SR1 and Trap Shooters Road Planning Study

Public Workshop #1
Existing Conditions



January 23, 2023







How to Participate

- How Can I Participate in this Workshop?
 - You Can Listen Using Your Computer Speakers or by Calling in on Your Phone
- To Listen to the Audio Using Your Phone, Please Call:

Phone Number: 1 305 224 1968

• Webinar ID: 869 8564 4765

Passcode: 942031

 All Attendees, Whether on the Phone or Using Computer Speakers, will be Joining this Session in Listen-Only Mode



*9 - Raise Hand



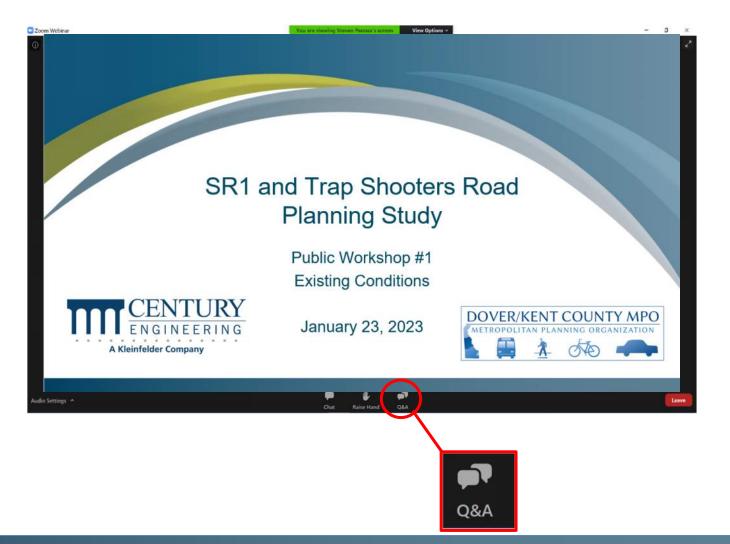
*6 - Unmute/Mute





To Ask A Question

During the Session, Please Type All Questions and Comments in the Q&A Box which is Located on the Bottom Bar at the Bottom of Your Screen. Move Your Mouse to the Bottom of the Screen and the Bar will Appear.







To Ask A Question

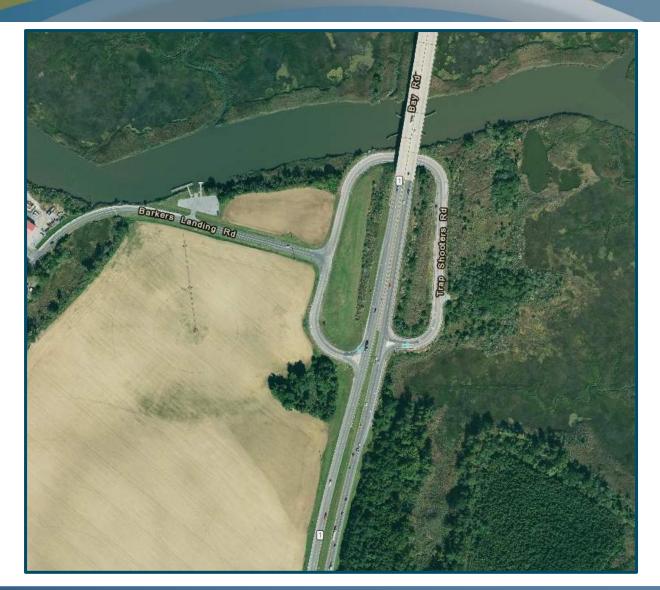
- If you cannot use the Q&A function, please email questions directly to:
- James.Galvin@doverkentmpo.org
- Each question will be reviewed by the moderator, and panelists will respond verbally to the questions that are chosen
- Specific questions may be answered directly within the Q&A function





Agenda

- Study Area
- Purpose and Need
- Work Plan
- Existing Conditions
- Current DelDOT Efforts
- Schedule
- Questions







Study Area

- SR1
- Trap Shooter Road
- Barkers Landing Road







Poll Question #1

- What best describes you?
 - Elected Official
 - Government Official
 - Engineering Consultant
 - Local Resident
 - Other







Poll Question #2

- What best describes where do you live?
 - Barkers Landing Road
 - Ponderosa Drive
 - Plaindealing Road
 - Jonathan's Landing
 - Church Creek
 - Magnolia area
 - South of Trap Shooters and Magnolia
 - Other

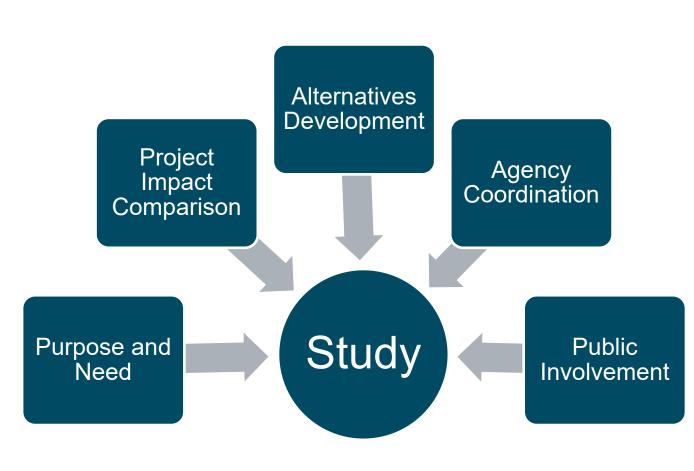






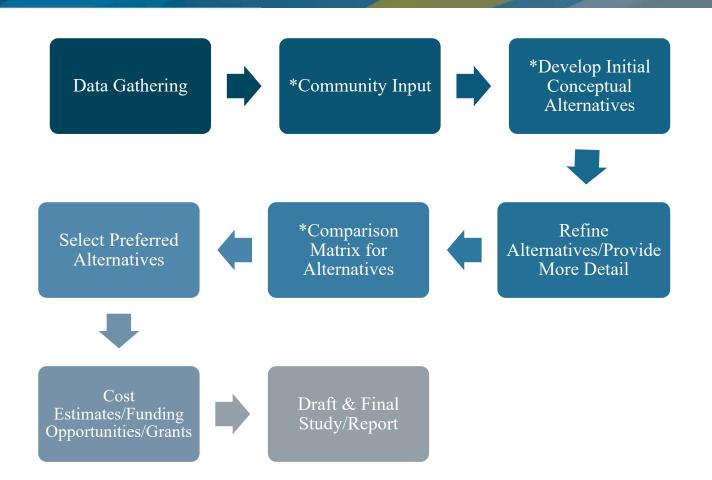
Purpose and Need

- Purpose
 - Improve safety and capacity at the intersection of SR1 and Trap Shooters Road
- Need
 - The intersection is experiencing high crash rates
 - The intersection reducing the overall capacity of SR1







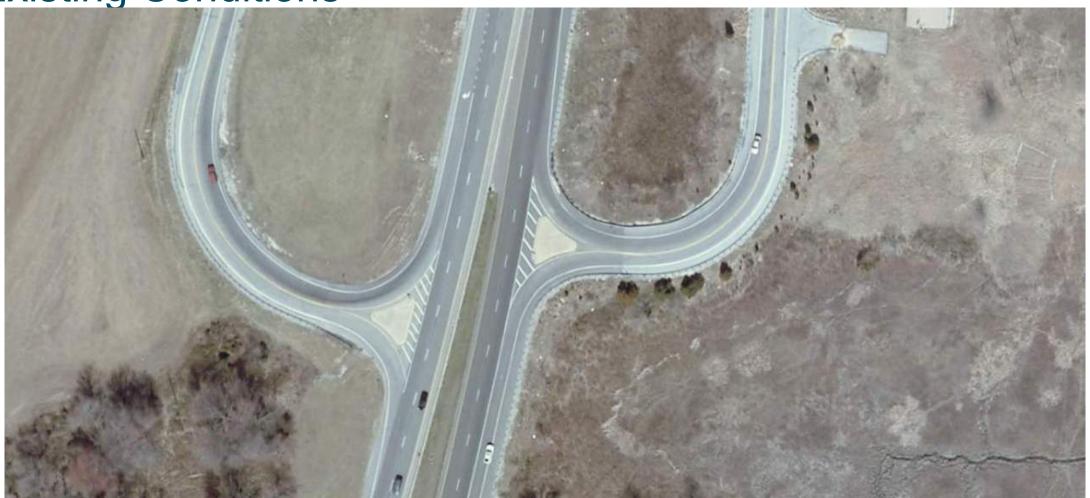


Comparison Matrix

Level of service
Safety
Environmental Impacts
Stormwater management
Others as appropriate for the proposed design(s)

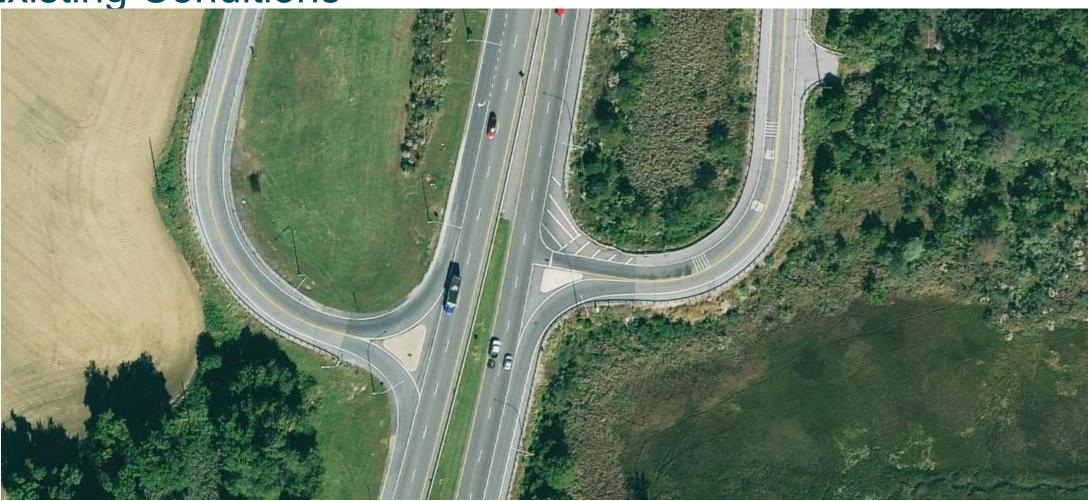
Public Outreach (Continuous Throughout)















Poll Question #3

- How many times a week to you drive through this intersection?
 - 0
 - 1-5
 - 6-10
 - 11-15
 - >15







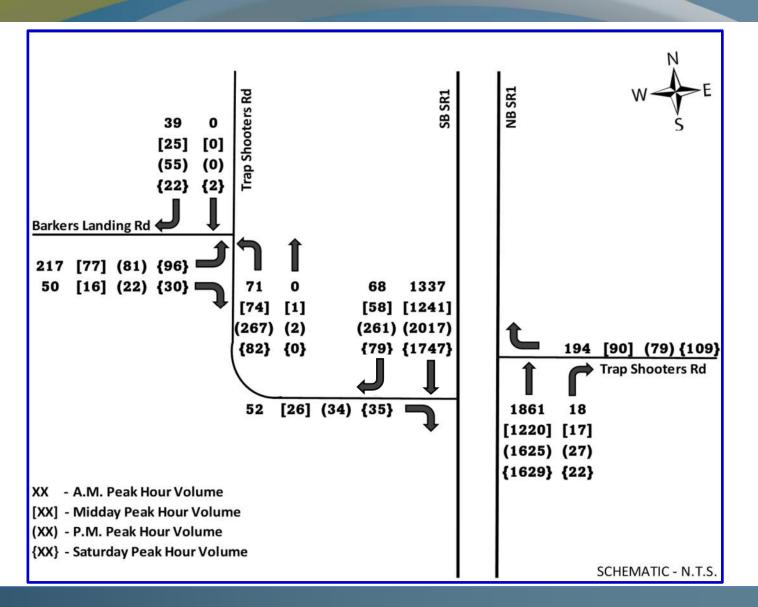
- Traffic Counts
 - Oct and Nov 2022
 - DelDOT data was used to calculate Summer Saturday turning movement volumes







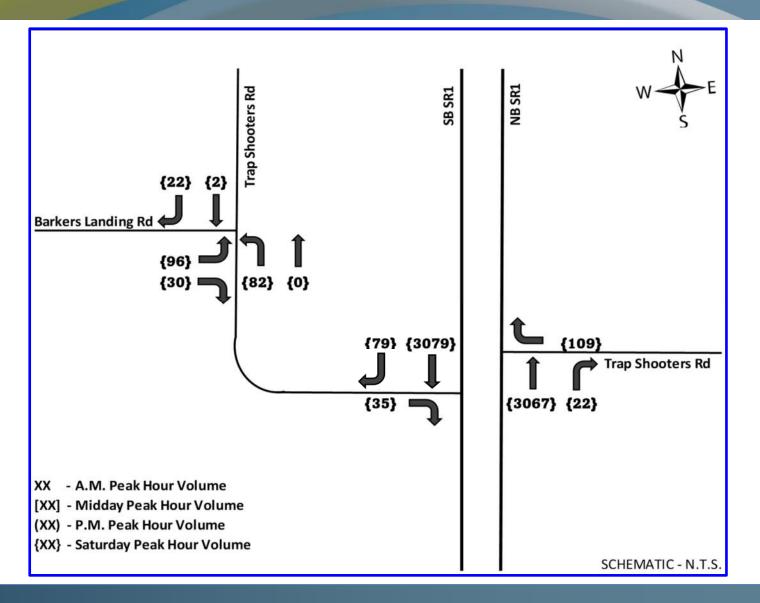
- Non summer peak hour turning movements
- AM heavy NB
- PM heavy SB







- Summer Saturday peak hour turning movements
- About ½ of the volumes during a weekday peak hour



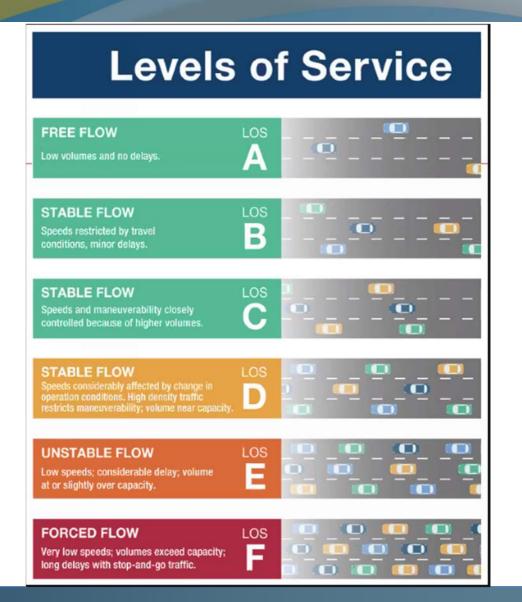




Level of Service (LOS)

What is it?

A measure of delay







SB SR1 and Trap Shooters Rd

| | Movement | Measures of Effectiveness under Existing 2022 Trafic Conditions | | | | | | | | | | | | | | |
|-----------------|-------------------------|---|-----|-------------------------|-------|------------|-------------------------|----------------|---------------------|-------------------------|----------------|-----------------|-------------------------|----------------|---|-------------------------|
| Control Type | | Weekday AM | | Weekday Midday | | Weekday PM | | | Non-Summer Saturday | | | Summer Saturday | | | | |
| | | Delay (Sec) | Los | 95th % Queue (ft) | Delay | LOS | 95th % Queue (ft) | Delay (Sec) | LOS | 95th % Queue (ft) | Delay (Sec) | LOS | 95th % Queue (ft) | Delay (Sec) | | 95th % Queue (ft) |
| Two-Way Stop | EBR Trap Shooters Rd | 17.4 | С | 15 | 16.4 | С | 8 | 27.6 | D | 15 | 21.5 | С | 13 | 93.5 | F | 53 |

NB SR1 and Trap Shooters Rd

| Control Type | Movement | Measures of Effectiveness under Existing 2022 Trafic Conditions | | | | | | | | | | | | | | |
|-----------------|-------------------------|---|-----|-------------------------|----------------|------------|-------------------------|----------------|---------------------|-------------------------|----------------|-----------------|-------------------------|----------------|-----|-------------------------|
| | | Weekday AM | | Weekday Midday | | Weekday PM | | | Non-Summer Saturday | | | Summer Saturday | | | | |
| | | Delay (Sec) | Los | 95th % Queue (ft) | Delay (Sec) | LOS | 95th % Queue (ft) | Delay (Sec) | Los | 95th % Queue (ft) | Delay (Sec) | LOS | 95th % Queue (ft) | Delay (Sec) | LOS | 95th % Queue (ft) |
| Two-Way Stop | WBR Trap Shooters Rd | 87.6 | F | 198 | 16.9 | С | 23 | 27.1 | D | 38 | 35.6 | Е | 70 | 301.4 | F | 213 |





- Crash Data
 - October 21, 2017, to October 31, 2022



■ d| Listen ▶

Traffic Advisory State Police Investigating Serious Crash- Magnolia

Date Posted: Saturday, July 10th, 2021





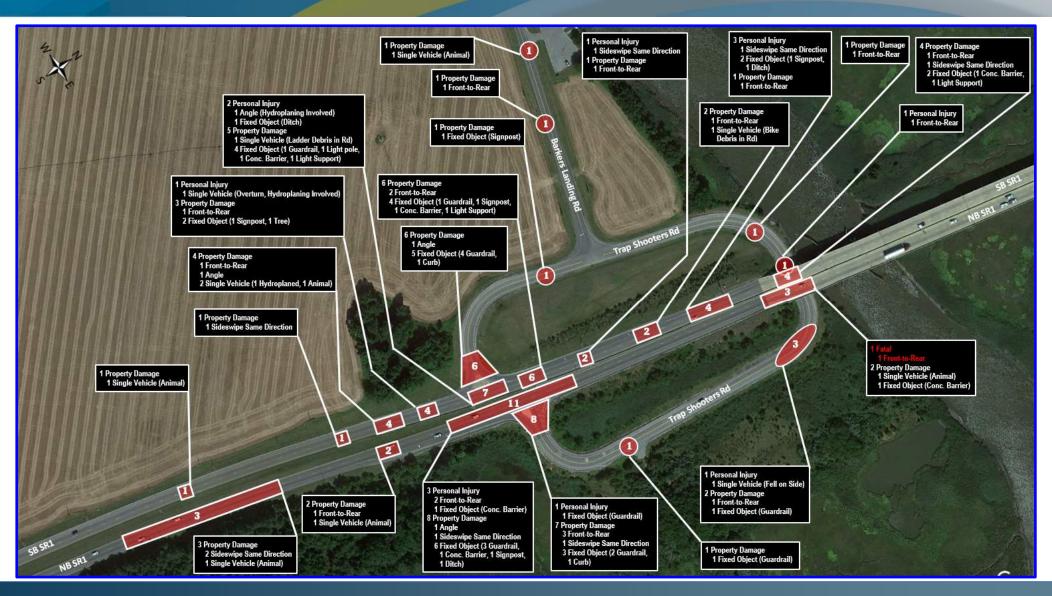


Poll Question #4

- Have you or someone you know ever been in a crash or a near miss at this intersection?
 - Yes
 - No



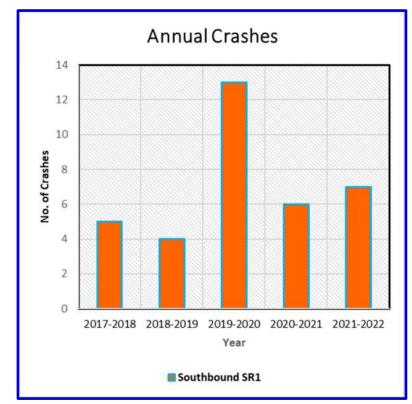


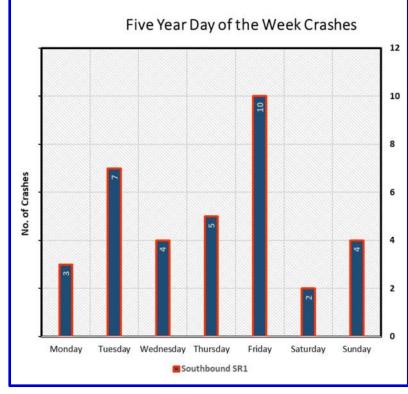






- SR1 Southbound Crashes
 - Total of 35 crashes
 - 2020 experienced an abnormally high number of crashes
 - Friday has a higher number of crashes

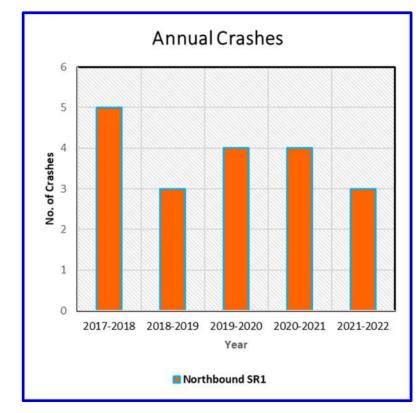


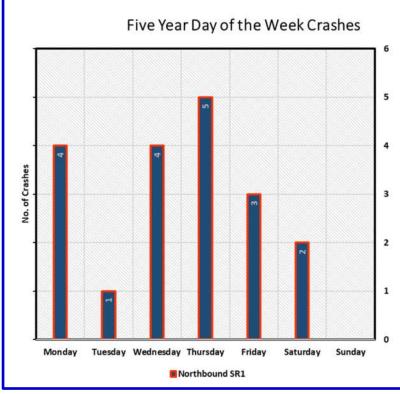






- SR1 Northbound Crashes
 - Total of 19 crashes
 - Relatively consistent number of crashes across the 5 years









- Crash Rates
 - Overall the area experiences higher than average crashes
 - 2020 to 2021
 comparison shows
 crash rates are
 trending down except
 SR1 NB

| Functional Class | Ratio of 2020 Roadway Crash Rate to Similar Roads in Kent County | Ratio of 2020 Roadway Crash Rate to Similar Roads Statewide |
|-----------------------|---|--|
| Northbound SR1 | 4.70 | 5.63 |
| Southbound SR1 | 20.35 | 24.41 |
| Trap Shooters Rd | 39.27 | 31.65 |
| Barkers Landing Rd | 0.00 | 0.00 |

| Functional Class | Ratio of 2021 Roadway Crash Rate to Similar Roads in Kent County | Ratio of 2021 Roadway Crash Rate to Similar Roads Statewide | | | | |
|-----------------------|---|--|--|--|--|--|
| Northbound SR1 | 7.19 | 7.71 | | | | |
| Southbound SR1 | 11.51 | 12.33 | | | | |
| Trap Shooters Rd | 13.45 | 10.84 | | | | |
| Barkers Landing Rd | 0.00 | 0.00 | | | | |





Poll Question #5

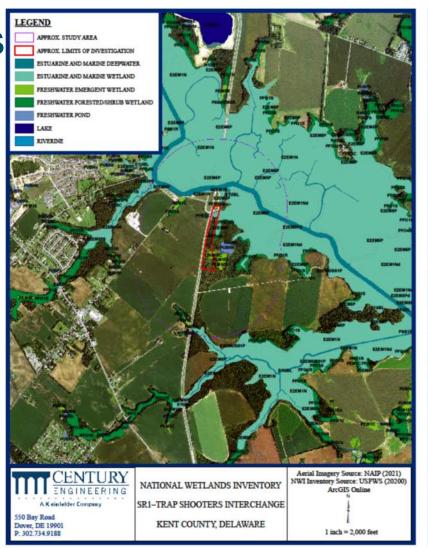
- Did you think there would be more crashes on SR1 in the SB direction than in the NB
 - Yes
 - No







- Wetlands inventory
- Natural Resources

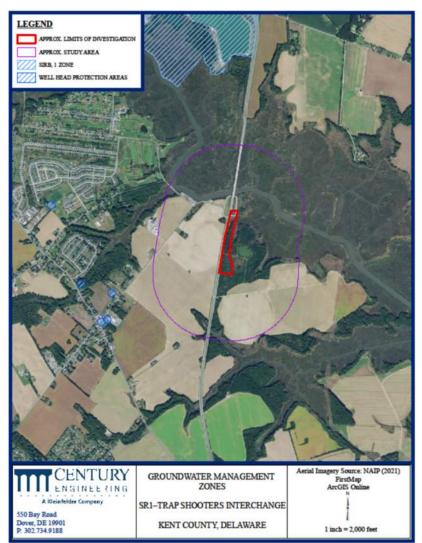


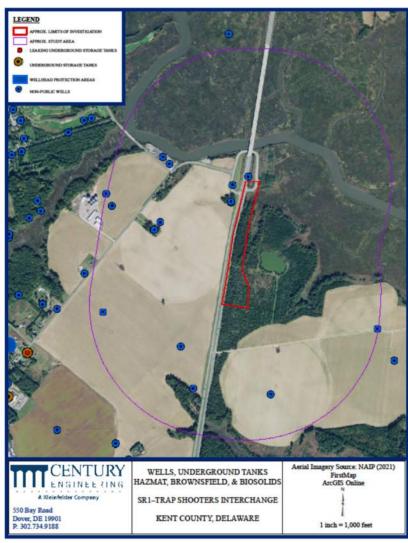






- No groundwater recharge areas near the study area
- Wells and underground tanks are located in the project area



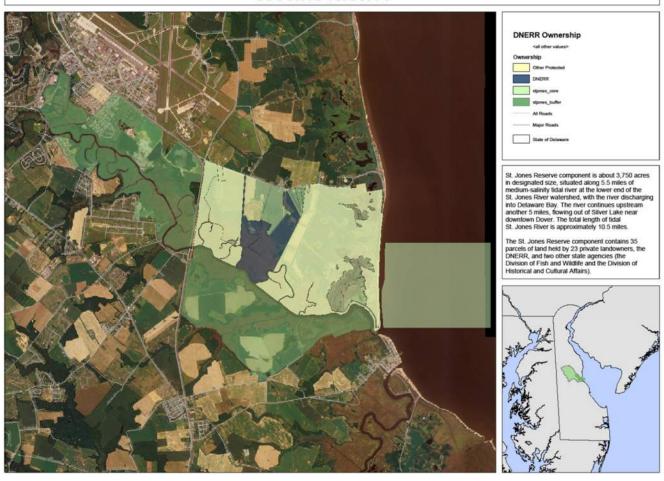






- DNERR is located adjacent to the project site
- The interchange area is identified as a buffer

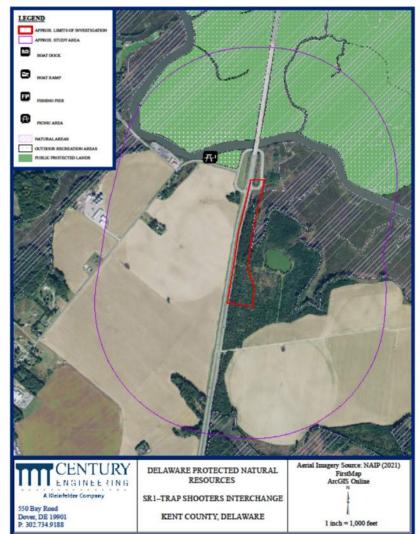
Delaware National Estuarine Research Reserve St Jones Reserve

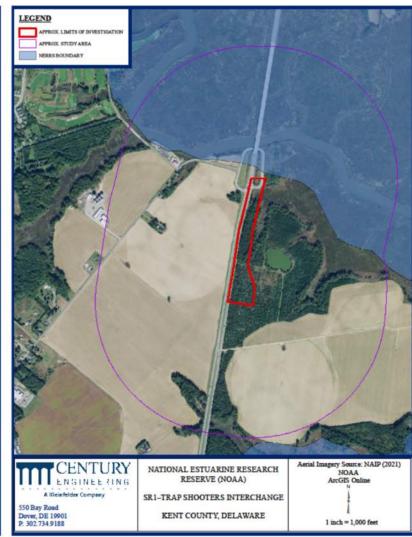






- DNREC Protected resources were identified
- The Northern boundary is in a National Estuarian Research Reserve









- There are known historic and archaeological resources in the area
- Most of the area is large lot farms

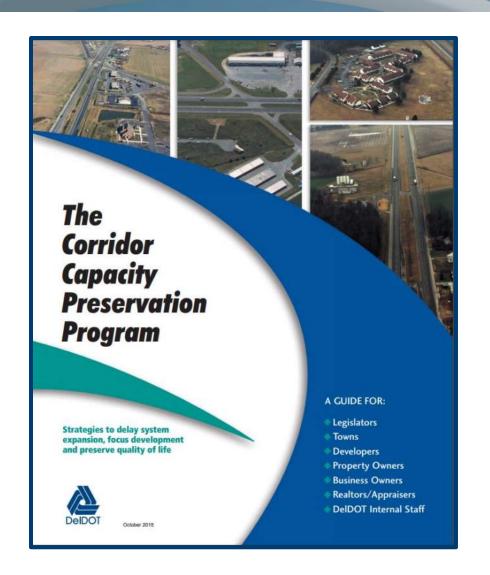








- CCPP SR1 Plan Update
 - Public workshops 11/15/2022
- SR1 Capacity Analysis
 - 6/20/2020
 - Triggers the need for a 3rd lane on SR1
 - 2035 2045







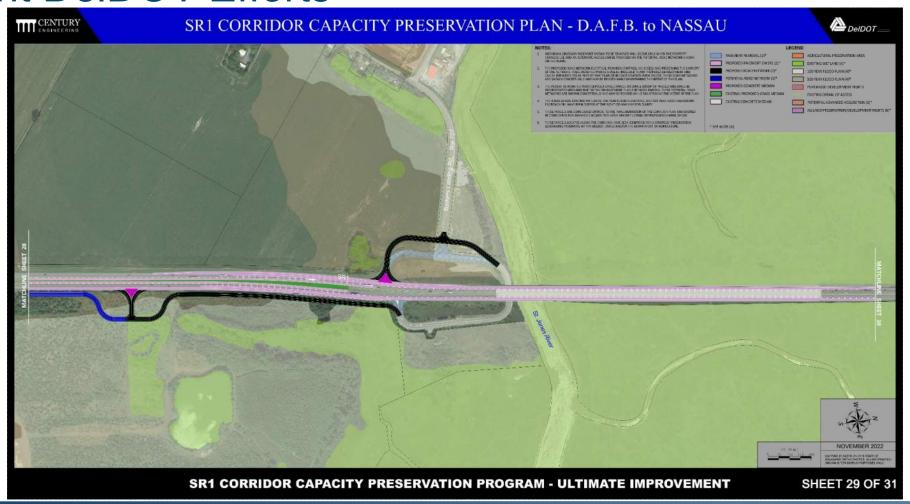
Poll Question #6

- Are you familiar with DelDOT's Corridor Capacity Preservation Program?
 - Yes
 - No

















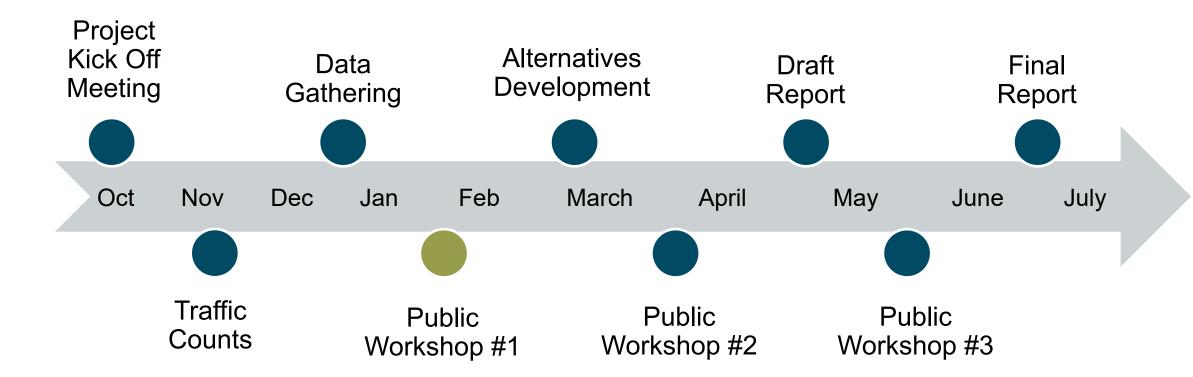








Schedule













*9 - Raise Hand

*6 - Unmute/Mute









https://doverkentmpo.delaware.gov/projects/



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