

Phase 2 Working Group Meeting #1

April 29, 2019



**Regional
Systems
Planning**



Agenda

2

- **Introduction**
- **Recap of Phase 1 results**
- **Phase 2 implementation plan review**
- **Public comment**

Introduction

3

- **Welcome**
 - Secretary Jennifer Cohan, Delaware Department of Transportation
 - Todd Lawson, Sussex County
 - Self-introductions
- **Summary of notebook materials**
 - Agenda
 - Presentation
 - Phase 2 implementation plan
- **Discussion of Working Group guidelines**

Working group guidelines

4

- **Expectations**

- Participate actively throughout the process
 - **11 of the 20 Working Group members must be present to meet**
- Represent broader views in addition to individual views
- Offer suggestions to DeIDOT and Sussex County

Working group guidelines

5

- **How we treat each other**

- Each member has an equal right to speak and ask questions.
- Each member is encouraged to share individual viewpoints. Individual opinions are valid whether others agree with them or not.
- We will listen to, respect and seek to understand the views of others, particularly those perspectives that differ from our own.
- Disagreements will be explored, not suppressed.
- We will be courteous when addressing other committee members, staff and consultants.
- We will refrain from interrupting each other, staff or consultants.
- We will keep our comments relevant to the topic under discussion.
- We will focus on opportunities for the future, not past issues.

Working group guidelines

6

- **How we communicate**

- Ideas discussed within the Working Group should not be presented as representing the position of the Working Group without the agreement of the Working Group.
- When speaking about the work of the Working Group outside of meetings, members are speaking for themselves only unless speaking from approved documents or positions of the Working Group.
- In order to comply with FOIA, email communications between members of the Working Group should be sent through the DeIDOT project team.

Recap of Phase 1 results



**Regional
Systems
Planning**

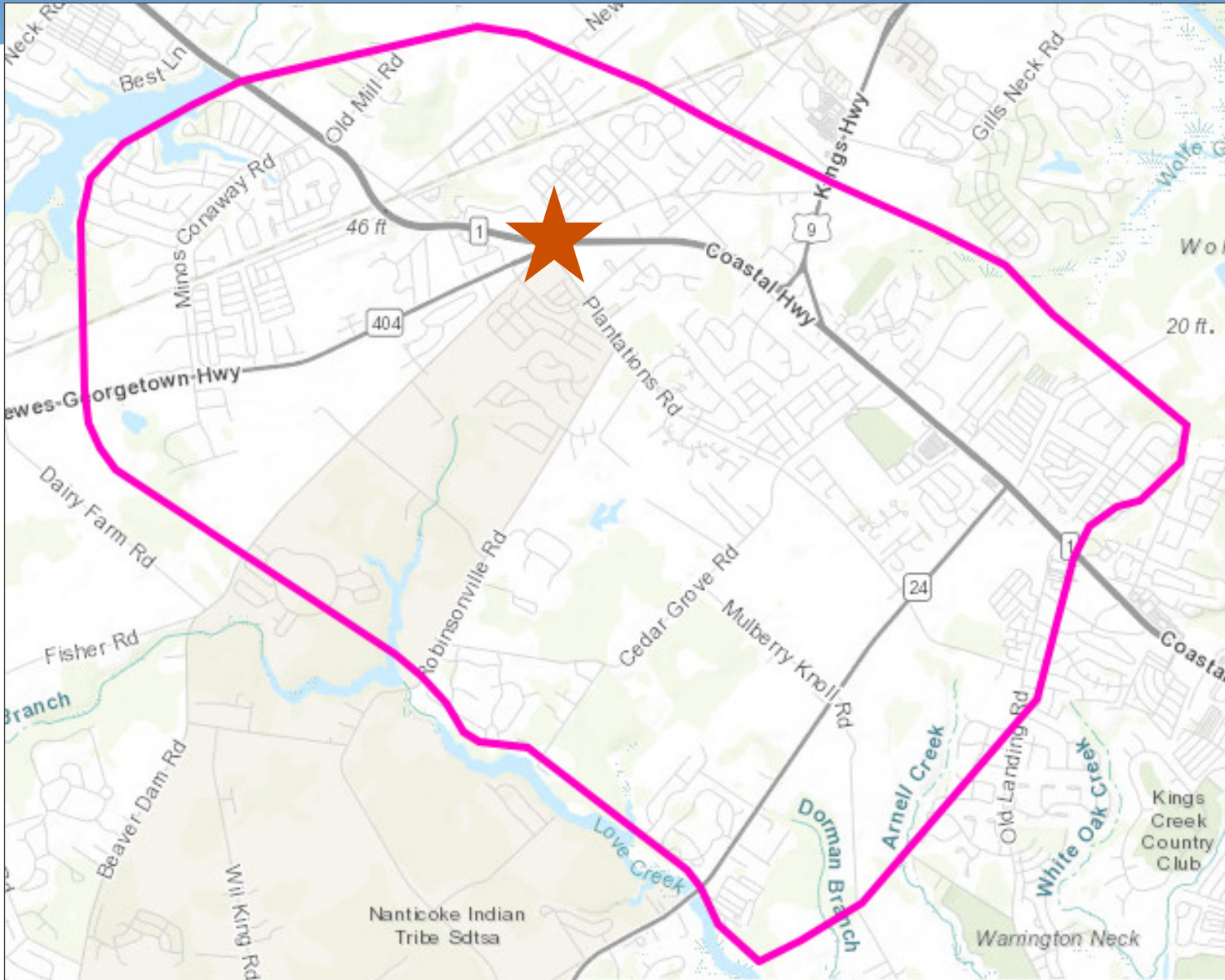


Recap of Phase 1 results

8

- **Partnership between DeIDOT and Sussex County**
- **Goal of Phase 1 was to develop recommendations to improve local traffic circulation at Five Points and in the surrounding area**
- **Guided by a Working Group representing a cross section of the community**

Recap of Phase 1 results



Recap of Phase 1 results

10

- **10 WG meetings**
- **2 public workshops**

I.G. Burton

George Cole

Robert Fischer

Dennis Forney

Scott Green

R. Keller Hopkins

Christian Hudson

DJ Hughes

Todd Lawson

Sen. Ernesto B. Lopez

Lloyd Schmitz

Rep. Peter Schwartzkopf

Rep. Steve Smyk

Josh Thomas

Ann Marie Townshend

Gail Van Gilder

Recap of Phase 1 results

78 recommendations in five categories

(see handout)

FIVE POINTS TRANSPORTATION STUDY RECOMMENDATIONS

DRAFT for DeDOT internal review
February 5, 2019

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 (public)
A	1	N/A	25	Review the need for grade separating or reconfiguring crossings between Frederica and Lewes before eliminating signals in this area	DeDOT - PD South		\$	*	N/A	N/A	N/A	COMPLETE	A memorandum summarizing this effort can be found at [link] . This connection is now part of the project. Project information can be found at https://www.deldot.gov/information/projects/SR13MinoConaway/in-dev.shtml
A	2	N/A	42	Evaluate Tulp Drive connection to Route 1 as part of the Mino Conaway Road grade separation project	DeDOT - PD South		\$	*	\$\$	**	0 0	COMPLETE	This effort was completed as part of the US 113 Millboro-South Ave Supplemental OCS. A two-lane bypass was found to be adequate for future demand. A memorandum summarizing traffic projections for the Route 24 bypass can be found at [link] .
A	3	N/A	53	Study the feasibility of increasing the proposed Route 24 bypass of Millboro from one lane in each direction to two lanes in each direction	DeDOT - PD South		\$\$	**	\$\$\$\$	**	0 0 0	COMPLETE	This will be addressed as part of the Mino Conaway project. Documentation of signing will be available when semi-final plans are completed and the public will have the opportunity to comment. See #2 above for a link to project information.
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 Naussau Bridge	DeDOT - PD South		\$	*	TBD	TBD	TBD	IN PROGRESS	Service roads are now part of the project. Project information can be found at https://www.deldot.gov/information/projects/SR13MinoConaway/in-dev.shtml .
A	5	N/A	55	Evaluate one-way service roads as part of the Mino Conaway Road grade separation project	DeDOT - PD South		\$	*	\$\$	**	0 0	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 Luce Creek bridge.
A	6	N/A	82	Study the feasibility of extending the eastbound widening of Route 24 to Luce Creek	DeDOT - PD South		\$	*	\$\$\$	**	0 0 0	COMPLETE	Coordinate with E-2 and E-3.
A	7	N/A	83	Study the feasibility of widening or adding through lanes on Hatteras Road from Route 24 to Cedar Grove Road and Postal Lane	DeDOT - PD South/Planning		\$	*	\$\$\$	**	0 0 0	IN PROGRESS	Addressed in the County's 2018 comprehensive plan update; more work is needed.
B	1	Y	34	Require new developments to plan for interconnections to any future development areas and monitor to ensure implementation	Sussex County	DeDOT	\$	*	N/A	N/A	N/A	Priority recommendation for 2019	Additional signs will be installed on southbound SR 1 north of Thompsonville Road to identify municipal destinations and distances. Installation is planned for 2019.
B	2	Y	86	Consider modifications to land development requirements and/or the Development Coordination Manual that require additional buffer setbacks for all new developments for future road expansion	Sussex County	DeDOT	\$	*	N/A	N/A	N/A	Priority recommendation for 2019	New advance acquisition regulations were approved in 2018. Now, proactive purchases will be feasible.
B	3	Y	4	Study the feasibility and anticipated effectiveness of modifying signage, starting in Millford, to encourage through drivers (to points outside the Route 1 corridor between Lewes and Dewey Beach) to use Route 113, Route 5, Route 15, etc.	DeDOT - Traffic	Private partner(s) such as Waze	\$	*	\$\$	*	0	Priority recommendation for 2019	Priority recommendation for 2019
B	4	Y	91	Improve advance acquisition process to allow DeDOT to more quickly acquire land needed for transportation improvements and acquire available land within the Five Points Study Area (i.e., Creative Concepts)	General Assembly	DeDOT	\$	**	N/A	N/A	N/A	COMPLETE	Priority recommendation for 2019
B	5	Y	50	Study the feasibility of converting the Arty's driveway between Route 1 and Savannah Road into a public accessible road	DeDOT - Planning	DeDOT - Real Estate, property owners	\$	*	\$\$	**	0	Priority recommendation for 2019	Longer-term
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	

Page 1 of 5



Recap of Phase 1 results

12

7 recommendations (Category A) are being addressed by current DeIDOT projects and initiatives, including:

- Modifications to current capital projects: Route 1/Minos Conaway Road, Route 24, Plantation Road
- Route 24 North Millsboro Bypass
- Route 1 Corridor Capacity Preservation Program

Recap of Phase 1 results

27 recommendations (Category B) are to “implement policies and procedures to make the area more efficient, sustainable and beautiful.” Eight priorities were identified, including:

- Updates to development regulations
- Signing improvements
- Advancing TIDs
- Parking management system
- Advance acquisition process improvements (now complete)

Recap of Phase 1 results

20 recommendations (Category C) are to “make the most of existing roadway infrastructure.” Ten priorities were identified, including:

- Study to widen US 9
- Various intersection improvements
- Canary Creek bridge on New Road
- Selected improvements on existing roads
- Continued signal timing/phasing improvements

Recap of Phase 1 results

15 recommendations (Category D) are to “make walking, bicycling, and transit more viable as alternatives to driving.” Six priorities were identified, including:

- Transit service improvements
- Walking/bicycling connections between neighborhoods
- Filling sidewalk gaps
- Studying pedestrian bridges over Route 1

Recap of Phase 1 results

9 recommendations (Category E) are to “invest in new infrastructure to support anticipated growth.”

Three priorities were identified:

- Study a grade separation at Five Points
- Study a new road parallel to and west of Plantation Road
- Plan for grid road patterns in the area

Recap of Phase 1 results

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)

Recap of Phase 1 results

18

- **Commitments made in Phase 1:**

- DeIDOT and Sussex County will start to act on the Working Group's recommendations
- The Working Group will remain involved in Phase 2
- DeIDOT and Sussex County will report on progress on a regular basis

Phase 2 implementation plan



**Regional
Systems
Planning**



Phase 2 implementation plan

20

- **Progress is already being made**
 - 8 recommendations are complete or being incorporated into other projects
 - 13 initiatives are in progress
 - 15 additional recommendations will be addressed starting in 2019
- **Examples of progress to date:**

Phase 2 implementation plan

SR 1 Intersection and Median Crossover Assessment (see handout)

- Collected July 2017 traffic counts
- Analyzed crash data from January 2012 to March 2019
- Developed recommendations and compared to 2007 Corridor Capacity Preservation Program

SR 1 (Primehook to Tulip) Intersection and Median Crossover Assessment - Updated April 2019																			
Map #	Intersection of SR 1 and	Total Crashes	Crash Rank	Max EB L/T Volume	EB L/T Angle Crashes	% EB L/T Angle Crashes	Max WB L/T Volume	WB L/T Angle Crashes	% WB L/T Angle Crashes	Max NB L/U Volume	NB L/U Angle Crashes	% NB L/U Angle Crashes	Max SB L/U Volume	SB L/U Angle Crashes	% SB L/U Angle Crashes	Unknown Involvement Angle Crashes	% Unknown Involvement Angle Crashes	2007 SR 1 COP Report Short-Term Proposed	Suggested Potential Next Steps
1	Primehook/Dalton Access Rd	18	10	9	1	6%	19	1	6%	74			2	0	0%	3	17%	Prohibit EB L/T and WB L/T	
2	SR 5	21	8	101	9	43%				12	0	0%	2	0	0%			Prohibit EB L and SB U	Prohibit NB L and SB U (widen within median for inside NB merge lane)
3	Haystack Rd	7	14	9	1	14%				3			4			2	29%	Close, Right-in/light-out only	Close, Right-in/light-out only
4	Deep Branch Rd (Loop)	21	8	23	7	33%	2	0	0%	28	3	14%	3	0	0%			Prohibit EB L/T and WB L/T	Prohibit EB L/T and WB L/T
5	SR 10	26	6	89	5	7%	111	3	4%	238	4	5%	14	0	0%			N/A	Priority full-time signal, planned GIS
6	Madison Rd	37	6	121	15	41%	17	2	5%	14	2	5%	10	0	0%			Prohibit EB L/T and WB L/T	Prohibit NB/SB L, EB T, WB L/T (widen within median for inside NB merge lane)
7	Deater Hook/Ridge Creek Rd	18	10	19	1	6%	55	4	22%	34			13			2	11%	Prohibit EB L/T and WB L/T	Prohibit EB L/T and WB L/T
8	Cave Neck Rd	71	2	26	14	20%				299	17	24%	2	0	0%			Prohibit EB L and SB U	Prohibit EB L and SB U to meet crossover ("1500'") Use signing and striping with tubular markers, not formal geometric changes.
9	Willow Creek Rd	9	13				25	1	11%	1			21			3	33%	Close, Right-in/light-out only	
10	Devon Rd	6	15	6						51	1	13%	5			1	17%	Prohibit EB L	
11	Willow Crossover Rd	38	5	40	10	26%				156	5	12%	15	1	3%			Prohibit EB L	Improve EB R acceleration/merge lane
12	Old Mill Rd	13	12				14	3	23%	3	0	0%	11	2	15%			Close, Right-in/light-out only	
13	Wasson Rd (north)	22	7				2	4	18%	4			232	1	5%	4	18%	Prohibit WB L and NB U	
14	Maintenance Rd	69	3	42	22	32%	60	11	16%	110	12	17%	39	2	3%	1	1%	N/A	Short-term safety improvements (signing and striping, "1000' AHEAD" plaques, formalize vehicle right-of-way in median). Long-term incorporation into service road for Minos Conaway GIS
15	Tulip Dr/Thayer Shiklaver	57	4				90	4	7%				60	1	2%			N/A	Short-term safety improvements (dynamic warning beacons, WST, speed reduction markings). Long-term incorporation into service road for Minos Conaway GIS

SR 1 always assumed to be N.S.
 Grade Separation Planned
 Part of Proposed Grade Separation
 Movement Not Applicable

Methodology:
 1. 14 intersections with an expectation of significant side street volumes were chosen to be counted in July 2017.
 2. Summary crash data for 1/2012 to 3/2019 was analyzed for the study area.
 3. Detailed crash reports were collected for intersections or crossovers that had 5+ angle or crossover-related crashes in the study period.
 4. The above table was produced to analyze the detailed crash data and volumes for each intersection/crossover.
 5. Recommendations for movement restrictions were made based on crash data, volumes, and observations of alternative routes.
 6. Recommendations were compared to those in the 2007 SR 1 Corridor Capacity Preservation Program report.



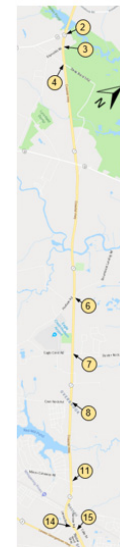
Phase 2 implementation plan

Nine short-term recommendations (see handout)

Three currently in design

- SR 5
- Hudson Road/Steamboat Landing Road
- Oyster Rocks Road/Eagle Crest Road

SR 1 (Primehook Road to Tulip Drive)
Intersection and Median Crossover Assessment
Executive Summary
April 24, 2019



As a follow-up action item from the November 11, 2016 public workshop for the SR 1 and SR 10 grade-separated intersection, DeDOT recently performed a corridor-wide study to investigate safety enhancements along SR 1 at the unsignalized intersections and median crossovers from Primehook Road/Sylvan Acres Road to Tulip Drive/Slipper Shell Way. Along this approximately 9-mile corridor, 15 intersections were extensively studied. There are 22 additional intersections and crossovers with significantly lower traffic volumes and crash frequencies that were also screened for safety and operational concerns.

Crash history from January 2012 to March 2016 and vehicular volumes from summer 2017 were used in analyzing the 15 study intersections. Eight intersections have suggested short-term improvements:

2 – SR 5	21 crashes (Rank #8)	Prohibit northbound SR 1 left turns and southbound u-turns. Widen northbound SR 1 to provide a free-flowing, inside merge lane for eastbound SR 5 left turns.
3 – Reynolds Road	7 crashes (Rank #14)	Close the median crossover.
4 – Deep Branch Road (north end)	21 crashes (Rank #8)	Prohibit eastbound and westbound Deep Branch Rd left turns and thru movements.
6 – Hudson Road/Steamboat Landing Road	37 crashes (Rank #6)	Prohibit northbound and southbound SR 1 left turns, westbound left turns, and eastbound and westbound thru movements. Widen northbound SR 1 to provide a free-flowing, inside merge lane for eastbound Hudson Rd left turns.
7 – Oyster Rocks Road/Eagle Crest Road	18 crashes (Rank #10)	Prohibit eastbound Eagle Crest Rd and westbound Oyster Rocks Rd left turns and thru movements.
8 – Cave Neck Road	71 crashes (Rank #2)	Prohibit eastbound Cave Neck Rd left turns and southbound SR 1 u-turns.
11 – Minos Conaway Road	38 crashes (Rank #5)	Consider improving the eastbound Minos Conaway Rd right-turn acceleration/merge lane onto southbound SR 1.
14 – Nassau Road/Janice Road	69 crashes (Rank #3)	Install short-term safety improvements to reduce the likelihood of angle crashes. Long term, incorporate access into the service roads for the Minos Conaway Rd grade-separated intersection.
15 – Tulip Drive/Slipper Shell Way	57 crashes (Rank #4)	Install short-term safety improvements to reduce the likelihood of rear-end crashes. Long term, incorporate access into the service roads for the Minos Conaway Rd grade-separated intersection.



Phase 2 implementation plan

Bike box on Dartmouth Drive at SR 1



Phase 2 implementation plan

Category B complete:

- B-4: Advance acquisition process improvements
- B-23: App to warn people of congestion and recommend alternative routes

Phase 2 implementation plan

Category B in progress:

- B-7: Continue TID studies east and west of Route 1
- B-9: Study New Road per Byway Master Plan
- B-13: Study alternatives to both meter and slow southbound traffic approaching Five Points
- B-21: Study emergency vehicle pre-emption
- B-22: Require bike parking in new developments

Phase 2 implementation plan

Category B priorities for 2019:

- B-1: Require new development to plan for interconnections
- B-2: Consider additional buffers/setbacks
- B-3: Study modifying SB signage in Milford
- B-5: Study Arby's driveway

Phase 2 implementation plan

27

Category C complete:

- C-2: Signal warrant study at Route 9 and Minos Conaway Road

Phase 2 implementation plan

- **Category C in progress:**

- C-3: Improve Old Landing and Warrington Road
- C-4: Improve Canary Creek bridge
- C-5: Improve Cave Neck/Sweet Briar/Hudson
- C-9: Short-term improvements at Route 9/Plantation/Beaver Dam
- C-10: Continue to improve traffic signal phasing, timing, and coordination
- C-13: Study crossovers on Route 1

Phase 2 implementation plan

- **Category C priorities for 2019:**
 - C-1: Corridor study on Route 9
 - C-7: Feasibility study for improving Minos Conaway Road
 - C-8: Feasibility study for restriping sections of Savannah Road with a two-way left-turn lane
 - C-19: Study all-way STOP at Beaver Dam/Kendale

Phase 2 implementation plan

Category D in progress:

- D-14: Feasibility study for bicyclist left turns from Dartmouth Drive
- D-15: Study opportunities for pedestrian crossings on Kings Highway and Freeman Highway

Phase 2 implementation plan

31

Category D priorities for 2019:

- D-1: Feasibility study for van or jitney service loop
- D-4: Study of sidewalk gaps along New Road and Old Orchard Road
- D-5: Study of sidewalk gaps along Savannah Road between Lewes and Five Points
- D-7: Feasibility study for transit service in the Milton/Red Mill Pond/Minos Conaway Road area

Phase 2 implementation plan

32

Category E priorities for 2019:

- E-2: Study a new road parallel to and west of Plantation Road
- E-3: Plan for grid road patterns in the area

Phase 2 implementation plan

33

- **DeIDOT and Sussex County will start to act on the Working Group's recommendations**
 - Draft implementation plan is in place
 - Individual projects, as they move forward, will remain connected to the overall Five Points framework
 - **Your effort will help us establish “purpose and need” for these projects**

Phase 2 implementation plan

34

- **The Phase 2 Working Group will advise on implementation**
 - DeIDOT and the County appreciate the Working Group providing the local knowledge needed to implement projects successfully

Phase 2 implementation plan

35

- What will the group do?
 - Meet 2-3 times per year
 - Monitor the progress of the implementation plan
 - Support the project development process as champions and advocates for individual projects that arise from the Five Points Transportation Study

Phase 2 implementation plan

36

- **DeIDOT and Sussex County will report on progress on a regular basis**
 - Public outreach, including an annual public workshop for the overall Five Points Transportation Study, will continue
 - An annual report will be prepared
 - As usual, public workshops will be held for individual capital projects as they proceed

Phase 2 implementation plan

37

- **Proposed next steps**

- Email stakeholders to make the public aware of the implementation plan
- Begin work on 2019 priorities
- Convene the Working Group again in the fall
- Prepare the first annual report, showing progress made in 2019, in early 2020
- Hold the first annual Phase 2 public workshop in spring 2020

Public comment

38



Thank you for your participation!

39

Jenn Cinelli-Miller

Project Planner

Delaware Department of Transportation

jennifer.cinelli@delaware.gov

302.760.2549

