

November 10, 2022

Memorandum #2022-157

TO: Regional Connectors Study Steering (Policy) Committee and Working Group

BY: Camelia Ravanbakht, RCS Project Coordinator

RE: Regional Connectors Study (RCS) Steering (Policy) Committee and Working Group Joint Meeting – November 17, 2022

Please RSVP by COB Monday, November 14, 2022

Attached is the agenda for the joint meeting of the Regional Connectors Study (RCS) Steering (Policy) Committee and Working Group scheduled for Thursday, November 17, 2022, at 9:00 AM.

This meeting will be held in person in the 757 Room of the Regional Building located at 723 Woodlake Drive, Chesapeake.

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Attachments

RCS Steering (Policy) Committee and Working Group Members

Voting Members:

Steering (Policy) Group

Rick West (CH)
Donnie Tuck (HA)
McKinley Price (NN)
Martin Thomas (NO)
Shannon Glover (PO)
Mike Duman (SU)
Robert Dyer (VB)

Working Group

Troy Eisenberger (CH)
Jason Mitchell (HA)
Bryan Stilley (NN)
Deborah Mangiaracina (NO)
James Wright (PO)
Jason Souders (SU)
Ric Lowman (VB)

Nonvoting Members:

Ivan Rucker (FHWA)
Rick Dwyer (HRMFFA)
Kevin Page (HRTAC)
Lesley Dobbins-Noble (USACE)
Col. Brian Hallberg (USACE)
George Janek (USACE)
Keith Lockwood (USACE)
Robert Pruhs (USACE)
Zack Hoekwater (USCG)
Gene Leonard (USCG)
Michael King (USN)
Pamela Phillips (VDOT)
Chris Hall (VDOT)
Stephen Edwards (VPA)
Barbara Nelson (VPA)

Staff:

Bob Crum (HRTPO)
Pavithra Parthasarathi (HRTPO)
Rob Case (HRTPO)
Keith Nichols (HRTPO)
Dale Stith (HRTPO)
Kyle Gilmer (HRTPO)
Greg Grootendorst (HRPDC)

Project Coordinator:

Camelia Ravanbakht

Project Consultants:

Lorna Parkins
Paul Prideaux



Agenda

Regional Connectors Study
Joint Steering (Policy) Committee and Working Group Meeting
Thursday, November 17, 2022
9:00 AM
The Regional Building, The 757 Room
723 Woodlake Drive, Chesapeake, Virginia

- 1. Call to Order**
- 2. Welcome and Introductions**
- 3. Public Comment Period** (Limit 3 minutes per individual)
- 4. Minutes (Action Requested)**

Summary Minutes from August 9, 2022, Joint Steering (Policy) Committee and Working Group Meeting

Attachment 4 –
4A Summary Minutes of August 9, 2022
4B Summary Minutes of September 27, 2022

Recommended Action: For Approval

Motion: Approve Summary Minutes of August 9, 2022, and September 27, 2022, Meetings

- 5. Regional Connectors Study Phase 3: Step 2 – Draft Segment Tiering (Action Requested)**

Lorna Parkins (MBI) and Paul Prideaux (MBI), RCS Project Co-Managers

At the last Joint Steering (Policy) and Working Group Meeting of September 27, 2022, Ms. Parkins presented an introductory review of the RCS study. She briefly reviewed the mandated segments and segment bundles which will be later used in the segment tiering process.

Mr. Prideaux followed by providing a brief overview of the Qualitative Analysis (Step 1) of the five mandated segments. He indicated that the Quantitative Analysis included three elements: Congestion Benefits, Economic Impacts, and Cost estimates. While the congestion benefits and economic impacts were reviewed at the August 9, 2022, Joint Meeting, Mr. Prideaux reviewed the cost for each of the mandated

segments and indicated the methodology was based on VDOT's Cost Estimating Program (PCES).

The recordings of the August 9th and September 27th meetings are available (links below) on the HRTPO website for reference:

[Joint RCS | Events Calendar | Hampton Roads Transportation Planning Organization - The Heartbeat of Hampton Roads \(hrtpo.org\)](#)

[Joint RCS Steering and Working Group | Events Calendar | Hampton Roads Transportation Planning Organization - The Heartbeat of Hampton Roads \(hrtpo.org\)](#)

According to the Scope of Work, Phase 3 of the study will entail the evaluation of the mandatory segments based on the qualitative analysis (project readiness, permitting challenges, and construction complexity) and the quantitative analysis (congestion benefits, economic impacts, and cost estimates) to provide a stratification of the segments into three tiers:

- **Tier 1:** Those segments that are ready for advancement and should be recommended for consideration in the fiscally constrained portion of the 2050 Long Range Transportation Plan, as developed by the HRTPO.
- **Tier 2:** Those segments which require further refinement and maturation and will be recommended for consideration in the 2050 Vision Plan as projects requiring further evaluation for permitability and constructability.
- **Tier 3:** Those segments that due to technical issues or other items will be retained but will warrant further consideration by the community at the appropriate time.

Ms. Parkins (MBI) and Mr. Prideaux (MBI) will brief the Joint Committee members on this item.

Attachment 5 – Cost Estimates of Mandated Segments

Recommended Action: For Approval

Motion: Approve Draft Tiering of Mandated Segments

6. Regional Connectors Study Phase 3: Step 3 – Scenario Analysis (Action Requested)

Lorna Parkins (MBI) and Paul Prideaux (MBI), RCS Project Co-Managers

The Scenario Analysis will consider a baseline 2045 land use scenario and three 2045 “Greater Growth” land use scenarios that present plausible futures with respect to economic, demographic, and technological factors. The 2045 “Greater Growth” land

use scenarios include Greater Growth on the Water, Greater Growth in Urban Places, and Greater Growth in Suburban/Greenfield Places.

As described in the Scope of Work for Phase 3, the Consultant Team will run up to three segment bundles for each scenario (the 2045 Baseline Scenario and the three Greater Growth Scenarios). The Scope of Work assumes that only Tier 1 and Tier 2 segments will be included in the bundles for scenario analysis.

Ms. Parkins (MBI) and Mr. Prideaux (MBI) will brief the Joint Committee on this item.

Recommended Action: For Approval

Motion: Approve up to three Segment bundles from Tier 1 and Tier 2 to be used for Scenario Analysis

7. Regional Connectors Study Phase 3: Public Meetings Schedule

Lorna Parkins (MBI), RCS Project Co-Manager

The revised Phase 3 Scope of Work consists of a four-step process including public engagement throughout the study. The Engagement Plan includes website updates, two rounds of public meetings, and a Regional Connector Symposium.

The public meetings consist of in-person meetings, pop-up meetings, and an online open house on the Study website. The Consultant Team anticipates having these public meetings take place in the January – February 2023 timeframe.

Ms. Parkins (MBI), RCS Project Co-Manager, will brief the Joint Committee on this item.

Recommended Action: For Information and Discussion

8. For Your Information

RCS Diary of Key Decision Points: 2017 to Present

The attached diary includes a summary of key decision points from 2017 to the present time. The purpose of this document is to provide a quick reference for members and the public. This is a living document and will be updated with future approved key action Items.

Attachment 8 – RCS Diary November Update

9. RCS Next Meeting: Early 2023 - Date TBD

10. Other Items of Interest

11. Adjournment

Regional Connectors Study
Joint Steering (Policy) Committee & Working Group Meeting Minutes
August 9, 2022, 9:30 am

Steering (Policy) Committee

The following voting members attended the web meeting (alphabetically by city):

Rick West (CH)
Donnie Tuck (HA)
McKinley Price, Chair (NN)
Martin Thomas (NO)
Shannon Glover (PO)
Michael Duman (SU)
Robert Dyer (VB)

The following voting members were absent from the meeting (alphabetically by city):

No voting members of the Steering (Policy) Committee were absent.

Working Group

The following voting members attended the web meeting (alphabetically by city):

Tracy Jones-Schoenfeld (CH)
Bryan Stilley (NN)
John Stevenson (NO)
Carl Jackson (PO)
Jason Souders (SU)
Ric Lowman (VB)

The following voting members were absent from the meeting (alphabetically by city):

James Mitchell (HA)

Others

The following others attended the meeting (alphabetically by last name):

Robert A. Crum, Jr. (HRTPO/HRPDC)
Lesley Dobbins-Noble (USACE)
Rick Dwyer (HRFFMA)
Chris Gullickson (VPA)
Todd Halacy (VDOT)

Megan Gribble (Virginia Beach)
Steve Jones (Naval Station Norfolk)
Chris Largy (Michael Baker Intl.)
Phil Lohr (STV)

Karen McPherson (McPherson Consulting)
Albert Moor (Suffolk)
Barbara Nelson (VPA)
Kevin Page (HRTAC)
Lorna Parkins (Michael Baker Intl.)
Pavithra Parthasarathi (HRTPO)
Paul Prideaux (Michael Baker Intl.)

Camelia Ravanbakht (RCS Project Coordinator)
Mark Shea (Virginia Beach)
Earl Sorey (Chesapeake)
Stefanie Strachan (Hampton)
Joe Strange (Michael Baker Intl.)
Eric Stringfield (VDOT)
Cathie Vick (VPA)
James Wright (Portsmouth)

The following others attended the meeting virtually (alphabetically by last name):

Michael King (Navy)
Tammy Leigh DeMent (PRR)
Naomi Stein (EPB)
Bill Thomas (Michael Baker Intl.)

1. Call to Order

Chair McKinley Price called the meeting to order at 9:30 a.m.

2. Welcome and Introductions

Mr. Robert Crum, HRTPO Executive Director, asked attendees to introduce themselves.

3. Public Comment Period

There were no public comments.

4. Minutes

The April 26, 2022 minutes were approved, with Mayor West making the motion and Mayor Glover seconding the motion.

5. Regional Connectors Study: Step 1: Qualitative Evaluation of Mandated Segments and Segment Bundling – Comments and Responses

Mr. Crum introduced this item by providing a quick review of the last meeting and noting that committee members were asked to provide comments to the consultant after the meeting. Mr. Crum added that many comments were submitted (which were included in today's agenda packet) and he thanked the committee for their participation.

Ms. Parkins started her presentation by noting that she will discuss the Qualitative Evaluation of Mandated Segments and Segment Bundling, Congestion Reduction Evaluation and Economic Impacts Analysis, and Public Participation Plan at today's meeting.

Ms. Parkins discussed the Phase 3 Process Graphic, and noted that the study is currently in Step 2 which includes the congestion reduction evaluation and revised design and cost estimation. At the end of Step 2 draft segments will be tiered, which will be followed by public meetings.

Ms. Parkins reminded the group of the definition of project segments vs. bundles, followed by how segments will be classified using tiers. Tier 1 will include segments that are ready for advancement and recommended for consideration in the HRTPO 2050 LRTP. Tier 2 will include segments which require further refinement, and will be recommended for consideration in the HRTPO 2050 Vision Plan. Tier 3 will include segments that due to technical challenges and uncertainties will be further developed at an appropriate time in the future.

Ms. Parkins detailed the comments that were received from committee members on the mandated segments. These comments include:

- The City of Portsmouth provided comments on the VA 164 Widening, including recommending further refinement of alignment assumptions, looking at local impacts and local opposition, analyzing stormwater management concerns, and incorporating Environmental Justice concerns.
- The Navy provided comments on the VA 164 Connector. These comments reflect the security requirements of the Navy Fuel Depot and fuel pipeline facilities, and also the strategic nature of both the Fuel Depot and the Colonial Pipeline.
- The Navy also provided comments on the I-564 Connector. These comments include the security requirements of the Navy Fuel Depot, height restrictions due to flight paths, security concerns at Gate 6 and at Piers 1-3, and changing assumptions for the ATI interchange along the I-564 Intermodal Connector.
- The US Army Corps of Engineers (USACE) Operations provided comments on the VA 164 Connector. These included updated data on Craney Island, concerns on Craney Island operations, and Section 408 permit requirements.
- The USACE Regulatory also provided comments, including comments on independent utility, future permitting requirements, wetland impacts and remediation, Environmental Justice concerns, and endangered species evaluations.
- The Port of Virginia provided comments supportive of the VA 164 and I-564 Connectors. They also noted that security concerns can be resolved during later stages of project development after further planning and conceptual design.

Ms. Parkins added that it is very helpful to receive all of these comments, particularly for constructability, permitting, and readiness considerations. She added that responses to each comment were included in the agenda packet except for the comments received from the Port, which will be prepared shortly.

There were no questions or comments on this item.

6. Regional Connectors Study: Step 2 – Congestion Reduction Evaluation and Economic Impacts Analysis

Mr. Prideaux introduced the topic by noting that Michael Baker used the HRTPO 2045 Regional Travel Demand Model to test improvements. They looked at both regionwide results and results at key facilities, and also prepared a summary of economic results.

Mr. Prideaux discussed the segment bundles that were analyzed:

- Segment Bundle A is comprised of Segment 1a (I-664 north of College Drive).
- Segment Bundle B is comprised of Segment 1a (I-664 north of College Drive) and Segment 2 (VA 164)
- Segment Bundle C is comprised of Segment 1a (I-664 north of College Drive), Segment 4 (I-564 Connector), and Segment 5 (I-664 Connector)
- Segment Bundle D is comprised of Segment 1a (I-664 north of College Drive), Segment 2 (VA 164), Segment 3 (VA 164 Connector) and Segment 4 (I-564 Connector)

Mr. Prideaux noted that Segment 1b (I-664 south of College Drive) was included in the 2045 RCS Baseline Network, based on a decision made at the last RCS meeting.

Mr. Prideaux provided highlights on the congestion analysis for the regionwide results. He noted that total regional travel levels are similar for the 2045 baseline and all four bundles, but vehicle-hours of travel and delay are reduced with all four bundles as a result of reduced congestion. He also noted that Bundles C and D have the greatest benefit on vehicle-hours of travel and delay. Mr. Prideaux added that Bundles C and D have the largest reduction in the share of congested travel, which would lead to improved travel time reliability.

Mr. Prideaux added that cost estimates will be provided at the next meeting to provide insight on the cost-effectiveness of each segment.

Mr. Prideaux noted that congestion at 23 key locations was also examined and highlighted the results at some key locations including the Hampton Roads Bridge-Tunnel, three Hampton Roads Harbor crossings, the Midtown and Downtown Tunnels, and Hampton Boulevard. Mr. Prideaux added that these results will help with the tiering of segments, which will be discussed at the next meeting.

Mr. Jackson asked if we could further determine whether Bundle C or Bundle D would have the greatest reduction in congestion. He expressed his concern that Bundle D has many more issues than Bundle C. Mr. Prideaux and Ms. Parkins replied that they would provide further analysis on these bundles with the upcoming cost effectiveness analysis.

Ms. Parkins provided a summary of the economic impact analysis. She highlighted the societal benefits of each Bundle in 2045 relative to the 2045 baseline conditions, and noted that Bundle D had the highest societal benefits, largely due to time and reliability savings. Ms. Parkins also highlighted the regional economic impact in 2045 relative to 2045 baseline conditions, in terms of increase in the Gross Regional Product. Bundle D has the most cumulative benefit, with most of that being due to impacts of Segment 1a.

Mayor Price asked if we are able to determine how certain potential large economic development projects that could increase housing and population levels would impact congestion. Ms. Parkins replied that this will be looked at as part of the scenario analysis, with the three scenarios of Greater Growth on the Water, in Urban Centers, and in Suburban Centers.

Mr. Crum mentioned the escalating costs of the HRBT project through the years and noted that there are costs associated with waiting. Mr. Crum asked if we can get into these costs of waiting in the RCS in terms of escalating construction costs. Mayor Price added that escalating costs through the years was also an issue for the CBBT project. Ms. Parkins replied that their team will think about how to represent this opportunity cost in the study.

Mr. Stringfield asked if all of the bundles include Bundle A, which improves the Monitor-Merrimac Memorial Bridge-Tunnel. Ms. Parkins replied that yes, all four bundles include

improvements at the tunnel. Ms. Parkins added that they have been coordinating with HRSD in terms of the proposed alignment of improvements to I-664.

Mayor Tuck asked about increasing costs and the ability to fund projects now versus years in the future. Mr. Crum replied that this is a conversation for this group to have with the HRTPO Board as the study progresses with costs provided by the consultant. Ms. Parkins added that there is about a year left remaining on the study, and then that question should be addressed in the HRTPO Long-Range transportation planning process.

7. Regional Connectors Study: Phase 3: Public Engagement Plan – Proposed Outreach Plan

Ms. Parkins introduced the proposed outreach plan by noting that strategies have changed due to the pandemic. She noted that the plan no longer is to take a preferred alternative to the public, but rather to take the tiering of projects to the public. The plan is now for a more hybrid approach. This will include four in-person meetings (Lower Peninsula, Norfolk, Suffolk, and Portsmouth), three pop-up meetings (including events spread out geographically), and more online engagement to reach those unable to attend in-person meetings.

Ms. Parkins highlighted maps showing demographics and transit routes to help with determining the four proposed meeting locations.

Mr. Stringfield asked about online engagement, and whether they are planning to run an online survey to accompany each public meeting or are they planning to run a single survey throughout the entire public involvement period. Ms. Parkins replied that public meetings will be on the front end of the public involvement period and that the survey will continue to be available afterward for the full public involvement period.

Mayor Glover noted that public meetings in that area of Portsmouth are typically held at Churchland High School, since it is a larger venue.

Ms. Parkins wrapped up the presentation by noting that a discussion of possible locations for pop-up meetings, such as at fall festivals, will be discussed at the next meeting.

8. For Your Information

The agenda packet includes a diary of key decision points in the RCS study from 2017 to the present time.

9. RCS Next Meeting

Ms. Parkins noted that the next meeting of the Joint RCS Steering (Policy) Committee and Working Group is scheduled for September 27th. At this meeting, it is expected that there will be a discussion on recommended draft tiers.

10. Other Items of Interest

There were no other items of interest.

11. Adjournment

The meeting was adjourned at 10:40 a.m.

Regional Connectors Study
Joint Steering (Policy) Committee & Working Group Meeting Minutes
September 27, 2022, 9:30 am

Steering (Policy) Committee

The following voting members attended the meeting (alphabetically by city):

Donnie Tuck (HA)
McKinley Price, Chair (NN)
Martin Thomas (NO)

The following voting members were absent from the meeting (alphabetically by city):

Rick West (CH)
Shannon Glover (PO)
Mike Duman (SU)
Robert Dyer (VB)

Working Group

The following voting members attended the meeting (alphabetically by city):

Troy Eisenberger (CH)
Jason Mitchell (HA)
Bryan Stilley (NN)
Deborah Mangiaracina (NO)
Carl Jackson (PO)
Jason Souders (SU)
Ric Lowman (VB)

No voting members were absent from the meeting.

Others

The following others attended the meeting (alphabetically by last name):

Dorian Allen (Norfolk)
Rob Case (HRTPO)
Robert A. Crum, Jr. (HRTPO/HRPDC)
Mitzi Crystal (VDOT)
Lesley Dobbins-Noble (USACE)
Rick Dwyer (HRMFFA)
Kyle Gilmer (HRTPO)
Jason Flowers (USACE)
Megan Gribble (Virginia Beach)
George Janek (USACE)
Steve Jones (US Navy)
Barbara Nelson (VPA)
Kevin Page (HRTAC)
Lorna Parkins (Michael Baker Intl.)
Pavithra Parthasarathi (HRTPO)
Paul Prideaux (Michael Baker Intl.)
Camelia Ravanbakht (RCS Project Coordinator)
Angela Rico (Newport News)
Earl Sorey (Chesapeake)
Dale Stith (HRTPO)
Joe Strange (Michael Baker Intl.)
Eric Stringfield (VDOT)

The following others attended the meeting virtually (alphabetically by last name):

Claudette Lajoie (Solstice Environmental)
Chris Largy (Michael Baker Intl.)
Jon Lee (EBP)
Karen McPherson (McPherson Consulting)
Bill Thomas (Michael Baker Intl.)

Call to Order

Chair McKinley Price called the meeting to order at 9:30 a.m.

Welcome and Introductions

Mr. Robert Crum, HRTPO Executive Director, asked attendees to introduce themselves.

Public Comment Period

There were no public comments.

Minutes

Due to a lack of a quorum, this item was skipped.

Phase 3: Qualitative Evaluation of Mandated Segments - Updates

Lorna Parkins (MBI) presented slides showing the five highway segments under consideration and the goal of the study. Paul Prideaux (MBI) presented updates on the qualitative evaluation using slides, including modifications to the alignment of several of the segments. The qualitative evaluation covers permitting issues and readiness.

Phase 3: Step 2 – Cost Estimation and Revised Design: Draft Segment Tiering

Mr. Prideaux presented revised alignments under the previous agenda item. Under this agenda item, he presented cost estimates for the five mandated segments.

Adjournment

To avoid presenting information twice—once today, and once again with a quorum present—after discussion and consensus, Mayor Price adjourned the meeting at approximately 10:30 a.m. Mr. Crum said that he would check the calendars of the mayors and schedule a meeting to conduct the business planned for today's meeting.

A recording of the meeting is available on the HRTPO [website](#).

Updated Cost Estimates of Mandated Segments

Segment	Costs (\$ M) 2022\$	Key factors related to costs
1a. I-664 Widening (North of College Drive)	\$ 3,918	New tunnel and islands, sheer length of new roadway over water, significant number of new/widened bridges
2. VA-164 Widening	\$ 174	Improvements to existing alignment, entirely over land, helps control costs; includes coordination with railroad, crash walls for railroad, and is partially widened to the outside.
3. VA-164 Connector	\$ 800	Significant structures over Craney Island, Navy security requirements, landfill, and Corp of Engineers coordination requirements. Includes interchanges with I-564 Connector and VA-164.
4. I-564 Connector	\$ 3,242	New tunnel and islands, Navy security requirements.
5. I-664 Connector	\$ 1,534	Entire segment on structure over water.

-The replacement cost for the College Dr. bridge over VA-164 has been removed due to it being included in the [Bowers Hill Interchange Improvement Study](#).

-Planning level estimates using VDOT Cost Estimating System (PCES), supplemented with project-specific elements such as security needs and relying on recent examples of key project elements such as tunnels. These preliminary cost estimates are as of Nov 9, 2022 and may change as RCS project development continues.

Regional Connectors Study

Summary of Key Decision Points

**Prepared By: Camelia Ravanbakht, PhD
RCS Independent Project Coordinator**

November 13, 2020

Revised: December 2020, January 2021, February 2021, April 2021, May 2021, June 2021, October 2021, December 2021, April 2022, July 2022, September 2022, November 2022.

Abstract:

This document is a diary of key decision points approved by the RCS Steering (Policy) Committee and Working Group from 2017 to present, in chronological order.

The purpose of this document is to provide a quick reference for members of the Regional Connectors Study and the public. The information used in this document is based on excerpts from meeting minutes prepared by Dr. Rob Case, Mr. Keith Nichols, and Ms. Kathlene Grauberger of HRTPO.

This is a living document and will be updated with future key action items per approval from the Committee.

2017

Steering (Policy) Committee meeting on 10/05/2017

Item#5: Draft Guidance for Scope of Work

Motion: Mayor Sessoms (VB) moved the endorsement and recommendation of the HRTPO Board's approval of the Guidance for Scope of Work; Mayor Rowe (Portsmouth) seconded; Motion passed unanimously.

2018

Working Group meeting on 05/11/2018:

Item#5: Contract Negotiations with Selected Consultant:

Mr. Crum (HRPDC/HRTPO) gave an overview of the consultant selection process in which Michael Baker was chosen. Craig Eddy (Michael Baker) gave an overview, with slides, of a phased approach and a scope for Phase 1. After much discussion by Working Group members, HTRPO staff, and HRTAC staff, it was decided that the consultant would do the following:

- Monthly meetings of the Working Group, to be canceled as appropriate considering project progress
- Convene a group meeting of stakeholders (Working Group and Policy Group) for Task 1 (Initiate Engagement Program)
- Coordinate with VDOT HR District surveys to avoid duplication.
- Establish goals & objectives during Phase 1
- Prepare a scope for Phase 2 during Phase 1
- Send details of the proposed survey to Kendall Miller (HRTPO)
- Prepare a new baseline of existing conditions.

Mr. Crum asked the group if it concurred with him asking the HRTPO Board for authorization to enter contract with Michael Baker for Phase 1. A motion made by Brian Stilley (Newport News) and seconded by John Yorks (Hampton)—to move ahead with Phase 1—passed unanimously.

Working Group meeting on 06/04/18:

Item#5: Revised Phase 1 Scope:

Craig Eddy (MBI) presented the current Phase 1 scope, revised based on earlier comments of the working group. Bob Crum (HRTPO) asked that the purpose of Phase 1— “the establishment of goals and objectives [and] the development of a draft scope for Phase 2”—be included in the scope of Phase 1. Craig said that he would add those items to Task 5. Bob asked if the group was comfortable with him signing a contract for Craig to proceed. The group concurred.

2019

Joint Steering (Policy) Committee and Working Group meeting on 02/13/2019:

Item#5: RCS and Relationship with 2045 Long-Range Transportation Plan (LRTP):

Mr. Crum (HRPDC/HRTPO) stated that to-date, the timelines of the RCS and the 2045 LRTP have been synchronized; however, concerns have grown that more time is needed to conduct the RCS, and it has been suggested to pursue a second option. The options for discussion are as follows:

- Option 1: RCS Concurrent with the 2045 LRTP Schedule
- Option 2: RCS Separate Path from the 2045 LRTP Schedule

Mayor Rowe (Portsmouth) expressed support for Option 2 and stated that the RCS should be decoupled from the LRTP since the LRTP is a fiscally constrained document. He noted that in the 2030 LRTP, adopted by the HRTPO Board in March 2007, no State highway construction funds would be available by 2018; therefore, the projects in the 2030 plan were either pared down or tolled. He indicated that the LRTP was flawed in concept and should reflect the region's vision without the restrictions of fiscal constraint.

Motion:

Mayor Rowe (Portsmouth) moved to decouple the timelines of the RCS and the 2045 LRTP; seconded by Mayor Price (Newport News). The Motion Unanimously Carried.

Item# 6: RCS Draft Scope of Services for Phase 2:

Motion:

Mayor Rowe (Portsmouth) moved to refer the Phase 2 Scope of Work technical comments to the Working Group for review and to recommend HRTPO Board approval of the \$1 million Phase 2 abbreviated scope of work; seconded by Mayor West (Chesapeake). The Motion carried.

Steering (Policy) Committee Meeting on 04/30/2019:

Item#3: Committee Organizational Structure:

Mr. Crum (HRPDC/HRTPO) presented the idea of the committee nominating a voting member as chair. Mayor Price (Newport News) was chosen as Chair, and he appointed Mayor Rowe (Portsmouth) as Vice Chair.

Item#7: Phase 2 Supplemental Scope of Work, Cost and Budget:

The committee approved the Phase 2 Supplemental Scope of Work, Cost and Budget, forwarding it to the HRTPO Board for approval at its May 16, 2019.

Steering (Policy) Committee meeting on 07/09/2019:

Item#5: Phase 2 Supplement Budget Omission:

Craig Eddy (MBI) presented slides concerning this matter. The committee approved the correction.

Item#7: Scenario Planning and Greater Growth Assumptions:

The consultant will run the models with 16% employment growth, and then present the results to the Working Group for it to decide whether that produces sufficient variation in the congestion of the existing + committed network between the three Greater Growth scenarios. Should upward revisions be deemed necessary by the Working Group, the consultant will run the models with employment growth rates up to 21% until sufficient variation between the scenarios is determined. The Committee approved the Scenario Narratives, Goals, Objectives, and Performance Measures.

Steering (Policy) Committee on 11/05/2019:

Item#6. Draft Phase 3 Scope of Work:

Craig Eddy (MBI) presented the draft Phase 3 scope, schedule, and budget using slides. The Committee approved the scope, schedule, and budget as presented.

2020

Working Group Electronic Meeting 06/12/2020

For the Preliminary Alternatives discussion, Craig Eddy (MBI) provided a background of the project scope, vision, goals, and objectives. His presentation included maps of the segments from the HRCS SEIS that were specified to be part of the RCS effort, as well as additional candidate segments received through stakeholder interviews. The group discussed the potential segments and alternatives to review and analyze as part of the study. Jason Flowers (USACE) read a statement regarding the Corps' federally mandated position to maintain and protect navigable waterways, channels, and access. After much discussion, there was concurrence among the members of the Working Group that the following candidate segments (shown on map provided at meeting) not be forwarded for analysis:

- o Segment 1: New bridge over James River, includes improvements on Rt 10 to US 17
- o Segment 4: Ferry service, Hampton to Norfolk
- o Segment 5: New bridge tunnel from NIT to Hampton

The Working Group also discussed at length the potential future need and scope of the VA-164 Connector and whether it should remain an RCS segment for consideration. For now, VA-164 will remain a potential segment since it is one of the mandated segments to analyze. Additional discussions with all impacted stakeholders will continue at future meetings.

Working Group Electronic Meeting on 07/09/ 2020:

Motion to move the study forward and accept the Travel Demand Model adjustments and calibrations were unanimously passed.

Working Group Electronic Meeting on 08/13/2020:

Concerning Phase 2, Lorna Parkins (MBI), Vlad Gavrilovic (EPR), Bill Thomas (MBI) presented inputs and outputs of travel demand model runs for various growth scenarios. Craig Eddy (MBI) asked the working group to confirm that the Greater Growth forecasts provide adequate differentiation in results.

Working Group members concurred that the differentiation between the three greater growth scenarios is sufficient and directed the consultant team to move the study forward. Congestion related performance measures will be presented at the August 27th meeting.

Working Group Electronic Meeting on 08/27/2020:

Bill Thomas (MBI) used slides to provide a modeling and congestion (by scenario) update. Results showed a decrease in VMT and VHT from 2017 to 2045 Base. Members expressed concerns with a decrease. Bill Thomas indicated that he intends to perform more checking of the modeling results.

Working Group directed the consultant team to improve model findings, coordinate with staff and report back in late summer/early fall.

Working Group Electronic Meeting on 10/08/2020:

Item #5. RCS: Modeling Update on Congestion Measures

Bill Thomas (MBI) indicated that he made model fixes to correct earlier counter-intuitive results and substandard differences (in screenline volumes) between counts and model. He presented volume data showing a better relationship between counts and the model. Then he presented measures (vehicle-miles traveled, delay, speed, etc.) comparing the three 2045 Greater Growth scenarios (Water, Urban, and Suburban). Bryan Stilley (Newport News) asked whether the group was satisfied with the fixes. The group made no objections. Mr. Stilley indicated that this satisfaction recommends to the Steering Committee approval of Phase 2.

Item #6. Mandated and Other Potential Segments:

Craig Eddy (MBI) presented slides showing the five segments from the Hampton Roads Crossing Study (HRCS) Supplemental Environmental Impact Statement (SEIS).

Motion: Brian Fowler (Norfolk) made a motion that the RCS move forward studying alternatives comprised of the five SEIS segments and modifications of the five. Ric Lowman (Va. Beach) seconded the motion. The Working Group approved the motion (4 to 1 from those voting members present at the time of the motion).

Joint Steering (Policy) Committee and Working Group Electronic Meeting on 10/27/2020:

Item #5: RCS Phase 2 Status Report:

Motion: The joint body approved Phase 2 completion, including Greater Growth scenario planning differentiation and travel demand modeling performance measures. The motion was moved by Mayor Rowe (Portsmouth) and seconded by Mayor Dyer (Virginia Beach). Prior to the vote, at the request of Mayor Rowe (Portsmouth), Cathy Vick (VPA) and Barbara Nelson (VPA) verbalized the Port's perspective, including expected growth of the Port. The motion passed unanimously by individual voice vote.

Item #6: RCS Mandated SEIS Segments and Other Potential Segments:

Motion: Mayor Rowe (Portsmouth) moved that the Mandated Segments be carried forward for "feasibility". Camelia Ravanbakht (RCS Coordinator) mentioned that the segments will be evaluated for permitability. Brian Fowler (Norfolk) indicated that the next step would be for the segments to be modified, as necessary. Martin Thomas (Norfolk) asked that the motion mirrors the motion of the Working Group at its recent meeting. Bob Crum (HRTPO/HRPDC) listed the 5 Mandated segments—I-664 Connector, VA 164 Connector, I-564 Connector, I-664, VA 164—then he reiterated the motion: This joint committee directs the RCS to move forward with studying the feasibility of alternatives comprised of the 5 Mandated Segments and modifications thereof. The motion passed unanimously by individual voice vote.

Working Group Electronic Meeting on 12/10/2020:

Item#5: Regional Connectors Study: Phase 3 - Task 2 - Development of Preliminary Alternatives

The Consultant Team provided the group with a detailed presentation of two travel demand model (TDM) runs: 1) one Unconstrained 2045 Baseline with the Existing + Committed (E+C) network and 2) one Unconstrained 2045 Baseline with all five mandated segments including: I-664, I-664 Connector, I-564 Connector, VA 164, and VA 164 Connector. Results from these two unconstrained 2045 Baseline model runs were compared with 2017 traffic volumes at key locations. Following some group discussions, Working Group members directed the Consultant Team to prepare for the January 14, 2021, meeting, five new 2045 Baseline model runs with a Constrained E+C network and the following Unconstrained segments:

- All five Mandated Segments (I-664, I-664 Connector, I-564 Connector, VA 164, VA 164 Connector)
- I-664 and VA 164
- I-664, VA 164, I-664 Connector, I-564 Connector
- I-664, VA 164, I-664 Connector, VA 164 Connector
- I-664, VA 164, VA 164 Connector, I-564 Connector

2021

Working Group Electronic Meeting 01/14/2021

Item#5: Regional Connectors Study: Development of Preliminary Alternatives

The Consultant Team presented the results from travel demand model runs for five Alternatives (see below graphics). Traffic volumes were tabulated for 2017, 2045 Baseline, and each of the five 2045 alternative runs. Following extensive discussions, Working Group Chair asked the members to decide which one of these alternatives should be moved forward to the next step for further modeling runs under Constrained E+C network as well as Constrained mandated segments.



Motion: Troy Eisenberger (Chesapeake) made a motion to move forward to the next step with Alternatives 2, 3, and 5. The motion was seconded by Ric Lowman (Virginia Beach) and passed 4 to 1 by those voting members present at the time of the motion.

Working Group Electronic Meeting 02/11/2021

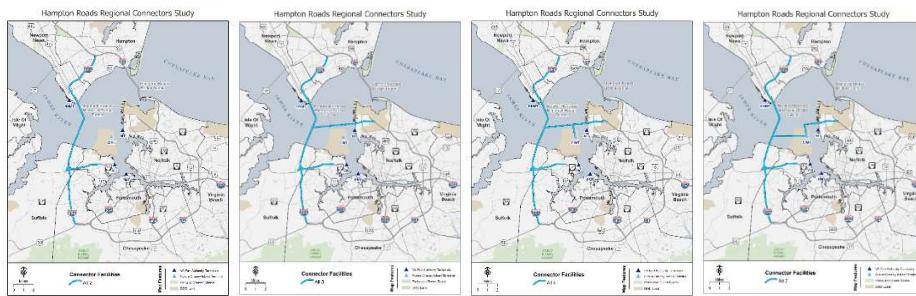
Item#5: Regional Connectors Study: Development of Preliminary Alternatives

The Consultant Team presented the traffic volume results from travel demand model runs for 2045 Baseline, Alternatives 2, 3, and 5. The presentation also included summaries of two meetings separately conducted on January 29, 2021, with ACOE and the Navy and on February 5, 2021, with the Port of Virginia staff. Discussions focused on Segment 164 Connector regarding issues and constraints (listed below) expressed by ACOE, Navy and the City of Portsmouth:

- Segments must not interfere with operations, maintenance, construction, or capacity of Craney Island
- Current projected lifespan of Craney Island is 2050 based on current technology
- Segments must be a minimum of 1800 feet from the next phase of the Navy Fuel Depot project for safety and security reasons and may require walls to further safeguard from potential security threats
- City of Portsmouth Landfill expansion

Motion: Carl Jackson (Portsmouth) made a motion to delete Alternative 5 and add two new Alternatives 6 and 7. The motion was seconded by Brian Fowler (Norfolk) and passed unanimously.

The modeling results for Alternatives 2, 3, 6, and 7 will be presented at the March 11 Working Group meeting.



Working Group Electronic Meeting 03/11/2021 - Cancelled

Working Group Electronic Meeting 04/08/2021

Item#5: Regional Connectors Study: Development of Preliminary Alternatives

- The Consultant Team presented the modeling results from 2045 Baseline and Alternatives 2, 3, 6 and 7. The presentation included traffic volumes, capacity utilizations, and travel times for various runs. The Team also reviewed key model assumptions used for various model networks.
- Group discussion took place regarding the assumptions for HRELN toll rates, HRTPO Board approved 2045 list of projects, Bowers Hill Study recommended concept plans, and various design options.
- The WG members agreed to move all four alternatives (2, 3, 6, and 7) to the next step of the modeling process. In addition, they agreed to run Alternative 6 under two versions – with and without improvements to VA 164. Furthermore, they agreed to run each of the five preliminary alternatives under two design options for MMMBT: 6 General Purpose (GP) Lanes + 2 Managed Lanes (ML) and 4General Purpose Lanes + 4 Managed Lanes.

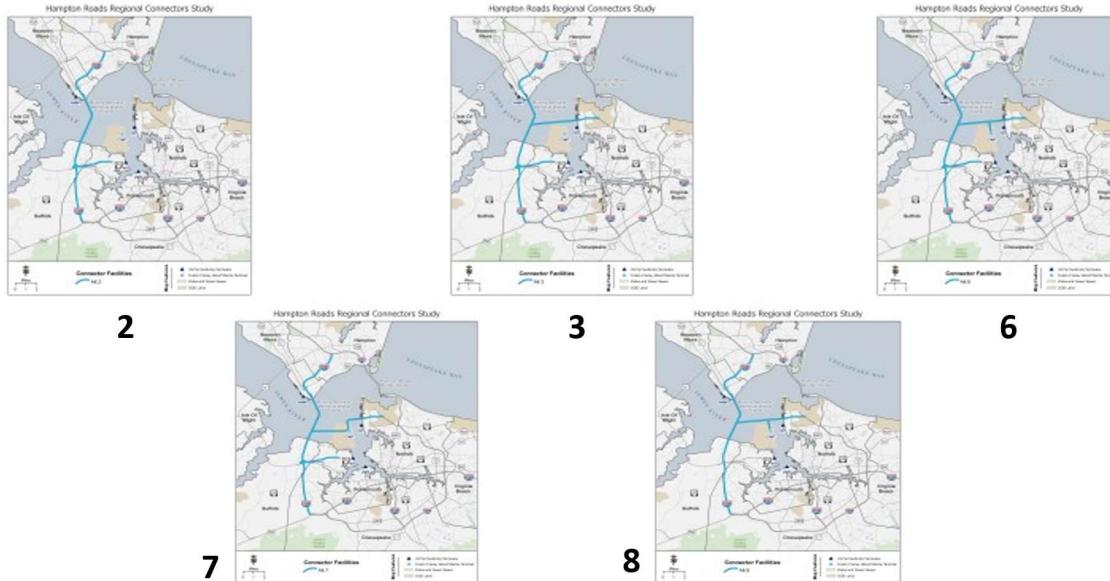
The next modeling runs will therefore include 10 Alternatives with the E+C Network (October 2020 version) while ensuring consistency with the Bowers - Hill Study recommended concept plans and HRTAC approved Initial Tolling Policy for HRELN (\$0.06/mile or \$0.25 per gantry). This is consistent with the scope of work.

Working Group Electronic Meeting 05/25/2021

Item#5: Regional Connectors Study Phase 3: Development of Preliminary Alternatives

- The Consultant Team presented the travel demand modeling results on five Alternatives (2, 3, 6, 7, and 8) selected at the April 8 meeting (see below Graphics 5A). The results were based on two design options for MMMBT: Option A (6GP+2M) and Option B (4GP+4M).
- The 2045 travel demand networks used for modeling these ten alternatives were corrected since the April 8th meeting to reflect the HRTAC Initial Toll Policy on the HRELN (\$0.06/mile) and were also consistent with the recommendations from the Bowers-Hill Interchange Improvement Study (see Modeling assumptions below).
- The WG members agreed on eliminating Alternative 7 under both design options A and B due to design limitations and low estimated traffic volumes.
- The WG members agreed and selected Alternatives 2, 3, 6, and 8 with Options A and B to be moved to the next step of the analysis. The motion passed unanimously to recommend these 8 Alternatives for the Steering Committee's consideration and approval at their next meeting to be scheduled in the June/July timeframe.

ATTACHMENT 5A- ALTERNATIVES 2,3,6,7,8



Modeling Assumptions



I-664 Roadway Segments	Actual Existing Lanes	MMMBT Design Option (6+2)	MMMBT Design Option (4+4)	Comments
I-64 to Terminal Avenue Interchange	6	6+2	6+4/2*	
Terminal Avenue Interchange to I-664 Connector	4	6+2	4+4	MMMBT
I-664 Connector to College Dr. (Exit 8)	4	6+2	4+4	
College Dr. (Exit 8) to VA 164**	6	6+4	6+4	Bowers Hill Study Area
VA 164 to Dock Landing Rd**	4	4+4	4+4	
Dock Landing Rd to US 58 (Bowers Hill)**	4	6+4	6+4	
US 58 (Bowers Hill) to I-264W**	8	8+4	8+4	
* Adds/drops second HOT lane at Powhatan Parkway				
** Per Bowers Hill Interchange Improvement Study				

Joint Steering (Policy) Committee and Working Group Electronic Meeting
06/22/2021

Item#5: Regional Connectors Study Phase 3: Development of Preliminary Alternatives

The Consultant Team provided an update of activities conducted since the October 27, 2020, Joint meeting. Mr. Craig Eddy reviewed Alternatives 1 through 8 as considered by the Working Group during the past several months. Mr. Eddy further indicated that the Working Group had eliminated Alternative 1 (high cost), Alternatives 4 and 5 (VA 164 Connector constraints and issues raised by the Navy, Army Corps of Engineers, and city of Portsmouth), and Alternative 7 (low estimated traffic volumes and design constraints). Lastly, Mr. Eddy shared with the members the four alternatives (Alternatives 2, 3, 6, and 8) under two design options A and B that were recommended by the Working Group for the Steering Committee's approval.

Motion: Chair Price requested the members for a motion to approve the Working Group's recommended alternatives and design options. Mr. Thomas (Norfolk) indicated that a funding request has been submitted to Congress for the Craney Island Access Study. He further requested the Chair to include Alternatives 5 and 7 in the final list of Preliminary Alternatives. Following some discussions and the absence of several members of the Policy Committee, Chair Price directed the staff to schedule a 30-minute electronic meeting the following week for the joint group to reconvene and act on this one item: selection of Preliminary Alternatives.

Joint Steering (Policy) Committee and Working Group Electronic Meeting
06/30/2021

Item#4: Regional Connectors Study Phase 3: Development of Preliminary Alternatives

The purpose of this meeting was for the members to vote on the Working Group recommended Alternatives 2, 3, 6, and 8 under two design options A and B (a total of 8 Alternatives). The design options pertain to the number of general purpose (GP) and managed (M) lanes on I-664 from its interchange with I-64 on the peninsula to its proposed interchange with the I-664 Connector over the Hampton Roads Harbor. Option A would provide 6 GP and 2 M while Option B would provide 4 GP and 4 M.

Mayor Price (Newport News) initiated this item by asking for a motion to move ahead with the alternatives recommended by the working group that were to be voted on at the previous week's (June 22) meeting. Mayor Tuck (Hampton) made a motion, and Mayor Glover (Portsmouth) seconded the motion.

Vice-Mayor Thomas (Norfolk) made a substitute motion. The substitute motion is to include Alternatives 5 and 7 in the study, due to the burden of truck traffic on Hampton Boulevard, the burden that will be imposed by the future Craney Island Terminal, and the possibility that these alternatives may be cheaper. Vice-Mayor Thomas (Norfolk) then mentioned the possibility of an additional \$3.1 million in

federal earmark that was requested for a study to look at access to the future Craney Island Terminal. Mayor Dyer (Virginia Beach) seconded the substitute motion.

There was extensive discussion among the Steering (Policy) Committee members regarding the importance of Alternatives 5A, 5B, 7A, and 7B even though they had been recommended for removal. The addition of Alternatives 5A, 5B, 7A, and 7B, would result in twelve preliminary alternatives to be studied when added to the 8 recommended by the Working Group, which exceeds the number allowable (maximum of ten Alternatives) as per the scope of work. During the meeting, the Steering Committee was made aware of this scope limitation.

Motion: Vice-Mayor Thomas (Norfolk) amended his substitute motion. His amended substitute motion is to defer the action today to determine how much additional funding would be required to analyze 12 alternatives simultaneously through Phase 3 (including Alternatives 5 and 7) and to explore what additional money is available from HRTAC to fund the additional analysis. Mayor Tuck (Hampton) moved approval of the amended substitute motion; Mayor Dyer (Virginia Beach) seconded.

The Motion passed with five Yes votes and two No votes requiring:

- an estimated cost/per additional alternative (beyond 10)
- an inquiry as to the availability of additional funds from HRTAC for such study

RCS on Temporary Pause: July 2021 – September 2021

Following the June 30, 2021, Joint Steering (Policy) Committee/Working Group meeting, Robert Crum, HRPDC/HRTPO Executive Director collaborated diligently with the Committee members to resolve notable issues and develop a path forward to complete the RCS.

Joint Steering (Policy) Committee and Working Group Meeting 10/12/2021

Item #5: RCS Background and Recommended Path Forward:

Robert Crum, HRPDC/HRTPO Executive Director made a presentation on the path forward for the RCS. He began his presentation by introducing the consultant's new project leadership – Lorna Parkins and Paul Prideaux – and by highlighting the mandated segments and the past philosophy of the study.

Mr. Crum noted that he met with members of the Steering (Policy) Group after the June meeting. In these discussions he heard that some of the options in the RCS may not be constructed for decades; technology, community growth, and needs will evolve over time; there are questions and concerns about some segments but it's too early to eliminate them at this stage, the RCS should determine each segment's advantages and disadvantages, and ready-to-go projects shouldn't be slowed down.

Mr. Crum stated that HRTPO staff and the consultant team believe that retaining certain segments through the next stage of analysis can be accomplished without the need for additional funding. He added that each of these segments would be advanced to the next phase of this study, where an analysis would be completed on the degree to which each segment addresses the needs of the region.

Mr. Crum added that the cost, constructability, permitability and congestion relief of the various segments will be evaluated, and the various segments will be ranked using this evaluation and staged based on project readiness.

Mr. Crum concluded his presentation by noting the following potential category groupings:

- Those segments that are ready for advancement and should be recommended for consideration in the fiscally constrained portion of the Hampton Roads 2050 Long-Range Transportation Plan.
- Those segments which require further refinement and maturation and will be recommended for consideration in the 2050 Vision Plan as projects requiring further evaluation for permitability and constructability.
- Those segments that due to technical issues or other items will be retained but will warrant further consideration by the community at the appropriate time.

Motion: Mayor Dyer (Virginia Beach) made a motion to approve the recommended path forward and Mayor Duman (Suffolk) seconded. The motion was unanimously approved.

Item #6: RCS: Proposed Approach to Study Completion

Lorna Parkins (MBI) RCS Project Co-Manager noted that the mandated study segments have not changed. The updated methodology will simply sort the segments into chronological tiers based on readiness and known challenges associated with construction and permitting. She added that the updated Phase 3 Process will establish a tiering framework, apply the framework to tier the segments, evaluate congestion relief and finalize segments tiers, and provide the information for the 2050 LRTP and prioritization process.

Ms. Parkins added that there will be three tiers. Tier 1 will have favorable constructability, permitting and readiness; Tier 2 will have favorable or mixed constructability and permitting but less favorable readiness; and Tier 3 will be challenged for constructability and permitting and a higher degree of uncertainty.

Ms. Parkins noted that individual segments will be organized into bundles for analysis, and the congestion relief evaluation will include as many as three logical bundles for evaluation. The consultant team will evaluate congestion relief and other system effects of the bundles, and the evaluation results will finalize the tiering of the segments.

Mr. Jackson (Portsmouth) mentioned that the Working Group has had a strong role in the study to this point and asked if the Working Group will continue to have this role moving forward. Mr. Crum (HRTPO) replied that the Working Group will continue to be key in the technical work of the study. Mr. Crum

(HRTPO) also noted that committee members indicated a preference for more Joint Steering (Policy) and Working Group meetings moving forward.

Joint Steering (Policy) Committee and Working Group Meeting 12/07/2021 – Cancelled

2022

Joint Steering (Policy) Committee and Working Group Meeting 01/11/2022

Item# 5. Regional Connectors Study (RCS): Scope of Work and Schedule Update:

Ms. Lorna Parkins, RCS Co-Project Manager, briefed the Joint Committee members on the updated scope of work and schedule associated with the RCS. She stated that the updated methodology approved by the Steering Committee at the October 21, 2021, meeting will be used to evaluate and sort the RCS segments into chronological tiers based on readiness and known challenges associated with construction and permitting. She then provided a summary of the following three tiers:

- Tier 1
 - Favorable constructability and permitting
 - Favorable readiness
- Tier 2
 - Favorable or mixed constructability and permitting
 - Less favorable readiness
- Tier 3
 - Currently challenged for constructability and permitting
 - Higher degree of uncertainty/requires additional information

The updated Study process will consist of four steps:

- Step 1 – Draft Segment Tiering (3 months)
 - Qualitative assessment of construction, permitting, and readiness
- Step 2 – Final Segment Tiering (3 months) – to include updating the RCS 2045 Baseline Network
 - Congestion reduction evaluation
 - Revised design and cost estimation
- Step 3 – Full recommendations to the HRTPO (6 months)
 - Scenario analysis
 - Traffic operations analysis
- Step 4 – Final Report (4 months)

- Public engagement and documentation

Ms. Parkins stated that the consultant team will come back to the Joint RCS at the beginning of Step 2 to determine if any projects need to be added to the base network. She noted that although the schedule is tight, the consultant team should be able to make the original study completion date of June 2023.

Mr. Carl Jackson (Portsmouth) asked whether the Joint RCS was being asked to consider approving the updated study process or the baseline network. Ms. Parkins replied that the Joint RCS will be asked to vote on the updated study process.

Mayor Donnie Tuck (Hampton) stated that there were possible funding earmarks that may be brought forth from Congress and inquired to the status of the earmarks. Mr. Kevin Page, HRTAC Executive Director, replied that he was unaware of any federal funding at this time.

Motion: Mayor Rick West (Chesapeake) Moved to approve the revised RCS Scope of Work and Schedule; seconded by Mayor Donnie Tuck (Hampton). The Motion Carried.

Item# 6. Regional Connectors Study: Draft Evaluation Measures for Segment Tierung

Ms. Lorna Parkins stated that as noted in her previous presentation regarding the revised scope of work, the mandated RCS segments will be evaluated utilizing the following criteria:

- Permitting Issues
- Construction Complexity
- Project Readiness
- Congestion Relief

Ms. Parkins noted that the consultant team has developed a series of draft measures and factors for evaluating the mandated segments on the first three criteria. She summarized each criterion and stated that this evaluation will provide a comprehensive understanding of the mandated segments including impacts to community residents and businesses, environmental justice populations, regional economic drivers, and the environment.

She indicated that the outcome of this evaluation will provide logical information, supported by qualitative and quantitative observations, which will support the initial draft designation of the mandatory segments into three tiers as described in the revised scope of work.

Ms. Amy Inman (Norfolk) inquired as to the quality of evaluating the segments with these measures based on unknown traffic impacts. Ms. Parkins acknowledged that there are unknown factors; however, the impacts on the segment alignments will be initially based on the current level of engineering.

Motion: Mayor Rick West (Chesapeake) Moved to approve the draft Evaluation Measures; seconded by Mayor Donnie Tuck (Hampton). The Motion Carried.

Joint Steering (Policy) Committee and Working Group Meeting 04/26/2022

Item# 5. Regional Connectors Study (RCS): Qualitative Evaluation of Mandated Segments and Segment Bundling (Action Requested)

At the January 11, 2022, Joint Meeting, the Steering Committee approved a four-step process for moving forward. Ms. Lorna Parkins, RCS Co-Project Manager (MBI), presented the results of Step 1 “Qualitative Evaluation of Mandated Segments and Bundling of Segments”. Dale Stith (HRTPO) provided the members a quick review of the HRTPO long-range transportation planning process.

Ms. Parkins described the assumed characteristics of the five mandated segments analyzed, and presented qualitative findings for each segment in the following categories:

- Construction Complexity
- Permitting Issues and Key Environmental Impacts
- Project Readiness

✓ Carl Jackson (Portsmouth) expressed concern about possible undercounting of property takes for the VA 164 Widening segment.

✓ Concerning the I-664 Connector segment, Lesley Dobbins-Noble (COE) suggested a high impact rating due to the Section 408 process for Craney Island.

✓ Concerning the VA 164 Connector segment, Steve Jones (Naval Station Norfolk) asked whether it had been changed to at-grade where it crosses the fuel depot.

✓ Kevin Page (HRTAC) noted that a crash wall is not required in the 99-year railroad permit. He also suggested that the southern portion of the I-664 segment—including in HRTAC’s 2045 long-range plan of finance (to be approved by HRTAC in June) be considered “a given” and to be included in the RCS 2045 “baseline”.

✓ Ms. Parkins noted that that is one of her recommendations.

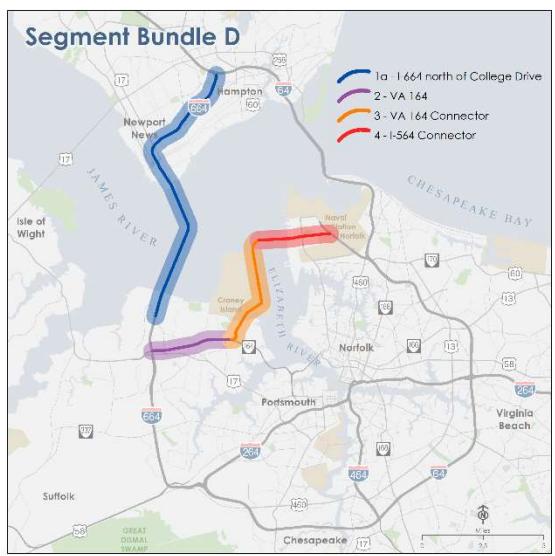
✓ Mayor Price (Newport News) mentioned that VDEQ is studying the air-quality effects of the coal piles which may be impacted by widening of the northern portion of I-664.

Ms. Parkins presented recommended bundling of segments (four bundles) to be used in the measurement of benefits in the congestion relief evaluation and economic impacts analysis.

Recommendations for approval:

- Placing the southern portion of the I-664 segment in the RCS 2045 “baseline”.
- Bundling segments into four bundles (A, B, C, and D, as shown below) for analysis of benefits.

Motion: Mayor Tuck (Hampton) moved to approve the above recommendations; seconded by Mayor Dyer (Va. Beach). The motion carried.



Joint Steering (Policy) Committee and Working Group Meeting 08/09/2022

Item #5. Regional Connectors Study: Step 1: Qualitative Evaluation of Mandated Segments and Segment Bundling – Comments and Responses

Ms. Parkins discussed the Phase 3 Process Graphic and noted that the study is currently in Step 2 which includes the congestion reduction evaluation, revised design, and cost estimation. At the end of Step 2 draft segments will be tiered, which will be followed by public meetings.

Ms. Parkins reminded the group of the definition of project segments vs. bundles, followed by how segments will be classified using tiers. Tier 1 will include segments that are ready for advancement and recommended for consideration in the HRTPO 2050 LRTP. Tier 2 will include segments which require further refinement and will be recommended for consideration in the HRTPO 2050 Vision Plan. Tier 3 will include segments that due to technical challenges and uncertainties will be further developed at an appropriate time in the future.

Ms. Parkins detailed the comments that were received from committee members on the mandated segments. These comments include:

- The City of Portsmouth provided comments on the VA 164 Widening, including recommending further refinement of alignment assumptions, looking at local impacts and local opposition, analyzing stormwater management concerns, and incorporating Environmental Justice concerns.
- The Navy provided comments on the VA 164 Connector. These comments reflect the security requirements of the Navy Fuel Depot and fuel pipeline facilities, and also the strategic nature of both the Fuel Depot and the Colonial Pipeline.
- The Navy also provided comments on the I-564 Connector. These comments include the security requirements of the Navy Fuel Depot, height restrictions due to flight paths, security concerns at Gate 6 and at Piers 1-3, and changing assumptions for the ATI interchange along the I-564 Intermodal Connector.
- The US Army Corps of Engineers (USACE) Operations provided comments on the VA 164 Connector. These included updated data on Craney Island, concerns on Craney Island operations, and Section 408 permit requirements.
- The USACE Regulatory also provided comments, including comments on independent utility, future permitting requirements, wetland impacts and remediation, Environmental Justice concerns, and endangered species evaluations.
- The Port of Virginia provided comments supportive of the VA 164 and I-564 Connectors. They also noted that security concerns can be resolved during later stages of project development after further planning and conceptual design.

Ms. Parkins added that it is very helpful to receive all these comments, particularly for constructability, permitting, and readiness considerations.

No Action was required for this item.

Item #6. Regional Connectors Study: Step 2 – Congestion Reduction Evaluation and Economic Impacts Analysis

Mr. Prideaux introduced the topic by noting that Michael Baker used the HRTPO 2045 Regional Travel Demand Model to evaluate improvements. They looked at both regionwide results and results at key facilities and prepared a summary of economic results.

Mr. Prideaux discussed the segment bundles that were analyzed:

- Segment Bundle A is comprised of Segment 1a (I-664 north of College Drive).
- Segment Bundle B is comprised of Segment 1a (I-664 north of College Drive) and Segment 2 (VA 164)
- Segment Bundle C is comprised of Segment 1a (I-664 north of College Drive), Segment 4 (I-564 Connector), and Segment 5 (I-664 Connector)
- Segment Bundle D is comprised of Segment 1a (I-664 north of College Drive), Segment 2 (VA 164), Segment 3 (VA 164 Connector) and Segment 4 (I-564 Connector)

Mr. Prideaux noted that Segment 1b (I-664 south of College Drive) was included in the 2045 RCS Baseline Network, based on a decision made at the last RCS meeting.

Mr. Prideaux provided highlights on the congestion analysis for the regionwide results. He noted that total regional travel levels are similar for the 2045 baseline and all four bundles, but vehicle-hours of travel and delay are reduced with all four bundles because of reduced congestion. He also noted that Bundles C and D have the greatest benefit on vehicle-hours of travel and delay. Mr. Prideaux added that Bundles C and D have the largest reduction in the share of congested travel, which would lead to improved travel time reliability.

Mr. Jackson (Portsmouth) asked if we could further determine whether Bundle C or Bundle D would have the greatest reduction in congestion. He expressed his concern that Bundle D has many more issues than Bundle C. Mr. Prideaux and Ms. Parkins replied that they would provide further analysis on these bundles with the upcoming cost effectiveness analysis.

Ms. Parkins provided a summary of the economic impact analysis. She highlighted the societal benefits of each Bundle in 2045 relative to the 2045 baseline conditions and noted that Bundle D had the highest societal benefits, largely due to time and reliability savings. Ms. Parkins also highlighted the regional economic impact in 2045 relative to 2045 baseline conditions, in terms of increase in the Gross Regional Product. Bundle D has the most cumulative benefit, with most of that being due to impacts of Segment 1a.

Mayor Price (Newport News) asked if we could determine how certain potential large economic development projects that could increase housing and population levels would impact congestion. Ms. Parkins replied that this will be looked at as part of the scenario analysis, with the three scenarios of Greater Growth on the Water, in Urban Centers, and in Suburban Centers.

Mr. Crum (HRTPO) mentioned the escalating costs of the HRBT project through the years and noted that there are costs associated with waiting. Mr. Crum (HRTPO) asked if we could get into these costs of waiting in the RCS in terms of escalating construction costs. Mayor Price (Newport News) added that escalating costs through the years was also an issue for the CBBT project. Ms. Parkins replied that their team will think about how to represent this opportunity cost in the study.

Mr. Stringfield (VDOT) asked if all the bundles include Bundle A, which improves the Monitor-Merrimac Memorial Bridge tunnel. Ms. Parkins replied that yes, all four bundles include improvements at the tunnel. Ms. Parkins added that they have been coordinating with HRSD in terms of the proposed alignment of improvements to I-664.

Mayor Tuck (Hampton) asked about increasing costs and the ability to fund projects now versus years in the future. Mr. Crum (HRTPO) replied that this is a conversation for this group to have with the HRTPO Board as the study progresses with costs provided by the consultant. Ms. Parkins added that there is about a year left remaining on the study, and then that question should be addressed in the HRTPO Long-Range transportation planning process.

No Action was required for this item.

Item #7. Regional Connectors Study: Phase 3: Public Engagement Plan – Proposed Outreach Plan

Ms. Parkins introduced the proposed outreach plan by noting that strategies have changed due to the pandemic. She noted that the plan no longer is to take a preferred alternative to the public, but rather to take the tiering of projects to the public. The plan is now for a more hybrid approach. This will include four in-person meetings (Lower Peninsula, Norfolk, Suffolk, and Portsmouth), three pop-up meetings (including events spread out geographically), and more online engagement to reach those unable to attend in-person meetings.

Ms. Parkins highlighted maps showing demographics and transit routes to help with determining the four proposed meeting locations.

Mr. Stringfield (VDOT) asked about online engagement, and whether they are planning to run an online survey to accompany each public meeting or are they planning to run a single survey throughout the entire public involvement period. Ms. Parkins replied that public meetings will be on the front end of the public involvement period and that the survey will continue to be available afterward for the full public involvement period.

Mayor Glover (Portsmouth) noted that public meetings in that area of Portsmouth are typically held at Churchland High School, since it is a larger venue.

Ms. Parkins wrapped up the presentation by noting that a discussion of possible locations for pop-up meetings, such as at fall festivals, will be discussed at the next meeting.

No Action was required for this item.

Joint Steering (Policy) Committee and Working Group Meeting 09/27/2022

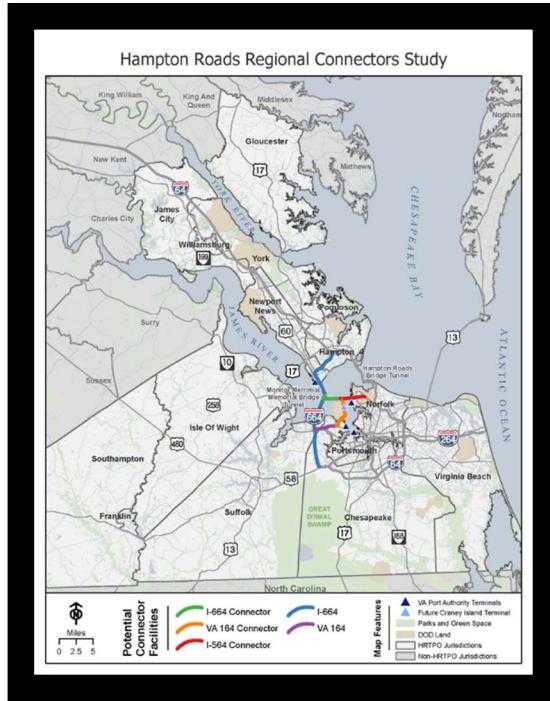
6. Phase 3: Step 2 – Cost Estimation and Revised Design: Draft Segment Tiering (Action Item)

Ms. Parkins provided a brief overview of the Qualitative Analysis (Step 1) of the five mandated segments. She reviewed the segments and segment bundles which will be later used in the segment tiering process.

Mr. Prideaux provided a brief update on the Quantitative Analysis (Step 2) of the five mandated segments. He indicated that the Quantitative Analysis includes three elements: Congestion Benefits, Economic Impacts, and Cost estimates. He mentioned the congestion benefits and economic impacts were reviewed at the August 9, 2022, Joint Meeting. He then reviewed the cost for each of the mandated segments and indicated the methodology was based on VDOT's Cost Estimating Program (PCES).

To avoid presenting information twice—once today, and once again with a quorum present—after discussion and consensus, Mayor Price adjourned the meeting at approximately 10:30 a.m. Mr. Crum said that he would check the calendars of the mayors and schedule a meeting to conduct the business planned for today's meeting.

APPENDIX A – STUDY AREA



Appendix B: Funding

Description Budget/Cost

Phase 1	\$359,497
Phase 1 (Supplement)	\$3,784
Phase 2 (Interim)	\$779,199
Phase 2 (Supplement)	\$709,637
Phase 2 (Supplement Omission)	\$96,746
Phase 3	\$4,062,710
Subtotal amount (Consultant)	\$6,011,573
Contingency	\$80,638
Total Amount (Consultant)	\$6,092,211
RCS Project Coordination	\$322,000
HRTPO staff expenses	\$535,756
Grand Total	\$6,949,967

Funded by HRTAC, Administered by HRTPO

