HREL

HAMPTON ROADS EXPRESS LANES

NETWORK

Hampton Roads Express Lanes Network Update

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Agenda

- HREL Network Phased Delivery Update
- HREL Network Driver Perspective Video
- HREL Network Transportation Management Plan (TMP)

Hampton Roads Express Lanes Network Phased Delivery

HRELN is a continuous network of Express Lanes in each traffic direction on I-64 from the Jefferson Avenue interchange in Newport News to the I-64, I-264 and 664 Bowers Hill interchange in Chesapeake. Divided into four segments, it will be delivered in two phases:

Existing

- Segment 1 (two reversible Express Lanes)

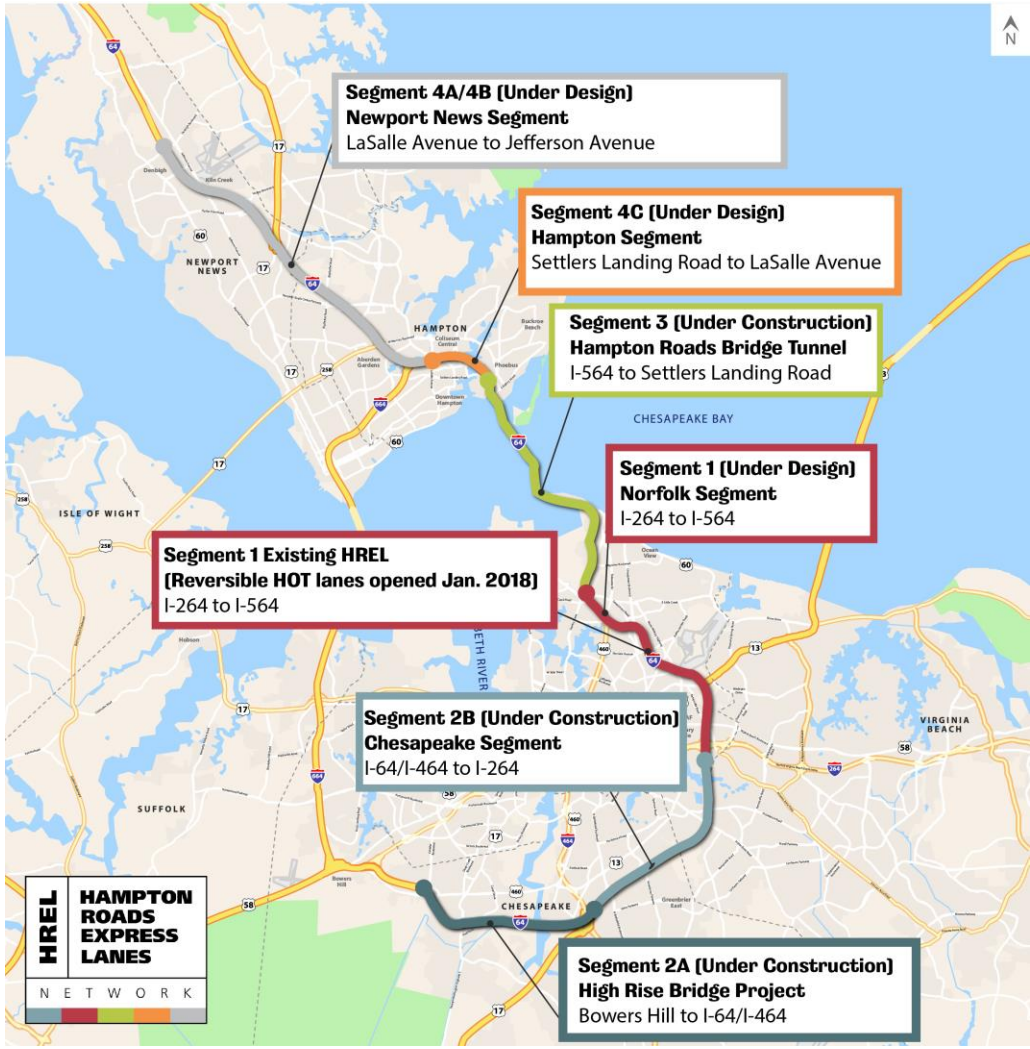
Phase I (Under Construction)

- **Segment 2** – under construction and fully funded (one Express Lane in each direction, completion by end of 2022)
- **Segment 3 (HRBT Expansion Project)** – additional capacity with the construction of new tubes and lanes, completion in 2025

Phase II (Currently in Preliminary Design)

Operational by the end of 2025

- **Segment 1** – completes modifications to the I-564 interchange to facilitate a two-Express Lane westbound transition and provides a single bi-directional part-time Express shoulder lane to operate in concert with the Reversible Lanes
- **Segment 4A/4B** – constructs one Express Lane in each direction from LaSalle Ave. to the Mercury Blvd. interchange and converts the existing H.O.V. lane to an Express Lane in each direction from Jefferson Ave. to the Mercury Blvd. interchange
- **Segment 4C** – provides a two-Express Lane eastbound entrance transition



Hampton Roads Express Lanes Network Phased Delivery

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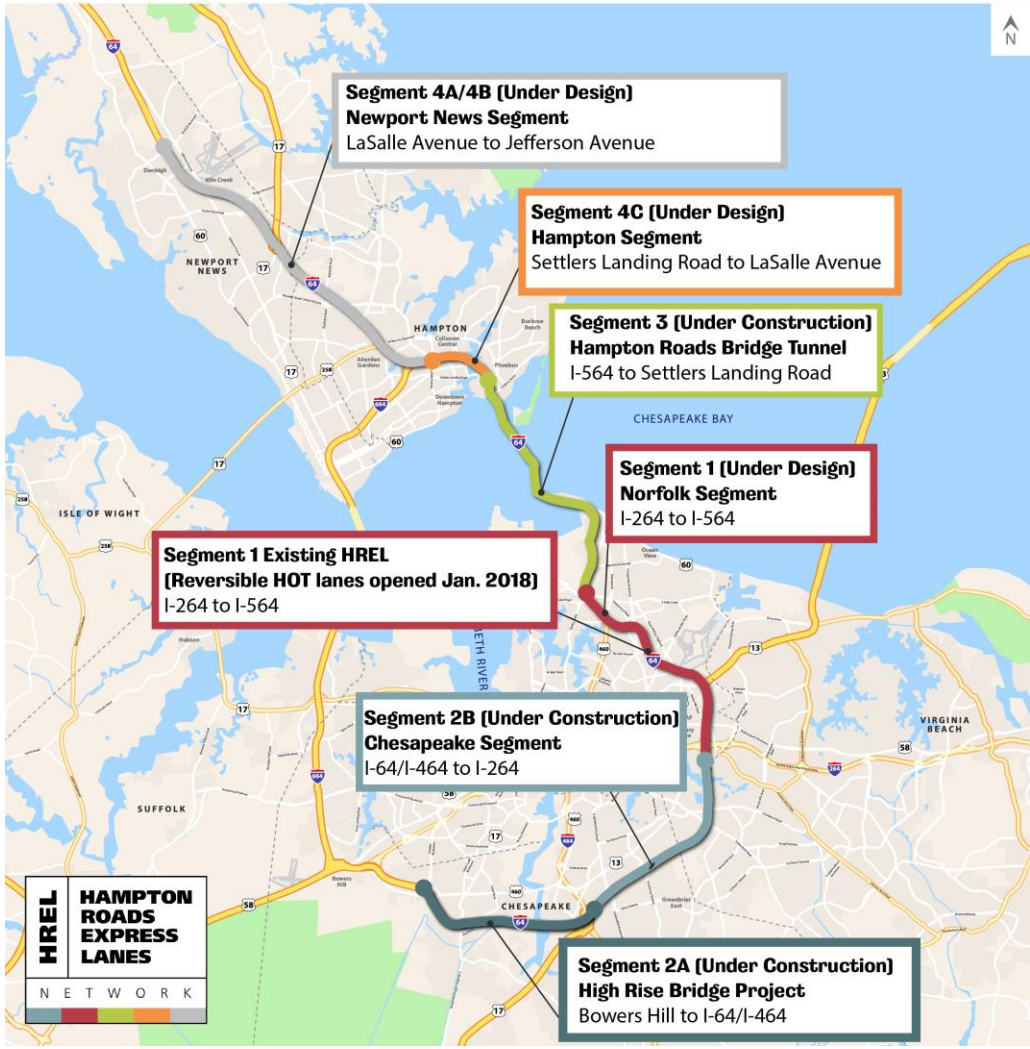
Phase II (Currently in Preliminary Design)

Operational by the end of 2025

- **Segment 1**
  - **Public Hearing – October 2021**
  - **Request for Proposal – Winter 2022**
  - **Notice to Proceed – Summer 2022**
  - **Construction Completion – Winter 2025**
- **Segment 4A/4B**
  - **Public Hearing – September 29/30, 2021**
  - **Advertisement – Spring 2023**
  - **Notice to Proceed – Summer 2023**
  - **Construction Completion – Winter 2025**
- **Segment 4C**
  - **Public Hearing – September 22/23, 2021**
  - **Request for Proposal – Winter 2021**
  - **Notice to Proceed – Summer 2022**
  - **Construction Completion – Winter 2025**

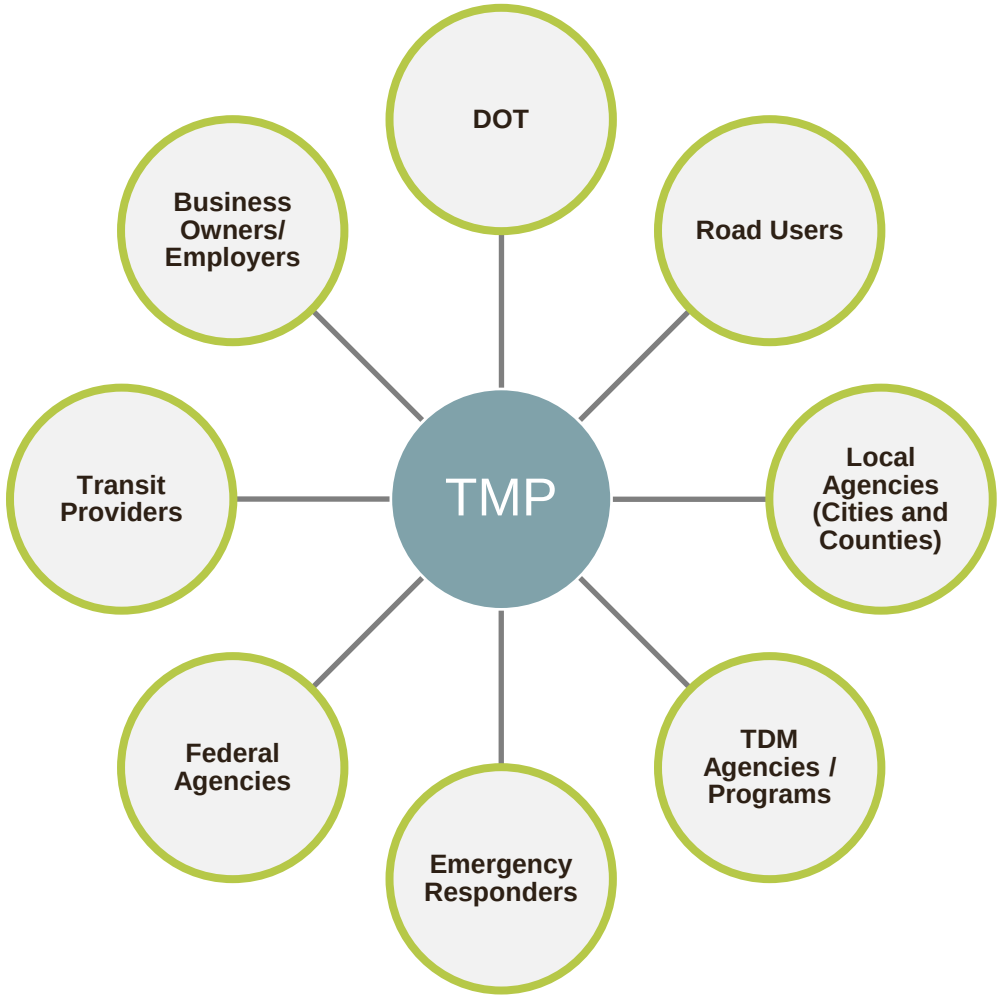


HRELN Driver Perspective Video

What is a Transportation Management Plan (TMP)?

- The TMP seeks to mitigate construction impacts
- TMP is required for all Federal-aid projects
- The TMP should be scalable
- A living document with:
  - A set of coordinated transportation management strategies
  - Description on how strategies will be used to manage work zone impacts
- Updated as:
  - Project progresses from scoping towards construction
  - Major work zone changes occur during construction

A Regional / Coordinated Approach



- A coordinated and holistic approach is essential to delivering a seamless TMP along the corridor
- Coordinating among multiple projects enables agencies to:
  - Effectively manage overall work zone impacts
  - Effectively use resources
  - Avoid conflicts in roles and responsibilities
  - Avoid additional costs
  - Ensure consistent communications

Draft HREL TMP Goals

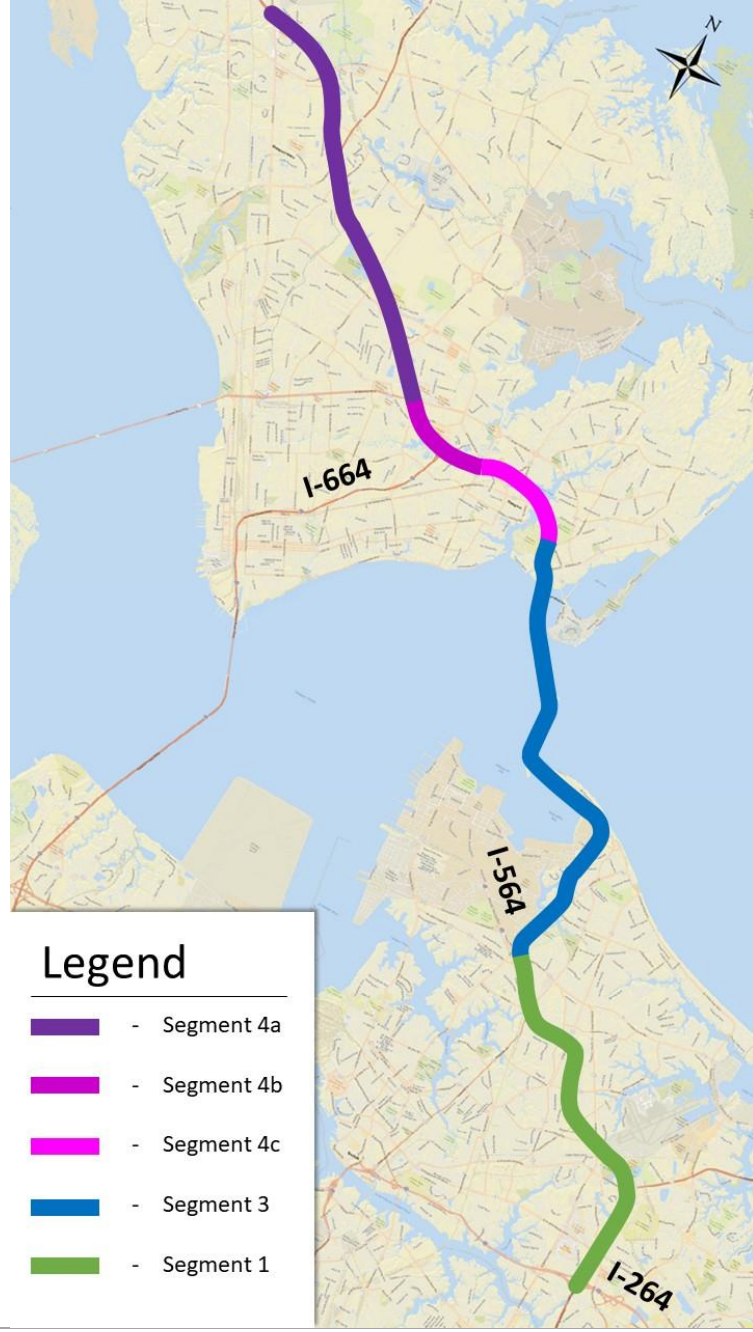
- **Goal #1.** Improve Safety within the Work Zone for Construction Workers and the Traveling Public
- **Goal #2.** Minimize Traffic Mobility Impacts
- **Goal #3.** Manage Transportation Demand
- **Goal #4.** Improve Public Awareness of Work Zone and TMP Activities
- **Goal #5.** Improve Intra- and Interagency Coordination during Construction
- **Goal #6.** Enhance Situational Awareness and Monitor Performance of the Transportation Network

Work Zone Traffic Analysis

Impact to Freeways

Scenarios (AM & PM)

- Baseline
- Work Zone (Worst Case and Equilibrium Condition)
- TDM Strategies (2 Scenarios)

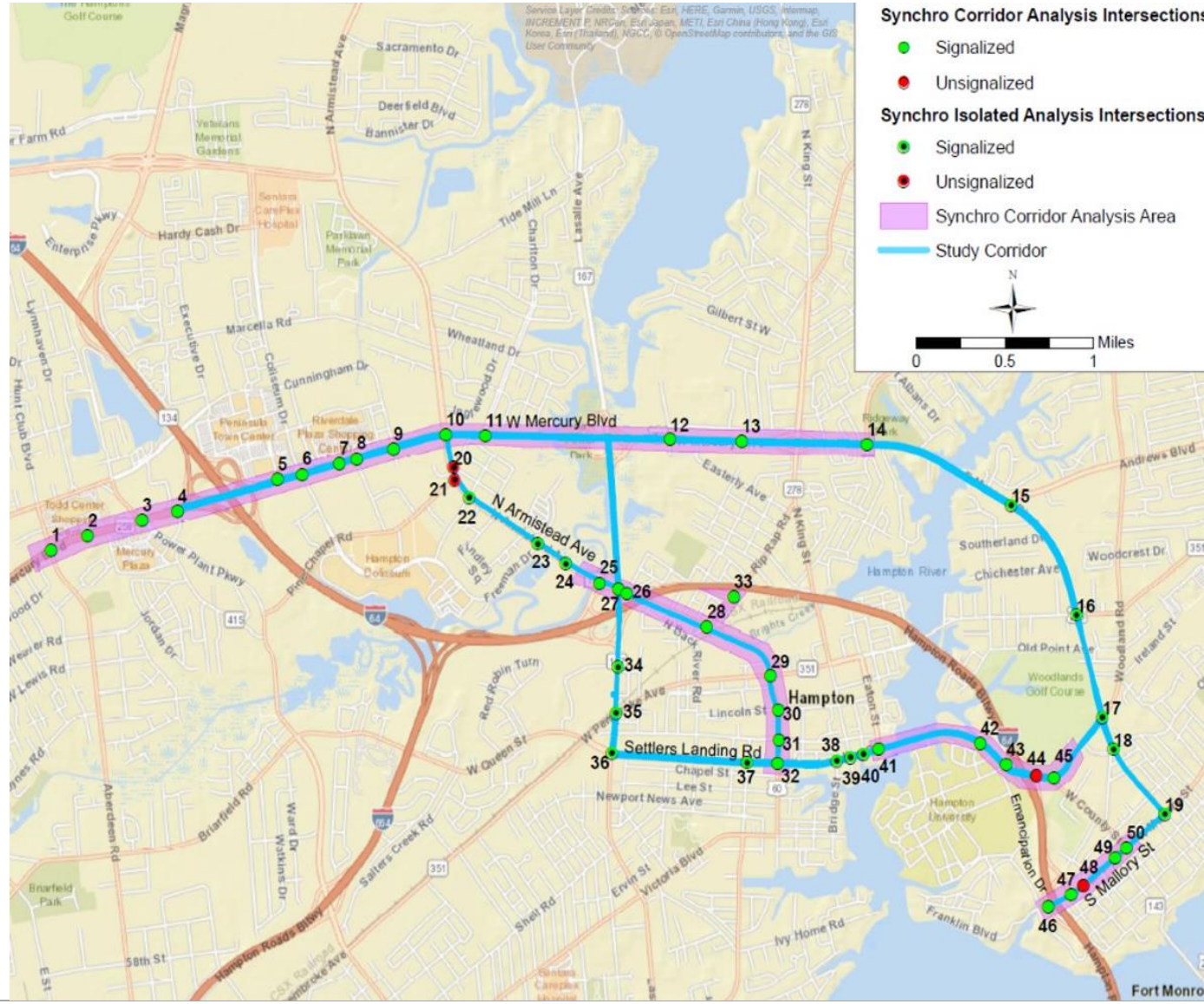


Work Zone Traffic Analysis

Impact to Local Streets

City of Hampton

- 50 Intersections
- Scenarios (AM & PM)
  - Baseline
  - Work Zone
  - TDM Strategies

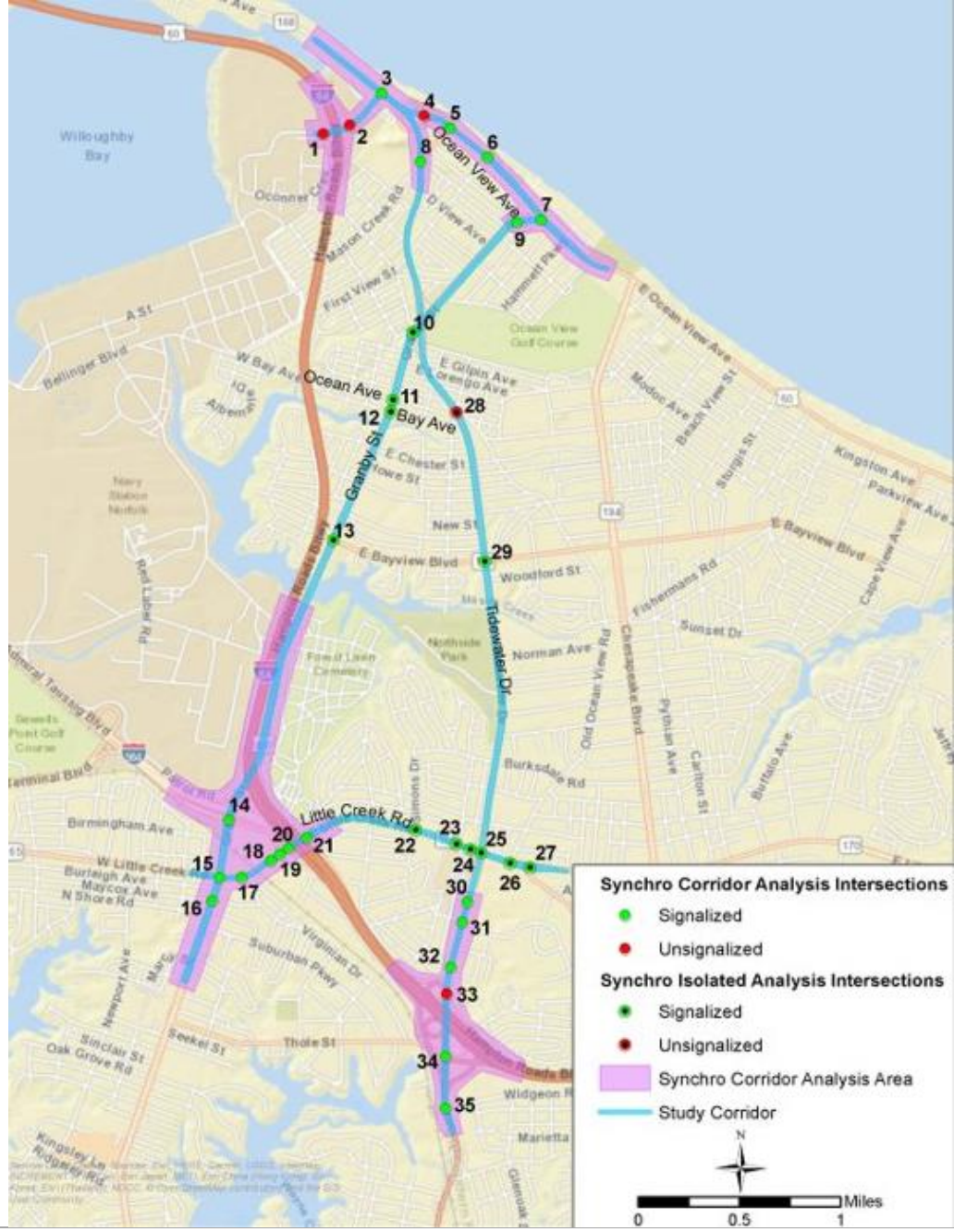


Work Zone Traffic Analysis

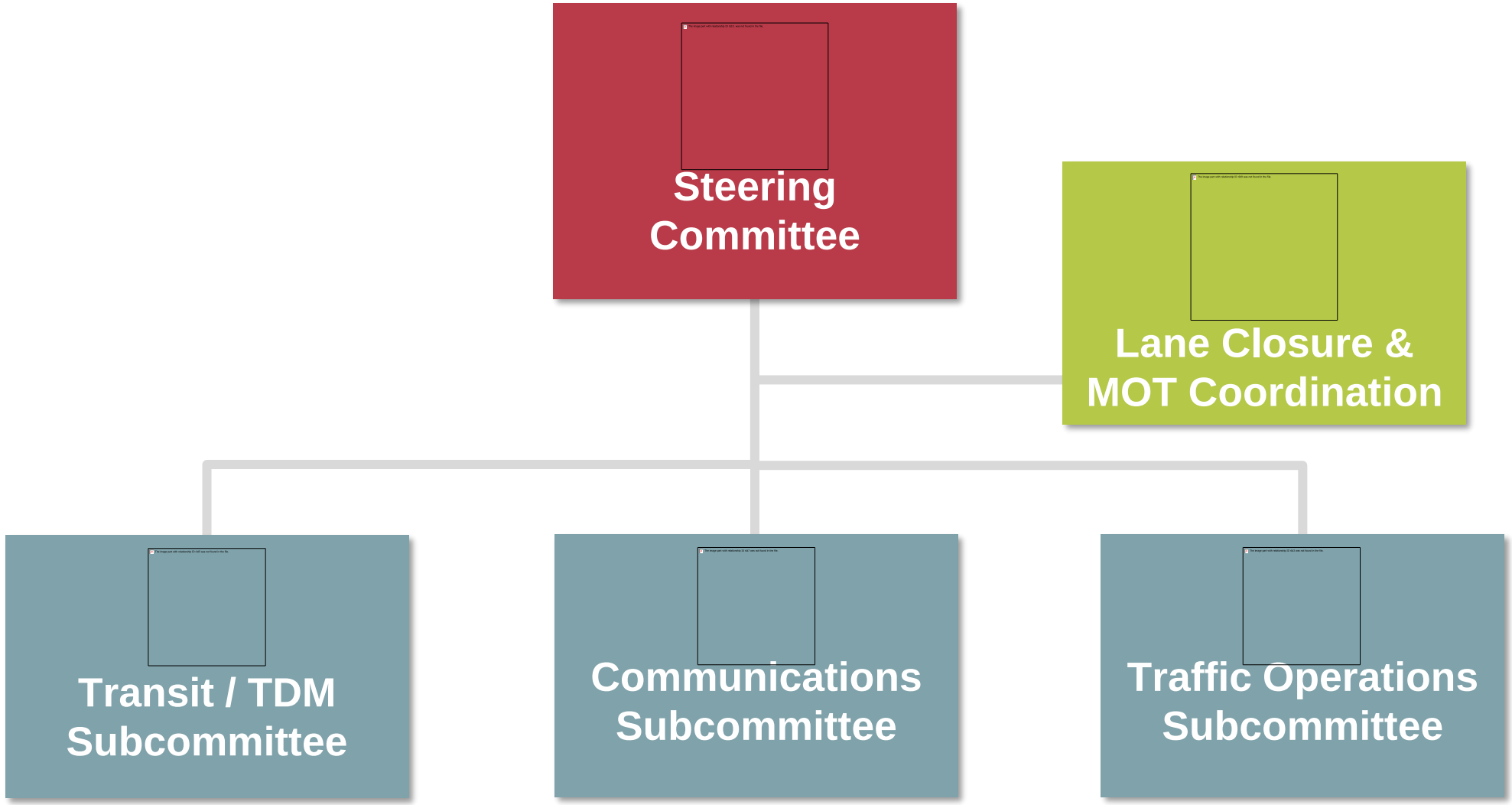
Impact to Local Streets

City of Norfolk

- 35 Intersections
- Scenarios (AM & PM)
  - Baseline
  - Work Zone
  - TDM Strategies



Proposed Organizational Structure



Technical Subcommittees

- Responsible for identifying and implementing strategies to:
  - Manage congestion
  - Maintain traffic during the construction of the project
  - Reduce vehicles in the construction zone
  - Keep the affected community informed
- VDOT staff will lead each of the technical subcommittees
- Staff from local, county and state departments/agencies will also serve on the subcommittees
- Each subcommittee will develop strategies within their respective purviews, as well as budgets and performance targets for each strategy

Traffic Operations Subcommittee

Promote the safety of workers as well as the safe and efficient movement of traffic through the project's work zone

- Temporary transportation operations strategies
- Incident / emergency management
- Use of ITS for traffic monitoring, queue detection, and traveler information
- Coordination with the Transportation Operations Centers (TOCs)
- Optimize traffic signal performance on arterials to support diverting traffic and detour/alternate routes
- Implement local spot improvements

Example Traffic Operations Strategies

Data Collection and Monitoring Strategies

- Temporary Data Collection
- Portable CCTV Cameras (integrated w/ ATMS)
- Real-Time Data and Monitoring of Impacts

Incident Management Strategies

- Supplemental Safety Service Patrols
- Supplemental Virginia State Police (VSP) Troopers
- Dedicated Wreckers
- Supplemental Local / County Police
- Updated Incident Response and Detour Plans
- Emergency Pull-offs within the Construction Area

Local Operations Strategies

- Local Spot Improvements
- Updated Signal Timing

Traveler Information Strategies

- Portable Changeable Message Signs (integrated w/ ATMS)
- Automated Work Zone Information System (Travel time and speed advisory on PCMS)
- Geo-fenced Alerts

Advanced Work Zone Strategies

- Queue Detection and Warning System
- Variable Speed Limit System
- Automated Work Zone Speed Enforcement
- Temporary Ramp Metering
- Dynamic Merge Control / Zipper Merge

Other Traffic Operations Strategies

- Services to Pre-position Portable Equipment
- Ongoing Operations-focused Meetings

Communications Subcommittee

Ensure that information is communicated to appropriate key audiences (motorists, law enforcement, emergency services, businesses, residents, elected officials and media).

- Develop a holistic communications plan to keep key customers informed about construction-related impacts before and during the construction
- Communicate and promote ways commuters can avoid construction-related delays, i.e., rideshare, telework, public transportation
- Determine the need for and types of community meetings needed to inform the public on the various aspects of the construction project

Example Communications Strategies

Coordinated Outreach & Advertising

- Public Meetings
- Employer Outreach
- Lane Closure Promotion
- Media Events

Communication using Electronic Media

- Website, Social Media, E-Newsletter, etc.

Customer Relationship Management (CRM) Tool

Transit / TDM Subcommittee

Identify and implement transit and transportation demand management (TDM) strategies to reduce travel demand on the corridor during construction

- Identify existing transit services and TDM strategies in the corridor to leverage and enhance these assets during construction
- Identify opportunities to align TMP transit and TDM strategies with post-construction services and strategies (where applicable)

Example Transit / TDM Strategies

Vanpool and Carpool Formation Strategies

- Carpool/Vanpool Incentive Programs
- Guaranteed Ride Home Program Promotion

Commuter and Local Transit Strategies

- Transit Fare Subsidies on Existing Commuter Routes
- Supplemental Bus Services
- Ferry Service between Downtown Hampton and Norfolk
- Employer Shuttles

TDM Outreach Strategies

- Transit and TDM Program Promotion
- Military and Large Employer Transit and TDM Outreach and Promotion

Questions?

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https://www.64expresslanes.org/

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