I-476 FLEX LANE PROJECT

Paul Valliere, PE – PennDOT District 6-0
Sandi Yeakley, PE – Benesch

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Pennsylvania
Department of Transportation

AGENDA: I-476 FLEX LANE PROJECT

1. Welcome & Introductions
2. Project Background
3. Proposed Design
4. Project Schedule and Next Steps
5. Questions

PROJECT BACKGROUND

FLEX LANES LIMITS

I-476

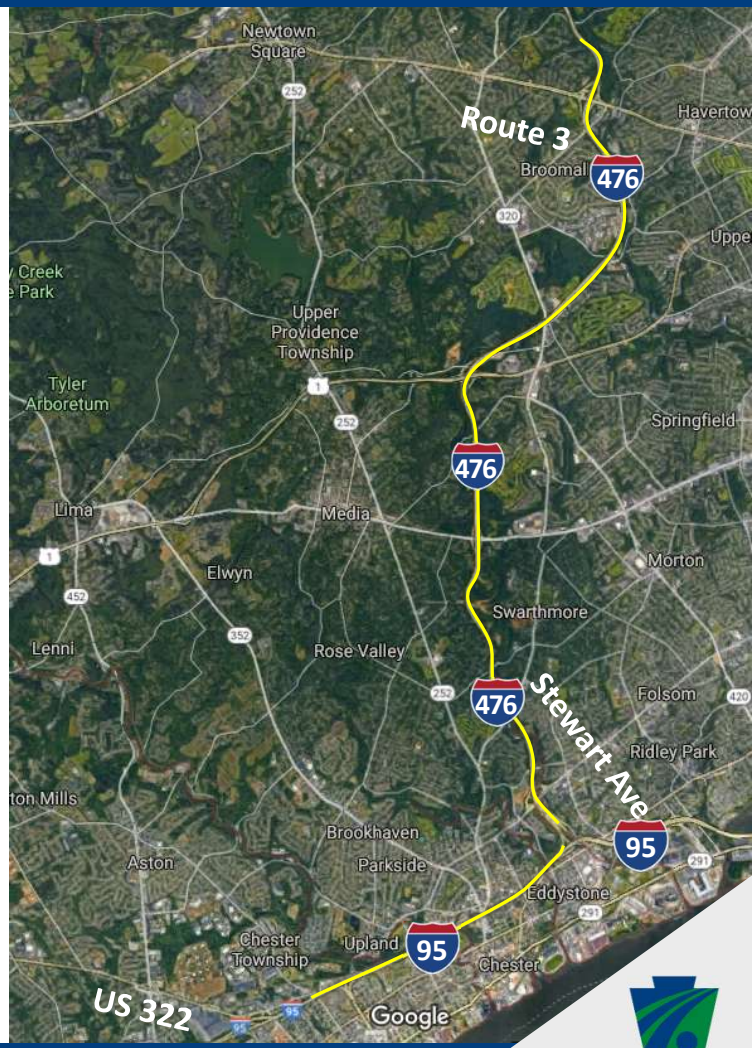
- Route 3 to I-95 Interchange

I-95 Southbound

- I-476 southbound on-ramp to Engle Street

PURPOSE AND NEED

The project's purpose is to reduce congestion, reduce crashes and improve travel time along the I-476 and I-95 corridors.



PROJECT BACKGROUND

I-476 Section ATC

- Activation in early 2026
- 15-mile portion of I-476 Corridor
- Variable Speed Limits Signs and Queue Detection System
- Automatically change based on real-time traffic and safety conditions.
- Goal is to harmonize vehicle flow and reduce rear-end crashes.

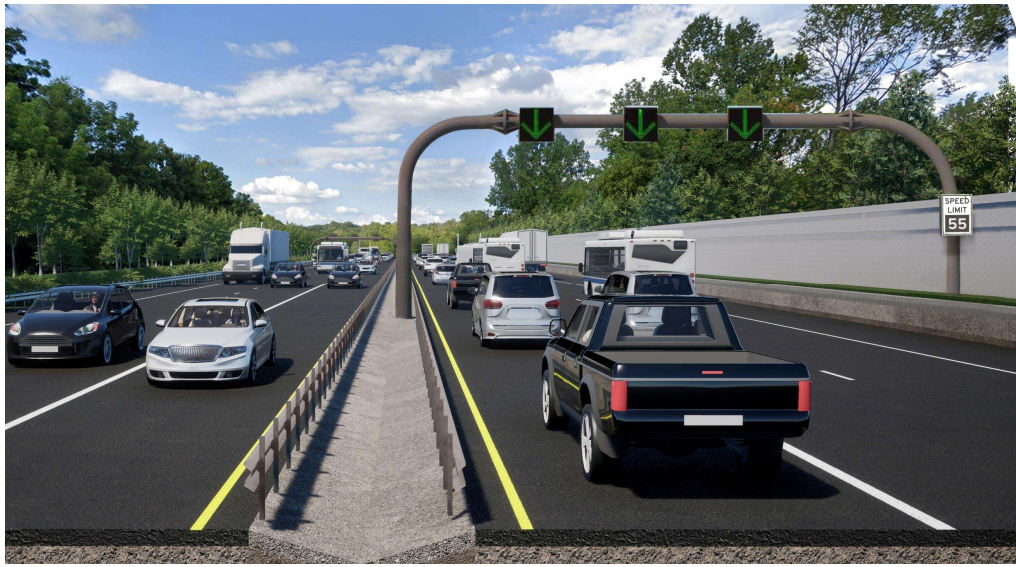




PROPOSED DESIGN

FLEX LANE CONCEPT

- Sometimes referred to as hard shoulder running or part-time shoulder lanes.
- Active traffic management strategy to dynamically provide additional lane capacity when needed.
- Lanes are controlled by overhead arrows and “X”s and open when needed during peak times.



PROPOSED DESIGN

I-476 FLEX LANES

- Widen inside shoulders to provide an additional lane when needed.
- Flex lane available during peak demand while being utilized as a shoulder during off-peak times.
- Overhead electronic signing.
- Improvements to seven mainline bridges.





PROPOSED DESIGN

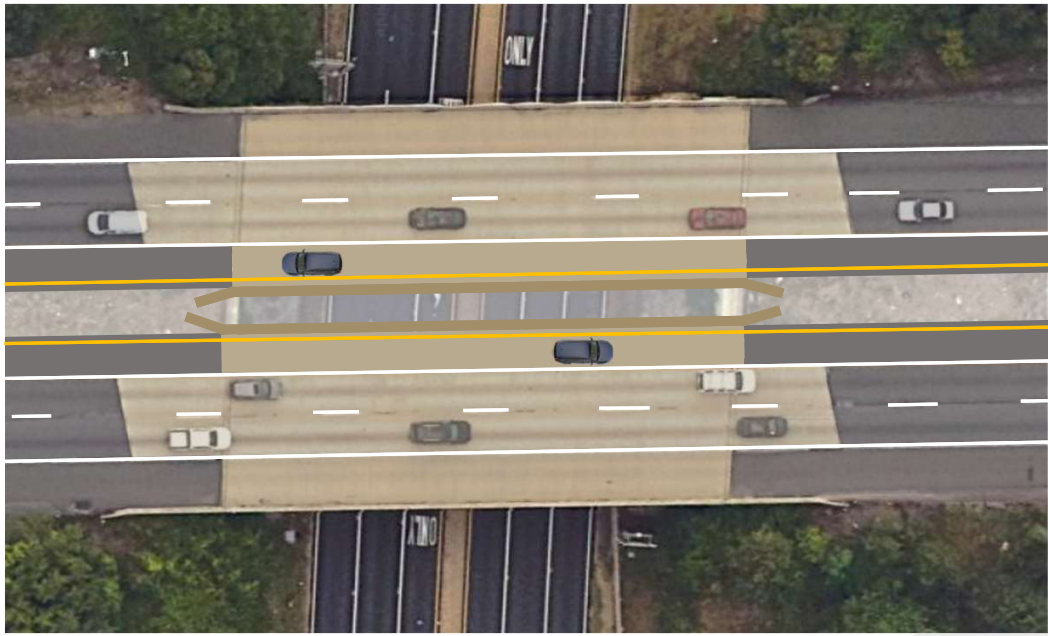
TYPICAL BRIDGE WIDENING

Existing



Proposed

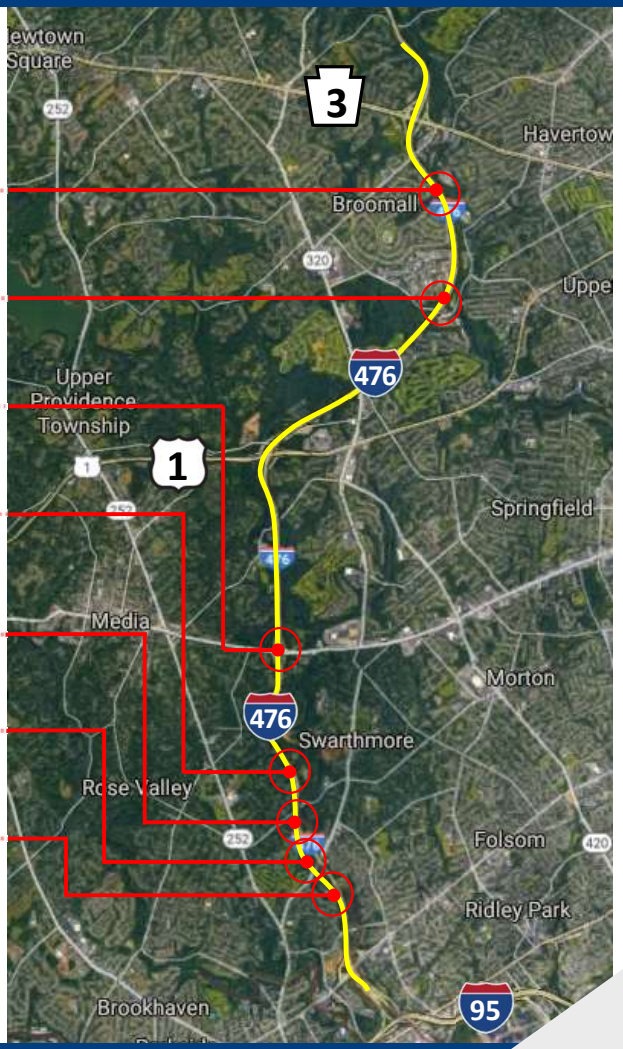




PROPOSED DESIGN

BRIDGES TO BE IMPROVED

- I-476 over Tributary to Darby Creek
- I-476 over Reed Road & Whetstone Creek
- I-476 over Baltimore Pike
- I-476 over Avondale Road & Dicks Run
- I-476 over Rose Valley Road
- I-476 over Avondale Road & Crum Creek
- I-476 over Crum Creek & Blackrock Park



PROPOSED DESIGN

MEDIAN RETAINING WALLS



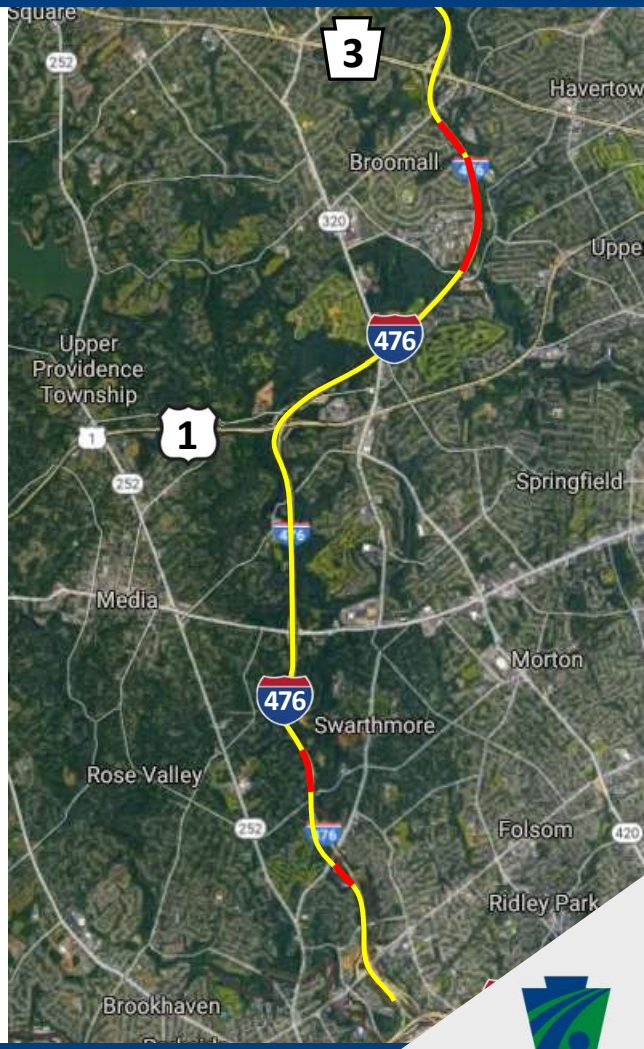


West Chester Pike

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PROPOSED DESIGN

CROSSOVERS

- South of Reed Road
- North of Avondale Road



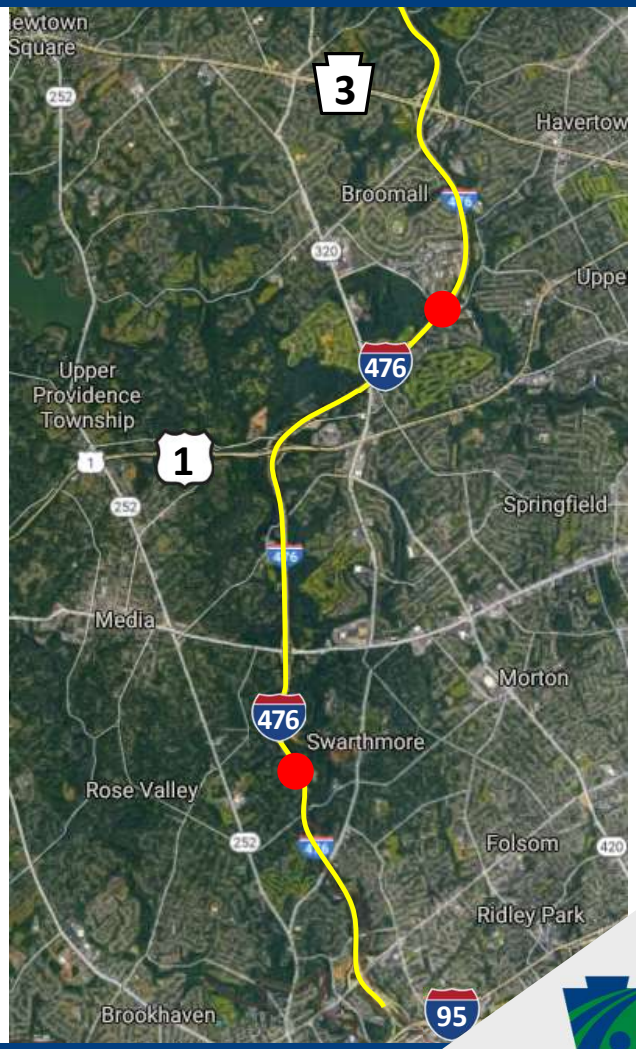


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PROPOSED DESIGN

EMERGENCY GATED ACCESS

- Off Eagle Road Near Reed Rd

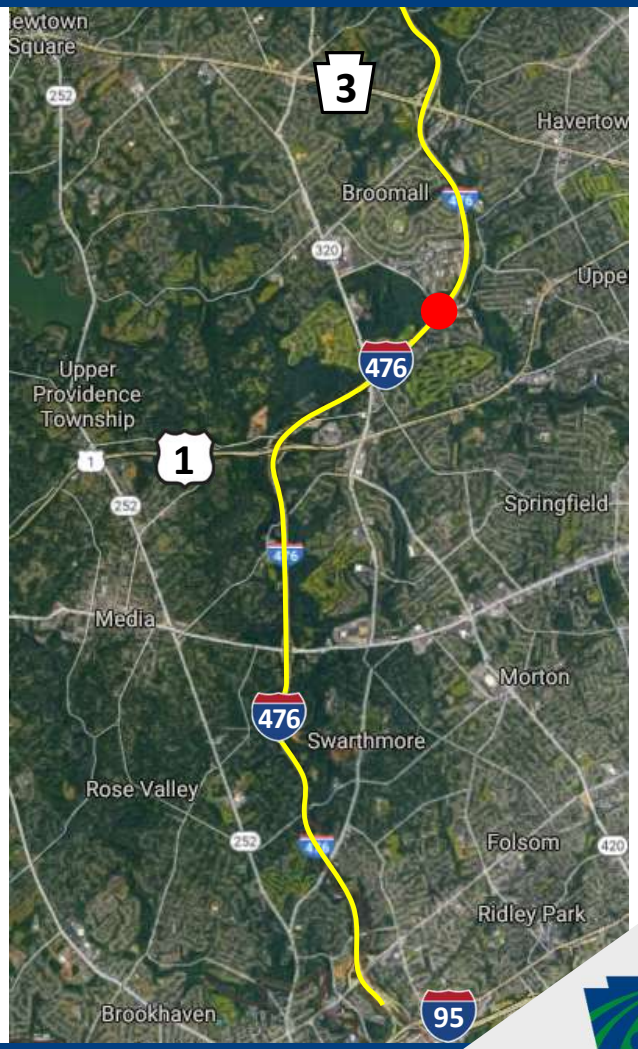


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PROPOSED DESIGN

DRAINAGE IMPROVEMENTS & STORMWATER MANAGEMENT DESIGN

- 6 Modified Existing Stormwater Basins
- 15 New Stormwater Basins
- 10 Partial Property Impacts

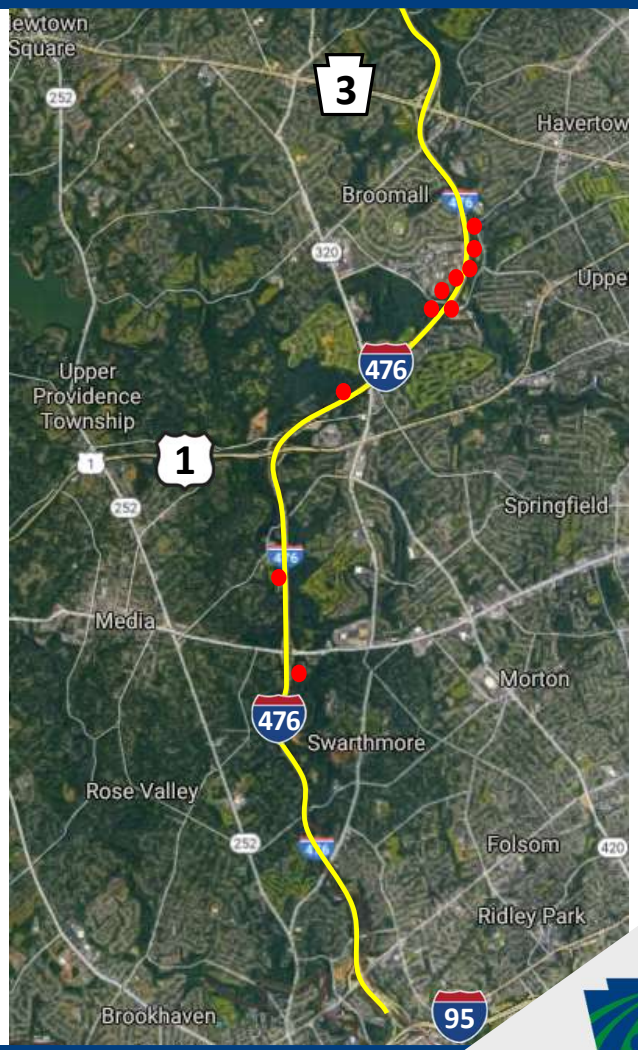


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PROPOSED DESIGN

I-95 SOUTHBOUND

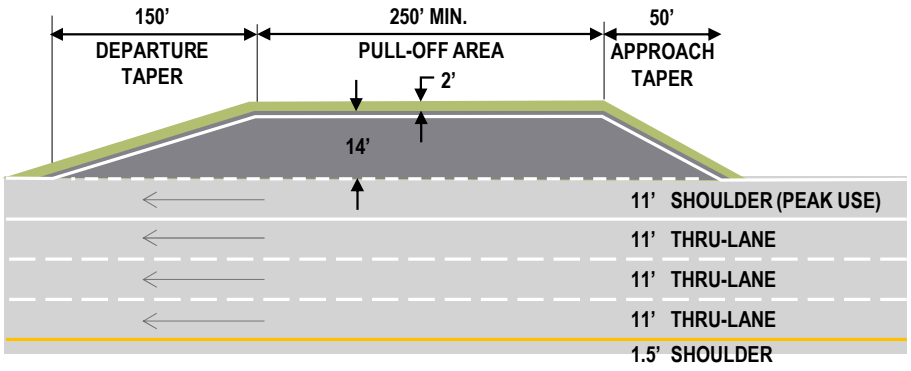
- Reconstruct outside southbound shoulder to provide an additional lane when needed.
- Flex lane available during peak demand while being utilized as a shoulder during off-peak times.
- Overhead electronic signing.
- Widen bridge over abandoned railroad north of Commodore Barry Bridge interchange.

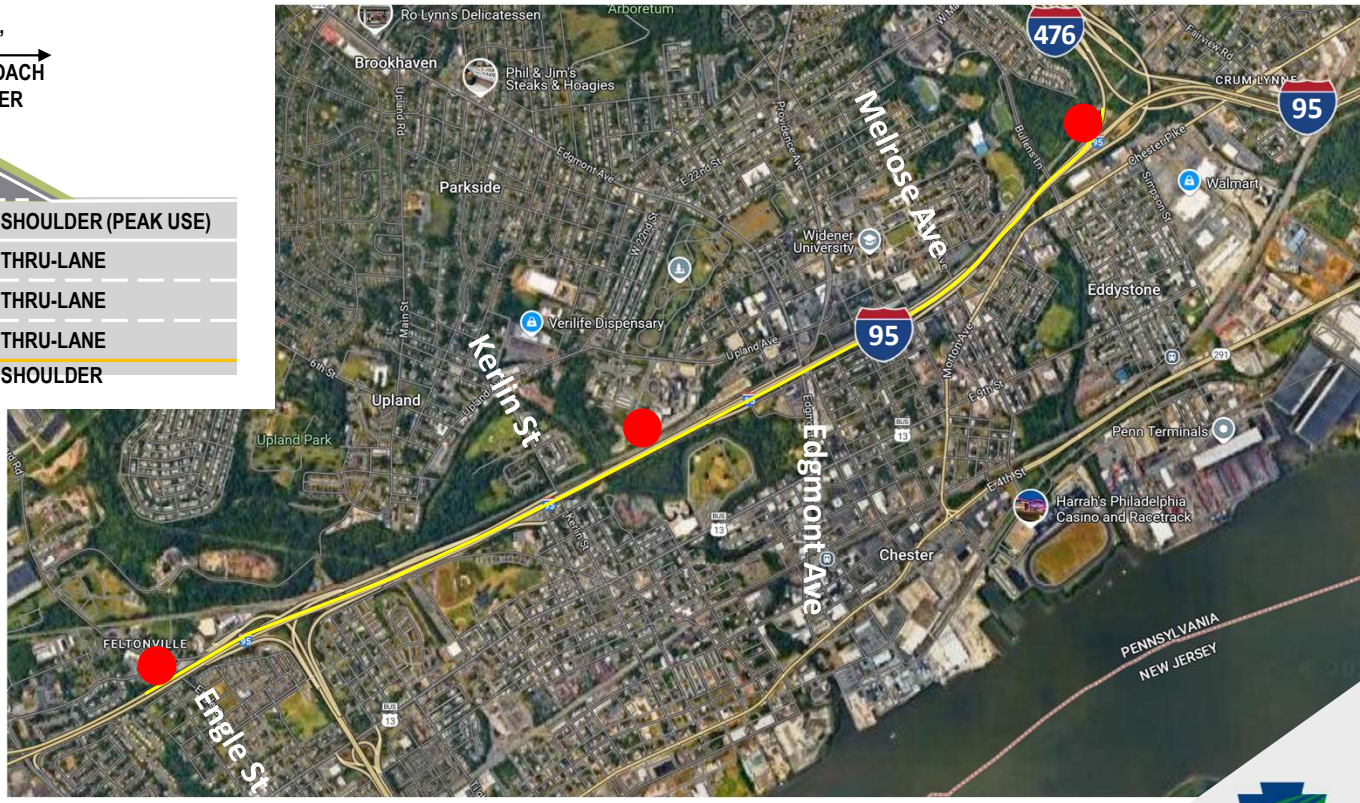




PROPOSED DESIGN

EMERGENCY PULL OFFS FOR I-95 SB





US 322 WB

Commodore Barry Bridge

PROPOSED DESIGN

TRAFFIC CONTROL DURING CONSTRUCTION

I-476

- Maintain 2 lanes of traffic in each direction.
- Traffic shifted partially onto right shoulder.



I-95

- Maintain 3 lanes of traffic on southbound side.
- Reduced lane widths.
- I-95 northbound remains uneffected.



PROPOSED DESIGN

COORDINATION EFFORTS

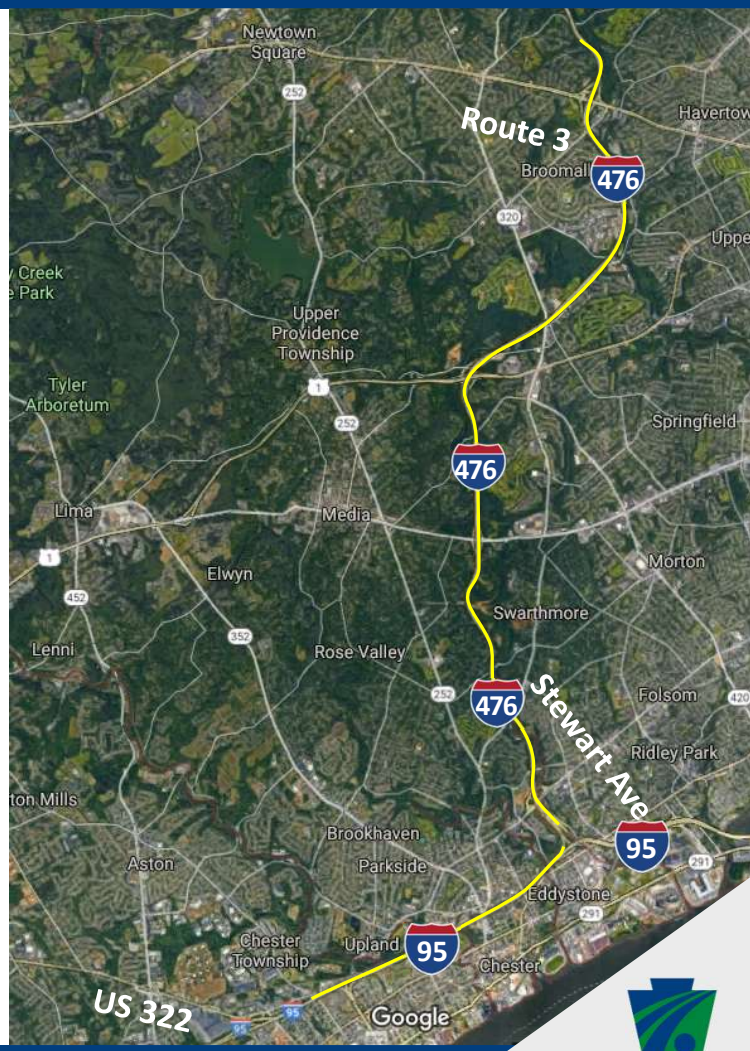
- Utility Coordination
- Right-of-Way Coordination
- Emergency Responder Coordination

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PROPOSED DESIGN

INCIDENT RESPONSE

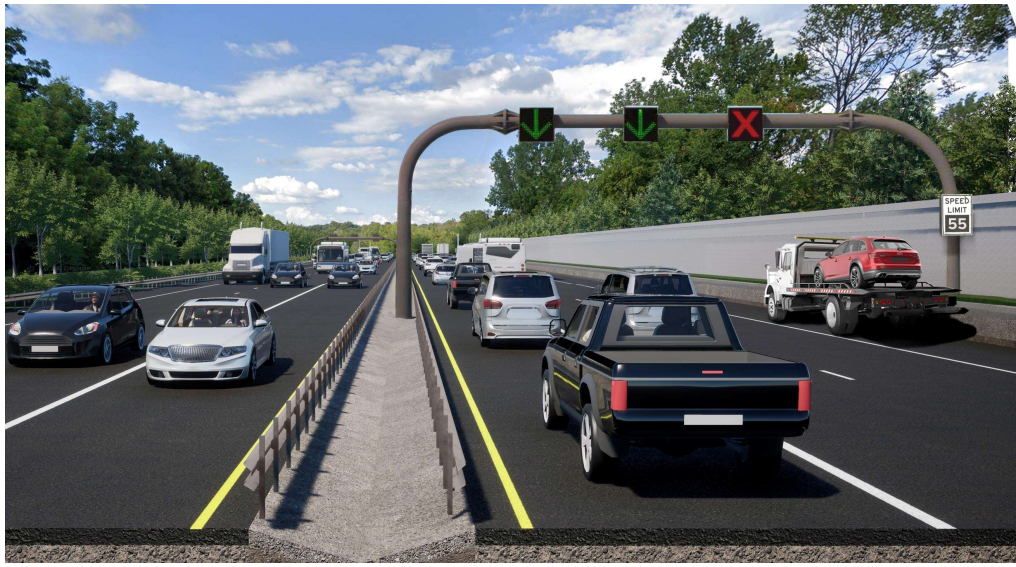
Dynamic Lane Control

Driver Alerts

- Variable Speed Limits
- Changeable Message Signs

Gated Corridor Access

Coordinated Response Plans



PROJECT SCHEDULE



QUESTIONS?

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