks (public)
		N/A	25	Review the need for grade separating or restricting crossings between Frederica and Lewes before eliminating signals in this area	DelDOT - PD South		s		N/A	N/A	N/A	COMPLETE	A memorandum summarizing this effort can be found at [link].
		N/A	42	Evaluate Tulip Drive connection to Route 1 as part of the Minos Conaway Road grade separation project	DelDOT - PD South		s		SS		••	COMPLETE	This connection is now part of the project. Project information can found at https://www.deldot.gov/information/projects/SR1MinosConaway dex.shtml.
		N/A	53	Study the feasibility of increasing the proposed Route 24 bypass of Milibboro from one lane in each direction to two lanes in each direction	DelDOT - PD South		ss		ssss			COMPLETE	This effort was completed as part of the US 113 Milliboro-South A Supplemental DEIS. A two-lane bypass was found to be adequate future demand. A memorandum summarizing traffic projections f the Route 24 bypass can be found at [link].
		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	DelDOT - PD South		s		тво	TBD	TEO	IN PROGRESS	This will be addressed as part of the Minos Conaway project. Documentation of signing will be available when semi-final plans completed and the public will have the opportunity to comment. A-2 above for a link to project information.
		N/A	55	Evaluate one-way service roads as part of the Minos Consway Road grade separation project	DelDOT - PD South		s		SS		••	COMPLETE	Service roads are now part of the project. Project information can found at https://www.deldot.gov/information/projects/SR1MinosConaway.deldot.gov/information/gov/information
		N/A	82	Study the feasibility of extending the eastbound widening of Route 24 to Love Creek	DelDOT - PD South		s		555			COMPLETE	The current project, design of which is nearing completion, exten- the four-lane section on SR 24 to a point west of Beacon Middle School. Widering to three lanes (one through lane in each direction plus a center left-turn lane) will extend to the Love Creek bridge
		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	DelDOT - PD South/Planning		\$		555			IN PROGRESS	Coordinate with E-2 and E-3.
		Υ	34	Implementation	Sussex County	DelDOT	\$		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 resident developments will be considered.
		Υ	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	DelDOT	s		N/A	N/A	N/A	Priority recommendation for 2019	Addressed in the County's 2018 comprehensive plan update; more work is needed.
		γ	4	Study the feasibility and anticipated effectiveness of modifying signage, starting in Milford, to encourage through	DelDOT - Traffic	Private partner(s) such as Waze	s		SS		٠	Priority recommendation for 2019	Additional signs will be installed on southbound SR 1 north of Thompsonville Road to identify municipal destinations and distance Installation is planned for 2019.
		Υ	91	Improve advance acquisition process to allow DelDOT to	General Assembly	DelDOT	s		N/A	N/A	N/A	COMPLETE	New advance acquisition regulations were approved in 2018. No proactive purchases will be feasible.
		Υ	50	Study the feasibility of converting the Arby's driveway	DelDOT - Planning	DelDOT - Real Estate; property owners	s		SS		۰	Priority recommendation for 2019	
	6	Y	14	Incorporate more walkable, bikeable, mixed-use town centers into the comprehensive plan	Sussex County		s	•	N/A	N/A	N/A	Longer-term	





78 recommendations

Recommendations to be implemented under current DelDOT 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)





Current status (as of January 2022)

55 of 78 recommendations in progress, ongoing, or completed

- Compares to 54 of 78 at last meeting (October 2021)
- 1 Category B recommendation newly "In Progress"
- 3 recommendations COMPLETE since last meeting
- 1 recommendation changed from "In Progress" to "Ongoing"
- All seven recommendations "To be initiated in 2021" were initiated in 2021
- 4 recommendations selected "To be initiated in 2022"





Total in progress, ongoing, or completed

Category	January 1, 2021	December 31, 2021	Change in 2021
Α	7	7	0
В	15	17	+2
С	14	16	+2
D	8	12	+4
E	3	3	0
	47	55	+8





- A-7 Study the feasibility of widening or adding through lanes on Plantation Road from Route 24 to Cedar Grove Road and Postal Lane
 - This study is on hold pending results of the Mulberry Knoll Road Extension study.
 - Mulberry Knoll Road study expected to be completed in Spring of 2022.





- B-2 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
 - In 2020, the Sussex County Planning & Zoning Commission discussed a potential future revision to the Zoning Code to clarify the maximum extent to which parking may be permitted in the front yard setback.
 - DelDOT updated the Development Coordination Manual to require greater width along principal arterials.
 - Sussex County's focus is primarily on east-west roads, which are not principal arterials except Route 18/404.





- B-2 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 (cont.)
 - DelDOT is currently updating Chapter 2 of the Development Coordination Manual – Traffic Studies
 - Chapter 3 deals with Right of Way. That update is not yet underway.
 - The Development Coordination Manual is in the Strategic Highway Safety Plan (Strategy 5.2 Revise DelDOT's Development Coordination Manual to require additional pedestrian infrastructure improvements related to new developments).





- B-5 Study the feasibility of converting the Arby's driveway between Route 1 and Savannah Road into a publicly-accessible road
 - DelDOT negotiated a concept for connections through the Nicola Pizza property.
 - Sussex County approved the Nicola Pizza site plan with the easement language.
 - Further progress on hold until Arby's comes up for development.
 - Traffic conditions will be monitored during the Old Orchard Road realignment construction.





- B-8 –Study the feasibility of a parking management system to alert travelers when parking lots at major destinations are full
 - DNREC is getting ready to update the entrance to Cape Henlopen State Park, and would like to explore adding automated counters for use in tracking parking occupancy.





- B-10 Endorse "don't block the box" legislation with camera enforcement
 - To be Initiated in 2022
 - Local legislators and DelDOT are drafting legislation





- B-14 Identify locations where trees can safely be planted within the right of way
 - The presentation earlier this evening provided the guidelines that govern how trees could potentially be planted within the right of way
 - At the April 2022 meeting, members will have the opportunity to provide input on desired locations for trees.





- C-1 Conduct a corridor study on Route 9 to determine the feasibility of widening to four lanes
 - A project is programmed in the FY 21 26 CTP.
 - Project development process began in October 2021.
 - The Plantation Road project will complete the widening of Route 9 from Ward Avenue to Route 1.





- C-2 Conduct a study at Route 9 and Minos Conaway Road to determine if a traffic signal is warranted and install a signal if warranted
 - Study is complete, recommending installation of a southbound right-turn lane on Minos Conaway Road and keeping stop sign control.
 - A project was programmed in the FY 21 26 CTP.
 - The right turn lane was accelerated by adding it to a paving rehabilitation project, and construction is underway.





- C-4 Improve the Canary Creek bridge on New Road to reduce flooding
 - The project development process is underway under DelDOT's Bridges/State of Good Repair budget.
 - Online public information meetings were held in June and August 2021.
 - Final right of way approval has been received.
 - Construction is anticipated to begin in Fall of 2023, rather than after completion of Old Orchard Road as originally planned.





- C-5 Improve the intersection of Cave Neck Road, Sweet Brian Road, and Hudson Road
 - A project is programmed in the FY 21 26 CTP.
 - DelDOT presented alternatives to Council in November. A public workshop was held November 16, 2021.
 - A preferred alternative is scheduled to be selected in early 2022 and design complete in early 2024.





- C-6 Study the feasibility of lengthening left- and right-turn lanes throughout the study area
 - DelDOT Traffic evaluated locations suggested by Five Points Working Group members. All but two have been incorporated into other DelDOT projects.
 - DelDOT is looking at the potential to add southbound Route 1 at Dartmouth Drive to the Kings Highway capital project.





- C-6 Study the feasibility of lengthening left- and right-turn lanes throughout the study area (cont.)
 - Southbound Route 1 at Ames Drive will be re-evaluated after changes are completed at Holland Glade Road.
 - Design is underway on southbound Route 1 at Old Landing Rd.
 - A pavement rehabilitation project now under construction on Minos Conaway Road from Route 9 to Brittany Lane is adding the right turn lane at US 9.





- C-7 Study the feasibility of improving Minos Conaway Road with appropriate lane widths, shoulder widths, turn lanes, curvature, etc.
 - A curve compliance study completed in February 2019 and signage improvements were implemented in March 2019.
 - The Henlopen TID study recommended a project to improve Minos Conaway Road. The project is not funded.
 - A paving project is adding a right turn lane at US 9.
 - Further action on hold pending completion of Minos Conaway GSI.





- C-11 Develop concepts and estimates for bringing roads in the study area to DelDOT standard, including shoulders
 - In 2020 the Working Group clarified that C-11 applies to state roads.
 - The Henlopen TID study addressed state-maintained roads west of SR 1 and developed estimates for bringing them up to DelDOT standard with 11-foot lanes and shoulders per functional classification.
 - The main roadways east of Route 1 are in the CTP or are being studied by others.
 - The status of this recommendation is changed to COMPLETE.





- C-12 Study access management opportunities along Route 1 in the study area, including potential connections between businesses
 - An agreement between Lowe's and DelDOT has been executed to provide access to Lowe's from Route 1 through the Lewes Transit Center property.
 - Sussex County is actively pursuing interconnectivity in all commercial projects along Route 1.
 - This recommendation status is changed to ONGOING





- C-14 Study the feasibility of installing a "YOUR SPEED" display on southbound Route 1 at Nassau Road
 - The radar speed sign was installed August 18, 2021 in the median approximately 415 ft south of Nassau Rd. (northern access point)
 - Status: COMPLETE





- C-16 Study the feasibility of providing driveway access from Beacon Middle School and Love Creek Elementary School onto Mulberry Knoll Road
 - To be initiated in 2022
 - Revisit reasons behind the original school site access plans
 - Consult with Cape Henlopen School District





- D-1 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.)
 - Primary lead is the City of Lewes.
 - DTC has held conversations with the City of Lewes about providing them small cutaway (paratransit sized) buses that they could operate as jitneys.
 - Lewes wants to start service in May 2022.





- D-3 Develop design guidance to separate pedestrians and bicyclists from highway traffic using aesthetic treatments
 - To be Initiated in 2022



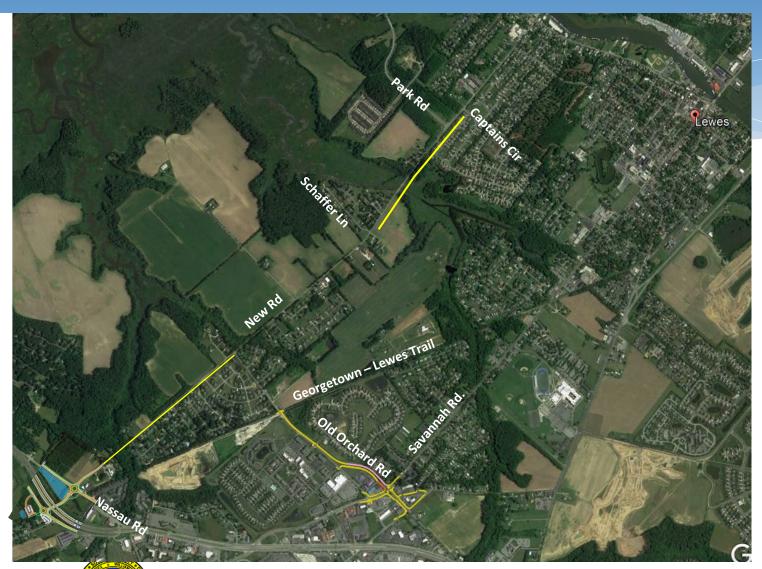


- D-4 Develop concepts and estimates for filling sidewalk gaps along New Road and Old Orchard Road
 - Portions will be built by current CTP projects:
 - ➤ Old Orchard Road relocation project construction start Fall 2022, complete 2025
 - ➤ New Road Canary Creek Bridge construction start Fall 2023, complete Spring 2024
 - > SR1/Minos Conaway Road construction start 2023, complete 2025
 - ➤ New Road from Nassau Road to Old Orchard Road –preliminary engineering start 2025
 - Portions will be built by developer projects.
 - The Byway Committee will identify remaining gaps on New Road.
 - DelDOT will inventory remaining gaps on Old Orchard Road in FY 2023.





D-4: Sidewalk /path added by upcoming projects7





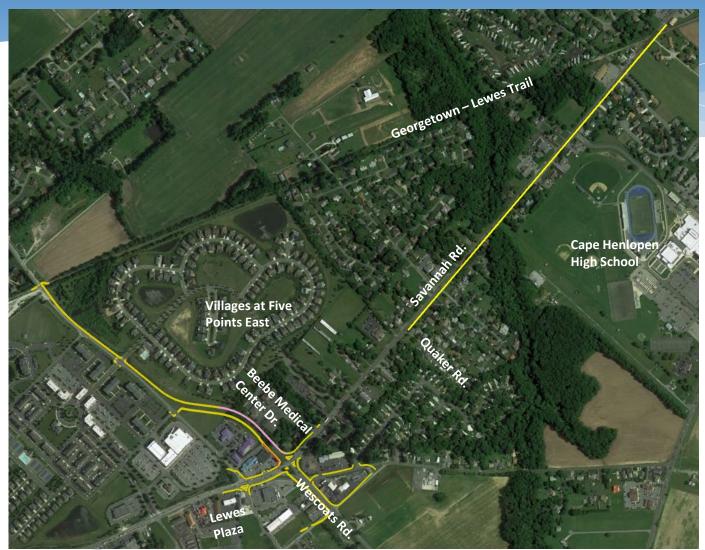


- D-5 Develop concepts for filling all sidewalk gaps along Savannah Road between Lewes and Five Points.
 - The Savannah Road Sidewalk project started construction November 1, 2021. It places sidewalk on the south side of Savannah Road from Quaker Road to the G&L Trail.
 - The Old Orchard Road relocation project will add sidewalk on Savannah Road in project limits.
 - DelDOT will inventory remaining gaps in FY 2023 and report to the Byway Committee.
 - The Byway Committee is investigating moving forward with a master plan for Savannah Road.





D-5: Sidewalk added by upcoming projects







- D-9 Identify potential connections to and from the Lewes Transit Center
 - Being examined as part of the SR 1 Low Stress Bikeway study.
 - Draft FY 2023-28 CTP has a project on Shady Road including pedestrian/bicycle improvements.





- D-11 Study the feasibility of providing shelters at bus stops –
 Context sensitive i.e. beach style
 - DTC has upgraded and improved transit shelters in the Five Points study area with its new statewide standard shelter.
 - DTC will continue to evaluate bus stops for shelters.
 - This recommendation is COMPLETE





- D-15 Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway
 - Pedestrian crossings of Kings Highway were provided at the signal at Clay Road.
 - Improved pedestrian crossings are planned to be installed at the signal at Kings Highway and Gills Neck Road in 2022.
 - By agreement between a developer, the City of Lewes, and DelDOT, a new signal will be installed at Freeman Highway and Monroe Avenue which will have at least one crosswalk across Freeman Highway.





- D-15 Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway (cont.)
 - Additional pedestrian facilities may be included with the Kings Highway CTP project as proposed by the Kings Highway/Gills Neck Road Byway Master Plan.
 - The Kings Highway CTP project has started and a public meeting is planned in February 2022.
 - Rectangular Rapid Flashing Beacons (RRFB) are now operating at the trail crossing of Freeman Highway near Cape Henlopen Drive.





- 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
 - This project is a candidate for the FY 23-28 Capital Transportation Program; CTP hearings were held in September.
 - It is still intended that developers will build this road to the greatest extent possible or will contribute to its construction through the Henlopen TID.





- 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 (cont.)
 - A public workshop was held October 26, at 4:00 pm.
 - The study will be completed in Spring of 2022.





- E-4 Evaluate the potential transportation benefits, costs, and impacts of a new road connecting Route 1 north of Five Points and the Vineyards
 - To be Initiated in 2022.
 - A new road connection would allow developments in the area to access the roadway network from more than just a single point.





- E-7 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
 - Airport Road extension from Old Landing Road to SR 24 is included in a CTP project which will begin preliminary engineering in 2025.
 - The new extension from Old Landing Road will connect to Beebe Drive which connects to SR 24.
 - There is no project at this time to extend Airport Road west of SR 24 to Postal Lane. It is recommended by the Henlopen TID study.





Phase 2 implementation plan

Next steps

- Continue work on recommendations
- Provide email progress updates in February and March
- Convene the Working Group on April 25, 2022
- Prepare the 2021 Annual Report summarizing activities and progress in 2021
- Schedule a public workshop in May 2022





Public comment





Thank you for your participation!

Next meeting
Monday, April 25, 2022
6:00 pm
Location TBD

Jenn Cinelli-Miller
Project Planner
Delaware Department of Transportation
jennifer.cinelli@delaware.gov
302.760.2549







Meeting Minutes

Phase 2 Working Group Meeting #10

October 25, 2021, 6:00 pm Online

Members present:
Robert Fischer
Josh Grabski
DJ Hughes
Todd Lawson
Sen. Ernesto B. Lopez
Carol Materniak
Lloyd Schmitz
Pamela Steinebach
Kim Hoey Stevenson
Ann Marie Townshend
Michael Tyler

Members absent:
Scott Green
Doug Hudson
Carole Kohr
Glenn Marshall
Mark Schaeffer
Rep. Peter Schwartzkopf
Rep. Steve Smyk
Gail Van Gilder

This was an online meeting. A quorum of 11 Working Group members attended.

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 informed everyone that Josh Thomas, who represented DelDOT on the Working Group has taken a new position and left DelDOT. Pamela Steinebach, the new Director of Planning, will now be representing DelDOT on the Working Group. Andrew also noted that Jeff Riegner, who was part of the consultant team with WRA, has also taken a new position. Other WRA staff and Andrew himself are performing Jeff's role at this meeting. By January 2022 the team will have a better idea of who from WRA will take this role moving forward 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 July 26, 2021 Working Group meeting were



approved all in favor, no opposed, with Ann Marie Townshend and Pamela Steinebach abstaining due to not being in attendance at that meeting.

Five Points Intersection Briefing

Shanté Hastings, Deputy Secretary and Chief Engineer for DelDOT, gave a presentation on the Five Points intersection in response to the high level of interest from the public for Recommendation E-1: **Study the feasibility of a grade separated intersection (GSI) at Five Points.** The E-1 recommendation was presented at the Phase 1 workshop and was ranked as a top 3 priority among workshop attendees/residents.

Shanté discussed the GSI study conducted in 2008 that developed several different options for the intersection, all of which would have relocated US 9 to the current alignment of SR 23 to avoid widening through the Belltown historic district. From this study, six grade separated alternative options were evaluated, but none were able to gather public support, so DelDOT suspended the study. Shanté pointed out that since the time of that study, new development (Lewes Transit Center, Bests' Ace Hardware, Henlopen Landing etc.) has affected the feasibility of those alternatives.

Todd Oliver from WRA reviewed existing conditions from a traffic standpoint. Todd noted that the signals at the intersection operate based on traffic demand, which can have varying wait times based on congestion. The most recent count performed on this intersection was in March 2021. Some of the primary issues are:

- Eastbound US 9 through/right turn
- Northbound Route 1 left turn and effect of gueues from US 9 westbound
- Southbound Route 1 left turn

Todd shared a video taken of the intersection on a Friday afternoon in March 2021 to demonstrate how queueing at the intersection of US 9 causes additional delays at the intersection. Todd described seasonal impacts. Summer traffic can be up to 50% higher than off-season traffic for some movements, and the primary issues are still the turn movements noted above. Todd also described the 3-year crash history and noted that rear end crashes make up 78% of total crashes. After red-light running camera enforcement was installed in 2017, there has been a decrease in angle crashes by 36%. This is significant because angle crashes are typically the most severe.

Shanté described improvements that have been made to the Five Points area, starting with signing and striping improvements on Route 1 and US 9 to make it



more clear and easier for drivers to navigate. Improvement projects to the area include:

- Plantation Road Phase 1, Robinsonville Road to US 9 (Spring 2022 construction)
- Old Orchard Road realignment (Fall 2022 construction)
- SR 1 at Minos Conaway Road GSI (Fall 2023 construction)
- Mulberry Knoll Road study (potential new north-south road connection west of and parallel to Route 1)
 - Will also determine potential widening of Plantation Road from Robinsonville Road to SR 24
- US 9 widening Old Vine Blvd. to Route 1 (Design beginning FY 2022)

Mike Tyler said he hasn't seen any bicycle connections in these improvements and that he is very concerned about the changes being presented here that don't appear to include bicycle and pedestrian movements. Mike also mentioned that roundabouts give some concern for safety, and asked about provisions for cycling on these improvements. Todd Oliver responded that all the improvement projects and studies include a component of multi-modal facilities (sidewalks, multi-use paths, trails, etc.) for cyclists and pedestrians.

Shanté presented an overview map showing the physical locations of these projects and studies in relation to the Five Points intersection. Shanté then shared a video showing the future improvements for Plantation Road roundabout and how it will affect the traffic at Five Points. This improvement will have a new connection adjacent to the current ACE Hardware and a longer connector from US 9 to Beaver Dam Road.

Shanté mentioned that the Henlopen Transportation Improvement District or TID, which was adopted by Sussex County last year after a multi-year study, is a means for funding road improvements using fees collected from developers.

Shanté discussed several reasons why DelDOT is waiting to study a grade separation at the Five Points intersection. DelDOT is currently addressing other working group recommendations to improve traffic operations. The current proposed improvements can be completed sooner. DelDOT needs to see how these other improvements may affect the traffic patterns at Five Points. This will allow DelDOT to go about making improvements in a smart and logical way.

A GSI study will involve environmental documentation to evaluate impacts to cultural and natural resources. Preliminary concepts will be developed and analyzed for their impacts on congestion, safety, properties and businesses, and cost. Concepts must include integration with the pedestrian and bicycle network. Public involvement will occur throughout the study process to help develop the



preferred alternative. Once a project is programmed in the CTP, DelDOT will follow the project development process, including NEPA approval, preliminary and final engineering, right-of-way acquisition and utility relocation. Again, public involvement will occur throughout.

Shanté concluded that at this moment, DelDOT plans to allow some time for the other projects in the area to move forward. At some point a decision will be made as to when to move forward with a Five Points GSI study.

Bob Fischer shared his idea of a double-decker road starting at the Five Points intersection and continuing all the way to Dewey Beach. Bob mentioned that this idea wasn't recommended during Phase 1 because of the extremely high costs. However, if private investment was encouraged, it could help fund the road. The Route 1 corridor could become a Tyson's Corner type area with high-rise buildings, relocation of tech jobs, and more full-time residents, all creating a huge economic impact for the area. Andrew Bing stated that this idea for the area was brought up previously, but the aesthetic of this plan didn't appeal to many people.

DJ Hughes said he agreed with Shanté's statement about finishing projects around Five Points before trying to study the intersection, and that the Minos Conaway project will help drivers, cyclists and pedestrians. DJ stated that traveling southbound on Route 1, Five Points is metering the traffic, but traffic still backs up to Five Points from Wescoats Road. DJ feels that there would not be many capacity benefits from grade separating the intersection, but if it were for safety issues, that makes more sense. Andrew Bing responded that at some point there will be a determination to do a preliminary study to investigate those types of things to gain a better understanding.

Mike Tyler asked how long it will take to realize a Five Points project. Mike shared that 20 years ago they were talking with DelDOT about realignments in the Five Points area and nothing happened. Shanté responded that she was not sure what happened 20 years ago, but DelDOT currently plans to spend 3.1 billion dollars in Sussex County over the next few years. DelDOT is inclined to wait until other projects in the area are up and running before a Five Points project would begin, because they will have an impact on the Five Points intersection. The last project to start construction will be in the fall of 2023, which will take a couple years to complete. Mike said if there was any way to expedite the process, that would be great.

Bob Fischer said that he would be happy to help develop any alternatives with the team.



Implementation Plan Status

Adrienne Eiss from WRA reviewed the progress that has been made since the last working group meeting.

- B-14 Identify locations where trees can safely be planted within the right of way. This work will be getting under way in the next couple of months. At the next working group meeting, DelDOT will supply guidelines that govern how trees could potentially be planted within the right of way.
- C-5 Improve the intersection of Cave Neck Road, Sweet Briar Road, and Hudson Road. Design of this project has begun, and DelDOT will be presenting alternatives to Sussex County Council in November. A public workshop will be held in November.
- C-14 Study the feasibility of installing a "YOUR SPEED" display on southbound Route 1 at Nassau Road. The radar speed sign was installed August 18, 2021 in the median approximately 415 ft south of Nassau Road (northern access point).
- D-4 Develop concepts and estimates for filling sidewalk gaps along New Road and Old Orchard Road. Portions will be built by current CTP projects and developer projects, with construction starting in Fall of 2022 for some portions. The Byway Committee will identify remaining gaps on New Road.
- D-5 Develop concepts for filling all sidewalk gaps along Savannah Road between Lewes and Five Points. The Savannah Road Sidewalk project will be stating construction November 1, 2021, placing sidewalk on the south side of Savannah Road from Quaker Road to the G&L Trail. The Old Orchard Road relocation project will add sidewalk on Savannah Road in project limits. The Byway Committee is investigating moving forward with a master plan for Savannah Road.
- D-11 Study the feasibility of providing shelters at bus stops –
 Context sensitive i.e. beach style. An additional shelter was installed at
 the Rehoboth park and ride this summer, replacing an older shelter. DTC is
 still coordinating with the City of Lewes for a shelter and all necessary
 amenities at Stop ID 2918, Savannah Road at Third Street.
- E-1 Study the feasibility of a grade separated intersection (GSI) at Five Points. As discussed by Shanté earlier in the meeting, DelDOT has reviewed prior GSI studies and is developing a strategy for initiating a new study.
- 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. This



project is a candidate for the FY 23-28 Capital Transportation Program; CTP hearings were held in September. It is still intended that developers will build this road to the greatest extent possible or will contribute to its construction through the Henlopen TID.

Senator Lopez thanked everyone for their continued work and the updates on the Savannah Road sidewalks.

DJ Hughes asked about the schedule of the construction for SR 16, Cave Neck Road and SR 1, and Minos Conaway Road. Shanté stated that SR 16 construction will start in the Spring of 2022, lasting about 2.5 years. Cave Neck Road and SR 1 construction is slated to start in 2025, and Minos Conaway should begin in Fall of 2023 and last 2.5 years.

Next steps

Andrew summarized the next steps in the Working Group process:

- Updates on the implementation plan will continue.
- Email progress updates will be sent in November and December.
- Staff will start preparing the 2021 Annual Report.
- The next meeting will be held January 31, 2022. This meeting is likely to be online.

Public comments

Andrew Bing asked meeting attendees whether they had any comments or questions. There were no comments or questions from the public.

The meeting was adjourned at 7:15 pm.

Public attendance

Eight members of the public attended, as listed below.

Kathleen Baker Dan Deboissiere Ian Friedland Richard Grifasi JH Jenn to get name for jhmalls @aol.com
Eul Lee
Mary Roth
Nick Roth





Guidance for trees in the right-of-way

When are trees/landscape placed within the right-of-way?

- 1. To meet regulatory requirements such as the Landscaping and Reforestation Act
- 2. When requested by the community and meet certain conditions
 - Starts in project planning
 - During planning efforts, like Five Points
 - o As part of project development, e.g. Old Orchard Road realignment and Minos Conaway GSI
 - Planning coordinates with DelDOT South Maintenance District and Roadside Environmental
 - A major deciding factor is maintenance

Where are trees/landscape permitted within the right-of-way?

- Safety first!
 - Trees can cause hazards along roadway
 - Line of sight needs to be maintained to allow safe turning movements
- Lateral offset, or distance from the edge of the roadway to a vertical roadside element such as a curb, wall, utility pole, sign, or tree. Determining the appropriate lateral offset is based on:
 - Roadway classification
 - Curbing/barrier
 - Adjacent Land Use
- · Avoid conflicts with utilities
 - Above ground
 - Below ground

What type of trees/landscape are permitted within the right-of-way?

- Species selection
 - o Should consider salt spray tolerance, wind tolerance, and sandy soil conditions
 - Invasive species prohibited by law
 - Native species may soon be required
 - o Recommended species list under development
- Enhancing Delaware's Highway initiative provides established guidelines:
 - Roadside Vegetation Concept and Planning Manual
 - o Roadside Vegetation Establishment and Management Manual

Who maintains trees/landscape within the right-of-way?

- Short-term maintenance
 - Cost can be included in installation cost
 - Must consider maintenance of traffic requirements and safety for access
- Long-term maintenance
 - o Critical to success of landscape
 - o DelDOT can mow, apply preemergent, and perform some tree pruning
 - o Naturalized landscapes (i.e. meadow along a highway) may reduce mowing requirements
- Landscape Maintenance Agreements
 - Required for all projects where extensive landscape elements are desired
 - o Between DelDOT and established entity with financial capacity to maintain landscape over time
 - Must consider maintenance of traffic cost
 - Volunteer organizations may be a maintenance resource







List of upcoming meetings

Phase 2 Working Group

Meeting #12

Monday, April 25, 2022, 6:00 pm Location to be determined

Public Workshop

May 2022 – date to be determined

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

See the Delaware Public Meeting Calendar at publicmeetings.delaware.gov for official meeting notices.





January 31, 2022 (red text indicates changes since October 25, 2021 Working Group meeting)

\$ < \$200K \$\$ \$200K - \$2M \$\$\$ \$2M - \$20M

\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Category	ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp.	Status	Remarks
A. Recon	nmendat	ions to be	implemen	ted under current DelDOT projects or initiatives									
А	1	N/A	25	Review the need for grade separating or restricting crossings between Frederica and Lewes before eliminating signals in this area	DelDOT - Traffic		\$	*	N/A	N/A	N/A	COMPLETE	Studies have been completed, with results presented to the Working Group in October 2019. DelDOT is proceeding with a program of grade separations and crossover improvements.
А	2	N/A	42	Evaluate Tulip Drive connection to Route 1 as part of the Minos Conaway Road grade separation project	DelDOT - PD South		\$	*	\$\$	* *	◊ ◊	COMPLETE	Tulip Drive connection is now part of the Minos Conaway project.
А	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	DelDOT - 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	DelDOT - PD South		\$	*	TBD	TBD	TBD	IN PROGRESS	Sussex County Tourism has developed the plan for destination signing on SR 1 including the destinations and sign appearance. Directional signs installed as part of the Minos Conaway project will have a look that is consistent with the Sussex County Tourism design scheme. 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.
А	5	N/A	55	Evaluate one-way service roads as part of the Minos Conaway Road grade separation project	DelDOT - 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.
А	6	N/A	82	Study the feasibility of extending the eastbound widening of Route 24 to Love Creek	DelDOT - 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.
А	7	N/A	N X X	Study the feasibility of widening or adding through lanes on Plantation Road from Route 24 to Cedar Grove Road and Postal Lane	DelDOT - PD South/Planning		\$	*	\$\$\$	* *	⋄⋄⋄	IN PROGRESS	On hold pending results of the Mulberry Knoll Road Extension study. See recommendations E-2 and E-3.
B. Imple	ment pol	icies and p	procedures	to make the area more efficient, sustainable, and beautiful									
В	1	Y	34	Require new developments to plan for interconnections to any future development areas and monitor to ensure implementation	Sussex County	DelDOT	\$	*	N/A	N/A	N/A	ONGOING	All subdivision applications are subject to pre-application meetings. Where the potential for interconnectivity to undeveloped parcels is identified, this is discussed with developers prior to application submittal.
В	2	γ	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	DelDOT	\$	*	N/A	N/A	N/A	IN PROGRESS	In 2020, the Sussex County Planning & Zoning Commission discussed a potential future revision to the Zoning Code to clarify the maximum extent to which parking may be permitted in the front yard setback. DelDOT updated the Development Coordination Manual to require greater width along principal arterials. Sussex County's focus is primarily on east-west roads, which are not principal arterials except Route 18/404. The Development Coordination Manual is in the Strategic Highway Safety Plan (Strategy 5.2 Revise DelDOT's Development Coordination Manual to require additional pedestrian infrastructure improvements related to new developments).

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Catego	ry	ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp. impacts	Status	Remarks
В		3	Υ	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.	DelDOT - 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. Travel time messages are now displayed on these variable message signs approaching the beach area. This information is also available on the DelDOT app.
В		4	Υ	91	Improve advance acquisition process to allow DelDOT 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	DelDOT	\$	* *	N/A	N/A	N/A	COMPLETE	New advance acquisition regulations were approved in 2018. Now proactive purchases will be feasible.
В		5	Y	50	Study the feasibility of converting the Arby's driveway between Route 1 and Savannah Road into a publicly-accessible road	DelDOT - Planning	DelDOT - Real Estate and PD South; property owners	\$	*	\$\$	* *	◊	IN PROGRESS	DelDOT negotiated a concept for connections through the Nicola Pizza property. Sussex County approved the Nicola Pizza site plan with the easement language. Further progress on hold until Arby's comes up for development. Coordinate with B-1, C-12.
В		6	Υ	14	Incorporate more walkable, bikeable, mixed-use town centers into the comprehensive plan	Sussex County		\$	*	N/A	N/A	N/A	Longer-term	
В		7	Υ	89	Continue TID studies both east and west of Route 1	DelDOT - Planning	Sussex County, City of Lewes	\$\$	*	TBD	TBD	TBD	COMPLETE	At its October 27, 2020 meeting, Sussex County Council approved the Henlopen TID agreement. The Henlopen TID recomendations 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.
В		8	Υ	62	Study the feasibility of a parking management system to alert travelers when parking lots at major destinations are full	DelDOT - Planning	DelDOT Traffic, DTC, property owners, businesses, DNREC, private	\$\$	*	\$\$\$	* *	◊	IN PROGRESS	DelDOT has reached out to DNREC to obtain information on their current parking count and monitoring practices and historic lot count data. DNREC is getting ready to update the entrance to Cape Henlopen State Park, and would like to explore adding automated counters for use in tracking parking occupancy. Coordinate with recommendation B-
В		9	N	69	Study enhancing New Road per Byway Master Plan	DelDOT	City of Lewes, Sussex County, Delaware Greenways, Byway Committee	N/A	N/A	\$\$\$	* *	⋄⋄⋄	ONGOING	The New Road Master Plan was endorsed by the Lewes Mayor & City Council on July 13, 2020. In addition, they approved the Byway's request to transition to a citizen-led Byway 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. Improvements along frontages of new development will be addressed by developer agreements.
В		10	N	94	Endorse "don't block the box" legislation with camera enforcement	General Assembly	Delaware State Police, DelDOT	\$	* *	\$\$	*	◊	To be Initiated in 2022	
В		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	
В		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	
В		13	N	95	Study alternatives to both meter and slow southbound traffic approaching Five Points	DelDOT		\$	*	TBD	TBD	TBD	COMPLETE	DelDOT has implemented speed reduction pavement markings along SR 1 southbound approaching the Nassau Bridge.

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Category	ID	Priority	Old idea	Working Group recommendation	Assumed lead agency	Other responsible	Study	Study timeframe	Imp.	Imp. timeframe	Imp.	Status	Remarks
В	14	N	no. 36	Identify locations where trees can safely be planted within the right of way	DelDOT	parties (if any)	\$	*	\$\$	**	impacts	IN PROGRESS	DelDOT already considers adding trees during development of capital projects. At the January, 2022 meeting DelDOT will provide the Working Group with guidelines that govern how trees could potentially be planted within the right of way. At the following Working Group meeting, members will have the opportunity to provide input on desired locations for trees.
В	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	DelDOT	Sussex County	\$	*	\$\$\$	* * *	◊◊	Longer-term	
В	16	N	16	Increase the importance of considering noise and lighting impacts of major transportation project recommendations per regulations	DelDOT		\$	*	N/A	N/A	N/A	ONGOING	
В	17	N	56	Evaluate the use of land made available by narrowing lanes for landscape and multi-modal trails or parks	DelDOT		\$	*	\$\$	* *	◊	Longer-term	
В	18	N	26	Study potential locations and designs for aesthetically pleasing gateways to coastal Sussex County	Sussex County	DelDOT, City of Lewes, Byway Committee	\$	*	\$\$	**	٥	Longer-term	
В	19	N	75	Study the feasibility of mounting clear, consistent, day/night address/block numbering signage along Route 1	DelDOT	Sussex County Tourism	\$	*	\$\$	*	◊	Longer-term	
В	20	N	80	Consider whether CTP funding should be allocated based on population growth	DelDOT	Council on Transportation	\$	* *	N/A	N/A	N/A	Longer-term	
В	21	N	7	Study frequency and causes of emergency vehicle preemption and make recommendations to balance emergency vehicle access with traveler mobility	DelDOT	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.
В	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.
В	23	N	35	Use an app to warn people of congestion on Route 1 and recommend alternative routes	DelDOT		\$	*	N/A	N/A	N/A	COMPLETE	DelDOT app is in place and continually being updated.
В	24	N	49	Improve tourism-oriented destination signage along Route 1	Sussex County Tourism	DelDOT	\$	*	\$	*	◊	IN PROGRESS	Sussex County Tourism is taking the lead on this effort in conjunction with municipalities. Coordinate with recommendation A-4.
В	25	N	28	Identify the costs and benefits of dedicating Nassau Commons Boulevard to public use	DelDOT Planning	Sussex County, property owner	\$	*	\$\$	* *	◊◊	IN PROGRESS	The developer of the Vineyards may be improving a portion near US 9. DeIDOT is investigating right of way issues, including maintenance. The Henlopen TID recommended a project to improve Nassau Commons Boulevard, which is currently not funded.
В	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	DelDOT	Sussex County	\$	*	N/A	N/A	N/A	Longer-term	
В	27	N	9	Develop a better process for constituents to request transportation improvements	DelDOT	General Assembly, Sussex County, Council on Transportation	\$	*	N/A	N/A	N/A	IN PROGRESS	DelDOT continues to develop the Project Pipeline Process, a new portal for the public to identify transportation issues and request improvements.

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\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Category	, ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp. impacts	Status	Remarks
C. Mak	e the mos	t of existir	ng roadway	infrastructure									
c	1	Y	20	Conduct a corridor study on Route 9 to determine the feasibility of widening to four lanes	DelDOT - Planning		\$\$	**	\$\$\$\$	***	⋄⋄⋄	IN PROGRESS	Widening is recommended by the Henlopen TID study, with limits from Ward Avenue to just west of Old Vine Boulevard. A project is programmed in the FY 21 - 26 CTP. Project development process began in October 2021. The Plantation Road project will complete the widening of Route 9 from Ward Avenue to Route 1.
С	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	DelDOT - 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 programmed in the FY 21 - 26 CTP. The right turn lane was added to a paving rehabilitation project and construction is underway.
С	3	Y	64	Initiate a capital project to improve the intersection of Old Landing and Warrington Road (developer funding and concept are available)	DelDOT - PD South		N/A	N/A	\$\$\$	* *	◊ ◊	COMPLETE	A project is programmed in the FY 21 - 26 CTP. Design is scheduled to start in FY 2025.
С	4	Y	11	Improve the Canary Creek bridge on New Road to reduce flooding	DelDOT - Bridge		N/A	N/A	\$\$\$	* *	⋄⋄⋄	IN PROGRESS	A project has been initiated under DelDOT's Bridges/State of Good Repair budget. Online public information meetings were held in June and August 2021. Final right of way approval has been received. Construction is anticipated to begin in Fall of 2023.
С	5	Y	92	Improve the intersection of Cave Neck Road, Sweet Briar Road, and Hudson Road	DelDOT - PD South		\$	*	\$\$\$	* *	⋄ ⋄	IN PROGRESS	Sussex County Council selected this intersection as the first project its FAST program (Funding Accelerating Safety in Transportation). DelDOT presented alternatives to Council in November. A public workshop was held November 16, 2021. A preferred alternative is scheduled to be selected in early 2022 and design complete in early 2024.
С	6	Υ	102	Study the feasibility of lengthening left- and right-turn lanes throughout the study area	DelDOT - Traffic		\$	*	\$\$\$\$	***	⋄⋄⋄	IN PROGRESS	DelDOT Traffic evaluated locations suggested by Five Points Working Group members. All but two have been incorporated into other DelDOT projects. DelDOT is looking at the potential to add southbound Route 1 at Dartmouth Drive to the Kings Highway capital project. Southbound Route 1 at Ames Drive will be re-evaluated after changes are completed at Holland Glade Road. Design is underway on southbound Route 1 at Old Landing Rd. A pavement rehabilitation project now under construction on Minos Conaway Road from Route 9 to Brittany Lane is adding the right turn lane at US 9.
С	7	Y	1111/4	Study the feasibility of improving Minos Conaway Road with appropriate lane widths, shoulder widths, turn lanes, curvature, etc.	DelDOT - Planning/Traffic		\$	*	\$\$\$	* * *	⋄⋄⋄	IN PROGRESS	A curve compliance study completed in February 2019 and signage improvements were implemented in March 2019. The Henlopen TID study recommended a project to improve Minos Conaway Road. The project is not funded. A paving project is adding a right turn lane at US 9. Further action on hold pending completion of Minos Conaway GSI.
С	8	Y	1013	Study the feasibility of restriping two-lane sections of Savannah Road with a two-way left-turn lane	DelDOT - Traffic		\$	*	\$\$	* *	\	COMPLETE	DelDOT'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.
С	9	γ*	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	DelDOT 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.

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\$ < \$200K * <3 years \QDelta Low \$\$ \$200K - \$2M \$\$\$ \$2M - \$20M

* * 3-10 years 🔷 🗘 Medium

\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Category	ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp.	Status	Remarks
С	10	γ*	37	Continue to improve traffic signal phasing, timing and coordination using real time monitoring and control technologies	DelDOT - Traffic		\$	*	\$	*	⋄	ONGOING	This is a core function of DelDOT Traffic, and is done on an ongoing basis. Pre-emption improvements are in progress; see recommendation B-21.
С	11	N		Develop concepts and estimates for bringing roads in the study area to DelDOT standard, including shoulders	DelDOT		\$\$	**	\$\$\$\$\$	***	000	COMPLETE	In 2020 the Working Group clarified that C-11 applies to state roads. The Henlopen TID study addressed state-maintained roads west of SR 1 and developed estimates for bringing them up to DelDOT standard with 11-foot lanes and shoulders per functional classification. The main roadways east of Route 1 are in the CTP or are being studied by others.
С	12	N	98 1	Study access management opportunities along Route 1 in the study area, including potential connections between businesses	DelDOT	Sussex County	\$	*	\$\$\$	* *	⋄⋄⋄	ONGOING	An agreement between Lowe's and DelDOT has been executed to provide access to Lowe's from Route 1 through the Lewes Transit Center property. Sussex County is actively pursuing interconnectivity in all commercial projects along Route 1.
С	13	N	22	Study the feasibility of eliminating unsignalized crossovers on Route 1	DelDOT		\$	*	\$\$	* *	◊	Longer-term	This recommendation refers to crossovers between Five Points and Route 24.
С	14	N	51	Study the feasibility of installing a "YOUR SPEED" display on southbound Route 1 at Nassau Road	General Assembly	DelDOT	\$	*	\$	*	⋄		Area legislators supported the installation of this sign using their Community Transportation Funds. The radar speed sign was installed August 18, 2021.
С	15	N	- 3X I	Study the feasibility of lengthening the southbound acceleration lane on Route 1 at Minos Conaway Road	DelDOT		\$	*	\$\$	*	⋄	COMPLETE	Construction was completed in spring 2020.
С	16	N	84	Study the feasibility of providing driveway access from Beacon Middle School and Love Creek Elementary School onto Mulberry Knoll Road	DelDOT	Sussex County, Cape Henlopen School District	\$	*	\$\$\$	* *	⋄	To be Initiated in 2022	
С	17	N	21	Conduct capacity analyses at study area intersections to identify the need for turn lanes	DelDOT		\$\$	*	\$\$\$\$	* *	⋄ ⋄	Longer-term	
С	18	N		Improve lane markings and signs at identified intersections: Five Points, Dartmouth Drive/Kings Highway, Plantation Road/Beaver Dam Road	DelDOT		\$	*	\$	*	◊	Longer-term	Immediate maintenance concerns are being addressed now.
c	19	N	/X	Study the feasibility of an all-way STOP at Beaver Dam Road and Kendale Road	DelDOT		\$	*	\$	*	◊	COMPLETE	Eight reportable crashes occurred at the intersection over the three years from March 2015 – March 2018. Based on the crash type, an allway STOP may not be an appropriate countermeasure, with the curvature of the roadway and potential to increase rear-end crashes. A roundabout was studied but is not adequate for 2045 traffic. The Henlopen TID study recommended a traffic signal by 2045; it will be installed when a signal warrant is met.
С	20	N		Study the feasibility of replacing the HAWK signal with a full signal at Holland Glade Road, potentially with a fourth leg at the outlets	DelDOT - Development Coordination		\$	*	\$\$	*	◊	COMPLETE	In conjunction with proposed development of Coastal Station on Route 1 at Holland Glade Road, the HAWK signal will be removed and replaced with a full signal and a four-way intersection. The intersection is now in final design.

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\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Imp. Imp. Old idea Other responsible Study Study Imp. ID Assumed lead agency Category Priority **Working Group recommendation** Status Remarks parties (if any) timeframe timeframe impacts cost cost D. Make walking, bicycling, and transit more viable as alternatives to driving 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. DTC Study the feasibility of a hop-on, hop-off van or jitney service loop for held preliminary conversations with the City of Lewes about providing Lewes similar to free service in Cape May (Five Points, hospital, Lloyds them small cutaway (paratransit sized) buses that they could operate as 79 \$\$ City of Lewes, DRBA DTC, DNREC \$ ٥ IN PROGRESS Grocery Store, downtown Lewes, Library, Lewes Beach, Ferry, State jitneys. DTC also received a federal grant to pilot on-demand microtransit (DART Connect) services in the Georgetown and Millsboro Park, etc.) areas. Based the success of the pilot, this type of service could be used in the Lewes area. Lewes wants to start service in May 2022. The SR 1 Low-Stress Bikeway Study is underway to evaluate the potential for routes both parallel to and crossing Route 1. The results of Study the feasibility of potential connections for walking and bicycling Sussex County (as part of \$\$\$ IN PROGRESS DelDOT - Planning \$\$ $\Diamond \Diamond$ between existing neighborhoods, along streets, and to trails comprehensive plan) the pedestrian bridge study in recommendation D-6 will be incorporated into this effort. Coordinate with D-6 and D-10. Develop design guidance to separate pedestrians and bicyclists from To be Initiated in 96 DelDOT TBD TBD TBD Sussex County D highway traffic using aesthetic treatments 2022 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 Develop concepts and estimates for filling all sidewalk gaps along New 90 DelDOT - Planning \$ \$\$\$ $\Diamond \Diamond \Diamond$ IN PROGRESS Road Master Plan will identify remaining gaps on New Road. A gap Road and Old Orchard Road remains on Old Orchard Road between the Trail and New Road. DelDOT will inventory remaining gaps in FY 23. The Savannah Road Sidewalk project started construction November 1, 2021. It places sidewalk on the south side of Savannah Road from Quaker Road to the G&L Trail. The Old Orchard Road relocation project Develop concepts and estimates for filling all sidewalk gaps along \$\$\$ 71 DelDOT - Planning $\Diamond \Diamond \Diamond$ IN PROGRESS will add sidewalk in the project limits. DelDOT will inventory remaining Savannah Road between Lewes and Five Points gaps in FY 23 and report to the Byway Committee. The Byway Committee is investigating moving forward with a master plan for Savannah Road. To be coordinated with C-8. Initial candidate locations have been identified: the Five Points intersection area, the Lewes Transit Center area, and near Rehoboth Study the feasibility of pedestrian bridges over Route 1 at specific 52 \$\$\$ IN PROGRESS DelDOT $\Diamond \Diamond$ Outlets (Surfside). Further evaluation, including public input, will be locations conducted as part of the SR 1 Low-Stress Bikeway Study. Coordinate with D-2 and D-10. 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, Study the feasibility of transit service to tie the Milton/Red Mill but other factors in the schedules prevent them from being seamless. DTC \$ \$\$ Ν 59 **◊** IN PROGRESS Pond/Minos Conaway Road area into the transit network 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. The on-demand services mentioned in D-1 for Lewes could serve Milton in the future.

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\$ < \$200K \$\$ \$200K - \$2M \$\$\$ \$2M - \$20M

\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Category	ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp.	Status	Remarks
D	8	Ν	N 81	Study the feasibility of a park and ride lot on Route 24 at the edge of the study area	DTC	DelDOT	\$	*	\$\$\$	* *	⋄⋄⋄	IN PROGRESS	DTC supports implementing a Park and Ride along Route 24, but an exact location has not yet been determined. Discussions have begun with area businesses regarding park and ride locations along the Route 24 corridor.
D	9	N	23	Identify potential connections to and from the Lewes Transit Center	DelDOT		\$	*	\$\$	* *	◊	IN PROGRESS	Being examined as part of the SR 1 Low Stress Bikeway study. Draft FY 2023-28 CTP has a project on Shady Road including pedestrian/bicycle improvements.
D	10	N	l h	Study the feasibility of a barrier in the median of Route 1 to deter pedestrian crossings at inappropriate locations	DelDOT		\$	*	\$\$\$	* *	⋄	IN PROGRESS	Evaluations are being conducted in conjunction with recommendations D-2 and D-6.
D	11	N		Study the feasibility of providing shelters at bus stops - Context Sensitive i.e. cottage beach style shelters	DTC		\$	*	\$\$	*	⋄	COMPLETE	DTC has upgraded and improved transit shelters in the Five Points study area with its new statewide standard shelter. 13 shelters were installed in the Rehoboth Beach/Lewes area and along the Route 1 corridor at the higher ridership locations in 2020 and 7 more bus shelters were installed in 2021. DTC will continue to evaluate bus stops for shelters.
D	12	N	<u>Δ</u> 1	Identify publicly- and privately-owned land in the study area that may be used for trails	DelDOT		\$	*	\$\$\$\$	* * *	⋄ ⋄	Longer-term	
D	13	N	1	Identify locations in the study area where bike parking can be provided	DelDOT		\$	*	\$	*	◊	Longer-term	
D	14	N		Study the feasibility of signing and/or pavement markings that will improve bicyclist comfort turning left from Dartmouth Drive onto Route 1	DelDOT - 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	4/	Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway	DelDOT, DRBA		\$	*	\$\$	**	⋄	IN PROGRESS	Signs were installed in May 2018. Pedestrian crossings of Kings Highway were provided at the signal at Clay Road. Improved pedestrian crossings are planned to be installed at the signal at Kings Highway and Gills Neck Road in 2022. By agreement between a developer, the City of Lewes, and DelDOT, a new signal will be installed at Freeman Highway and Monroe Avenue which will have at least one crosswalk across Freeman Highway. Additional pedestrian facilities may be included with the Kings Highway CTP project as proposed by the Kings Highway/Gills Neck Road Byway Master Plan. The Kings Highway CTP project has started and a public meeting is planned in February 2022. Rectangular Rapid Flashing Beacons (RRFB) were confimed to be operational on 12/30/2021 at the trail crossing of Freeman Highway near Cape Henlopen Drive.

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\$\$\$\$ \$20M - \$200M \$\$\$\$\$ > \$200M

Category	ID	Priority	Old idea no.	Working Group recommendation	Assumed lead agency	Other responsible parties (if any)	Study cost	Study timeframe	Imp.	Imp. timeframe	Imp. impacts	Status	Remarks
E. Inves	. Invest in new infrastructure to support anticipated growth												
E	1	Υ	66	Study the feasibility of a grade separation at Five Points	DelDOT - Planning		\$\$	**	\$\$\$\$	***	⋄⋄⋄		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. DelDOT has reviewed prior GSI studies and is developing a strategy for initiating a new study.
E	2	Υ	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	DelDOT - Planning	Sussex County	\$\$	**	\$\$\$\$	***	⋄⋄⋄	IN PROGRESS	Idea is recommended by the Henlopen TID study. DelDOT 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. This project is a candidate for the FY 23-28 Capital Transportation Program. CTP hearings were held in September, 2021. A public workshop was held October 26, 2021. 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	DelDOT - Planning	Sussex County, property owners and developers	\$\$	**	\$\$\$\$	* * *	⋄⋄⋄	IN PROGRESS	Idea is recommended by the Henlopen TID study. The TID identified grid connections, but only between Plantation Road and Mulberry Knoll Road. The County Master Plan requires connections related to US 9 when large parcels are developed along that corridor. 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	DelDOT		\$\$	* *	\$\$\$	* * *	⋄⋄⋄	To be Initiated in 2022	
E	5	N	44	Look at east/west traffic as a system: Minos Conaway (starting at Route 9), New, Old Orchard, and Clay Roads	DelDOT - 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	DelDOT		\$\$	* *	\$\$\$\$\$	* * *	⋄⋄⋄	Longer-term	
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	DelDOT		\$\$	* *	\$\$\$	* * *	⋄⋄⋄	IN PROGRESS	Airport Road extension from Old Landing Road to SR 24 is included in a CTP project which will begin preliminary engineering in 2025. Extension from SR 24 to Postal Lane is recommended by the Henlopen TID study, but there is no project.
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	DelDOT		\$\$	* *	\$\$\$	* * *	⋄⋄⋄	Longer-term	
E	9	N	30	Revisit and consider feasibility of recommendations from 2003 SR 1 Land Use and Transportation Study	DelDOT		\$\$	*	\$\$\$\$\$	* * *	◊◊◊	Longer-term	

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78 recommendations

Recommendations to be implemented under current DelDOT 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)



