



Hampton Roads, Virginia Eight-Hour Ozone Maintenance Area



Transportation Conformity Analysis



2030 Long Range Transportation Plan and FY 09-12 Transportation Improvement Program

EXECUTIVE SUMMARY

Prepared by: Virginia Department of Transportation

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Conformity Analysis Project Manager & Principal Author

Christopher Voigt, VDOT Environmental

Contributors

Consultation

Hampton Roads Transportation Planning Organization
Benito Perez, Dale Stith, Kendall Miller

Project Lists

Hampton Roads Transportation Planning Organization
Andrew Pickard, Michael Kimbrel

VDOT Hampton Roads District
Tony Gibson, Eric Stringfield

Travel Demand Modeling

Hampton Roads Transportation Planning Organization
Andrew Pickard, Benito Perez, Dale Stith

VDOT Transportation and Mobility Planning
Jaesup Lee

Thoughtful input and assistance received from VDOT Air Quality Program Manager Jim Ponticello, Hampton Roads Transportation Planning Organization staff including Dwight Farmer and Camelia Ravanbakht, Virginia Department of Environmental Quality staff including Tom Ballou and Sonya Lewis-Cheatham, and other VDOT Transportation and Mobility Planning staff, including Ben Mannell, Paul Agnello and Chad Tucker, is also gratefully acknowledged.

Executive Summary

This report presents the regional conformity analysis and recommendation for a finding of conformity for the Hampton Roads 2030 Long Range Transportation Plan (LRTP, or “Plan”) and associated Fiscal Year (FY) 2009-2012 Transportation Improvement Program (TIP, or “Program”), both as amended by the Hampton Roads Transportation Planning Organization (HRTPO). The HRTPO serves as the designated Metropolitan Planning Organization or MPO for the Hampton Roads region¹. The conformity analysis was conducted in compliance with the federal transportation conformity rule (40 CFR Parts 51 and 93)² and the corresponding state conformity regulation (9 VAC 5-151)³.

As summarized in Exhibit ES-1, the LRTP and TIP meet all applicable federal and state conformity requirements and criteria⁴.

Exhibit ES-1: Conformity Analysis Summary*

Section	Criteria	Demonstrated:
93.108	Fiscal constraint	Yes**
93.110	Latest planning assumptions	Yes
93.111	Latest emissions model	Yes
93.112	Consultation	Yes***
93.113(b) & (c)	TCMs	na****
93.118	Emissions Budget	Yes

* As specified in 40 CFR 93.109, “Table 1 – Conformity Criteria”, with the addition of fiscal constraint as required in Section 93.108. Additional requirements apply, e.g. as specified in 93.122, although not specifically listed above.

** As indicated by MPO (HRTPO) approval and/or provision of the project lists for the Plan and Program and the supporting information provided with those documents, and subject to federal review consistent with 23 CFR Part 450 as referenced in the conformity rule in Section 93.108.

*** Conducted to meet both state and federal requirements.

**** The applicable implementation (maintenance) plan (72 FR 30490, effective June 1, 2007) for Hampton Roads does not include transportation control measures (TCMs), which therefore are not required for the conformity analysis or determination.

A recommendation for a finding of conformity is therefore made, conditional upon any further and separate review as may be required by the US Department of Transportation (US DOT) for the fiscal constraint criterion consistent with Section 93.108⁵ of the federal

¹ The Hampton Roads Metropolitan Planning Organization (HRMPO) was renamed the Hampton Roads Transportation Planning Organization (HRTPO) in 2009. Website: <http://www.hrtpo.org>.

² Federal Transportation Conformity Regulations (EPA Website): <http://www.epa.gov/otaq/stateresources/transconf/conf-reqs.htm>.

³ Virginia Regulation for Transportation Conformity (9 VAC5-151), effective January 19, 2010: <http://leg1.state.va.us/000/reg/TOC09005.HTM#C0151>

⁴ Federal Conformity Rule, 40 CFR 93.109 (Criteria...). See “Table 1 - Conformity Criteria”: http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.109.htm

⁵ Federal Conformity Rule, 40 CFR 93.108 Fiscal Constraints for Transportation Plans and TIPs: http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.108.htm

conformity rule and the requirements of the federal planning rule specified at 23 CFR Part 450⁶.

Supporting information for each of these criteria demonstrations is provided below, following a summary of the current status of the region with regard to air quality and, for context, an overview of the applicable regulatory requirements.

Hampton Roads Air Quality Planning Status

Hampton Roads is currently in attainment (maintenance) of the 1997 eight-hour ozone national ambient air quality standard (NAAQS) and in attainment of all of the other applicable NAAQS. The designated maintenance area includes the Counties of Gloucester, Isle of Wight, James City, and York, and the Cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. Federal transportation conformity requirements apply for areas in nonattainment or maintenance, and therefore apply for Hampton Roads.

On June 1, 2007, the United States Environmental Protection Agency (US EPA) via Federal Register notice approved a redesignation request and State Implementation Plan (SIP) revision (maintenance plan) that had been submitted by the Virginia Department of Environmental Quality (VDEQ)⁷. EPA also found adequate and approved motor vehicle emission budgets for ozone precursors (nitrogen oxides or NO_x, and volatile organic compounds, or VOC) as specified in the maintenance plan. Pursuant to the requirements of the federal conformity rule, the maintenance plan budgets must be met in all regional conformity analyses for the Hampton Roads area.

Regulatory Requirements Overview

Conformity means, as indicated in Section 176(c) of the Clean Air Act (CAA)⁸ as amended:

“(A) conformity to an [air quality] implementation plan’s purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not— (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing

⁶ US DOT - Federal Highway Administration (FHWA), 23 CFR Parts 450 and 500 and Federal Transit Administration (FTA), 49 CFR Part 613, *Statewide Transportation Planning; Metropolitan Transportation Planning*, Final Rule effective March 16, 2007. See: <http://edocket.access.gpo.gov/2007/07-493.htm>.

For reference, the FHWA also provides a compilation of transportation-related legislation, regulations and guidance on their website: <http://www.fhwa.dot.gov/hep/legreg.htm>.

⁷ US EPA, 72 FR 30490, 40 CFR Parts 52 and 81 [EPA-R03-OAR-2006-0919; FRL-8320-9], *Approval and Promulgation of Air Quality Implementation Plans; Virginia; Redesignation of the Hampton Roads 8-Hour Ozone Nonattainment Area to Attainment and Approval of the Area’s Maintenance Plan and 2002 Base-Year Inventory*, Final Rule, effective June 1, 2007. See: <http://edocket.access.gpo.gov/2007/E7-10581.htm>.

⁸ Clean Air Act (and amendments): <http://www.epa.gov/air/caa/>

violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area. ...”

Section 176(c)(4)(B) of the CAA requires regulatory action in the form of criteria and procedures for conformity to be promulgated by EPA in concurrence with the US DOT:

*“176(c)(4)(B) *Transportation plans, programs, and projects.— The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update, criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.*”*

The federal conformity rule was initially promulgated in 1993 and has been amended a number of times since. The most current compilation is that produced by EPA in March 2010⁹. Under the federal rule, MPOs, state departments of transportation and the FHWA along with the FTA are responsible for conformity determinations for: (1) LRTPs, (2) TIPs, (3) transportation projects that receive federal funding or require FHWA or FTA approval, and (4) regionally significant non-federal projects, if these actions occur in areas that have been designated by EPA as nonattainment or maintenance areas for any of the criteria pollutants.

State conformity regulations, primarily to address consultation, are a requirement of the federal conformity rule at 40 CFR Part 51. Accordingly, the VDEQ in 1997 developed the *Virginia Regulation for Transportation Conformity*¹⁰. The Virginia regulation was updated for consistency with EPA requirements in 2007, and amended again in 2008. The current version, specified in the Virginia Administrative Code (VAC) at 9 VAC 5-151¹¹, was approved by EPA via Federal Register notice on November 20, 2009 (effective January 19, 2010)¹². The Virginia regulation closely reflects the requirements of the federal rule for inter-agency and public consultation.

Demonstrations of conformity are therefore conducted to meet the general objectives given in the CAA by meeting the technical criteria specified in the federal and state conformity regulations, with consultation as required by the federal and state regulations including local procedures for inter-agency and public consultation that have been established for the Hampton Roads area.

⁹ US EPA, *Transportation Conformity Regulations Updated March 2010*, EPA-420-B-10-006, March 2010, available at: <http://www.epa.gov/otaq/stateresources/transconf/regs/420b10006.pdf>.

¹⁰ Specified in the Virginia Administrative Code (VAC) at 9 VAC 5-150. See: <http://www.deq.virginia.gov/air/regulations/air150.html>.

¹¹ Virginia *Regulation for Transportation Conformity* (9 VAC 5-151). See: <http://www.deq.virginia.gov/air/regulations/air151.html>.

¹² US EPA, 74 FR 60194, 40 CFR Part 52, [EPA-R03-OAR-2009-0674; FRL-8983-1], *Approval and Promulgation of Air Quality Implementation Plans; Virginia; Transportation Conformity Regulations*, Direct Final Rule, November 20, 2009, effective January 19, 2010. See: <http://edocket.access.gpo.gov/2009/E9-27814.htm>

Conformity Criteria Assessments

Summary assessments are presented below for each of the key conformity criteria listed in Exhibit ES-1, which includes not only the specific criteria identified for regional conformity analyses in Section 93.109¹³ of the federal rule (namely, those specified in sections 93.110 through 93.113, and 93.118) but also fiscal constraint from Section 93.108 of that rule. However, as revenues and project costs are not generally assessed in air quality conformity analyses, but are instead assessed as required with the associated Plan and TIP, the fiscal constraint criterion effectively serves as a prerequisite for the conformity analysis and determination. More detail and supporting information on the technical criteria and assessments are provided in the main report.

- Section 93.108 (Fiscal Constraints for Transportation Plans and TIPs)¹⁴: The federal conformity rule states: “*Transportation plans and TIPs must be fiscally constrained consistent with [US] DOT’s planning regulations at 23 CFR part 450 in order to be found in conformity.*”

For Hampton Roads, the MPO (HRTPO) addresses fiscal constraint in the development of the Plan and Program as appropriate and typically includes specific sections or chapters addressing revenues, cost estimates, and financial constraint with those documents. For the purposes of this conformity demonstration, therefore, fiscal constraint is indicated by HRTPO provision and/or approval of the project lists for the Plan and Program and the supporting information referenced by those documents.

A recommendation for a finding of conformity is therefore conditional upon any further and separate review as may be required by the US DOT for the fiscal constraint criterion consistent with Section 93.108 of the federal conformity rule as well as requirements of federal planning regulations specified at 23 CFR Part 450.

- Section 93.110 (Latest Planning Assumptions)¹⁵: All requirements for the application of latest planning assumptions were met as follows:
 - 93.110(a) Latest Planning Assumptions: This section requires that: “*the conformity determination ... must be based upon the most recent planning assumptions in force at the time the conformity analysis begins...*”

In general, the latest available and approved population and employment forecasts for 2030 by Traffic Analysis Zone (TAZ) were employed with the regional travel demand network model (TP+) to generate the traffic volume and vehicle-miles-traveled (VMT) forecasts applied in this conformity analysis. Regional roadway and transit networks were updated as

¹³ Federal Conformity Rule, 40 CFR 93.109 (“Criteria...”). See “Table 1 - Conformity Criteria”: http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.109.htm

¹⁴ Federal Conformity Rule, 40 CFR 93.108 *Fiscal Constraints for Transportation Plans and TIPs*: http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.108.htm

¹⁵ Federal Conformity Rule, 40 CFR 93.110 *Criteria and Procedures: Latest Planning Assumptions* http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.110.htm

appropriate using the Plan and Program project lists, which were subjected to interagency consultation as described below. Emission controls assumed for the analysis were consistent with those specified in the applicable implementation (maintenance) plan revision.

All of the latest planning assumptions and other aspects of the conformity analysis were reviewed by the Hampton Roads Interagency Consultation Group (ICG) at the beginning of the conformity analysis process, as documented in the chapter on consultation and in Appendix D. Additional details are provided below.

- **93.110 (b) Socioeconomic Forecasts:** This section requires that “*Assumptions must be derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other agency authorized to make such estimates and approved by the MPO*”. Further, Section 93.122(b)(1)(ii) requires that “*Land use, population, employment, and other network-based travel model assumptions must be documented and based on the best available information*”. Section 93.122(b)(1)(iii) adds that “*Scenarios of land development and use must be consistent with the future transportation system alternatives for which emissions are being estimated*.”

As documented in the main report, the socioeconomic forecasts for 2030 (including interim years and sub-allocations as appropriate) represent the latest projections available and approved for use with the 2030 LRTP¹⁶. The Regional Economic Models, Inc. (REMI) econometric model was applied to develop control totals for key parameters such as population and employment for the Hampton Roads area. The HRTPO then sub-allocated the regional control totals to the local or jurisdiction level. The sub-allocations were reviewed by each locality and adjustments made where appropriate.

- **93.110(c) and (d) Transit:** These sections respectively require that “*The conformity determination for each transportation plan and TIP must discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous conformity determination*” and “*The conformity determination must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time*”.

Transit operating policies (including fares and service levels) and modeling for transit (ridership) have not changed significantly since the previous

¹⁶ While socioeconomic forecasts for 2034 have more recently been adopted for use in the pending development of the 2034 LRTP, they were not intended nor approved by the TPO for use with the existing and approved 2030 LRTP. Consistent with the consultation requirements of the federal conformity rule at 93.105 and the corresponding state regulation at 9 VAC 5-151-70 that is now in effect, the use of the 2030 versus the 2034 socioeconomic forecasts for this analysis was reviewed by the ICG at the beginning of the conformity analysis process. Minutes for that meeting are provided in Appendix D. The consensus of the ICG was to apply the approved 2030 socioeconomic forecasts for this analysis.

conformity determination. Transit service including proposed light rail is included in future networks for the region. While future transit ridership is effectively determined in the course of modeling for the conformity analysis, details on current transit operating policies including fares and service levels may be found on the Hampton Roads Transit (HRT) and Williamsburg Area Transportation Authority (WATA) websites¹⁷. Transit service and fares as well as road and bridge tolls are also addressed in supporting documentation for the Plan and associated modeling.

In brief, local transit fares have not changed (or not changed significantly) since the last conformity analysis for either HRT or the WATA. For HRT, the current single ticket fare for local bus service is \$1.50. A day pass (the Go Pass) was introduced in 2008 with a fare of \$3.50 for a one-day pass. For WATA, the fare for a one-way trip is \$1.25; for seniors (60 and over) and disabled, a reduced fare of \$0.50 applies. An all-day pass (for unlimited trips) is also available for a fare of \$1.50. In keeping with the Americans with Disabilities Act (ADA), door-to-door service is also available for those unable to use bus at a fare of \$2.00 per one-way trip. Finally, express bus service modeling includes the “Max” service, with fares converted to constant 2000 dollars.

- 93.110(e) Transportation Control Measures (TCMs) and Other Measures: This section requires that “*The conformity determination must use the latest existing information regarding the effectiveness of the TCMs [transportation control measures] and other implementation plan measures which have already been implemented.*”

The applicable SIP revision (maintenance plan) for Hampton Roads does not include transportation control measures (TCMs). TCMs are therefore not required for the conformity analysis or determination. Accordingly, credit for TCMs was not taken in this analysis. See 72 FR 30490, effective June 1, 2007.

Other measures applicable for on-road motor vehicles as listed in the applicable implementation (maintenance) plan include *Tier 2/Low Sulfur Gasoline Rule, 2007 On Road Diesel Engine Rule, and Reformulated gasoline (on-road)*¹⁸. Other or associated measures implemented in the region and documented in this report include gasoline Reid Vapor Pressure (RVP) limits and early implementation of the National Low Emission Vehicle

¹⁷ See www.hrtransit.org and www.williamsburgtransport.com, respectively.

¹⁸ VDEQ, *Maintenance Plan for the Hampton Roads Nonattainment Area Consisting of the Cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Suffolk, Virginia Beach, and Williamsburg and the Counties of James City, York, Gloucester, and Isle of Wight - Final*, ca October 2006. See Table 5.2.2-1 (*Maintenance Plan Control Measures and Emission Reductions*) on page 8.

The Technical Support Document (TSD) for the maintenance plan lists the same measures under slightly different headings, namely the *Federal Tier 2/Low Sulfur Gasoline Rule, Federal Heavy Duty Diesel Engine Rule, and Reformulated Gasoline (On-Road)*. See: VDEQ, *Technical Support Document for the Redesignation Request and Maintenance Plan for Hampton Roads 8-hour Ozone Nonattainment Area - Final*, ca October 2006, Table 8-1 (*Maintenance Plan Control Measures and Emission Reductions*), p.282.

(NLEV) Program. All of these measures have been implemented and were therefore credited in this analysis as appropriate.

Further, and though not specified in the implementation plan, other measures have been implemented that have or may have the effect of reducing emissions. Credit for these measures was not needed to demonstrate conformity and was therefore not taken for this analysis. These measures include transit bus replacements, Congestion Mitigation and Air Quality (CMAQ) funded projects, van pools, and park-and-ride lots.

- 93.110(f) Consultation on Key Assumptions: This section requires that “*Key assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by Sec. 93.105*”.

Consultation was conducted on all key assumptions in accord with both federal and state regulations, as documented below in the summary on consultation.

- Section 93.111 (Latest Emissions Model)¹⁹. Requirements to apply the latest emission model were satisfied using MOBILE6.2 for this conformity analysis. The use of the latest emission model is specified in the federal conformity rule at 93.111(a) as follows: “*The conformity determination must be based on the latest emission estimation model available*.” However, when EPA issues a new model, a grace or transition period applies in which the previous model or version of the model may still be applied, per the federal conformity rule at 93.111(c) which states: “*Transportation plan and TIP conformity analyses for which the emissions analysis was begun during the grace period or before the Federal Register notice of availability of the latest emission model may continue to use the previous version of the model*.”

On March 2, 2010, EPA officially released the next generation Motor Vehicle Emission Simulator (MOVES2010) model for use in SIP development and regional conformity applications²⁰. The EPA notice indicated that a two-year grace period (ending March 2, 2012) will apply for use of the new model in regional emissions analyses for transportation conformity determinations. Therefore, for regional conformity analyses initiated before or within the two-year

¹⁹ Federal Conformity Rule, 40 CFR 93.111 *Criteria and Procedures: Latest Emissions Model* <http://edocket.access.gpo.gov/cfr/2009/julctr/40cfr93.111.htm>

²⁰ US EPA, 75 FR 9411, [FRL-9121-1], *Official Release of the MOVES2010 Motor Vehicle Emissions Model for Emissions Inventories in SIPs and Transportation Conformity*, Notice of Availability, March 2, 2010. Available at: <http://edocket.access.gpo.gov/2010/2010-4312.htm>. The model name or version as initially released was “MOVES2010”, and an updated version “MOVES2010a” was released in August 2010. To allow for pending future revisions to the model and any associated revisions to the model name, the current version of the model is referenced here generically as “MOVES”. See:

- EPA website for MOVES: <http://www.epa.gov/otaq/models/moves/index.htm>.
- US EPA, *Policy Guidance on the Use of MOVES2010 for State Implementation Plan Development, Transportation Conformity, and Other Purposes*, EPA-420-B-09-046, December 2009. Direct link: <http://www.epa.gov/otaq/models/moves/420b09046.pdf>.

grace period, the MOBILE6.2 model (the model previously designated as the official model by EPA) may continue to be applied.

The selection of latest emission model for the conformity analysis was considered by the ICG at the beginning of the conformity analysis process, as documented in the chapter on consultation and in Appendix D. The consensus of the ICG was to apply the MOBILE6.2 model for this analysis, within the grace period. The MOVES model may be applied in future analyses once appropriate steps have been taken, within the grace period, to review and update as needed the applicable budgets specified in the maintenance plan²¹.

- Section 93.112 (Consultation)²²: Regulatory requirements for consultation that were initially established at the federal level have been reflected in state regulations and requirements as well as locally developed inter-agency and public consultation procedures. Exhibit ES-2 presents an overview of applicable federal, state and local consultation requirements.

Federal Regulation: Federal requirements for consultation as specified in the conformity rule in Section 93.105 were made subject in Section 93.112 to the establishment and approval by EPA of corresponding state requirements, as follows: *“Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450. Until the implementation plan revision required by §51.390 of this chapter is fully approved by EPA, the conformity determination must be made according to §93.105 (a)(2) and (e) and the requirements of 23 CFR part 450.”*

The referenced section, 51.390, of the federal transportation conformity rule effectively requires the development of a state regulation to govern conformity consultation processes and further provides that the state regulation once approved by EPA effectively governs (over the federal) where they overlap. Section 51.390c provides that: *“Timing and approval... Following EPA approval of the state conformity provisions (or a portion thereof) in a revision to the state’s conformity implementation plan, conformity determinations will be governed by the approved (or approved portion of the) state criteria and procedures as well as any applicable portions of the federal conformity rules that are not addressed by the approved conformity SIP.”*

Commonwealth of Virginia Regulation: The Virginia “*Regulation for Transportation Conformity*” (9 VAC 5-151) satisfies these requirements and is therefore the governing regulation for consultation for conformity purposes for the Commonwealth.

²¹ A separate process to review and update as appropriate (using MOVES) the motor vehicle emission budgets specified in the currently applicable SIP revision (maintenance plan) is planned. This review and update process would need to be completed before the new or revised budgets could be applied in future conformity analyses.

²² Federal Conformity Rule, 40 CFR 93.112 Criteria and Procedures: Consultation http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.112.htm

Although the Virginia regulation generally mirrors the federal with regard to specific consultation requirements, one difference is that the Virginia regulation requires that the Lead (or Local) Planning Organization (LPO) for air quality planning that has been established for the region pursuant to Section 174 of the federal Clean Air Act as amended specifically be included in consultation for conformity purposes. The Hampton Roads Air Quality Committee (HRAQC) is the designated LPO for the region, and the involvement of the VDEQ staff representative for that Committee in the local inter-agency consultation process for conformity is considered to fulfill that requirement.

Hampton Roads Procedures: Both inter-agency and public consultation procedures have been established for Hampton Roads. Inter-agency consultation procedures for conformity were approved in 2005^{23,24}. An Interagency Consultation Group (ICG) has been established that includes representatives of member agencies of the HRTPO, Virginia Department of Rail and Public Transportation (VDRPT), VDOT, FHWA, FTA, VDEQ and the US EPA. A representative of the LPO also participates in consultation with the ICG. All meetings are open to the public.

Public consultation for the LRTP, TIP and conformity is conducted following the extensive procedures presented in the “*Public Participation Plan*” (PPP)²⁵ that was approved by the HRTPO in December 2009. The PPP responds to SAFETEA-LU requirements as implemented with the revised planning regulations (23 CFR Part 450). The ICG procedures are also referenced in the PPP, and the two processes are coordinated.

The main report includes a summary of all applicable federal, state and local consultation requirements as well as a record of inter-agency and public consultation activities conducted in support of this analysis. The consultation record is also reviewed below.

²³ VDOT, *Consultation Procedures for the Hampton Roads Ozone Nonattainment Area in Support of the Transportation Conformity Regulations*, Revised July 18, 2005. See: http://www.hrtpo.org/Documents/Reports/Rev_HR_ICP2005.pdf

²⁴ The recent approval by EPA of the Virginia *Regulation for Transportation Conformity* will require updates to currently established consultation procedures for MPOs across the Commonwealth, including the HRTPO. However, since the consultation requirements specified in the new Virginia regulation generally mirror those in the existing federal regulation, the updates are expected to be largely editorial in nature and not involve significant changes to established consultation processes.

For Hampton Roads, an update to existing consultation procedures is in the planning stages. The update is planned to not only reflect changes as appropriate to the applicable regulations for the new Virginia regulation but also to provide the ICG an opportunity to update and streamline existing consultation processes.

²⁵ Hampton Roads TPO, *Public Participation Plan*, December 2009: [http://www.hrtpo.org/Documents/Reports/HRTPO%20PPP%20-%20December%202009%20\(Final\).pdf](http://www.hrtpo.org/Documents/Reports/HRTPO%20PPP%20-%20December%202009%20(Final).pdf)

Exhibit ES-2: Federal, State and Local Consultation Requirements Relating to Transportation Conformity

DATE	REQUIREMENT
<u>PENDING</u>	<p><u><i>Update to Inter-Agency Consultation Procedures for Transportation Conformity.</i></u></p> <p>Update for the existing (2005) Hampton Roads Conformity Consultation Procedures, both to reflect the new Virginia Conformity SIP (<i>Regulation for Transportation Conformity</i>, 9 VAC 5-151) and to streamline and update existing processes as appropriate.</p>
<u>CURRENTLY APPLICABLE OR APPROVED</u>	<p>Federal</p> <p>Legislation & Regulations</p> <p><u><i>US EPA Regulation for Transportation Conformity (40 CFR Parts 51 and 93).</i></u> Key requirements for consultation are addressed in Sections 51.390, 93.105, and 93.112.</p> <p>March 24, 2010 <i>Transportation Conformity Regulations Updated March 2010</i> issued by EPA. This is the most current compilation by EPA of the Federal Transportation Conformity Rule (40 CFR Parts 51 and 93). It reflects all amendments made since the initial issuance by EPA of the rule in 1993 through March 24, 2010, including revisions promulgated pursuant to SAFETEA-LU in 2005.</p> <p><u><i>US DOT Planning Assistance and Standards (23 CFR Part 450)(Transportation Planning & Programming Requirements).</i></u> Key requirements for consultation are addressed in Section 450.316 Interested parties, participation, and consultation.</p> <p>February 14, 2007 US DOT, Federal Highway Administration, 23 CFR Parts 450 and 500, Federal Transit Administration, 49 CFR Part 613 [Docket No. FHWA-2005-22986] RIN 2125-AF09; FTA RIN 2132-AA82, <i>Statewide Transportation Planning; Metropolitan Transportation Planning</i>, Final Rule. Most recent major update to the federal planning regulations.</p> <p><u><i>Legislation - Clean Air Act as amended, and subsequent SAFETEA-LU amendments.</i></u></p> <p>August 10, 2005 Federal Reauthorization (<i>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users</i>, or SAFETEA-LU, Public Law 109-59), which addressed in part conformity.</p> <p>November 15, 1990 Last set of major amendments to the <i>Clean Air Act</i>, although there have been minor amendments since. Conformity is addressed in Section 176(c).</p> <p>State</p> <p>Federally-Required State Regulation for Transportation Conformity (9 VAC 5-151)</p> <p>January 19, 2010 Effective date for the new Virginia <i>Regulation for Transportation Conformity</i> (9 VAC 5-151) approved 11/20/09 by EPA via Federal Register notice. See US EPA, 74 FR 60194, 40 CFR Part 52, [EPA-R03-OAR-2009-0674; FRL-8983-1], "Approval and Promulgation of Air Quality Implementation Plans; Virginia; Transportation Conformity Regulations", Direct Final Rule, November 20, 2009. The regulation was approved as submitted on March 23, 2009.</p> <p>March 23, 2009 Submittal the Virginia <i>Regulation for Transportation Conformity</i> (9 VAC 5-151) by the VDEQ to the US EPA for approval in response to federal conformity rule requirements at 40 CFR Part 51. By the federal rule, the requirements of the new state regulation generally govern over the pre-existing federal requirements for consultation for conformity purposes (where they overlap, and as long as they are no less stringent).</p> <p>Local</p> <p>Consultation Procedures</p> <p><u><i>Public Participation Plan</i></u> December 16, 2009 MPO (HRTPO) approval of the <i>Hampton Roads Transportation Planning Organization Public Participation Plan</i> dated December 2009. This document responds to public and consultation stakeholder requirements specified in 23 CFR Part 450.</p> <p><u><i>Inter-Agency Consultation Procedures for Transportation Conformity</i></u> September 21, 2005 MPO (HRTPO) approval of (Inter-Agency) <i>Consultation Procedures for the Hampton Roads Ozone Nonattainment Area in Support of the Transportation Conformity Regulations</i> (Revised July 18, 2005). This revision updated the initial version approved in July 2001. These procedures were developed in response to requirements of the federal conformity rule at 40 CFR 93.105.</p>

Consultation Record

Interagency and public consultation opportunities relating to this conformity analysis, including the prior development of project lists, were (or will be) provided at the following meetings and events:

- November 17, 2010: HRTPO approval of an amendment to the 2030 LRTP. HRTPO meetings are open to the public, with email announcements (including public notices) and agendas posted the week before the meeting.
- December 1, 2010: ICG meeting, marking the beginning of the conformity analysis process. This meeting provided an opportunity for detailed review and comment on all aspects of the proposed analysis, including models, associated methods and assumptions, project lists for the Plan and TIP (including changes), and overall schedule.

Exhibit ES-3 lists current members of the Hampton Roads ICG. Membership includes all parties identified in the both the federal and state conformity regulations and is consistent with the requirements given in the 2005 Conformity Consultation Procedures for Hampton Roads.

ICG meeting notices were distributed by email and also posted on the HRTPO web site. The email distribution list included representatives of all of the agencies listed in the Exhibit for the ICG, which includes members of the TTAC, as well as the staff representative for the HRAQC (LPO).

Comments received from the ICG comments are documented in the minutes for the meeting, which are referenced below and copied in Appendix D. Comments were limited to minor updates to the project lists for modeling and to the proposed schedule for the conformity analysis.

Public comment was also sought at or in conjunction with the ICG meeting and on the project lists for the conformity finalized at the ICG meeting. The ICG meeting was noted on the TTAC agenda for which the “HRTPO Weekly Update” public notice email was distributed the week before the meeting (on Friday, November 26, 2010). A public announcement for the meeting was posted on or by November 29, 2010 on the HRTPO website.

An opportunity for public input was provided at the ICG meeting. No comments from the public were received at the meeting. One written comment from a member of the public was received one day in advance of the meeting and was distributed to meeting participants (and is copied in Appendix D, which addresses consultation). No comments were received that would require a material change to the conformity analysis.

Following the meeting, the project lists for the conformity analysis were posted on the HRTPO website for a fourteen-day public review period. A notice of the availability of the project lists for the conformity analysis was included in the regular “HRTPO Weekly Update” email issued December 8, 2010 by the HRTPO. The public comment period ended December 20, 2010. No comments were received or none that would require a material change to

the conformity analysis.

Exhibit ES-3: Hampton Roads Interagency Consultation Group (ICG)

<i>Agency</i>	<i>Staff</i>
<i>City/County</i> City of Chesapeake City of Hampton City of Newport News City of Norfolk City of Poquoson City of Portsmouth City of Suffolk City of Virginia Beach City of Williamsburg Gloucester County Isle of Wight County James City County York County	Earl Sorey Lynn Allsbrook Michael King Jeffrey Raliski Deborah Vest Richard Hartman Robert Lewis Travis Campbell Reed Nester Anne Ducey-Ortiz Jane Hill Steven Hicks Timothy Cross
<i>Regional</i> Hampton Roads Transportation Planning Organization Hampton Roads Transit Williamsburg Area Transit Authority	Andy Pickard Jayne Whitney Richard Drumwright
<i>State</i> Virginia Dept. of Environmental Quality Virginia Dept. of Rail & Public Transportation Virginia Dept. of Transportation – C/O Environmental Virginia Dept. of Transportation – C/O Planning	Sonya Lewis-Cheatham Joseph Swartz Jim Ponticello Jaesup Lee
<i>Federal</i> Environmental Protection Agency Federal Highway Administration Federal Transit Administration	Martin Kotsch Marisel Lopez-Cruz Tony Cho
<i>Alternates / Other (non-voting)</i> City of Suffolk James City County US Navy	<i>Alternate Other</i> Sherry Earley Scott Mills Allen Murphy Jennifer Tabor

* Listing as of November 23, 2010.

The presentation given at the ICG meeting included a review of the membership list (including the involvement of the LPO in the consultation process), selection of the latest emission model for the analysis, modeling methodology and assumptions (including the selection of socioeconomic forecasts to meet latest planning assumption requirements), the project lists to be applied in the conformity analysis for the Plan and TIP, and the conformity analysis schedule. The presentation also addressed a planned future update to the ICG Consultation Procedures pursuant to the recent approval of the Virginia *Regulation for Transportation Conformity*.

Draft meeting minutes (including attachments and an updated ICG Membership list) were distributed for comment. No comments were received.

Copies of all materials distributed for the ICG Meeting are provided in Appendix D, with the exception of the project lists for the Plan and TIP which are presented separately (given their length) in Appendix E. Appendix D includes the meeting agenda, membership list, draft modeling methodology and assumptions (draft chapter of conformity analysis report), draft conformity analysis schedule, presentation (PowerPoint slides), and email/website notices. Comments received are also copied in this appendix. Additionally, email transmittals for both draft and final minutes are copied in this Appendix, with the final minutes attached.

- December 6-20, 2010: Fourteen-day public comment period on the project lists for the Amended 2030 LRTP and FY 2009-2012 TIP. The public review period was initiated following changes agreed at the ICG meeting and noted in the minutes. An announcement of the public review period on the project lists was provided to more than 4,000 email addresses, among them local and regional media and public information officers. No comments requiring a material change to the analysis were received.
- March 2, 2011: TTAC recommendation for approval of the draft Conformity Analysis and proposed finding of conformity for the amended 2030 LRTP and amended FY 2009-2012 TIP, subject to no adverse comments received during the associated public review period that would require their review. No comments requiring a material change to the draft analysis or proposed finding of conformity were received.
- February 23-March 9, 2011: Fourteen-day public review period on the draft Regional Conformity Analysis and its proposed finding of conformity. A public notice with links to copies of the draft Conformity Analysis and its Executive Summary were posted on the HRTPO website, links to which were provided in its regular weekly broadcast email. The public review period was also noted in the agendas for the TTAC and TPO meetings in March 2011. No comments requiring a material change to the draft analysis or proposed finding of conformity were received.
- March 17, 2011: HRTPO approval of the draft Conformity Analysis and finding of conformity for the amended 2030 LRTP and amended FY 2009-2012 TIP, both of which were determined to be fiscally-constrained by the HRTPO. No comments requiring a material change to the draft analysis or proposed finding of conformity were received.
- Section 93.113 (Timely Implementation of TCMs)²⁶: As indicated previously under “Latest Planning Assumptions”, the applicable SIP revision (maintenance plan) for Hampton Roads does not include transportation control measures

²⁶ Federal Conformity Rule, 40 CFR 93.113 Criteria and Procedures: *Timely Implementation of TCMs* http://edocket.access.gpo.gov/cfr_2009/julqtr/40cfr93.113.htm

(TCMs). TCMs are therefore not required for the conformity analysis or determination. See 72 FR 30490, effective June 1, 2007.

- Section 93.118 (Motor Vehicle Emissions Budget)²⁷: Requirements of the federal conformity rule with regard to the applicable motor vehicle emission budgets were met as follows:
 - (a) *The transportation plan, TIP... must be consistent with the motor vehicle emissions budget(s) in the applicable implementation plan... This criterion is satisfied if it is demonstrated that emissions of the pollutants ...are less than or equal to the motor vehicle emissions budget(s)....*”,

Exhibit ES-4 lists the motor vehicle emission budgets as specified in the applicable implementation plan revision, namely the 2007 maintenance plan for the eight-hour ozone standard as previously referenced. Budgets are specified for nitrogen oxides (NO_x) and for volatile organic compounds (VOC), both of which are precursors to ozone formation.

Exhibit ES-4: Motor Vehicle Emission Budgets for Hampton Roads

ADEQUATE AND APPROVED MOTOR VEHICLE EMISSIONS BUDGETS (MVEBS) IN TONS PER DAY (TPD)		
Budget year	NO _x	VOC
2011	50.387	37.846
2018	31.890	27.574

Source: Excerpted from 72 FR 30490, effective June 1, 2007.

Exhibit ES-5 presents the emission forecasts for the LRTP and TIP in comparison to the specified motor vehicle emission budgets. The forecast emissions are less than the corresponding budgets established in the applicable SIP revision (maintenance plan) for each pollutant and year tested. The emission tests required by the federal conformity rule are therefore passed.

For transparency and to demonstrate consistency with the methodology applied in the maintenance plan, the Exhibit presents separate emission totals for network emissions, off-network emissions, and contributions from mobile sources operating on military bases within the Hampton Roads maintenance area.

- (b) *“Consistency with the motor vehicle emissions budget(s) must be demonstrated for each year for which the applicable (and/or submitted) implementation plan specifically establishes motor vehicle emissions*

²⁷ Federal Conformity Rule, 40 CFR 93.118 Criteria and Procedures: Motor Vehicle Emissions Budget <http://edocket.access.gpo.gov/cfr/2009/julqtr/40cfr93.118.htm>

budget(s), for the attainment year (if it is within the timeframe of the transportation plan and conformity determination), for the last year of the timeframe of the conformity determination ..., and for any intermediate years within the timeframe of the conformity determination as necessary so that the years for which consistency is demonstrated are no more than ten years apart ... “

Exhibit ES-5: Conformity (Emission Budget) Tests

Year	Regional Emissions (tons per average ozone season weekday)	
	NO _x	VOC
2011 Budget Year		
Network	36.81	27.94
Off-Network	8.30	8.58
Military Base	0.52	0.26
TOTAL FORECAST:	45.63	36.78
Budget:	50.387	37.846
Conformity Test:	PASSED	PASSED
2018 Budget Year		
Network	21.13	18.65
Off-Network	4.92	5.95
Military Base	0.52	0.26
TOTAL FORECAST:	26.57	24.86
Budget:	31.890	27.574
Conformity Test:	PASSED	PASSED
2020 Interim Year (within ten years of other years modeled)		
Network	19.07	16.57
Off-Network	4.48	5.45
Military Base	0.52	0.26
TOTAL FORECAST:	24.08	22.28
2018 Budget:	31.890	27.574
Conformity Test:	PASSED	PASSED
2030 LRTP Horizon Year		
Network	16.42	16.02
Off-Network	4.04	5.64
Military Base	0.52	0.26
TOTAL FORECAST:	20.97	21.92
2018 Budget:	31.890	27.574
Conformity Test:	PASSED	PASSED

* Budgets specified in 72 FR 30490, effective June 1, 2007, with military base contributions from Table 4-7, p. 62, in the TSD for the referenced Maintenance Plan.

The motor vehicle emission budget tests were satisfied for each pollutant and year modeled, as noted above. The years modeled were selected as follows:

- 2011 and 2018 are years for which motor vehicle emission budgets are specified in the applicable implementation plan revision (maintenance plan) referenced above, and the federal conformity rule requires that years for which budgets are established must be modeled.
- 2030 is the horizon year for the LRTP, which the federal conformity requires to be modeled.
- 2020 satisfies the interim year requirement (such that analysis years are no more than ten years apart) specified in the federal conformity rule.

Since the federal conformity rule requires that motor vehicle budgets established “for the most recent prior year” apply for years for which budgets have not been “specifically established”, the 2018 budgets as listed are also applicable for the subsequent test years (2020 and 2030).

(c) *“Consistency with the motor vehicle emissions budget(s) must be demonstrated for each pollutant or pollutant precursor ...for which the area is in nonattainment or maintenance and for which the applicable implementation plan (or implementation plan submission) establishes a motor vehicle emissions budget”*,

The motor vehicle emission budget tests were satisfied for each pollutant and year modeled, as noted above. The pollutants modeled (NO_x and VOC precursors to ozone) were ones for which motor vehicle emission budgets were specified in the applicable implementation plan revision, namely the 2007 maintenance plan for the eight-hour ozone standard) as noted above.

(d) *“Consistency with the motor vehicle emissions budget(s) must be demonstrated by including emissions from the entire transportation system, including all regionally significant projects contained in the transportation plan and all other regionally significant highway and transit projects expected in the nonattainment or maintenance area in the timeframe of the transportation plan...”*

The motor vehicle emission budget tests were satisfied for each pollutant and year modeled, as noted above. Emissions from the entire transportation system, including “all regionally significant projects contained in the transportation plan and all other regionally significant highway and transit projects expected in the maintenance area in the timeframe of the transportation plan”, were included in the analysis. For this purpose, separate emission forecasts were generated for motor vehicle traffic on network and off-network facilities and military bases.

Network emissions are those attributable to travel on roadways included in the regional travel demand (network) model. This includes all existing roadway facilities and transit service as well as all regionally significant roadway projects and transit services planned to be open or operational by each year modeled. Estimates for emissions attributable to travel on network facilities were estimated for each year modeled for the conformity analysis.

Off-network emissions are for travel on local and collector streets not included in the regional travel demand network model. Estimates for emissions attributable to travel on off-network facilities were also estimated for each year modeled for the conformity analysis.

Exhibit ES-6 presents the estimated emissions for on-road motor vehicles operating on military bases in the Hampton Roads area as reported in the technical support document for the maintenance plan and incorporated into the emission forecasts for the conformity analysis. The estimates do not vary by year.

Exhibit ES-6: Hampton Roads Military Base Emissions

Year	Regional Emissions (tons per ozone season weekday)	
	NOx	VOC
2011	0.52	0.26
2018	0.52	0.26

Source: Table 4-7, page 62, in the Technical Support Document for the Maintenance Plan approved effective June 1, 2007 (72 FR 30490)

For reference, Chapter 1 of the main report provides a more detailed review of applicable federal, state and local regulatory requirements.

Chapter 2 documents the transportation and emission modeling methodology, key data and assumptions as applied in the analysis, and a summary of the modeling results.

Chapter 3 provides an overview of all applicable consultation requirements as well as a chronological consultation record of meetings and events related to the analysis. Copies of consultation materials including meeting agenda, minutes, conformity analysis schedule, presentation and handouts are provided in Appendix D. Project lists are provided in Appendix E.

Chapter 4 summarizes the results of the conformity demonstration and the conclusion.

