

Sanitary Sewer Lateral Evaluation

William Barrack II, Director, Wastewater Planning & Monitoring Division

Land Use Policy Committee

September 1, 2026

Problem: Board Concern for Owners Cost Burden when Repairing Privately-Owned Sewer Laterals

12/9/2025 Board Matter:

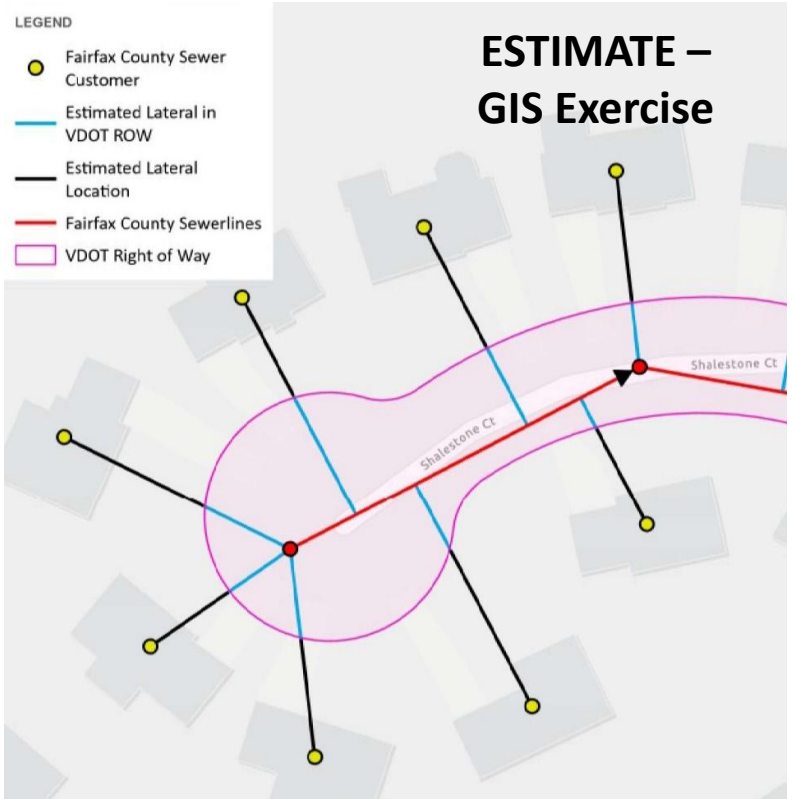
1. Estimate the scale of the problem in which privately owned sewer laterals are located within the VDOT right-of-way
2. Research how neighboring jurisdictions have addressed this problem
3. Identify alternatives available to the County to assist residents in these situations along with the potential benefits, implementation timeline, and costs, including additional employee resources necessary for each alternative
4. Provide a summary report of staff findings including their recommendations to the Land Use Policy Committee for discussion.

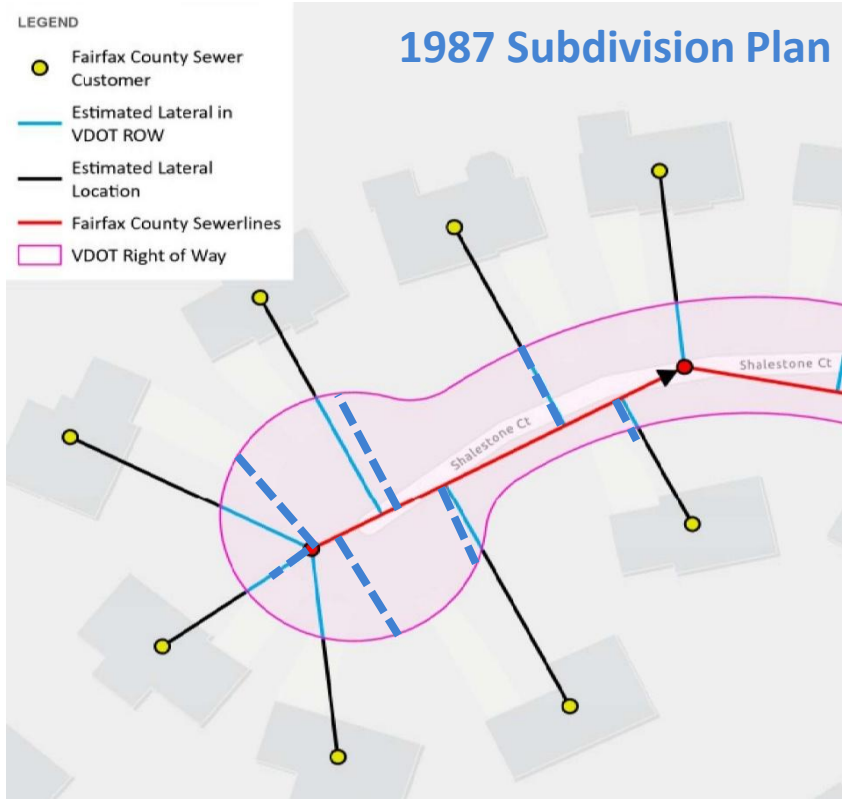


Note: Both state law and sewer utility bond requirements limit funding alternatives.

1. Estimate the scale of the problem in which privately owned sewer laterals are located within the VDOT right-of-way

- GIS exercise to estimate approximate locations
- Out of 257,605 lateral connections, 124,825 (48%) estimated to be in **VDOT** ROW.
  - Total length in VDOT ROW: ~700 miles, Average length in VDOT ROW: ~30 feet





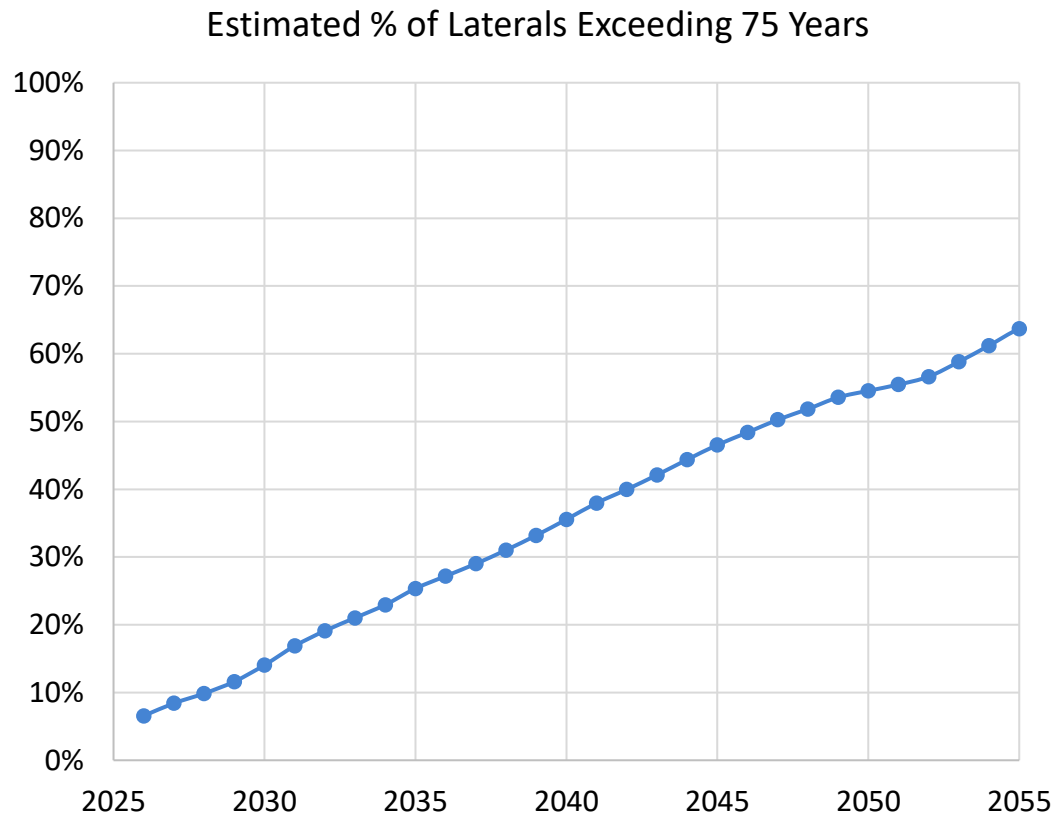
Laterals in VDOT ROW – Magisterial District

- Fairly consistent between magisterial districts
  - Dranesville, Mason slightly impacted more
  - Hunter Mill, Sully slightly impacted less

District	Number of Sewer Customers in ROW	% of Sewer Connections in ROW
Braddock	17,431	54%
Dranesville	15,196	64%
Franconia	15,204	46%
Hunter Mill	7,934	32%
Mason	16,007	62%
Mount Vernon	16,308	53%
Providence	9,216	42%
Springfield	14,638	47%
Sully	12,916	37%
Average		**48%**

Laterals – Estimated Age

- Like the sewer system, significant system expansion in the 50s-70s.
- Larger portion of laterals expected to reach estimated useful life in upcoming years
  - Today: 5% laterals >75 years
  - In 20 years: nearly 50% of laterals > 75 years



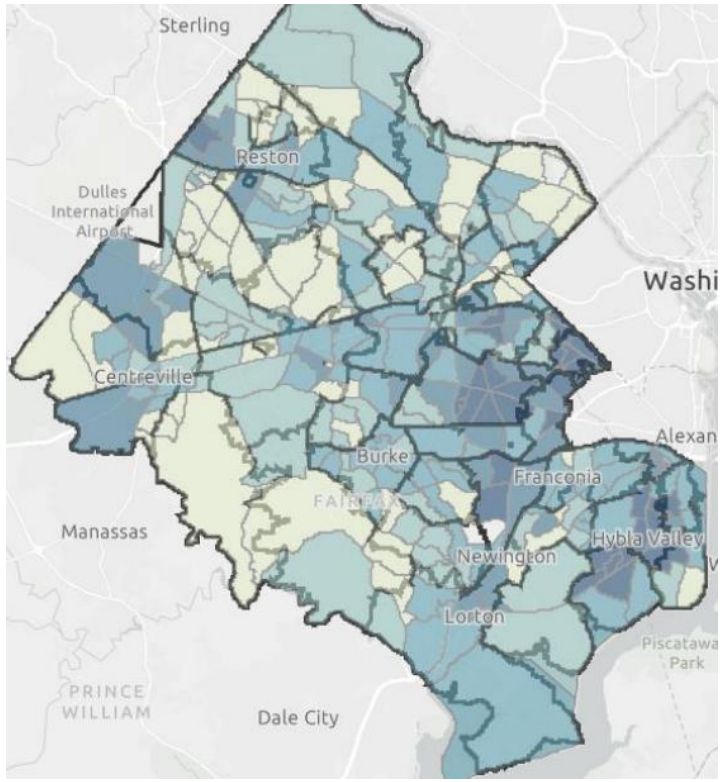
Laterals by the Numbers – Customer Type

- Single-family, detached homes are the customer type most likely to have sewer laterals located in the VDOT ROW
  - SFD represent 62% of all connections
  - SFD represent 42% of all revenue
  - SFD represent 97% of connections impacted by VDOT ROW
- **A solution would primarily benefit single-family, detached homes**

Land Use Type	# of Sewer Connections in VDOT ROW	% of all Connections in VDOT ROW
Commercial	1,674	1.3%
Residential – Single Family, Detached	120,662	96.6%
Residential – Single Family, Attached	2,038	1.6%
Residential – Multi-Family	242	0.2%
Municipal	236	0.2%

Laterals in VDOT Right-of-Way – Mostly in Areas with Low Vulnerability

- Lateral connections located in VDOT ROWs are most common in low or very low vulnerability areas.



Index Description	Number Laterals in the ROW	% of Connections in ROW
Very High	3,119	2%
High	10,901	9%
Average	25,397	20%
Low	36,882	30%
Very Low	48,551	39%

Vulnerability Index as defined by One Fairfax at:
https://www.fairfaxcounty.gov/topics/one-fairfax

2. Research how neighboring jurisdictions have addressed this issue

- We reached out to 21 utilities
- Established list of 10+ questions
- Key takeaways:
  - Several utilities* offer support for structural issues in the ROW
  - The utilities that have programs for privately owned sewer laterals are either authorities or cities
    - No programs within VA are need-based
    - Lateral repair cost can range from 10k -> 100k

Sewer Utility	Number of Sewer Connections	VDOT Maintenance for Local Roads	Public Entity Lateral Ownership
Fairfax County	260,000	Yes	No
Prince William Water*	95,000	Yes	No*
Loudoun Water*	85,000	Yes	No*
Arlington County	37,000	No	No
City of Alexandria	36,000	No	Varies
City of Manassas	14,000	No	In Street ROW
Fauquier County Water Authority*	8,000	Yes	No*
Town of Vienna	6,100	No	No
Town of Herndon*	6,000	No	No*
City of Falls Church	4,300	No	No
City of Fairfax	3,300	No	No
Manassas Park	4,000	No	Property Line to Main

Lateral Approach Beyond Northern Virginia

- Large Non-Virginia utilities and utilities outside Northern Virginia own sewer laterals

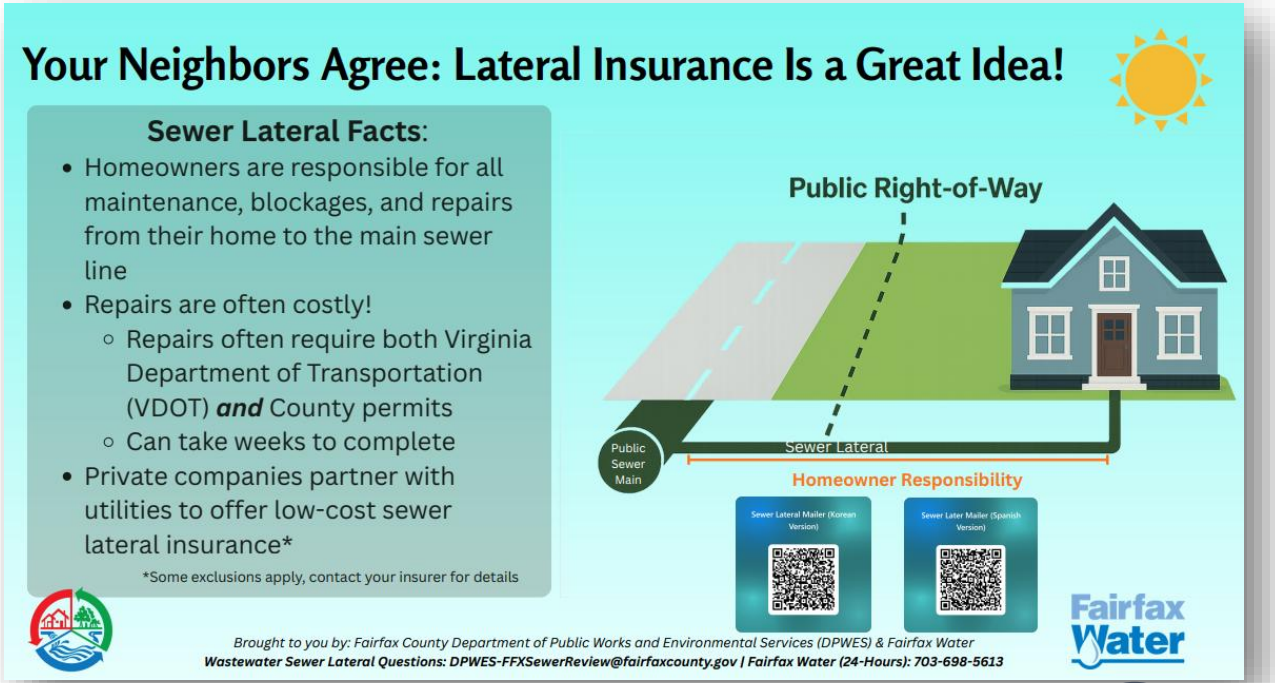
Sewer Utility	Estimated Number of Sewer Connections	State DOT Maintenance for Local Roads	Public Entity Lateral Ownership
WSSC [1]	500,000	Varies	Property Line to Sewer Main
City of Virginia Beach	135,000	No	Property Line to Sewer Main
DC Water[2]	127,000	DDOT	Property Line to Sewer Main
Henrico County	98,000	No	Property Line to Sewer Main
Howard County[1]	78,000	No	Property Line to Sewer Main
City of Richmond	70,000	No	Property Line to Sewer Main
Western VA Water Authority	28,000	No	Property Line to Sewer Main
James City Service Authority	25,000	Yes	Property Line to Sewer Main
Bedford Regional Water Authority	6,500	Varies	Property Line to Sewer Main

[1]Utility located in Maryland
[2]Utility located in Washington DC

Lateral Ownership Transition to County: $1.5B | +32 FTEs

DPWES Action: Educational Campaign

- **Approach: Prioritize customer education**
  - Ownership responsibilities of entire lateral
    - Fairfax County Code Section 65-6-5 (Ownership of building sewer) explicitly establishes that the County does not own sewer laterals
  - Private insurance options exist with a range of plans, costs, benefits, limitations
    - Supplemental homeowners' insurance
    - Gas/power companies
- **Implementation:**
  - Low cost
  - Outreach events, newsletters, mailers



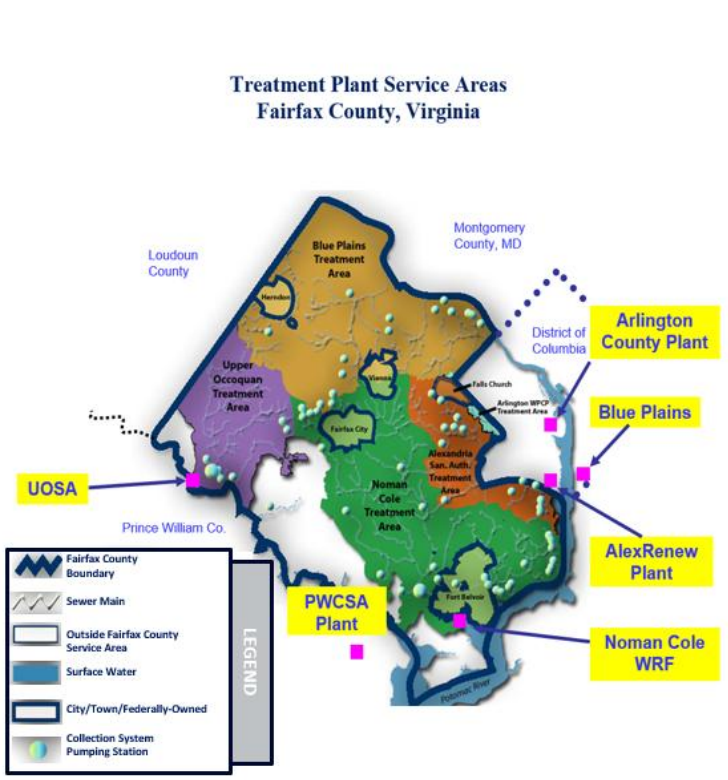
Other Options are Limited by State Law

- Board to Consider Legal Authority when Pursuing Additional Options:
  - Large number of sewer laterals located in the VDOT ROW, prioritize need-based initial pilot
  - Pilot program using general funds to support need-based private lateral repairs if legal authority exists
    - Partial Reimbursement
    - Structural Repairs



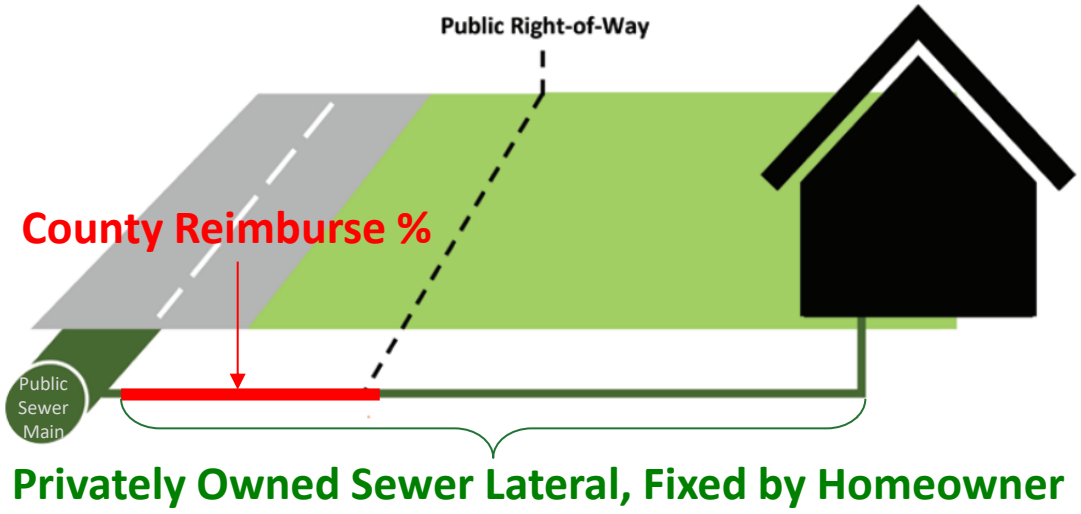
Program Funding Considerations

- Current state authority does not allow Fairfax County to directly spend funds on privately-owned assets.
- Funding options:
  - General funds:
    - Appropriate general fund dollars to a nonprofit or charitable third-party organization (TBD)
      - State law restricts conditions on donations. Any consideration of this option requires additional research.
    - or; Go to Virginia General Assembly and request additional authority from the state
  - Wastewater funds cannot be used:
    - The General Bond Resolution for the Sewer System pledges all gross revenues of the System to the payment of the System's reasonable and necessary operating expenses and debt (revenue bond debt service and subordinate obligations).
    - Sewer laterals are not System assets.



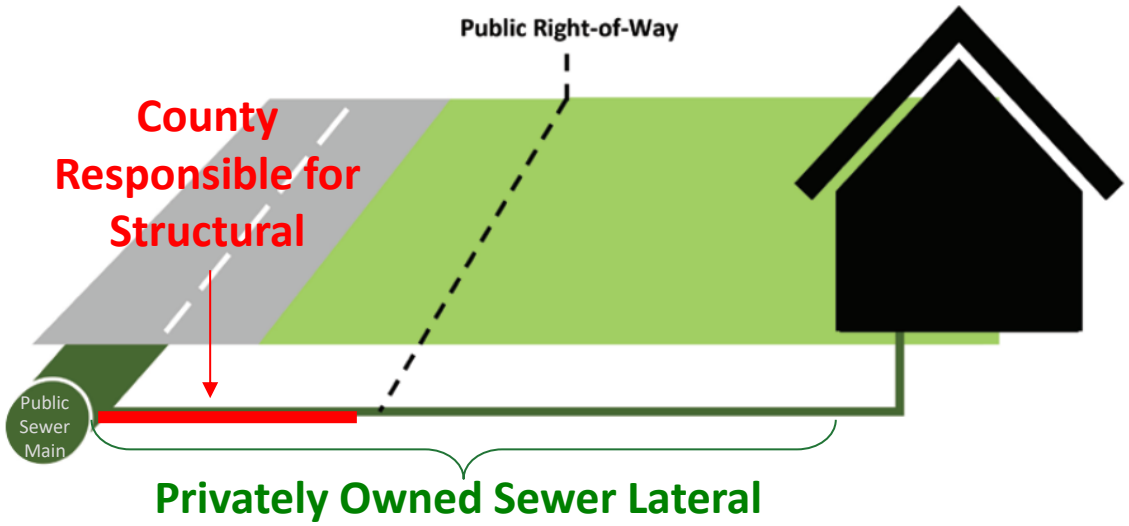
What Does Partial Reimbursement Look Like?

- **Approach: Lateral remains privately owned and customer leads repairs with partial County reimbursement.**
  - Flexibility on setting reimbursement amount, budget assumes reimbursement is **maximum** of 50% of costs OR $10,000.
  - Benefit is established maximum spend per lateral fix
- **Implementation (As limited by state law):**
  - $250,000 need-based pilot program using general funds
    - Benefit minimum of 25 customers, <1 FTE
  - Full implementation:
    - $45M over 10 years



What Does Structural Repair Support in VDOT ROW Look Like?

- **Approach: County responsible for structural issues in the ROW**
  - Property owners retain ownership of lateral, responsible for all blockages, and responsible for structural issues outside of ROW
- **Implementation (As limited by state law):**
  - $250,000 need-based pilot program using general funds:
    - Benefit approximately 5 customers, <1 FTE
  - Full implementation:
    - $90M over 10 years



Alternatives

- DPWES will move forward on education campaign

- Given potential large number of laterals located in the VDOT ROW, DPWES identified alternatives using general funds to support need-based private lateral repairs
    - Partial Reimbursement
    - Structural Repairs

- **Both require consideration of legal limitations**

Recommendation Sought

- Continue with current program as-is, with the additional education campaign
- Pursue state code/legislative needs to allow for partial reimbursement
- Pursue state code/legislative needs to allow for structural repairs

Details	Estimated # of Benefited Customers $250,000 Pilot	Estimated # of Benefited Customers - $500,000 Pilot	Full Implementation
Partial Reimbursement	25	50	$45M over 10yrs
Structural Support within VDOT ROW	5	10	$90M over 10yrs

Questions?

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Department of Public Works and Environmental Services
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