

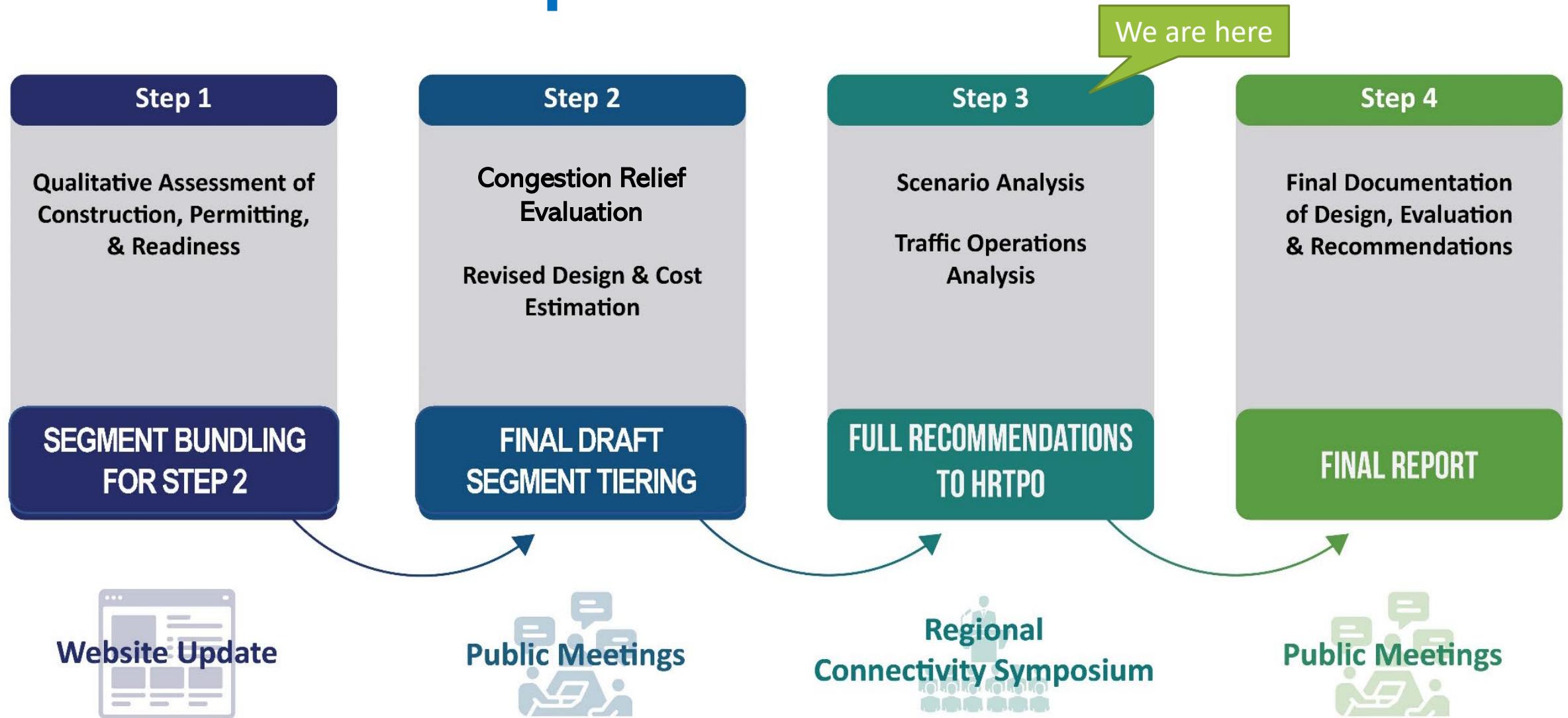


REGIONAL CONNECTORS STUDY

JOINT STEERING (POLICY) COMMITTEE AND WORKING GROUP
FEBRUARY 13, 2023

Michael Baker
INTERNATIONAL

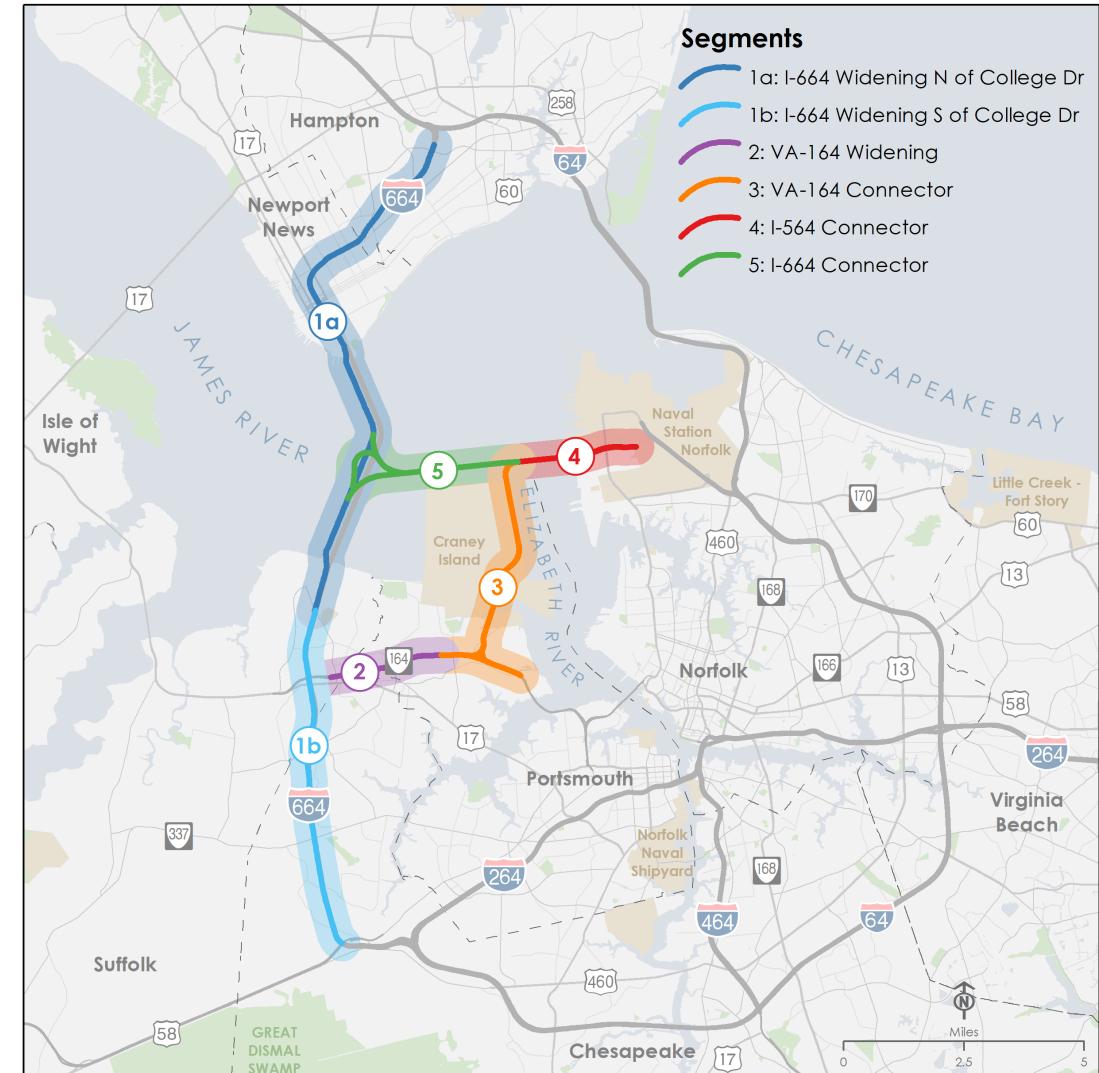
Phase 3 Process Graphic



RCS Phase 3 Update

Agenda

- Progress Update
- Scenario Analysis: Regional Congestion & Economic Benefits
- Public Engagement Overview
- Wrapping Up the Study



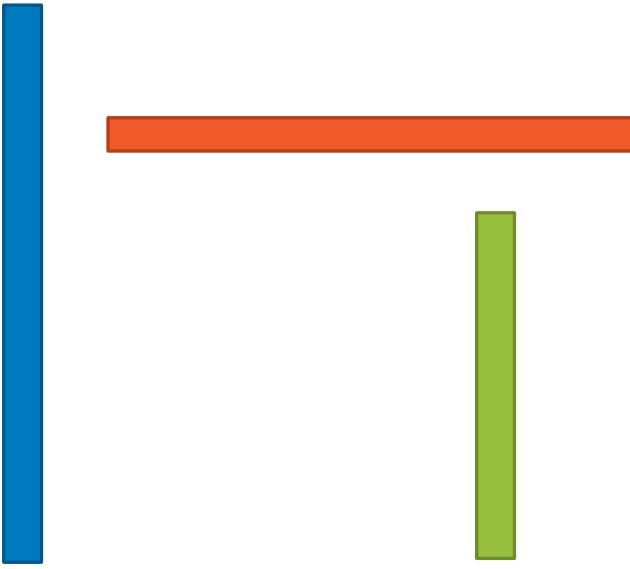


REGIONAL CONNECTORS STUDY

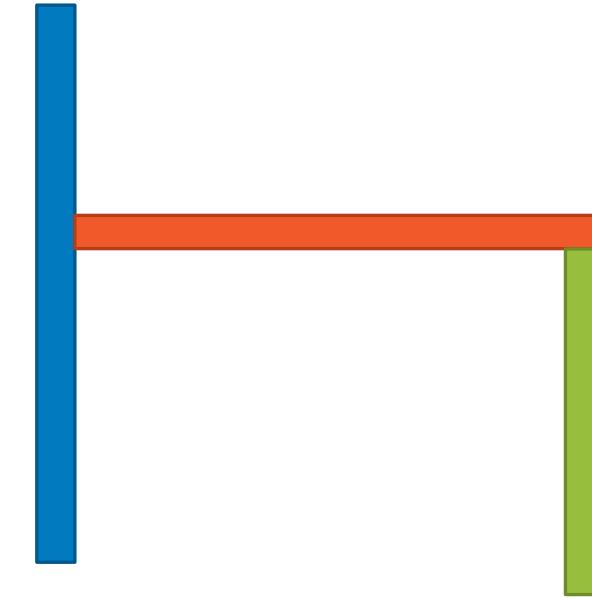
INTRODUCTORY SLIDES

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Segments vs Bundles



SEGMENTS



BUNDLE

Tiering

- The RCS will propose roadway segments that are ready to move forward and appear the most cost effective as Tier I recommendations.
- Segments that require further refinement and have hurdles to advancing are Tier II recommendations.

**Tier
I**

Segments recommended for HRTPO to evaluate for the 2050 Long Range Transportation Plan (LRTP).

**Tier
II**

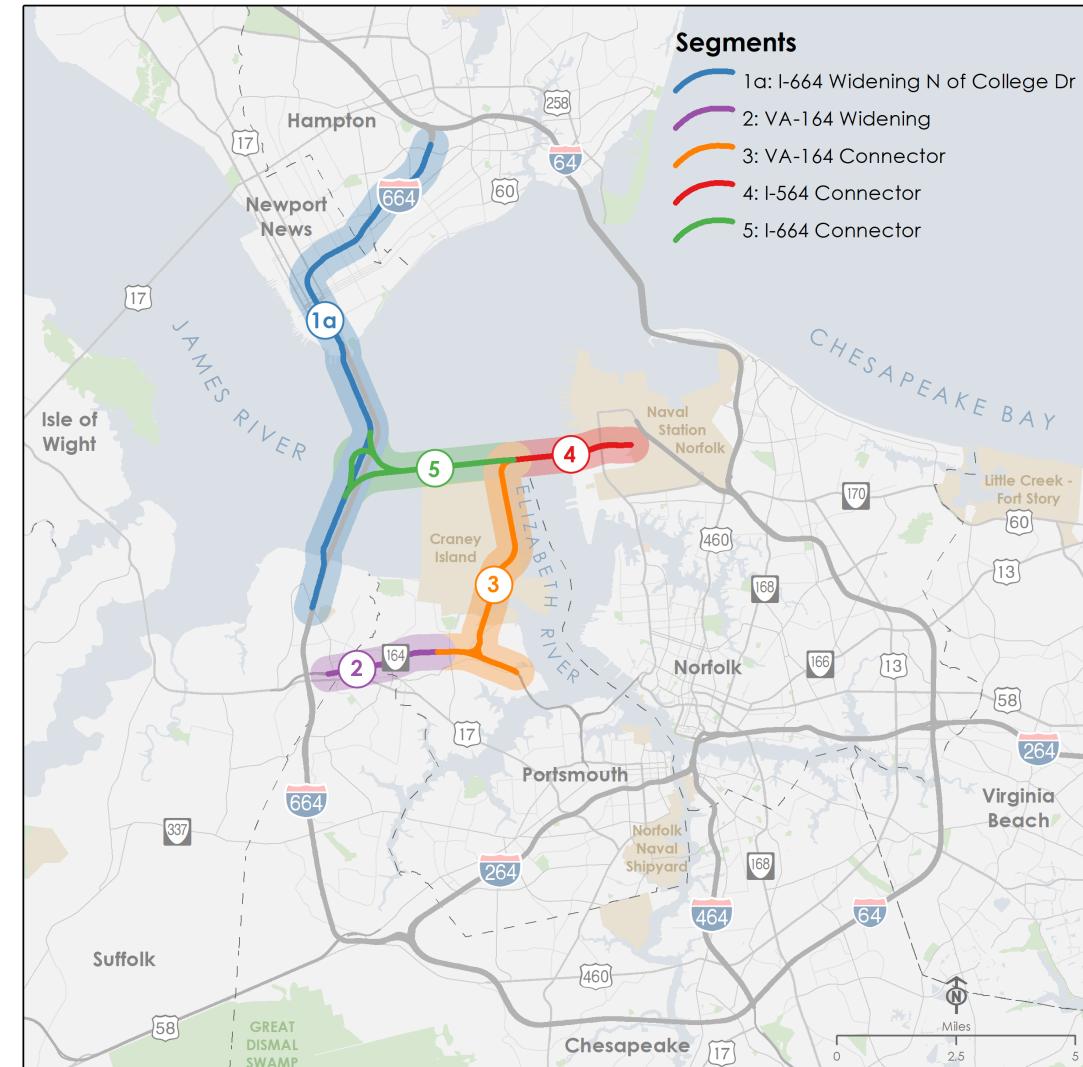
Segments recommended for HRTPO to include in the Regional Transportation Vision Plan.



HRTPO Long Range
Transportation
Planning Process

November 17 Actions:

- Recommended Segments 1a and 2 for Tier I
- Recommended Segments 3, 4 and 5 for Tier II
- Directed the consultant team to proceed
 - Analyze 3 bundles of Tier I and II segments in the scenario analysis
 - Analyze Tier I segments in traffic operations analysis





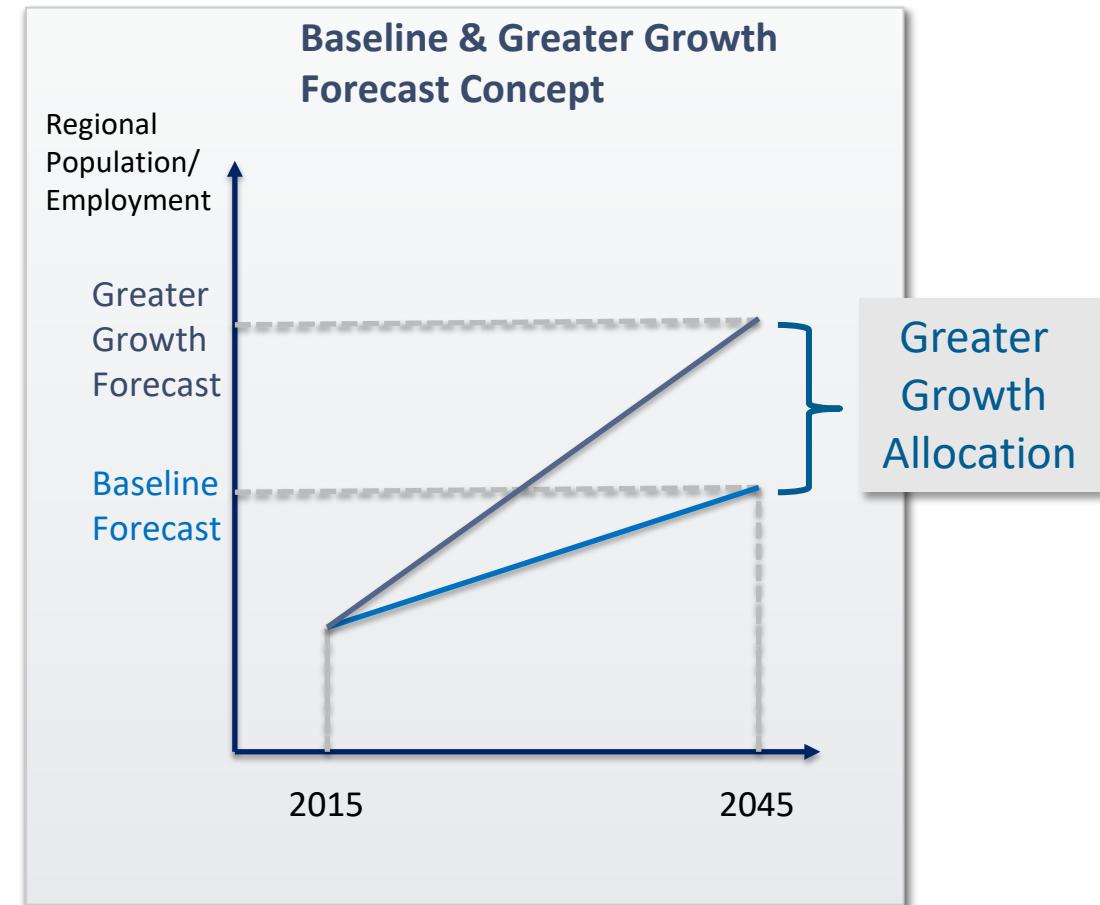
REGIONAL CONNECTORS STUDY

SCENARIO ANALYSIS

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Scenario Analysis

- Compare 2045 Baseline and 3 Greater Growth Scenarios
 - Greater Growth Scenarios reflect 2x the employment growth from 2015-2045 and associated increase in population growth
 - “Stress test” of the transportation network and harbor crossings in particular
 - Scope of work allows testing of baseline and up to 3 bundles of segments in Tiers I and II



Greater Growth Scenario Narratives

GREATER GROWTH ON THE WATER

- » Growth in water-oriented activity
- » Port of Virginia becomes even more competitive with freight more multimodal
- » More dispersed housing locations
- » Moderate assumptions for CAV adoption & network adaptation

GREATER GROWTH IN URBAN CENTERS

- » Significant economic diversification
- » Low space requirements per job
- » Large role for “digital port”
- » New professionals prefer to live/work in urban settings
- » High level of CV adoption & low auto ownership or high TNC mode

GREATER SUBURBAN / GREENFIELD GROWTH*

- » Growth is suburban / exurban, but growth includes walkable mixed use centers
- » Port of Virginia becomes even more competitive
- » “Digital port” brings additional jobs
- » Housing is more suburban
- » High level of AV adoption & network adaptation

WHAT THESE WILL HELP US TEST

Water

Test greater cross-harbor travel in particular

Urban

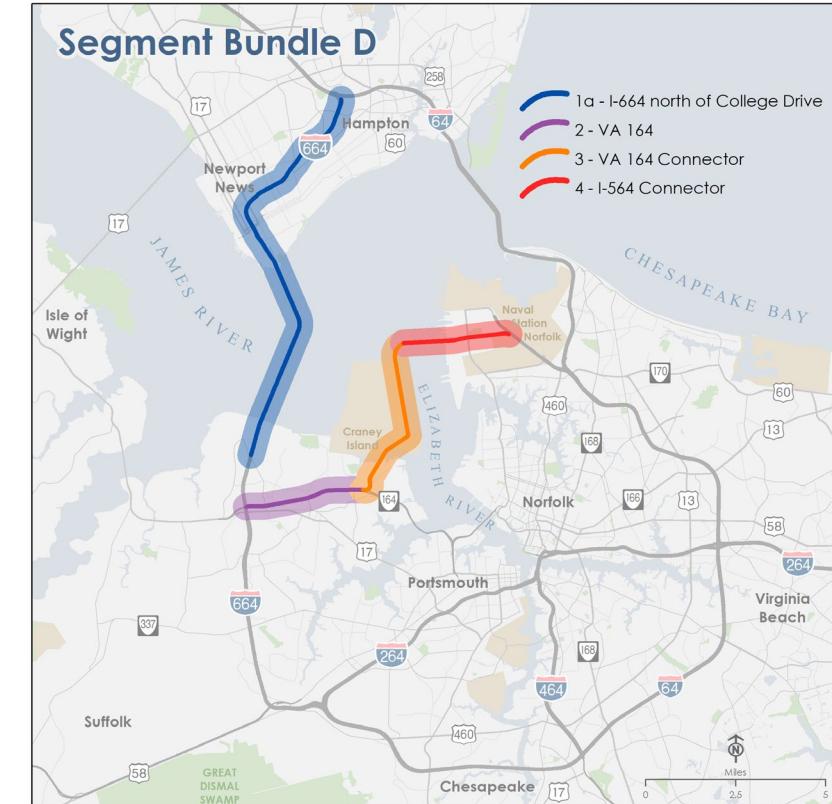
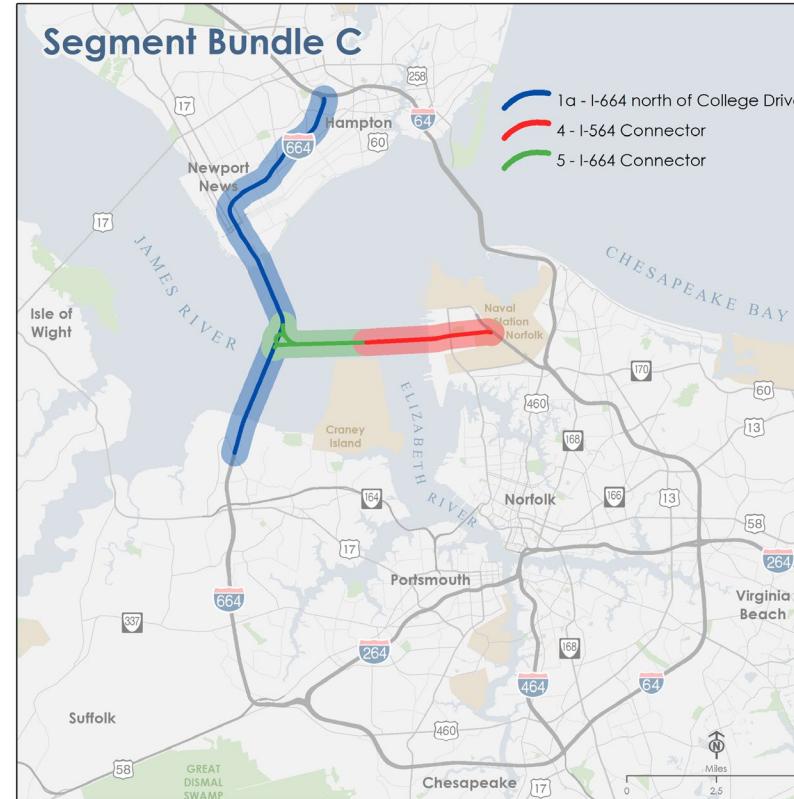
Test more urban & multimodal travel patterns

Suburban

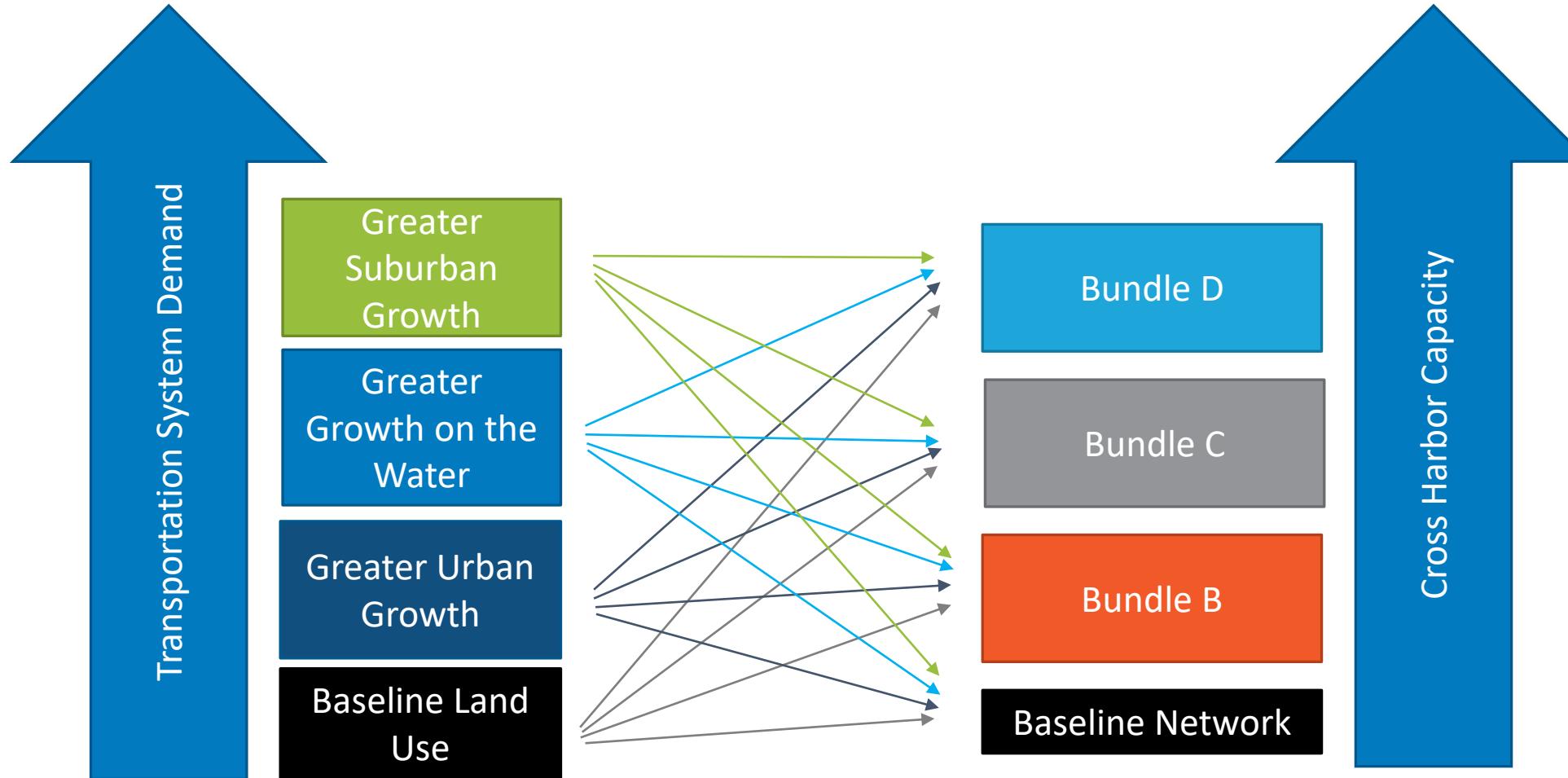
Test more overall regional travel

Approved by Steering
(Policy) Committee
7/09/2019

Consultant Team Selected Bundles B, C and D for analysis



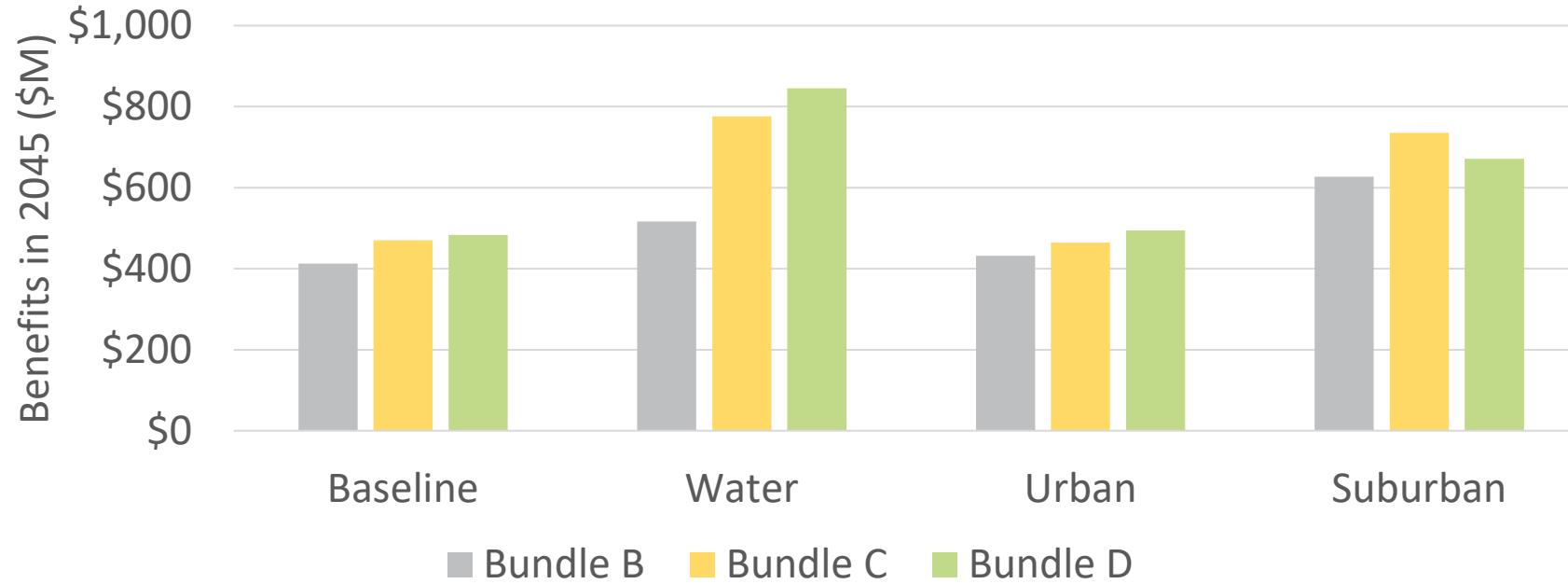
Scenario Planning – “Stress Test”



Congestion & Economic Results - Takeaways

- Comparing benefits and costs, Bundle B (Tier I segments) consistently delivers the best results
- Total travel is impacted more by the land use scenarios than the bundles
- There is more congestion overall with greater growth scenarios
- With greater congestion, scenarios show additional benefits from the segments

Societal Benefits in 2045

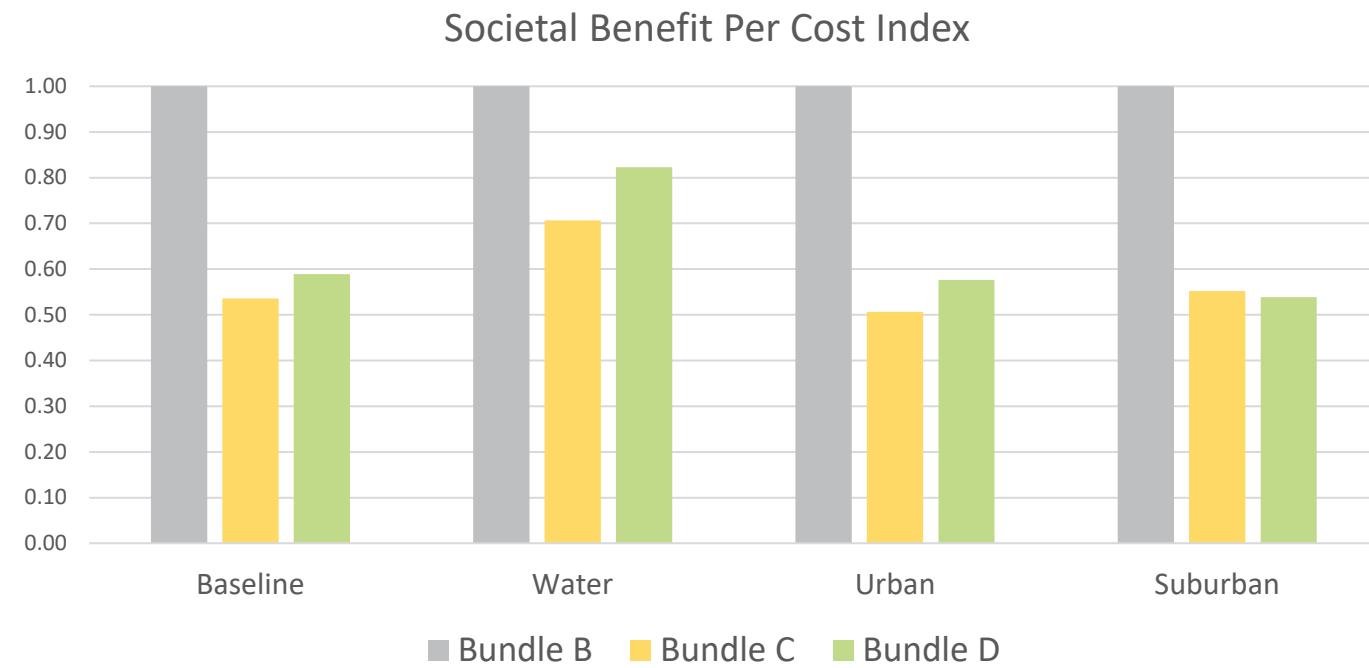


- **Bundle D** has the greatest total economic value among the bundles across all scenarios except the suburban scenario where **Bundle C** is the best performing.
- Greater growth along the water or in suburban areas tends to enhance the benefits of the segments (regardless of which bundle is selected)

(Annual, \$M, benefits of each bundle are relative to 2045 baseline)



Societal Benefits Relative to Cost



- **Bundle B** is always the most cost effective across all scenarios.
- **Bundle C** and **Bundle D** are closest to **Bundle B** in relative cost-effectiveness in the Water Scenario.

Note: Results are indexed so that the most cost-effective bundle is assigned a score of 1, and the other bundles are assigned fractions based on their relative cost effectiveness.



REGIONAL CONNECTORS STUDY

PUBLIC ENGAGEMENT UPDATE

Public Engagement

- Pop Ups were held Jan 19, 23, 24



Regional Connectors Study Open Houses

5:30 – 7:30 p.m.

February 1 Pearl Bailey Library, Newport News	February 2 Lambert's Point Community Center, Norfolk	February 7 Churchland Branch Library, Portsmouth	February 9 VDOT Hampton Roads District Office, Suffolk
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Attendance: 68 total

15

18

15

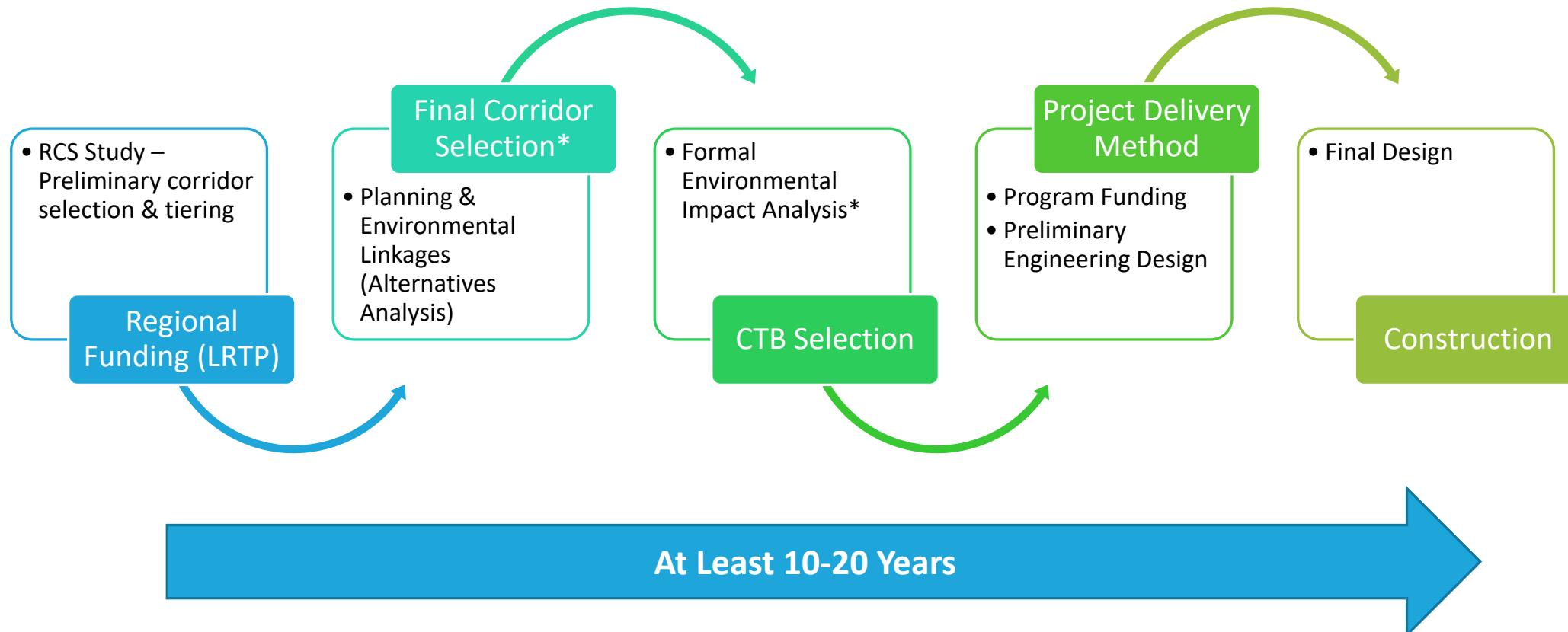
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Public Engagement – Comment Themes

- Congestion
- Tolls
- Alternatives to Personal Vehicles
- Environment
- “Benefits and Burdens” Feedback
- Project Timelines

Project Development Process

- Many public questions & conversations addressed project development and timelines



* Ongoing coordination with HRTPO, HRTAC, FHWA and other regional and resource agency stakeholders

Please Share! www.connectorstudy.org/openhouse

Regional Connectors Study

Online Open House

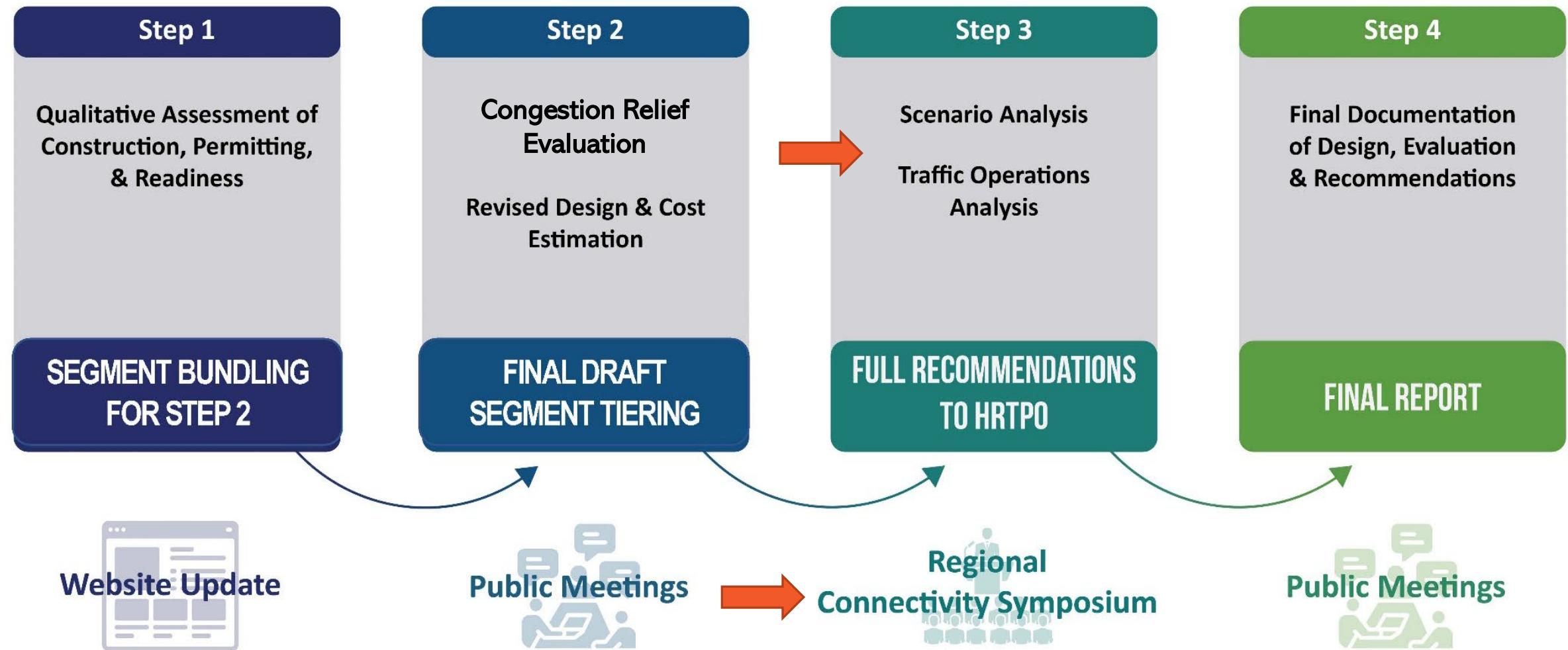
February 13 – March 6



REGIONAL CONNECTORS STUDY

WRAPPING UP THE STUDY

Next Steps →



Regional Connectors Study Project Completion Schedule (Steps 3 and 4)

Task	Step	Fall 2022	Winter 2022-2023	Spring 2023	Summer 2023
Code and run 2045 RCS Baseline Network for 4 Land Use Scenarios	3				
Code and run up to 3 bundle networks for 4 Land Use Scenarios	3				
Evaluate congestion and economic performance of all of the above	3				
Operational analysis - code/refine segments for analysis	3				
Operational analysis - analyze bundle networks and land use scenarios	3				
Finalize segment cost estimates	3				
Final documentation of study findings	4				
Steering Committee/Working Group Meetings		✓	✓	✓	✓
Public Engagement:					
Plan and Hold Regional Connectivity Symposium	3				
HRTPO Community Advisory Comm. Meeting	3,4	✓	✓	✓	
Plan, restart, continue social media	3,4				
Draft promotion materials, promotion plan for public meetings	3,4				
Plan/attend pop-up events	3,4		Jan. 19, 23, 24		TBD
Plan/Prepare/Publicize public meetings	3,4				
Hold public meetings	3,4		Feb. 1, 2, 7, 9		TBD

