

Transportation Resilience & Sustainability

Project Updates

2023 Winter Workshop



2.13.23



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Director - Transportation
Resilience & Sustainability

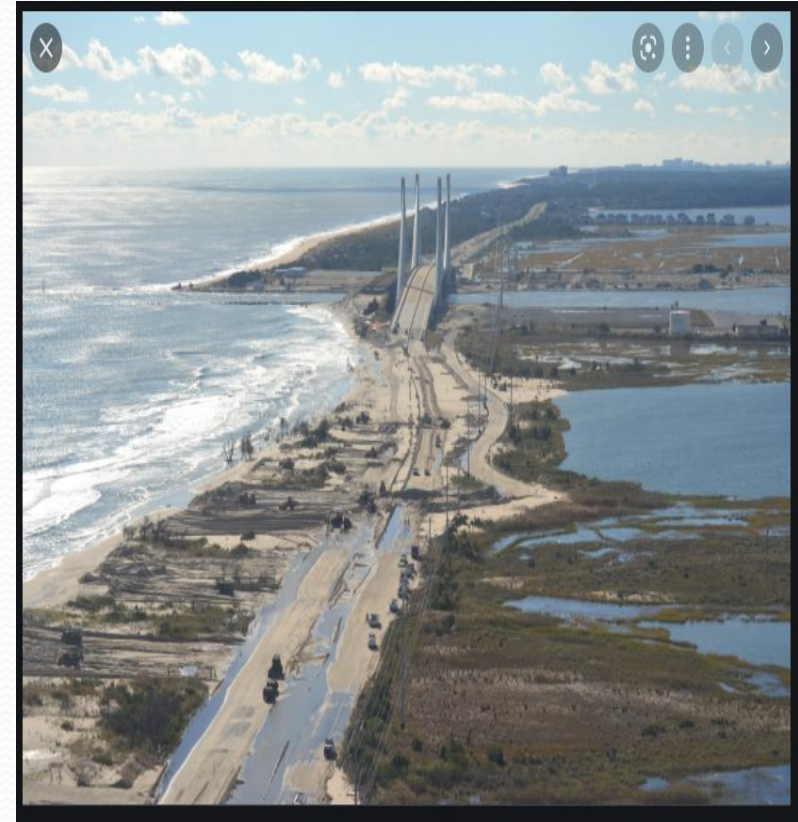


Discussion Items

- EV plan
- Resiliency Studies
 - SR 1, Dewey Beach to Fenwick Island Coastal Resilience Study
 - Pilottown Road, Lewes
 - SR 299, east of Odessa
 - SR 9, New Castle to Little Creek
- Project updates
 - Port Mahon Road
 - Frequently flooded roadway mapping
 - South Bowers Road
 - Woodland Beach Road

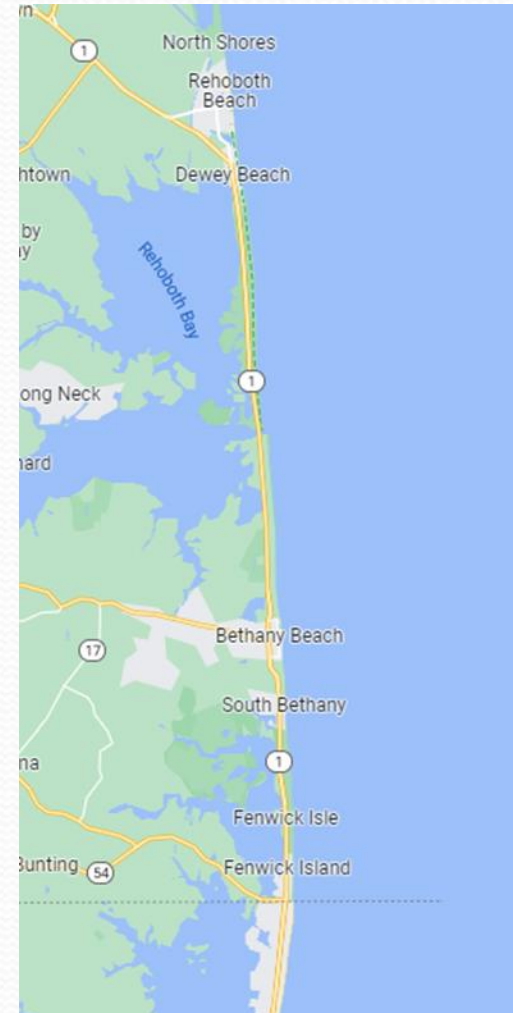
SR 1, Dewey Beach to Fenwick Island

- Critical corridor for the state
- FEMA Planning Study Grant
- Engaged with AECOM for the study
- Data gathering, model generation on going
- Extensive public engagement – communities, businesses, legislators
- Deliverable – resilient long-term transportation options for corridor



SR 1 Resiliency Study

- Initial planning work complete
 - Corridor was broken down by risk assessment
 - Ocean and bay modeling performed
- Public outreach
 - First public meeting held (September 2022); second is being planned (February/March 2023)
- Met with Fenwick Island, Dewey Beach, and Bethany Beach leadership



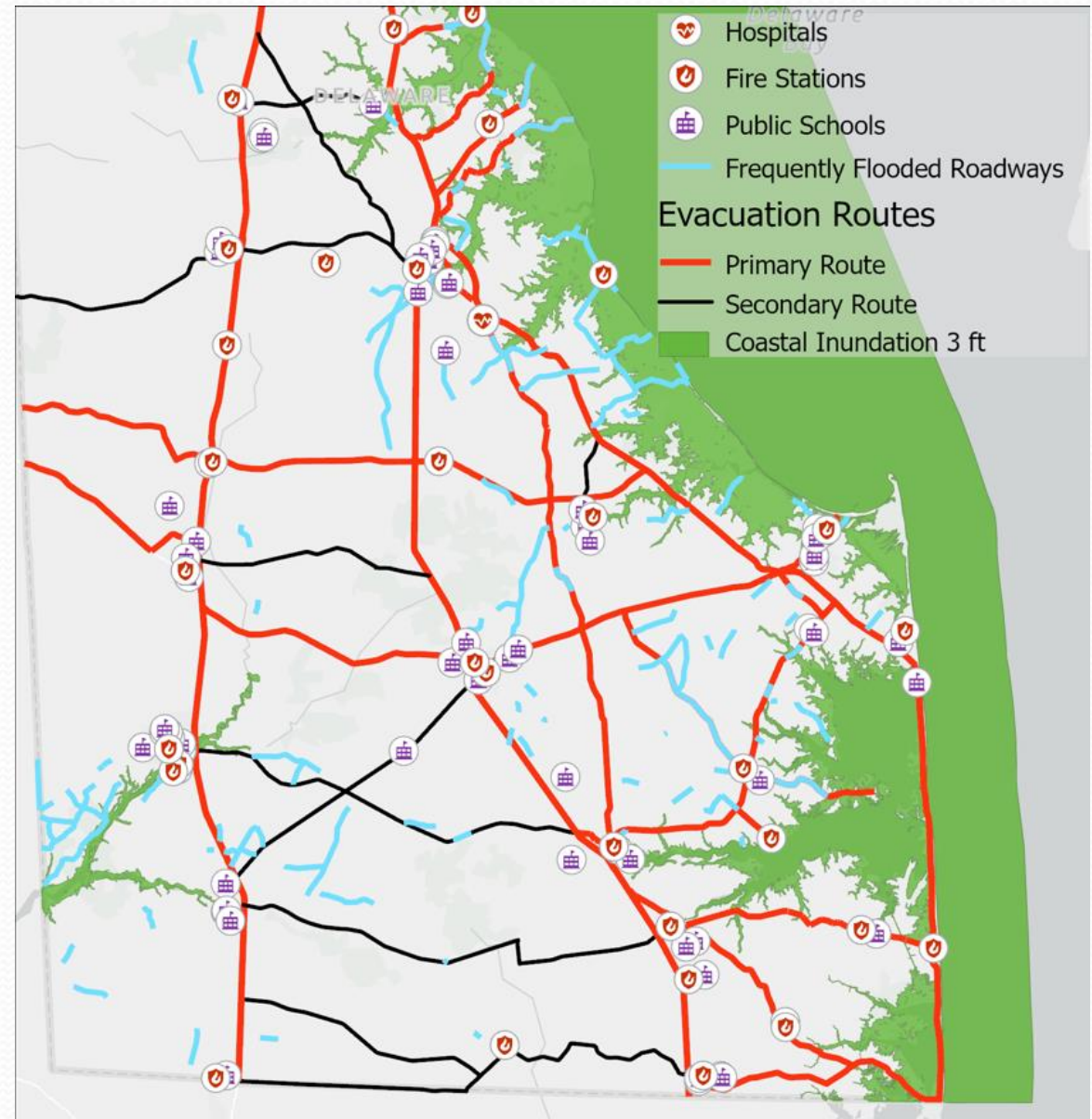
Pilottown Road, Lewes

- DNREC is lead agency; FEMA Planning Study Grant
- Looking to possibly raise roadway to minimize roadway flooding occurrences
- Planning work completed
- Have met with Mayor, City Manager, City Council, and public
- Next steps:
 - Meet with local businesses directly affected by project for input
 - Apply for a Federal grant for construction



Frequently Flooded Roadways

- 250+ miles identified by Districts
- Prioritize segments
 - Strategic transportation network
 - Impact on public/social disruption/economic justice
 - Roadway flooding characteristics/conditions





Bayview Tavern

JP's on the Wharf
Temporarily closed

Bowers Beach

Cooper Ave

Davidson St

Wyatt St

Davidson St

Rd 121

S Bowers Rd

Rd 121

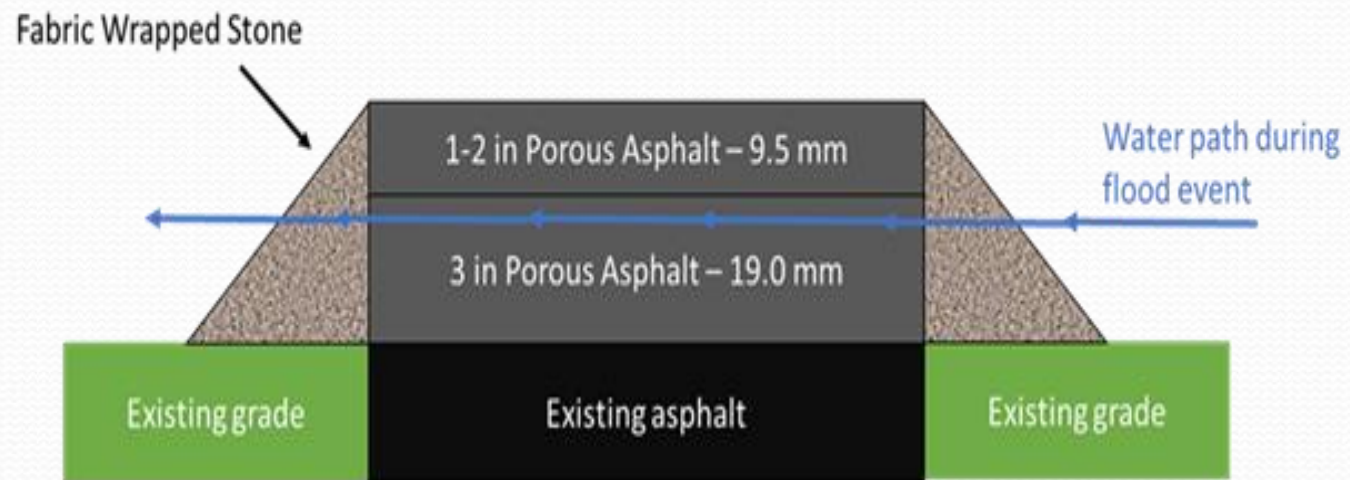
Webbs Cut-Off

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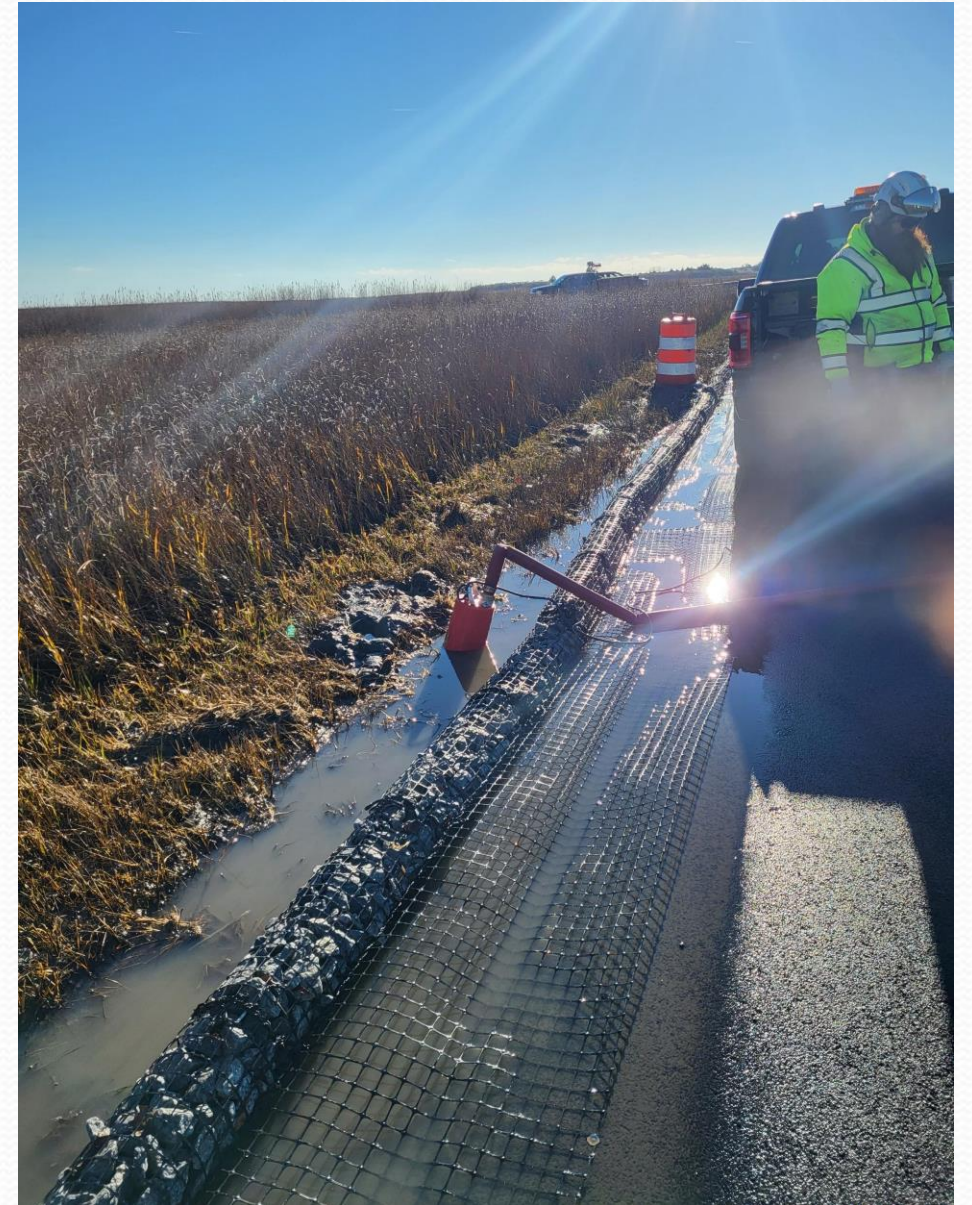
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Shirleys

South Bowers Road



South Bowers Road



South Bowers Road



South Bowers Road



South Bowers Road



Woodland Beach Road

- One-way-in, one-way-out access road to beach community (48 houses)
- Roadway sees many overtopping events
- Have been past evacuations of community
- “Water on Road” warning sign system is active
- Working with UD on low-cost sensor deployment
- Longer term solution sought
 - Underlying soil stabilization
 - Lightweight aggregate fill to raise roadway
 - Pile supported roadway slabs in low lying areas



Funding Opportunities – Resiliency

- **Federal Programs**

- **National Electric Vehicle Infrastructure (NEVI) build-out**

- Awaiting final federal rulemaking

- **Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)**

- Possible projects (pavement overlays): SR 1 locations in Sussex County, SR 9 locations between New Castle and Little Creek, other frequently flooded roadway locations across the state

- **Carbon Reduction Program**

- Carbon Reduction Plan due November 2023

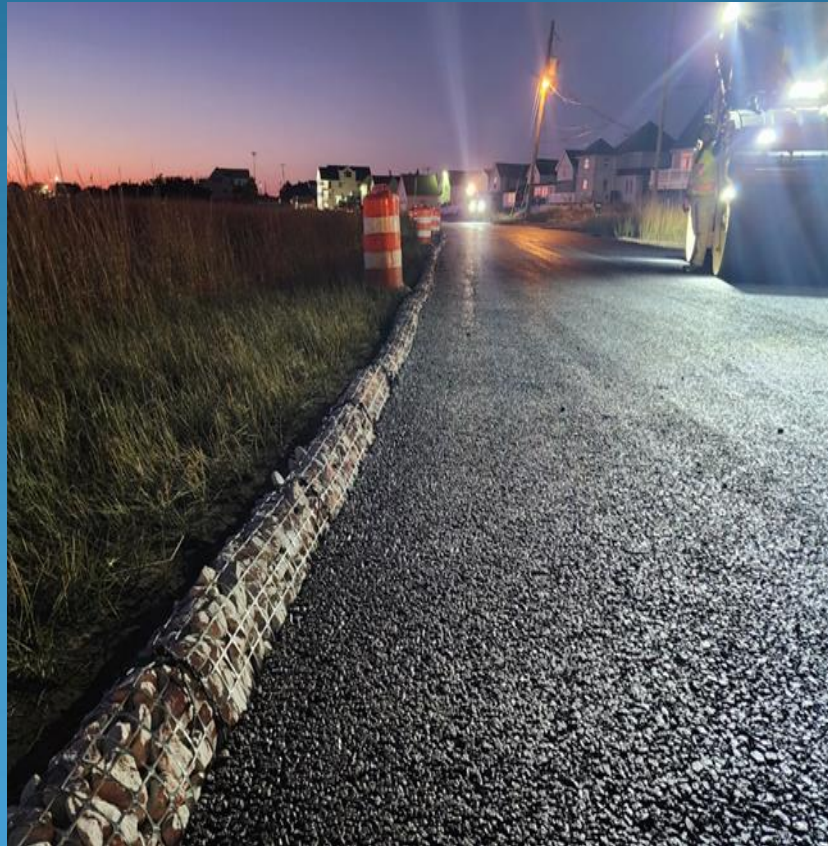
- **Resilience Improvement Plan (RIP)**

- Draft planned for spring 2023

- **FHWA Climate Challenge grant**

- Track infrastructure construction GHG emissions
- Kick-off February 2023

Thank you for your time and attention

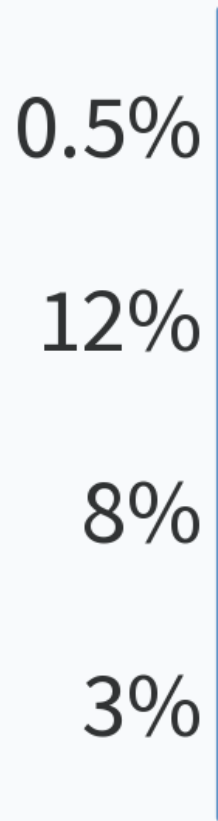


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If concrete were a country, it would be the third largest emitter of greenhouse gases on Earth, behind only China and the United States.

What percentage of greenhouse gases are produced by concrete?



Transportation accounts for _____% of GHG

20%

48%

27%

12%