

Northern Virginia's Integrated Corridor Management (ICM) Planning Effort for the East-West Travel Shed

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What is ICM to Virginia?

Choice for customers

It's the **freedom** to move **where** you want to, **when** you want to, and **how** you want to

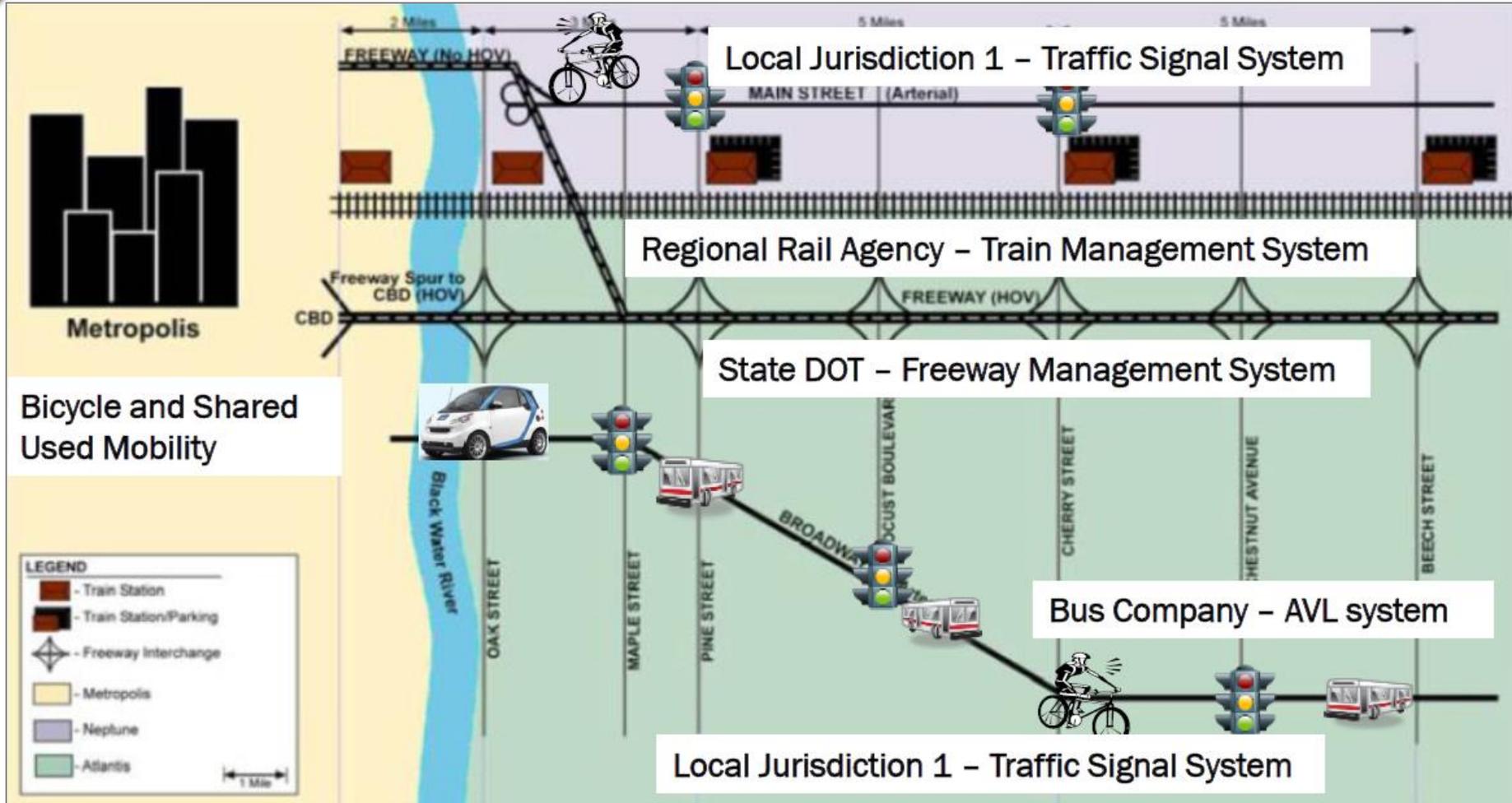
Utilizing “all seats” (bus, train, car), all travel lanes, all parking, and all modes in a corridor.



Coordinated Actions for Operators

The integrated, joint management of a multimodal transportation system.

Why ICM?



(Source: USDOT ICM Initiative)

ICM – A Paradigm Shift

- From moving vehicles to **moving people** and freight.
- From Individual Modes and Facilities to **End-to-End Trips** focusing on multiple modes and **connectivity**.
- From **Individual Jurisdictions to Multiple** adopting a more balanced approach meeting local, regional and national transportation needs.
- **Intermodal** - opportunities to structure freeway, arterial, and transit operations where modes can work together and thrive in a corridor .

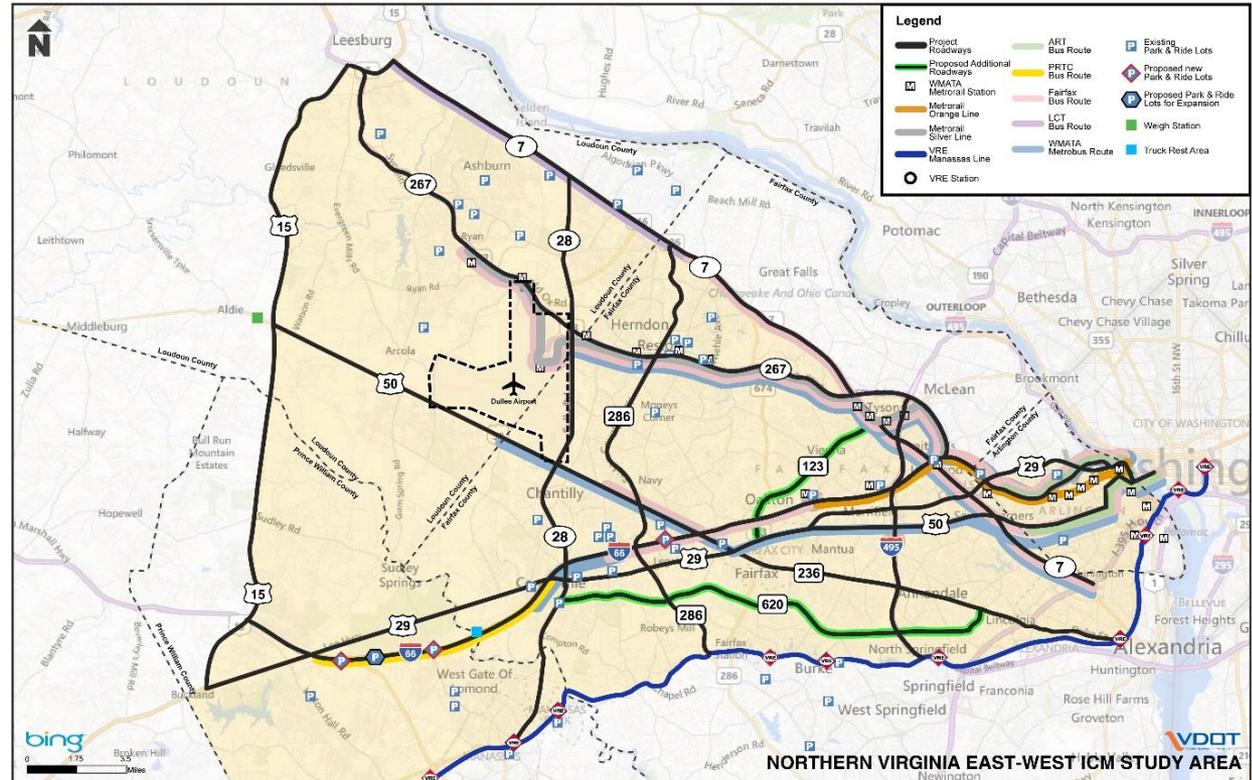


ICM – Virginia’s Approach

- **Customer Focused**
End-to-end trip planning with options
- **Stakeholder-Driven**
Multi-agency collaboration & coordination
- **Technology-Enabled**
Technology is the tool, not the goal
Make all travel options more attractive
- **Performance-Based & with Targeted-Outcomes**
Objective ways to ensure sustainability & appropriate investment
- **Building Blocks**
Don’t let the “perfect” be the enemy of “good”
Flexible and adaptable to demonstrate early results

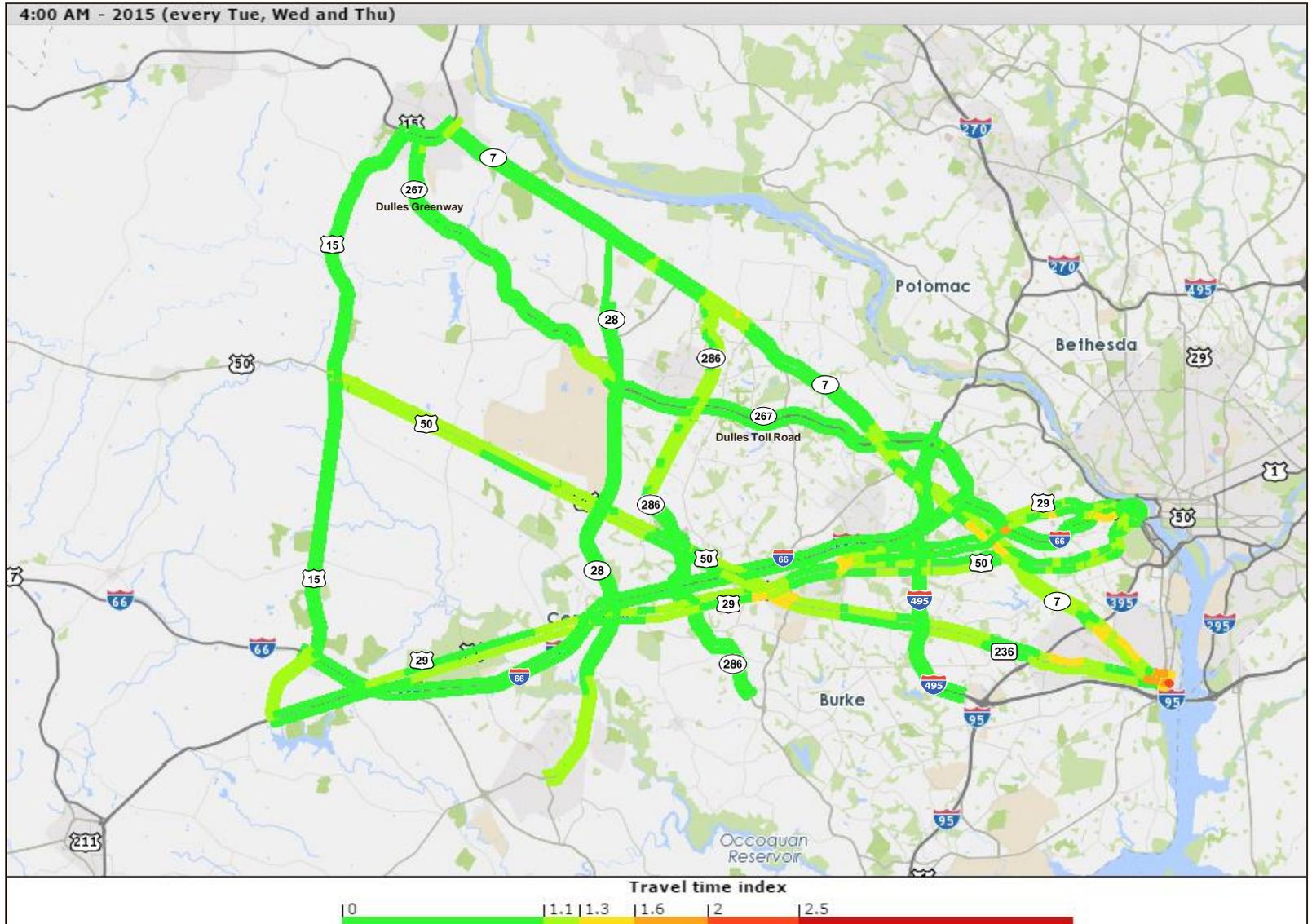
NoVA East-West Travel Shed – Study Area

- E-W Roadways: I-66, Rt. 29, Rt. 50, Rt. 236, Rt. 620, DTR, Greenway, Rt. 7
- Connecting Roadways: Rt. 15, Rt. 28, Fairfax Co. Pkwy, Rt. 123, I-495
- Metro: Silver Line and Orange Line
- Commuter Rail: VRE
- Bike Trails
- Park and Ride Lots
- Bus Services
- Freight



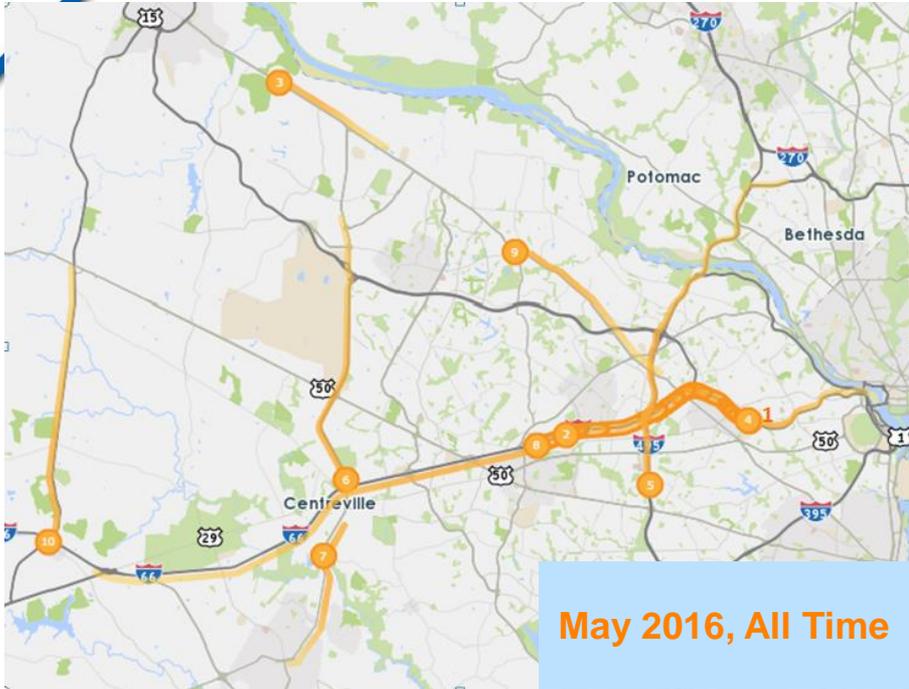
Time Lapse Travel Time Index Trend Map

2015 Data: Tuesday – Thursday (4:00AM – 9:00PM)



(Source: Vehicle Probe Project Suite)

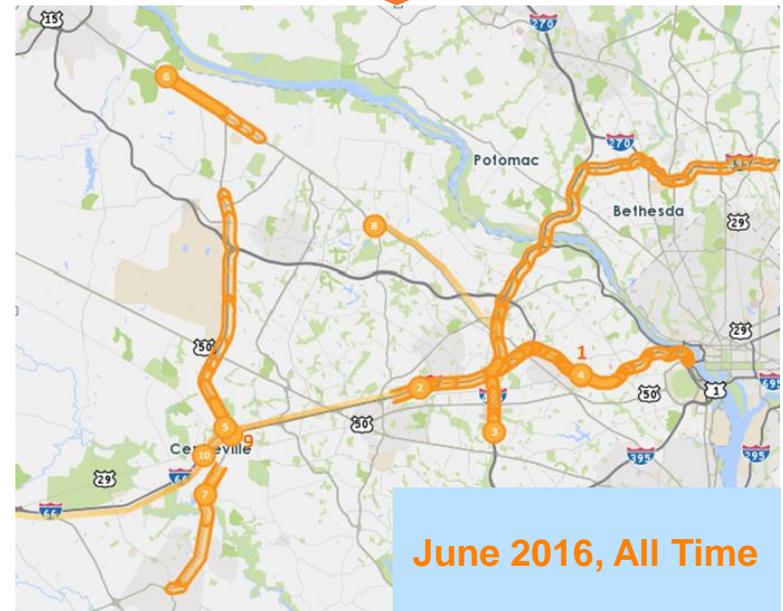
Impact on Metro Service/Capacity Reduction



- Bottleneck locations are substantially similar, with some changes in ranking.
- The most west-end bottleneck at Rt. 15 and I-66 was dropped from the ranking.
- A new bottle neck near Rt. 28 and I-66 was materialized.
- The severity of congestion in the corridor increased.

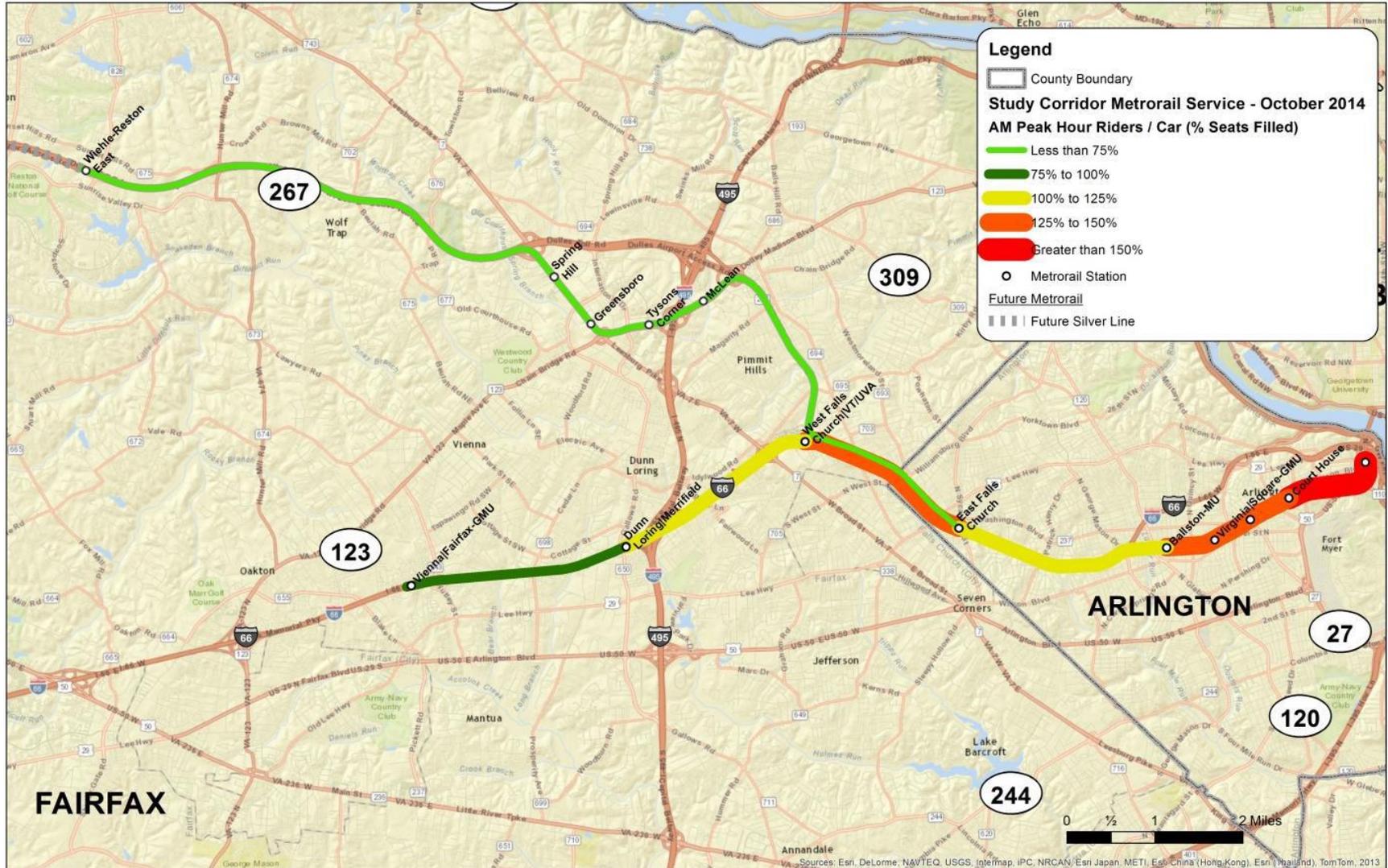
(Source: Vehicle Probe Project Suite) Courtesy of Wenjing Pu, MWCOG

June 4 – June 16   Continuous Single Track
 June 18 – July 3    Line Segment Shutdown



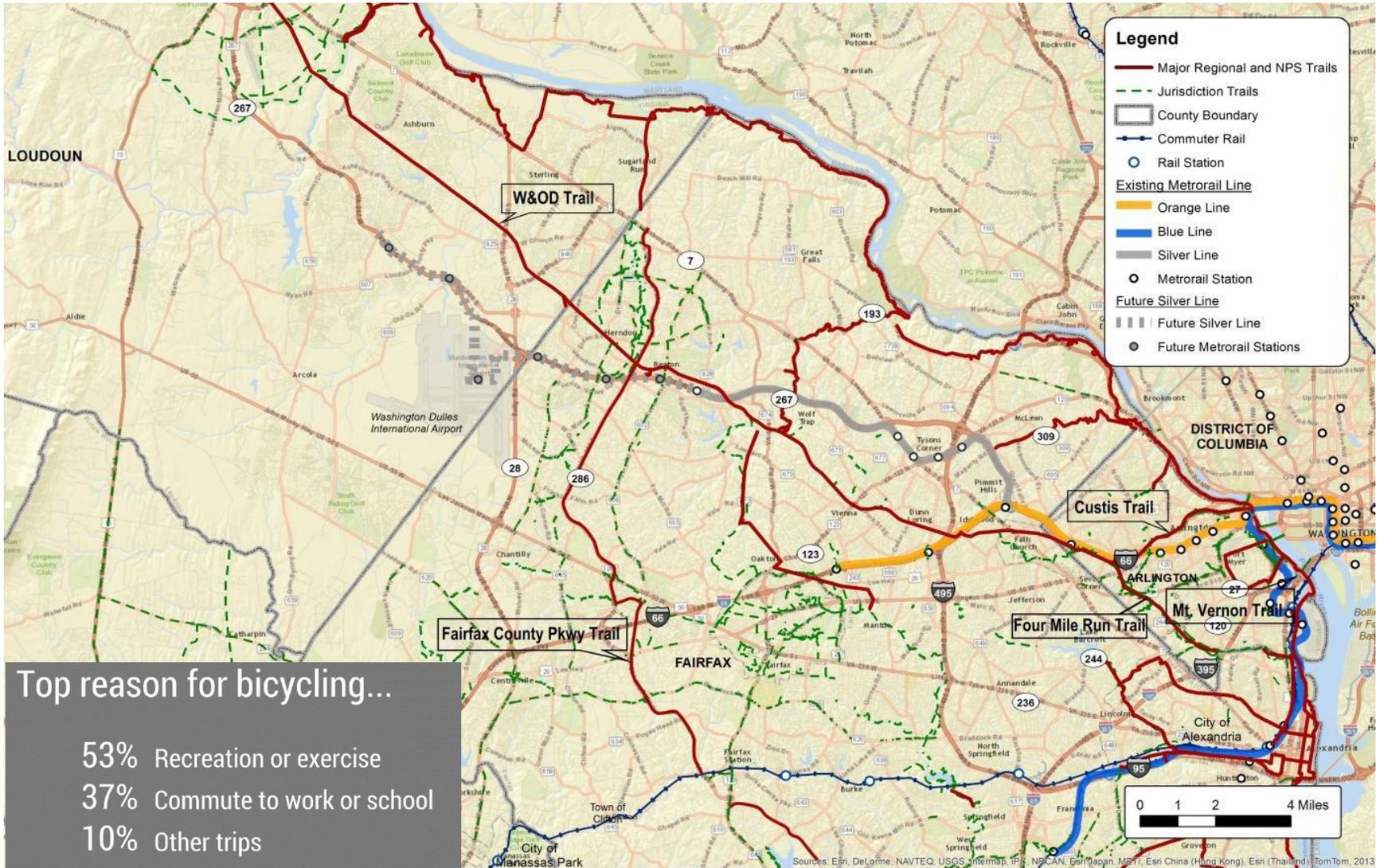
Morning Peak MetroRail Occupancy

2015 AM Peak Hour; West to East



Dedicated Biking Trails

Nearly 40% survey responders indicated that they use Bike to commute

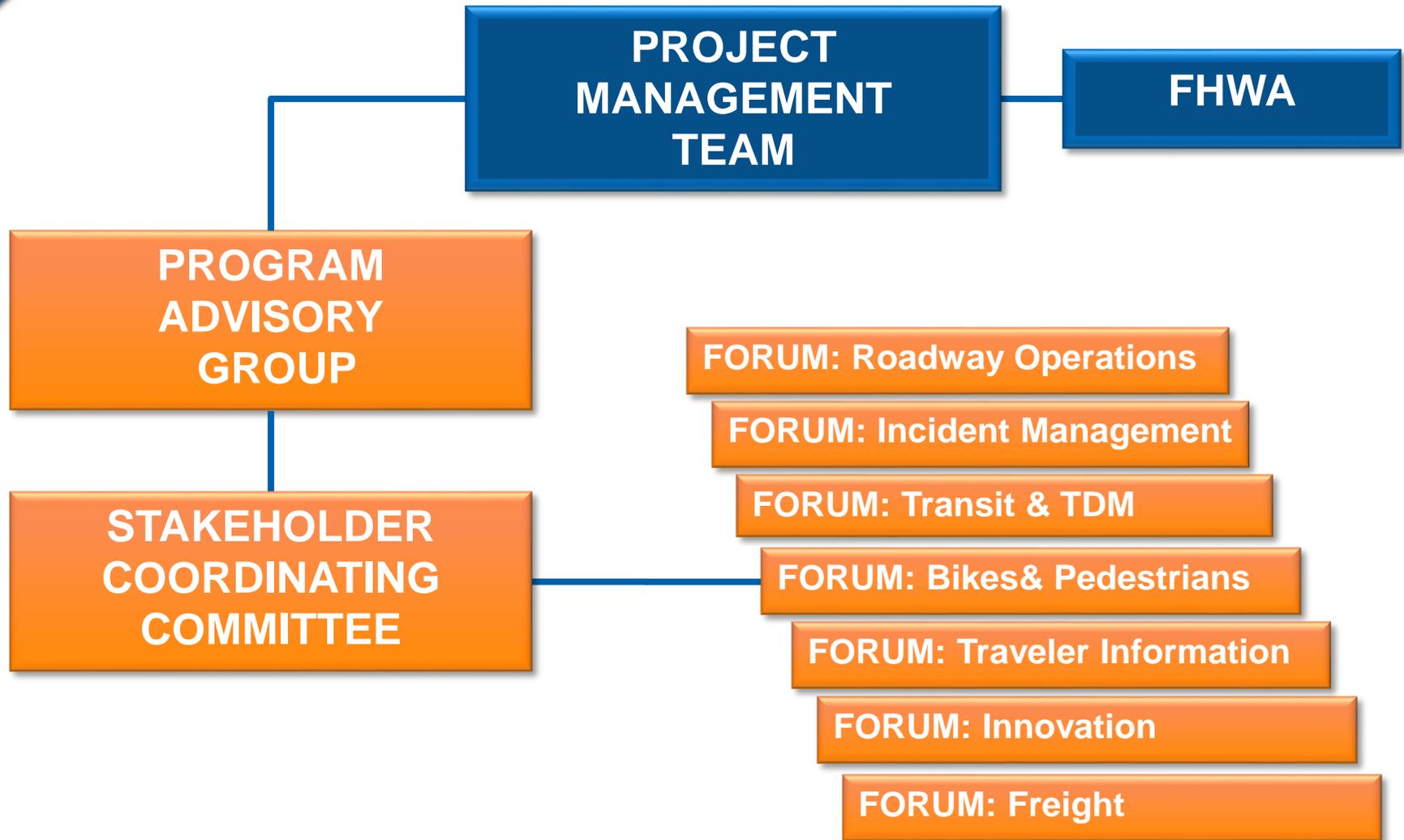


NoVA E-W ICM Project Overview

VDOT's Commitment to FHWA per ICM Grant

- Define a *Concept of Operations and Implementation Plan* for deploying ICM in the NoVA East-West travel shed.
- Collaborate among partner agencies and engage stakeholders across the study area.
- Project tasks:
 1. Start-up and organize project.
 2. Profile study corridor.
 3. Define ICM framework and identify operational needs in corridor.
 4. Identify, explore, and prioritize ICM strategies to address operational needs.
 5. Prepare a Concept of Operations.
 6. Prepare an Implementation Plan.
 7. Request broad regional support for the ICM concept.
- Schedule for planning effort: POP – 20 months.

ICM Project Organization Structure

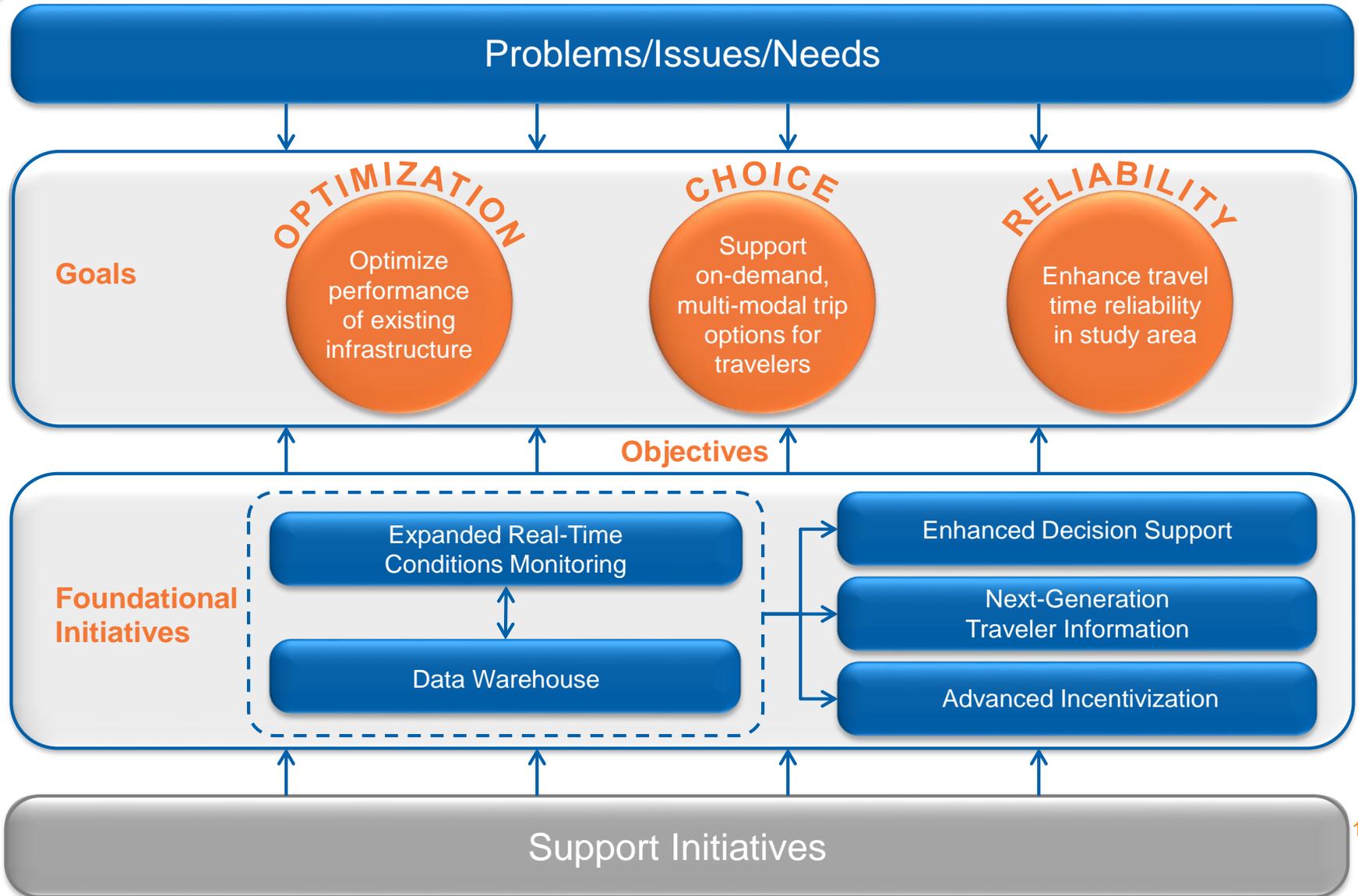


A Stakeholder-driven, multi-agency, and multi-modal plan.

Agencies and Organizations Participating in Resource Forum Workshops



Strawman ICM Framework



Challenges and Next Steps

Challenges

- Identifying “pockets” of excess capacity on roads and transit
- Lacking consistent arterial condition monitoring
- Maintaining stakeholder involvement and commitment beyond the planning phase

Next Steps

- Refining the Corridor Profile
- Developing the Concept of Operations
- Gathering ConOps-related input from stakeholders
- Preparing the Implementation Plans



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