



Hampton Roads, Virginia Eight-Hour Ozone Maintenance Area

Transportation Conformity Analysis

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

DRAFT EXECUTIVE SUMMARY

Prepared by: Virginia Department of Transportation

May 2010



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. This 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 Plan and Program 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. New Website: <http://www.hrtpo.org>.

² Federal Transportation Conformity Regulations (EPA Website): <http://www.epa.gov/otaq/stateresources/transconf/conf-regs.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 State 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 pre-requisite 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 E. 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 E. 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, while local transit fares have not changed (or not changed significantly) since the last conformity analysis for either HRT or the WATA, express bus service has been augmented. For Hampton Roads Transit, 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 Williamsburg Area Transit, 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 has been augmented in the model with the addition of new (“Max”) express bus 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

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.

region and documented in this report include gasoline Reid Vapor Pressure (RVP) limits and early implementation of the National Low Emission Vehicle (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.

- o 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 the corresponding (and newly applicable) state regulation, 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/julqtr/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>. While the official name of the current model is “MOVES2010”, it is abbreviated here as “MOVES” to allow for pending future revisions to the model and any associated revisions to the model name. For additional information, 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 E. 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 recently approved Virginia “*Regulation for Transportation Conformity*” (9 VAC 5-151) as previously referenced satisfies these requirements and is now 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 using MOVES for the region.

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. As the Hampton Roads Air Quality Committee (HRAQC) is the designated LPO for the region, 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 by the Hampton Roads MPO in 2005^{23,24}. As required by these procedures, an Interagency Consultation Group (ICG) for Hampton Roads has been formed. Members of the ICG include representatives of federal, state and local air and transportation agencies, including the member agencies of the HRTPO, Virginia Department of Rail and Public Transportation (VDRPT), VDOT, FHWA, FTA, VDEQ and the US EPA. As noted above, the LPO is also involved in consultation with the ICG. All meetings are open to the public.

Public consultation on the LRTP and TIP (versus the conformity analysis specifically) is conducted following the extensive procedures presented in the Hampton Roads “*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). Conformity consultation requirements including the existing ICG procedures are 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
PENDING	
<p><u>Update to Inter-Agency Consultation Procedures for Transportation Conformity</u> 2010</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>
CURRENTLY APPLICABLE OR APPROVED	
Federal	
Legislation & Regulations	
<p><u>US EPA Regulation for Transportation Conformity (40 CFR Parts 51 and 93).</u> Key requirements for consultation are addressed in Sections 51.390, 93.105, and 93.112.</p>	
<p>March 24, 2010</p>	<p><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>US DOT Planning Assistance and Standards (23 CFR Part 450)(Transportation Planning & Programming Requirements).</u> Key requirements for consultation are addressed in Section 450.316 Interested parties, participation, and consultation.</p>	
<p>February 14, 2007</p>	<p>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>Legislation - Clean Air Act as amended, and subsequent SAFETEA-LU amendments.</u></p>	
<p>August 10, 2005</p>	<p>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</p>	<p>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>
State	
Federally-Required State Regulation for Transportation Conformity (9 VAC 5-151)	
<p>January 19, 2010</p>	<p>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], "<i>Approval and Promulgation of Air Quality Implementation Plans; Virginia; Transportation Conformity Regulations</i>", Direct Final Rule, November 20, 2009. The regulation was approved as submitted on March 23, 2009.</p>
<p>March 23, 2009</p>	<p>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>
Local	
Consultation Procedures	
<p><u>Public Participation Plan</u> December 16, 2009</p>	<p>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>Inter-Agency Consultation Procedures for Transportation Conformity</u> September 21, 2005</p>	<p>MPO (HRTPO) approval of (Inter-Agency) <i>Consultation Procedures for the Hampton Roads Ozone Nonattainment Area in Support of the Transportation Conformity Regulations (Revised July 18, 2005)</i>. 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:

- December 16, 2009: HRTPO approval of amendments to the 2030 LRTP (to be subject to a conformity analysis). HRTPO meetings are open to the public, with email announcements (including public notices) and agendas generally posted the week before the meeting.
- March 3, 2010: TTAC approval of list of projects for amendment to the 2030 LRTP, accounting for a February 2010 federal update to stimulus funding. TTAC meetings are open to the public, with email announcements (including public notices) and agendas generally posted the week before the meeting.
- April 7, 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. Updates to the member list incorporated subsequent to the ICG meeting are italicized. The new *Virginia Regulation for Transportation Conformity* does not specifically require changes to the ICG membership and the agencies and other parties that it does specify to be consulted (as noted in the section above) were all included in the consultation for this analysis.

Meeting notices were distributed by email and also posted on the HRTPO web site. The email distribution list included the members of the Hampton Roads TTAC in addition to the agencies listed in the Exhibit for the ICG as well as the staff representative for the HRAQC (LPO).

A public announcement for the meeting was posted on March 31, 2010 on the HRTPO website on the same page as the affiliated TTAC meeting scheduled to immediately follow the ICG meeting at the same location. Public involvement was at the same time also solicited via an announcement posted in the *Public Notices* section on the HRTPO website as well as a regularly-scheduled HRTPO *Public Notice* email distributed the same day in which the upcoming ICG meeting was listed along with other public meetings. An opportunity was provided for public input at the meeting. No comments from the public were received at the meeting.

Copies of materials distributed for the ICG Meeting are provided in Appendix E, with the exception of the project lists for the Plan and TIP which are presented separately (given their length) in Appendix F. Consultation materials presented in the Appendix E include email notice, website notices, ICG meeting agenda, ICG membership list, draft modeling methodology and assumptions (draft chapter of conformity analysis report), draft conformity analysis schedule, and the ICG meeting presentation (PowerPoint slides).

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

Agency	Staff
<i>City/County</i> City of Chesapeake City of Hampton City of Newport News City of Norfolk City of Poquoson City of Portsmouth <i>City of Suffolk</i> 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 Jeff Bliemel Richard Hartman <i>Robert Lewis</i> 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 Jeremy Raw
<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> <i>City of Suffolk</i> James City County <i>US Navy</i>	<i>Sherry Earley</i> Allen Murphy <i>Jennifer Tabor</i>

* Listing as of April 21, 2010. Changes made since the April 7, 2010 ICG meeting are italicized.

The presentation given at the ICG meeting addressed the membership list (and the inclusion of the LPO in the consultation process), selection of the latest emission model for the analysis, modeling methodology and assumptions for the conformity analysis (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 approval of the Virginia *Regulation for Transportation Conformity*.

Draft meeting minutes (including attachments and an updated ICG Membership list) were distributed for comment. Other than updates to the membership list, no comments on the draft minutes were received. Email for

both draft and final minutes are included in the Appendix E, with the final minutes included in full.

- April 7-21, 2010: Fourteen-day public comment period for the Amended 2030 LRTP and FY 2009-2012 TIP project lists, conducted immediately following the ICG meeting. An announcement was provided to more than 4,000 email addresses, among them local and regional media and public information officers. Two comments from the public were received. Copies of the comments received and responses provided are included in Appendix E.
- *May 26-June 9, 2010: Fourteen-day public review period on the draft Regional Conformity Analysis and proposed finding of conformity. HRTPO staff published a public notice in local newspapers and on the web site seeking comments, and published the draft Conformity Analysis on the HRTPO website.*
- *June 2, 2010: TTAC recommendation for approval of the draft Conformity Analysis and proposed finding of conformity, subject to no adverse comments received during the associated public review period.*
- *June 16, 2010: HRTPO approval of the Conformity Analysis and finding of conformity.*
- 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 (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.

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

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

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 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 ... “*

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

- The years 2011 and 2018 are ones for which the applicable implementation plan revision (maintenance plan) as noted above specifies motor vehicle emission budgets.
- The year 2030 was selected as the horizon year for the LRTP.
- To meet the interim year requirement (ten-year limit), the year 2020 was selected.

Since the 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).

Exhibit ES-5: Conformity (Emission Budget) Tests

Year	Regional Emissions (tons per average ozone season weekday)	
	NO _x	VOC
2011 Budget Year		
<i>Network</i>	36.83	27.95
<i>Off-Network</i>	8.50	8.78
<i>Military Base</i>	0.52	0.26
TOTAL FORECAST:	45.85	36.99
Budget:	50.387	37.846
Conformity Test:	PASSED	PASSED
2018 Budget Year		
<i>Network</i>	21.08	18.59
<i>Off-Network</i>	5.03	6.09
<i>Military Base</i>	0.52	0.26
TOTAL FORECAST:	26.64	24.94
Budget:	31.890	27.574
Conformity Test:	PASSED	PASSED
2020 Interim Year (within ten years of other years modeled)		
<i>Network</i>	19.10	16.58
<i>Off-Network</i>	4.59	5.58
<i>Military Base</i>	0.52	0.26
TOTAL FORECAST:	24.21	22.41
2018 Budget:	31.890	27.574
Conformity Test:	PASSED	PASSED
2030 LRTP Horizon Year		
<i>Network</i>	16.37	15.97
<i>Off-Network</i>	4.14	5.77
<i>Military Base</i>	0.52	0.26
TOTAL FORECAST:	21.02	22.00
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.

- (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.

Contributions from military bases were taken as specified in the maintenance plan for the region. 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. The estimates do not vary by year.

Exhibit ES-6: Hampton Roads Military Base Emissions

Year	Regional Emissions <i>(tons per ozone season weekday)</i>	
	NO _x	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)

