HAMPTON ROADS 2030 LONG-RANGE TRANSPORTATION PLAN

APPENDICES

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PLANNING DISTRICT COMMISSION
December 2007

T07-10

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HAMPTON ROADS
2030 LONG-RANGE TRANSPORTATION PLAN

APPENDICES

This report was included in the Work Program
for Fiscal Year 2006-2007, which was approved
by the Commission and the Metropolitan
Planning Organization at their
meetings of March 15, 2006**.**

PREPARED BY

HAMPTON ROADS
PLANNING DISTRICT COMMISSION

HAMPTON ROADS PLANNING DISTRICT COMMISSION
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AUTHORS
Robert B. Case, P.E.
Andrew Pickard, P.E.
Dale M. Stith

ORGANIZATION NAME, ADDRESS AND TELEPHONE
Hampton Roads Planning District Commission
723 Woodlake Drive
Chesapeake, Virginia 23320
(757) 420-8300

ABSTRACT

This document identifies the transportation projects planned to be in place in the year 2030 in Hampton Roads and records the process through which the Plan was developed. The purpose of the project identification lists is to serve as a reservoir from which projects are moved to implementation, and to inform persons in both the public and private sectors of planned transportation investments. The purpose of the planning process record is:

- To allow the reader to weigh the assumptions, analyses, and procedures used during the plan development and thereby to judge the validity of the Plan, and

- To serve as a guide for the next planning cycle.

ACKNOWLEDGEMENTS

Prepared in cooperation with the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), and the Virginia Department of Transportation (VDOT). The contents of this report reflect the views of the Hampton Roads Metropolitan Planning Organization (MPO). The Hampton Roads Planning District Commission (HRPDC) is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, VDOT, or HRPDC. This report does not constitute a standard, specification, or regulation. FHWA or VDOT acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

APPENDICES

APPENDIX A- INFORMATION SECURITY

Document #1- “Information Security Policy,
Critical Infrastructure Information/Sensitive Security Information (CII/SSI)”

Document #2- “Information Security Policy,
Information Security Policy Development”

Document #3- “Information Security Policy,
Information Access Control”

Document #1

“Information Security Policy,
Critical Infrastructure Information/Sensitive Security Information (CII/SSI)”

Information Security Policy

SUBJECT: Critical Infrastructure Information/Sensitive Security Information (CII/SSI)

ABSTRACT:

The CII/SSI Policy provides uniform guidance for the identification, designation and security-in-depth protection of CII/SSI and for the identification of responsible parties for identifying, designating, marking, safeguarding, protecting, using, storing, reproducing, disposing, and transmitting CII/SSI documents. This policy also establishes the minimum criteria which responsible parties should use to designate information as CII/SSI.

POLICY AUTHOR: Marcy Jones

INTERNAL REVIEWER: John Karabaic

AUTHORIZING OFFICER: James Austin
Information Security Advisory Committee

EFFECTIVE DATE: May 1, 2006

REVIEW DATE: May 1, 2007

VERSION: 6.0

Information Security Policy

SUBJECT: Critical Infrastructure Information/Sensitive Security Information (CII/SSI)

POLICY STATEMENT:

All VDOT information is a VDOT asset and the property of the Commonwealth. VDOT information includes that which is electronically generated, printed, filmed, typed, stored or verbally communicated. VDOT information will be protected according to its sensitivity regardless of the media on which it is stored, the manual or automated systems that process it or the methods by which it is distributed.

Information regarding VDOT's critical infrastructure (CII/SSI) is sensitive and will be marked by its originator and protected by all into whose possession it passes in accordance with this policy. CII/SSI will be released only to an authorized person.

Security of CII/SSI, like all security, is risk based. Risk management factors to be considered include the sensitivity, value and critical nature of the infrastructure information; analysis of the known and anticipated threats and vulnerabilities; and countermeasures benefits versus cost.

CII/SSI is exempt from disclosure under FOIA (ref. Code of Virginia §2.2-3705.2, (3), (4), (6)); however, it may be released at the discretion of the custodian.

SCOPE:

This policy is applicable to all VDOT employees, contractors and all other parties which originate, have access to, or have a need to access VDOT CII/SSI.

This policy covers all VDOT critical infrastructures. Critical infrastructures include but are not limited to: Tunnel and Bridge-Tunnel Facilities, Ferries, Smart Traffic Centers, VDOT Central Office, District Offices, Data Systems, Security Systems, and the Information Technology Infrastructure.

RESPONSIBILITIES:

SEMD Information Security Office (ISO) will maintain this policy consistent with changes in the Homeland Security environment and based on program improvements developed as part of its policy oversight role. ISO will also develop and maintain the "CII/SSI Guide" to provide procedural guidance to originators and users of CII/SSI.

Each VDOT employee who originates CII/SSI or is responsible for having CII/SSI originated by non-VDOT employees is responsible for designating the information, written or electronic, as CII/SSI, affixing the markings prescribed by this policy, and

protecting the information. Employees shall apply all statements of this policy in a good faith effort and exercise due care in fulfilling each of the requirements of this policy. See the "CII/SSI Guide" for marking instructions and sample forms (Appendix C).

Each VDOT manager is responsible to ensure that information is properly designated as CII/SSI and that CII/SSI information is adequately handled, controlled and stored. Managers will ensure that persons under their supervision disclose CII/SSI only in support of official VDOT business and to persons who have executed the prescribed non-disclosure agreement. Managers will periodically review VDOT information in the custody of their work unit to ensure that the provisions of this policy are appropriately applied and take action to correct the designation, marking, handling and storage of CII/SSI. Managers will establish specific procedures applicable to the designation, marking, handling, and storage of CII/SSI in their work unit and these procedures will not conflict with this policy. Further guidance is provided in the "CII/SSI Guide" (Appendix C).

The VDOT Human Resource Department (Central Office and District Offices) is responsible for ensuring new employees complete the non-disclosure agreement. The completed forms should be retained in the employee's personnel file.

The designated Contract Officer is responsible for ensuring contractors/consultants complete the appropriate non-disclosure agreement prior to the start of the contract. The completed forms should be retained in the contract file.

COMPLIANCE:

Failure to comply with this policy may result in:

Application of a Group II offense per DHRM Standards of Conduct policy (1.60), Section V, B, 2, a) Failure to follow a supervisor's instructions, perform assigned work, or otherwise comply with established written policy and/or e) Unauthorized use or misuse of state property or records, or

Application of a Group III offense per DHRM Standards of Conduct policy (1.60), Section V, B, 3, d) Theft or unauthorized removal of state records, state property, or the property of other persons.

Nothing in this policy is intended to allow individuals to circumvent or deny appropriate FOIA requests. CII/SSI may not be subject to disclosure under FOIA (ref. Code of Virginia §2.2-3705.2, (3), (4), (6)), however, information designated as CII/SSI may be disclosed at the discretion of the information custodian.

Questions regarding FOIA requests related to CII/SSI are to be directed to CII/SSI@VDOT.virginia.gov.

APPENDIX A
References

AUTHORITY REFERENCE:

Code of Virginia
- Code of Virginia § 2.2-3705.2 (3), (4), (6), Exclusion to application of chapter
- Code of Virginia § 44-146.22, Development of measures to prevent or reduce harmful consequences of disaster: disclosure of information

Federal
- 6 CFR Part 29, Procedures for Handling Critical Infrastructure Information, Federal Register, Vol. 69, No. 34, February 20, 2003, pp 8074 – 8089
- 33 CFR Part 6, Protection and Security of Vessels, Harbors and Waterfront Facilities
- 33 CFR Part 101, Maritime Security: General
- 49 CFR Part 1520, Protection of Sensitive Security Information,
- US Patriot Act (Public Law 107–56) (Oct. 26, 2001)
- Homeland Security Act of 2002 (Public Law 107-296, 116 stat. 2135, sections 211-215), Title II, Subtitle B, Section 214: Critical Infrastructure Information Act of 2002, 6 USC §§131-134
- Maritime Transportation Security Act (Public Law 107-295), 46 USC Part 2101,
- Presidential Decision Directive 63 (PDD 63) (May 22, 1998)
- Homeland Security Presidential Directive 7 (HSPD-7) (Dec. 17, 2003)
- Executive Order (EO) 13231, Critical Infrastructure Protection in the Information Age
- USCG Navigation and Vessel Inspection Circular 10 04, Guidelines for Handling Sensitive Security Information
- U.S. Department of Transportation, Security and Emergency Preparedness Guide

OTHER REFERENCE:
- Information Security Office Charter, February 3, 2006
- Information Security Advisory Committee Charter, February 3, 2006
- National Industrial Security Program Operating Manual (NISPOM)
- VDOT HR Policy 2.10e
- DHRM Policy 1.60, Standards of Conduct

Appendix B
Definitions

A. Authorized Person - A person who, in the performance of official duties, has a need-to-know for information designated CII/SSI and who has signed the proper non-disclosure agreement. (see Unauthorized Person, Unauthorized Access)

B. Critical Infrastructure (CI) - Critical Infrastructure means systems and assets, whether physical or virtual, so vital to the United States and Virginia that the incapacity or destruction of such systems and assets would have debilitating impact on security, economic security, public health or safety, or any combination thereof. (6CFR Part 29; 6USC §131)

C. Critical Infrastructure Information (CII) – An information designation, not a classification. This designation is used by VDOT to identify information or material (plans, drawings, etc.) which is not appropriate for public release without a need-to-know; information that is not customarily public knowledge and that the public would not generally need-to-know. CII consists of records or information related to the security of Critical Infrastructure or protected systems. This includes but is not limited to:

1. Actual, potential or threatened interference with, attack on, compromise of, or incapacitation of critical infrastructure or protected system by physical or computer-based attack or other similar conduct, including the misuse of or unauthorized access to all types of communications and data transmission systems that violate Federal, State or local law, harms interstate commerce of the United States, or threatens the public health or safety;

2. The ability of any critical infrastructure or protected system to resist such interference, compromise, or incapacitation, including any planned or past assessment, projection, or estimate of the vulnerability of critical infrastructure or a protected system, including security testing, risk evaluation thereto, risk management planning, or risk audit or;

3. Any planned or past operational problem or solution regarding critical infrastructure or protected system, including repair, recovery, reconstruction, insurance or continuity to the extent it is related to such interference, compromise or incapacitation.

D. Critical Infrastructure Information/Sensitive Security Information Program (CII/SSI Program) - SEMD Security program established for the development, management, maintenance, and review of policies to be used to identify, designate and protect Critical Infrastructure Information and Sensitive Security Information throughout VDOT.

E. Custodian – The employee charged with the responsibility of protecting the CII/SSI asset in accordance with originator's specific instructions.

F. Due Care – Just, proper and sufficient care, so far as the circumstances demand; the absence of negligence. That degree of care that a reasonable person can be expected to exercise. That care which an ordinarily prudent person would have exercised under the same or similar circumstances.

G. Fiduciary Responsibility – The legal relationship that gives rise to duty to act on the behalf of another with the highest standard of trust and good faith.

H. Good Faith - A state of mind consisting of faithfulness to one's duty or obligation; absence of intent to defraud or to seek unconscionable advantage.

I. Maritime Facility - Any structure or facility of any kind located in, on, under, or adjacent to any waters subject to the jurisdiction of the U.S. and used, operated, or maintained by a public or private entity, including any contiguous or adjoining property under common ownership or operation.

J. Need-to-Know – The legitimate requirement of a person or organization to know, access, or possess sensitive or classified information that is critical to the performance of an authorized, assigned mission (i.e. a VDOT related project). The necessity for access to, or knowledge or possession of, specific information required to carry out official duties. Information that is intended for use only by individuals who require the information in the course of performing their job function.

K. Operational Security - A process to deny potential adversaries information about capabilities and/or intentions by identifying, controlling and protecting sensitive information. Frequently referred to as OpSec. The CII/SSI policy integrates OpSec processes into the way VDOT protects its sensitive information.

L. Originator – The person originating the information and authorized to assign the value of CII/SSI asset; the person who has been assigned to exercise the organization's proprietary rights and fiduciary responsibilities for the CII/SSI asset in question.

M. Proprietary rights – Pertaining to property ownership and rights associated with ownership (i.e. possession, control, use).

N. Protected System – Protected system means any service, physical or computer based system, process, or procedure that directly or indirectly affects the viability of VDOT and includes any physical or computer-based system including a computer, computer system, computer or communications network, or any component hardware or element thereof, software programs, processing instructions, or information or data in transmission or storage therein, irrespective of the medium of transmission or storage.

O. Public Knowledge – Information about which knowledge or use is accessible to the general public if there has been no deliberate attempt to keep it hidden or secret. Knowledge that is available to anyone. Something might be considered public knowledge if it could be seen in a public area versus being located in a locked or non-public area. In some instances, the object itself may be public knowledge but it's location or use in that specific instance is not (e.g., an electrical panel in a reception

area is recognizable and not hidden but, if the panel is locked, what the various circuit breakers control is not public knowledge.)

P. Security-in-depth – SEMD security program consisting of layered and complementary security controls sufficient to deter and detect unauthorized entry and movement within a facility. Examples include, but are not limited to use of: employee, visitor and contractor access controls; perimeter fences; use of intrusion detection systems (IDS); random guard patrols throughout facilities during working and non-working hours; closed circuit television surveillance; and other safeguards that mitigate the vulnerabilities of open storage areas without alarms and security storage containers, during working and non-working hours.

Q. Sensitive Security Information (SSI) – Sensitive Security Information is an information designation, not a classification. Material designated as SSI consists of information related to maritime facilities and must be protected from unauthorized disclosure in order to ensure transportation security as required by the Maritime Transportation Security Act of 2002 (49CFR Part 1520).

R. Unauthorized Access - Unauthorized access means gaining access to or receiving CII/SSI without the proper authority to do so. (also unauthorized disclosure, unauthorized release, unauthorized retrieval, unauthorized use, unauthorized removal, unauthorized entry)

S. Unauthorized Person - A person not authorized to have access to CII/SSI or other sensitive information. (see Authorized Person)

CII/SSI Guide

An Accompanying Guide to CII/SSI Policy Version 6.0, March 2006

Table of Contents

NOTE: The Multi-Purpose Non-Disclosure Agreement form included in this document is a sample form and should not be used as the actual form. The actual Multi-Purpose Non-Disclosure Agreement form may be downloaded from the *Inside VDOT* Forms page.

I. Purpose

This Guide will provide general guidance the user/originator can use to designate CII/SSI in your sections and develop specific procedures for handling, marking, disseminating, releasing and destroying CII/SSI. You will also find samples of the forms that should be used in the aforementioned processes.

As noted in the CII/SSI Policy, critical infrastructure includes but is not limited to: Tunnel and Bridge-Tunnel Facilities, Ferries, Smart Traffic Centers, VDOT Central Office, District Offices, Data Systems, Security Systems, and the Information Technology Infrastructure. Critical infrastructure is a system or asset so vital that its incapacity or destruction would have a debilitating impact on security, economic security, public health or safety. ***Critical infrastructure information*** (CII) is the designation used by VDOT to identify information that is not appropriate for public release without a need-to-know. ***Sensitive security information*** (SSI) is the designation used to identify information related to maritime critical infrastructure that is not appropriate for public release without a need-to-know.

A page containing Frequently Asked Questions has been included in this Guide for your reference. If you have questions that are not answered in this guide, you may submit your questions, via email, to CII/SSI@VDOT.virginia.gov.

II. Guidelines for Designating and Marking VDOT Information as CII/SSI

Designating CII/SSI

Each Manager should perform a review of the documents in his/her custody to determine if the document contains CII/SSI and ensure proper markings are affixed. This Guide contains a CII/SSI Designation Decision Process flowchart and Quick Reference document to provide you with the necessary tools in determining proper CII/SSI designation.

Marking CII/SSI

Once a document has been designated as CII/SSI, it should be marked according to the following:

It is the responsibility of the document originator to make sure that CII/SSI contained within the document is identified and marked, whether it has been previously marked or not. However, if you are the person handling a document which you feel contains CII/SSI and the document has not been properly marked; please refer the document back to the originator for designation and proper marking.

The marking shown below (frame and format optional) should be placed appropriately on all pages or sections containing CII material. It should be located either at the top or bottom of the page consistently throughout the document. The format and arrangement of the words may be modified to accommodate different situations but the wording should remain consistent.

– Restricted –
Critical Infrastructure Information

Marking Maritime Related SSI

Documents designated as SSI should be marked at the top of every page in the document and at the following locations in the document:

- The outside of any front cover,
- The outside of any back cover,
- Any binder cover or folder (front and back)
- Any title page

The marking at the top of the page should be:

Sensitive Security Information

The marking at the bottom of each page of the document should be:

WARNING: This record contains Sensitive Security Information that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a ''need-to-know'', as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 CFR parts 15 and 1520.

III. Guidelines for Handling, Storing and Reproducing CII/SSI

CII/SSI shall be protected at all times, either by appropriate storage or having it under the personal observation and control of a person authorized to receive it. Each person who works with protected CII/SSI is personally responsible for taking proper precautions to ensure that unauthorized persons do not gain access to it.

During working hours, reasonable steps shall be taken to minimize the risks of access to CII/SSI by unauthorized personnel. After working hours, CII/SSI shall be stored in a secure container, such as a locked desk, file cabinet or facility where contract security is provided.

CII/SSI shall be transmitted only by VDOT courier, US first class, express, certified or registered mail, or through secure electronic means.

CII/SSI in electronic format should be released in a protected format such as a locked PDF or password protected WORD document.

Material containing CII/SSI shall be disposed of by any method that prevents unauthorized retrieval and in accordance with established records retention policy.

Documents or materials containing CII/SSI may be reproduced to the minimum extent necessary to carry out official duties provided that the reproduced material is marked and protected in the same manner as the original material.

IV. Guidelines for releasing documents designated as CII/SSI

If CII/SSI material is involved, the individual releasing the information must determine if the requestor has a legitimate need-to-know. If the requestor does not have a need-to-know, do not release the

information to them. If the requestor takes issue with this decision, you may contact the SEMD Information Security Office for further guidance.

If there is a legitimate need-to-know, before releasing the information, ensure the requestor completes a non-disclosure agreement and retain a copy on file for 24 months. A sample Non-disclosure agreement has been included for your reference. In accordance with the Policy, when non-disclosure agreements are completed as a condition of employment, such as for new employees and contractors, the signed non-disclosure agreements should be returned to the Human Resource Department to be filed in the employee's personnel folder or the Contract Officer to be filed with the procurement documents.

V. Sample Documents

This Guide contains the following Sample Forms:

- Frequently Asked Questions
- Quick Reference to Identifying CII/SSI
- Non-Disclosure Agreement
- CII/SSI Designation Decision Process flowchart

CII/SSI Guide

Frequently Asked Questions

1. What is CII?

Critical infrastructure information (CII) is the designation used by VDOT to identify information that is not appropriate for public release without a need-to-know.

2. What is SSI?

Sensitive security information (SSI) is the designation used to identify information related to maritime critical infrastructure that is not appropriate for public release without a need-to-know.

3. What is need-to-know?

The legitimate requirement of a person or organization to know, access, or possess sensitive or classified information that is critical to the performance of an authorized, assigned mission (i.e. a VDOT related project). The necessity for access to, or knowledge or possession of, specific information required to carry out official duties. The information is intended for use only by individuals who require the information in the course of performing their job function.

4. What is Public Knowledge?

Information about which knowledge or use is accessible to the general public if there has been no deliberate attempt to keep it hidden or secret. Knowledge that is available to anyone. Something might be considered public knowledge if it could be seen in a public area versus being located in a locked or non-public area. In some instances, the object itself may be public knowledge but it's location or use in that specific instance is not (e.g., an electrical panel in a reception area is recognizable and not hidden but, if the panel is locked, what the various circuit breakers control is not public knowledge).

For example, if a circuit breaker box is located in the lobby of a building, the location of that box would not be CII/SSI. However, the identification of the circuits/devices controlled by the breakers in the box might be CII/SS depending on the function of the devices controlled by the individual breakers (Security Systems, Alarm Systems, etc.). If the box is located in a locked room in an area not normally open to the public, it could be considered CII/SSI.

5. What about solicitations that involve information and site-visits that contain/show CII/SSI?

The current approach to handling CII/SSI in solicitations is as follows:

- Do not include CII/SSI in the public advertisement.
- Require pre-registration for a mandatory pre-bid conference.
- Obtain signed non-disclosure agreements and verify identity with photo-id of all participants prior to allowing entry into the meeting.
- Distribute material containing CII/SSI (minimum needed) and conduct site visits at the time of the pre-bid.
- Limit access and photography to that which is necessary.

6. Who has to do the review and marking?

The CII/SSI Policy states that Managers will review VDOT information in the custody of their work unit to ensure that the provisions of this policy are appropriately applied.

7. Can A/E firms mark CII/SSI as the plans/specs are developed?

The Contract Officer should inform the A/E firm at the time the contract is awarded that the project contains CII/SSI and the firm's responsibilities for marking information. As such, plans/specification must be marked accordingly as they are developed. A/E firms, or any other outside entity, who work as agents of VDOT must mark the CII/SSI in accordance with the Policy.

CII/SSI Guide

Quick Reference to Identifying CII/SSI

Information identified as either Critical Infrastructure Information or Sensitive Security Information (CII/SSI) should be marked as specified in the CII/SSI Policy.

Points to consider when determining what constitutes CII/SSI…

- What impact could the information have if it was inadvertently transferred to an unintended audience?
- Does the information provide details concerning security procedures and capabilities?
- Could someone use the information to target personnel, facilities or operations?
- How could someone intent on causing harm misuse the information?
- Could the use of this information be dangerous if combined with other publicly available information?
- Look at the material from an adversary's point of view.

Answer the following:		**Y/N**
Is the information customarily public knowledge? (Information that is accessible to the general public if there has been no deliberate attempt to keep it hidden or secret.)		
Does the general public have a need-to-know? (Access to, or knowledge or possession of, specific information required to carry out official duties) (Note: Contractors should be considered employees, not general public.)		
If **"yes"** to either, then it is **not** CII/SSI, otherwise continue.		
If the item under consideration shows describes or is itself listed below, it might be CII/SSI.		
1	Documentation or other information that describes the design, function, operation or access control features of any security system, manual or automated, used to control access to or use of any automated data processing or telecommunications system.	
2	Plans and information to prevent or respond to terrorist activity, the disclosure of which would jeopardize the safety of any person, including: • Critical infrastructure sector or structural components • Vulnerability assessments • Operational, procedural, transportation, and tactical planning or training manuals • Staff meeting minutes or other records Engineering or architectural records or portions of, that reveals the location or operation of: • Security equipment and systems • Ventilation equipment and systems • Emergency equipment and systems • Utility equipment and systems • Elevator equipment and systems • Fire protection equipment and systems • Electrical equipment and systems • Telecommunications equipment and systems	
3	Information (including drawings, manuals, or other records) which reveals: • Surveillance techniques • Personnel deployments • Alarm or security systems or technologies • Operational and transportation plans or protocols	
4	Information concerning threats against transportation.	

Critical Infrastructure Information/Sensitive Security Information (CII/SSI) Multi-Purpose Non-Disclosure Agreement

Retain a copy of both the front and back sides of this form for future reference

VDOT requires CII/SSI be protected and not disclosed to unauthorized persons.

PART A: To Be Completed By Individual VDOT or Company Employee

I agree with the following as a condition of being granted access to CII/SSI:

CII/SSI, which is valuable and sensitive, is protected by law and by strict VDOT policies. The intent of these laws and policies is to assure that CII/SSI will remain confidential - that is, it will be used only as necessary to accomplish VDOT's mission. Disclosure of CII/SSI in any manner that permits interception by unauthorized persons could compromise safety and security and is prohibited. CII/SSI may be released only to persons with a need-to-know.

I might have access to this information in various formats including but not limited to documents and drawings, physical structures, and computer based systems. I have no right or ownership interest in any VDOT CII/SSI. VDOT may at any time revoke my authorization allowing access to CII/SSI.

Willful violation of this agreement may subject me to discipline which might include, but is not limited to, removal from current VDOT projects; exclusion from further VDOT related work; and legal liability. My obligations with respect to the confidentiality and security of all CII/SSI disclosed to me shall survive the termination of any agreement or relationship with VDOT. My execution of this agreement shall not nullify or affect in any manner any other agreement, non-disclosure or otherwise, which I have executed or may execute with VDOT or the Commonwealth of Virginia.

I am obligated to protect this information from unauthorized disclosure in accordance with the terms of this agreement. I will only use CII/SSI that I obtain to perform my legitimate VDOT related duties. I will conduct myself in a strict conformance to applicable laws and VDOT policies governing CII/SSI. I will safeguard the confidentiality of all CII/SSI at all times. I will be responsible for my misuse or my wrongful disclosure of CII/SSI.

Each provision of this agreement is severable. If any administrative or judicial tribunal should find any provision of this agreement to be unenforceable, all other provisions shall remain in full force and effect.

I make this agreement in good faith, without mental reservation or purpose of evasion.

Printed Name	Date
VDOT District/Division OR Company Name	Phone Number
Signature	Signature of Authorized Agent (Not required for VDOT employees)

PART B: To Be Completed By Company Agent Only:

In addition to the provisions above, I certify:

All employees of this company involved with this VDOT project, regardless of location, who will have access to CII/SSI, myself included, will complete a Critical Infrastructure Information/Sensitive Security Information Individual Non-Disclosure Agreement. The Agreement will be signed by me and accepted by VDOT prior to being granted access to CII/SSI. We will only access CII/SSI for which we have a need-to-know. We will safeguard the confidentiality of all CII/SSI at all times. We will conduct ourselves in strict conformance to applicable laws and VDOT policies governing CII/SSI. Obligations with respect to the confidentiality and security of all CII/SSI disclosed to us shall survive the termination of any agreement or relationship with VDOT.

Each provision of this agreement is severable. If any administrative or judicial tribunal should find any provision of this agreement to be unenforceable, all other provisions shall remain in full force and effect.

I make this agreement in good faith, without mental reservation or purpose of evasion.

Authorized Company Agent:

Printed Name	Date
Company Name	Title
Signature of Authorized Agent	Phone Number
VDOT Contract Name and Number	

This form is valid for the identified project for a period of two years, while employed by the same company.

Last Name, First name:

Critical Infrastructure Information/Sensitive Security Information (CII/SSI)
Multi-Purpose Non-Disclosure Agreement
Back Page

Retain a copy of both the front and back sides of this form for future reference

Handling CII/SSI

You are responsible for safeguarding Critical Infrastructure Information/Sensitive Security Information (CII/SSI) in your custody or under your control.

The extent of protection afforded CII/SSI shall be sufficient to reasonably foreclose the possibility of its loss or compromise.

The terms of this clause (*Handling CII/SSI*), including this paragraph, must be included in any dissemination of any document, in whole or in part, that contains CII/SSI.

Protection - CII/SSI shall be protected at all times, either by appropriate storage or having it under the personal observation and control of a person authorized to receive it. Each person who works with protected CII/SSI is personally responsible for taking proper precautions to ensure that unauthorized persons do not gain access to it.

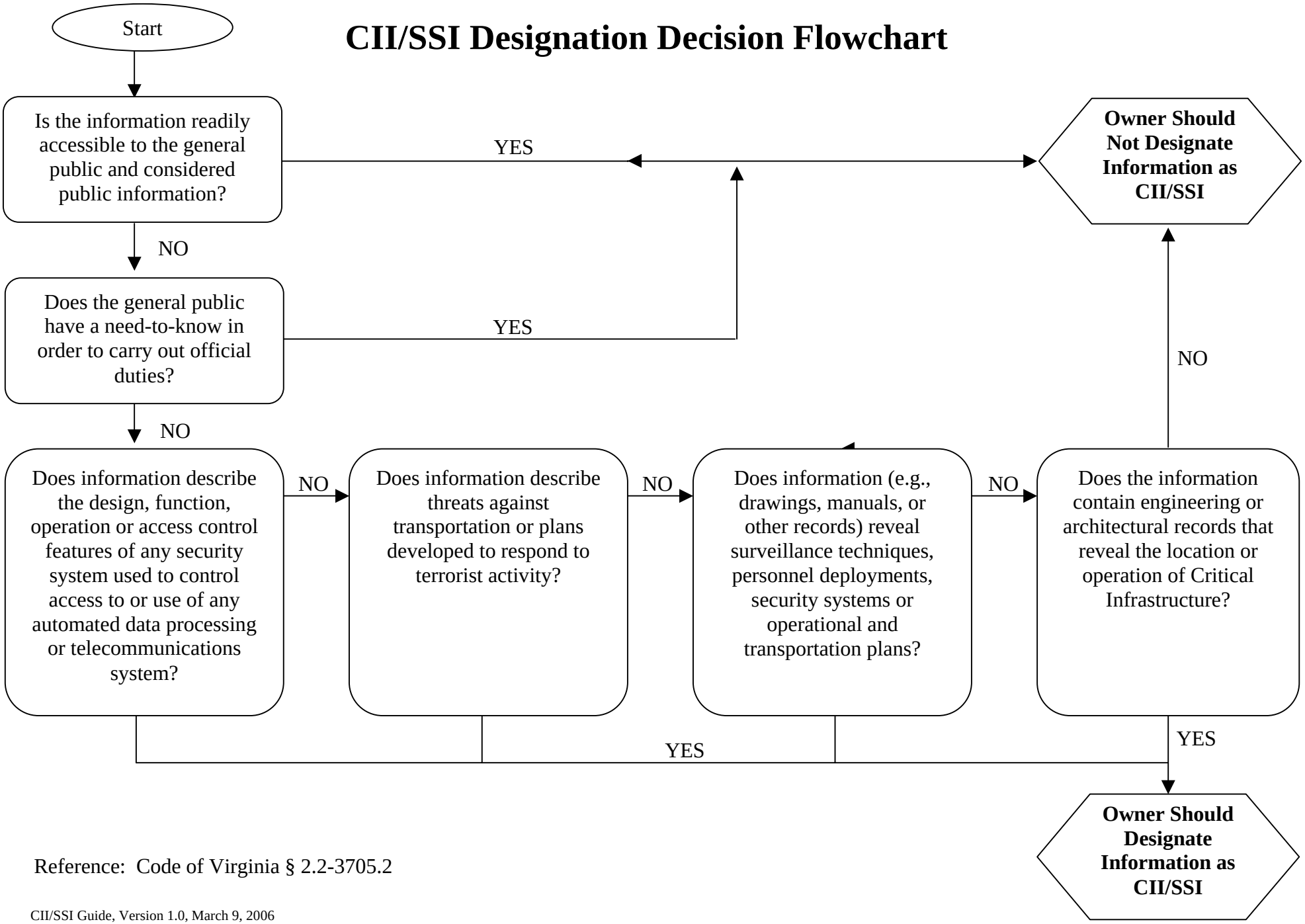
Use and Storage - During working hours, reasonable steps shall be taken to minimize the risks of access to CII/SSI by unauthorized personnel. After working hours, CII/SSI shall be secured in a secure container, such as a locked desk, file cabinet or facility where contract security is provided.

Reproduction - Documents or material containing CII/SSI may be reproduced to the minimum extent necessary consistent with the need to carry out official duties provided that the reproduced material is marked and protected in the same manner as the original material.

Disposal - Material containing CII/SSI shall be disposed of by any method that prevents unauthorized retrieval (e.g. shredding, burning, returning to original source, etc.).

Transmission - CII/SSI shall be transmitted only by VDOT courier, US first class, express, certified or registered mail, or through secure electronic means.

CII/SSI Designation Decision Flowchart



Reference: Code of Virginia § 2.2-3705.2

Document #2

“Information Security Policy,
Information Security Policy Development”

Information Security Policy

SUBJECT: Information Security Policy Development

ABSTRACT:

This Information Security Policy Development Policy is to assist in the achievement of a consistent approach to the development and review of Information Security policies throughout the Virginia Department of Transportation (VDOT). The policy outlines VDOT's requirements in relation to how policies are to be developed and reviewed.

POLICY AUTHOR:	John Karabaic
INTERNAL REVIEWER:	John Karabaic
AUTHORIZING OFFICER:	Jim Austin Information Security Advisory Committee
EFFECTIVE DATE:	April 28, 2006
REVIEW DATE:	April 28, 2007
REVISION NUMBER:	1.0

Information Security Policy

SUBJECT: Information Security Policy Development

POLICY STATEMENT:

VDOT Information Security policies will be compliant with legislation, VITA policies and other VDOT policies.

VDOT Information Security policies are initiated to address a security vulnerability or to implement best practices and will follow a prescribed process that includes extensive planning activities, a standard format and appropriate due diligence. Information Security policies will be published only after thorough review and advice of the Information Security Advisory Committee.

SCOPE:

This Policy is applicable to all VDOT employees, contractors, consultants, and all others, including outsourced third parties, which have access to, or manage VDOT information, networks, or applications.

This Policy encompasses all systems, automated and manual, for which the VDOT Commissioner has administrative responsibility, including systems managed or hosted by third parties on behalf of VDOT.

In all cases, applicable Federal and State statutes and regulations that guarantee either protection or accessibility of VDOT information will take precedence over this Policy.

This policy is in addition to VITA policies.

RESPONSIBILITIES:

The Security and Emergency Management Division, Information Security Office (ISO) will determine the need, develop, review, modify, publish and interpret VDOT's Information Security Policies. The ISO will ensure that new and revised policies and procedures have been properly reviewed and approved prior to issuance.

VDOT employees may request the ISO to develop and/or modify Information Security policies and may offer recommended content.

VDOT's Information Security Advisory Committee will recommend publication of all Information Security policies and procedures.

COMPLIANCE:

Any compromise or suspected compromise of this policy must be reported to the appropriate VDOT management and the ISO. Any violations of security policies may be subject to disciplinary or other appropriate action in accordance with law, rule, regulation, policy or negotiated agreement.

APPENDIX A

ASSOCIATED POLICY/PROCEDURES:

- Information Security Office Charter, February 3, 2006
- Information Security Advisory Committee Charter, Feb 3, 2006
- ITRM Policy 90.1 Information Technology Security Policy, dated December 7, 2001
- ITRM Policy SEC500-02 Information Technology Security Management Policy, 2005 draft
- ITRM Standard SEC2000-01.1 Information Technology Security, dated December 7, 2001
- ITRM Standard SEC500-01 Information Technology Security Management, 2005 draft

AUTHORITY REFERENCE:

- Code of Virginia § 2.2-603, Security Incident Reporting
- Code of Virginia § 2.2-2007, Powers and duties of the Chief Information Officer
- Code of Virginia § 2.2-2009, Database Audit
- Code of Virginia § 2.2-3705, Exclusions to Application of Chapter (FOIA)
- Code of Virginia § 44-146.22, Development of Measures to Prevent or Reduce Harmful Consequences of Disasters
- Executive Order 69, Virginia's Secure Commonwealth Initiative

OTHER REFERENCES:

- VDOT Corporate Tenet # 3, Preserve the integrity and security of information . . .
- ISO/ECI 17799.2000(e), Code of Practice for Information Security Management
- ISO 27001, Information Security Management - Specification With Guidance for Use
- 6 CFR Part 29 Procedures for Handling Critical Infrastructure Information
- 33 CFR Part 6 Protection and Security of Vessels, Harbors and Waterfront Facilities
- 49 CFR Part 1520 Protection of Sensitive Security Information

APPENDIX B

DEFINITIONS:

Information Security Advisory Committee: A VDOT committee chartered to advise and assist the Agency to plan, design and implement an information security program that ensures the security and protection of VDOT's information assets. The Information Security Advisory Committee is the final review and approval body for VDOT information security policies.

Information Security Office (ISO): The organization within VDOT's Security and Emergency Management Division responsible to develop a information security program for VDOT that defines, implements and oversees policies governing technical, operational and procedural measures, and management structures that provide for the confidentiality, integrity and availability of information based on business requirements and risk analysis.

Information Security Officer: The VDOT official responsible for the development, implementation, oversight, and maintenance of the Agency's information security program.

APPENDIX C

Information Security Policy Review and Publication Process

1. The ISO determines the need for a new or revised Information Security policy based on VDOT employee, management or Information Security Advisory Committee input; industry trends; or perceived vulnerabilities.

2. Tier 1 policies will address a broad mission area such as Information Security. VDOT will have only one Tier 1 Information Security Policy.

3. Tier 2 policies will address a specific information security vulnerability or internal control area.

4. Tier 3 policies will define a specific process to be implemented in support of a Tier 2 policy. In cases where the procedure is limited, it may be included as an appendix of the Tier 2 policy.

5. When the ISO determines that an Information Security Policy needs to be developed, the development of an initial draft will be assigned to an ISO staff member.

6. The initial draft will then be vetted throughout the ISO and presented to a Core Review Team. The Core Review Team, made up of three to five members, will review the draft policy. The membership of this team will typically include a representative from the Internal Audit division and the Information Technology division as well as representatives from the affected organizational unit(s) of VDOT.

7. The Core Review Team will review and/or comment on the proposed Information Security policy for a minimum of 30 days. The Core Review Team will employ formal review techniques such as a structured walk-thru. During the Core Review Team review period, others (e.g., other VDOT, VITA) may be invited to participate in the review virtually.

8. The Core Review Team will prepare the draft policy along with any unresolved comments for review by the Information Security Advisory Committee.

9. The Information Security Advisory Committee will review the draft document and recommend its publication by the ISO.

10. The ISO will publish Information Security Policies consistent with the advice of the Information Security Advisory Committee. Policies will be published in a standard format with an effective date. All ISO policies will be review and re-published annually.

Document #3

“Information Security Policy,
Information Access Control”

SUBJECT: Information Access Control

ABSTRACT:

This Access Control Policy is intended to preserve the properties of integrity, confidentiality and availability of the Virginia Department of Transportation's (VDOT) information assets through the use of logical and physical access control mechanisms commensurate with the value, sensitivity, consequences or loss or compromise, legal requirements and ease of recovery of these assets.

POLICY AUTHOR:	Beth Nelson
INTERNAL REVIEWER:	John Karabaic
AUTHORIZING OFFICER:	Jim Austin Information Security Advisory Committee
EFFECTIVE DATE:	May 1, 2006
REVISION NUMBER:	1.0
REVIEW DATE:	May 1, 2007
SUPERCEDES:	VDOT IT Policy SEC2002-01.1, dated January, 2003

SUBJECT: Information Access Control

POLICY STATEMENT:

Access to VDOT's information assets requires all authorized users to authenticate themselves, and is limited to those individuals who have a need-to-know in order to perform their assigned job responsibilities. Use of a user ID and password is required to access automated information.

Access to VDOT's servers/workstations requires a unique login and password for each authorized user. Default logins and passwords will not be permitted. User IDs and passwords must not be shared. Strong passwords must be used and changed at least every 90 days.

Networks and applications will be implemented with security controls. Access to VDOT networks, applications and the information contained therein requires written approval by the requestor's supervisor and the Data Owner.

User IDs will be suspended immediately upon retirement, resignation, or termination of an employee or third party employee. Account inactivity for thirty days will cause the user account to be disabled. Any disabled account will be deleted after thirty additional days.

All information contained on VDOT's public website must be classified for public release.

SCOPE:

This Access Control Policy is applicable to all VDOT employees, contractors, consultants, and all others, including outsourced third parties, which have access to, or manage VDOT information, networks, or applications.

This Access Control Policy encompasses all systems, automated and manual, for which the VDOT Commissioner has administrative responsibility, including systems managed or hosted by third parties on behalf of VDOT.

In all cases, applicable Federal and State statutes and regulations that guarantee either protection or accessibility of VDOT information will take precedence over this Policy.

This policy is in addition to VITA policies.

RESPONSIBILITIES:

Security and Emergency Management Division's (SEMD) Information Security Office (ISO) is responsible for:

1. developing and implementing Information Security policies,
2. providing oversight of policy interpretation and compliance reviews, and
3. advising VDOT management and employees concerning the use and distribution of VDOT information assets.

Data Owners are responsible for:

1. classifying all information based on its sensitivity,
2. defining what information may be shared with other departments, divisions, agencies, and the public, and
3. approving user access to the information and supporting system for which they are responsible.

VDOT Managers are responsible for:

1. exercising due care when authorizing the use of and access to VDOT information and,
2. authorizing access using the principle of least privilege.

VDOT employees, contractors, consultants, and third-party employees are responsible for:

1. accessing only the information assets to which they are authorized,
2. reasonably protecting VDOT information against unauthorized activities performed under their user ID, and
3. assuring information maintained on computer equipment or on paper is physically protected from security threats and environmental hazards.

VITA is responsible for:

1. developing procedures to guarantee controls are in place to prevent users from other connected networks access to sensitive areas of the VDOT's network,
2. developing procedures to guarantee remote connections to a computer are made through a managed central point-of-entry,
3. updating the VDOT Active Directory and network access controls,
4. ensuring network and mainframe accounts for the Central Office and Districts comply with this Access Control Policy,
5. removing of inactive accounts promptly, and
6. reporting actions to inactivate/delete accounts to the VDOT supervisory chain.

VDOT Information Technology Division is responsible for:

1. developing procedures to guarantee access to source code for applications and systems is limited to authorized VDOT staff, contractors, consultants, and third-party employees, and for only those applications and systems they directly support,
2. ensuring application accounts for the Central Office and Districts comply with this Access Control Policy,
3. remove inactive accounts promptly, and
4. reporting actions to inactivate/delete accounts to the VDOT supervisory chain.

VDOT Public Affairs Is responsible for ensuring that only information appropriate for public dissemination is displayed on the public website.

COMPLIANCE:

Any compromise or suspected compromise of this policy must be reported to the appropriate VDOT management and the ISO. Any violation of security policies may be subject to disciplinary or other appropriate action in accordance with law, rule, regulation, policy or negotiated agreement.

APPENDIX A

ASSOCIATED POLICY/PROCEDURES:

- Information Security Office Charter, February 3, 2006
- Information Security Advisory Committee Charter, February 3, 2006
- ITRM Policy 90.1 Information Technology Security Policy, dated December 7, 2001
- ITRM Policy SEC500-02 Information Technology Security Management Policy, 2005 draft
- ITRM Standard SEC2000-01.1 Information Technology Security, dated December 7, 2001
- ITRM Standard SEC500-01 Information Technology Security Management, 2005 draft
- ISO-2-Data Classification, January 2006 draft

AUTHORITY REFERENCE:

- Code of Virginia § 2.2-603, Security Incident Reporting
- Code of Virginia § 2.2-2009, Database Audit
- Code of Virginia § 2.2-3705, Exclusions to Application of Chapter (FOIA)
- Code of Virginia § 44-146.22, Development of Measures to Prevent or Reduce Harmful Consequences of Disasters
- Executive Order 69, Virginia's Secure Commonwealth Initiative

OTHER REFERENCES:

- VDOT Corporate Tenet # 3, Preserve the integrity and security of information
- ISO/ECI 17799.2000(e), Code of Practice for Information Security Management
- ISO 27001, Information Security Management - Specification With Guidance for Use
- 6 CFR Part 29 Procedures for Handling Critical Infrastructure Information
- 33 CFR Part 6 Protection and Security of Vessels, Harbors and Waterfront Facilities
- 49 CFR Part 1520 Protection of Sensitive Security Information
- Information Security Office Charter
- Information Security Committee Charter

APPENDIX B

DEFINITIONS:

Access: The ability or permission to enter or pass through an area or to view, change, or communicate with an information resource. Access controls a set of procedures performed by hardware, software, and administrators to monitor access, identify Users requesting access, record access attempts, and prevent unauthorized access to information resources.

Access Control: The management of admission to a system and/or to network resources. The first part of access control is authenticating the User, which proves the identity of the User or client machine attempting to log on. The second part is granting the authenticated User access to specific resources based on Agency policies and the permission level assigned to the User or User Group.

Asset: Any software, data, hardware, administrative, physical, communications, or personnel resource.

Authenticate: To determine that something is genuine. To reliably determine the identity of a communicating party or device.

Authorization: Granting the right of access to a User, program, or process. The privileges granted to an individual by a designated official to access information based upon the individual's job, clearance, and need to know.

Data Owner: The individual responsible for the policy and practice decisions of data. For business data, the individual may be called a business owner of the data. The authority, individual, or organization who has original responsibility for the data by statute, Executive order, or Directive. Also referred to as the "Data Steward" or "Executive Sponsor."

Due Care: The customary practice of responsible and sufficient protection of assets that reflects a community or societal norm. Sufficient care of assets should be maintained such that recognized experts in the field would agree that negligence of care is not apparent.

Identification: The process of associating a User with a unique user ID or login ID

Least Privilege: The minimum level of information, functions, and capabilities necessary to perform a User's duties. Application of this principle limits the damage that can result from accident, error, or unauthorized use of an information system.

Logon ID: An identification code (normally a group of numbers, letters, and special characters) assigned to a particular User that identifies the User to the information resource.

Need-to-Know: A security principle stating that an individual should have access only to that needed to perform a particular function.

Password: A unique string of characters that, in conjunction with a logon ID, authenticates a User's identity.

Strong Password: A password that is difficult to detect by both humans and computer programs, effectively protecting data from unauthorized access. A strong password consists of at least eight characters that are a combination of both uppercase and lowercase letters, numbers and allowable symbols (e.g., @, #, $, %). Strong passwords also do not contain words that can be found in a dictionary or parts of the user's own name.

User: An entity that attempts to access an information resource. The entity may be an individual, a computer, or another application.

User ID: A unique symbol or character string that is used by an information resource to identify a specific User. See Logon ID.
]

Appendix C

VDOT Form ISO-01 and
Instructions for completing.

Virginia Department of Transportation
Information Systems Access Request

Individual for Whom Access is Requested

Last Name: _____ First Name: _____ Middle Initial: _____

Last 4 digits of SSN: _____ Employee ID _____ Telephone: _____ (include area code)

CO or District: _____ Division or Residency: _____ Office location: _____

Job Title: _____ Supervisor name: _____

EFFECTIVE DATE OF REQUEST: ____/_____/_____

Employment Category:
___Full Time ___Hourly ___Temporary
___Contractor (Contract #_____)

_____
Signature of Contracting Officer

Reason For Request:
___New Employee ___New Contractor
___Transfer within VDOT (from _____ to _____)
___Departing Employee ___Departing Contractor

Action Requested:	**System to which Action Applies**	**Level of Access**	**Authorizing Official** (Supervisor or System Owner)
___Add User Account	*Network/Exchange*		
___Delete User Account			
___Modify User Access			

Approvals

Position	Printed Name	Signature	Date
Supervisor			
District/Division Administrator			
District or Division System Coordinator			

Acknowledgement

As an employee/contractor of the Commonwealth of Virginia Department of Transportation (VDOT), I acknowledge that I have been granted access to the automated systems, including licensed software, hardware, and data of VDOT.

I further acknowledge that the data contained in and accessed using the information systems and network of VDOT and the Virginia Information Technology Agency (VITA), and any other automated system which I use in the course of performing my duties is the property of the Commonwealth of Virginia. This includes all systems and data used, regardless of where the system or data resides, to conduct the business of VDOT. Although I have access to data I shall not read, disclose, provide, or otherwise make available, in whole or in part, such information other than to other employees or consultants of (VDOT) to whom such disclosure is authorized. Such disclosure shall be in confidence for purposes specifically related to the business of VDOT and the Commonwealth.

I agree that logon IDs and passwords are not to be shared among employees. If I must share my logon ID or password while getting help or troubleshooting a problem, I understand it is my responsibility to change my password immediately after receiving this help.

I understand and agree that all computer resources and equipment are the property of VDOT and are to be used for official business only, and are not for personal use. I understand that VDOT reserves the right to monitor, access, and disclose at its discretion any communication using its system and therefore, I should have no expectation of privacy. I also understand it is my responsibility to protect the data and systems from damage or destruction, both tangible and intangible.

I agree not to provide any system administrator level password to anyone outside of ITD without the approval, in advance of disclosing the password, of the VDOT Information Security Officer. I understand that doing this is a class 3 violation of the Standards of Conduct.

I agree that my obligations with respect to the confidentiality and security of all information disclosed to me shall survive the termination of any agreement, relationship, or employment with VDOT.

I shall take all appropriate action, whether by instruction, agreement or otherwise, to ensure the protection, confidentiality and security of the information and automated systems, to satisfy my obligations under this Agreement. I will perform my duties with quality and integrity, in a professional manner, and in keeping with established standards. I will report all violations or suspected violations of information security immediately to my supervisor and the Information Security Officer.

I acknowledge that I have read and will comply with the VDOT Information Security Policy and the Internet Usage Policy dated 3/00. Use of the computer resources and equipment with knowledge of these policies will be deemed consent to these policies. This Agreement shall be interpreted in accordance with the laws of the Commonwealth of Virginia.

I Acknowledge and Accept the Above	**Printed Name**	**Signature**	**Date**

For VITA/ITD Use Only

System/Application	Action Taken	Completed By	Date Completed	Comments (User Name, Address, etc.)
Active Directory				
Network/Exchange				

Virginia Department of Transportation
Information Systems Access Request
Instructions

This form is to request that an employee or contractor of VDOT be given access to the Agency's information technology infrastructure and data. The form may be used in a variety of ways. The instruction for each use of the form follows.

Use of the Form for Adding Access for a New Employee of VDOT:

The hiring supervisor will complete the "Individual" and "Approvals" blocks on the ISO-01 when a candidate has been selected using information obtained from the candidate's application and knowledge of the systems that will be used to accomplish assigned tasks. The EFFECTIVE DATE OF REQUEST will be the date negotiated for the candidate to enter State service. The supervisor will indicate all systems for which the candidate will require access and obtain the approval of the System Owner if required. The hiring supervisor will obtain all required approvals. The hiring supervisor will include the ISO-01 in the hiring package forwarded to VDOT Human Resources Division.

VDOT Human Resources Division will provide a copy of the form to the designated VITA official and, as necessary, VDOT Information Technology Division or Business Application Coordinator(s) to grant approved access.

Human Resources will obtain the new employee's signature in the "Acknowledgement" block of the ISO-01 during New Employee Orientation, and will retain the original ISO-01 in the new employee's personnel file.

Use of the Form for Modifying the Access of an Employee Transferring within VDOT:

The hiring supervisor will complete the "Individual" and "Approvals" blocks on the ISO-01 when a decision to hire has been made. The hiring supervisor will request "Modify User Accounts" and will indicate the systems which the employee will have continued need to access, new systems for which access is required and systems for which current access should be discontinued. The hiring supervisor will obtain the employee's signature in the "Acknowledgement" block. The ISO-01 will be included in the "hiring package" forwarded to VDOT Human Resources Division.

VDOT Human Resources Division will provide a copy of the form to the designated VITA official and, as necessary, VDOT Information Technology Division or Business Application Coordinator(s) to grant, modify, and/or delete access as requested.

VDOT Human Resources Division will retain the original ISO-01 in the employee's personnel file.

Use of the Form for Adding Access for a New VDOT Contractor or Consultant:

The VDOT official requiring or managing the work to be accomplished under the contract will perform the role of "Supervisor" and will complete the "Individual" and "Approvals" blocks of the form for each contractor for whom access to VDOT's information technology infrastructure or data is required. The contracting officer will annotate the form with the contract identification number and will sign as indicated. The "Supervisor" will indicate the systems to which the contractor will require access and will obtain the signature of the contractor in the "Acknowledgement" block. The "Supervisor" will indicate in the EFFECTIVE DATE OF REQUEST the date the contractor will require access, but not before or after the contract under which the contractor is working for VDOT is in effect.

The "Supervisor" will forward the signed form to the contracting officer who will provide a copy of the ISO-01 form the designated VITA official and, as necessary, VDOT Information Technology Division or Business Application Coordinator(s) to grant access as requested.

The contracting officer will retain the original ISO-01 in the contract file.

Use of the Form for Discontinuing Access for a VDOT Employee:

As soon as a supervisor is aware of the impending departure of an employee from VDOT for any reason (e.g., retirement, resignation, reassignment outside VDOT, etc.), the supervisor will prepare an ISO-01 requesting that all system access currently available to the employee be deleted. The EFFECTIVE DATE OF REQUEST will be the scheduled departure date of the employee. The EFFECTIVE DATE OF REQUEST may be adjusted if the actual departure date is different than the scheduled date.

The supervisor will be forward the ISO-01 to the Human Resources Division who will provide a copy to the designated VITA official and, as necessary, VDOT Information Technology Division or Business Application Coordinator(s) to delete access as requested.

The Human Resources Division will ensure that an ISO-01 to delete access has been provided prior to final approval of the employee's Separation Checklist. Human Resources Division will retain a copy of the original ISO-01 with the employee's Separation Checklist in the employee's official file.

Use of the Form for Discontinuing Access of a VDOT Contractor or Consultant:

As soon as The VDOT official requiring or managing the work to be accomplished under contract is aware of the impending departure of a contractor from VDOT for any reason, the official will prepare an ISO-01 requesting that all system access currently available to the contractor be deleted. The EFFECTIVE DATE OF REQUEST will be the scheduled departure date of the contractor which will be no later than the end date of the contract under which the contractor is providing services to VDOT. The EFFECTIVE DATE OF REQUEST may be adjusted if the actual departure date is different than the scheduled date.

The official will forward the ISO-01 to the contracting officer who will provide a copy to the designated VITA official and, as necessary, VDOT Information Technology Division or Business Application Coordinator(s) to delete access as requested.

The contracting officer will retain a copy of the ISO-01 to delete access in the contract file

APPENDIX B- CANDIDATE PROJECTS & MEASURES OF EFFECTIVENESS

Document #1- “Candidate Projects for 2030 Regional Transportation Plan”

Document #2- “Candidate Projects for 2030 NHS Funding”

Document #3- “NHS Candidates- Pros and Cons and Regional Impact Maps”

Document #4- “Candidate Projects for 2030 RSTP Funding”

Document #1

“Candidate Projects for 2030 Regional Transportation Plan”

CANDIDATE PROJECTS FOR 2030 REGIONAL TRANSPORTATION PLAN

2030 STATUS LEGEND

N Project was submitted as a **candidate for NHS funds** for the 2030 Plan.

O Project was submitted as a **candidate for sources of funds other than NHS** for the 2030 Plan.

Projects in the recent Regional Toll Study are not included in this list, as financing for these projects is currently being discussed by the General Assembly.

PROJID	2030 Status	Locality	Project	From	To	EPDO Crash Rate per MVMT	Poverty HH's in Nearby BlockGrp	Minority Persons in Nearby BlockGrp	Work	2006 Lanes	Prop'd Lanes	Current Cost (M$'s)	YOE	2030 Cost (FY06+, million YOE $'s)	Proj. Link EXIST. ADT ('01 to '03) (21)	Proj. Link 2003 CMS LOS (18)
8	N	CH	GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	n.a.	0%	17%	Widening	4	6	$101	2014-2022	$165	22,857	F
7	N	CH	GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	2.2	7%	31%	New Alignment	0	4	$11	2022-2030	$25	3,917	B
23	N	GLO	Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	1.3	4%	17%	Widening	4	6	$56	2022-2030	$125	17,672	A
22	N	GLO	Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	2.5	4%	10%	Widening	4	6	$148	2014-2022	$242	34,070	F
40	N	HM	I-64 (Hampton)	I-664	Mallory Rd	1.8	23%	95%	Widening	6	8	$306	2022-2030	$682	97,807	D
44	N	HM	Magruder Blvd	Cmdr Shep Blvd ext	HRCP	n.a.	6%	48%	Widening	4	6	$34	2022-2030	$75	34,812	C
62	N	MULTI	Ft Eustis Blvd	0.54 mi. e. Jefferson Ave	Rte 17	n.a.	0%	7%	Widening	2	4	$36	2014-2022	$60	16,997	D
37	N	MULTI	Hampton Roads Center Pkwy	Harpersville Rd	I-64	2.4	3%	49%	Widening	4	6	$36	2022-2030	$81	42,994	D
64	N	MULTI	I-264 (add two lanes, I-64 to Indep Blvd)	I-64	Independence Blvd	3.0	8%	49%	Widening	8+2	10+2	$400	2022-2030	$892	241,927	E
65	N	MULTI	I-264 (prepare existing lanes for all uses)	I-64	Independence Blvd	2.6	8%	49%	Widening	8+2	10	$300	2022-2030	$669	241,927	E
67	N	MULTI	I-664 (Southside)	Bowers Hill	Rte 17 / Bridge Rd	1.2	1%	18%	Widening	4	6	$56	2022-2030	$125	73,215	E
80	N	NN	I-64 (Newport News)	Jefferson Ave (exit 255)	Merrimac Trail (exit 247)	2.0	6%	35%	Widening	4	6+2	$160	2014-2022	$262	89,613	E
79	N	NN	I-64 / Bland intx	na	na	n.a.	3%	40%	Interchange(s), New	n.a.	n.a.	$112	2022-2030	$250	89,613	E
82	N	NN	Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	2.3	16%	66%	Widening	4	6	$34	2022-2030	$75	23,013	C
85	N	NN	Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	1.7	9%	29%	Widening	4	6	$26	2014-2022	$42	41,480	F
94	N	NOR	Brambleton Ave	St. Pauls Blvd	I-264	2.4	56%	97%	Widening	4	6	$90	2022-2030	$200	36,846	E
102	N	NOR	Little Creek Rd	Tidewater Dr	Military Hwy	3.4	18%	48%	Widening	4	6	$14	2022-2030	$30	46,106	D
112	N	PORT	4th Marine Terminal Access (20)	Western Fwy	Craney Island	n.a.	5%	33%	New Alignment	0	4	$275	2022-2030	$614	n.a.	n.a.
199	N	Transit	Alt fuel buses: Oystr Pt & Dwntwn Norf	na	na	n.a.	4%	18%	Purchase buses	n.a.	n.a.	n.a.	2022-2030	being developed	n.a.	n.a.
213	N	Transit	Norfolk Light Rail	Newtown Rd	Norfolk General Hospital	n.a.	43%	99%	Capital cost	n.a.	n.a.	n.a.	n.a.	$204	n.a.	n.a.
219	N	Transit	Southside bus terminal / maint. facility	na	na	n.a.	17%	21%	Improve / replace	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
145	N	VB	I-264 / Independence Blvd intx	na	na	2.4	5%	37%	Interchange imp.	n.a.	n.a.	$112	2022-2030	$250	n.a.	n.a.
146	N	VB	I-264 / Lynnhaven Pkwy intx	na	na	2.5	6%	59%	Interchange imp.	n.a.	n.a.	$55	2014-2022	$91	n.a.	n.a.
147	N	VB	I-264 / Rosemont Rd intx	na	na	1.3	5%	23%	Interchange imp.	n.a.	n.a.	$84	2022-2030	$187	n.a.	n.a.
144	N	VB	I-264 / Witchduck Rd intx	na	na	3.0	3%	8%	Interchange imp.	n.a.	n.a.	$95	2014-2022	$156	n.a.	n.a.
148	N	VB	Independence Blvd	Haygood Rd	Northampton Blvd	2.4	3%	14%	Widening	4	6	$31	2022-2030	$69	43,743	F
164	N	VB	Northampton Blvd / Shore Dr intx	na	na	n.a.	11%	19%	Improve interchange	n.a.	n.a.	$15	2022-2030	$33	n.a.	n.a.
193	N	YC	Rte 17 (York Co.)	Hampton Hwy	Goodwin Nk / Denbigh B	1.0	3%	12%	Widening	4	6	$45	2014-2022	$73	55,511	F
2	O	CH	Cedar Rd	Albemarle Dr	Battlefield Blvd	1.1	6%	39%	Widening	3	4	$10	2022-2030	$22	23,327	D
3	O	CH	Cedar Rd (incl'g Deep Crk br) (7)	Mill Creek Pkwy	Shipyard Rd	2.2	7%	31%	Widening	2	4	$81	2014-2022	$132	13,974	F
9	O	CH	Hanbury Rd	Johnstown Rd	Battlefield Blvd	0.4	0%	12%	Widening	2	4	$12	2014-2022	$19	7,860	C
13	O	CH	Military Hwy	Allison Dr	VB CL	1.7	5%	70%	Widening	4	6	$40	2014-2022	$65	36,344	F
15	O	CH	Mt Pleasant Rd (incl'g Byp intx impr'ts)	Great Bridge Bypass	Centerville Tnpk	2.5	2%	9%	Widening	2	4	$25	2022-2030	$56	17,950	E
30	O	HM	Armistead Ave	Mercury Blvd	Hampton Roads Center Pkwy	2.5	5%	27%	Widening	4	6	$23	2022-2030	$52	35,453	C
39	O	HM	I-64 @ Armistead Ave & Lasalle Ave	n.a.	n.a.	1.5	23%	95%	Modify Interchange	n.a.	n.a.	$45	2022-2030	$100	n.a.	n.a.
42	O	HM	Little Back River Rd	King St	Harris Creek Rd	0.9	6%	33%	Widening	2	4	$18	2014-2022	$30	5,314	C
51	O	IW	Smithfield Connector	Nike Park Rd	Smith's Neck Rd	n.a.	6%	12%	New Alignment	0	4	$8	2022-2030	$17	n.a.	n.a.
57	O	JC	Rte 60 relo. - east section- JCC	Rte 60 near WalMart Distr Ctr.	Newport News CL	1.8	6%	46%	New alignment	0	4	$48	2014-2022	$79	n.a.	n.a.
77	O	NN	Atkinson Blvd	Warwick Blvd	Jefferson Ave	n.a.	13%	64%	New Alignment	0	4	$26	2014-2022	$42	n.a.	n.a.
78	O	NN	Harpersville Rd	Jefferson Ave	Warwick Blvd	1.6	6%	38%	Widening	2	4	$16	2022-2030	$35	13,198	D
83	O	NN	Middleground Blvd	Jefferson Ave	Warwick Blvd	n.a.	9%	25%	New Alignment	0	4	$42	2014-2022	$69	n.a.	n.a.
84	O	NN	Oyster Point Rd	Jefferson Ave	Warwick Blvd	2.5	17%	34%	Widening	4	6	$15	2022-2030	$33	46,330	F
86	O	NN	Rte 60 relo. - east section- NN	James City CL	Ft Eustis Blvd	1.8	4%	39%	New alignment	0	4	$23	2014-2022	$37	n.a.	n.a.
92	O	NOR	Brambleton Ave / I-264 Interchange	n.a.	n.a.	2.2	43%	99%	Modify Interchange	n.a.	n.a.	$65	2014-2022	$107	n.a.	n.a.
95	O	NOR	Church St / Wood St	Brambleton Blvd	St Paul's Blvd	1.4	56%	97%	Widening	2	4	$9	2022-2030	$21	n.a.	n.a.
101	O	NOR	Little Creek Rd	Tidewater Dr	Azalea Garden Rd	3.4	8%	52%	Widening	4	6	$34	2022-2030	$77	29,324	D
104	O	NOR	Military Hwy	Northampton Blvd	Robin Hood Rd	1.9	11%	41%	Widening	4	6	$68	2014-2022	$112	51,231	F
108	O	NOR	Va. Beach Blvd (13)	Military Circle entr.	Newtown Rd	2.3	6%	26%	Widening	4 / 6	8	$56	2014-2022	$92	36,304	D
111	O	POQ	Wythe Creek Rd	Alphus St	Hampton CL	n.a.	13%	4%	Widening	2	4	$9	2022-2030	$20	13,991	D
118	O	PORT	Turnpike Rd	Portsmouth Blvd	Constitution Ave	2.7	68%	99%	Widening	2	4	$11	2022-2030	$25	10,781	D
123	O	SM	Battery Park Rd	S. Church St	Nike Park Rd	n.a.	7%	20%	Widening	2	4	$13	2022-2030	$29	8,654	D
126	O	SUF	Nansemond Pkwy - Portsmouth Blvd	Shoulders Hill Rd	Chesapeake CL	1.8	6%	49%	Widening	2	4	$7	2014-2022	$12	11,171	C
201	O	Transit	Bus Purchases, HRT	n.a.	n.a.	n.a.	n.a.	n.a.	200 new buses	n.a.	n.a.	n.a.	2022-2030	being developed	n.a.	n.a.
204	O	Transit	Call and Ride (similar to previous Maxi Ride)	n.a.	n.a.	n.a.	n.a.	n.a.	O&M	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
206	O	Transit	Ferry	n.a.	n.a.	n.a.	n.a.	n.a.	8 new ferries	n.a.	n.a.	n.a.	2022-2030	being developed	n.a.	n.a.

CANDIDATE PROJECTS FOR 2030 REGIONAL TRANSPORTATION PLAN

2030 STATUS LEGEND

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O Project was submitted as a **candidate for sources of funds other than NHS** for the 2030 Plan.

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PROJID	2030 Status	Locality	Project	From	To	EPDO Crash Rate per MVMT	Poverty HH's in Nearby BlockGrp	Minority Persons in Nearby BlockGrp	Work	2006 Lanes	Prop'd Lanes	Current Cost (M$'s)	YOE	2030 Cost (FY06+, million YOE $'s)	Proj. Link EXIST. ADT ('01 to '03) (21)	Proj. Link 2003 CMS LOS (18)
207	O	Transit	Ferry - O&M	n.a.	n.a.	n.a.	n.a.	n.a.	O&M	n.a.	n.a.	n.a.	2022-2030	being developed	n.a.	n.a.
208	O	Transit	HRT headquarters in Hampton	n.a.	n.a.	n.a.	15%	62%	Replacement	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
209	O	Transit	Local bus service	n.a.	n.a.	n.a.	n.a.	n.a.	O&M	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
214	O	Transit	Peninsula fixed guideway project	n.a.	n.a.	n.a.	n.a.	n.a.	Capital cost	n.a.	n.a.	n.a.	2022-2030	being developed	n.a.	n.a.
216	O	Transit	Regional bus service	n.a.	n.a.	n.a.	n.a.	n.a.	O&M	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
220	O	Transit	Transit stations	n.a.	n.a.	n.a.	n.a.	n.a.	Replacement	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
221	O	Transit	Virginia Beach trolley facility	n.a.	n.a.	n.a.	n.a.	n.a.	Replacement	n.a.	n.a.	n.a.	2014-2022	being developed	n.a.	n.a.
130	O	VB	Baker Rd Ext'd	Summit Arch	w. of Witchduck Rd	n.a.	8%	49%	New Alignment	0	2	$4	2014-2022	$6	n.a.	n.a.
132	O	VB	Buckner Blvd / Shipps Corner Rd	Rosemont Rd	Holland Rd	n.a.	9%	53%	New Alignment	0	4	$11	2014-2022	$18	n.a.	n.a.
133	O	VB	Centerville Tnpk	Ches CL	Kempsville Rd	n.a.	0%	53%	Widening	2	4	$12	2022-2030	$26	13,987	C
134	O	VB	Centerville Tnpk	Kempsville Rd	Indian River Rd	3.5	42%	30%	Widening	2	6	$19	2022-2030	$42	17,414	E
136	O	VB	Constitution Dr ext'd	Columbus St	Bonney Rd	n.a.	4%	36%	New Alignment	0	4	$12	2014-2022	$20	n.a.	n.a.
138	O	VB	Elbow Rd / Dam Neck Rd	Indian River Rd	GTE VB Amphitheater	n.a.	6%	42%	Widening	2	4	$40	2014-2022	$66	n.a.	n.a.
139	O	VB	First Colonial Rd	Great Neck Rd	Republic Rd	1.1	7%	20%	Widening	4	6	$25	2022-2030	$57	18,136	C
142	O	VB	Holland Rd	Dam Neck Rd	Rosemont Rd	3.8	12%	42%	Widening	4	6	$33	2014-2022	$54	32,587	C
143	O	VB	I-64 / City Line Interchange & Road (13)	n.a.	n.a.	n.a.	42%	30%	New interchange	n.a.	n.a.	$11	2014-2022	$17	n.a.	n.a.
149	O	VB	Indian River Rd	Centerville Tnpk	Ferrell Pkwy	2.5	1%	40%	Widening	6	8	$20	2014-2022	$33	67,533	F
150	O	VB	Indian River Rd	Lynnhaven Pkwy	Elbow Rd	1.8	4%	45%	Widening	2	4	$53	2014-2022	$87	11,236	C
151	O	VB	Indian River Rd	Elbow Rd	North Landing Rd	1.8	0%	29%	Widening	2	4	$39	2022-2030	$87	5,465	B
153	O	VB	Jeanne St	Constitution Dr	Independence Blvd	n.a.	10%	48%	Widening	2	4	$2	2014-2022	$4	n.a.	n.a.
160	O	VB	Nimmo Pkwy	Ind Rvr / N Landing Rds	West Neck Rd ext'd	n.a.	9%	44%	New Alignment	0	4	$10	2014-2022	$16	n.a.	n.a.
162	O	VB	Nimmo Pkwy	Upton Dr	Sandfiddler Rd	n.a.	1%	5%	New Alignment	0	2	$31	2022-2030	$69	n.a.	n.a.
168	O	VB	Princess Anne Rd	Upton Dr	General Booth Blvd	0.9	3%	13%	Widening	2	4	$7	2014-2022	$12	12,635	C
169	O	VB	Providence Rd	Kempsville Rd	PA Rd	n.a.	0%	19%	Widening	2	4	$19	2022-2030	$41	15,587	D
170	O	VB	Rosemont Rd	VB Blvd	Holland Rd	3.8	2%	23%	Widening	4	6	$34	2014-2022	$56	56,000	F
171	O	VB	Salem Rd	North Landing Rd	Elbow Rd	0.8	9%	44%	Widening	2	4	$22	2022-2030	$48	5,411	C
172	O	VB	Salem Rd	Elbow Rd	Independence Blvd	1.7	1%	34%	Widening	2	4	$12	2014-2022	$20	9,624	B
173	O	VB	Sandbridge Rd	Princess Anne Rd	Atwoodtown Rd	n.a.	3%	13%	Widening	2	4	$16	2022-2030	$35	10,205	C
176	O	VB	Shore Dr / Lesner Bridge (4)	west approaches	east approaches	n.a.	4%	4%	Br. Reconstruction	4	4	$82	2014-2022	$134	n.a.	n.a.
178	O	VB	West Neck Pkwy ext'd	Elbow Rd	North Landing Rd	n.a.	9%	44%	New Alignment	0	4	$18	2022-2030	$39	n.a.	n.a.
179	O	VB	West Neck Pkwy ext'd	North Landing Rd	Indian River Rd	n.a.	2%	22%	New Alignment	0	4	$10	2014-2022	$16	n.a.	n.a.
180	O	VB	West Neck Rd	North Landing Rd	Indian River Rd	3.8	2%	22%	Widening	2	4	$17	2014-2022	$28	2,619	B
181	O	VB	Witchduck Rd	I-264	VB Blvd	2.0	8%	49%	Widening	4	6	$15	2014-2022	$24	45,265	E
182	O	VB	Witchduck Rd	Princess Anne Rd	I-264	1.4	3%	8%	Widening	4	6	$24	2014-2022	$40	29,985	C
73	O	WMB	Ironbound Rd	Longhill Conn Rd	Richmond Rd	0.4	29%	39%	Widening	2	4	$8	2022-2030	$19	12,335	C
192	O	YC	Oriana Blvd realigned	1.2 mi. west of Rte 17	Denbigh Blvd., 0.19mi e. of NN (	n.a.	3%	12%	Realign	2	2	$22	2022-2030	$48	n.a.	n.a.
194	O	YC	US 17 (JC Morris Blvd - GW Hwy)	Hampton Hwy	Newport News CL	1.0	0%	22%	Widening	4	6	$38	2022-2030	$85	38,000	D
195	O	YC	Victory Blvd (Rte 171)	Rte 17	Hampton Hwy	1.0	1%	19%	Widening	4	6	$5	2014-2022	$8	36,300	D
196	O	YC	Victory Blvd (Rte 171)	Hampton Hwy	Poquoson CL	1.0	3%	21%	Widening	2	4	$26	2022-2030	$58	18,575	D

CANDIDATE PROJECTS FOR 2030 REGIONAL TRANSPORTATION PLAN

2030 STATUS LEGEND

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PROJID	2030 Status	Locality	Project	From	To	Proj. Link 2030 BASE ADT (19)	Proj. Link 2030 ALT. ADT (22)	Proj. Link 2030 BASE LOS (19)	Proj. Link 2030 ALT. LOS (22)	Nearby Road	Nearby Link EXIST. ADT ('01 to '03) (21)	Nearby Link 2003 CMS LOS (18)	Nearby Link 2030 BASE ADT (19)	Nearby Link 2030 ALT. ADT (22)	Nearby Link 2030 BASE LOS (19)	Nearby Link 2030 ALT. LOS (22)
8	N	CH	GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	50,000	56,000	F	D	Dominion Blvd	28,411	F	41,000	39,000	G	G
7	N	CH	GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	10,000	10,000	C	B	Dominion Blvd	8,413	C	11,000	11,000	C	C
23	N	GLO	Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	22,000	22,000	C	C	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	N	GLO	Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	48,000	52,000	F	D	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
40	N	HM	I-64 (Hampton)	I-664	Mallory Rd	144,000	154,000	F	E	I-664	76,834	D	104,000	104,000	D	D
44	N	HM	Magruder Blvd	Cmdr Shep Blvd ext	HRCP	47,000	54,000	F	D	Big Bethel Rd	22,214	C	30,000	30,000	D	D
62	N	MULTI	Ft Eustis Blvd	0.54 mi. e. Jefferson Ave	Rte 17	27,000	34,000	G	D	Denbigh Blvd	15,857	E	22,000	22,000	F	F
37	N	MULTI	Hampton Roads Center Pkwy	Harpersville Rd	I-64	69,000	78,000	E	D	I-64	145,972	D	200,000	196,000	G	G
64	N	MULTI	I-264 (add two lanes, I-64 to Indep Blvd)	I-64	Independence Blvd	298,000	317,000	G	G	Va Beach Blvd	46,111	C	63,000	55,000	D	C
65	N	MULTI	I-264 (prepare existing lanes for all uses)	I-64	Independence Blvd	298,000	317,000	G	G	Va Beach Blvd	46,111	C	63,000	56,000	D	C
67	N	MULTI	I-664 (Southside)	Bowers Hill	Rte 17 / Bridge Rd	96,000	106,000	F	D	HRBT	91,225	F	106,000	106,000	G	G
80	N	NN	I-64 (Newport News)	Jefferson Ave (exit 255)	Merrimac Trail (exit 247)	127,000	157,000	G	G	Jefferson Ave	23,013	C	44,000	34,000	C	C
79	N	NN	I-64 / Bland intx	na	na	127,000	155,000	G	G	Bland Blvd	29,379	C	37,000	64,000	F	G
82	N	NN	Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	42,000	50,000	F	D	Warwick Blvd	47,554	F	60,000	56,000	G	G
85	N	NN	Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	57,000	57,000	G	E	Oyster Pt Rd	52,524	D	65,000	65,000	F	F
94	N	NOR	Brambleton Ave	St. Pauls Blvd	I-264	34,000	44,000	D	C	Va Beach Blvd	14,724	C	23,000	22,000	C	C
102	N	NOR	Little Creek Rd	Tidewater Dr	Military Hwy	35,000	39,000	D	C	Sewells Pt Rd	9,978	B	13,000	16,000	C	C
112	N	PORT	4th Marine Terminal Access (20)	Western Fwy	Craney Island	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
199	N	Transit	Alt fuel buses: Oystr Pt & Dwntwn Norf	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
213	N	Transit	Norfolk Light Rail	Newtown Rd	Norfolk General Hospital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
219	N	Transit	Southside bus terminal / maint. facility	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
145	N	VB	I-264 / Independence Blvd intx	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
146	N	VB	I-264 / Lynnhaven Pkwy intx	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
147	N	VB	I-264 / Rosemont Rd intx	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
144	N	VB	I-264 / Witchduck Rd intx	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
148	N	VB	Independence Blvd	Haygood Rd	Northampton Blvd	42,000	52,000	F	D	Northampton Blvd	39,750	B	63,000	61,000	B	B
164	N	VB	Northampton Blvd / Shore Dr intx	na	na	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
193	N	YC	Rte 17 (York Co.)	Hampton Hwy	Goodwin Nk / Denbigh B	77,000	91,000	G	G	Jefferson Ave	58,750	E	69,000	69,000	F	F
2	O	CH	Cedar Rd	Albemarle Dr	Battlefield Blvd	32,000	33,000	G	F	Great Bridge Blvd	9,282	C	19,000	19,000	F	F
3	O	CH	Cedar Rd (incl'g Deep Crk br) (7)	Mill Creek Pkwy	Shipyard Rd	50,000	54,000	G	G	Dominion Blvd	8,413	C	11,000	9,000	C	C
9	O	CH	Hanbury Rd	Johnstown Rd	Battlefield Blvd	13,000	13,000	D	C	Johnstown Rd	9,238	B	11,000	13,000	C	D
13	O	CH	Military Hwy	Allison Dr	VB CL	30,000	33,000	C	C	I-64	128,511	D	142,000	141,000	F	F
15	O	CH	Mt Pleasant Rd (incl'g Byp intx impr'ts)	Great Bridge Bypass	Centerville Tnpk	24,000	39,000	G	F	Butts Station Rd	11,370	D	23,000	22,000	G	F
30	O	HM	Armistead Ave	Mercury Blvd	Hampton Roads Center Pkwy	32,000	48,000	D	D	Coliseum Dr	17,435	B	31,000	26,000	D	C
39	O	HM	I-64 @ Armistead Ave & Lasalle Ave	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
42	O	HM	Little Back River Rd	King St	Harris Creek Rd	4,000	5,000	C	C	Fox Hill Rd	28,701	F	30,000	28,000	D	D
51	O	IW	Smithfield Connector	Nike Park Rd	Smith's Neck Rd	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
57	O	JC	Rte 60 relo. - east section- JCC	Rte 60 near WalMart Distr Ctr.	Newport News CL	n.a.	22,000	n.a.	C	Pocohantas Trl	9,244	C	20,000	6,000	F	C
77	O	NN	Atkinson Blvd	Warwick Blvd	Jefferson Ave	n.a.	27,000	n.a.	C	Denbigh Blvd	36,879	D	46,000	37,000	G	F
78	O	NN	Harpersville Rd	Jefferson Ave	Warwick Blvd	21,000	35,000	F	F	Main St	14,823	C	24,000	19,000	C	C
83	O	NN	Middleground Blvd	Jefferson Ave	Warwick Blvd	n.a.	37,000	n.a.	F	JC Morris Blvd	38,271	C	49,000	41,000	G	F
84	O	NN	Oyster Point Rd	Jefferson Ave	Warwick Blvd	59,000	72,000	G	F	JC Morris Blvd	38,271	C	54,000	52,000	G	G
86	O	NN	Rte 60 relo. - east section- NN	James City CL	Ft Eustis Blvd	n.a.	22,000	n.a.	C	Warwick Blvd	16,331	D	27,000	24,000	G	F
92	O	NOR	Brambleton Ave / I-264 Interchange	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
95	O	NOR	Church St / Wood St	Brambleton Blvd	St Paul's Blvd	n.a.	9,000	n.a.	C	St Pauls Blvd	41,857	D	48,000	45,000	D	D
101	O	NOR	Little Creek Rd	Tidewater Dr	Azalea Garden Rd	30,000	36,000	C	C	Ocean View Ave	18,765	B	19,000	18,000	C	C
104	O	NOR	Military Hwy	Northampton Blvd	Robin Hood Rd	57,000	68,000	G	F	I-64	171,696	E	164,000	157,000	F	F
108	O	NOR	Va. Beach Blvd (13)	Military Circle entr.	Newtown Rd	46,000	60,000	D	C	I-264	241,927	E	294,000	286,000	G	G
111	O	POQ	Wythe Creek Rd	Alphus St	Hampton CL	23,000	26,000	G	C	Carys Chapel Rd	n.a.	n.a.	4,000	2,000	C	B
118	O	PORT	Turnpike Rd	Portsmouth Blvd	Constitution Ave	9,000	12,000	C	C	I-264	82,090	D	91,000	91,000	D	D
123	O	SM	Battery Park Rd	S. Church St	Nike Park Rd	7,000	7,000	C	C	Brewers Neck Blvd	21,801	B	36,000	36,000	F	F
126	O	SUF	Nansemond Pkwy - Portsmouth Blvd	Shoulders Hill Rd	Chesapeake CL	26,000	30,000	G	D	Pughsville Rd	3,175	B	14,000	13,000	D	C
201	O	Transit	Bus Purchases, HRT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
204	O	Transit	Call and Ride (similar to previous Maxi Ride)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
206	O	Transit	Ferry	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

CANDIDATE PROJECTS FOR 2030 REGIONAL TRANSPORTATION PLAN

2030 STATUS LEGEND

N Project was submitted as a **candidate for NHS funds** for the 2030 Plan.

O Project was submitted as a **candidate for sources of funds other than NHS** for the 2030 Plan.

Projects in the recent Regional Toll Study are not included in this list, as financing for these projects is currentl

PROJID	2030 Status	Locality	Project	From	To	Proj. Link 2030 BASE ADT (19)	Proj. Link 2030 ALT. ADT (22)	Proj. Link 2030 BASE LOS (19)	Proj. Link 2030 ALT. LOS (22)	Nearby Road	Nearby Link EXIST. ADT ('01 to '03) (21)	Nearby Link 2003 CMS LOS (18)	Nearby Link 2030 BASE ADT (19)	Nearby Link 2030 ALT. ADT (22)	Nearby Link 2030 BASE LOS (19)	Nearby Link 2030 ALT. LOS (22)
207	O	Transit	Ferry - O&M	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
208	O	Transit	HRT headquarters in Hampton	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
209	O	Transit	Local bus service	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
214	O	Transit	Peninsula fixed guideway project	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
216	O	Transit	Regional bus service	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
220	O	Transit	Transit stations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
221	O	Transit	Virginia Beach trolley facility	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
130	O	VB	Baker Rd Ext'd	Summit Arch	w. of Witchduck Rd	n.a.	9,000	n.a.	C	Va Beach Blvd	46,111	C	63,000	59,000	D	C
132	O	VB	Buckner Blvd / Shipps Corner Rd	Rosemont Rd	Holland Rd	n.a.	6,000	n.a.	C	Dam Neck Rd	35,390	D	39,000	38,000	F	F
133	O	VB	Centerville Tnpk	Ches CL	Kempsville Rd	26,000	30,000	G	D	Kempsville Rd	29,819	B	41,000	40,000	D	D
134	O	VB	Centerville Tnpk	Kempsville Rd	Indian River Rd	22,000	40,000	G	D	Kempsville Rd	34,230	C	37,000	32,000	F	E
136	O	VB	Constitution Dr ext'd	Columbus St	Bonney Rd	n.a.	13,000	n.a.	C	Independence Blvd	81,851	F	98,000	86,000	F	F
138	O	VB	Elbow Rd / Dam Neck Rd	Indian River Rd	GTE VB Amphitheater	12,000	18,000	C	C	Independence Blvd	7,206	B	9,000	8,000	C	C
139	O	VB	First Colonial Rd	Great Neck Rd	Republic Rd	44,000	49,000	G	F	Great Neck Rd	n.a.	n.a.	25,000	23,000	C	C
142	O	VB	Holland Rd	Dam Neck Rd	Rosemont Rd	39,000	47,000	F	D	Rosemont Rd	23,334	B	27,000	23,000	D	C
143	O	VB	I-64 / City Line Interchange & Road (13)	n.a.	n.a.	n.a.	27,000	n.a.	C	Indian River Rd	78,122	F	96,000	81,000	G	F
149	O	VB	Indian River Rd	Centerville Tnpk	Ferrell Pkwy	72,000	84,000	G	F	Providence Rd	25,491	D	34,000	32,000	F	F
150	O	VB	Indian River Rd	Lynnhaven Pkwy	Elbow Rd	15,000	23,000	D	C	Salem Rd	9,624	B	22,000	20,000	C	C
151	O	VB	Indian River Rd	Elbow Rd	North Landing Rd	10,000	15,000	C	C	Salem Rd	5,411	C	8,000	6,000	C	C
153	O	VB	Jeanne St	Constitution Dr	Independence Blvd	5,000	5,000	C	C	Va Beach Blvd	49,607	D	69,000	66,000	D	D
160	O	VB	Nimmo Pkwy	Ind Rvr / N Landing Rds	West Neck Rd ext'd	n.a.	13,000	n.a.	C	North Lndg Rd	7,639	C	12,000	5,000	C	C
162	O	VB	Nimmo Pkwy	Upton Dr	Sandfiddler Rd	n.a.	10,000	n.a.	C	Sandbridge Rd	10,205	C	12,000	5,000	C	C
168	O	VB	Princess Anne Rd	Upton Dr	General Booth Blvd	13,000	18,000	C	C	Nimmo Pkwy	10,176	B	16,000	11,000	C	C
169	O	VB	Providence Rd	Kempsville Rd	PA Rd	18,000	34,000	F	F	Ferrell Pkwy	40,307	C	38,000	33,000	F	F
170	O	VB	Rosemont Rd	VB Blvd	Holland Rd	69,000	82,000	G	G	Lynnhaven Pkwy	53,061	D	57,000	55,000	F	F
171	O	VB	Salem Rd	North Landing Rd	Elbow Rd	8,000	10,000	C	C	Indian River Rd	5,465	B	10,000	10,000	C	C
172	O	VB	Salem Rd	Elbow Rd	Independence Blvd	9,000	17,000	C	C	Indian River Rd	11,236	C	15,000	15,000	D	D
173	O	VB	Sandbridge Rd	Princess Anne Rd	Atwoodtown Rd	14,000	14,000	D	C	Upton Dr	12,635	C	16,000	15,000	C	C
176	O	VB	Shore Dr / Lesner Bridge (4)	west approaches	east approaches	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
178	O	VB	West Neck Pkwy ext'd	Elbow Rd	North Landing Rd	n.a.	17,000	n.a.	C	Princess Anne Rd	23,737	E	45,000	35,000	G	F
179	O	VB	West Neck Pkwy ext'd	North Landing Rd	Indian River Rd	n.a.	12,000	n.a.	C	North Lndg Rd	7,639	C	18,000	18,000	F	F
180	O	VB	West Neck Rd	North Landing Rd	Indian River Rd	7,000	8,000	C	C	Seaboard Rd	2,719	B	4,000	3,000	C	B
181	O	VB	Witchduck Rd	I-264	VB Blvd	40,000	54,000	F	F	Independence Blvd	81,851	F	84,000	81,000	F	F
182	O	VB	Witchduck Rd	Princess Anne Rd	I-264	39,000	51,000	F	F	Independence Blvd	80,128	F	89,000	87,000	F	F
73	O	WMB	Ironbound Rd	Longhill Conn Rd	Richmond Rd	17,000	19,000	F	C	Monticello Ave	13,944	D	22,000	21,000	G	F
192	O	YC	Oriana Blvd realigned	1.2 mi. west of Rte 17	Denbigh Blvd., 0.19mi e. of NN (	16,000	14,000	D	C	Denbigh Blvd	15,857	E	24,000	24,000	F	F
194	O	YC	US 17 (JC Morris Blvd - GW Hwy)	Hampton Hwy	Newport News CL	47,000	55,000	F	D	Victory Blvd	45,257	D	65,000	64,000	F	F
195	O	YC	Victory Blvd (Rte 171)	Rte 17	Hampton Hwy	37,000	41,000	F	D	Hampton Hwy	26,202	D	37,000	31,000	E	D
196	O	YC	Victory Blvd (Rte 171)	Hampton Hwy	Poquoson CL	30,000	33,000	G	E	Hampton Hwy	25,086	C	37,000	32,000	E	D

2030 PROJECTS SUBMITTED AS CANDIDATES
BUT NOT NECESSARY TO LIST IN REGIONAL PLAN

2030 STATUS LEGEND

U Not necessary to list project for regional plans; turn lanes, collectors, locals, reconstructions, etc. are **included in a general pot of money** for these "unlisted" projects.

PROJID	2030 Status	Locality	Project	From	To	Work	2006 Lanes	Prop'd Lanes
17	U	CH	Woodlake Dr Extd	Woodlake Cir	Battlefield Blvd	New Alignment	0	2
11	U	CH	I-64 at Greenbrier Pkwy	na	na	Modify Interchange	n.a.	n.a.
19	U	GLO	New connector road	Margaret Dr	Hayes Rd	New Alignment	0	2
21	U	GLO	New connector road	Brays Point Rd	Featherbed Ln	New Alignment	0	2
34	U	HM	Fox Hill Rd (10)	Old Fox Hill Rd	Willow Oaks Blvd	Reconstruct	4	4
35	U	HM	Fox Hill Rd (10)	Willow Oaks Blvd	Woodland Rd	Reconstruct	4	4
36	U	HM	Fox Hill Rd (10)	Woodland Rd	Old Buckroe Rd	Reconstruct	4	4
45	U	HM	Power Plant Pkwy (9)	Briarfield Rd	Pine Chapel Rd	Reconstruct	4	4
48	U	HM	Todds Lane (10)	Newport News CL	Aberdeen Rd	Reconstruct	4	4
74	U	MULTI	Ironbound Rd / Monticello Ave	n.a.	n.a.	Intersection imp.	n.a.	n.a.
91	U	NOR	Boush St	Brambleton Ave	Va Beach Blvd	Reconstruct	4	4
90	U	NOR	Boush St	City Hall Ave	Brambleton Ave	Reconstruct	4	4
93	U	NOR	Brambleton Ave intersections (3)	n.a.	n.a.	Turn Lane(s)	n.a.	n.a.
116	U	PORT	McLean St	Greenwood Dr	Airline Blvd	Widening	2	4
124	U	SUF	Kings Highway Bridge	n.a.	n.a.	Reconstruct	2	2
135	U	VB	Concert Dr Ext'd	Recreation Dr	Dam Neck Rd	New Alignment	0	4
140	U	VB	First Colonial Rd / VB Blvd Intersection	n.a.	n.a.	Intersection, incl. widen	n.a.	n.a.
152	U	VB	Indian River Rd	North Landing Rd	West Neck Rd	Reconstruct	2	2
167	U	VB	Princess Anne Rd	Indian River Rd	Upton Dr	Reconstruct	2	2
175	U	VB	Seaboard Rd	Princess Anne Rd	Princess Anne Rd	Reconstruct	2	2
184	U	WMB	East-West Blvd	Quarterpath Rd	Pocahantas Trl	New Alignment	0	2
185	U	WMB	North-South Blvd	East-West Blvd	Quarterpath Rd	New Alignment	0	2
186	U	WMB	Quarterpath Rd (11)	Rte 199	York St	Reconstruct	2	2

Notes

(1) e.g. bikeways, turn lanes, signals, etc.
(2) for reconstruction, turn lanes, etc.
(3) at Colley Ave, Duke St, Boush St, Granby St, and Monticello Ave.
(4) 6 lanes of pavement at Lesner Bridge.
(5) blank
(6) blank
(7) The Corps of Engineers would fund this improvement.
(8) Project will have a landscaped median from S'berry Plains to Ironbound Square, center turn lane from Ironbound Sq to Longhill Connector Rd, roundabout at Longhill Conn Rd, and multi-use paths along ROW.
(9) Road is currently 4-lane undivided, project will make it 4-lane divided including widening of a short bridge.
(10) Adding a center turn lane.
(11) Road is currently about a third dirt, third 2 lanes, and a third a narrow paved road. Project would include bike facility.
(12) near Princess Anne Elementary School.
(13) Partially funded by SAFETEA-LU.
(14) Hampton Roads Third Crossing:
Seg. 1: I-564 to MMMBT, new 4L hiway plus 2L for transit
Seg. 2: MMMBT, widen to 8L plus 2L for transit (2nd tube)
Seg. 3: Craney Island Connector, new 4L hiway
Seg. 4: I-664 in Newport News, widen to 8L
Seg. 5: I-664 from Seg. 1 to Bowers Hill, widen to 6L
Seg. 6: I-64 to Intermodal Connector, widen to 8L plus 2L for transit
(15) Midtown Tunnel / MLK Freeway: construct add'l 2L Midtown Tunnel and extend MLK to I-264
(16) SP&G: Southeastern Parkway and Greenbelt
I-264 to Rte 168: 4; Oak Grove Conn: 8L;
Dom. Blvd: 4L arterial from GW Hwy to Cedar Rd; 4L highway w/ intx at Great Bridge Blvd
(17) Rte 460 improvements:
from I-664 to e. end Suffolk bypass: upgrade to interstate design standards
from w. end Suffolk bypass to I-295: new 4L highway at interstate design standards
(18) Source is April 2005 CMS for Hampton Roads; PM Peak LOS is shown. LOS G was not a possible category in the CMS.
(19) Base is 2030 landuse on an existing plus committed highway network and 2000 bus network.
(20) Analysis of the 4th Marine Terminal Access could not be done because the 2030 socioeconomic data for Craney Island had no population or employment.
(21) Source is April 2005 CMS for Hampton Roads.
(22) ALT scenario is 2030 Base scenario plus the project listed.

Document #2

“Candidate Projects for 2030 NHS Funding”

CANDIDATE PROJECTS FOR 2030 NHS FUNDING (plus Midtown/MLK)

(alphabetically listed)

Project	From	To	Dist. mi.	EC lanes	Improvement	Total Project Cost, 2005$	Inflation Period (6)	YOE	Total Project Cost, YOE$	Pre-FY06 Allocations	FY06+ Project Cost, YOE$	NHS FY06+ Request, YOE$
Brambleton Ave	St. Pauls Blvd	I-264	1.2	4	widen to 6L	$89,600,000	late (III)	2022-2030	$199,808,000	$0	$199,808,000	$199,808,000
Dominion Blvd (with toll)	Great Bridge Blvd	GW Hwy	5.1	2	widen to 4L	$137,046,824	TS (12)	TS (12)	$185,000,000	$5,589,000	$179,411,000	$50,000,000
GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	1.0	2	realign, 4L (div'd)	$11,400,000	late (III)	2022-2030	$25,422,000	$0	$25,422,000	$25,422,000
GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	1.2	4	widen to 6L	$100,800,000	early (II)	2014-2022	$165,312,000	$0	$165,312,000	$165,312,000
Hampton Roads Center Pkwy	Harpersville Rd	I-64	2.5	4	widen to 6L	$36,400,000	late (III)	2022-2030	$81,172,000	$0	$81,172,000	$81,172,000
I-264 (add two lanes, I-64 to Indep Blvd)	I-64	Independence Blvd	3.5	8+2	widen to 10+2	$400,000,000	late (III)	2022-2030	$892,000,000	$0	$892,000,000	$892,000,000
I-264 (prepare existing lanes for all uses)	I-64	Independence Blvd	3.5	8+2	10 regular lanes	$300,000,000	late (III)	2022-2030	$669,000,000	$0	$669,000,000	$669,000,000
I-264 / Independence Blvd intx	n.a.	n.a.	n.a.	n.a.	improve intx	$112,000,000	late (III)	2022-2030	$249,760,000	$0	$249,760,000	$249,760,000
I-264 / Lynnhaven Pkwy intx (11)	n.a.	n.a.	n.a.	n.a.	improve intx	$55,492,000	early (II)	2014-2022	$91,006,880	$1,160,000	$89,846,880	$79,606,880
I-264 / Rosemont Rd intx	n.a.	n.a.	n.a.	n.a.	improve intx	$84,000,000	late (III)	2022-2030	$187,320,000	$725,000	$186,595,000	$186,595,000
I-264 / Witchduck Rd intx	n.a.	n.a.	n.a.	n.a.	improve intx	$95,200,000	early (II)	2014-2022	$156,128,000	$5,930,000	$150,198,000	$150,198,000
I-64 (Hampton)	I-664	Mallory Rd	3.6	6	widen to 8L	$305,800,000	late (III)	2022-2030	$681,934,000	$0	$681,934,000	$681,934,000
I-64 / Bland intx (11)	n.a.	n.a.	n.a.	n.a.	construct intx	$112,000,000	late (III)	2022-2030	$249,760,000	$36,391,000	$213,369,000	$213,369,000
I-64 (Southside, partial, with toll)	I-464	end of High-Rise Br	2.6	4	widen to 6L	$388,552,756	TS (12)	TS (12)	$648,000,000	$0	$648,000,000	$324,000,000
I-64 (Peninsula)	Jefferson Ave (exit 255)	Rte 199 (exit 242)	12.0	4	widen to 6+2	$354,784,350	R+1(13)	R+1(13)	$556,000,000	$5,249,000	$550,751,000	$550,751,000
Independence Blvd	Haygood Rd	Northampton Blvd	1.7	4	widen to 6L	$30,900,000	late (III)	2022-2030	$68,907,000	$0	$68,907,000	$68,907,000
Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	1.6	4	widen to 6L	$33,600,000	late (III)	2022-2030	$74,928,000	$0	$74,928,000	$74,928,000
Little Creek Rd	Tidewater Dr	Military Hwy	0.9	4	widen to 6L	$13,600,000	late (III)	2022-2030	$30,328,000	$0	$30,328,000	$30,328,000
Magruder Blvd	Cmdr Shep Blvd ext	HRCP	1.4	4	widen to 6L	$33,600,000	late (III)	2022-2030	$74,928,000	$0	$74,928,000	$74,928,000
Norfolk Light Rail	Newtown Rd	Norfolk General	7.4	n.a.	light rail	$190,082,645	n.a.	n.a.	$230,000,000	$10,000,000	$220,000,000	$7,000,000
Northampton Blvd / Shore Dr intx	n.a.	n.a.	n.a.	n.a.	improve intx	$14,800,000	late (III)	2022-2030	$33,004,000	$0	$33,004,000	$33,004,000
Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	11.4	4	widen to 6L	$147,700,000	early (II)	2014-2022	$242,228,000	$0	$242,228,000	$242,228,000
Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	4.2	4	widen to 6L	$56,000,000	late (III)	2022-2030	$124,880,000	$0	$124,880,000	$124,880,000
Rte 17 (York Co.)	Hampton Hwy	Goodwin Nk / Denbigh B	3.4	4	widen to 6L	$44,800,000	early (II)	2014-2022	$73,472,000	$14,624,000	$58,848,000	$28,000,000
Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	0.6	4	widen to 6L	$25,800,000	early (II)	2014-2022	$42,312,000	$0	$42,312,000	$42,312,000
					$Billions:	$3.174			$6.033	$0.080	$5.953	$5.245
Candidates for 100% Toll Funding:												
Midtown Tnl / MLK Ext (w/ toll & on DTT	Hampton Blvd	I-264	1.0	4,0	widen and extend	$437,376,900	TS (12)	TS (12)	$549,000,000	$0	$549,000,000	$0.0

CANDIDATE PROJECTS FOR 2030 NHS FUNDING (plus Midtown/MLK) ,page 2

(alphabetically listed)			Regional Trav. Time Savings 2030 minutes (2) (3)	Regional Trav. Time Savings 2030 B/C Ratio	Recent Count	EC Forecast 2030	ALT Forecast 2030 (1) (10)	Cnstrn Cost per Add'l Trip 2030 (8)	Cnstrn Cost per Trip (all trips) 2030 (10)	EC LOS 2030	EC Cong'd Speed mph 2030 (3)	ALT Cong'd Speed mph 2030 (3)
Project	From	To										
Brambleton Ave	St. Pauls Blvd	I-264	0.03	0.6	47,524	38,000	46,000	$1.93	$0.34	D	15	21
Dominion Blvd (with toll)	Great Bridge Blvd	GW Hwy	0.22	2.8	28,411	41,000	75,000	$0.69	$0.32	G	5	47
GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	n.a.	n.a.	3,917	10,000	10,000	$100	$0.20	C	25	35
GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	0.13	2.2	22,857	50,000	56,000	$2.90	$0.31	G	7	13
Hampton Roads Center Pkwy	Harpersville Rd	I-64	-0.11	-5.1	42,994	69,000	78,000	$0.70	$0.08	D	45	51
I-264 (add two lanes, I-64 to Indep Blvd)	I-64	Independence Blvd	0.20	0.9	241,927	297,000	317,000	$3.45	$0.22	G	15	22
I-264 (prepare existing lanes for all uses)	I-64	Independence Blvd	0.17	1.0	241,927	297,000	317,000	$2.59	$0.16	G	15	22
I-264 / Independence Blvd intx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	332,000	n.a.	$0.06	n.a.	n.a.	n.a.
I-264 / Lynnhaven Pkwy intx (11)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	194,000	n.a.	$0.05	n.a.	n.a.	n.a.
I-264 / Rosemont Rd intx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	239,000	n.a.	$0.06	n.a.	n.a.	n.a.
I-264 / Witchduck Rd intx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	290,000	n.a.	$0.06	n.a.	n.a.	n.a.
I-64 (Hampton)	I-664	Mallory Rd	0.05	0.3	119,045	144,000	154,000	$5.27	$0.34	F	35	44
I-64 / Bland intx (11)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	183,000	n.a.	$0.11	n.a.	n.a.	n.a.
I-64 (Southside, partial, with toll)	I-464	end of High-Rise Br	0.00	0.0	87,988	96,000	84,000	$100	$0.80	F	38	55
I-64 (Peninsula)	Jefferson Ave (exit 255)	Rte 199 (exit 242)	1.12	5.5	97,970	127,000	157,000	$2.04	$0.39	G	10	20
Independence Blvd	Haygood Rd	Northampton Blvd	0.04	2.2	43,743	42,000	52,000	$0.53	$0.10	F	21	25
Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	0.16	8.3	23,013	42,000	48,000	$0.97	$0.12	F	14	21
Little Creek Rd	Tidewater Dr	Military Hwy	0.03	3.4	29,324	35,000	39,000	$0.59	$0.06	D	18	26
Magruder Blvd	Cmdr Shep Blvd ext	HRCP	0.04	2.1	34,812	47,000	54,000	$0.83	$0.11	F	18	24
Norfolk Light Rail	Newtown Rd	Norfolk General Hospital	n.a.	n.a.	n.a.	n.a.	6,500	n.a.	$5.04	n.a.	n.a.	n.a.
Northampton Blvd / Shore Dr intx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	64,000	n.a.	$0.04	n.a.	n.a.	n.a.
Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	0.14	1.7	36,168	48,000	52,000	$6.37	$0.49	F	18	29
Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	0.03	0.9	17,672	22,000	22,000	$100	$0.44	C	38	45
Rte 17 (York Co.)	Hampton Hwy	Goodwin Nk / Denbigh B	0.32	12.5	55,511	77,000	91,000	$0.55	$0.08	G	6	10
Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	0.06	3.9	41,480	57,000	57,000	$100	$0.08	G	10	21
Midtown Tnl / MLK Ext (w/ toll & on DTT	Hampton Blvd	I-264	0.07	0.3	35,309	54,000	42,000	$100	$1.80	G	20	50

Notes
Red triangles indicate comments for staff on xls file.
Costs covered by other funding sources in addition to NHS.
(1) Volume on GW Hwy south of Cedar Rd is not expected to change with realignment.
(2) "Travel Time Savings" are average across the region (not solely on facility). Note: 2030 Existing plus Committed (EC) average highway travel time is 23.70 minutes.
(3) "Speed" and average highway trip travel time ("TT") are under congested conditions.
(4) The forecast shown for interchanges is the number of vehicles entering the interchange daily.
(5) The LOS shown for interchanges is based on the LOS of adjacent segments.
(6) 3.89% annual inflation rate; committed period: 2006-2014; "early (II)" period: 2014-2022 (2018 mid-yr, 1.64 factor); "late (III)" period: 2022-2030 (2026 mid-yr, 2.23 factor).
(7) "NHS Cost" is that portion of total cost requested to be covered by NHS funds.
(8) A cost of $100 indicates the infinite cost associated with adding zero trips.
(9) (blank)
(10) Trips are total entering vehicles for intersections and interchanges.
(11) The YOE NHS cost of this interchange has been reduced to reflect an earmark (Bland: $36m TEA-21; Lynnhaven: $11.4m SAFETEA).
(12) Construction time-table based on Toll Study, by Baker.
(13) Construction time-table: 2002 Referendum schedule, plus one year
Abbreviations
"FCA": Fully-Controlled Access
"B/C": Benefit/Cost ratio
"CHG": change in the measure between the scenario with the project (ALT) and the 2030 Existing plus committed scenario (EC)
"EC": existing + committed
"ALT": scenario with the alternative (i.e. candidate project)

Document #3

“NHS Candidates- Pros and Cons and Regional Impact Maps”

I-64 (Peninsula)

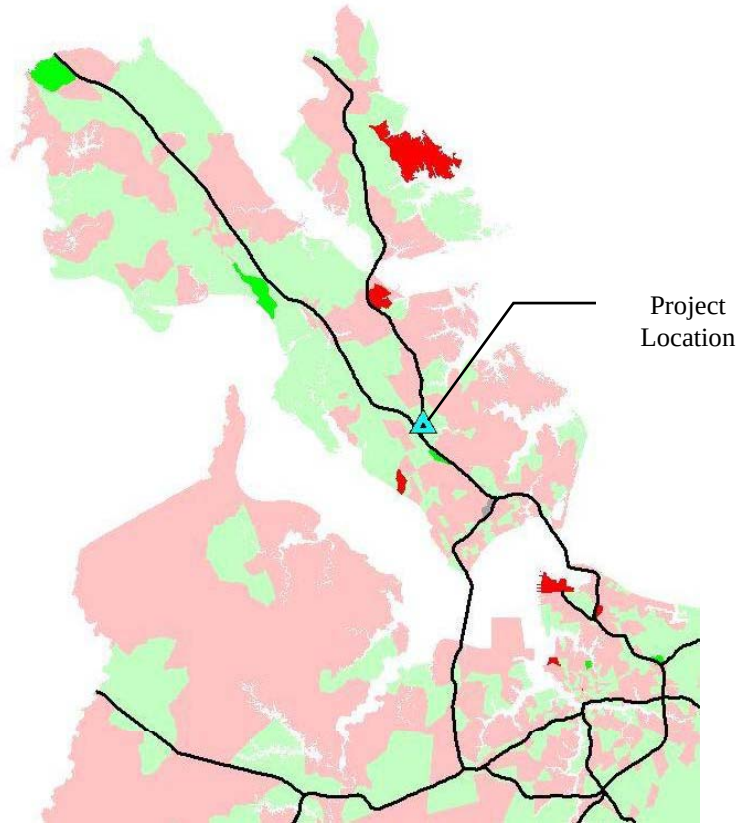
(from Jefferson Ave [exit 255] to Merrimac Tr [exit 247]; widen to 8 lanes)

- PRO
  - High regional Travel Time Savings Benefit/Cost ratio.
  - Improves primary gateway to Hampton Roads.

Rte 17 / J Clyde Morris Blvd
(from I-64 to Harpersville Rd; widen to 6 lanes)

- PRO
  - High regional network Travel Time Savings Benefit/Cost Ratio.
  - Improves LOS to E condition (10mph without project).
  - Low Cost per Trip.
  - Improves gateway to Hampton Roads.

- Note:
  - A longer, more effective improvement for this corridor (e.g. I-64 to Victory Blvd) should be considered for 2034 LRP.



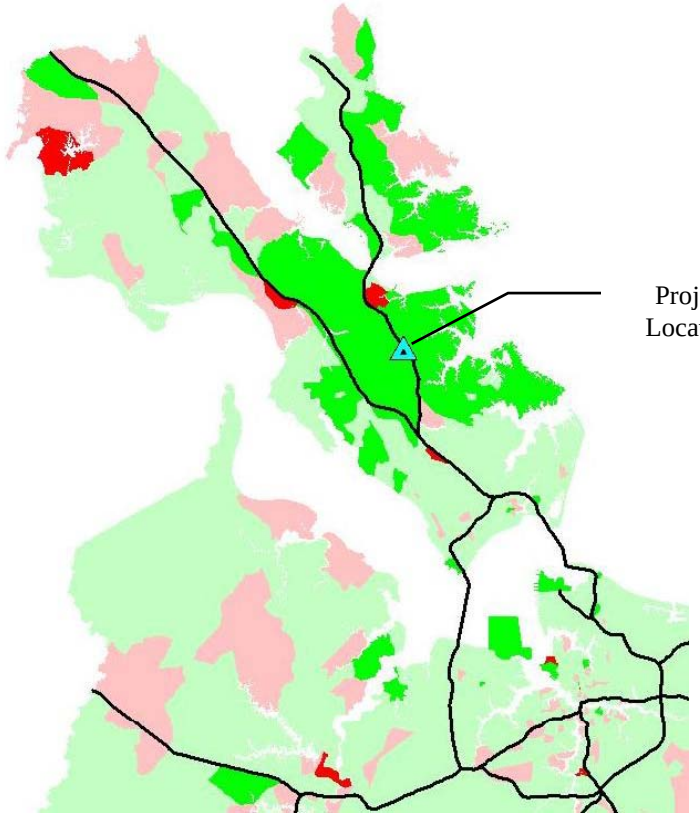
Dominion Blvd
(from Great Bridge Blvd to GW Hwy; widen to 4 lanes)

- PRO
  - High regional Travel Time Savings Benefit/Cost ratio.
  - Improves primary gateway to Hampton Roads.

Rte 17
(from Hampton Hwy to Goodwin/Denbigh; widen to 6 lanes)

- PRO
  - High regional Travel Time Savings Benefit/Cost ratio.
  - Low Cost per Additional Trip
  - Low Cost per Trip
  - Significantly improves accessibility of York and Gloucester counties.
  - Improves gateway to Hampton Roads.
  - Improves stagnant conditions (6mph w/o project).

Note: In light of high demand, consider 8 lanes for 2034 LRP.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

Increase up to 1.0 minute

Increase > 1.0 minute

Northampton Blvd / Shore Dr
Interchange Improvement

- PRO
  - Low Cost per Trip.
  - Improves access to growing Shore Dr. corridor.

I-264 / Lynnhaven Parkway
Interchange Improvement

- PRO
  - Low Cost per Trip.
  - Queue currently affects interstate traffic.
  - Severe congestion forecasted for adjacent roadway links:
    - I-264 from Rosemont Rd to Lynnhaven Pkwy
    - Lynnhaven Pkwy from International Pkwy to I-264
  - Serves important business area (Lynnhaven corridor).

I-264 / Witchduck Road
Interchange Improvement

- PRO
  - Low Cost per Trip.
  - Beyond Severe congestion forecasted for both adjacent interstate links.
  - Beyond Severe congestion forecasted for Witchduck Rd between I-264 and Va Beach Blvd.
  - Provides access to growing Town Center area.
  - Without Southeastern Parkway (not funded in Plan B), provides needed improvement to I-264 corridor.

  - Fully-funded in FY07 SYIP via allocations thru FY12.

I-264 / Rosemont Road
Interchange Improvement

- PRO
  - Low Cost per Trip.
  - Severe congestion forecasted for adjacent interstate links.
  - Beyond Severe congestion forecasted for Rosemont Rd between I-264 and Va Beach Blvd.
    - Model-based forecast, with capacity constraint: 74k vehicles for this segment which has 40k capacity.
  - Provides access to growing Town Center area.

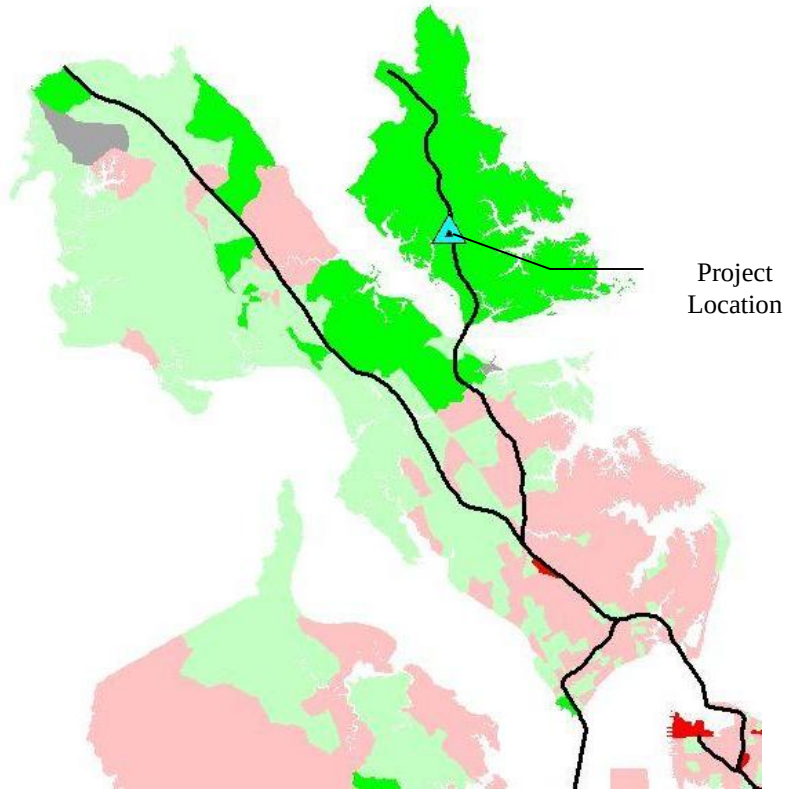
I-64 (Southside)
(from I-464 thru High Rise Bridge; widen to 6 lanes)

- PRO
  - Improves primary gateway to Hampton Roads.
- CON
  - No additional trips provided in year 2030 (due to toll).

Rte 17, Gloucester
(from Coleman Bridge to Main St. [south]; widen to 6 lanes)

- PRO
  - Improves a congested highway (currently: 36k vpd) with higher forecasted congestion (2030: 48k vpd, LOS F).
  - Moderately high Travel Time Savings Benefit/Cost Ratio.
  - Improves accessibility of Gloucester.

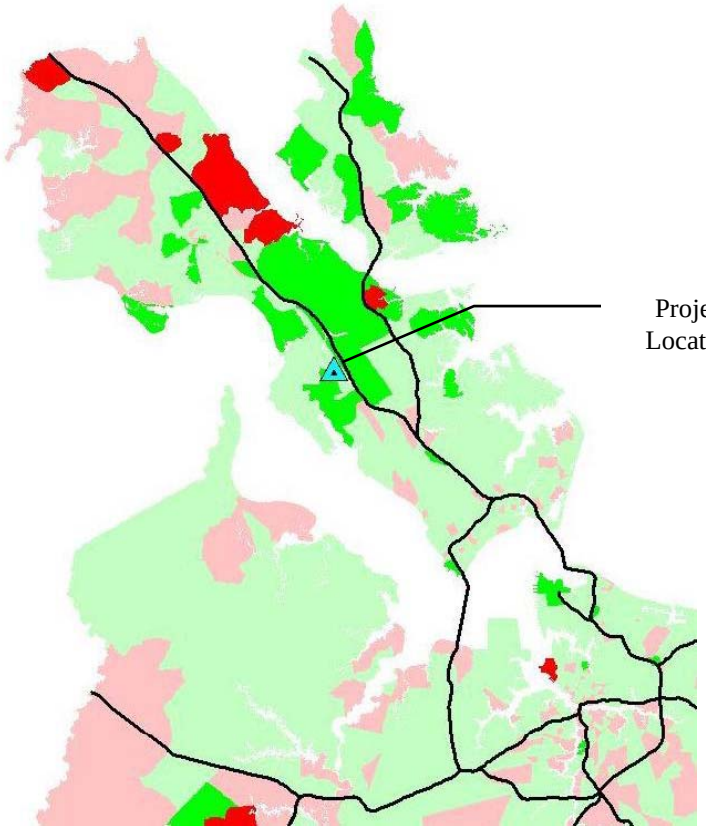
- Note:
  - High Cost per Additional Trip is due to lack of alternatives for Gloucester trips.



Jefferson Ave

(from Green Grove / Atkinson to Ft Eustis Blvd; widen to 6 lanes)

- CON
  - Low existing volume (23k).
- PRO
  - 2nd highest regional network Travel Time Savings Benefit/Cost Ratio.
  - Low Cost per Additional Trip.
  - Provides better accessibility for central York County and northern Newport News.
  - Provides route parallel to un-funded widening of I-64 (Plan A toll project).



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

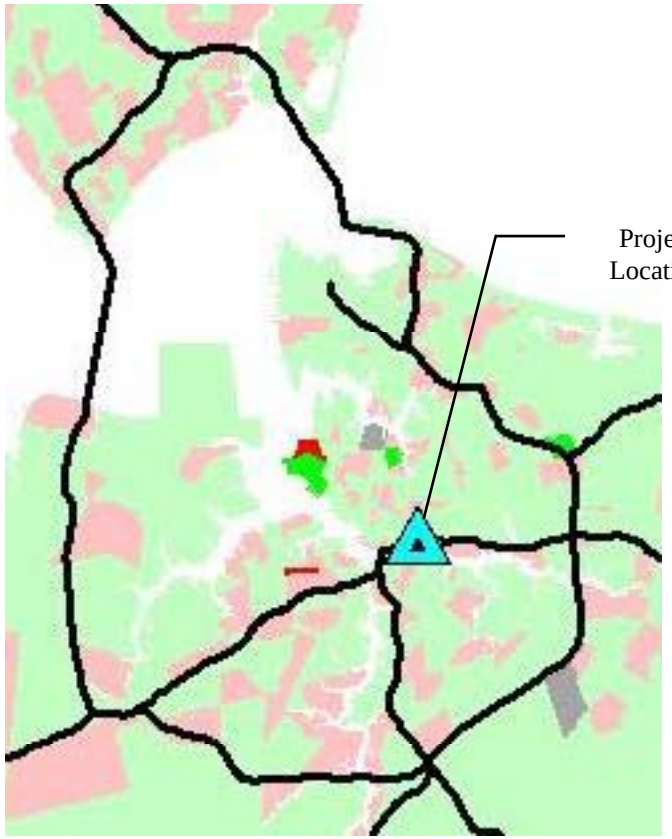
Increase up to 1.0 minute

Increase > 1.0 minute

Brambleton Ave
(St. Paul's Blvd to I-264; widen to 6 lanes)

- PRO
  - Improves a route between downtown and points east which is an alternative to congested St. Paul's Blvd.

- CON
  - Brambleton has some additional capacity between St. Paul's Blvd and Tidewater Dr.
  - Low Travel Time Savings Cost/Benefit Ratio.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

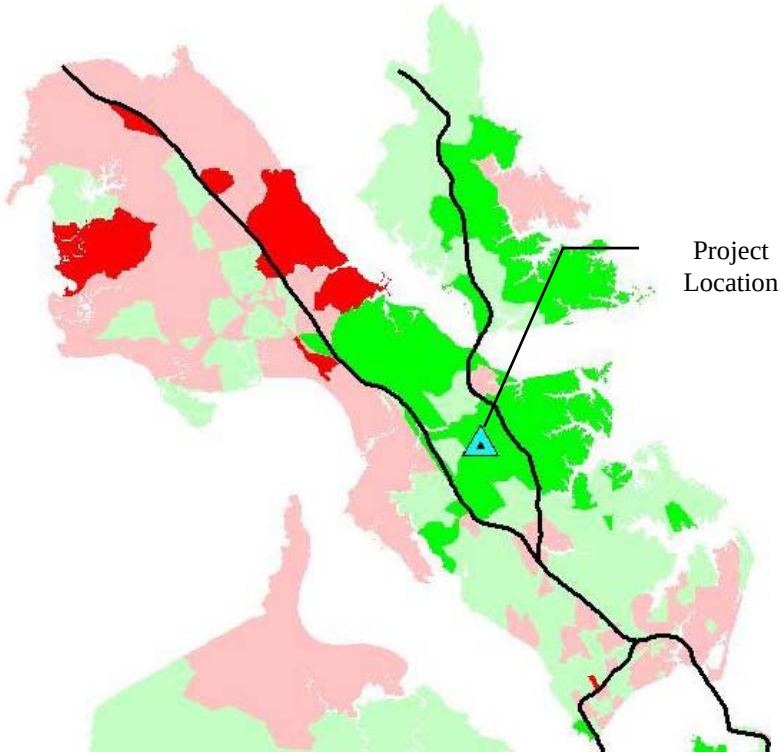
No change

Increase up to 1.0 minute

Increase > 1.0 minute

Ft Eustis Blvd
(Jefferson Ave to Rte 17; widen to 4 lanes)

- PRO
  - Improves a route which will be severely congested.
  - Improves accessibility of southern Gloucester and central York.
  - Low Cost per Additional Trip.
- CON
  - Negative regional Travel Time Savings Benefit/Cost (increases congestion on I-64 segment with un-funded widening [Plan A]).

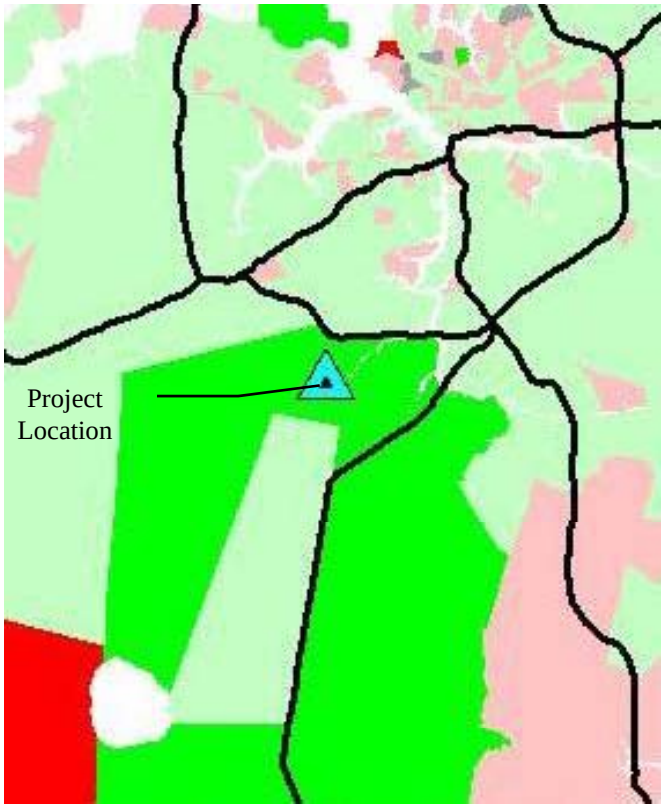


GW Hwy
(Sawyers Mill Rd to Cedar Rd; 4 lane realignment)

- PRO
  - Eliminates a traffic signal.
- CON
  - Low existing volume.
  - Low on-project Travel Time Savings Cost/Benefit Ratio.
  - Project serves no additional trips.

GW Hwy
(from Mill Creek Pkwy to I-64; widen to 6 lanes)

- PRO
  - Improves accessibility of southern Chesapeake.
  - Addresses Beyond Severe 2030 congestion (7 mph).
- CON
  - Some travel improvement will be provided to much of this segment by currently scheduled widening to 4 lanes.
  - 6 lanes may be opposed by residents of Deep Creek.
  - High Cost per Additional trip.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

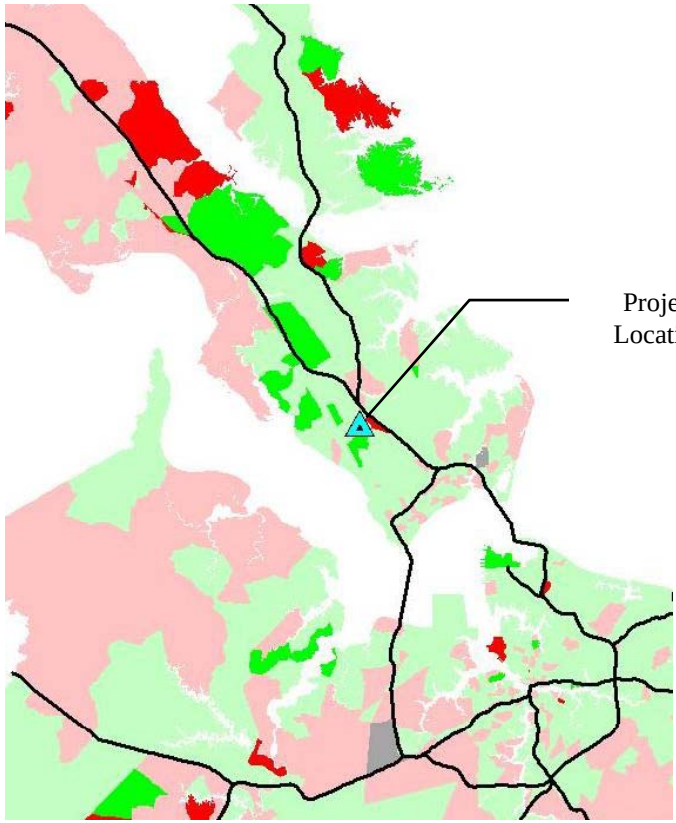
No change

Increase up to 1.0 minute

Increase > 1.0 minute

Hampton Roads Center Pkwy
(from Harpersville Rd to I-64; widen to 6 lanes)

- PRO
  - Low Cost per Additional Trip.
- CON
  - Low on-project Travel Time Savings Benefit/Cost Ratio.
  - Negative impact on regional Travel Time.
  - Low current volumes west of Big Bethel Rd (16k).



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

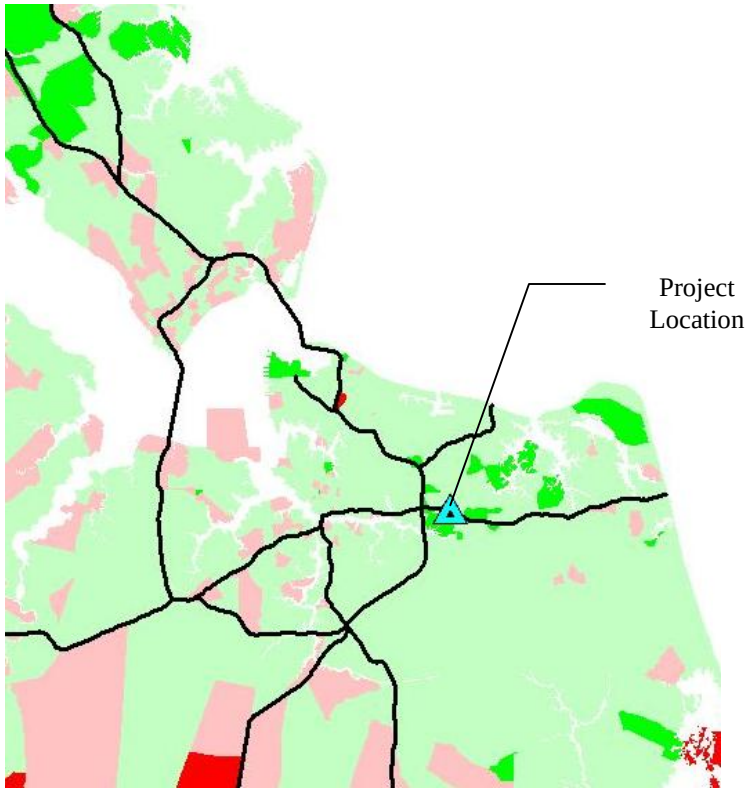
Increase up to 1.0 minute

Increase > 1.0 minute

I-264
(from I-64 to Independence Blvd; 2 additional lanes)

- PRO
  - Beyond Severe congestion in 2030 for 300k vpd.
    - 15 mph forecasted peak period travel speed.

- CON
  - Reduces HOV incentive.
  - Low Travel Time Savings Benefit/Cost Ratio.
  - High Cost per Additional Trip.
  - Would consume majority of NHS funding.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

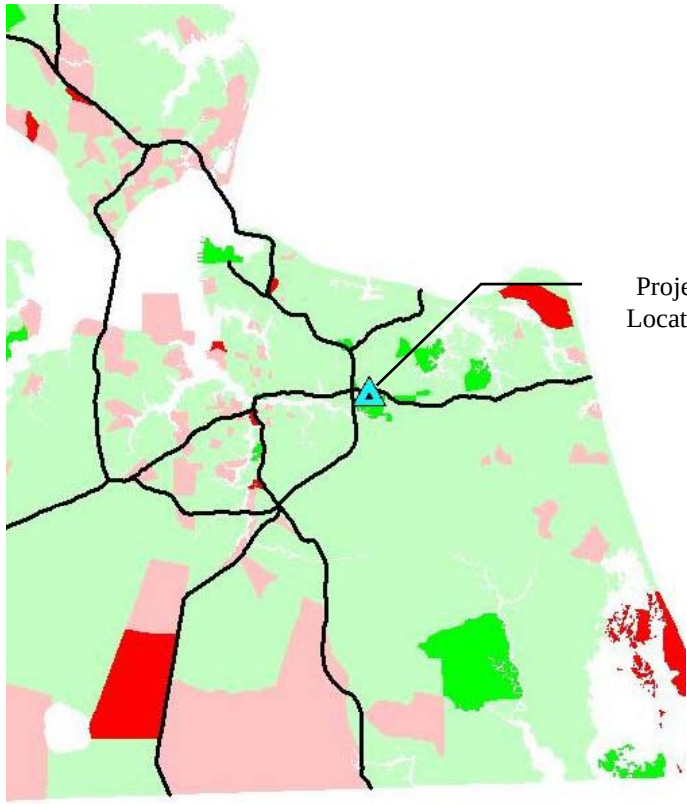
No change

Increase up to 1.0 minute

Increase > 1.0 minute

I-264 (from I-64 to Independence Blvd; prepare existing lanes [HOV, regular, shoulder] for 24hr use by all vehicles)

- PRO
  - Beyond Severe congestion in 2030 for 300k vpd (15 mph).
  - Reduces accidents by eliminating speed differential.
- CON
  - Removes HOV incentive.
  - Low Travel Time Savings Benefit/Cost Ratio.
  - High Cost per Additional Trip.
  - Would consume majority of NHS funding.

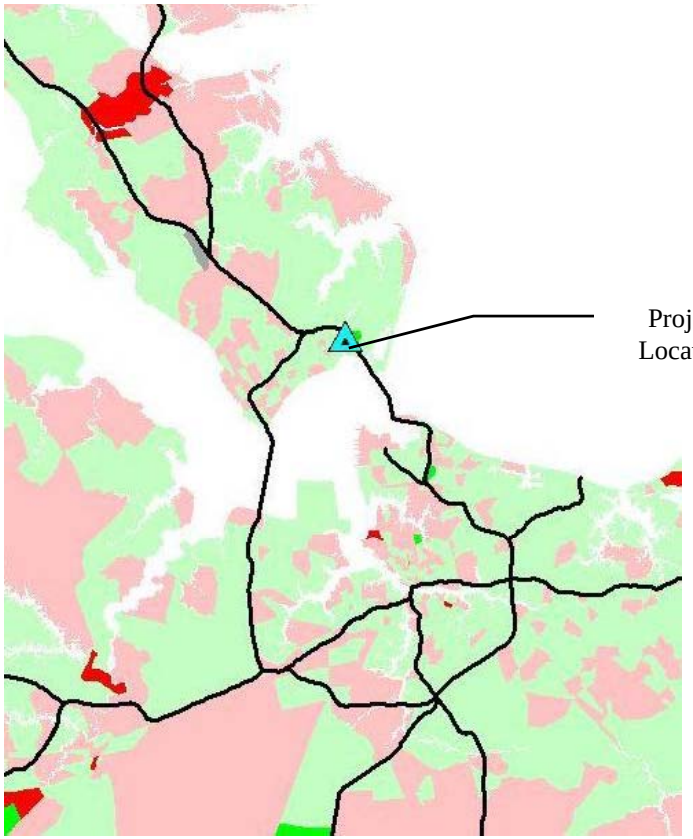


I-264 / Independence Blvd
Interchange Improvement

- PRO
  - I-264, from I-64 to Independence, is highest volume roadway in Hampton Roads (existing and forecast).
  - 100k vehicles forecasted for Independence Blvd.
  - Beyond Severe congestion forecasted for adjacent roadway links.
  - Serves important multi-use area (Town Center).
  - Serves large portion of Va. Beach.
- CON
  - Significant improvements have already been made to and near this interchange:
    - Baxter Rd flyover
    - 8-lane widening of Independence Blvd north and south of interchange.

I-64
(from I-664 to Mallory Rd; widen to 8 lanes)

- PRO
  - Severe congestion forecasted.
- CON
  - Existing configuration of HRBT limits usage of I-64 between HRBT and I-664.
  - Very low Travel Time Savings Benefit/Cost Ratio.
  - High Cost per Additional Trip.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

Increase up to 1.0 minute

Increase > 1.0 minute

I-64 / Bland Blvd

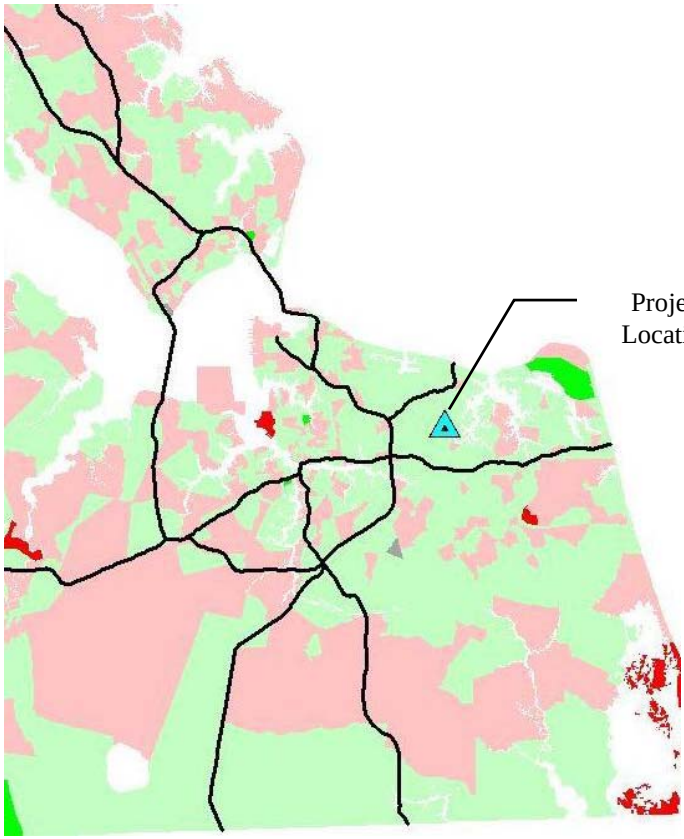
Interchange Construction

- PRO
  - Provides better access to NN/Wmsbg Airport from points west.
  - Reduces volume by 16k on congested Jefferson Ave.
- CON
  - Creates Beyond Severe congestion on Bland Blvd between I-64 and Warwick Blvd.
  - High Cost per Trip (for an interchange project).

Independence Blvd
(from Haygood Rd to Northampton Blvd; widen to 6 lanes)

- PRO
  - Improves a route which will be severely congested.
  - Low Cost per Additional Trip.

- CON
  - Low on-project Travel Time Savings Benefit/Cost Ratio.
  - No growth in volume expected (without improvement).



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

Increase up to 1.0 minute

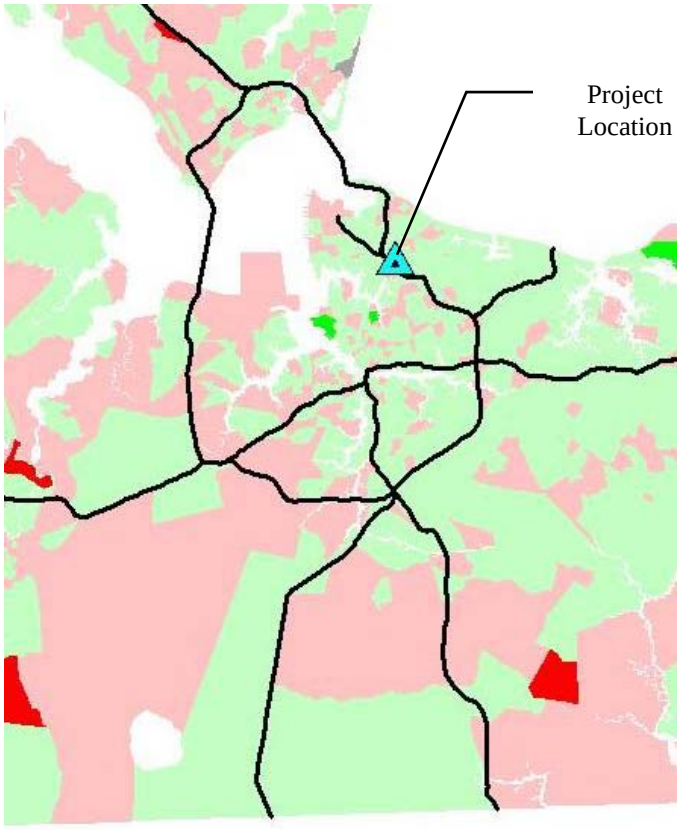
Increase > 1.0 minute

Little Creek Rd

(from Tidewater Dr to Military Hwy; widen to 6 lanes)

- PRO
  - High regional network Travel Time Savings Benefit/Cost Ratio.
  - Low Cost per Additional Trip.

- CON
  - Relatively low existing volume for 4 lanes (29k).
  - Low forecasted congestion (LOS D).
  - Low on-project Travel Time Savings Benefit/Cost Ratio.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

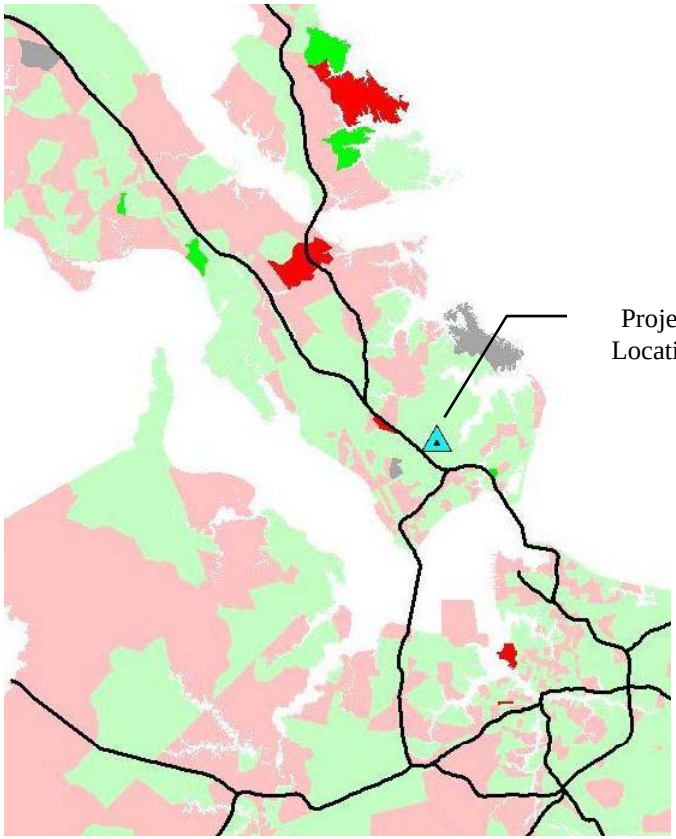
No change

Increase up to 1.0 minute

Increase > 1.0 minute

Magruder Blvd
(from Cmdr Shep Blvd Ext to HRCP; widen to 6 lanes)

- PRO
  - Low Cost per Additional Trip.
- CON
  - Low on-project Travel Time Savings Benefit/Cost Ratio.
  - Interchanges at either end of this segment allow high volumes without high congestion.

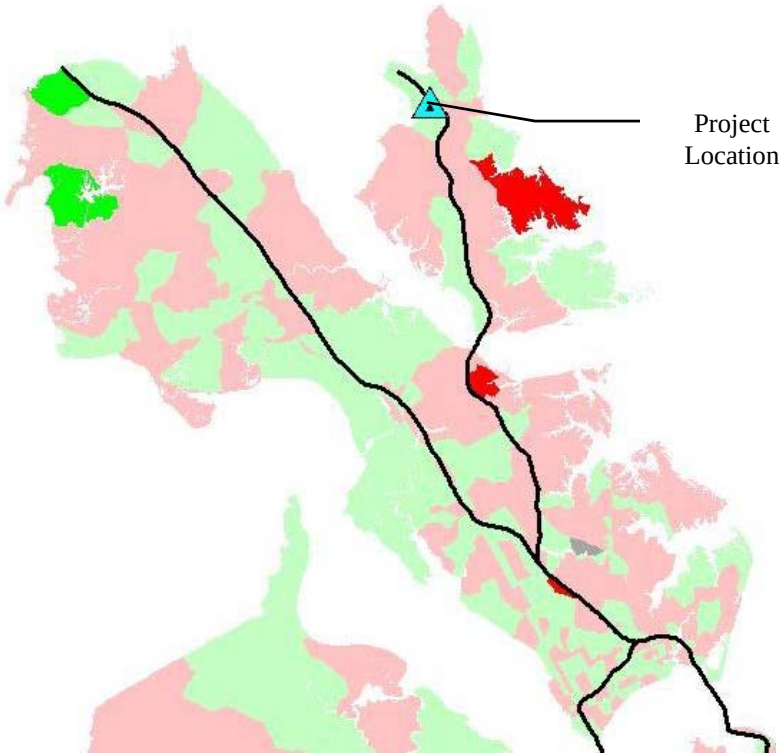


Norfolk Light Rail

- PRO
  - Ridership: 6,500 – 12,000 weekday trips (depending on land use scenario)
  - Provides high-frequency transportation:
    - for persons who don't drive
    - for persons who choose not to drive (e.g. parking costs)
- CON
  - Based on the number of riders expected on the LRT—and the portion of them which would ride a bus, travel VB Blvd, or not make the trip if LRT were not built—it is expected that this project will have minor impact on the LOS of parallel I-264 on which expected future congestion is not great enough to warrant the consideration of a project to address that congestion.
    - NHS funds can be used for transit only: 1) when it improves the LOS on an NHS-designated fully-access controlled highway; and 2) when transit project is more cost effective than corresponding highway project.

Rte 17, Gloucester
(from Main St. [south] to Ark Rd; widen to 6 lanes)

- CON
  - No significant congestion forecasted.
  - Low Travel Time Savings Benefit/Cost Ratio.
  - No additional trips forecasted.



Change in Avg. Congested Travel Time to Zone, 2030

Decrease > 1.0 minute

Decrease up to 1.0 minute

No change

Increase up to 1.0 minute

Increase > 1.0 minute

Document #4

“Candidate Projects for 2030 RSTP Funding”

RSTP Funding- Priority Order re: Score

Note: Consensus opinion of 7-5-06 TTC mtg.: fund Dominion Blvd and Norfolk LRT with 2030 RSTP funds.

Locality	Project	From	To	RSTP-Existing Congestion Score (0-7)	RSTP-Future Congestion Score (0-10)	RSTP-Cost Effectiveness (cost/vmt), 0-20	RSTP-System Continuity (total= 20; partial= 10)	RSTP-Safety (0-20)	RSTP- Air Quality (reduces NOx = 5)	RSTP- Air Quality (reduces HC = 5)	RSTP-Score (0-90)	**RSTP-Rank**	Un-funded Balance
RSTP Candidates which are NOT Scored													
CH	Dominion Blvd (with toll)	Great Bridge Blvd	GW Hwy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$50
Transit	Norfolk Light Rail	Newtown Rd	Norfolk General	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$7
VB	Northampton Blvd / Shore Dr intx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$33
Transit	Naval Base Ext'n (LRT)- PE Only	(unspecified location)	Naval Base	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$10
Transit	Peninsula Fixed Guideway (LRT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$25
VB	Shore Dr / Lesner Bridge (6 lanes)	west approaches	east approaches	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	**n.a.**	$114
RSTP Candidates which ARE Scored													
VB	Rosemont Rd	VB Blvd	Holland Rd	7	10	20	20	19	5	5	86	**1**	$56
VB	Indian River Rd	Centerville Tnpk	Ferrell Pkwy	7	10	19	20	16	5	5	81	**2**	$33
VB	Centerville Tnpk	Kempsville Rd	Indian River Rd	7	10	16	20	18	5	5	81	**3**	$42
NN	Oyster Point Rd	Jefferson Ave	Warwick Blvd	7	10	18	20	15	5	5	79	**4**	$33
POQ	Wythe Creek Rd (w/o br. widening)	Alphus St	Hampton CL	3	10	19	20	10	5	5	72	**5**	$4
VB	Independence Blvd	Haygood Rd	Northampton Blvd	7	7	14	20	14	5	5	72	**6**	$69
YC	Rte 17 (York Co.)	Hampton Hwy	Goodwin Nk / Denbigh B	7	10	20	20	2	5	5	69	**7**	$28
VB	Witchduck Rd	I-264	VB Blvd	7	7	12	20	10	5	5	67	**8**	$23
VB	West Neck Pkwy ext'd	Elbow Rd	North Landing Rd	7	10	9	20	10	5	5	66	**9**	$39
VB	Centerville Tnpk	Ches CL	Kempsville Rd	0	10	14	20	10	5	5	64	**10**	$26
NN	Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	7	10	8	20	8	5	5	63	**11**	$42
VB	Holland Rd	Dam Neck Rd	Rosemont Rd	0	7	17	10	19	5	5	63	**12**	$54
CH	Cedar Rd	Albemarle Dr	Battlefield Blvd	3	10	15	20	4	5	5	63	**13**	$22
HM	Wythe Creek Rd	Comm Shepard Blvd	Poquoson CL	7	10	5	20	10	5	5	62	**14**	$56
VB	Providence Rd	Kempsville Rd	PA Rd	3	7	12	20	10	5	5	62	**15**	$41
NN	Atkinson Blvd	Warwick Blvd	Jefferson Ave	3	10	8	20	10	5	5	61	**16**	$41
NOR	Military Hwy	Northampton Blvd	Robin Hood Rd	7	10	4	20	10	5	5	61	**17**	$91
YC	Victory Blvd (Rte 171)	Hampton Hwy	Poquoson CL	3	10	15	20	3	5	5	61	**18**	$58
NN	Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	0	7	11	20	12	5	5	60	**19**	$75
YC	Victory Blvd (Rte 171)	Rte 17	Hampton Hwy	3	7	17	20	3	5	5	60	**20**	$8
GLO	Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	7	7	19	0	16	5	5	59	**21**	$242
CH	Cedar Rd (incl'g Deep Crk br) (7)	Mill Creek Pkwy	Shipyard Rd	7	10	1	20	11	5	5	59	**22**	$132
NN	Middleground Blvd	Jefferson Ave	Warwick Blvd	3	10	5	20	10	5	5	58	**23**	$66
CH	GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	7	7	4	20	10	5	5	58	**24**	$165
MULTI	Hampton Roads Center Pkwy	Harpersville Rd	I-64	3	7	18	10	14	0	5	57	**25**	$81

RSTP Funding- Priority Order re: Score

Locality	Project	From	To	RSTP-Existing Congestion Score (0-7)	RSTP-Future Congestion Score (0-10)	RSTP-Cost Effectiveness (cost/vmt), 0-20	RSTP-System Continuity (total= 20; partial= 10)	RSTP-Safety (0-20)	RSTP- Air Quality (reduces NOx = 5)	RSTP- Air Quality (reduces HC = 5)	RSTP-Score (0-90)	**RSTP-Rank**	Un-funded Balance
NOR	Little Creek Rd	Tidewater Dr	Military Hwy	3	3	13	20	17	0	0	57	**26**	$30
NN	Harpersville Rd	Jefferson Ave	Warwick Blvd	3	7	9	20	7	5	5	56	**27**	$35
VB	Witchduck Rd	Princess Anne Rd	I-264	0	7	10	20	5	5	5	52	**28**	$39
NN	Rte 60 relo. - east section- NN	James City CL	Ft Eustis Blvd	0	7	6	20	9	5	5	52	**29**	$32
JC	Rte 60 relo. - east section- JCC	Rte 60 near Distr Ctr.	Newport News CL	0	7	6	20	9	5	5	51	**30**	$61
HM	Armistead Ave	Mercury Blvd	HRC Pkwy	0	3	13	20	15	0	0	51	**31**	$52
VB	Buckner Blvd / Shipps Corner Rd	Rosemont Rd	Holland Rd	0	7	3	20	10	5	5	50	**32**	$18
NOR	Va. Beach Blvd (13)	Military Circle entr.	Newtown Rd	3	3	11	20	12	0	0	49	**33**	$88
VB	Baker Rd Ext'd	Summit Arch	w. of Witchduck Rd	0	3	16	20	10	0	0	49	**34**	$6
HM	Magruder Blvd	Cmdr Shep Blvd ext	HRCP	0	7	11	10	10	5	5	48	**35**	$75
CH	Military Hwy	Allison Dr	VB CL	7	0	12	20	8	0	0	47	**36**	$64
VB	West Neck Rd	North Landing Rd	Indian River Rd	0	0	6	20	20	0	0	46	**37**	$28
NOR	Brambleton Ave	St. Pauls Blvd	I-264	7	3	2	20	13	0	0	45	**38**	$200
WMB	Ironbound Rd	Longhill Conn Rd	Richmond Rd	0	7	7	20	1	5	5	44	**39**	$19
NOR	Little Creek Rd	Military Highway	Azalea Garden Rd	3	0	14	20	6	0	0	43	**40**	$45
PORT	Turnpike Rd	Portsmouth Blvd	Constitution Ave	3	0	10	10	17	0	0	40	**41**	$15
YC	US 17 (NN CL to Hampton Hwy)	Hampton Hwy	Newport News CL	3	7	15	0	3	5	5	38	**42**	$85
SM	Battery Park Rd	S. Church St	Nike Park Rd	3	0	3	20	10	0	0	36	**43**	$29
NOR	Church St / Wood St	Brambleton Blvd	St Paul's Blvd	3	3	1	20	6	0	0	33	**44**	$21
SUF	Finney Ave extension	Washington St	Finney Ave	0	0	0	20	10	0	0	30	**45**	$6
CH	Hanbury Rd	Johnstown Rd	Battlefield Blvd	0	3	7	20	0	0	0	30	**46**	$19
SUF	Kings Highway Bridge	n.a.	n.a.	0	0	0	20	10	0	0	30	**47**	$76
VB	Salem Rd	North Landing Rd	Elbow Rd	0	0	5	20	1	0	0	26	**48**	$48
YC	Oriana Blvd realigned	1.2 mi. west of Rte 17	Denbigh Blvd, 0.2mi e NI	3	3	9	0	10	0	0	25	**49**	$48
HM	Little Back River Rd	King St	Harris Creek Rd	0	0	2	20	2	0	0	24	**50**	$30
CH	GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	0	0	3	0	11	0	0	14	**51**	$25
GLO	Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	0	0	8	0	5	0	0	12	**52**	$125
IW	Smithfield Connector	Nike Park Rd	Smith's Neck Rd	0	0	2	0	10	0	0	12	**53**	$17

APPENDIX C- 2030 PLAN VOLUME AND CONGESTION FORECAST

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11310800		264	Che	I-264	I-64&664	WCL PORTSMOUTH	1.23	55,936	2006	4		58,000	2,000	Low to mod.
11240840		264	Por	I-264	WCL PORTSMOUTH	GREENWOOD DR	0.42	55,936	2006	4		58,000	2,000	Low to mod.
11240850		264	Por	I-264	GREENWOOD DR	VICTORY BLVD	1.31	51,555	2006	4		64,000	12,000	Moderate
11240860		264	Por	I-264	VICTORY BLVD	PORTSMOUTH BLVD	0.75	66,865	2005	6		76,000	9,000	Low to mod.
11240870		264	Por	I-264	PORTSMOUTH BLVD	FREDERICK BLVD	0.91	61,167	2006	6		77,000	16,000	Low to mod.
11240880		264	Por	I-264	FREDERICK BLVD	M L K FWY	0.45	74,208	2006	6		88,000	14,000	Moderate
11240890		264	Por	I-264	M L K FWY	DES MOINES AVE	0.51	74,208	2006	6		95,000	21,000	Moderate
11240900		264	Por	I-264	DES MOINES AVE	EFFINGHAM ST	0.72	67,669	2006	6		87,000	19,000	Low to mod.
11240910		264	Por	I-264	EFFINGHAM ST	COURT ST	0.39	101,995	2006	4	Y	90,000	-12,000	Severe
11240920		264	Por	I-264	COURT ST	NORFOLK CL	0.33	101,995	2006	4	Y	90,000	-12,000	Severe
11220900		264	Nor	I-264	PORTSMOUTH CL	I-464	0.40	101,995	2006	4	Y	90,000	-12,000	Severe
11221145		264	Nor	I-264	I-464	WTR/TIDEW/CITY HALL	0.72	125,297	2006	8		131,000	6,000	Moderate
11221155		264	Nor	I-264	WTR/TIDEW/CITY HALL	BRAMBLETON AVE	0.91	119,230	2006	8		127,000	8,000	Moderate
11221170		264	Nor	I-264	BRAMBLETON AVE	MERRIMAC AVE	0.85	124,852	2006	8		131,000	6,000	Moderate
11221180		264	Nor	I-264	MERRIMAC AVE	MILITARY HWY	2.43	137,077	2005	8		151,000	14,000	Severe
11221200		264	Nor	I-264	MILITARY HWY	I-64	0.78	n.a.	n.a.	10		192,000	n.a.	Severe
11222695		264	Nor	I-264	I-64	VAB CL / NEWTOWN RD	0.74	241,927	2003	12		282,000	40,000	Beyond Severe
11341940		264	VaB	I-264	NORF CL / NEWTOWN RD	WITCHDUCK RD	1.47	193,681	2006	10		230,000	36,000	Beyond Severe
11341950		264	VaB	I-264	WITCHDUCK RD	INDEPENDENCE BLVD	1.27	212,703	2006	10		223,000	10,000	Severe
11341960		264	VaB	I-264	INDEPENDENCE BLVD	ROSEMONT RD	2.36	166,719	2005	10		177,000	10,000	Severe
11341970		264	VaB	I-264	ROSEMONT RD	LYNNHAVEN PKWY	1.72	144,800	2005	8		156,000	11,000	Severe
11341980		264	VaB	I-264	LYNNHAVEN PKWY	LASKIN RD	1.48	102,260	2006	8		146,000	44,000	Moderate
11341990		264	VaB	I-264	LASKIN RD	FIRST COLONIAL RD	1.19	75,562	2006	6		93,000	17,000	Moderate
11342000		264	VaB	I-264	FIRST COLONIAL RD	S.E. PKWY & GRNBELT	0.92	51,547	2006	6		80,000	28,000	Low to mod.
11342005		264	VaB	I-264	S.E. PKWY & GRNBELT	BIRDNECK RD	0.56	51,547	2006	6		70,000	18,000	Low to mod.
11342010		264	VaB	I-264	BIRDNECK RD	PARKS AVE	0.49	n.a.	n.a.	6		36,000	n.a.	Low to mod.
11310810		464	Che	I-464	I-64	MILITARY HWY	1.00	59,199	2006	6		101,000	42,000	Moderate
11310820		464	Che	I-464	MILITARY HWY	FREEMAN AVE	0.97	52,692	2003	6		84,000	31,000	Low to mod.
11310830		464	Che	I-464	FREEMAN AVE	POINDEXTER ST	1.90	51,277	2005	6		78,000	27,000	Low to mod.
11310840		464	Che	I-464	POINDEXTER ST	NORFOLK CL	0.72	50,253	2003	4		66,000	16,000	Moderate
11221210		464	Nor	I-464	NORFOLK CL	MAIN ST	0.42	46,768	2006	4		66,000	19,000	Moderate
11221225		464	Nor	I-464	MAIN ST	BERKLEY AVE / I-264	0.61	43,413	2006	4		61,000	18,000	Moderate
11221240		564	Nor	I-564	ADM TAUSSIG BLVD	INTERMODAL CONN	0.50	49,368	2005	6		46,000	-3,000	Low to mod.
11221250		564	Nor	I-564	INTERMODAL CONN	INT TERMINAL BLVD	1.37	49,368	2005	6		50,000	1,000	Low to mod.
11221260		564	Nor	I-564	INT TERMINAL BLVD	I-64	0.90	67,314	2006	6		67,000	0	Low to mod.
10470460		64	JCC	I-64	NEW KENT CL	RTE 30	2.69	44,583	2004	4		81,000	36,000	Severe
10470470		64	JCC	I-64	RTE 30	CROAKER RD	4.34	49,374	2004	4		83,000	34,000	Severe
10470480		64	JCC	I-64	CROAKER RD	YORK CO LINE	1.67	55,234	2004	4		102,000	47,000	Severe
10990360		64	York	I-64	JAMES CITY CL	RTE 199 (@ LIGHTFOOT)	1.12	55,234	2004	4		102,000	47,000	Severe
10990370		64	York	I-64	RTE 199 (@ LIGHTFOOT)	CAMP PEARY RD	4.29	53,494	2005	4		88,000	35,000	Severe
10990380		64	York	I-64	CAMP PEARY RD	RTE 199 (@ KINGSMILL)	3.88	58,253	2004	4		87,000	29,000	Severe
10990390		64	York	I-64	RTE 199 (@ KINGSMILL)	GROVE INTERCHANGE	1.14	78,626	2004	8	Y	112,000	33,000	Moderate
10990395		64	York	I-64	GROVE INTERCHANGE	JAMES CITY CL	0.85	80,740	2004	8	Y	106,000	25,000	Low to mod.
10470490		64	JCC	I-64	YORK CO LINE	NEWPORT N CL	2.38	80,740	2004	8	Y	106,000	25,000	Low to mod.
11210920		64	NN	I-64	JAMES CITY CL	JEFFERSON AVE @ CL	0.27	80,740	2004	8	Y	106,000	25,000	Low to mod.
11210930		64	NN	I-64	JEFFERSON AVE @ CL	YORKTOWN RD	0.88	80,941	2004	8	Y	98,000	17,000	Low to mod.
11210940		64	NN	I-64	YORKTOWN RD	FT EUSTIS BLVD	2.45	87,136	2004	8	Y	107,000	20,000	Low to mod.
11210950		64	NN	I-64	FT EUSTIS BLVD	BLAND BLVD	3.76	97,970	2004	8	Y	121,000	23,000	Moderate
11210955		64	NN	I-64	BLAND BLVD	JEFFERSON AVE	1.10	n.a.	n.a.	8	Y	120,000	n.a.	Moderate
11210960		64	NN	I-64	JEFFERSON AVE	OYSTER POINT RD	1.60	117,732	2004	8		147,000	29,000	Severe
11210970		64	NN	I-64	OYSTER POINT RD	J C MORRIS BLVD	1.64	127,600	2005	8		182,000	54,000	Severe
11210980		64	NN	I-64	J C MORRIS BLVD	HAMPTON CL	0.90	136,945	2004	8		188,000	51,000	Beyond Severe

Prepared by HRPDC.
9/19/2007 2030LRTP_FORECAST3.xls DATA

2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11141100		64	Hamp	I-64	NEWPORT NEWS CL	HRC PARKWAY	2.24	136,945	2004	8		188,000	51,000	Beyond Severe
11141110		64	Hamp	I-64	HRC PARKWAY	MAGRUDER BLVD	0.77	113,790	2004	8		181,000	67,000	Severe
11141120		64	Hamp	I-64	MAGRUDER BLVD	MERCURY BLVD	1.04	131,564	2004	10		208,000	76,000	Severe
11141130		64	Hamp	I-64	MERCURY BLVD	I-664	0.96	122,460	2004	10		192,000	70,000	Severe
11141140		64	Hamp	I-64	I-664	ARMISTEAD AVE	0.88	111,529	2004	6		145,000	33,000	Severe
11141150		64	Hamp	I-64	ARMISTEAD AVE	RIP RAP RD	0.46	97,800	2004	6		124,000	26,000	Severe
11141153		64	Hamp	I-64	RIP RAP RD	KING ST	0.33	97,800	2004	6		126,000	28,000	Severe
11141155		64	Hamp	I-64	KING ST	TYLER ST	1.22	97,800	2004	6		126,000	28,000	Severe
11141160		64	Hamp	I-64	TYLER ST	MALLORY ST	0.54	99,150	2004	6		123,000	24,000	Severe
11141185		64	Hamp	I-64	MALLORY ST	HAMPTON CL	3.69	92,532	2006	4		111,000	18,000	Beyond Severe
11221280		64	Nor	I-64	HAMPTON CL	15TH VIEW ST	0.19	92,532	2006	4		111,000	18,000	Beyond Severe
11221285		64	Nor	I-64	15TH VIEW ST	4TH VIEW ST	1.82	92,532	2006	4		106,000	13,000	Beyond Severe
11221290		64	Nor	I-64	4TH VIEW ST	BAY AVE	1.01	84,658	2006	4		93,000	8,000	Severe
11221300		64	Nor	I-64	BAY AVE	GRANBY ST	1.60	89,873	2006	4		105,000	15,000	Beyond Severe
11221310		64	Nor	I-64	GRANBY ST	I-564 / LITTLE CRK RD	0.21	89,873	2006	4		99,000	9,000	Severe
11221325		64	Nor	I-64	I-564 / LITTLE CRK RD	TIDEWATER DR	1.17	151,383	2005	8		163,000	12,000	Severe
11221340		64	Nor	I-64	TIDEWATER DR	CHESAPEAKE BLVD	1.04	150,922	2005	8		163,000	12,000	Severe
11221350		64	Nor	I-64	CHESAPEAKE BLVD	NORVIEW AVE	0.97	154,857	2005	8		163,000	8,000	Severe
11221360		64	Nor	I-64	NORVIEW AVE	ROBIN HOOD RD	1.13	177,914	2005	8		196,000	18,000	Beyond Severe
11221370		64	Nor	I-64	ROBIN HOOD RD	MILITARY HWY	0.09	n.a.	n.a.	8		172,000	n.a.	Beyond Severe
11221380		64	Nor	I-64	MILITARY HWY	NORTHAMPTON BLVD	1.07	163,095	2005	8		166,000	3,000	Severe
11221390		64	Nor	I-64	NORTHAMPTON BLVD	I-264	2.12	180,105	2003	10		196,000	16,000	Severe
11221400		64	Nor	I-64	I-264	VA BEACH CL	0.93	148,643	2003	8		158,000	9,000	Severe
11340580		64	VaB	I-64	NORFOLK CL	INDIAN RIVER RD	1.57	148,643	2005	8		157,000	8,000	Severe
11340590		64	VaB	I-64	INDIAN RIVER RD	CHES CL / CITYLINE RD	1.36	136,481	2005	8		147,000	11,000	Severe
11310850		64	Che	I-64	VAB CL / CITY LINE RD	GREENBRIER PKWY	1.30	136,481	2005	8		148,000	12,000	Severe
11310860		64	Che	I-64	GREENBRIER PKWY	BATTLEFIELD BLVD	1.42	130,824	2005	8		147,000	16,000	Severe
11310870		64	Che	I-64	BATTLEFIELD BLVD	I-464	1.08	117,481	2005	8		126,000	9,000	Moderate
11310880		64	Che	I-64	I-464	G WASH HWY	4.38	79,849	2006	6	Y	69,000	-11,000	Low to mod.
11310890		64	Che	I-64	G WASH HWY	MILITARY HWY	1.53	77,388	2006	6	Y	79,000	2,000	Low to mod.
11310900		64	Che	I-64	MILITARY HWY	I-264&664	2.31	78,097	2005	6	Y	63,000	-15,000	Low to mod.
11310910		664	Che	I-664	I-64 / I-264	RTE 13/58/460	1.70	111,822	2006	8	Y	118,000	6,000	Moderate
11310922		664	Che	I-664	RTE 13/58/460	DOCK LANDING RD	1.25	82,031	2006	6	Y	96,000	14,000	Moderate
11310924		664	Che	I-664	DOCK LANDING RD	PORTSMOUTH BLVD	1.14	81,555	2006	6	Y	96,000	14,000	Moderate
11310930		664	Che	I-664	PORTSMOUTH BLVD	PUGHSVILLE RD	2.06	83,659	2006	6	Y	95,000	11,000	Moderate
11310940		664	Che	I-664	PUGHSVILLE RD	SUFFOLK CL	0.83	80,370	2005	6	Y	93,000	13,000	Moderate
11330400		664	Suf	I-664	NCL CHESAPEAKE	BRIDGE RD	0.74	80,370	2005	6	Y	93,000	13,000	Moderate
11330410		664	Suf	I-664	BRIDGE RD	WESTERN FWY	0.15	56,103	2005	6	Y	65,000	9,000	Low to mod.
11330420		664	Suf	I-664	WESTERN FWY	COLLEGE DR	1.41	58,229	2005	6	Y	75,000	17,000	Low to mod.
11330430		664	Suf	I-664	COLLEGE DR	E-W CONN / NN CL	3.28	57,105	2006	6	Y	80,000	23,000	Low to mod.
11210990		664	NN	I-664	E-W CONN / SUFFOLK CL	TERMINAL AVE	2.85	57,105	2006	10	Y	80,000	23,000	Low to mod.
11211000		664	NN	I-664	TERMINAL AVE	23RD ST	0.92	48,016	2004	10	Y	68,000	20,000	Low to mod.
11211010		664	NN	I-664	23RD ST	HAMPTON CL	1.93	52,860	2004	10	Y	81,000	28,000	Low to mod.
11141200		664	Hamp	I-664	NEWPORT NEWS CL	ABERDEEN RD	0.44	64,964	2004	10	Y	84,000	19,000	Low to mod.
11141210		664	Hamp	I-664	ABERDEEN RD	POWHATAN PKWY	1.29	61,347	2004	10	Y	89,000	28,000	Low to mod.
11141220		664	Hamp	I-664	POWHATAN PKWY	I-64	1.38	67,871	2004	10	Y	85,000	17,000	Low to mod.
11310010		166	Che	22ND ST	LIBERTY ST	NOR CL / BERK AVE EXT	0.31	6,553	2005	4		12,000	5,000	Low to mod.
11310020		58	Che	AIRLINE BLVD	I-664	PORTSMOUTH CL	2.16	9,018	2005	4		19,000	10,000	Low to mod.
11310040		168	Che	ATLANTIC AVE	CAMPOSTELLA RD	PROVIDENCE RD	0.38	17,545	2005	4		26,000	8,000	Low to mod.
11310050		168	Che	ATLANTIC AVE	PROVIDENCE RD	OLD ATLANTIC AVE	1.07	20,731	2005	4		24,000	3,000	Low to mod.
11310070		168	Che	ATLANTIC AVE	OLD ATLANTIC AVE	CAMPOSTELLA RD	0.57	13,126	2005	4		14,000	1,000	Low to mod.
11310060		901	Che	ATLANTIC AVE, OLD	ATLANTIC AVE	LIBERTY ST	0.31	4,816	2005	4		14,000	9,000	Low to mod.

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2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11310080		166	Che	**BAINBRIDGE BLVD**	DOMINION BLVD	GREAT BR BLVD	2.05	5,403	2005	2		**4,000**	-1,000	Low to mod.
11310090		166	Che	**BAINBRIDGE BLVD**	GREAT BR BLVD	MILITARY HWY	0.68	9,528	2005	2		**7,000**	-3,000	Low to mod.
11310100		166	Che	**BAINBRIDGE BLVD**	MILITARY HWY	FREEMAN AVE	0.70	11,203	2005	2		**12,000**	1,000	Low to mod.
11310110		166	Che	**BAINBRIDGE BLVD**	FREEMAN AVE	SWAIN AVE	0.94	11,842	2005	4		**15,000**	3,000	Low to mod.
11310120		166	Che	**BAINBRIDGE BLVD**	SWAIN AVE	POINDEXTER ST	1.13	11,842	2005	2		**13,000**	1,000	Low to mod.
11310130		337	Che	**BAINBRIDGE BLVD**	POINDEXTER ST	NORFOLK CL	0.53	2,107	2005	2		**7,000**	5,000	Low to mod.
11310142		168	Che	**BATTLEFIELD BLVD**	GALLBUSH RD / TOLL RD	INDIAN CRK RD / TOLL RD	2.63	13,763	2005	2		**15,000**	1,000	Low to mod.
11310150		168	Che	**BATTLEFIELD BLVD**	INDIAN CRK RD / TOLL RD	CENTERVILLE TNPK	1.54	17,105	2005	2		**23,000**	6,000	**Severe**
11310155		168	Che	**BATTLEFIELD BLVD**	CENTERVILLE TNPK	HILLCREST PKWY	2.05	18,907	2005	2		**28,000**	9,000	**Beyond Severe**
11310165		168	Che	**BATTLEFIELD BLVD**	HILLCREST PKWY	GREAT BR BYP	1.78	7,260	2003	2		**12,000**	5,000	Low to mod.
11310170	BUS	168	Che	**BATTLEFIELD BLVD**	GREAT BR BYP	HANBURY RD	0.42	8,326	2005	2		**16,000**	8,000	**Moderate**
11310175	BUS	168	Che	**BATTLEFIELD BLVD**	HANBURY RD	JOHNSTOWN RD	1.61	15,882	2005	2		**17,000**	1,000	**Severe**
11310180	BUS	168	Che	**BATTLEFIELD BLVD**	JOHNSTOWN RD	CEDAR RD	0.28	35,491	2005	4		**37,000**	2,000	**Severe**
11310190	BUS	168	Che	**BATTLEFIELD BLVD**	CEDAR RD	ALBEMARLE DR	0.14	37,036	2005	4		**39,000**	2,000	**Severe**
11310200	BUS	168	Che	**BATTLEFIELD BLVD**	ALBEMARLE DR	WAYNE AVE	0.61	n.a.	n.a.	4		**50,000**	n.a.	**Severe**
11310210	BUS	168	Che	**BATTLEFIELD BLVD**	WAYNE AVE	GREAT BR BLVD	0.45	n.a.	n.a.	4		**48,000**	n.a.	**Severe**
11310220	BUS	168	Che	**BATTLEFIELD BLVD**	GREAT BR BLVD	GREAT BR BYP	0.19	40,572	2005	6		**50,000**	9,000	**Moderate**
11310230		168	Che	**BATTLEFIELD BLVD**	GREAT BR BYP	VOLVO PKWY	1.97	50,835	2005	6		**59,000**	8,000	**Severe**
11310240		168	Che	**BATTLEFIELD BLVD**	VOLVO PKWY	I-64	0.65	n.a.	n.a.	6		**53,000**	n.a.	**Moderate**
11310250		168	Che	**BATTLEFIELD BLVD**	I-64	MILITARY HWY	0.76	42,981	2005	6		**50,000**	7,000	**Moderate**
11310260		168	Che	**BATTLEFIELD BLVD**	MILITARY HWY	ROBERT HALL DR	0.26	25,433	2005	4		**28,000**	3,000	Low to mod.
11310270		168	Che	**BATTLEFIELD BLVD**	ROBERT HALL DR	CAMPOSTELLA RD	0.30	n.a.	n.a.	4		**27,000**	n.a.	Low to mod.
11310280		903	Che	**BENEFIT RD**	JOHNSTOWN RD	SIGN PINE RD	1.80	3,117	2005	2		**8,000**	5,000	Low to mod.
11310290		905	Che	**BLACKWATER RD**	VA BEACH CL	FENTRESS AIRFIELD RD	2.59	3,045	2005	2		**6,000**	3,000	Low to mod.
11310300		907	Che	**BRUCE RD**	TAYLOR RD	TYRE NECK RD	1.60	15,985	2005	2		**17,000**	1,000	**Severe**
11310310		909	Che	**BUTTS STATION RD**	KEMPSVILLE RD	CENTERVILLE TNPK	2.08	12,796	2005	2		**16,000**	3,000	**Moderate**
11310320		911	Che	**CAMPOSTELLA RD**	GREAT BR BLVD	MILITARY HWY	1.32	6,893	2005	2		**10,000**	3,000	Low to mod.
11310330		911	Che	**CAMPOSTELLA RD**	MILITARY HWY	BATTLEFIELD BLVD	1.06	12,527	2002	2		**15,000**	2,000	**Moderate**
11310340		168	Che	**CAMPOSTELLA RD**	BATTLEFIELD BLVD	PROVIDENCE RD	0.44	14,951	2005	2		**16,000**	1,000	**Severe**
11310350		168	Che	**CAMPOSTELLA RD**	PROVIDENCE RD	ATLANTIC AVE	1.47	14,353	2005	2		**18,000**	4,000	**Severe**
11310360		168	Che	**CAMPOSTELLA RD**	ATLANTIC AVE	NOR CL / BERK AVE EXT	0.34	21,981	2005	6		**22,000**	0	Low to mod.
11310370		196	Che	**CANAL DR**	MILITARY HWY	G.W. HWY	0.97	15,104	2005	4		**22,000**	7,000	Low to mod.
11310380		913	Che	**CAVALIER BLVD**	MILITARY HWY	PORTSMOUTH CL	1.24	11,681	2005	4		**20,000**	8,000	Low to mod.
11310395		165	Che	**CEDAR RD**	MOSES GRANDY TRL @ SHIPYARD RD	MOSES GRANDY TRL @ SEBRIELL WAY	3.17	13,226	2005	2		**9,000**	-4,000	Low to mod.
11310400		165	Che	**CEDAR RD**	DOMINION BLVD	BRIARFIELD DR	3.38	27,023	2005	4		**41,000**	14,000	**Severe**
11310410		165	Che	**CEDAR RD**	BRIARFIELD DR	BATTLEFIELD BLVD	0.79	27,458	2005	4		**34,000**	7,000	**Severe**
11310420		917	Che	**CENTERVILLE TPK**	BATTLEFIELD BLVD	ETHERIDGE MNR BLVD	3.75	6,946	2005	2		**11,000**	4,000	Low to mod.
11310430		917	Che	**CENTERVILLE TPK**	ETHERIDGE MNR BLVD	MT PLEASANT RD	2.15	9,648	2005	2		**18,000**	8,000	**Severe**
11310440		917	Che	**CENTERVILLE TPK**	MT PLEASANT RD	BUTTS STATION RD	1.27	16,913	2005	2		**21,000**	4,000	**Severe**
11310445		917	Che	**CENTERVILLE TPK**	BUTTS STATION RD	ELBOW RD	0.45	9,062	2005	2		**17,000**	8,000	**Severe**
11310450		917	Che	**CENTERVILLE TPK**	ELBOW RD	S.E. PKWY & GRNBELT	0.45	7,820	2005	2		**21,000**	13,000	**Severe**
11310460		917	Che	**CENTERVILLE TPK**	S.E. PKWY & GRNBELT	VA BEACH CL	0.95	7,820	2005	2		**23,000**	15,000	**Beyond Severe**
11310470		923	Che	**CHURCHLAND BLVD**	W BRANCH BLVD	TOWN PT RD	0.59	6,210	2005	2		**8,000**	2,000	Low to mod.
11310480		923	Che	**CHURCHLAND BLVD**	TOWN PT RD	PORTSMOUTH CL	0.11	16,399	2005	4		**18,000**	2,000	Low to mod.
11310490		1036	Che	**DOCK LANDING RD**	JOLLIFF RD	I-664	0.39	6,311	2005	4		**9,000**	3,000	Low to mod.
11310500		1036	Che	**DOCK LANDING RD**	I-664	PORTSMOUTH BLVD	3.18	6,893	2005	2		**8,000**	1,000	Low to mod.
11310510		104	Che	**DOMINION BLVD**	G.W. HWY	CEDAR RD	4.00	10,336	2005	4		**25,000**	15,000	Low to mod.
11310520		104	Che	**DOMINION BLVD**	CEDAR RD	BAINBRIDGE BLVD	0.93	29,984	2005	4	Y	**73,000**	43,000	**Moderate**
11310530		104	Che	**DOMINION BLVD**	BAINBRIDGE BLVD	GREAT BR BLVD	1.62	27,773	2005	4	Y	**79,000**	51,000	**Severe**
11310540		104	Che	**DOMINION BLVD**	GREAT BR BLVD	OAK GROVE CONN	0.30	42,478	2005	4	Y	**92,000**	50,000	**Severe**
11310550		929	Che	**ELBOW RD**	CENTERVILLE TNPK	VA BEACH CL	2.85	5,724	2006	n.a.		**replaced by SEPG**	n.a.	**replaced by SEPG**
11310560		931	Che	**FENTRESS AIRFIELD RD**	BLACKWATER RD	MT PLEASANT RD	0.16	4,833	2005	2		**8,000**	3,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11310570		933	Che	FREEMAN AVE	I-464	BAINBRIDGE BL	0.20	8,202	2005	4		16,000	8,000	Low to mod.
11310580		17	Che	G.W. HWY	N.C. STATE LINE	DOMINION BLVD	9.83	11,052	2005	4		20,000	9,000	Low to mod.
11310590		17	Che	G.W. HWY	DOMINION BLVD	G.W. HWY RELO	3.00	4,217	2005	2		9,000	5,000	Low to mod.
11310600		17	Che	G.W. HWY (Deep Creek bridge)	CEDAR RD @ HINTON AVE	MILL CREEK PKWY	0.10	n.a.	n.a.	2		38,000	n.a.	Beyond Severe
11310605		17	Che	G.W. HWY	MILL CREEK PKWY	WILLOWWOOD DR	0.80	25,138	2005	4		39,000	14,000	Severe
11310610		17	Che	G.W. HWY	WILLOWWOOD DR	I-64	0.38	25,138	2005	4		37,000	12,000	Severe
11310620		17	Che	G.W. HWY	I-64	MILITARY HWY	0.94	24,568	2005	4		39,000	14,000	Severe
11310630		17	Che	G.W. HWY	MILITARY HWY	CANAL DR	0.98	15,778	2005	2		18,000	2,000	Moderate
11310640		17	Che	G.W. HWY	CANAL DR	PORTSMOUTH CL	0.61	28,426	2005	4		38,000	10,000	Severe
11310575	NEW	17	Che	G.W. HWY RELOCATION	G.W. HWY	MOSES GRANDY TRL @ SHIPYARD RD	0.56	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11310650		190	Che	GREAT BR BLVD	BAINBRIDGE BLVD	CAMPOSTELLA RD	0.84	5,963	2005	2		9,000	3,000	Low to mod.
11310660		190	Che	GREAT BR BLVD	CAMPOSTELLA RD	I-64	0.30	10,339	2005	2		14,000	4,000	Moderate
11310670		190	Che	GREAT BR BLVD	I-64	DOMINION BLVD	0.26	14,465	2005	4		23,000	9,000	Low to mod.
11310680		190	Che	GREAT BR BLVD	DOMINION BLVD	RIVERWALK PKWY (N)	0.50	n.a.	n.a.	4		14,000	n.a.	Low to mod.
11310690		190	Che	GREAT BR BLVD	RIVERWALK PKWY (N)	BATTLEFIELD BLVD	1.82	14,027	2005	2		16,000	2,000	Severe
11310740		935	Che	GREENBR PKWY	KEMPSVILLE RD	VOLVO PKWY	1.86	29,389	2005	4		32,000	3,000	Severe
11310750		935	Che	GREENBR PKWY	VOLVO PKWY	EDEN WAY	0.41	46,205	2005	6		48,000	2,000	Severe
11310760		935	Che	GREENBR PKWY	EDEN WAY	I-64	0.69	89,359	2005	6		92,000	3,000	Beyond Severe
11310770		935	Che	GREENBR PKWY	I-64	WOODLAKE DR	0.43	60,985	2005	6		69,000	8,000	Severe
11310772		935	Che	GREENBR PKWY	WOODLAKE DR	MILITARY HWY	0.33	34,358	2002	6		39,000	5,000	Moderate
11310780		937	Che	HANBURY RD / ETHRG MNR	JOHNSTOWN RD	BATTLEFIELD BLVD	1.01	8,204	2005	4		8,000	0	Low to mod.
11310790		937	Che	HANBURY RD / ETHRG MNR	BATTLEFIELD BLVD	GREAT BR BYP	0.26	n.a.	n.a.	4		17,000	n.a.	Low to mod.
11310795			Che	HANBURY RD / ETHRG MNR	GREAT BR BYP	CENTERVILLE TNPK	2.35	13,000	2005	4		14,000	1,000	Moderate
11311403		949	Che	HILLCREST PKWY	EDINBURGH PKWY	CHESAPEAKE EXPR	0.36	2,455	2003	4		15,000	13,000	Low to mod.
11311405		949	Che	HILLCREST PKWY	CHESAPEAKE EXPR	BATTLEFIELD BLVD	0.30	11,652	2003	4		17,000	5,000	Low to mod.
11310950		407	Che	INDIAN RIVER RD	NORFOLK CL	KEMP LANE	0.39	26,815	2005	6		31,000	4,000	Low to mod.
11310960		407	Che	INDIAN RIVER RD	KEMP LANE	VA BEACH CL	1.22	36,234	2005	6		38,000	2,000	Low to mod.
11310970		941	Che	JOHNSTOWN RD	BENEFIT RD	STONEGATE PKWY	3.85	4,089	2005	2		12,000	8,000	Low to mod.
11310975		941	Che	JOHNSTOWN RD	STONEGATE PKWY	HANBURY RD	1.27	10,392	2002	2		15,000	5,000	Moderate
11310980		941	Che	JOHNSTOWN RD	HANBURY RD	PARKER RD	0.76	9,238	2003	2		12,000	3,000	Low to mod.
11310990		941	Che	JOHNSTOWN RD	PARKER RD	BATTLEFIELD BLVD	0.49	14,944	2002	4		20,000	5,000	Low to mod.
11311000		191	Che	JOLLIFF RD	AIRLINE BLVD	DOCK LANDING RD	2.22	3,219	2005	2		8,000	5,000	Low to mod.
11311010		191	Che	JOLLIFF RD	DOCK LANDING RD	PORTSMOUTH BLVD	0.90	3,165	2005	2		8,000	5,000	Low to mod.
11311020		190	Che	KEMPSVILLE RD	BATTLEFIELD BLVD	GREAT BR BYP	0.23	n.a.	n.a.	4		36,000	n.a.	Severe
11311030		190	Che	KEMPSVILLE RD	GREAT BR BYP	GREENBRIER PKWY	1.04	29,512	2005	6		44,000	14,000	Moderate
11311040		190	Che	KEMPSVILLE RD	GREENBRIER PKWY	VOLVO PKWY	1.89	18,717	2005	6		48,000	29,000	Moderate
11311050		190	Che	KEMPSVILLE RD	VOLVO PKWY	VA BEACH CL	0.38	33,149	2005	6		36,000	3,000	Low to mod.
11311060		943	Che	LIBERTY ST	SCL NORFOLK	22ND ST	0.36	4,474	2005	2		6,000	2,000	Low to mod.
11311080		246	Che	LIBERTY ST	22ND ST	POINDEXTER RD	0.06	9,914	2005	4		24,000	14,000	Low to mod.
11311090		246	Che	LIBERTY ST	POINDEXTER RD	OLD ATLANTIC AVE	0.37	9,914	2005	4		13,000	3,000	Low to mod.
11311100		246	Che	LIBERTY ST	OLD ATLANTIC AVE	CAMPOSTELLA RD	0.37	6,484	2005	4		13,000	7,000	Low to mod.
11311110		13	Che	MILITARY HWY	SUFFOLK CL	I-664	2.50	69,801	2005	6		114,000	44,000	Severe
11311130		13	Che	MILITARY HWY	AIRLINE BLVD	I-64	3.28	8,866	2005	4		27,000	18,000	Moderate
11311140		13	Che	MILITARY HWY	I-64	CAVALIER BLVD	0.30	19,371	2005	4		25,000	6,000	Low to mod.
11311150		13	Che	MILITARY HWY	CAVALIER BLVD	G.W. HWY	0.91	19,371	2005	4		26,000	7,000	Low to mod.
11311160		13	Che	MILITARY HWY	G.W. HWY	CANAL DR	1.01	22,746	2005	4		29,000	6,000	Low to mod.
11311170		13	Che	MILITARY HWY	CANAL DR	BAINBRIDGE BLVD	2.18	34,841	2005	4		47,000	12,000	Severe
11311180		13	Che	MILITARY HWY	BAINBRIDGE BLVD	I-464	0.46	32,063	2005	4		35,000	3,000	Moderate
11311190		13	Che	MILITARY HWY	I-464	CAMPOSTELLA RD	0.64	33,388	2005	4		35,000	2,000	Moderate
11311200		13	Che	MILITARY HWY	CAMPOSTELLA RD	BATTLEFIELD BLVD	0.60	31,551	2005	4		32,000	0	Moderate
11311210		13	Che	MILITARY HWY	BATTLEFIELD BLVD	ALLISON DR	0.66	34,211	2005	6		35,000	1,000	Low to mod.
11311220		13	Che	MILITARY HWY	ALLISON DR	GREENBRIER PKWY	0.50	34,408	2005	4		37,000	3,000	Severe

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11311230		13	Che	MILITARY HWY	GREENBRIER PKWY	VA BEACH CL	1.68	35,978	2005	4		40,000	4,000	Severe
11310390		17	Che	MOSES GRANDY TRL	G.W. HWY EXIST. (at Hinton Ave)	DIAMOND AVE	0.04	13,226	2005	2		41,000	28,000	Beyond Severe
11310392		17	Che	MOSES GRANDY TRL	DIAMOND AVE	CEDAR RD @ SHIPYARD RD	0.28	13,226	2005	2		41,000	28,000	Severe
11310385		951	Che	MOSES GRANDY TRL	CEDAR RD @ SHIPYARD RD	CEDAR RD @ SEBRIELL WAY	2.09	n.a.	n.a.	4		26,000	n.a.	Low to mod.
11310397		165	Che	MOSES GRANDY TRL	CEDAR RD @ SEBRIELL WAY	DOMINION BLVD	0.10	13,226	2005	4		35,000	22,000	Severe
11311250		165	Che	MT PLEASANT RD	BATTLEFIELD BLVD	GREAT BR BYP	0.76	20,305	2005	4		30,000	10,000	Moderate
11311260		165	Che	MT PLEASANT RD	GREAT BR BYP	CENTERVILLE TNPK	2.43	19,411	2005	4		31,000	12,000	Moderate
11311270		165	Che	MT PLEASANT RD	CENTERVILLE TNPK	FENTRESS AIRFIELD RD	4.53	11,044	2005	2		11,000	0	Low to mod.
11311280		165	Che	MT PLEASANT RD	FENTRESS AIRFIELD RD	VA BEACH CL	0.91	10,938	2005	2		13,000	2,000	Low to mod.
11311540		961	Che	OAK GROVE CONN	I-64	DOMINION BLVD	0.57	59,861	2006	n.a.		intx. ramps	intx. ramps	intx. ramps
11311550		961	Che	OAK GROVE CONN	DOMINION BLVD	BATTLEFIELD BLVD	1.90	61,642	2005	8	Y	98,000	36,000	Low to mod.
11311290		337	Che	POINDEXTER ST	PORTSMOUTH CL	I-464	0.85	7,919	2003	2	Y	19,000	11,000	Severe
11311300		337	Che	POINDEXTER ST	I-464	BAINBRIDGE BLVD	0.20	13,634	2005	4		22,000	8,000	Low to mod.
11311310		166	Che	POINDEXTER ST	BAINBRIDGE BLVD	LIBERTY ST	0.48	10,004	2005	2		12,000	2,000	Low to mod.
11311320		337	Che	PORTSMOUTH BLVD	SUFFOLK CL	JOLLIFF RD	0.75	14,058	2005	4		18,000	4,000	Low to mod.
11311330		337	Che	PORTSMOUTH BLVD	JOLLIFF RD	I-664	0.60	18,763	2005	4		24,000	5,000	Low to mod.
11311340		337	Che	PORTSMOUTH BLVD	I-664	TAYLOR RD	1.34	27,875	2005	4		31,000	3,000	Moderate
11311350		337	Che	PORTSMOUTH BLVD	TAYLOR RD	PORTSMOUTH CL	0.70	35,721	2005	4		39,000	3,000	Severe
11311360		409	Che	PROVIDENCE RD	ATLANTIC AVE	CAMPOSTELLA RD	0.20	5,700	2002	4		10,000	4,000	Low to mod.
11311370		409	Che	PROVIDENCE RD	CAMPOSTELLA RD	VA BEACH CL	2.34	19,038	2005	4		22,000	3,000	Low to mod.
11311380		947	Che	PUGHSVILLE RD	SUFFOLK CL	I-664	0.63	8,832	2005	4		12,000	3,000	Low to mod.
11311390		947	Che	PUGHSVILLE RD	I-664	TAYLOR RD	0.37	20,466	2005	4		25,000	5,000	Low to mod.
11310140		168	Che	RTE 168 (NC TO SE PKWY)	N.C. ST LINE	BALLAHACK RD	0.50	21,282	2005	4		34,000	13,000	Moderate
11310141		168	Che	RTE 168 (NC TO SE PKWY)	BALLAHACK RD	B'FIELD BLVD @ GALLB. RD	1.00	21,282	2005	4		34,000	13,000	Moderate
11311580		168	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ GALLB. RD	B'FIELD BLVD @ IND CRK RD	2.61	6,761	2002	4	Y	18,000	11,000	Low to mod.
11311570		168	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ IND CRK RD	HILLCREST PKWY	2.63	8,103	2005	4		18,000	10,000	Low to mod.
11311560		168	Che	RTE 168 (NC TO SE PKWY)	HILLCREST PKWY	B'FIELD BLVD @ KEGMAN RD	2.21	23,096	2005	4		38,000	15,000	Low to mod.
11310700		168	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ KEGMAN RD	HANBURY ROAD	0.59	24,045	2005	4		36,000	12,000	Low to mod.
11310710		168	Che	RTE 168 (NC TO SE PKWY)	HANBURY ROAD	MT PLEASANT RD	1.31	41,408	2005	4		56,000	15,000	Low to mod.
11310720		168	Che	RTE 168 (NC TO SE PKWY)	MT PLEASANT RD	B'FIELD / KEMPSVILLE	2.31	66,120	2005	4		80,000	14,000	Severe
11310725		168	Che	RTE 168 (NC TO SE PKWY)	B'FIELD / KEMPSVILLE	SE PKWY / OAK GROVE CONN	0.30	n.a.	n.a.	4		within intx.	n.a.	within tntx.
11311400		949	Che	SIGN PINE / ST BR / EDINB	BENEFIT RD	HILLCREST PKWY	1.82	2,455	2003	2		10,000	8,000	Low to mod.
11311600	NEW		Che	S.E. PARKWAY	BATTLEFIELD BLVD.	CENTERVILLE TPK.	3.09	n.a.	n.a.	4	Y	45,000	n.a.	Low to mod.
11311610	NEW		Che	S.E. PARKWAY	CENTERVILLE TPK.	VA BEACH C.L.	3.41	n.a.	n.a.	4	Y	45,000	n.a.	Low to mod.
11311410		953	Che	TAYLOR RD	PORTSMOUTH BLVD	BRUCE RD	1.76	23,900	2005	4		30,000	6,000	Moderate
11311420		953	Che	TAYLOR RD	BRUCE RD	PUGHSVILLE RD	0.31	22,629	2005	4		29,000	6,000	Moderate
11311430		953	Che	TAYLOR RD	PUGHSVILLE RD	WESTERN BRANCH BLVD	1.70	16,045	2005	4		21,000	5,000	Low to mod.
11311440		955	Che	TOWN POINT RD	PORTSMOUTH CL	CHURCHLAND BLVD	0.09	24,739	2005	4		27,000	2,000	Moderate
11311450		957	Che	TYRE NECK RD	BRUCE RD	SILVERWOOD BLVD	1.10	13,170	2005	2		14,000	1,000	Severe
11311455		957	Che	TYRE NECK RD	SILVERWOOD BLVD	PORTSMOUTH CL	0.15	12,400	2003	2		14,000	2,000	Severe
11311460		959	Che	VOLVO PKWY	BATTLEFIELD BLVD	GREENBRIER PKWY	1.40	28,173	2005	4		28,000	0	Moderate
11311470		959	Che	VOLVO PKWY	GREENBRIER PKWY	FAIRWAY REACH RD	0.82	25,122	2005	4		25,000	0	Low to mod.
11311480		959	Che	VOLVO PKWY	FAIRWAY REACH RD	KEMPSVILLE RD	0.60	22,892	2005	4		36,000	13,000	Severe
11311490		959	Che	VOLVO PKWY	KEMPSVILLE RD	VA BEACH CL	0.53	n.a.	n.a.	4		24,000	n.a.	Low to mod.
11311510		17	Che	WESTERN BRANCH BLVD	SUFFOLK CL	CHURCHLAND BLVD	0.61	24,272	2005	4		27,000	3,000	Low to mod.
11311520		17	Che	WESTERN BRANCH BLVD	CHURCHLAND BLVD	TAYLOR RD	0.32	22,530	2005	4		33,000	10,000	Moderate
11311530		17	Che	WESTERN BRANCH BLVD	TAYLOR RD	PORTSMOUTH CL	0.32	23,758	2003	4		26,000	2,000	Low to mod.
10360090		616	Glo	BELROI RD	RTE 614	US 17	3.62	4,609	2003	2		10,000	5,000	Low to mod.
10360030		17	Glo	G.W. HWY	YORK CL	GUINEA RD	2.96	35,073	2005	4	Y	45,000	10,000	Severe
10360040		17	Glo	G.W. HWY	GUINEA RD	FEATHERBED LN	4.29	36,168	2003	4		46,000	10,000	Severe
10360050		17	Glo	G.W. HWY	FEATHERBED LN	US 17 BUS S	4.76	29,232	2003	4		41,000	12,000	Severe
10360060		17	Glo	G.W. HWY	US 17 BUS S	ARK RD	4.06	17,672	2003	4		23,000	5,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
10360070		216	Glo	GUINEA RD	US 17	RTE 649	3.66	9,275	2003	2		11,000	2,000	Low to mod.
10360080		614	Glo	HICKORY FORK RD	US 17	RTE 616	5.33	5,734	2003	2		9,000	3,000	Low to mod.
10360020	BUS	17	Glo	MAIN ST	US 17 (s. end)	RTE 3 &14 E	1.20	21,754	2003	4		28,000	6,000	Moderate
10360010		3	Glo	RTE 3/14	US 17 BUS	COW CREEK	1.70	17,110	2003	4		25,000	8,000	Low to mod.
11140010		905	Hamp	ABERDEEN RD	TODDS LA	MERCURY BLVD	0.20	13,536	2006	4		14,000	0	Low to mod.
11140020		905	Hamp	ABERDEEN RD	MERCURY BLVD	BRIARFIELD RD	1.29	18,404	2005	4		20,000	2,000	Low to mod.
11140030		905	Hamp	ABERDEEN RD	BRIARFIELD RD	I-664	0.99	20,227	2005	4		25,000	5,000	Low to mod.
11140040		905	Hamp	ABERDEEN RD	I-664	PEMBROKE AVE	0.17	16,610	2005	4		22,000	5,000	Low to mod.
11140050		905	Hamp	ABERDEEN RD	PEMBROKE AVE	NEWPORT NEWS CL	0.30	11,123	2006	4		16,000	5,000	Low to mod.
11140060		172	Hamp	ARMISTEAD AVE	WYTHE CRK RD	NASA MAIN GATE	0.96	10,784	2005	4		24,000	13,000	Low to mod.
11140200		172	Hamp	ARMISTEAD AVE	NASA MAIN GATE	CMDR SHEP BLVD	0.32	13,967	2005	4		32,000	18,000	Severe
11140070		920	Hamp	ARMISTEAD AVE	CMDR SHEP BLVD	HRC PARKWAY	1.52	27,963	2005	4		35,000	7,000	Severe
11140080		920	Hamp	ARMISTEAD AVE	HRC PARKWAY	MERCURY BLVD	1.30	36,512	2005	4		41,000	4,000	Severe
11140090		134	Hamp	ARMISTEAD AVE	MERCURY BLVD	CONVENTION CENTER BLVD.	0.14	23,396	2004	4		26,000	3,000	Low to mod.
11140095		134	Hamp	ARMISTEAD AVE	CONVENTION CENTER BLVD.	LA SALLE AVE	0.95	26,200	2005	4		28,000	2,000	Low to mod.
11140100		134	Hamp	ARMISTEAD AVE	LA SALLE AVE	RIP RAP RD	0.44	23,328	2005	4		25,000	2,000	Low to mod.
11140105		134	Hamp	ARMISTEAD AVE	RIP RAP RD	PEMBROKE AVE	0.37	14,415	2005	4		17,000	3,000	Low to mod.
11140110		134	Hamp	ARMISTEAD AVE	PEMBROKE AVE	SETTLERS LANDING RD	0.37	14,498	2005	4		19,000	5,000	Low to mod.
11140120		940	Hamp	BIG BETHEL RD	YORK CL	SEMPLE FARM RD	0.28	12,802	2004	2		17,000	4,000	Severe
11140130		940	Hamp	BIG BETHEL RD	SEMPLE FARM RD	SAUNDERS RD	0.15	16,632	2005	4		23,000	6,000	Low to mod.
11140135		940	Hamp	BIG BETHEL RD	SAUNDERS RD	THOMAS NELSON DR	1.25	19,393	2005	4		29,000	10,000	Moderate
11140140		940	Hamp	BIG BETHEL RD	THOMAS NELSON DR	HRC PKWY	0.57	27,113	2004	4		34,000	7,000	Severe
11140150		940	Hamp	BIG BETHEL RD	HRC PKWY	TODDS LANE	1.23	32,701	2005	4		40,000	7,000	Severe
11140170		945	Hamp	BRIARFIELD RD	NEWPORT NEWS CL	ABERDEEN RD	0.87	14,056	2006	2		16,000	2,000	Severe
11140180		945	Hamp	BRIARFIELD RD	ABERDEEN RD	POWER PLANT PKWY	1.06	13,733	2005	4		18,000	4,000	Low to mod.
11140190		950	Hamp	CHESTNUT AVE	NEWPORT NEWS CL	MERCURY BLVD	0.20	8,835	2003	2		10,000	1,000	Moderate
11140205		134	Hamp	CMDR SHEP BLVD	ARMISTEAD AVE	MAGRUDER BLVD	0.73	10,177	2005	4		12,000	2,000	Low to mod.
11140210	NEW	1070	Hamp	CMDR SHEP BLVD EXT	MAGRUDER BLVD	BIG BETHEL RD	1.33	n.a.	n.a.	4		10,000	n.a.	Low to mod.
11140220		960	Hamp	COLISEUM DR	MERCURY BLVD	HRC PARKWAY	1.40	21,909	2006	4		26,000	4,000	Low to mod.
11140230		143	Hamp	COUNTY ST	WOODLAND RD	MALLORY ST	0.41	5,239	2006	2		7,000	2,000	Low to mod.
11140240		152	Hamp	CUNNINGHAM DR	TODDS LA	COLISEUM DR	0.86	22,690	2005	4		25,000	2,000	Low to mod.
11140250		152	Hamp	CUNNINGHAM DR	COLISEUM DR	MERCURY BLVD	0.74	13,598	2005	4		17,000	3,000	Low to mod.
11140260		169	Hamp	FOX HILL RD	MERCURY BLVD	WOODLAND RD	1.89	26,443	2005	4		31,000	5,000	Moderate
11140270		169	Hamp	FOX HILL RD	WOODLAND RD	OLD BUCKROE RD	1.10	13,953	2004	4		22,000	8,000	Low to mod.
11140280		970	Hamp	HARRIS CREEK RD	FOX HILL RD	LITTLE BACK RIVER RD	0.80	3,033	2006	2		5,000	2,000	Low to mod.
11140290		975	Hamp	HRC PARKWAY	NEWPORT NEWS CL	BIG BETHEL RD	1.26	23,487	2005	4		34,000	11,000	Moderate
11140300		975	Hamp	HRC PARKWAY	BIG BETHEL RD	I-64	0.57	45,491	2005	4		66,000	21,000	Moderate
11140310		975	Hamp	HRC PARKWAY	I-64	MAGRUDER BLVD	0.87	50,960	2005	4		59,000	8,000	Low to mod.
11140320		975	Hamp	HRC PARKWAY	MAGRUDER BLVD	COLISEUM DR	0.45	34,284	2005	4		35,000	1,000	Low to mod.
11140330		975	Hamp	HRC PARKWAY	COLISEUM DR	ARMISTEAD AVE	0.40	33,244	2004	4		40,000	7,000	Severe
11140340		60	Hamp	KECOUGHTAN RD	NEWPORT NEWS CL	POWHATAN PKWY	1.19	7,683	2005	4		9,000	1,000	Low to mod.
11140350		60	Hamp	KECOUGHTAN RD	POWHATAN PKWY	LA SALLE AVE	1.09	7,944	2004	4		10,000	2,000	Low to mod.
11140360		60	Hamp	KECOUGHTAN RD	LA SALLE AVE	VICTORIA BLVD	1.04	6,091	2005	4		12,000	6,000	Low to mod.
11140370		980	Hamp	KECOUGHTAN RD	VICTORIA BLVD	SETTLERS LNDG RD	0.28	12,347	2006	4		14,000	2,000	Low to mod.
11140380		985	Hamp	KING ST	PEMBROKE AVE	I-64	0.29	10,155	2004	3		12,000	2,000	Low to mod.
11140390		985	Hamp	KING ST	I-64	RIP RAP RD	0.45	10,155	2004	4		12,000	2,000	Low to mod.
11140400		985	Hamp	KING ST	RIP RAP RD	MERCURY BLVD	0.20	18,192	2005	4		22,000	4,000	Low to mod.
11140410		278	Hamp	KING ST	MERCURY BLVD	OLD FOX HILL RD	0.12	n.a.	n.a.	4		26,000	n.a.	Moderate
11140420		278	Hamp	KING ST	OLD FOX HILL RD	LITTLE BACK RIVER RD	0.54	26,572	2005	4		29,000	2,000	Moderate
11140430		278	Hamp	KING ST	LITTLE BACK RIVER RD	LANGLEY AFB	1.40	9,088	2005	2		9,000	0	Low to mod.
11140440		167	Hamp	LA SALLE AVE	KECOUGHTAN RD	VICTORIA BLVD	0.58	n.a.	n.a.	2		10,000	n.a.	Low to mod.
11140445		167	Hamp	LA SALLE AVE	VICTORIA BLVD	SETTLERS LANDING RD	0.68	15,134	2005	4		18,000	3,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11140450		167	Hamp	LA SALLE AVE	SETTLERS LANDING RD	PEMBROKE AVE	0.15	16,827	2004	4		18,000	1,000	Low to mod.
11140460		167	Hamp	LA SALLE AVE	PEMBROKE AVE	ARMISTEAD AVE	0.51	23,766	2003	4		26,000	2,000	Low to mod.
11140470		167	Hamp	LA SALLE AVE	ARMISTEAD AVE	MERCURY BLVD	0.63	15,236	2005	4		16,000	1,000	Low to mod.
11140480		167	Hamp	LA SALLE AVE	MERCURY BLVD	LANGLEY GATE	1.46	15,227	2005	4		17,000	2,000	Low to mod.
11140490		990	Hamp	LITTLE BACK RIVER RD	KING ST	HARRIS CREEK RD	1.90	13,630	2005	2		16,000	2,000	Severe
11140500		134	Hamp	MAGRUDER BLVD	YORK CO LINE	SMPL FARM RD	0.28	23,478	2005	4		26,000	3,000	Low to mod.
11140510		134	Hamp	MAGRUDER BLVD	SMPL FARM RD	CMDR SHEP BLVD	0.90	31,324	2006	4		33,000	2,000	Moderate
11140520		134	Hamp	MAGRUDER BLVD	CMDR SHEP BLVD	HRC PARKWAY	1.38	36,527	2005	4		42,000	5,000	Moderate
11140530		134	Hamp	MAGRUDER BLVD	HRC PARKWAY	I-64	0.67	22,003	2006	4		32,000	10,000	Moderate
11140540		995	Hamp	MAGRUDER RAMP	I-64	CUNNINGHAM DR	0.57	3,441	2001	1		4,000	1,000	Low to mod.
11140550		1000	Hamp	MALLORY ST	I-64	COUNTY ST	0.40	7,125	2005	2		16,000	9,000	Severe
11140560		169	Hamp	MALLORY ST	COUNTY ST	MERCURY BLVD	0.23	7,125	2005	2		13,000	6,000	Low to mod.
11140570		169	Hamp	MALLORY ST	MERCURY BLVD	PEMBROKE AVE	1.94	6,851	2005	4		12,000	5,000	Low to mod.
11140580		143	Hamp	MELLEN ST	MALLORY ST	MERCURY BLVD	0.70	5,113	2005	2		7,000	2,000	Low to mod.
11140590		258	Hamp	MERCURY BLVD	NEWPORT NEWS CL	ABERDEEN RD	2.04	50,334	2005	8		60,000	10,000	Low to mod.
11140600		258	Hamp	MERCURY BLVD	ABERDEEN RD	QUEEN ST	0.43	50,362	2004	8		67,000	17,000	Moderate
11140610		258	Hamp	MERCURY BLVD	QUEEN ST	I-64	0.38	45,769	2005	8		67,000	21,000	Moderate
11140620		258	Hamp	MERCURY BLVD	I-64	COLISEUM DR	0.35	45,469	2005	8		61,000	16,000	Moderate
11140621		258	Hamp	MERCURY BLVD	COLISEUM DR	CUNNINGHAM DR	0.42	40,164	2005	8		56,000	16,000	Low to mod.
11140630		258	Hamp	MERCURY BLVD	CUNNINGHAM DR	ARMISTEAD AVE	0.24	51,167	2005	8		58,000	7,000	Low to mod.
11140640		258	Hamp	MERCURY BLVD	ARMISTEAD AVE	LA SALLE AVE	0.70	60,988	2005	8		68,000	7,000	Severe
11140650		258	Hamp	MERCURY BLVD	LA SALLE AVE	KING ST	0.82	61,816	2005	8		68,000	6,000	Severe
11140660		258	Hamp	MERCURY BLVD	KING ST	FOX HILL RD	0.31	42,078	2005	6		51,000	9,000	Severe
11140670		258	Hamp	MERCURY BLVD	FOX HILL RD	ANDREWS BLVD	0.70	32,500	2005	4		34,000	2,000	Severe
11140680		258	Hamp	MERCURY BLVD	ANDREWS BLVD	PEMBROKE AVE	0.55	18,872	2004	4		24,000	5,000	Low to mod.
11140690		258	Hamp	MERCURY BLVD	PEMBROKE AVE	WOODLAND RD	0.44	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11140700		258	Hamp	MERCURY BLVD	WOODLAND RD	MALLORY ST	0.50	9,779	2005	4		17,000	7,000	Low to mod.
11140710		258	Hamp	MERCURY BLVD	MALLORY ST	MELLEN ST	0.78	4,379	2005	4		7,000	3,000	Low to mod.
11140730		169	Hamp	OLD BUCKROE RD	PEMBROKE AVE	FOX HILL RD	1.50	7,280	2005	2		8,000	1,000	Low to mod.
11140740		351	Hamp	PEMBROKE AVE	NEWPORT NEWS CL	ABERDEEN RD	0.33	9,815	2005	4		17,000	7,000	Low to mod.
11140750		351	Hamp	PEMBROKE AVE	ABERDEEN RD	POWHATAN PKWY	1.18	13,194	2005	4		17,000	4,000	Low to mod.
11140760		351	Hamp	PEMBROKE AVE	POWHATAN PKWY	SETTLERS LNDG RD	1.44	12,958	2005	4		18,000	5,000	Low to mod.
11140770		351	Hamp	PEMBROKE AVE	SETTLERS LNDG RD	LA SALLE AVE	0.17	13,116	2005	4		19,000	6,000	Low to mod.
11140780		351	Hamp	PEMBROKE AVE	LA SALLE AVE	ARMISTEAD AVE	0.71	11,283	2005	4		16,000	5,000	Low to mod.
11140790		351	Hamp	PEMBROKE AVE	ARMISTEAD AVE	KING ST	0.27	15,702	2004	4		23,000	7,000	Low to mod.
11140800		351	Hamp	PEMBROKE AVE	KING ST	EATON ST	0.14	n.a.	n.a.	4		15,000	n.a.	Low to mod.
11140810		351	Hamp	PEMBROKE AVE	EATON ST	BARRON ST	0.40	9,777	2005	2		14,000	4,000	Moderate
11140820		351	Hamp	PEMBROKE AVE	BARRON ST	MERCURY BLVD	0.60	9,777	2005	3		13,000	3,000	Low to mod.
11140830		351	Hamp	PEMBROKE AVE	MERCURY BLVD	WOODLAND RD	0.19	15,105	2005	4		19,000	4,000	Low to mod.
11140840		351	Hamp	PEMBROKE AVE	WOODLAND RD	OLD BUCKROE RD	1.10	13,928	2005	4		17,000	3,000	Low to mod.
11140850		351	Hamp	PEMBROKE AVE	OLD BUCKROE RD	MALLORY ST	0.60	4,399	2005	2		6,000	2,000	Low to mod.
11140900		415	Hamp	POWER PLANT PKWY	MERCURY BLVD	PINE CHAPEL RD	0.71	11,860	2003	4		22,000	10,000	Low to mod.
11140910		415	Hamp	POWER PLANT PKWY	PINE CHAPEL RD	BRIARFIELD RD	0.46	25,907	2005	4		28,000	2,000	Moderate
11140860		1045	Hamp	POWHATAN PKWY	KECOUGHTAN RD	PEMBROKE AVE	0.76	7,919	2005	2		9,000	1,000	Low to mod.
11140870		1045	Hamp	POWHATAN PKWY	PEMBROKE AVE	I-664	0.19	22,361	2006	4		24,000	2,000	Low to mod.
11140880		1045	Hamp	POWHATAN PKWY	I-664	BRIARFIELD RD	0.73	15,131	2006	4		16,000	1,000	Low to mod.
11140920		415	Hamp	QUEEN ST	BRIARFIELD RD	MICHIGAN DR	1.27	13,359	2005	4		16,000	3,000	Low to mod.
11140970		415	Hamp	QUEEN ST	MICHIGAN DR	PEMBROKE AVE	0.09	13,359	2005	4		16,000	3,000	Low to mod.
11140930		1055	Hamp	RIP RAP RD	ARMISTEAD AVE	I-64	0.20	8,408	2005	2		14,000	6,000	Moderate
11140935		1055	Hamp	RIP RAP RD	I-64	KING ST	0.46	10,064	2005	2		17,000	7,000	Severe
11140940		1060	Hamp	ROANOKE AVE	NEWPORT NEWS CL	MERCURY BLVD	0.19	3,802	2004	2		5,000	1,000	Low to mod.
11140950		1070	Hamp	SAUNDERS RD	NEWPORT NEWS CL	BIG BETHEL RD	0.72	10,002	2005	4		19,000	9,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11140960		1075	Hamp	SEMPLE FARM RD	MAGRUDER BLVD	WYTHE CRK RD	0.18	10,145	2006	4		23,000	13,000	Low to mod.
11140980		1080	Hamp	SETTLERS LNDG RD	PEMBROKE AVE	LA SALLE AVE	0.15	10,241	2006	4		11,000	1,000	Low to mod.
11140990		1080	Hamp	SETTLERS LNDG RD	LA SALLE AVE	KECOUGHTAN RD	0.60	10,508	2005	4		18,000	7,000	Low to mod.
11140995		1080	Hamp	SETTLERS LNDG RD	KECOUGHTAN RD	ARMISTEAD AVE	0.08	18,441	2005	4		24,000	6,000	Low to mod.
11141000		60	Hamp	SETTLERS LNDG RD	ARMISTEAD AVE	EATON ST	0.44	16,562	2005	2		25,000	8,000	Beyond Severe
11141005		60	Hamp	SETTLERS LNDG RD	EATON ST	TYLER ST	0.63	21,295	2005	4		27,000	6,000	Moderate
11141010		60	Hamp	SETTLERS LNDG RD	TYLER ST	I-64	0.10	24,033	2005	4		25,000	1,000	Low to mod.
11141020		152	Hamp	TODDS LA	NEWPORT NEWS CL	BIG BETHEL RD	1.19	19,961	2005	4		31,000	11,000	Moderate
11141030		152	Hamp	TODDS LA	BIG BETHEL RD	ABERDEEN RD	0.98	22,387	2004	4		27,000	5,000	Moderate
11141040		152	Hamp	TODDS LA	ABERDEEN RD	CUNNINGHAM DR	0.30	27,961	2004	4		31,000	3,000	Moderate
11140890		1100	Hamp	TODDS LA	CUNNINGHAM DR	MERCURY BLVD	0.18	15,731	2005	4		16,000	0	Low to mod.
11141050		143	Hamp	WOODLAND RD	I-64	COUNTY ST	0.22	23,331	2005	4		29,000	6,000	Moderate
11141060		1115	Hamp	WOODLAND RD	COUNTY ST	MERCURY BLVD	0.38	17,843	2005	4		20,000	2,000	Low to mod.
11141070		1115	Hamp	WOODLAND RD	MERCURY BLVD	PEMBROKE AVE	0.45	13,124	2004	4		17,000	4,000	Low to mod.
11141080		1115	Hamp	WOODLAND RD	PEMBROKE AVE	FOX HILL RD	1.82	10,501	2005	4		17,000	6,000	Low to mod.
11141090		172	Hamp	WYTHE CRK RD	ARMISTEAD AVE	POQUOSON CL	1.00	16,651	2006	4		33,000	16,000	Moderate
13000015		704	IW	BATTERY PARK RD	S CHURCH ST	SM CL / NIKE PARK RD	1.33	10,116	2005	2		10,000	0	Low to mod.
10460195		704	IW	BATTERY PARK RD	SM CL / NIKE PARK RD	COUNTRY WAY	1.17	4,193	2005	2		4,000	0	Low to mod.
10460120		258	IW	BREWERS NECK BLVD	RTE 10 & 32	RTE 670	1.82	24,460	2005	4		33,000	9,000	Severe
10460130		258	IW	BREWERS NECK BLVD	RTE 670	US 17	1.03	24,460	2005	4		30,000	6,000	Moderate
13000040	BUS	10	IW	CHURCH ST, N	MAIN ST	SMITHFIELD CL	1.28	9,731	2005	2		12,000	2,000	Low to mod.
10460050	BUS	10	IW	CHURCH ST, N	SMITHFIELD CL	JENKINS LN	0.87	5,081	2005	2		6,000	1,000	Low to mod.
10460060	BUS	10	IW	CHURCH ST, N	JENKINS LN	RTE 10 BYP	2.05	1,920	2005	2		3,000	1,000	Low to mod.
13000080	BUS	10	IW	CHURCH ST, S	RTE 10 BYP	BATTERY PARK RD	0.85	15,974	2005	4		17,000	1,000	Low to mod.
13000085	BUS	10	IW	CHURCH ST, S	BATTERY PARK RD	CYPRESS CREEK BR	1.00	14,348	2005	2		15,000	1,000	Moderate
13000095	BUS	10	IW	CHURCH ST, S	CYPRESS CREEK BR	MAIN ST	0.58	14,934	2005	2		16,000	1,000	Severe
10460180		669	IW	NIKE PARK RD	TITUS CREEK DR	BATTERY PARK RD	1.55	9,247	2005	2		9,000	0	Low to mod.
10460210		704	IW	RESCUE RD	NEWPORT ST	SMITH'S NECK RD	1.30	859	2005	2		2,000	1,000	Low to mod.
10460010		10	IW	RTE 10	SUFFOLK CL	RIDDICK RD	2.07	11,677	2005	4		14,000	2,000	Low to mod.
10460020		10	IW	RTE 10	RIDDICK RD	BREWERS NK BLVD	2.08	11,677	2005	4		14,000	2,000	Low to mod.
10460110		258	IW	RTE 10	BREWERS NK BLVD	RTE 644 / ECL SM	1.00	23,633	2005	4		36,000	12,000	Severe
13000045		10	IW	RTE 10	RTE 644 / ECL SM	S. CHURCH ST	0.96	28,952	2005	4		35,000	6,000	Severe
10460045		10	IW	RTE 10	BUS RTE 10	SURRY CL	4.20	7,323	2005	2		10,000	3,000	Low to mod.
13000055	BYP	10	IW	RTE 10 BYPASS	S. CHURCH ST	RTE 710 (FAIRWAY DR)	1.55	17,269	2005	2		18,000	1,000	Moderate
13000065	BYP	10	IW	RTE 10 BYPASS	RTE 710 (FAIRWAY DR)	MAIN ST	0.75	17,269	2005	2		18,000	1,000	Moderate
13000070	BYP	10	IW	RTE 10 BYPASS	MAIN ST	SMITHFIELD CL	0.78	10,829	2005	2		14,000	3,000	Moderate
10460030	BYP	10	IW	RTE 10 BYPASS	SMITHFIELD CL	BUS RTE 10	2.96	7,890	2005	2		14,000	6,000	Moderate
10460080		17	IW	RTE 17	NEWPORT NEWS CL	BREWERS NK BLVD	4.54	29,803	2005	4		42,000	12,000	Moderate
10460075		17	IW	RTE 17	BREWERS NK BLVD	W. END CHUC BR	1.83	16,285	2005	4		23,000	7,000	Low to mod.
10460065		17	IW	RTE 17	W. END CHUC BR	SUFFOLK CL	0.60	16,285	2005	2		23,000	7,000	Low to mod.
10460320		260	IW	RTE 258 (GREAT MILL HWY)	SUFFOLK CL	US 58 BUS	2.85	3,972	2005	2		7,000	3,000	Low to mod.
10460300		58	IW	RTE 58 BUS	FRANKLIN CL	US 258	1.52	9,218	2005	2		19,000	10,000	Severe
10460310		58	IW	RTE 58 BUS	US 258	SUFFOLK CL	5.20	3,407	2005	2		6,000	3,000	Low to mod.
10460140		669	IW	SMITH'S NECK RD	CARROLLTON BLVD	REYNOLDS DR	0.72	10,970	2005	2		15,000	4,000	Moderate
10460150		665	IW	SMITH'S NECK RD	REYNOLDS DR	TITUS CREEK DR	1.03	8,586	2005	2		13,000	4,000	Moderate
10460160		665	IW	SMITH'S NECK RD	TITUS CREEK DR	RESCUE RD	2.10	1,657	2005	2		2,000	0	Low to mod.
10460170		668	IW	TITUS CREEK DR	SMITH'S NECK RD	NIKE PARK RD	0.92	6,457	2005	2		7,000	1,000	Low to mod.
10460205		704	IW	TODD AVE / WARWICK ST	COUNTRY WAY	NEWPORT ST	0.57	1,012	2005	2		3,000	2,000	Low to mod.
10460250		258	IW	US 258 (INCLUDING MAIN ST)	CARRSVILLE HWY	WINDSOR CL	12.70	4,086	2005	2		12,000	8,000	Low to mod.
10460240		258	IW	US 258 (INCLUDING MAIN ST)	WINDSOR SCL	US 460	0.15	5,247	2005	2		13,000	8,000	Low to mod.
10460230		258	IW	US 258 (INCLUDING MAIN ST)	US 460	WINDSOR NCL	0.25	5,532	2005	2		16,000	10,000	Moderate
10460220		258	IW	US 258 (INCLUDING MAIN ST)	WINDSOR NCL	MONUMENT CIR	7.70	5,532	2005	2		8,000	2,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
10460100		258	IW	US 258 (INCLUDING MAIN ST)	MONUMENT CIR	SMITHFIELD CL	5.40	5,693	2005	2		4,000	-2,000	Low to mod.
13000020		258	IW	US 258 (INCLUDING MAIN ST)	SMITHFIELD CL	RTE 10 BYPASS	1.04	13,835	2005	2		14,000	0	Moderate
13000030	BUS	258	IW	US 258 (INCLUDING MAIN ST)	RTE 10 BYPASS	S. CHURCH ST	0.64	6,209	2005	2		10,000	4,000	Low to mod.
10460260		460	IW	US 460 (2030 data refers to new Rte 460)	SOUTHAMPTON CL	WINDSOR WCL	6.10	10,356	2005	4	Y	26,000	16,000	Low to mod.
10460270		460	IW	US 460 (2030 data refers to new Rte 460)	WINDSOR WCL	US 258	0.08	n.a.	n.a.	4	Y	26,000	n.a.	Low to mod.
10460280		460	IW	US 460 (2030 data refers to new Rte 460)	US 258	WINDSOR ECL	1.21	14,666	2005	4	Y	38,000	23,000	Low to mod.
10460290		460	IW	US 460 (2030 data refers to new Rte 460)	WINDSOR ECL	SUFFOLK CL	2.35	14,939	2005	4	Y	38,000	23,000	Low to mod.
10470030		30	JCC	BARHAMSVILLE RD	I-64	RTE 60	1.71	6,215	2004	4		19,000	13,000	Low to mod.
10470040		614	JCC	CENTERVILLE RD	RTE 5 E	ALT RTE 5	0.50	3,531	2005	2		8,000	4,000	Low to mod.
10470050		614	JCC	CENTERVILLE RD	ALT RTE 5	BRICK BAT RD	1.15	5,719	2005	2		6,000	0	Low to mod.
10470060		614	JCC	CENTERVILLE RD	BRICK BAT RD	LONGHILL RD	3.32	6,400	2005	2		12,000	6,000	Low to mod.
10470070		614	JCC	CENTERVILLE RD	LONGHILL RD	RTE 60	3.11	10,364	2005	2		12,000	2,000	Low to mod.
10470080		910	JCC	COLONIAL PARKWAY	JAMESTOWN	NCL WMSBRG	8.70	1,728	2005	2		5,000	3,000	Low to mod.
10470090		607	JCC	CROAKER RD	RTE 60	ROSE LN	0.51	8,652	2005	2		13,000	4,000	Moderate
10470100		607	JCC	CROAKER RD	ROSE LN	I-64	0.67	9,002	2005	4		15,000	6,000	Low to mod.
10470110		607	JCC	CROAKER RD	I-64	FENTON MILL RD	0.41	6,108	2004	4		15,000	9,000	Low to mod.
10470120		607	JCC	CROAKER RD	FENTON MILL RD	RIVERVIEW RD	0.73	3,770	2005	2		12,000	8,000	Low to mod.
10470140		615	JCC	IRONBOUND RD	MONTICELLO AVE	WLMBG CL	0.76	10,764	2005	4		11,000	0	Low to mod.
10470132		615	JCC	IRONBOUND RD / NEWS RD	MONTICELLO AVE	RTE 5 / J TYLER HWY	1.36	12,483	2005	2		19,000	7,000	Severe
10470135		615	JCC	IRONBOUND RD / SANDY B	RTE 5 / J TYLER HWY	JAMESTOWN RD	0.98	8,219	2005	2		10,000	2,000	Low to mod.
10470150		31	JCC	JAMESTOWN RD	JAMES RIVER	WCL WLMBG	4.17	9,297	2005	2		10,000	1,000	Low to mod.
10470160		5	JCC	JOHN TYLER HWY	CHARLES CITY CL	MONTICELLO AVE	1.50	3,455	2004	2		7,000	4,000	Low to mod.
10470170		5	JCC	JOHN TYLER HWY	MONTICELLO AVE	CENTERVILLE RD	2.70	3,770	2005	2		7,000	3,000	Low to mod.
10470180		5	JCC	JOHN TYLER HWY	CENTERVILLE RD	IRONBOUND RD	2.10	10,336	2005	2		15,000	5,000	Moderate
10470190		5	JCC	JOHN TYLER HWY	IRONBOUND RD	RTE 199	1.79	11,529	2005	2		17,000	5,000	Severe
10470220		615	JCC	LONGHILL CONN RD	LONGHILL RD	IRONBOUND RD	0.85	6,294	2005	2		20,000	14,000	Severe
10470200		612	JCC	LONGHILL RD	CENTERVILLE RD	RTE 199	3.05	19,095	2005	2		27,000	8,000	Beyond Severe
10470210		612	JCC	LONGHILL RD	RTE 199	LONGHILL CONN RD	0.66	16,843	2001	4		30,000	13,000	Moderate
10470230		143	JCC	MERRIMAC TRL (RTE 143)	NN CL / I-64	YORK CL @ GROVE	2.44	10,195	2004	4		24,000	14,000	Low to mod.
10470240		143	JCC	MERRIMAC TRL (RTE 143)	YORK CL @ GOV'T RD	YORK CL @ PENN. RD	1.12	15,902	2004	4		23,000	7,000	Low to mod.
10470010		5000	JCC	MONTICELLO AVE	RTE 5	CENTERVILLE RD	1.08	4,237	2005	2		10,000	6,000	Low to mod.
10470235		5000	JCC	MONTICELLO AVE	CENTERVILLE RD	NEWS RD / IRONBOUND	2.65	10,003	2005	2		13,000	3,000	Low to mod.
10470245		5000	JCC	MONTICELLO AVE	NEWS RD / IRONBOUND	RTE 199	0.57	36,548	2005	4		39,000	2,000	Severe
10470250		900	JCC	MONTICELLO AVE	RTE 199	IRONBOUND RD	0.82	23,662	2005	4		29,000	5,000	Moderate
10470260		30	JCC	OLD STAGE RD	NEW KENT CL	BARNES RD	1.29	7,601	2004	2		11,000	3,000	Low to mod.
10470270		30	JCC	OLD STAGE RD	BARNES RD	I-64	0.84	7,601	2004	4		20,000	12,000	Low to mod.
10470215		658	JCC	OLDE TOWNE RD	LONGHILL RD	RICHMOND RD	1.40	9,671	2005	2		14,000	4,000	Moderate
10470280		60	JCC	POCAHONTAS TR	ECL WLMBG	YORK CL @ 199	1.38	9,840	2004	4		31,000	21,000	Moderate
10470290		60	JCC	POCAHONTAS TR	YORK CL @ GRV INTX	BASF RD / 60 RELO	3.10	10,806	2005	2		14,000	3,000	Moderate
10470295		60	JCC	POCAHONTAS TR	BASF RD / 60 RELO	NEWPORT NEWS CL	0.90	10,402	2005	2		15,000	5,000	Moderate
10470310		60	JCC	RICHMOND RD	NEW KENT CL	RTE 30	5.05	5,836	2005	4		9,000	3,000	Low to mod.
10470320		60	JCC	RICHMOND RD	RTE 30	CROAKER RD	3.17	15,211	2005	4		28,000	13,000	Moderate
10470325		60	JCC	RICHMOND RD	CROAKER RD	CENTERVILLE RD	2.70	18,770	2005	4		38,000	19,000	Severe
10470335		60	JCC	RICHMOND RD	CENTERVILLE RD	RTE 199	0.28	23,288	2005	4		41,000	18,000	Severe
10470340		60	JCC	RICHMOND RD	RTE 199	NCL WLMBG	2.40	18,106	2005	4		38,000	20,000	Severe
10470350		199	JCC	RTE 199	YORK CL	RICHMOND RD	0.16	19,733	2004	4		32,000	12,000	Low to mod.
10470360		199	JCC	RTE 199	RICHMOND RD	LONGHILL RD	2.94	18,366	2004	4		35,000	17,000	Low to mod.
10470370		199	JCC	RTE 199	LONGHILL RD	MONTICELLO AVE	1.89	24,063	2004	4		36,000	12,000	Low to mod.
10470380		199	JCC	RTE 199	MONTICELLO AVE	RTE 5	1.30	23,273	2004	4		37,000	14,000	Moderate
10470390		199	JCC	RTE 199	RTE 5	WCL WLMBG	0.23	30,553	2004	4		45,000	14,000	Severe
10470410		199	JCC	RTE 199	ECL WLMBG	COLONIAL PKWY	1.73	29,003	2004	4		49,000	20,000	Severe
10470425		199	JCC	RTE 199	COLONIAL PKWY	RTES 60 & 143 / YORK CL	2.14	29,134	2004	4		49,000	20,000	Severe

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11210020		60	NN	23/25TH ST CONN	HUNTINGTON AVE	JEFFERSON AVE	0.36	1,976	2004	2		15,000	13,000	Low to mod.
11210030		60	NN	25TH ST	JEFFERSON AVE	26TH ST	1.37	3,476	2006	2		5,000	2,000	Low to mod.
11210040		60	NN	25TH ST	26TH ST	HAMPTON CL	0.46	9,591	2006	2		9,000	-1,000	Low to mod.
11210050		60	NN	26TH ST	25TH ST	ROANOKE AVE	0.67	2,357	2006	2		3,000	1,000	Low to mod.
11210055		60	NN	26TH ST	ROANOKE AVE	JEFFERSON AVE	0.74	3,488	2006	2		4,000	1,000	Low to mod.
11210060		60	NN	26TH ST OVERPASS	JEFFERSON AVE	WARWICK BLVD	0.34	n.a.	n.a.	2		15,000	n.a.	Moderate
11210070		60	NN	26TH ST OVERPASS	WARWICK BLVD	HUNTINGTON AVE	0.13	3,951	2006	2		10,000	6,000	Low to mod.
11210080		351	NN	39TH ST	HUNTINGTON AVE	MADISON AVE	0.63	4,482	2006	4		7,000	3,000	Low to mod.
11210090		351	NN	39TH ST	MADISON AVE	HAMPTON CL	1.00	8,139	2006	4		10,000	2,000	Low to mod.
11210700	NEW	1030	NN	ATKINSON BLVD	WARWICK BLVD	JEFFERSON AVE	1.19	n.a.	n.a.	4		30,000	n.a.	Low to mod.
11210100		917	NN	BLAND BLVD	WARWICK BLVD	I-64	0.54	31,620	2006	4		36,000	4,000	Severe
11210105		917	NN	BLAND BLVD	I-64	JEFFERSON AVE	0.40	31,620	2006	4		36,000	4,000	Severe
11210110		917	NN	BLAND BLVD	JEFFERSON AVE	SIEMENS WAY	0.48	20,329	2006	4		25,000	5,000	Low to mod.
11210120		930	NN	BRIARFIELD RD	JEFFERSON AVE	HAMPTON CL	1.17	8,905	2006	2		12,000	3,000	Low to mod.
11210130		933	NN	BUXTON AVE	HAMPTON CL	25TH ST	0.52	13,915	2006	2		13,000	-1,000	Low to mod.
11210140		940	NN	CENTER AVENUE	WARWICK BLVD	JEFFERSON AVE	0.35	4,406	2006	4		5,000	1,000	Low to mod.
11210150		945	NN	CHESTNUT AVE	39TH ST	44TH ST	0.20	8,403	2006	4		10,000	2,000	Low to mod.
11210160		945	NN	CHESTNUT AVE	44TH ST	BRIARFIELD RD	0.90	8,403	2006	2		9,000	1,000	Low to mod.
11210170		945	NN	CHESTNUT AVE	BRIARFIELD RD	HAMPTON CL	1.00	8,526	2006	4		13,000	4,000	Low to mod.
11210175		173	NN	DENBIGH BLVD	LUCAS CREEK RD	WARWICK BLVD	0.51	19,966	2005	4		27,000	7,000	Moderate
11210180		173	NN	DENBIGH BLVD	WARWICK BLVD	JEFFERSON AVE	1.15	35,321	2005	4		36,000	1,000	Severe
11210190		173	NN	DENBIGH BLVD	JEFFERSON AVE	YORK CL	1.32	25,845	2005	4		35,000	9,000	Severe
11210210		105	NN	FT EUSTIS BLVD	WARWICK BLVD	I-64	0.82	40,091	2006	4		37,000	-3,000	Low to mod.
11210220		105	NN	FT EUSTIS BLVD	I-64	JEFFERSON AVE	0.16	24,879	2004	4		40,000	15,000	Severe
11210230		105	NN	FT EUSTIS BLVD	JEFFERSON AVE	.54M E JEFFERSON AVE	0.54	17,172	2006	4		33,000	16,000	Moderate
11210240		105	NN	FT EUSTIS BLVD	.54M E JEFFERSON AVE	YORK CL	0.74	17,172	2006	4		30,000	13,000	Low to mod.
11210250		965	NN	HARPERSVILLE RD	J C MORRIS BLVD	SAUNDERS RD	0.54	12,156	2006	2		19,000	7,000	Severe
11210260		965	NN	HARPERSVILLE RD	SAUNDERS RD	HRC PARKWAY	2.33	13,061	2006	2		16,000	3,000	Severe
11210270		965	NN	HARPERSVILLE RD	HRC PARKWAY	JEFFERSON AVE	0.44	23,063	2006	6		35,000	12,000	Low to mod.
11210280		306	NN	HARPERSVILLE RD	JEFFERSON AVE	WARWICK BLVD	0.89	14,416	2006	2		18,000	4,000	Severe
11210200		960	NN	HRC PARKWAY	HARPERSVILLE RD	HAMPTON CL	0.63	22,344	2006	4		34,000	12,000	Moderate
11210290		60	NN	HUNTINGTON AVE	71ST ST	39TH ST	1.78	15,310	2005	3		16,000	1,000	Low to mod.
11210300		60	NN	HUNTINGTON AVE	39TH ST	23RD ST	0.78	12,209	2005	3		14,000	2,000	Low to mod.
11210340		312	NN	J C MORRIS BLVD	WARWICK BLVD	JEFFERSON AVE	1.12	38,288	2005	4		48,000	10,000	Beyond Severe
11210330		17	NN	J C MORRIS BLVD	JEFFERSON AVE	I-64	1.53	48,785	2005	6		52,000	3,000	Moderate
11210320		17	NN	J C MORRIS BLVD	I-64	HARPERSVILLE RD	0.60	43,214	2005	6		62,000	19,000	Severe
11210310		17	NN	J C MORRIS BLVD	HARPERSVILLE RD	YORK CO LINE	0.19	37,945	2005	4		46,000	8,000	Severe
11210350		143	NN	JEFFERSON AVE	JCC CL @ I-64	YORKTOWN RD	1.14	15,560	2006	4		33,000	17,000	Severe
11210362		143	NN	JEFFERSON AVE	YORKTOWN RD	FT EUSTIS BLVD	2.50	10,064	2006	4		30,000	20,000	Moderate
11210370		143	NN	JEFFERSON AVE	FT EUSTIS BLVD	ATKINSON BLVD	1.34	24,312	2005	6		43,000	19,000	Low to mod.
11210380		143	NN	JEFFERSON AVE	ATKINSON BLVD	DENBIGH BLVD	1.68	35,853	2006	6		55,000	19,000	Moderate
11210390		143	NN	JEFFERSON AVE	DENBIGH BLVD	BLAND BLVD	0.87	61,323	2005	6		64,000	3,000	Severe
11210400		143	NN	JEFFERSON AVE	BLAND BLVD	I-64	0.92	68,480	2005	6		73,000	5,000	Severe
11210410		143	NN	JEFFERSON AVE	I-64	OYSTER PT RD	0.95	54,548	2005	6		63,000	8,000	Severe
11210425		143	NN	JEFFERSON AVE	OYSTER PT RD	MIDDLEGROUND BLVD	1.28	62,690	2005	6		66,000	3,000	Severe
11210440		143	NN	JEFFERSON AVE	MIDDLEGROUND BLVD	J C MORRIS BLVD	1.10	61,960	2005	6		70,000	8,000	Severe
11210450		17	NN	JEFFERSON AVE	J C MORRIS BLVD	HARPERSVILLE RD	1.12	59,390	2005	6		67,000	8,000	Severe
11210460		17	NN	JEFFERSON AVE	HARPERSVILLE RD	MAIN ST	1.67	50,483	2006	6		55,000	5,000	Moderate
11210470		17	NN	JEFFERSON AVE	MAIN ST	CENTER AVE	0.72	49,146	2005	6		51,000	2,000	Moderate
11210480		17	NN	JEFFERSON AVE	CENTER AVE	MERCURY BLVD	0.61	40,743	2005	6		41,000	0	Low to mod.
11210490		143	NN	JEFFERSON AVE	MERCURY BLVD	BRIARFIELD RD	1.06	33,386	2006	6		39,000	6,000	Low to mod.
11210500		143	NN	JEFFERSON AVE	BRIARFIELD RD	41ST ST	1.08	34,722	2005	6		38,000	3,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11210510		143	NN	JEFFERSON AVE	41ST ST	35TH ST	0.25	n.a.	n.a.	4		21,000	n.a.	Low to mod.
11210520		143	NN	JEFFERSON AVE	35TH ST	27TH ST / 25TH ST	0.54	14,418	2006	2		15,000	1,000	Moderate
11210540		152	NN	MAIN ST	WARWICK BLVD	JEFFERSON AVE	0.42	13,577	2005	4		23,000	9,000	Low to mod.
11210550		152	NN	MAIN ST	JEFFERSON AVE	HAMPTON CL	0.56	18,614	2005	4		19,000	0	Low to mod.
11210590		17	NN	MERCURY BLVD	ISLE WIGHT CO	RIVER RD	2.18	29,668	2006	4		42,000	12,000	Low to mod.
11210580		17	NN	MERCURY BLVD	RIVER RD	WARWICK BLVD	0.23	30,055	2005	4		39,000	9,000	Severe
11210570		17	NN	MERCURY BLVD	WARWICK BLVD	JEFFERSON AVE	0.34	45,103	2005	6		52,000	7,000	Moderate
11210560		258	NN	MERCURY BLVD	JEFFERSON AVE	HAMPTON CL	0.25	36,858	2005	6		47,000	10,000	Moderate
11210600	NEW	998	NN	MIDDLE GROUND BLVD	WARWICK BLVD	JEFFERSON AVE	0.95	n.a.	n.a.	4		38,000	n.a.	Severe
11210610		1015	NN	OYSTER PT RD	WARWICK BLVD	JEFFERSON AVE	1.04	49,778	2005	4		53,000	3,000	Beyond Severe
11210620		1015	NN	OYSTER PT RD	JEFFERSON AVE	I-64	1.11	44,526	2005	6		61,000	16,000	Severe
11210640		1016	NN	RICHNECK RD	DENBIGH BLVD	JEFFERSON AVE	0.20	4,894	2005	2		8,000	3,000	Low to mod.
11210650		1016	NN	RICHNECK RD	JEFFERSON AVE	YORK CL	2.30	8,137	2006	2		15,000	7,000	Moderate
11210660		1020	NN	ROANOKE AVE	I-664	43RD ST	0.20	3,331	2006	4		5,000	2,000	Low to mod.
11210670		1020	NN	ROANOKE AVE	43RD ST	BRIARFIELD RD	1.00	3,331	2006	4		5,000	2,000	Low to mod.
11210680		1020	NN	ROANOKE AVE	BRIARFIELD RD	HAMPTON CL	0.90	3,374	2006	2		5,000	2,000	Low to mod.
11210690		1025	NN	SAUNDERS RD	HARPERSVILLE	HAMPTON CL	0.84	7,496	2006	2		18,000	11,000	Severe
11210720		1015	NN	VICTORY BLVD	I-64	YORK CL	0.51	53,789	2005	6		63,000	9,000	Severe
11210730		60	NN	WARWICK BLVD	JAMES CITY CL	YORKTOWN RD	1.69	13,106	2006	2		15,000	2,000	Moderate
11210740		60	NN	WARWICK BLVD	YORKTOWN RD	FT EUSTIS BLVD	1.44	17,103	2006	2		27,000	10,000	Beyond Severe
11210750		60	NN	WARWICK BLVD	FT EUSTIS BLVD	ATKINSON BLVD	1.86	45,510	2006	4		52,000	6,000	Beyond Severe
11210760		60	NN	WARWICK BLVD	ATKINSON BLVD	DENBIGH BLVD	1.66	44,598	2005	4		45,000	0	Beyond Severe
11210770		60	NN	WARWICK BLVD	DENBIGH BLVD	BLAND BLVD	0.84	40,245	2005	4		52,000	12,000	Beyond Severe
11210780		60	NN	WARWICK BLVD	BLAND BLVD	OYSTER PT RD	1.39	42,976	2005	4		66,000	23,000	Beyond Severe
11210790		60	NN	WARWICK BLVD	OYSTER PT RD	MIDDLEGROUND BLVD	1.31	34,732	2005	4		43,000	8,000	Severe
11210800		60	NN	WARWICK BLVD	MIDDLEGROUND BLVD	DEEP CREEK RD	0.55	41,609	2005	6		63,000	21,000	Severe
11210810		60	NN	WARWICK BLVD	DEEP CREEK RD	J C MORRIS BLVD	1.43	46,538	2005	6		57,000	10,000	Severe
11210820		60	NN	WARWICK BLVD	J C MORRIS BLVD	HARPERSVILLE RD	1.07	35,524	2005	6		52,000	16,000	Severe
11210830		60	NN	WARWICK BLVD	HARPERSVILLE RD	MAIN ST	1.49	38,526	2005	4		46,000	7,000	Beyond Severe
11210840		60	NN	WARWICK BLVD	MAIN ST	CENTER AVE	0.69	26,645	2006	4		32,000	5,000	Severe
11210850		60	NN	WARWICK BLVD	CENTER AVE	MERCURY BLVD	0.50	26,803	2006	6		35,000	8,000	Low to mod.
11210860		60	NN	WARWICK BLVD	MERCURY BLVD	HUNTINGTON AVE	0.50	30,823	2005	6		31,000	0	Low to mod.
11210880		60	NN	WARWICK BLVD	HUNTINGTON AVE	39TH ST	1.75	14,462	2006	3		18,000	4,000	Low to mod.
11210870		60	NN	WARWICK BLVD	39TH ST	23RD ST	0.75	4,068	2006	3		11,000	7,000	Low to mod.
11210890		238	NN	YORKTOWN RD	YORK CO LINE	CRAFFORD RD	0.44	10,535	2006	2		12,000	1,000	Low to mod.
11210895		238	NN	YORKTOWN RD	CRAFFORD RD	JEFFERSON AVE	0.61	11,854	2006	2		19,000	7,000	Severe
11210900		238	NN	YORKTOWN RD	JEFFERSON AVE	I-64	0.15	10,527	2004	4		15,000	4,000	Low to mod.
11210910		238	NN	YORKTOWN RD	I-64	WARWICK BLVD	0.98	6,177	2006	2		16,000	10,000	Moderate
11220010		979	Nor	21ST ST	HAMPTON BLVD	COLLEY AVE	0.35	9,024	2006	2		10,000	1,000	Low to mod.
11220020		979	Nor	21ST ST	COLLEY AVE	LLEWELLYN ST	0.45	16,180	2006	2		17,000	1,000	Severe
11220030		979	Nor	21ST ST	LLEWELLYN ST	MONTICELLO AVE	0.27	9,833	2006	2		13,000	3,000	Moderate
11220040		247	Nor	26TH ST	HAMPTON BLVD	COLLEY AVE	0.39	3,640	2006	3		12,000	8,000	Low to mod.
11220050		247	Nor	26TH ST	COLLEY AVE	LLEWELLYN AVE	0.77	8,583	2006	3		10,000	1,000	Low to mod.
11220060		247	Nor	26TH ST	LLEWELLYN AVE	MONTICELLO AVE	0.27	9,276	2006	3		11,000	2,000	Low to mod.
11220070		247	Nor	26TH ST	MONTICELLO AVE	CHURCH ST	0.15	9,868	2006	3		11,000	1,000	Low to mod.
11220080		247	Nor	26TH ST	CHURCH ST	27TH ST	0.26	9,229	2006	2		11,000	2,000	Low to mod.
11220090		247	Nor	27TH ST	HAMPTON BLVD	COLLEY AVE	0.39	n.a.	n.a.	3		10,000	n.a.	Low to mod.
11220100		247	Nor	27TH ST	COLLEY AVE	LLEWELLYN AVE	0.47	8,396	2006	3		11,000	3,000	Low to mod.
11220110		247	Nor	27TH ST	LLEWELLYN AVE	MONTICELLO AVE	0.26	9,847	2006	3		12,000	2,000	Low to mod.
11220120		247	Nor	27TH ST	MONTICELLO AVE	CHURCH ST	0.10	n.a.	n.a.	3		21,000	n.a.	Moderate
11220130		247	Nor	27TH ST	CHURCH ST	26TH ST	0.25	n.a.	n.a.	3		15,000	n.a.	Low to mod.
11220140		983	Nor	38TH ST	HAMPTON BLVD	COLLEY AVE	0.40	6,656	2006	2		7,000	0	Low to mod.

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THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11220150		983	Nor	38TH ST	COLLEY AVE	LLEWELLYN AVE	0.54	9,408	2006	2		9,000	0	Low to mod.
11220160		983	Nor	38TH ST	LLEWELLYN AVE	GRANBY ST	0.16	5,348	2006	2		5,000	0	Low to mod.
11220170		985	Nor	4TH VIEW ST	I-64	OCEAN VIEW AVE	0.24	13,641	2006	4		27,000	13,000	Low to mod.
11220180		170	Nor	ADM TAUSSIG BLVD	HAMPTON BLVD	I-564	0.74	31,117	2006	4		41,000	10,000	Severe
11220190		901	Nor	AZALEA GARDEN RD	VA BEACH BLVD	PRINCESS ANNE RD	0.79	12,051	2006	2		13,000	1,000	Low to mod.
11220200		901	Nor	AZALEA GARDEN RD	PRINCESS ANNE RD	SEWELLS PT RD	0.31	17,535	2006	4		17,000	-1,000	Low to mod.
11220210		901	Nor	AZALEA GARDEN RD	SEWELLS PT RD	ROBIN HOOD RD	0.64	10,595	2006	2		11,000	0	Low to mod.
11220220		901	Nor	AZALEA GARDEN RD	ROBIN HOOD RD	I-64	0.43	11,057	2006	2		13,000	2,000	Low to mod.
11220230		901	Nor	AZALEA GARDEN RD	I-64	MILITARY HWY	0.40	9,765	2006	2		11,000	1,000	Low to mod.
11220240		901	Nor	AZALEA GARDEN RD	MILITARY HWY	NORVIEW AVE	0.60	n.a.	n.a.	4		24,000	n.a.	Low to mod.
11220250		901	Nor	AZALEA GARDEN RD	NORVIEW AVE	LITTLE CRK RD	1.42	13,878	2006	4		19,000	5,000	Low to mod.
11220260		902	Nor	BAINBRIDGE BLVD	SCL NORFOLK	S MAIN ST	0.50	1,307	2006	2		5,000	4,000	Low to mod.
11220270		905	Nor	BALLENTINE BLVD	I-264	VA BEACH BLVD	0.70	27,572	2006	4		32,000	4,000	Severe
11220280		903	Nor	BALLENTINE BLVD	VA BEACH BLVD	PRINCESS ANNE RD	0.50	13,866	2006	2		15,000	1,000	Moderate
11220290		903	Nor	BALLENTINE BLVD	PRINCESS ANNE RD	CHESAPEAKE BLVD	0.95	11,637	2006	2		12,000	0	Low to mod.
11220300		907	Nor	BAY AVE	FIRST VIEW ST	I-64 RAMP	0.27	16,664	2006	4		11,000	-6,000	Low to mod.
11220310		907	Nor	BAY AVE	I-64 RAMP	GRANBY ST	0.38	2,460	2006	4		3,000	1,000	Low to mod.
11220320		909	Nor	BAY VIEW BLVD	GRANBY ST	TIDEWATER DR	0.61	9,000	2006	2		10,000	1,000	Low to mod.
11220330		909	Nor	BAY VIEW BLVD	TIDEWATER DR	CHESAPEAKE BLVD	0.51	12,276	2006	2		9,000	-3,000	Low to mod.
11220340		909	Nor	BAY VIEW BLVD	CHESAPEAKE BLVD	CAPE VIEW AVE	1.11	6,456	2006	2		8,000	2,000	Low to mod.
11220360		911	Nor	BERKLEY AVE	I-464	STATE ST	0.10	13,486	2006	4		24,000	11,000	Low to mod.
11220370		911	Nor	BERKLEY AVE	STATE ST	MAIN ST	0.10	13,370	2006	4		15,000	2,000	Low to mod.
11220380		911	Nor	BERKLEY AVE	MAIN ST	BERKLEY AVE EXT	0.20	14,545	2006	4		14,000	-1,000	Low to mod.
11221410		913	Nor	BERKLEY AVE	BERKLEY AVE EXT	INDIAN RIVER RD	0.68	12,000	2003	4		13,000	1,000	Low to mod.
11220385		911	Nor	BERKLEY AVE EXT	BERKLEY AVE	WILSON RD	0.77	3,274	2003	2		4,000	1,000	Low to mod.
11220390		911	Nor	BERKLEY AVE EXT	WILSON ST	CAMPOSTELLA RD	0.48	3,444	2006	2		12,000	9,000	Low to mod.
11220465		337	Nor	BRAMBLETON AVE	HAMPTON BLVD	COLLEY AVE	0.50	34,404	2006	6		40,000	6,000	Low to mod.
11220480		337	Nor	BRAMBLETON AVE	COLLEY AVE	BOUSH ST	0.85	46,317	2006	6		55,000	9,000	Severe
11220490		337	Nor	BRAMBLETON AVE	BOUSH ST	MONTICELLO AVE	0.18	34,700	2006	6		45,000	10,000	Moderate
11220500		337	Nor	BRAMBLETON AVE	MONTICELLO AVE	ST PAULS BLVD	0.12	34,700	2006	6		44,000	9,000	Low to mod.
11220510		337	Nor	BRAMBLETON AVE	ST PAULS BLVD	CHURCH ST	0.30	22,685	2006	4		28,000	5,000	Low to mod.
11220520		337	Nor	BRAMBLETON AVE	CHURCH ST	TIDEWATER DR	0.29	34,070	2006	4		32,000	-2,000	Moderate
11220530		168	Nor	BRAMBLETON AVE	TIDEWATER DR	PARK AVE	0.42	38,235	2006	4		41,000	3,000	Severe
11220540		168	Nor	BRAMBLETON AVE	PARK AVE	I-264	0.20	47,162	2006	5		53,000	6,000	Severe
11220560		168	Nor	CAMPOSTELLA RD	CHES CL / BERKLEY AVE EXT	INDIAN RIVER RD	0.55	26,794	2006	6		28,000	1,000	Low to mod.
11220570		168	Nor	CAMPOSTELLA RD	INDIAN RIVER RD	WILSON RD	0.23	31,727	2006	6		34,000	2,000	Low to mod.
11220580		168	Nor	CAMPOSTELLA RD	WILSON RD	KIMBALL TER	0.77	43,858	2006	6		44,000	0	Low to mod.
11220550		168	Nor	CAMPOSTELLA RD	KIMBALL TER	I-264	0.10	43,858	2006	6		44,000	0	Low to mod.
11220590		918	Nor	CHESAPEAKE BLVD	BALLENTINE BLVD	CROMWELL RD	0.13	n.a.	n.a.	4		38,000	n.a.	Severe
11220600		247	Nor	CHESAPEAKE BLVD	CROMWELL RD	ROBIN HOOD RD	0.21	n.a.	n.a.	4		42,000	n.a.	Severe
11220610		247	Nor	CHESAPEAKE BLVD	ROBIN HOOD RD	HYDE CIR	0.89	20,635	2006	4		31,000	10,000	Moderate
11220620		247	Nor	CHESAPEAKE BLVD	HYDE CIR	SEWELLS PT RD	0.13	20,635	2006	6		27,000	6,000	Low to mod.
11220630		194	Nor	CHESAPEAKE BLVD	SEWELLS PT RD	I-64	0.94	19,299	2006	6		22,000	3,000	Low to mod.
11220640		194	Nor	CHESAPEAKE BLVD	I-64	JOHNSTONS RD	0.31	25,770	2006	6		31,000	5,000	Low to mod.
11220650		194	Nor	CHESAPEAKE BLVD	JOHNSTONS RD	LITTLE CREEK RD	0.49	25,770	2006	6		28,000	2,000	Low to mod.
11220660		194	Nor	CHESAPEAKE BLVD	LITTLE CREEK RD	SHEPPARD AVE	0.63	25,069	2006	4		27,000	2,000	Moderate
11220670		194	Nor	CHESAPEAKE BLVD	SHEPPARD AVE	BAY VIEW BLVD	0.41	25,069	2006	4		27,000	2,000	Moderate
11220680		194	Nor	CHESAPEAKE BLVD	BAY VIEW BLVD	CHESAPEAKE ST	0.61	14,170	2006	4		16,000	2,000	Low to mod.
11220690		194	Nor	CHESAPEAKE BLVD	CHESAPEAKE ST	OCEAN VIEW AVE	0.47	6,392	2006	4		6,000	0	Low to mod.
11220700		919	Nor	CHURCH ST	BRAMBLETON AVE	VA BEACH BLVD	0.22	17,657	2006	4		16,000	-2,000	Low to mod.
11220710		919	Nor	CHURCH ST	VA BEACH BLVD	PRINCESS ANNE RD	0.12	18,401	2006	4		21,000	3,000	Low to mod.
11220720		919	Nor	CHURCH ST	PRINCESS ANNE RD	26TH ST	0.83	20,982	2006	4		26,000	5,000	Moderate

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11220730		919	Nor	CHURCH ST	26TH ST	27TH ST	0.06	15,037	2006	4		20,000	5,000	Low to mod.
11220740		919	Nor	CHURCH ST	27TH ST	MONTICELLO AVE	0.21	12,853	2006	4		13,000	0	Low to mod.
11220750		460	Nor	CHURCH ST	MONTICELLO AVE	GRANBY ST	0.13	n.a.	n.a.	4		29,000	n.a.	Low to mod.
11220760		921	Nor	CITY HALL AVE	BOUSH ST	GRANBY ST	0.08	n.a.	n.a.	2		9,000	n.a.	Low to mod.
11220770		921	Nor	CITY HALL AVE	GRANBY ST	MONTICELLO AVE	0.06	n.a.	n.a.	2		14,000	n.a.	Severe
11220780		921	Nor	CITY HALL AVE	MONTICELLO AVE	ST PAULS BLVD	0.29	n.a.	n.a.	4		26,000	n.a.	Moderate
11220810		923	Nor	COLLEY AVE	BRAMBLETON AVE	OLNEY RD	0.21	19,756	2006	4		24,000	4,000	Low to mod.
11220820		923	Nor	COLLEY AVE	OLNEY RD	PRINCESS ANNE RD	0.39	16,264	2006	4		20,000	4,000	Low to mod.
11220830		923	Nor	COLLEY AVE	PRINCESS ANNE RD	21ST ST	0.40	17,629	2006	2		19,000	1,000	Severe
11220840		923	Nor	COLLEY AVE	21ST ST	26TH ST	0.24	17,304	2006	4		19,000	2,000	Low to mod.
11220850		923	Nor	COLLEY AVE	26TH ST	27TH ST	0.05	n.a.	n.a.	4		19,000	n.a.	Low to mod.
11220860		923	Nor	COLLEY AVE	27TH ST	38TH ST	0.34	14,187	2006	2		17,000	3,000	Severe
11220870		923	Nor	COLLEY AVE	38TH ST	53RD ST	0.74	14,187	2006	2		15,000	1,000	Moderate
11220880		925	Nor	CROMWELL RD	TAIT TERR	CHESAPEAKE BLVD	0.59	16,711	2006	4		17,000	0	Low to mod.
11220890		925	Nor	CROMWELL RD	CHESAPEAKE BLVD	TIDEWATER DR	0.82	13,640	2006	2		14,000	0	Moderate
11220895		n.a.	Nor	DUKE ST	OLNEY RD	BRAMBLETON AVE	0.19	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11220930		460	Nor	GRANBY ST	CHURCH ST	38TH ST	0.36	27,392	2006	4		28,000	1,000	Low to mod.
11220940		460	Nor	GRANBY ST	38TH ST	LLEWELLYN AVE	0.42	27,392	2006	4		25,000	-2,000	Low to mod.
11220950		460	Nor	GRANBY ST	LLEWELLYN AVE	WILLOW WOOD DR	0.28	42,577	2006	6		44,000	1,000	Low to mod.
11220960		460	Nor	GRANBY ST	WILLOW WOOD DR	THOLE ST	1.15	39,543	2006	6		45,000	5,000	Low to mod.
11220970		460	Nor	GRANBY ST	THOLE ST	LITTLE CREEK RD	0.60	32,967	2006	6		34,000	1,000	Low to mod.
11220980		460	Nor	GRANBY ST	LITTLE CREEK RD	I-564	0.26	28,418	2006	6		29,000	1,000	Low to mod.
11220990		460	Nor	GRANBY ST	I-564	I-64	0.18	n.a.	n.a.	4		42,000	n.a.	Severe
11221000		460	Nor	GRANBY ST	I-64	BAY VIEW BLVD	0.99	21,817	2006	4		25,000	3,000	Low to mod.
11221010		460	Nor	GRANBY ST	BAY VIEW BLVD	BAY AVE	0.56	14,247	2006	4		17,000	3,000	Low to mod.
11221020		460	Nor	GRANBY ST	BAY AVE	TIDEWATER DR	0.38	n.a.	n.a.	4		20,000	n.a.	Low to mod.
11221030		460	Nor	GRANBY ST	TIDEWATER DR	OCEAN VIEW AVE	0.71	11,857	2006	4		10,000	-2,000	Low to mod.
11221050		337	Nor	HAMPTON BLVD	BRAMBLETON AVE	PRINCESS ANNE RD	0.40	37,415	2006	4		39,000	2,000	Severe
11221060		337	Nor	HAMPTON BLVD	PRINCESS ANNE RD	21ST ST	0.48	37,415	2006	4		39,000	2,000	Severe
11221070		337	Nor	HAMPTON BLVD	21ST ST	26TH ST	0.21	38,027	2006	4		42,000	4,000	Severe
11221080		337	Nor	HAMPTON BLVD	26TH ST	27TH ST	0.05	n.a.	n.a.	4		37,000	n.a.	Severe
11221090		337	Nor	HAMPTON BLVD	27TH ST	38TH ST	0.18	41,767	2006	4		46,000	4,000	Severe
11221100		337	Nor	HAMPTON BLVD	38TH ST	JAMESTOWN CRES	1.32	40,887	2006	6		42,000	1,000	Low to mod.
11221110		337	Nor	HAMPTON BLVD	JAMESTOWN CRES	LITTLE CREEK RD	1.28	40,887	2006	6		43,000	2,000	Low to mod.
11221120		337	Nor	HAMPTON BLVD	LITTLE CREEK RD	INT TERM BLVD	0.18	41,701	2006	6		40,000	-2,000	Low to mod.
11221130		337	Nor	HAMPTON BLVD	INT TERM BLVD	INTERMODAL CONN	1.00	34,242	2006	6		35,000	1,000	Low to mod.
11221135		337	Nor	HAMPTON BLVD	INTERMODAL CONN	ADM TAUSSIG BLVD	0.92	34,242	2006	6		35,000	1,000	Low to mod.
11221420		407	Nor	INDIAN RIVER RD	BERKLEY AVE	WILSON RD	0.36	16,354	2006	4		17,000	1,000	Low to mod.
11221430		407	Nor	INDIAN RIVER RD	WILSON RD	CAMPOSTELLA RD	0.16	n.a.	n.a.	4		19,000	n.a.	Low to mod.
11221440		407	Nor	INDIAN RIVER RD	CAMPOSTELLA RD	CHESAPEAKE CL	0.71	24,043	2006	6		26,000	2,000	Low to mod.
11221450		933	Nor	INGLESIDE RD	VA BEACH BLVD	PRINCESS ANNE RD	0.66	16,050	2006	4		18,000	2,000	Low to mod.
11221460		933	Nor	INGLESIDE RD	PRINCESS ANNE RD	TAIT TERR	0.46	17,232	2006	4		17,000	0	Low to mod.
11221470		406	Nor	INT TERMINAL BLVD	HAMPTON BLVD	I-564	1.74	29,815	2006	4		31,000	1,000	Moderate
11221480		937	Nor	JAMESTOWN CRES	53RD ST	HAMPTON BLVD	0.73	6,889	2006	2		13,000	6,000	Low to mod.
11221490		939	Nor	JOHNSTONS RD	SEWELLS PT	CHESAPEAKE BLVD	0.21	n.a.	n.a.	2		13,000	n.a.	Low to mod.
11221500		939	Nor	JOHNSTONS RD	CHESAPEAKE BLVD	MILITARY HWY	0.36	12,297	2006	2		14,000	2,000	Moderate
11221510		939	Nor	JOHNSTONS RD	MILITARY HWY	LITTLE CREEK RD	0.94	8,570	2006	2		9,000	0	Low to mod.
11221520		165	Nor	KEMPSVILLE RD	NEWTOWN RD	VA BEACH BLVD	1.00	24,497	2006	4		26,000	2,000	Low to mod.
11221530		165	Nor	KEMPSVILLE RD	VA BEACH BLVD	NORTHAMPTON BLVD	1.58	14,606	2006	2		13,000	-2,000	Low to mod.
11221540		247	Nor	LAFAYETTE BLVD	27TH ST	TIDEWATER DR	0.89	15,863	2006	4		18,000	2,000	Low to mod.
11221550		247	Nor	LAFAYETTE BLVD	TIDEWATER DR	CHESAPEAKE BLVD	0.56	21,419	2006	4		23,000	2,000	Low to mod.
11221560		943	Nor	LIBERTY ST	STATE ST	S MAIN ST	0.11	3,641	2006	2		13,000	9,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11221570		943	Nor	LIBERTY ST	S MAIN ST	NCL CHESAPEAKE	0.63	4,540	2006	2		6,000	1,000	Low to mod.
11221580		165	Nor	LITTLE CREEK RD	HAMPTON BLVD	GRANBY ST	1.98	25,121	2006	4		28,000	3,000	Moderate
11221590		165	Nor	LITTLE CREEK RD	GRANBY ST	I-64	0.35	30,631	2006	4		42,000	11,000	Severe
11221600		165	Nor	LITTLE CREEK RD	I-64	TIDEWATER DR	0.77	29,950	2006	6		37,000	7,000	Low to mod.
11221610		165	Nor	LITTLE CREEK RD	TIDEWATER DR	SEWELLS PT RD	0.18	n.a.	n.a.	6		43,000	n.a.	Low to mod.
11221620		165	Nor	LITTLE CREEK RD	SEWELLS PT RD	CHESAPEAKE BLVD	0.53	30,332	2006	6		37,000	7,000	Low to mod.
11221630		165	Nor	LITTLE CREEK RD	CHESAPEAKE BLVD	MILITARY HWY	0.15	41,915	2006	6		54,000	12,000	Moderate
11221640		170	Nor	LITTLE CREEK RD	MILITARY HWY	AZALEA GARDEN RD	1.54	29,863	2006	4		32,000	2,000	Moderate
11221650		170	Nor	LITTLE CREEK RD	AZALEA GARDEN RD	SHORE DR	1.10	26,285	2006	4		30,000	4,000	Low to mod.
11221660		947	Nor	LLEWELLYN AVE	VA BEACH BLVD	PRINCESS ANNE RD	0.30	10,004	2006	4		12,000	2,000	Low to mod.
11221670		947	Nor	LLEWELLYN AVE	PRINCESS ANNE RD	21ST ST	0.50	10,290	2006	4		13,000	3,000	Low to mod.
11221680		947	Nor	LLEWELLYN AVE	21ST ST	26TH ST	0.26	8,906	2006	4		11,000	2,000	Low to mod.
11221690		947	Nor	LLEWELLYN AVE	26TH ST	27TH ST	0.05	8,906	2006	3		10,000	1,000	Low to mod.
11221700		947	Nor	LLEWELLYN AVE	27TH ST	35TH ST	0.41	8,514	2006	3		10,000	1,000	Low to mod.
11221710		947	Nor	LLEWELLYN AVE	35TH ST	38TH ST	0.15	8,514	2006	3		10,000	1,000	Low to mod.
11221720		947	Nor	LLEWELLYN AVE	38TH ST	DELAWARE AVE	0.20	13,439	2006	3		15,000	2,000	Low to mod.
11221730		947	Nor	LLEWELLYN AVE	DELAWARE AVE	GRANBY ST	0.27	8,666	2006	2		9,000	0	Low to mod.
11221735		951	Nor	MAIN ST	I-464	BAINBRIDGE BLVD	0.07	n.a.	n.a.	2		2,000	n.a.	Low to mod.
11221740		951	Nor	MAIN ST	BAINBRIDGE BLVD	LIBERTY ST	0.21	n.a.	n.a.	2		11,000	n.a.	Low to mod.
11221750		951	Nor	MAIN ST	LIBERTY ST	BERKLEY AVE	0.06	n.a.	n.a.	2		11,000	n.a.	Low to mod.
11221760		58	Nor	MIDTOWN TUNNEL	PORTSMOUTH CL	BRAMBLETON AVE	0.59	41,499	2006	4	Y	49,000	8,000	Low to mod.
11221770		13	Nor	MILITARY HWY	NCL VA BEACH	I-264	0.75	49,026	2006	8		66,000	17,000	Moderate
11221780		13	Nor	MILITARY HWY	I-264	VA BEACH BLVD	0.83	50,683	2006	8		63,000	12,000	Moderate
11221785		13	Nor	MILITARY HWY	VA BEACH BLVD	LOWERY RD	0.54	n.a.	n.a.	8		60,000	n.a.	Low to mod.
11221790		13	Nor	MILITARY HWY	LOWERY RD	PRINCESS ANNE RD	0.81	48,361	2006	8		62,000	14,000	Moderate
11221800		165	Nor	MILITARY HWY	PRINCESS ANNE RD	I-64 / ROBIN HOOD RD	0.52	57,624	2006	6		61,000	3,000	Severe
11221810		165	Nor	MILITARY HWY	I-64 / ROBIN HOOD RD	AZALEA GARDEN RD	0.65	28,301	2006	4		39,000	11,000	Severe
11221820		165	Nor	MILITARY HWY	AZALEA GARDEN RD	NORVIEW AVE	0.39	29,827	2006	4		32,000	2,000	Moderate
11221830		165	Nor	MILITARY HWY	NORVIEW AVE	JOHNSTONS RD	1.16	28,417	2006	4		34,000	6,000	Moderate
11221840		165	Nor	MILITARY HWY	JOHNSTONS RD	LITTLE CREEK RD	0.48	n.a.	n.a.	4		19,000	n.a.	Low to mod.
11221850		953	Nor	MONTICELLO AVE	CITY HALL AVE	BRAMBLETON AVE	0.47	6,917	2006	4		12,000	5,000	Low to mod.
11221860		953	Nor	MONTICELLO AVE	BRAMBLETON AVE	ST PAULS BLVD	0.19	6,952	2006	4		10,000	3,000	Low to mod.
11221870		460	Nor	MONTICELLO AVE	ST PAULS BLVD	VA BEACH BLVD	0.10	29,656	2006	4		34,000	4,000	Moderate
11221880		460	Nor	MONTICELLO AVE	VA BEACH BLVD	PRINCESS ANNE RD	0.18	25,165	2006	4		29,000	4,000	Low to mod.
11221890		460	Nor	MONTICELLO AVE	PRINCESS ANNE RD	21ST ST	0.48	25,165	2006	4		29,000	4,000	Low to mod.
11221900		460	Nor	MONTICELLO AVE	21ST ST	26TH ST	0.27	19,145	2006	4		24,000	5,000	Low to mod.
11221910		460	Nor	MONTICELLO AVE	26TH ST	27TH ST	0.05	n.a.	n.a.	4		22,000	n.a.	Low to mod.
11221920		460	Nor	MONTICELLO AVE	27TH ST	CHURCH ST	0.18	n.a.	n.a.	4		16,000	n.a.	Low to mod.
11221930		403	Nor	NEWTOWN RD	KEMPSVILLE RD	I-264	0.38	32,526	2006	4		34,000	1,000	Severe
11221940		403	Nor	NEWTOWN RD	I-264	VA BEACH BLVD	0.66	38,647	2006	4		51,000	12,000	Beyond Severe
11221950		403	Nor	NEWTOWN RD	VA BEACH BLVD	VA BEACH CL	0.15	40,109	2006	4		48,000	8,000	Beyond Severe
11221960		13	Nor	NORTHAMPTON BLVD	MILITARY HWY	KEMPSVILLE RD	0.24	33,500	2006	6		43,000	10,000	Low to mod.
11221970		13	Nor	NORTHAMPTON BLVD	KEMPSVILLE RD	I-64	0.49	37,111	2006	6		47,000	10,000	Low to mod.
11221980		13	Nor	NORTHAMPTON BLVD	I-64	VB CL / WESLEYAN DR	0.34	90,685	2006	8		111,000	20,000	Beyond Severe
11221995		957	Nor	NORVIEW AVE	TIDEWATER DR	CHESAPEAKE BLVD	1.14	6,573	2006	2		7,000	0	Low to mod.
11222010		247	Nor	NORVIEW AVE	CHESAPEAKE BLVD	I-64	0.41	24,236	2006	4		24,000	0	Low to mod.
11222020		247	Nor	NORVIEW AVE	I-64	MILITARY HWY	0.47	31,733	2006	4		30,000	-2,000	Low to mod.
11222030		247	Nor	NORVIEW AVE	MILITARY HWY	AZALEA GARDEN RD	0.50	17,162	2006	4		18,000	1,000	Low to mod.
11222050		60	Nor	OCEAN VIEW AVE	4TH VIEW ST	TIDEWATER DR	0.09	n.a.	n.a.	4		35,000	n.a.	Moderate
11222060		60	Nor	OCEAN VIEW AVE	TIDEWATER DR	GRANBY ST	0.75	17,803	2006	4		17,000	-1,000	Low to mod.
11222070		60	Nor	OCEAN VIEW AVE	GRANBY ST	CHESAPEAKE BLVD	0.44	n.a.	n.a.	4		30,000	n.a.	Low to mod.
11222080		60	Nor	OCEAN VIEW AVE	CHESAPEAKE BLVD	21ST BAY ST (SHORE DR)	3.15	19,495	2006	4		19,000	0	Low to mod.

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11222090		959	Nor	OLNEY RD	COLLEY AVE	LLEWELLYN AVE	0.56	10,783	2006	4		18,000	7,000	Low to mod.
11222100		166	Nor	PARK AVE	BRAMBLETON AVE	VA BEACH BLVD	0.45	17,797	2006	4		21,000	3,000	Low to mod.
11222110		166	Nor	PARK AVE	VA BEACH BLVD	PRINCESS ANNE RD	0.14	15,532	2006	4		19,000	3,000	Low to mod.
11222120		961	Nor	PRINCESS ANNE RD	HAMPTON BLVD	COLLEY AVE	0.08	6,105	2006	2		7,000	1,000	Low to mod.
11222130		961	Nor	PRINCESS ANNE RD	COLLEY AVE	LLEWELLYN AVE	0.57	9,298	2006	2		10,000	1,000	Low to mod.
11222140		961	Nor	PRINCESS ANNE RD	LLEWELLYN AVE	MONTICELLO AVE	0.18	9,346	2006	2		11,000	2,000	Low to mod.
11222150		961	Nor	PRINCESS ANNE RD	MONTICELLO AVE	CHURCH ST	0.51	9,573	2006	2		11,000	1,000	Low to mod.
11222160		961	Nor	PRINCESS ANNE RD	CHURCH ST	TIDEWATER DR	0.28	14,052	2006	4		16,000	2,000	Low to mod.
11222170		961	Nor	PRINCESS ANNE RD	TIDEWATER DR	MAY AVE	0.14	n.a.	n.a.	4		28,000	n.a.	Moderate
11222180		961	Nor	PRINCESS ANNE RD	MAY AVE	PARK AVE	0.36	n.a.	n.a.	4		28,000	n.a.	Moderate
11222190		166	Nor	PRINCESS ANNE RD	PARK AVE	BALLENTINE BLVD	0.97	19,234	2006	4		22,000	3,000	Low to mod.
11222200		166	Nor	PRINCESS ANNE RD	BALLENTINE BLVD	INGLESIDE RD	0.37	n.a.	n.a.	4		28,000	n.a.	Low to mod.
11222210		166	Nor	PRINCESS ANNE RD	INGLESIDE RD	AZALEA GARDEN RD	0.59	23,483	2006	4		26,000	3,000	Low to mod.
11222220		166	Nor	PRINCESS ANNE RD	AZALEA GARDEN RD	SEWELLS PT RD	0.32	24,897	2006	4		26,000	1,000	Low to mod.
11222230		166	Nor	PRINCESS ANNE RD	SEWELLS PT RD	MILITARY HWY	1.18	24,897	2006	4		28,000	3,000	Low to mod.
11222240		949	Nor	ROBIN HOOD RD	CHESAPEAKE BLVD	SEWELLS PT RD	0.98	7,084	2006	2		9,000	2,000	Low to mod.
11222250		949	Nor	ROBIN HOOD RD	SEWELLS PT RD	AZALEA GARDEN	0.36	5,780	2006	2		10,000	4,000	Low to mod.
11222260		949	Nor	ROBIN HOOD RD	AZALEA GARDEN	MILITARY HWY	0.74	9,914	2006	4		15,000	5,000	Low to mod.
11222270		962	Nor	SEWELLS PT RD	PRINCESS ANNE RD	AZALEA GARDEN RD	0.26	n.a.	n.a.	2		9,000	n.a.	Low to mod.
11222280		194	Nor	SEWELLS PT RD	AZALEA GARDEN RD	ROBIN HOOD RD	0.50	n.a.	n.a.	4		25,000	n.a.	Low to mod.
11222290		194	Nor	SEWELLS PT RD	ROBIN HOOD RD	CHESAPEAKE BLVD	0.86	14,216	2006	4		16,000	2,000	Low to mod.
11222295		194	Nor	SEWELLS PT RD	CHESAPEAKE BLVD	PARTRIDGE ST	0.12	9,453	2006	4		13,000	4,000	Low to mod.
11222300		962	Nor	SEWELLS PT RD	PARTRIDGE ST	PHILPOTTS RD	0.28	9,453	2006	4		13,000	4,000	Low to mod.
11222310		962	Nor	SEWELLS PT RD	PHILPOTTS RD	I-64	0.31	n.a.	n.a.	4		25,000	n.a.	Low to mod.
11222320		962	Nor	SEWELLS PT RD	I-64	LITTLE CREEK RD	1.02	n.a.	n.a.	4		17,000	n.a.	Low to mod.
11222330		60	Nor	SHORE DRIVE	21ST BAY ST	LITTLE CR RD	0.88	27,602	2006	4		27,000	-1,000	Low to mod.
11222340		60	Nor	SHORE DRIVE	LITTLE CR RD	WCL VA BEACH	0.98	36,117	2006	4		37,000	1,000	Severe
11222350		965	Nor	ST PAULS BLVD	WATERSIDE DR	CITY HALL AVE	0.23	21,603	2006	6		22,000	0	Low to mod.
11222360		965	Nor	ST PAULS BLVD	CITY HALL AVE	MARKET ST / MALL	0.11	n.a.	n.a.	6		13,000	n.a.	Low to mod.
11222370		460	Nor	ST PAULS BLVD	MARKET ST / MALL	BRAMBLETON AVE	0.39	51,621	2006	6		58,000	6,000	Severe
11222380		460	Nor	ST PAULS BLVD	BRAMBLETON AVE	MONTICELLO AVE	0.25	n.a.	n.a.	6		23,000	n.a.	Low to mod.
11222390		967	Nor	STATE ST	LIBERTY ST	BERKLEY AVE	0.07	3,641	2006	2		13,000	9,000	Low to mod.
11222430		971	Nor	THOLE ST	GRANBY ST	TIDEWATER DR	1.10	11,441	2006	2		12,000	1,000	Low to mod.
11222440		168	Nor	TIDEWATER DR	CITY HALL AVE	BRAMBLETON AVE	0.35	22,442	2006	6		28,000	6,000	Low to mod.
11222450		168	Nor	TIDEWATER DR	BRAMBLETON AVE	VA BEACH BLVD	0.29	33,221	2006	6		32,000	-1,000	Low to mod.
11222462		168	Nor	TIDEWATER DR	VA BEACH BLVD	PRINCESS ANNE RD	0.14	n.a.	n.a.	6		36,000	n.a.	Low to mod.
11222472		168	Nor	TIDEWATER DR	PRINCESS ANNE RD	LAFAYETTE BLVD	1.59	32,481	2006	6		34,000	2,000	Low to mod.
11222480		168	Nor	TIDEWATER DR	LAFAYETTE BLVD	CROMWELL RD	0.62	n.a.	n.a.	4		31,000	n.a.	Moderate
11222490		168	Nor	TIDEWATER DR	CROMWELL RD	NORVIEW AVE	0.43	40,810	2006	4		42,000	1,000	Severe
11222500		168	Nor	TIDEWATER DR	NORVIEW AVE	THOLE ST	0.91	36,506	2006	4		34,000	-3,000	Moderate
11222510		168	Nor	TIDEWATER DR	THOLE ST	I-64	0.15	n.a.	n.a.	4		38,000	n.a.	Severe
11222520		168	Nor	TIDEWATER DR	I-64	LITTLE CREEK RD	0.68	28,702	2006	4		26,000	-3,000	Moderate
11222530		168	Nor	TIDEWATER DR	LITTLE CREEK RD	BAY VIEW BLVD	1.18	19,162	2006	4		18,000	-1,000	Low to mod.
11222540		168	Nor	TIDEWATER DR	BAY VIEW BLVD	GRANBY ST	1.01	9,495	2006	4		15,000	6,000	Low to mod.
11222550		168	Nor	TIDEWATER DR	GRANBY ST	OCEAN VIEW AVE	0.89	8,529	2006	4		12,000	3,000	Low to mod.
11222560		973	Nor	VA BEACH BLVD	OLNEY RD	GRANBY ST	0.23	5,749	2006	4		9,000	3,000	Low to mod.
11222570		973	Nor	VA BEACH BLVD	GRANBY ST	MONTICELLO AVE	0.07	n.a.	n.a.	4		22,000	n.a.	Low to mod.
11222580		58	Nor	VA BEACH BLVD	MONTICELLO AVE	CHURCH ST	0.45	16,135	2006	4		17,000	1,000	Low to mod.
11222590		58	Nor	VA BEACH BLVD	CHURCH ST	TIDEWATER DR	0.30	n.a.	n.a.	4		23,000	n.a.	Low to mod.
11222600		58	Nor	VA BEACH BLVD	TIDEWATER DR	PARK AVE	0.53	15,843	2006	4		22,000	6,000	Low to mod.
11222610		58	Nor	VA BEACH BLVD	PARK AVE	BALLENTINE BLVD	0.99	18,573	2006	4		23,000	4,000	Low to mod.
11222620		58	Nor	VA BEACH BLVD	BALLENTINE BLVD	INGLESIDE RD	0.48	n.a.	n.a.	6		36,000	n.a.	Low to mod.

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11222630		58	Nor	VA BEACH BLVD	INGLESIDE RD	AZALEA GARDEN RD	0.43	32,697	2006	6		**40,000**	7,000	Low to mod.
11222640		58	Nor	VA BEACH BLVD	AZALEA GARDEN RD	JETT ST	0.38	32,831	2006	6		**44,000**	11,000	Low to mod.
11222650		58	Nor	VA BEACH BLVD	JETT ST	MILITARY HWY	0.88	32,831	2006	6		**40,000**	7,000	Low to mod.
11222660		58	Nor	VA BEACH BLVD	MILITARY HWY	GLENROCK RD	0.36	29,157	2006	6		**36,000**	7,000	Low to mod.
11222670		58	Nor	VA BEACH BLVD	GLENROCK RD	KEMPSVILLE RD	0.51	29,904	2003	4		**34,000**	4,000	**Moderate**
11222680		58	Nor	VA BEACH BLVD	KEMPSVILLE RD	NEWTOWN RD	0.93	32,238	2006	4		**39,000**	7,000	**Severe**
11222715		460	Nor	WATERSIDE DR / BOUSH ST	ST PAULS BLVD	CITY HALL AVE	0.57	33,630	2006	4		**37,000**	3,000	**Severe**
11220420		915	Nor	WATERSIDE DR / BOUSH ST	CITY HALL AVE	BUTE ST	0.35	33,630	2006	4		**35,000**	1,000	**Moderate**
11220430		915	Nor	WATERSIDE DR / BOUSH ST	BUTE ST	BRAMBLETON AVE	0.09	n.a.	n.a.	4		**35,000**	n.a.	**Moderate**
11220440		915	Nor	WATERSIDE DR / BOUSH ST	BRAMBLETON AVE	OLNEY RD	0.14	6,739	2006	3		**11,000**	4,000	Low to mod.
11220450		915	Nor	WATERSIDE DR / BOUSH ST	OLNEY RD	VA BEACH BLVD	0.07	n.a.	n.a.	3		**10,000**	n.a.	Low to mod.
11222720		975	Nor	WESLEYAN DR	NORTHAMPTON BLVD	NCL VA BEACH	0.38	19,652	2006	4		**33,000**	13,000	**Moderate**
11222730		977	Nor	WILLOW WOOD DR	GRANBY ST	TIDEWATER DR	1.10	13,054	2006	2		**13,000**	0	Low to mod.
11222740		460	Nor	WILSON RD	CHES CL / BERKLEY AVE EXT	INDIAN RIVER RD	0.44	9,563	2006	2		**10,000**	0	Low to mod.
11222750		460	Nor	WILSON RD	INDIAN RIVER RD	CAMPOSTELLA RD	0.22	n.a.	n.a.	4		**8,000**	n.a.	Low to mod.
11470080		904	Poq	EAST YORKTOWN RD	YORK CL	POQUOSON AVE	1.32	4,028	2004	2		**11,000**	7,000	Low to mod.
11470060		171	Poq	LITTLE FLORIDA RD	WYTHE CRK RD	POQUOSON AVE	1.44	12,836	2004	2		**19,000**	6,000	**Severe**
11470070		902	Poq	POQUOSON AVE	WYTHE CRK RD	LITTLE FLA RD	1.50	3,570	2004	2		**8,000**	4,000	Low to mod.
11470050		171	Poq	VICTORY BLVD	YORK CO LINE	WYTHE CRK RD	0.79	14,073	2004	2		**17,000**	3,000	**Severe**
11470010		172	Poq	WYTHE CRK RD	HAMPTON CL	ALPHUS ST	0.96	13,457	2004	4		**29,000**	16,000	**Moderate**
11470020		172	Poq	WYTHE CRK RD	ALPHUS ST	LITTLE FLA RD	0.12	15,040	2004	4		**29,000**	14,000	**Moderate**
11470030		172	Poq	WYTHE CRK RD	LITTLE FLA RD	HUDGINS RD	0.25	13,123	2004	4		**21,000**	8,000	Low to mod.
11470040		172	Poq	WYTHE CRK RD	HUDGINS RD	POQUOSON AVE	0.61	8,001	2004	2		**16,000**	8,000	**Severe**
11240010		58	Por	AIRLINE BLVD	CHESAPEAKE CL	GREENWOOD DR	0.30	13,759	2006	3		**19,000**	5,000	Low to mod.
11240020		58	Por	AIRLINE BLVD	GREENWOOD DR	ELMHURST LN	0.16	15,229	2006	3		**17,000**	2,000	Low to mod.
11240030		58	Por	AIRLINE BLVD	ELMHURST LN	.55ME ELMHURST LN	0.55	12,071	2006	3		**13,000**	1,000	Low to mod.
11240040		58	Por	AIRLINE BLVD	.55ME ELMHURST LN	VICTORY BLVD	0.75	12,071	2006	4		**14,000**	2,000	Low to mod.
11240050		58	Por	AIRLINE BLVD	VICTORY BLVD	PORTSMOUTH BLVD	0.29	13,787	2006	4		**19,000**	5,000	Low to mod.
11240060		58	Por	AIRLINE BLVD	PORTSMOUTH BLVD	FREDERICK BLVD	1.35	15,876	2006	4		**21,000**	5,000	Low to mod.
11240070		58	Por	AIRLINE BLVD	FREDERICK BLVD	HIGH ST	0.20	19,973	2006	4		**22,000**	2,000	Low to mod.
11240090		903	Por	CAVALIER BLVD	CHESAPEAKE CL	GREENWOOD DR	0.81	10,770	2006	4		**17,000**	6,000	Low to mod.
11240100		905	Por	CEDAR LN	HIGH ST	W NORFOLK RD	1.18	12,342	2006	2		**15,000**	3,000	**Moderate**
11240110		905	Por	CEDAR LN	W NORFOLK RD	WESTERN FREEWAY	0.23	18,884	2006	4		**18,000**	-1,000	Low to mod.
11240150		909	Por	CHURCHLAND BLVD	CHESAPEAKE CL	W NORFOLK RD	0.08	14,954	2006	4		**18,000**	3,000	Low to mod.
11240160		909	Por	CHURCHLAND BLVD	W NORFOLK RD	TYRE NECK RD	0.12	10,659	2006	4		**16,000**	5,000	Low to mod.
11240170		909	Por	CHURCHLAND BLVD	TYRE NECK RD	HIGH ST	0.30	10,934	2006	4		**17,000**	6,000	Low to mod.
11240190		913	Por	COUNTY ST	TURNPIKE RD	PENINSULA AVE	0.40	5,051	2006	4		**4,000**	-1,000	Low to mod.
11240200		913	Por	COUNTY ST	PENINSULA AVE	ELM AVE	0.31	4,650	2006	4		**3,000**	-2,000	Low to mod.
11240210		913	Por	COUNTY ST	ELM AVE	EFFINGHAM ST	0.33	4,461	2006	4		**4,000**	0	Low to mod.
11240230		915	Por	COURT ST	I-264	COUNTY ST	0.30	8,486	2006	4		**7,000**	-1,000	Low to mod.
11240240		915	Por	COURT ST	COUNTY ST	HIGH ST	0.10	7,440	2006	4		**5,000**	-2,000	Low to mod.
11240250		915	Por	COURT ST	HIGH ST	LONDON BLVD	0.10	3,927	2006	4		**3,000**	-1,000	Low to mod.
11240260		915	Por	COURT ST	LONDON BLVD.	CRAWFORD PKWY	0.24	1,230	2006	4		**1,000**	0	Low to mod.
11240265	NEW		Por	CRANEY ISLAND ACCESS RD	WESTERN FWY	CRANEY ISLAND	2.00	n.a.	n.a.	2		**7,000**	n.a.	Low to mod.
11240270		917	Por	CRAWFORD PKWY	EFFINGHAM ST	CRAWFORD ST	0.43	4,154	2006	4		**5,000**	1,000	Low to mod.
11240280		917	Por	CRAWFORD ST	CRAWFORD PKWY	LONDON BLVD	0.22	2,747	2006	4		**4,000**	1,000	Low to mod.
11240290		917	Por	CRAWFORD ST	LONDON BLVD	HIGH ST	0.11	7,714	2006	4		**8,000**	0	Low to mod.
11240300		917	Por	CRAWFORD ST	HIGH ST	COUNTY ST	0.11	8,292	2006	4		**9,000**	1,000	Low to mod.
11240310		917	Por	CRAWFORD ST	COUNTY ST	I-264	0.23	10,265	2006	4		**10,000**	0	Low to mod.
11240320		919	Por	DEEP CREEK BLVD	VICTORY BLVD	GREENWOOD DR	0.83	7,373	2006	2		**9,000**	2,000	Low to mod.
11240330		919	Por	DEEP CREEK BLVD	GREENWOOD DR	PORTSMOUTH BLVD	0.73	9,467	2006	2		**11,000**	2,000	Low to mod.
11240340		919	Por	DEEP CREEK BLVD	PORTSMOUTH BLVD	FREDERICK BLVD	0.14	10,074	2006	2		**10,000**	0	Low to mod.

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9/19/2007 2030LRTP_FORECAST3.xls DATA

2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11240350		919	Por	**DEEP CREEK BLVD**	FREDERICK BLVD	DES MOINES AVE	0.77	6,652	2006	2		**10,000**	3,000	Low to mod.
11240360		921	Por	**DES MOINES AVE**	DEEP CREEK BLVD	I-264	0.10	8,878	2006	2		**12,000**	3,000	Low to mod.
11240650		141	Por	**EFFINGHAM ST**	FREDERICK BLVD	ELM AVE	0.35	21,782	2006	4		**21,000**	-1,000	Low to mod.
11240660		141	Por	**EFFINGHAM ST**	ELM AVE	PORTSMOUTH BLVD	0.70	18,902	2006	4		**20,000**	1,000	Low to mod.
11240370		141	Por	**EFFINGHAM ST**	PORTSMOUTH BLVD	I-264	0.77	28,887	2006	6		**23,000**	-6,000	Low to mod.
11240380		141	Por	**EFFINGHAM ST**	I-264	SOUTH ST	0.14	37,052	2006	4		**30,000**	-7,000	Low to mod.
11240390		141	Por	**EFFINGHAM ST**	SOUTH ST	HIGH ST	0.21	29,958	2006	4		**34,000**	4,000	**Moderate**
11240400		141	Por	**EFFINGHAM ST**	HIGH ST	LONDON BLVD	0.11	26,036	2006	4		**29,000**	3,000	Low to mod.
11240410		923	Por	**EFFINGHAM ST**	LONDON BLVD	NORTH ST	0.10	18,622	2006	5		**24,000**	5,000	Low to mod.
11240420		923	Por	**EFFINGHAM ST**	NORTH ST	CRAWFORD PKWY	0.19	18,450	2006	4		**20,000**	2,000	Low to mod.
11240440		925	Por	**ELM AVE**	LONDON BLVD	HIGH ST	0.10	7,022	2006	3		**10,000**	3,000	Low to mod.
11240450		925	Por	**ELM AVE**	HIGH ST	COUNTY ST	0.10	10,324	2006	4		**13,000**	3,000	Low to mod.
11240460		925	Por	**ELM AVE**	COUNTY ST	SOUTH ST	0.19	10,654	2006	4		**7,000**	-4,000	Low to mod.
11240470		925	Por	**ELM AVE**	SOUTH ST	I-264	0.09	8,742	2006	2		**7,000**	-2,000	Low to mod.
11240480		925	Por	**ELM AVE**	I-264	PORTSMOUTH BLVD	0.70	8,742	2006	2		**7,000**	-2,000	Low to mod.
11240490		337	Por	**ELM AVE**	PORTSMOUTH BLVD	GEORGE WASH HWY	0.34	7,420	2006	4		**8,000**	1,000	Low to mod.
11240500		337	Por	**ELM AVE**	GEORGE WASH HWY	VICTORY BLVD	0.70	9,303	2006	2		**13,000**	4,000	Low to mod.
11240510		337	Por	**ELM AVE**	VICTORY BLVD	BURTONS PT RD	0.30	10,319	2006	4		**17,000**	7,000	Low to mod.
11240520		337	Por	**ELM AVE**	BURTONS PT RD	CHESAPEAKE CL	0.31	7,248	2006	2		**16,000**	9,000	**Moderate**
11240540		927	Por	**ELMHURST LN**	AIRLINE BLVD	PORTSMOUTH BLVD	1.03	7,254	2006	4		**8,000**	1,000	Low to mod.
11240550		17	Por	**FREDERICK BLVD**	GEORGE WASH HWY	PORTSMOUTH BLVD	0.66	14,160	2006	4		**17,000**	3,000	Low to mod.
11240560		17	Por	**FREDERICK BLVD**	PORTSMOUTH BLVD	DEEP CREEK BLVD	0.08	15,288	2006	4		**17,000**	2,000	Low to mod.
11240570		17	Por	**FREDERICK BLVD**	DEEP CREEK BLVD	I-264	0.52	21,440	2006	4		**23,000**	2,000	Low to mod.
11240580		17	Por	**FREDERICK BLVD**	I-264	TURNPIKE RD	0.36	41,699	2006	4		**42,000**	0	**Severe**
11240590		17	Por	**FREDERICK BLVD**	TURNPIKE RD	AIRLINE BLVD	0.51	28,833	2006	5		**38,000**	9,000	**Moderate**
11240600		17	Por	**FREDERICK BLVD**	AIRLINE BLVD	HIGH ST	0.14	18,090	2006	4		**24,000**	6,000	Low to mod.
11240610		17	Por	**G.W. HWY**	CHESAPEAKE CL	VICTORY BLVD	0.17	28,444	2006	4		**38,000**	10,000	**Severe**
11240620		17	Por	**G.W. HWY**	VICTORY BLVD	DAVIS ST	0.19	22,967	2006	4		**25,000**	2,000	Low to mod.
11240630		17	Por	**G.W. HWY**	DAVIS ST	GREENWOOD DR	0.42	25,509	2006	4		**24,000**	-2,000	Low to mod.
11240640		17	Por	**G.W. HWY**	GREENWOOD DR	FREDERICK BLVD	0.33	27,428	2006	4		**31,000**	4,000	Low to mod.
11240670		931	Por	**GREENWOOD DR**	AIRLINE BLVD	I-264	0.50	17,737	2006	4		**22,000**	4,000	Low to mod.
11240680		931	Por	**GREENWOOD DR**	I-264	CAVALIER BLVD	0.88	16,391	2006	4		**20,000**	4,000	Low to mod.
11240690		931	Por	**GREENWOOD DR**	CAVALIER BLVD	VICTORY BLVD	0.63	10,309	2006	4		**14,000**	4,000	Low to mod.
11240700		931	Por	**GREENWOOD DR**	VICTORY BLVD	INDEPENDENCE ST	1.05	5,433	2006	4		**5,000**	0	Low to mod.
11240710		931	Por	**GREENWOOD DR**	INDEPENDENCE ST	DEEP CREEK BLVD	0.37	4,589	2006	2		**5,000**	0	Low to mod.
11240720		931	Por	**GREENWOOD DR**	DEEP CREEK BLVD	GEORGE WASH HWY	0.51	3,631	2006	2		**5,000**	1,000	Low to mod.
11240730		17	Por	**HIGH ST**	CHESAPEAKE CL	TYRE NECK RD	0.21	25,201	2006	4		**25,000**	0	Low to mod.
11240740		17	Por	**HIGH ST**	TYRE NECK RD	CHURCHLAND BLVD	0.22	21,211	2006	4		**24,000**	3,000	Low to mod.
11240750		17	Por	**HIGH ST**	CHURCHLAND BLVD	CEDAR LA	0.89	27,243	2006	4		**37,000**	10,000	**Moderate**
11240760		17	Por	**HIGH ST**	CEDAR LA	FREDERICK BLVD	2.39	32,692	2006	4		**34,000**	1,000	**Severe**
11240780		935	Por	**HIGH ST**	FREDERICK BLVD	AIRLINE BLVD	0.12	17,756	2006	4		**14,000**	-4,000	Low to mod.
11240790		935	Por	**HIGH ST**	AIRLINE BLVD	MT VERNON AVE	0.23	14,315	2006	5		**13,000**	-1,000	Low to mod.
11240800		935	Por	**HIGH ST**	MT VERNON AVE	M L K FWY	0.48	15,119	2006	4		**15,000**	0	Low to mod.
11240810		935	Por	**HIGH ST**	M L K FWY	ELM AVE	0.79	17,764	2006	4		**18,000**	0	Low to mod.
11240820		935	Por	**HIGH ST**	ELM AVE	EFFINGHAM ST	0.33	11,455	2006	4		**11,000**	0	Low to mod.
11240830		935	Por	**HIGH ST**	EFFINGHAM ST	CRAWFORD ST	0.51	7,211	2006	2		**9,000**	2,000	Low to mod.
11240930		58	Por	**LONDON BLVD**	HIGH ST	MT VERNON AVE	0.31	20,861	2006	6		**19,000**	-2,000	Low to mod.
11240940		58	Por	**LONDON BLVD**	MT VERNON AVE	M L K FWY	0.40	20,861	2006	6		**23,000**	2,000	Low to mod.
11240950		141	Por	**LONDON BLVD**	M L K FWY	ELM AVE	0.86	29,382	2006	6		**31,000**	2,000	Low to mod.
11240960		141	Por	**LONDON BLVD**	ELM AVE	EFFINGHAM ST	0.32	24,741	2006	6		**25,000**	0	Low to mod.
11240970		939	Por	**LONDON ST**	EFFINGHAM ST	CRAWFORD ST	0.50	8,483	2006	2		**9,000**	1,000	Low to mod.
11241035		58	Por	**MIDTOWN TUNNEL**	MLK / WESTERN FRWY	NORFOLK CL	0.95	41,499	2006	4	Y	**49,000**	8,000	Low to mod.

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2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11240980	NEW	933	Por	MLK FWY	I-264	HIGH ST.	0.56	n.a.	n.a.	4	Y	29,000	n.a.	Low to mod.
11241000		933	Por	MLK FWY	HIGH ST	LONDON BLVD	0.25	n.a.	n.a.	4		33,000	n.a.	Low to mod.
11241015		58	Por	MLK FWY	LONDON BLVD	MIDTOWN / WESTERN	0.98	23,976	2000	6		44,000	20,000	Low to mod.
11241090		1020	Por	PORTCENTRE PKWY	PORTSMOUTH BLVD	CRAWFORD ST	0.68	10,519	2006	4		9,000	-2,000	Low to mod.
11241100		337	Por	PORTSMOUTH BLVD	CHESAPEAKE CL	ELMHURST LN	1.01	31,704	2006	4		39,000	7,000	Severe
11241110		337	Por	PORTSMOUTH BLVD	ELMHURST LN	VICTORY BLVD	1.19	24,028	2006	4		32,000	8,000	Severe
11241120		337	Por	PORTSMOUTH BLVD	VICTORY BLVD	AIRLINE BLVD	0.22	17,932	2006	4		22,000	4,000	Low to mod.
11241130		337	Por	PORTSMOUTH BLVD	AIRLINE BLVD	TURNPIKE RD	0.10	16,828	2006	4		18,000	1,000	Low to mod.
11241140		337	Por	PORTSMOUTH BLVD	TURNPIKE RD	I-264	0.35	14,542	2006	4		17,000	2,000	Low to mod.
11241150		337	Por	PORTSMOUTH BLVD	I-264	DEEP CREEK BLVD	1.07	12,294	2006	4		14,000	2,000	Low to mod.
11241160		337	Por	PORTSMOUTH BLVD	DEEP CREEK BLVD	FREDERICK BLVD	0.17	7,409	2006	4		11,000	4,000	Low to mod.
11241170		337	Por	PORTSMOUTH BLVD	FREDERICK BLVD	ELM AVE	0.77	10,172	2006	4		11,000	1,000	Low to mod.
11241180		943	Por	PORTSMOUTH BLVD	ELM AVE	EFFINGHAM ST	0.34	6,271	2006	4		7,000	1,000	Low to mod.
11241190		1022	Por	PORTSMOUTH BLVD	EFFINGHAM ST	PORTCENTRE PKWY	0.54	5,550	2006	2		6,000	0	Low to mod.
11241220		947	Por	TOWN POINT RD	SUFFOLK CL	TWIN PINES RD	0.72	9,478	2006	2		14,000	5,000	Severe
11241210		947	Por	TOWN POINT RD	TWIN PINES RD	WESTERN FWY	0.11	28,017	2006	4		32,000	4,000	Severe
11241200		947	Por	TOWN POINT RD	WESTERN FWY	CHESAPEAKE CL	0.25	26,522	2006	4		27,000	0	Moderate
11241230		337	Por	TURNPIKE RD	PORTSMOUTH BLVD	FREDERICK BLVD	1.06	5,733	2006	2		8,000	2,000	Low to mod.
11241240		337	Por	TURNPIKE RD	FREDERICK BLVD	HOWARD ST	0.29	11,439	2006	4		11,000	0	Low to mod.
11241250		337	Por	TURNPIKE RD	HOWARD ST	HARBOR DR	0.53	9,382	2006	2		8,000	-1,000	Low to mod.
11241260		337	Por	TURNPIKE RD	HARBOR DR	COUNTY ST	0.10	n.a.	n.a.	2		7,000	n.a.	Low to mod.
11241270		949	Por	TWIN PINES RD	TOWN POINT RD	HEDGEROW LN	1.38	10,937	2006	2		12,000	1,000	Low to mod.
11241280		951	Por	TYRE NECK RD	CHESAPEAKE CL	HIGH ST	0.24	12,420	2006	2		14,000	2,000	Severe
11241290		951	Por	TYRE NECK RD	HIGH ST	CHURCHLAND BLVD	0.18	6,331	2006	2		7,000	1,000	Low to mod.
11241300		951	Por	TYRE NECK RD	CHURCHLAND BLVD	W NORFOLK RD	0.07	4,259	2006	2		5,000	1,000	Low to mod.
11241310		239	Por	VICTORY BLVD	PORTSMOUTH BLVD	AIRLINE BLVD	0.20	7,634	2006	4		9,000	1,000	Low to mod.
11241320		239	Por	VICTORY BLVD	AIRLINE BLVD	I-264	0.36	25,378	2006	6		27,000	2,000	Low to mod.
11241330		239	Por	VICTORY BLVD	I-264	GREENWOOD DR	0.55	26,304	2003	4		27,000	1,000	Moderate
11241340		239	Por	VICTORY BLVD	GREENWOOD DR	DEEP CREEK BLVD	1.08	16,159	2006	4		22,000	6,000	Low to mod.
11241350		239	Por	VICTORY BLVD	DEEP CREEK BLVD	GEORGE WASH HWY	0.44	18,686	2006	4		25,000	6,000	Low to mod.
11241360		239	Por	VICTORY BLVD	GEORGE WASH HWY	ELM AVE	1.81	12,033	2006	4		15,000	3,000	Low to mod.
11241370		953	Por	W NORFOLK RD	CHURCHLAND BLVD	TYRE NECK RD	0.11	3,750	2006	2		4,000	0	Low to mod.
11241380		953	Por	W NORFOLK RD	TYRE NECK RD	CEDAR LN	1.02	6,630	2006	2		9,000	2,000	Low to mod.
11241390		953	Por	W NORFOLK RD	CEDAR LN	WESTERN FWY	1.58	5,569	2006	4		9,000	3,000	Low to mod.
11241410		164	Por	WESTERN FWY	SUFFOLK CL	TOWN POINT RD	1.01	46,962	2006	4		58,000	11,000	Low to mod.
11241420		164	Por	WESTERN FWY	TOWN POINT RD	CEDAR LN	1.31	n.a.	n.a.	4		68,000	n.a.	Moderate
11241425		164	Por	WESTERN FWY	CEDAR LN	CRANEY ISL CONN	1.00	41,771	2006	4		52,000	10,000	Low to mod.
11241435		164	Por	WESTERN FWY	CRANEY ISL CONN	W NORFOLK RD	0.61	41,771	2006	4		50,000	8,000	Low to mod.
11241445		164	Por	WESTERN FWY	W NORFOLK RD	MLK / MIDTOWN TNL	1.78	48,372	2006	4		72,000	24,000	Moderate
11330010		627	Suf	BENNETTS PASTURE RD	KINGS HWY	BRIDGE RD	3.38	9,327	2005	2		10,000	1,000	Low to mod.
11330020		17	Suf	BRIDGE RD	ISLE OF WIGHT CL	E. END CHUCKATUCK BR	0.60	15,692	2005	2		23,000	7,000	Low to mod.
11330030		17	Suf	BRIDGE RD	E. END CHUCKATUCK BR	CRITTENDEN RD	0.57	15,692	2005	4		22,000	6,000	Low to mod.
11330040		17	Suf	BRIDGE RD	CRITTENDEN RD	N. END NANSE BR	0.79	19,520	2005	4		27,000	7,000	Low to mod.
11330050		17	Suf	BRIDGE RD	N. END NANSE BR	S. END NANSE BR	0.93	19,520	2005	2		28,000	8,000	Low to mod.
11330060		17	Suf	BRIDGE RD	S. END NANSE BR	BENNETTS PASTURE RD	0.75	19,520	2005	4		28,000	8,000	Low to mod.
11330070		17	Suf	BRIDGE RD	BENNETTS PASTURE RD	SHOULDERS HILL RD	1.58	27,306	2005	4		37,000	10,000	Moderate
11330080		17	Suf	BRIDGE RD	SHOULDERS HILL RD	HARBOR VIEW BLVD	1.34	30,038	2005	4		36,000	6,000	Moderate
11330085		17	Suf	BRIDGE RD	HARBOR VIEW BLVD	WESTERN FWY	0.10	30,376	2005	4		41,000	11,000	Severe
11330090		17	Suf	BRIDGE RD	WESTERN FWY	I-664	0.43	19,350	2005	4		23,000	4,000	Low to mod.
11330100		17	Suf	BRIDGE RD	I-664	COLLEGE DR	0.54	21,558	2005	4		24,000	2,000	Low to mod.
11330110		17	Suf	BRIDGE RD	COLLEGE DR	CHESAPEAKE CL	0.07	25,074	2006	4		27,000	2,000	Low to mod.
11330120		32	Suf	CAROLINA RD	NC STATE LINE	WHALEYVILLE BLVD	9.43	3,676	2005	2		8,000	4,000	Low to mod.

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2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11330130		13	Suf	CAROLINA RD	WHALEYVILLE BLVD	TURLINGTON RD	0.87	17,467	2005	4		26,000	9,000	Low to mod.
11330140		13	Suf	CAROLINA RD	TURLINGTON RD	SW SUFFOLK BYP	0.61	17,467	2005	4		29,000	12,000	Low to mod.
11330150		13	Suf	CAROLINA RD	SW SUFFOLK BYP	FAYETTE ST	1.84	12,490	2005	4		23,000	11,000	Low to mod.
11330160		135	Suf	COLLEGE DR	BRIDGE RD	WESTERN FREEWAY	0.14	15,961	2005	4		16,000	0	Low to mod.
11330170		135	Suf	COLLEGE DR	WESTERN FREEWAY	TOWN POINT RD	0.74	17,422	2005	4		24,000	7,000	Low to mod.
11330180		135	Suf	COLLEGE DR	TOWN POINT RD	I-664	0.70	19,407	2005	4		22,000	3,000	Low to mod.
11330190		135	Suf	COLLEGE DR	I-664	HARBOR VIEW BLVD	0.60	10,482	2005	2		12,000	2,000	Low to mod.
11330200	BUS	58	Suf	CONSTANCE RD	HOLLAND RD	PITCHKETTLE RD	0.28	9,673	2005	2		12,000	2,000	Low to mod.
11330210	BUS	58	Suf	CONSTANCE RD	PITCHKETTLE RD	MAIN ST	0.85	11,114	2005	2		15,000	4,000	Moderate
11330220		13	Suf	CONSTANCE RD	MAIN ST	WILROY RD	0.88	17,120	2005	4		28,000	11,000	Moderate
11330240		647	Suf	COPELAND RD	HOLLAND RD	WHALEYVILLE BLVD	5.26	991	2002	2		2,000	1,000	Low to mod.
11330250		647	Suf	COPELAND RD	WHALEYVILLE BLVD	CAROLINA RD	1.56	722	2002	2		1,000	0	Low to mod.
11330260		628	Suf	CRITTENDEN RD	KINGS HWY	BRIDGE RD	5.26	3,381	2005	2		8,000	5,000	Low to mod.
11330270		603	Suf	EVERETTS RD	LAKE PRINCE DR	MOORE FARM LN	1.42	2,161	2005	2		2,000	0	Low to mod.
11330280		603	Suf	EVERETTS RD	MOORE FARM LN	GODWIN BLVD	0.93	1,984	2005	2		2,000	0	Low to mod.
11330290		919	Suf	FINNEY AVE	N. MAIN ST	PINNER ST	0.20	8,287	2005	2		3,000	-5,000	Low to mod.
11330295	NEW		Suf	FINNEY AVE EXT	WASHINGTON ST	FINNEY AVE	0.29	n.a.	n.a.	2		2,000	n.a.	Low to mod.
11330300		32	Suf	GODWIN BLVD	PRUDEN BLVD	SUFFOLK BYP	0.54	20,240	2005	4		21,000	1,000	Low to mod.
11330310		32	Suf	GODWIN BLVD	SUFFOLK BYP	KINGS FORK RD	1.40	20,630	2005	4		25,000	4,000	Low to mod.
11330320		32	Suf	GODWIN BLVD	KINGS FORK RD	NANS RVR (W BRNCH)	1.36	12,513	2005	4		13,000	0	Low to mod.
11330330		32	Suf	GODWIN BLVD	NANS RVR (W BRNCH)	EVERETTS RD	3.46	12,513	2005	2		13,000	0	Low to mod.
11330340		32	Suf	GODWIN BLVD	EVERETTS RD	KINGS HWY	0.87	13,697	2005	2		15,000	1,000	Low to mod.
11330350		32	Suf	GODWIN BLVD	KINGS HWY	ISLE OF WIGHT CL	1.31	10,767	2005	2		13,000	2,000	Low to mod.
11330360		917	Suf	HARBOR VIEW BLVD	BRIDGE RD	TOWN POINT RD	1.02	2,560	2005	4		8,000	5,000	Low to mod.
11330385	BUS	58	Suf	HOLLAND RD (Bus. 58)	SUFFOLK BYP	CONSTANCE RD	1.86	10,711	2005	2		13,000	2,000	Low to mod.
11330440		634	Suf	KINGS FORK RD	PITCHKETTLE RD	PRUDEN BLVD	0.64	2,495	2005	2		4,000	2,000	Low to mod.
11330450		634	Suf	KINGS FORK RD	PRUDEN BLVD	GODWIN BLVD	2.27	4,742	2005	2		8,000	3,000	Low to mod.
11330460		125	Suf	KINGS HWY	GODWIN BLVD	CRITTENDEN RD	0.69	4,351	2005	2		5,000	1,000	Low to mod.
11330470		125	Suf	KINGS HWY (w/out bridge)	CRITTENDEN RD	BENNETTS PASTURE RD	5.07	n.a.	n.a.	0		0	n.a.	n.a.
11330480		125	Suf	KINGS HWY	BENNETTS PASTURE RD	NANSEMOND PKWY	0.48	3,447	2005	2		6,000	3,000	Low to mod.
11331010		604	Suf	LAKE PRINCE DR	RTE 460	EVERETTS RD	3.93	1,831	2005	2		5,000	3,000	Low to mod.
11330490		13	Suf	MAIN ST BYPASS	FAYETTE ST	WASHINGTON ST	0.35	11,799	2005	4		16,000	4,000	Low to mod.
11330500		13	Suf	MAIN ST	WASHINGTON ST	MARKET ST	0.15	21,154	2005	2		18,000	-3,000	Severe
11330505		13	Suf	MAIN ST	MARKET ST	CONSTANCE RD	0.52	21,154	2005	4		28,000	7,000	Low to mod.
11330510	BUS	460	Suf	MAIN ST	CONSTANCE RD	GODWIN BLVD	1.41	28,704	2006	4		36,000	7,000	Moderate
11330520		911	Suf	MARKET ST	WASHINGTON ST	MAIN ST	0.49	5,218	2005	4		9,000	4,000	Low to mod.
11330530		13	Suf	MILITARY HWY	SUFFOLK BYP	WCL CHESAPEAKE	3.61	69,801	2005	6		113,000	43,000	Severe
11330540		337	Suf	NANSEMOND PKWY	WILROY RD	KINGS HWY	3.05	11,645	2005	2		8,000	-4,000	Low to mod.
11330550		337	Suf	NANSEMOND PKWY	KINGS HWY	SHOULDERS HILL RD	1.77	13,119	2005	2		14,000	1,000	Moderate
11330560		337	Suf	NANSEMOND PKWY	SHOULDERS HILL RD	CHESAPEAKE CL	0.75	14,058	2005	4		18,000	4,000	Low to mod.
11330570		1329	Suf	PINNER ST	WASHINGTON ST	CONSTANCE RD	1.24	8,873	2005	2		13,000	4,000	Low to mod.
11330580		604	Suf	PITCHKETTLE RD	CONSTANCE RD	SUFFOLK BYP	1.36	3,682	2005	2		8,000	4,000	Low to mod.
11330590		604	Suf	PITCHKETTLE RD	SUFFOLK BYP	KINGS FORK RD	2.41	2,359	2005	2		8,000	6,000	Low to mod.
11330605		13	Suf	PORTSMOUTH BLVD (Bus. 58)	WILROY RD	WASHINGTON ST	1.59	17,617	2005	4		20,000	2,000	Low to mod.
11330610		13	Suf	PORTSMOUTH BLVD (Bus. 58)	WASHINGTON ST	SUFFOLK BYP	1.04	23,854	2005	4		37,000	13,000	Severe
11331000		604	Suf	PROVIDENCE RD	KINGS FORK RD	RTE 460	0.50	1,302	2005	2		4,000	3,000	Low to mod.
11330650	BUS	460	Suf	PRUDEN BLVD	SUFFOLK BYP	GODWIN BLVD	1.10	12,522	2005	4		22,000	9,000	Low to mod.
11330660		659	Suf	PUGHSVILLE RD	SHOULDERS HILL RD	TOWN POINT RD	1.20	4,202	2005	2		6,000	2,000	Low to mod.
11330670		659	Suf	PUGHSVILLE RD	TOWN POINT RD	WCL CHESAPEAKE	0.08	8,832	2005	4		12,000	3,000	Low to mod.
11330960	BUS	189	Suf	RTE 189 (IN HOLLAND)	BUS RTE 58 W.	RTE 58	0.37	768	2005	4		2,000	1,000	Low to mod.
11330965		189	Suf	RTE 189 (NEAR FRANKLIN)	SOUTHAMPTON CL	RTE 272	2.08	2,067	2005	2		8,000	6,000	Low to mod.
11330975		189	Suf	RTE 189 (NEAR FRANKLIN)	RTE 272	RTE 58	0.83	3,217	2005	2		5,000	2,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11330980		260	Suf	**RTE 258 (GREAT MILL HWY)**	US 58	ISLE OF WIGHT CL	0.83	3,821	2005	2		**6,000**	2,000	Low to mod.
11330990		272	Suf	**RTE 272 (S. QUAY RD)**	RTE 189	RTE 58	1.33	1,541	2005	2		**5,000**	3,000	Low to mod.
11330910		58	Suf	**RTE 58**	SOUTHAMPTON CL	RTES 189&260	1.34	17,265	2005	4		**28,000**	11,000	Low to mod.
11330920		58	Suf	**RTE 58**	RTES 189&260	RTE 272	1.26	16,341	2005	4		**30,000**	14,000	Low to mod.
11330930		58	Suf	**RTE 58**	RTE 272	RTE 189 (IN HOLLAND)	4.17	17,907	2005	4		**25,000**	7,000	Low to mod.
11330940		58	Suf	**RTE 58**	RTE 189 (IN HOLLAND)	RTE 58 BUS (IN HOLLAND)	1.19	18,059	2005	4		**30,000**	12,000	Low to mod.
11330950		58	Suf	**RTE 58**	RTE 58 BUS (IN HOLLAND)	LUMMIS RD	4.01	21,427	2005	4		**33,000**	12,000	**Moderate**
11330370		58	Suf	**RTE 58**	LUMMIS RD	SUFFOLK BYP	4.28	22,744	2005	4		**43,000**	20,000	**Severe**
11330890	BUS	58	Suf	**RTE 58 BUS**	ISLE OF WIGHT CL	RTE 189 (IN HOLLAND)	2.65	2,912	2005	2		**6,000**	3,000	Low to mod.
11330900	BUS	58	Suf	**RTE 58 BUS**	RTE 189 (IN HOLLAND)	RTE 58	0.70	3,546	2005	4		**6,000**	2,000	Low to mod.
11331020		616	Suf	**RTE 616 (various road names)**	RTE 58	RTE 13	11.50	232	2005	2		**4,000**	4,000	Low to mod.
11331030		616	Suf	**RTE 616 (various road names)**	RTE 13	RTE 32	6.70	n.a.	n.a.	2		**2,000**	n.a.	Low to mod.
11330680		626	Suf	**SHOULDERS HILL RD**	NANSEMOND PKWY	PUGHSVILLE RD	1.44	6,787	2005	2		**8,000**	1,000	Low to mod.
11330690		626	Suf	**SHOULDERS HILL RD**	PUGHSVILLE RD	BRIDGE RD	1.63	7,810	2005	2		**11,000**	3,000	Low to mod.
11330700		58	Suf	**SUFFOLK BYP**	HOLLAND RD	PITCHKETTLE RD	1.69	35,091	2005	4		**49,000**	14,000	Low to mod.
11330710		58	Suf	**SUFFOLK BYP**	PITCHKETTLE RD	PRUDEN BLVD	1.63	35,958	2005	4		**50,000**	14,000	Low to mod.
11330720		58	Suf	**SUFFOLK BYP**	PRUDEN BLVD	GODWIN BLVD	1.06	45,957	2005	4		**72,000**	26,000	**Moderate**
11330730		58	Suf	**SUFFOLK BYP**	GODWIN BLVD	WILROY RD	1.85	56,459	2005	4		**85,000**	29,000	**Severe**
11330740		58	Suf	**SUFFOLK BYP**	WILROY RD	MILITARY HWY	2.02	46,120	2005	4		**74,000**	28,000	**Moderate**
11330750		13	Suf	**SW SUFFOLK BYP**	CAROLINA RD	HOLLAND RD	2.55	10,031	2005	4		**12,000**	2,000	Low to mod.
11330760		658	Suf	**TOWN POINT RD**	PUGHSVILLE RD	BRIDGE RD	1.71	1,128	2005	2		**5,000**	4,000	Low to mod.
11330765		658	Suf	**TOWN POINT RD**	HARBOR VIEW BLVD	COLLEGE DR	0.80	7,851	2005	4		**17,000**	9,000	Low to mod.
11330770		658	Suf	**TOWN POINT RD**	COLLEGE DR	PORTSMOUTH CL	0.60	8,634	2005	2		**10,000**	1,000	Low to mod.
11330620		460	Suf	**US 460** (2030 data refers to new Rte 460)	ISLE OF WIGHT CL	LAKE PRINCE DR	3.08	16,192	2005	4	Y	**38,000**	22,000	Low to mod.
11330630		460	Suf	**US 460** (2030 data refers to new Rte 460)	LAKE PRINCE DR	KINGS FORK RD	0.58	16,192	2005	4	Y	**38,000**	22,000	Low to mod.
11330640		460	Suf	**US 460** (2030 data refers to new Rte 460)	KINGS FORK RD	SUFFOLK BYP	1.47	20,616	2005	4	Y	**38,000**	17,000	Low to mod.
11330780		337	Suf	**WASHINGTON ST**	W CONSTANCE RD	SARATOGA ST	0.84	9,087	2005	2		**11,000**	2,000	Low to mod.
11330790		337	Suf	**WASHINGTON ST**	SARATOGA ST	MAIN ST	0.08	9,087	2005	3		**10,000**	1,000	Low to mod.
11330800		337	Suf	**WASHINGTON ST**	MAIN ST	PINNER ST	0.20	7,147	2005	2		**15,000**	8,000	**Moderate**
11330810		337	Suf	**WASHINGTON ST**	PINNER ST	PORTSMOUTH BLVD	2.84	8,988	2005	2		**18,000**	9,000	**Severe**
11330820		164	Suf	**WESTERN FWY**	BRIDGE RD	I-664	0.74	17,679	2005	4		**25,000**	7,000	Low to mod.
11330830		164	Suf	**WESTERN FWY**	I-664	COLLEGE DR	0.57	33,392	2005	4		**44,000**	11,000	Low to mod.
11330840		164	Suf	**WESTERN FWY**	COLLEGE DR	PORTSMOUTH CL	0.20	46,962	2006	4		**58,000**	11,000	Low to mod.
11330850		13	Suf	**WHALEYVILLE BLVD**	NC STATE LINE	CAROLINA RD	13.31	5,111	2006	2		**14,000**	9,000	Low to mod.
11330870		642	Suf	**WILROY RD**	CONSTANCE RD	SUFFOLK BYP	1.98	8,326	2005	2		**9,000**	1,000	Low to mod.
11330880		642	Suf	**WILROY RD**	SUFFOLK BYP	NANSEMOND PKWY	1.89	8,972	2005	2		**13,000**	4,000	Low to mod.
11340010		903	VaB	**21ST ST**	PARKS AVE	PACIFIC AVE	0.53	11,561	2007	4		**18,000**	6,000	Low to mod.
11340020		903	VaB	**21ST ST**	PACIFIC AVE	ATLANTIC AVE	0.06	6,786	2000	3		**8,000**	1,000	Low to mod.
11340030		903	VaB	**22ND ST**	PARKS AVE	PACIFIC AVE	0.53	12,069	2007	4		**18,000**	6,000	Low to mod.
11340040		903	VaB	**22ND ST**	PACIFIC AVE	ATLANTIC AVE	0.06	3,605	2007	3		**5,000**	1,000	Low to mod.
11340050		60	VaB	**ATLANTIC AVE**	SHORE DR	PACIFIC AVE	2.62	21,946	2007	4		**31,000**	9,000	**Moderate**
11340060		901	VaB	**ATLANTIC AVE**	PACIFIC AVE	LASKIN RD	0.85	5,608	2007	2		**7,000**	1,000	Low to mod.
11340070		901	VaB	**ATLANTIC AVE**	LASKIN RD	25TH ST	0.41	7,000	2003	2		**8,000**	1,000	Low to mod.
11340080		901	VaB	**ATLANTIC AVE**	25TH ST	22ND AVE	0.24	7,000	2003	2		**8,000**	1,000	Low to mod.
11340090		901	VaB	**ATLANTIC AVE**	22ND AVE	21ST AVE	0.07	8,000	2003	2		**9,000**	1,000	**Moderate**
11340100		901	VaB	**ATLANTIC AVE**	21ST ST	VA BEACH BLVD	0.27	9,506	2007	2		**5,000**	-5,000	Low to mod.
11340110		901	VaB	**ATLANTIC AVE**	VA BEACH BLVD	5TH ST	0.82	8,589	2007	2		**7,000**	-2,000	Low to mod.
11340120		907	VaB	**BAXTER RD**	PRINCESS ANNE RD	INDEPENDENCE BLVD	0.96	22,816	2006	4		**24,000**	1,000	Low to mod.
11340130		909	VaB	**BIRDNECK RD**	GEN BOOTH BLVD	NORFOLK AVE	2.29	16,894	2006	4		**18,000**	1,000	Low to mod.
11340140		909	VaB	**BIRDNECK RD**	NORFOLK AVE	VA BEACH BLVD	0.31	17,253	2007	4		**25,000**	8,000	Low to mod.
11340150		909	VaB	**BIRDNECK RD**	VA BEACH BLVD	I-264	0.33	34,411	2006	4		**27,000**	-7,000	**Moderate**
11340160		909	VaB	**BIRDNECK RD**	I-264	LASKIN RD	0.58	26,574	2007	4		**35,000**	8,000	**Severe**

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11340170		911	VaB	BLACKWATER RD	PUNGO FERRY RD	CHESAPEAKE CL	4.47	3,471	2007	2		6,000	3,000	Low to mod.
11340180		915	VaB	CENTERVILLE TPK	CHESAPEAKE CL	LYNNHAVEN PKWY	0.38	8,360	2006	4		23,000	15,000	Low to mod.
11340190		915	VaB	CENTERVILLE TPK	LYNNHAVEN PKWY	KEMPSVILLE RD	0.75	10,814	2006	4		28,000	17,000	Moderate
11340200		915	VaB	CENTERVILLE TPK	KEMPSVILLE RD	JAKE SEARS RD	0.88	19,058	2006	6		40,000	21,000	Moderate
11340210		915	VaB	CENTERVILLE TPK	JAKE SEARS RD	INDIAN RIVER RD	0.95	19,058	2006	6		27,000	8,000	Low to mod.
11340230			VaB	CITY LINE RD	I-64	CENTERVILLE TPK	1.00	n.a.	n.a.	4		21,000	n.a.	Low to mod.
11340240		939	VaB	DAM NECK RD	PRINCESS ANNE RD	ROSEMONT RD	0.44	40,795	2007	4		45,000	4,000	Severe
11340245		939	VaB	DAM NECK RD	ROSEMONT RD	HOLLAND RD	0.55	40,795	2007	4		42,000	1,000	Severe
11340250		965	VaB	DAM NECK RD	HOLLAND RD	LONDON BR CONN	0.72	43,450	2006	4		44,000	1,000	Severe
11340260		965	VaB	DAM NECK RD	LONDON BR CONN	LONDON BR RD	0.86	46,071	2007	4		38,000	-8,000	Severe
11340270		965	VaB	DAM NECK RD	LONDON BR RD	S.E. PKWY & GRNBELT	1.95	29,537	2006	4		22,000	-8,000	Low to mod.
11340275		965	VaB	DAM NECK RD	S.E. PKWY & GRNBELT	GEN BOOTH BLVD	1.02	24,439	2006	4		35,000	11,000	Severe
11340280		965	VaB	DAM NECK RD	GEN BOOTH BLVD	UPTON DR	0.40	34,374	2007	4		37,000	3,000	Severe
11340290		965	VaB	DAM NECK RD	UPTON DR	USN TRAINING CTR	1.70	21,199	2007	4		20,000	-1,000	Low to mod.
11340300		927	VaB	DIAMOND SPRINGS RD	NEWTOWN RD	WESLEYAN DR	0.41	23,084	2006	4		23,000	0	Low to mod.
11340310		927	VaB	DIAMOND SPRINGS RD	WESLEYAN DR	NORTHAMPTON BLVD	1.22	20,699	2006	4		24,000	3,000	Low to mod.
11340320		166	VaB	DIAMOND SPRINGS RD	NORTHAMPTON BLVD	SHORE DR	1.32	31,698	2006	4		34,000	2,000	Moderate
11340330		1038	VaB	ELBOW RD	CHESAPEAKE CL	INDIAN RIVER RD	0.32	6,887	2007	n.a.		replaced by SEPG	n.a.	replaced by SEPG
11340340		1038	VaB	ELBOW RD	INDIAN RIVER RD	SALEM RD	1.21	9,029	2007	4		21,000	12,000	Low to mod.
11340350		939	VaB	ELBOW RD	SALEM RD	PRINCESS ANNE RD	2.96	n.a.	n.a.	4		21,000	n.a.	Low to mod.
11340360		929	VaB	FERRELL PKWY	INDIAN RIVER RD	PRINCESS ANNE RD	2.74	50,554	2006	4		33,000	-18,000	Severe
11341273		615	VaB	FIRST COL / OCEANA BLVD	GEN BOOTH BLVD	TOMCAT BLVD / SEP&G	1.02	33,472	2006	4		37,000	4,000	Severe
11341295		615	VaB	FIRST COL / OCEANA BLVD	TOMCAT BLVD / SEP&G	VA BEACH BLVD	3.11	35,938	2006	4		28,000	-8,000	Moderate
11340380		408	VaB	FIRST COL / OCEANA BLVD	VA BEACH BLVD	I-264	0.22	n.a.	n.a.	4		22,000	n.a.	Low to mod.
11340390		408	VaB	FIRST COL / OCEANA BLVD	I-264	LASKIN RD	0.35	43,269	2007	4		47,000	4,000	Beyond Severe
11340400		408	VaB	FIRST COL / OCEANA BLVD	LASKIN RD	REPUBLIC RD	0.12	41,055	2006	4		46,000	5,000	Beyond Severe
11340402		408	VaB	FIRST COL / OCEANA BLVD	REPUBLIC RD	OLD DONATION PKWY	1.06	41,055	2006	6		48,000	7,000	Severe
11340403		408	VaB	FIRST COL / OCEANA BLVD	OLD DONATION PKWY	GREAT NECK RD	0.81	n.a.	n.a.	4		40,000	n.a.	Severe
11340405		149	VaB	GEN BOOTH BLVD	PRINCESS ANNE RD	FERRELL PKWY	0.30	35,389	2003	6		26,000	-9,000	Low to mod.
11340410		149	VaB	GEN BOOTH BLVD	FERRELL PKWY	LONDON BRIDGE RD	0.56	41,118	2007	6		42,000	1,000	Moderate
11340420		149	VaB	GEN BOOTH BLVD	LONDON BRIDGE RD	DAM NECK RD	1.51	30,063	2006	6		50,000	20,000	Severe
11340430		149	VaB	GEN BOOTH BLVD	DAM NECK RD	OCEANA BLVD	0.60	60,298	2006	6		60,000	0	Severe
11340440		149	VaB	GEN BOOTH BLVD	OCEANA BLVD	BIRDNECK RD	1.20	28,716	2007	4		32,000	3,000	Moderate
11340450		149	VaB	GEN BOOTH BLVD	BIRDNECK RD	OLD RUDEE BLVD	1.61	20,980	2006	4		18,000	-3,000	Low to mod.
11340460		279	VaB	GREAT NECK RD	POTTERS RD	I-264	0.31	17,084	2006	4		38,000	21,000	Severe
11340470		279	VaB	GREAT NECK RD	I-264	VA BEACH BLVD	0.05	17,084	2006	4		54,000	37,000	Beyond Severe
11340480		279	VaB	GREAT NECK RD	VA BEACH BLVD	FIRST COLONIAL RD	2.36	41,596	2006	4		45,000	3,000	Severe
11340490		279	VaB	GREAT NECK RD	FIRST COLONIAL RD	SHOREHAVEN RD	0.98	40,750	2006	6		50,000	9,000	Severe
11340500		279	VaB	GREAT NECK RD	SHOREHAVEN RD	SHORE DR	2.24	35,934	2006	4		40,000	4,000	Severe
11340510		403	VaB	HAYGOOD RD	NEWTOWN RD	WESLEYAN DR	0.25	7,829	2006	2		9,000	1,000	Low to mod.
11340520		403	VaB	HAYGOOD RD	WESLEYAN DR	INDEPENDENCE BLVD	1.10	19,036	2007	4		20,000	1,000	Low to mod.
11340530		410	VaB	HOLLAND RD	INDEPENDENCE BLVD	PLAZA TRAIL	0.33	43,131	2006	6		47,000	4,000	Moderate
11340540		410	VaB	HOLLAND RD	PLAZA TRAIL	ROSEMONT RD	1.32	39,234	2006	6		53,000	14,000	Severe
11340550		410	VaB	HOLLAND RD	ROSEMONT RD	LYNNHAVEN PKWY	1.15	37,853	2007	6		49,000	11,000	Severe
11340560		410	VaB	HOLLAND RD	LYNNHAVEN PKWY	DAM NECK RD	1.07	29,611	2007	6		47,000	17,000	Moderate
11340565		410	VaB	HOLLAND RD	DAM NECK RD	NIMMO PKWY	1.93	16,991	2006	4		28,000	11,000	Moderate
11340572		410	VaB	HOLLAND RD	NIMMO PKWY	PRINCESS ANNE RD	0.76	12,781	2007	2		11,000	-2,000	Low to mod.
11340605		225	VaB	INDEPENDENCE BLVD	INDIAN RIVER RD	SALEM RD	1.93	7,455	2006	2		7,000	0	Low to mod.
11340620		225	VaB	INDEPENDENCE BLVD	SALEM RD	PRINCESS ANNE RD	0.77	19,722	2006	4		20,000	0	Low to mod.
11340630		225	VaB	INDEPENDENCE BLVD	PRINCESS ANNE RD	LYNNHAVEN PKWY	0.55	27,362	2006	4		30,000	3,000	Moderate
11340640		225	VaB	INDEPENDENCE BLVD	LYNNHAVEN PKWY	PLAZA TRAIL	1.65	34,071	2006	4		36,000	2,000	Severe
11340650		225	VaB	INDEPENDENCE BLVD	PLAZA TRAIL	HOLLAND RD	0.76	39,565	2006	4		39,000	-1,000	Severe

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2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11340660		225	VaB	INDEPENDENCE BLVD	HOLLAND RD	BAXTER RD	0.80	77,087	2006	8		82,000	5,000	Severe
11340670		225	VaB	INDEPENDENCE BLVD	BAXTER RD	I-264	0.23	n.a.	n.a.	8		85,000	n.a.	Severe
11340680		225	VaB	INDEPENDENCE BLVD	I-264	VA BEACH BLVD	0.67	85,143	2006	8		98,000	13,000	Severe
11340690		225	VaB	INDEPENDENCE BLVD	VA BEACH BLVD	JEANNE ST	0.28	54,424	2006	8		62,000	8,000	Moderate
11340700		225	VaB	INDEPENDENCE BLVD	JEANNE ST	PEMBROKE AVE	1.07	54,424	2006	6		65,000	11,000	Severe
11340710		225	VaB	INDEPENDENCE BLVD	PEMBROKE AVE	HAYGOOD RD	0.90	48,917	2006	6		55,000	6,000	Severe
11340720		225	VaB	INDEPENDENCE BLVD	HAYGOOD RD	NORTHAMPTON BLVD	1.77	41,071	2006	6		49,000	8,000	Moderate
11340730		225	VaB	INDEPENDENCE BLVD	NORTHAMPTON BLVD	SHORE DR	0.58	21,389	2006	4		29,000	8,000	Low to mod.
11340575		n.a.	VaB	INDIAN LAKES BLVD	FERRELL PKWY	INDIAN RIVER RD	0.45	12,526	2007	4		18,000	5,000	Low to mod.
11340740		407	VaB	INDIAN RIVER RD	CHESAPEAKE CL	MILITARY HWY	0.52	33,122	2007	6		39,000	6,000	Low to mod.
11340750		407	VaB	INDIAN RIVER RD	MILITARY HWY	PROVIDENCE RD	0.57	35,456	2006	6		38,000	3,000	Low to mod.
11340760		407	VaB	INDIAN RIVER RD	PROVIDENCE RD	I-64	0.66	37,367	2006	6		46,000	9,000	Moderate
11340770		407	VaB	INDIAN RIVER RD	I-64	CENTERVILLE TPK	0.57	80,391	2006	8		91,000	11,000	Beyond Severe
11340780		407	VaB	INDIAN RIVER RD	CENTERVILLE TPK	KEMPSVILLE RD	0.72	65,897	2006	8		71,000	5,000	Severe
11340790		407	VaB	INDIAN RIVER RD	KEMPSVILLE RD	FERRELL PKWY	0.24	72,190	2006	8		61,000	-11,000	Moderate
11340800		407	VaB	INDIAN RIVER RD	FERRELL PKWY	INDIAN LAKES BLVD	0.59	16,247	2006	4		17,000	1,000	Low to mod.
11340805		407	VaB	INDIAN RIVER RD	INDIAN LAKES BLVD	LYNNHAVEN PKWY	0.32	n.a.	n.a.	4		50,000	n.a.	Severe
11340810		407	VaB	INDIAN RIVER RD	LYNNHAVEN PKWY	INDEPENDENCE BLVD	1.36	14,821	2007	4		25,000	10,000	Low to mod.
11340820		407	VaB	INDIAN RIVER RD	INDEPENDENCE BLVD	ELBOW RD	0.83	10,667	2006	4		23,000	12,000	Low to mod.
11340825		407	VaB	INDIAN RIVER RD	ELBOW RD	S.E. PKWY & GRNBELT	1.12	5,966	2007	4		37,000	31,000	Severe
11340830		407	VaB	INDIAN RIVER RD	S.E. PKWY & GRNBELT	N LANDING RD	1.70	5,966	2007	4		22,000	16,000	Low to mod.
11340835		407	VaB	INDIAN RIVER RD	N LANDING RD	WEST NECK RD	2.84	5,314	2006	2		10,000	5,000	Low to mod.
11340845		407	VaB	INDIAN RIVER RD	WEST NECK RD	PRINCESS ANNE RD	1.97	5,314	2006	2		6,000	1,000	Low to mod.
11340850		933	VaB	INTERNATIONAL PKWY	LYNNHAVEN PKWY	LONDON BRIDGE RD	1.02	13,949	2007	4		15,000	1,000	Low to mod.
11340860		190	VaB	KEMPSVILLE RD	CHESAPEAKE CL	CENTERVILLE TPK	1.01	33,826	2006	6		43,000	9,000	Moderate
11340870		190	VaB	KEMPSVILLE RD	CENTERVILLE TPK	INDIAN RIVER RD	1.54	36,037	2007	4		37,000	1,000	Severe
11340880		190	VaB	KEMPSVILLE RD	INDIAN RIVER RD	PROVIDENCE RD	1.29	30,114	2006	4		34,000	4,000	Severe
11340890		190	VaB	KEMPSVILLE RD	PROVIDENCE RD	PRINCESS ANNE RD	0.98	33,162	2006	4		35,000	2,000	Severe
11340900		58	VaB	LASKIN RD	VA BEACH BLVD	FIRST COLONIAL RD	1.48	30,459	2006	4		32,000	2,000	Moderate
11340910		58	VaB	LASKIN RD	FIRST COLONIAL RD	WINWOOD DR	0.51	29,177	2006	6		33,000	4,000	Low to mod.
11340915		58	VaB	LASKIN RD	WINWOOD DR	BIRDNECK RD	0.98	27,230	2006	6		40,000	13,000	Low to mod.
11340920		58	VaB	LASKIN RD	BIRDNECK RD	PACIFIC AVE	0.97	29,515	2006	6		31,000	1,000	Low to mod.
11340930		58	VaB	LASKIN RD	PACIFIC AVE	ATLANTIC AVE	0.06	6,800	2006	4		13,000	6,000	Low to mod.
11340950		943	VaB	LONDON BR EXT	DAM NECK RD	SHIPPS CORNER RD	0.25	21,165	2007	4		26,000	5,000	Low to mod.
11340940		943	VaB	LONDON BR RD	GEN BOOTH BLVD	DAM NECK RD	2.22	23,521	2006	4		24,000	0	Low to mod.
11340960		943	VaB	LONDON BR RD	SHIPPS CORNER RD	INTERNATIONAL PKWY	1.34	31,826	2006	4		34,000	2,000	Severe
11340970		943	VaB	LONDON BR RD	INTERNATIONAL PKWY	POTTERS RD	2.08	25,423	2006	4		32,000	7,000	Severe
11340980		414	VaB	LYNNHAVEN PKWY	CHESAPEAKE CL	CENTERVILLE TPK	0.55	n.a.	n.a.	4		24,000	n.a.	Low to mod.
11340990	NEW	414	VaB	LYNNHAVEN PKWY	CENTERVILLE TPK	INDIAN RIVER RD	2.07	n.a.	n.a.	4		25,000	n.a.	Low to mod.
11341050		414	VaB	LYNNHAVEN PKWY	INDIAN RIVER RD	SALEM RD	2.01	19,010	2006	4		25,000	6,000	Low to mod.
11341060		414	VaB	LYNNHAVEN PKWY	SALEM RD	PRINCESS ANNE RD	0.48	24,886	2006	4		28,000	3,000	Moderate
11341070		414	VaB	LYNNHAVEN PKWY	PRINCESS ANNE RD	INDEPENDENCE BLVD	0.67	28,590	2006	4		28,000	-1,000	Moderate
11341080		414	VaB	LYNNHAVEN PKWY	INDEPENDENCE BLVD	ROSEMONT RD	0.56	37,241	2006	4		41,000	4,000	Severe
11341090		414	VaB	LYNNHAVEN PKWY	ROSEMONT RD	HOLLAND DR	0.92	31,147	2006	4		35,000	4,000	Severe
11341100		414	VaB	LYNNHAVEN PKWY	HOLLAND RD	LYNNHAVEN RD	1.06	36,176	2006	6		50,000	14,000	Severe
11341110		414	VaB	LYNNHAVEN PKWY	LYNNHAVEN RD	INTERNATIONAL PKWY	0.61	42,697	2006	6		45,000	2,000	Moderate
11341120		414	VaB	LYNNHAVEN PKWY	INTERNATIONAL PKWY	I-264	1.37	51,048	2007	6		53,000	2,000	Severe
11341130		414	VaB	LYNNHAVEN PKWY	I-264	VA BEACH BLVD	0.42	30,578	2006	4		24,000	-7,000	Low to mod.
11341140		13	VaB	MILITARY HWY	CHESAPEAKE CL	PROVIDENCE RD	0.16	35,978	2005	6		40,000	4,000	Low to mod.
11341150		13	VaB	MILITARY HWY	PROVIDENCE RD	INDIAN RIVER RD	0.50	30,168	2006	6		33,000	3,000	Low to mod.
11341160		13	VaB	MILITARY HWY	INDIAN RIVER RD	NORFOLK CL	0.98	48,047	2006	8		54,000	6,000	Low to mod.
11341170		165	VaB	N LANDING RD	CHESAPEAKE CL	INDIAN RIVER RD	1.12	10,884	2007	2		13,000	2,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11341180		165	VaB	N LANDING RD / NIMMO PKWY	INDIAN RIVER RD	SALEM RD	0.36	n.a.	n.a.	4		23,000	n.a.	Low to mod.
11341185		165	VaB	N LANDING RD	SALEM RD	WEST NECK RD	2.08	8,604	2006	2		9,000	0	Low to mod.
11341195		165	VaB	N LANDING RD	WEST NECK RD	PRINCESS ANNE RD	0.57	8,604	2006	2		15,000	6,000	Moderate
11341200		402	VaB	NEWTOWN RD	NORFOLK CL	DIAMOND SPRINGS RD	0.72	40,109	2006	4		43,000	3,000	Severe
11341210		947	VaB	NEWTOWN RD	DIAMOND SPRINGS RD	HAYGOOD RD	0.90	7,829	2006	2		9,000	1,000	Low to mod.
11340855	NEW	1083	VaB	NIMMO PKWY	SALEM RD	WEST NECK RD	1.86	n.a.	n.a.	2		15,000	n.a.	Moderate
11340856	NEW	1083	VaB	NIMMO PKWY	WEST NECK RD	PRINCESS ANNE RD	0.85	n.a.	n.a.	4		17,000	n.a.	Low to mod.
11340361	NEW	967	VaB	NIMMO PKWY	PRINCESS ANNE RD	HOLLAND RD	0.57	n.a.	n.a.	4		25,000	n.a.	Low to mod.
11340362	NEW	967	VaB	NIMMO PKWY	HOLLAND RD	GEN BOOTH BLVD	2.02	n.a.	n.a.	4		21,000	n.a.	Low to mod.
11340372			VaB	NIMMO PKWY	GEN BOOTH BLVD	UPTON DR	0.69	11,855	2006	4		18,000	6,000	Low to mod.
11341220		949	VaB	NORFOLK AVE	BIRDNECK RD	PACIFIC AVE	1.40	9,909	2007	2		10,000	0	Moderate
11341240		13	VaB	NORTHAMPTON BLVD	NORF CL / WESLEYAN DR	DIAMOND SPRINGS RD	0.98	70,586	2006	8		77,000	6,000	Severe
11341250		13	VaB	NORTHAMPTON BLVD	DIAMOND SPRINGS RD	INDEPENDENCE BLVD	2.13	37,954	2006	6		62,000	24,000	Low to mod.
11341260		13	VaB	NORTHAMPTON BLVD	INDEPENDENCE BLVD	SHORE DR	1.01	23,006	2006	6		39,000	16,000	Low to mod.
11340220		13	VaB	NORTHAMPTON BLVD	SHORE DR	TOLL PLAZA	0.91	8,207	2006	4		15,000	7,000	Low to mod.
11341310		60	VaB	PACIFIC AVE	ATLANTIC AVE	LASKIN RD	0.83	18,205	2007	4		31,000	13,000	Moderate
11341320		60	VaB	PACIFIC AVE	LASKIN RD	22ND ST	0.65	21,087	2007	4		26,000	5,000	Low to mod.
11341330		60	VaB	PACIFIC AVE	22ND ST	21ST ST	0.07	21,087	2007	4		25,000	4,000	Low to mod.
11341340		60	VaB	PACIFIC AVE	21ST ST	VA BEACH BLVD	0.27	19,046	2007	4		22,000	3,000	Low to mod.
11341350		60	VaB	PACIFIC AVE	VA BEACH BLVD	5TH ST	0.82	19,146	2007	4		19,000	0	Low to mod.
11341360		60	VaB	PACIFIC AVE	5TH ST	OLD RUDEE BLVD	0.28	20,980	2006	4		25,000	4,000	Low to mod.
11341370		190	VaB	PEMBROKE BLVD	WITCHDUCK RD	INDEPENDENCE BLVD	0.40	11,009	2006	4		16,000	5,000	Low to mod.
11341380		953	VaB	PLAZA TRAIL	PRINCESS ANNE RD	INDEPENDENCE BLVD	0.76	12,766	2006	4		23,000	10,000	Low to mod.
11341390		953	VaB	PLAZA TRAIL	INDEPENDENCE BLVD	HOLLAND RD	0.49	11,555	2007	4		22,000	10,000	Low to mod.
11341400		953	VaB	PLAZA TRAIL	HOLLAND RD	MARINA LAKES RD	0.24	11,379	2007	4		17,000	6,000	Low to mod.
11341410		953	VaB	PLAZA TRAIL	MARINA LAKES RD	ROSEMONT RD	1.41	11,379	2007	2		12,000	1,000	Low to mod.
11341420		953	VaB	PLAZA TRAIL	ROSEMONT RD	I-264	0.94	11,353	2006	4		12,000	1,000	Low to mod.
11341430		953	VaB	PLAZA TRAIL	I-264	VA BEACH BLVD	0.17	11,353	2006	4		11,000	0	Low to mod.
11341440		165	VaB	PRINCESS ANNE RD	NEWTOWN RD / NORF CL	KEMPSVILLE RD	1.90	29,434	2006	4		31,000	2,000	Moderate
11341450		165	VaB	PRINCESS ANNE RD	KEMPSVILLE RD	BAXTER RD	0.58	30,044	2007	4		31,000	1,000	Moderate
11341460		165	VaB	PRINCESS ANNE RD	BAXTER RD	PROVIDENCE RD	1.65	25,652	2006	4		24,000	-2,000	Low to mod.
11341470		165	VaB	PRINCESS ANNE RD	PROVIDENCE RD	FERRELL PKWY	0.76	36,039	2007	4		39,000	3,000	Severe
11341490		165	VaB	PRINCESS ANNE RD	FERRELL PKWY	LYNNHAVEN PKWY	0.48	49,341	2006	8		56,000	7,000	Moderate
11341500		165	VaB	PRINCESS ANNE RD	LYNNHAVEN PKWY	INDEPENDENCE BLVD	0.44	49,341	2006	8		57,000	8,000	Moderate
11341510		165	VaB	PRINCESS ANNE RD	INDEPENDENCE BLVD	DAM NECK RD	1.48	43,578	2001	8		46,000	2,000	Low to mod.
11341515		165	VaB	PRINCESS ANNE RD	DAM NECK RD	S.E. PKWY & GRNBELT	1.09	26,219	2006	4		35,000	9,000	Severe
11341520		165	VaB	PRINCESS ANNE RD	S.E. PKWY & GRNBELT	NIMMO PKWY	1.24	26,219	2006	4		33,000	7,000	Severe
11341521		165	VaB	PRINCESS ANNE RD	NIMMO PKWY	N LANDING RD	0.55	13,394	2006	2		10,000	-3,000	Low to mod.
11341530		149	VaB	PRINCESS ANNE RD	N LANDING RD	HOLLAND RD	0.27	n.a.	n.a.	2		10,000	n.a.	Low to mod.
11341540		149	VaB	PRINCESS ANNE RD	HOLLAND RD	SEABOARD RD	1.00	25,029	2006	2		20,000	-5,000	Severe
11341550		149	VaB	PRINCESS ANNE RD	SEABOARD RD	GEN BOOTH BLVD	1.00	n.a.	n.a.	4		15,000	n.a.	Low to mod.
11341555		615	VaB	PRINCESS ANNE RD	GEN BOOTH BLVD	SANDBRIDGE RD	0.85	14,059	2006	4		14,000	0	Low to mod.
11341562		615	VaB	PRINCESS ANNE RD	SANDBRIDGE RD	SEABOARD RD	1.76	8,359	2007	2		15,000	7,000	Moderate
11341567		615	VaB	PRINCESS ANNE RD	SEABOARD RD	INDIAN RIVER RD	0.38	8,359	2007	2		13,000	5,000	Low to mod.
11341570		615	VaB	PRINCESS ANNE RD	INDIAN RIVER RD	PUNGO FERRY RD	7.71	8,664	2007	2		12,000	3,000	Low to mod.
11341580		615	VaB	PRINCESS ANNE RD	PUNGO FERRY RD	NC STATE LINE	5.74	3,963	2006	2		4,000	0	Low to mod.
11341590		409	VaB	PROVIDENCE RD	CHESAPEAKE CL	MILITARY HWY	0.08	13,584	2006	4		18,000	4,000	Low to mod.
11341600		409	VaB	PROVIDENCE RD	MILITARY HWY	INDIAN RIVER RD	0.72	19,015	2007	4		20,000	1,000	Low to mod.
11341610		409	VaB	PROVIDENCE RD	INDIAN RIVER RD	KEMPSVILLE RD	2.28	24,784	2007	4		30,000	5,000	Moderate
11341620		409	VaB	PROVIDENCE RD	KEMPSVILLE RD	PRINCESS ANNE RD	2.02	15,341	2006	4		28,000	13,000	Moderate
11341630		1134	VaB	PUNGO FERRY RD	BLACKWATER RD	PRINCESS ANNE RD	2.73	3,539	2007	2		4,000	0	Low to mod.
11341640		411	VaB	ROSEMONT RD	DAM NECK RD	FACULTY BLVD	0.93	14,675	2007	2		14,000	-1,000	Moderate

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2030 volume and congestion are for average weekdays.

2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11341650		411	VaB	ROSEMONT RD	FACULTY BLVD	LYNNHAVEN PKWY	0.58	17,842	2006	2		20,000	2,000	Severe
11341660		411	VaB	ROSEMONT RD	LYNNHAVEN PKWY	HOLLAND RD	1.25	22,367	2006	4		25,000	3,000	Low to mod.
11341670		411	VaB	ROSEMONT RD	HOLLAND RD	PLAZA TRAIL	1.16	34,433	2007	6		44,000	10,000	Moderate
11341680		411	VaB	ROSEMONT RD	PLAZA TRAIL	I-264	0.61	33,900	2007	6		52,000	18,000	Severe
11341690		411	VaB	ROSEMONT RD	I-264	VA BEACH BLVD	0.14	n.a.	n.a.	6		80,000	n.a.	Beyond Severe
11341700		955	VaB	SALEM RD	N LANDING RD	ELBOW RD	2.60	4,782	2007	2		4,000	-1,000	Low to mod.
11341710		955	VaB	SALEM RD	ELBOW RD	INDEPENDENCE BLVD	0.90	9,446	2007	4		15,000	6,000	Low to mod.
11341720		955	VaB	SALEM RD	INDEPENDENCE BLVD	LYNNHAVEN PKWY	0.60	9,446	2007	4		19,000	10,000	Low to mod.
11341730		955	VaB	SALEM RD	LYNNHAVEN PKWY	PRINCESS ANNE RD	0.73	15,869	2006	6		19,000	3,000	Low to mod.
11341750		1140	VaB	SANDBRIDGE RD	PRINCESS ANNE RD	ATWOODTOWN RD	1.55	10,308	2007	4		15,000	5,000	Low to mod.
11341760		1140	VaB	SANDBRIDGE RD	ATWOODTOWN RD	SANDPIPER DR	3.18	7,014	2006	2		13,000	6,000	Moderate
11341765	NEW	965	VaB	SEABOARD RD	NIMMO PKWY	PA RD (@ PA ELEM)	0.59	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11341766		965	VaB	SEABOARD RD	PA RD (@ PA ELEM)	PA RD (@ PUNGO FLD)	2.42	2,864	2007	2		4,000	1,000	Low to mod.
11341770		60	VaB	SHORE DRIVE	NORFOLK CL	DIAMOND SPRINGS RD	0.21	36,117	2006	4		37,000	1,000	Severe
11341780		60	VaB	SHORE DRIVE	DIAMOND SPRINGS RD	INDEPENDENCE BLVD	1.82	29,521	2007	4		36,000	6,000	Moderate
11341790		60	VaB	SHORE DRIVE	INDEPENDENCE BLVD	NORTHAMPTON BLVD	1.01	20,341	2007	4		23,000	3,000	Low to mod.
11341800		60	VaB	SHORE DRIVE	NORTHAMPTON BLVD	GREAT NECK RD, N	3.47	41,357	2006	4		45,000	4,000	Severe
11341810		60	VaB	SHORE DRIVE	GREAT NECK RD, N	ATLANTIC AVE	4.61	13,855	2007	4		17,000	3,000	Low to mod.
11342090	NEW		VaB	S.E. PARKWAY	VA BEACH WCL	INDIAN RIVER RD	0.46	n.a.	n.a.	4	Y	45,000	n.a.	Low to mod.
11342100	NEW		VaB	S.E. PARKWAY	INDIAN RIVER RD	PRINCESS ANNE RD	2.74	n.a.	n.a.	4	Y	25,000	n.a.	Low to mod.
11342110	NEW		VaB	S.E. PARKWAY	PRINCESS ANNE RD	DAM NECK RD	3.50	n.a.	n.a.	4	Y	25,000	n.a.	Low to mod.
11342120	NEW		VaB	S.E. PARKWAY	DAM NECK RD	OCEANA BLVD	1.72	n.a.	n.a.	4	Y	20,000	n.a.	Low to mod.
11342130	NEW		VaB	S.E. PARKWAY	OCEANA BLVD	I-264	3.33	n.a.	n.a.	4	Y	30,000	n.a.	Low to mod.
11341778		n.a.	VaB	UPTON DR	NIMMO PKWY	SANDBRIDGE RD	0.72	20,106	2007	4		19,000	-1,000	Low to mod.
11341830		58	VaB	VA BEACH BLVD	NEWTOWN RD / NORF CL	WITCHDUCK RD	1.26	43,292	2006	8		53,000	10,000	Low to mod.
11341840		58	VaB	VA BEACH BLVD	WITCHDUCK RD	INDEPENDENCE BLVD	1.12	35,236	2005	8		50,000	15,000	Low to mod.
11341850		58	VaB	VA BEACH BLVD	INDEPENDENCE BLVD	ROSEMONT RD	2.22	43,357	2006	8		66,000	23,000	Moderate
11341860		58	VaB	VA BEACH BLVD	ROSEMONT RD	LYNNHAVEN PKWY	2.00	54,866	2006	8		68,000	13,000	Moderate
11341870		58	VaB	VA BEACH BLVD	LYNNHAVEN PKWY	GREAT NECK RD	0.83	53,109	2006	8		55,000	2,000	Low to mod.
11341880		58	VaB	VA BEACH BLVD	GREAT NECK RD	LASKIN RD	0.14	31,148	2006	8		46,000	15,000	Low to mod.
11341890	BUS	58	VaB	VA BEACH BLVD	LASKIN RD	FIRST COLONIAL RD	1.04	31,051	2007	4		33,000	2,000	Severe
11341900	BUS	58	VaB	VA BEACH BLVD	FIRST COLONIAL RD	OCEANA BLVD	0.45	20,021	2006	4		20,000	0	Low to mod.
11341910	BUS	58	VaB	VA BEACH BLVD	OCEANA BLVD	BIRDNECK RD	0.96	12,787	2006	4		20,000	7,000	Low to mod.
11341920	BUS	58	VaB	VA BEACH BLVD	BIRDNECK RD	PACIFIC AVE	1.18	12,231	2006	4		14,000	2,000	Low to mod.
11341930	BUS	58	VaB	VA BEACH BLVD	PACIFIC AVE	ATLANTIC AVE	0.07	12,231	2006	4		15,000	3,000	Low to mod.
11342020		961	VaB	WESLEYAN DR	NORFOLK CL	BAKER RD	0.43	19,652	2006	4		33,000	13,000	Moderate
11342030		961	VaB	WESLEYAN DR	BAKER RD	DIAMOND SPRINGS RD	0.54	15,554	2007	4		23,000	7,000	Low to mod.
11342040		961	VaB	WESLEYAN DR	DIAMOND SPRINGS RD	HAYGOOD DR	1.18	21,648	2007	4		29,000	7,000	Moderate
11342160	NEW		VaB	WEST NECK PKWY	DAM NECK / ELBOW	NIMMO PKWY	2.50	n.a.	n.a.	4		5,000	n.a.	Low to mod.
11342170	NEW		VaB	WEST NECK PKWY	NIMMO PKWY	N LANDING RD	0.30	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11342180	NEW		VaB	WEST NECK PKWY	N LANDING RD	INDIAN RIVER RD	1.25	n.a.	n.a.	4		9,000	n.a.	Low to mod.
11342140	NEW	1162	VaB	WEST NECK RD	NIMMO PKWY	N LANDING RD	0.19	n.a.	n.a.	4		2,000	n.a.	Low to mod.
11342150		1162	VaB	WEST NECK RD	N LANDING RD	INDIAN RIVER RD	2.05	3,149	2006	4		2,000	-1,000	Low to mod.
11342050		190	VaB	WITCHDUCK RD	PRINCESS ANNE RD	I-264	0.78	28,184	2006	6		45,000	17,000	Moderate
11342060		190	VaB	WITCHDUCK RD	I-264	VA BEACH BLVD	0.51	43,730	2006	6		61,000	17,000	Severe
11342070		190	VaB	WITCHDUCK RD	VA BEACH BLVD	PEMBROKE BLVD	1.58	19,206	2007	4		27,000	8,000	Moderate
11370010		60	Wb	BYPASS RD	RICHMOND RD	YORK CL	0.11	21,871	2004	4		35,000	13,000	Moderate
11370020		60	Wb	BYPASS RD	YORK CL	CAPITOL LANDING RD	0.66	13,304	2004	4		22,000	9,000	Low to mod.
11370040		5	Wb	CAPITOL LANDING RD	BYPASS RD	MERRIMAC TRL	0.62	6,859	2004	4		16,000	9,000	Low to mod.
11370030		970	Wb	COLONIAL PARKWAY	JAMES CITY CL	YORK CL	3.09	5,881	2001	2		10,000	4,000	Low to mod.
11370250		132	Wb	HENRY ST	LAFAYETTE ST	RTE 132Y	0.44	7,463	2004	2		6,000	-1,000	Low to mod.
11370050		915	Wb	IRONBOUND RD	JAMES CITY CL	LONGHILL CONN RD	0.18	10,764	2005	4		11,000	0	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
11370065		915	Wb	IRONBOUND RD	LONGHILL CONN RD	RICHMOND RD	0.66	8,710	2004	2		17,000	8,000	Severe
11370080		31	Wb	JAMESTOWN RD	JAMES CITY CL	RTE 199	0.06	15,201	2005	4		25,000	10,000	Low to mod.
11370090		5	Wb	JAMESTOWN RD	RTE 199	OLD RTE 5	0.27	12,010	2004	4		14,000	2,000	Low to mod.
11370100		5	Wb	JAMESTOWN RD	OLD RTE 5	COLLEGE CREEK	0.58	13,548	2004	4		16,000	2,000	Low to mod.
11370110		5	Wb	JAMESTOWN RD	COLLEGE CREEK	BOUNDARY ST	0.92	13,548	2004	2		16,000	2,000	Severe
11370120		900	Wb	LAFAYETTE ST	RICHMOND RD	HENRY ST	0.95	10,935	2004	2		14,000	3,000	Moderate
11370130		5	Wb	LAFAYETTE ST	HENRY ST	CAPITOL LANDING RD	0.85	10,846	2004	2		15,000	4,000	Moderate
11370140		5	Wb	LAFAYETTE ST	CAPITOL LANDING RD	PAGE ST	0.21	9,006	2004	2		11,000	2,000	Low to mod.
11370150		143	Wb	MERRIMAC TRL (RTE 143)	YORK CL @ FARM FRESH	CAPITOL LANDING RD	0.90	7,285	2004	2		10,000	3,000	Low to mod.
11370160		143	Wb	MERRIMAC TRL (RTE 143)	CAPITOL LANDING RD	YORK CL @ QUEENS CRK	0.37	9,141	2004	4		15,000	6,000	Low to mod.
11370175		321	Wb	MONTICELLO AVE	IRONBOUND RD	RICHMOND RD	1.17	16,182	2004	2		26,000	10,000	Beyond Severe
11370190		60	Wb	PAGE ST	CAPITOL LANDING RD	SECOND ST	0.31	12,309	2004	4		28,000	16,000	Low to mod.
11370200		60	Wb	PAGE ST	SECOND ST	YORK ST	0.25	14,714	2004	4		24,000	9,000	Low to mod.
11370340		945	Wb	QUARTERPATH RD	RTE 199	YORK ST	1.44	1,473	2001	2		10,000	9,000	Severe
11370210		60	Wb	RICHMOND RD	JAMES CITY CL	IRONBOUND RD	1.34	16,902	2004	4		32,000	15,000	Moderate
11370220		60	Wb	RICHMOND RD	IRONBOUND RD	BYPASS RD	0.33	26,495	2004	4		44,000	18,000	Severe
11370230		950	Wb	RICHMOND RD	BYPASS RD	MONTICELLO AVE	0.37	21,401	2004	4		36,000	15,000	Severe
11370240		950	Wb	RICHMOND RD	MONTICELLO AVE	BROOKS ST	0.38	13,668	2004	4		23,000	9,000	Low to mod.
11370245		950	Wb	RICHMOND RD	BROOKS ST	BOUNDARY ST	0.67	13,668	2004	2		20,000	6,000	Severe
11370260		132	Wb	RTE 132	RTE 132Y	YORK CL	0.16	9,244	2004	4		12,000	3,000	Low to mod.
11370270		132	Wb	RTE 132Y	COLONIAL PARKWAY	RTE 132	0.30	5,267	2004	4		8,000	3,000	Low to mod.
11370280		199	Wb	RTE 199	JAMES CITY WCL	JAMESTOWN RD	0.24	30,553	2004	4		45,000	14,000	Severe
11370290		199	Wb	RTE 199	JAMESTOWN RD	JAMES CITY ECL	0.16	33,026	2004	4		45,000	12,000	Severe
11370300		900	Wb	SECOND ST	PAGE ST	YORK CL	0.41	21,869	2004	4		23,000	1,000	Low to mod.
11370310			Wb	TREYBURN DR	MONTICELLO AVE	IRONBOUND RD	0.73	n.a.	n.a.	2		7,000	n.a.	Low to mod.
11370330		60	Wb	YORK ST	PAGE ST	JAMES CITY CL	0.60	12,483	2004	2		21,000	9,000	Severe
10990005		n.a.	York	BALLARD ST	MOORE HOUSE RD	COLONIAL PARKWAY	0.11	3,706	2004	2		7,000	3,000	Low to mod.
10990010		600	York	BIG BETHEL RD	VICTORY BLVD	HAMPTON HWY	1.09	6,900	2004	2		7,000	0	Low to mod.
10990020		600	York	BIG BETHEL RD	HAMPTON HWY	HAMPTON CL	0.96	14,165	2004	2		17,000	3,000	Severe
10990030		60	York	BYPASS RD	NWCL WMSBG	RTE 132	1.07	21,871	2004	4		36,000	14,000	Moderate
10990040		60	York	BYPASS RD	RTE 132	NCL WMSBG	0.05	13,304	2004	4		23,000	10,000	Low to mod.
10990050		950	York	COLONIAL PARKWAY	WMSBG CL	BALLARD ST	11.21	2,812	2001	2		6,000	3,000	Low to mod.
10990015		238	York	COOK RD	GOOSLEY RD	MOORE HOUSE RD	0.25	n.a.	n.a.	2		8,000	n.a.	Low to mod.
10990060		173	York	DENBIGH BLVD	NEWPORT NEWS CL	US 17	2.18	16,241	2006	2		20,000	4,000	Severe
10990540		782	York	EAST YORKTOWN RD	VICTORY BLVD	POQUOSON CL	0.29	5,370	2004	2		11,000	6,000	Low to mod.
10990070		105	York	FT EUSTIS BLVD	NEWPORT NEWS CL	US 17	2.36	17,842	2004	4		31,000	13,000	Low to mod.
10990280	NEW	1050	York	FT EUSTIS BLVD (RTE 1050)	US 17	OLD YORK-HAMPTON HWY (RTE 173)	1.50	n.a.	n.a.	4		19,000	n.a.	Low to mod.
10990080		17	York	G.W. HWY	NEWPORT NEWS CL	VICTORY BLVD	1.20	36,142	2004	4		46,000	10,000	Severe
10990090		17	York	G.W. HWY	VICTORY BLVD	HAMPTON HWY	0.64	39,963	2004	4		41,000	1,000	Severe
10990100		17	York	G.W. HWY	HAMPTON HWY	GDWN NK RD / DENBIGH B	3.45	56,485	2006	6		80,000	24,000	Beyond Severe
10990110		17	York	G.W. HWY	GDWN NK RD / DENBIGH B	FT EUSTIS BLVD	1.38	35,482	2004	4		47,000	12,000	Severe
10990120		17	York	G.W. HWY	FT EUSTIS BLVD	GOOSLEY RD	2.97	34,362	2004	4		54,000	20,000	Beyond Severe
10990130		17	York	G.W. HWY	GOOSLEY RD	GLOU CL	1.06	30,577	2004	4		44,000	13,000	Severe
10990140		173	York	GOODWIN NECK RD	US 17	WOLF TRAP RD	1.05	9,319	2004	2		11,000	2,000	Severe
10990490		238	York	GOOSLEY RD	COOK RD	US 17	0.52	n.a.	n.a.	2		4,000	n.a.	Low to mod.
10990480		238	York	GOOSLEY RD	US 17	CRAWFORD RD	0.30	6,489	2004	2		9,000	3,000	Low to mod.
10990470		238	York	GOOSLEY RD	CRAWFORD RD	OLD WILLIAMSBURG RD	0.89	6,489	2004	2		8,000	2,000	Low to mod.
10990160		134	York	HAMPTON HWY	US 17	VICTORY BLVD	0.72	23,062	2004	4		34,000	11,000	Moderate
10990170		134	York	HAMPTON HWY	VICTORY BLVD	BIG BETHEL RD	1.54	33,615	2004	4		37,000	3,000	Severe
10990175		134	York	HAMPTON HWY	BIG BETHEL RD	NCL HAMPTON	1.77	27,998	2004	4		30,000	2,000	Low to mod.
10990210		143	York	MERRIMAC TRL (RTE 143)	JCC CL @ GROVE	I-64 RAMP (@ GROVE)	0.66	10,195	2004	4		24,000	14,000	Low to mod.
10990220		143	York	MERRIMAC TRL (RTE 143)	I-64 RAMP (@ GROVE)	RTE 199	1.75	14,817	2004	4		30,000	15,000	Low to mod.

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2030 Long Range Plan Volume and Congestion Forecast

THID	PRE	RTE	JUR	ROAD	FROM	TO	Dist. (mi)	Recent Count	Recent Count Year	2030 Total Lanes	2030 Toll	2030 FORECAST	CHANGE (recent to 2030)	2030 CONGESTION
10990230		143	York	**MERRIMAC TRL (RTE 143)**	RTE 199	JCC CL @ GOV'T RD	0.09	15,902	2004	4		**26,000**	10,000	Low to mod.
10990240		143	York	**MERRIMAC TRL (RTE 143)**	JCC CL @ PENN. RD	SECOND ST	0.50	n.a.	n.a.	4		**27,000**	n.a.	Low to mod.
10990250		143	York	**MERRIMAC TRL (RTE 143)**	SECOND ST	SCL WLMBG	0.26	7,247	2004	2		**10,000**	3,000	Low to mod.
10990190		143	York	**MERRIMAC TRL (RTE 143)**	WLMBG CL @ QUEENS CRK	RTE 132	0.22	9,154	2004	4		**15,000**	6,000	Low to mod.
10990200		143	York	**MERRIMAC TRL (RTE 143)**	RTE 132	I-64	0.60	17,104	2004	4		**24,000**	7,000	Low to mod.
10990510		603	York	**MOORETOWN RD**	RTE 199	OLD MOORETOWN RD	0.95	n.a.	n.a.	4		**11,000**	n.a.	Low to mod.
10990520		603	York	**MOORETOWN RD**	OLD MOORETOWN RD	WALLER MILL RD	3.50	4,622	2004	2		**11,000**	6,000	Low to mod.
10990180		646	York	**NEWMAN RD**	I-64	FENTON MILL RD	0.46	2,528	2004	4		**16,000**	13,000	Low to mod.
10990460		238	York	**OLD WILLIAMSBURG RD**	GOOSLEY RD	NEWPORT NEWS CL	2.20	10,535	2006	2		**12,000**	1,000	Low to mod.
10990550		641	York	**PENNIMAN RD**	RTE 199	COLONIAL PARKWAY	1.19	5,034	2006	2		**9,000**	4,000	Low to mod.
10990260		60	York	**POCAHONTAS TR**	JCC CL @ 199	GROVE INTERCHANGE	1.82	n.a.	n.a.	4		**36,000**	n.a.	**Moderate**
10990270		60	York	**POCAHONTAS TR**	GROVE INTERCHANGE	JCC CL @ BUSCH GRDNS	0.71	11,980	2004	2		**13,000**	1,000	Low to mod.
10990290		636	York	**RICHNECK RD**	WCL NN	FORT EUSTIS BLVD	0.90	1,425	2004	2		**9,000**	8,000	Low to mod.
10990410		132	York	**RTE 132**	WMSBG CL	BYPASS RD (RTE 60)	0.10	9,244	2004	4		**12,000**	3,000	Low to mod.
10990400		132	York	**RTE 132**	BYPASS RD (RTE 60)	CAPITOL LNDG RD (RTE 143)	1.16	9,373	2004	2		**10,000**	1,000	Low to mod.
10990415		199	York	**RTE 199**	I-64	MOORETOWN RD	0.85	20,584	2004	4		**34,000**	13,000	Low to mod.
10990425		199	York	**RTE 199**	MOORETOWN RD	JCC CL	0.57	19,733	2004	4		**32,000**	12,000	Low to mod.
10990435		199	York	**RTE 199**	RTES 60 & 143 / JCC CL	I-64	1.00	29,265	2006	4		**45,000**	16,000	Low to mod.
10990450		199	York	**RTE 199**	I-64	PENNIMAN RD	0.90	7,993	2004	4		**25,000**	17,000	Low to mod.
10990300		162	York	**SECOND ST**	ECL WMSBG	MERRIMAC TRAIL	0.17	21,869	2004	4		**23,000**	1,000	Low to mod.
10990310		171	York	**VICTORY BLVD**	NEWPORT NEWS CL	US 17	0.85	52,743	2004	6		**62,000**	9,000	**Severe**
10990320		171	York	**VICTORY BLVD**	US 17	HAMPTON HWY	0.35	30,801	2004	4		**34,000**	3,000	**Severe**
10990330		171	York	**VICTORY BLVD**	HAMPTON HWY	BIG BETHEL RD	1.02	20,450	2004	2		**22,000**	2,000	**Beyond Severe**
10990340		171	York	**VICTORY BLVD**	BIG BETHEL RD	EAST YORKTOWN RD	1.25	22,254	2004	2		**26,000**	4,000	**Beyond Severe**
10990345		171	York	**VICTORY BLVD**	EAST YORKTOWN RD	POQUOSON CL	0.23	14,073	2004	2		**17,000**	3,000	**Severe**
10990530		713	York	**WALLER MILL RD**	RTE 60	MOORETOWN RD	0.18	5,174	2004	4		**23,000**	18,000	Low to mod.

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APPENDIX D- DEVELOPMENT OF 2030 RESIDENTIAL DATA BY TAZ

DEVELOPMENT OF 2030 RESIDENTIAL DATA BY TAZ

Key:

HH = household
GQ = all group quarters types
GQNI = non-institutionalized group quarters
1990 and 2000 refer to the 1990 and 2000 Census
Adult = person 18 years or older

2030 Pop = [(2000 HH Pop / 2000 HH) * (2030 HH)] + 2000 GQ Pop

2000 Autos = [(1990 HH Autos / 1990 HH) * (2000 HH)] + [(2000 GQNI Pop) * (0.386 Autos per GQNI person)]

2030 Autos = (2000 Autos / 2000 Pop) * 2030 Pop

2000 Workers by place of residence = (1990 Workers / 1990 Total Pop) * (2000 Total Pop)

2030 Workers by place of residence = (2000 Workers / 2000 Pop) * 2030 Pop

0.386 autos per GQNI person was calculated from:

(one-third of an auto per GQNI person in 1990) * [(0.96 autos per adult in 2000) / (0.83 autos per adult in 1990)]

APPENDIX E- HIGHWAY CONGESTION THRESHOLDS

2030 Highway Volumes and Congestion Thresholds

The initial 2030 forecast volumes were calculated using the "change method":

2030 Forecast = (2000 count) + (2030 model volume – 2000 model volume)

If there was no 2000 count available, then: 2030 Forecast = 2030 model volume

While the "change method" resulted in reasonable forecasts for most of the 1,300+ segments, some of the forecasts were lower than the recent counts. These cases were reviewed and when a decline in traffic wasn't valid, the model growth per year was applied to the recent traffic count (e.g., model indicates a growth of 500 each year; the recent traffic count is 40k in 2005; 40k plus 500/year for 25 years results in a 2030 forecast of 52,500 vpd). All forecasts were then further evaluated for reasonableness and general consistency with previous studies.

The congestion levels are based on the criteria in the following table, expressed both as vehicles/day/lane and as volume to capacity ratios (V/C ratio). It should be noted that the capacities used in the region's travel demand forecast model were increased off-line of the model by 25% for interstates/freeways and by 34% for arterials/collectors prior to the below thresholds being calculated. This adjustment was done as a means of "calibrating" the 2000 model's congestion levels more closely with the congestion levels reported in the 2001 Congestion Management System report.

THRESHOLD FOR START OF LOS G: "beyond severe congestion" (vehicles per day per lane)

	CBD	CBD Fringe	Urban	Suburban	Rural
Interstate / Fwy.	24,600	24,600	25,000	25,400	26,400
Principal Arterial	11,300	11,700	12,300	12,500	12,900
Minor Arterial	9,400	10,300	10,400	10,700	11,100
Collector	7,000	7,000	7,100	7,400	10,500

THRESHOLD FOR START OF LOS F: "severe congestion" (vehicles per day per lane)

	CBD	CBD Fringe	Urban	Suburban	Rural
Interstate / Fwy.	19,000	19,000	19,200	19,500	20,300
Principal Arterial	8,700	9,000	9,400	9,600	9,900
Minor Arterial	7,300	7,900	8,000	8,200	8,500
Collector	5,400	5,400	5,500	5,700	8,000

THRESHOLD FOR START OF LOS E: "severe congestion" (vehicles per day per lane)

	CBD	CBD Fringe	Urban	Suburban	Rural
Interstate / Fwy.	17,800	17,800	18,100	18,400	19,100
Principal Arterial	8,400	8,600	9,100	9,200	9,500
Minor Arterial	7,000	7,600	7,700	7,900	8,200
Collector	5,100	5,100	5,300	5,500	7,700

THRESHOLD FOR START OF LOS D: "moderate congestion" (vehicles per day per lane)

	CBD	CBD Fringe	Urban	Suburban	Rural
Interstate / Fwy.	14,200	14,200	14,400	14,700	15,200
Principal Arterial	7,000	7,200	7,500	7,700	8,000
Minor Arterial	5,800	6,300	6,400	6,600	6,800
Collector	4,300	4,300	4,400	4,600	6,400

LOS AS V/C RATIOS

	LOS D	LOS E	LOS F	LOS G
Interstate / Fwy.	0.75	0.94	1.00	1.30
Art. / Collector	0.80	0.96	1.00	1.30

2030LRTP_FORECAST.xls and 3.0_FORECAST_LOS.S

APPENDIX F- WILLIAMSBURG AREA TRANSPORT (WAT) 2030 PLAN

WAT 2030 PLAN PROPOSAL

NEW INITIATIVES

Description	Primary Corridors	Annual Operating Cost	Additional Capital
Shuttle service between Williamsburg Transportation Center, College of William and Mary Residential/Retail Centers, pedestrian-friendly in nature located in Colonial Williamsburg, City of Williamsburg (High Street), and James city County (New Town)	Boundary Street, Lafayette Street, Richmond Road, and Monticello Avenue	$215,000	$800,000 (Two Alternative Fueled Street Car Trolleys)
Vehicle Replacement Plan	Existing service corridors	N/A	$39,863,000 Four Light-Duty vehicles, 31 medium light-duty vehicles, 6 medium medium-duty buses, 14 medium heavy-duty vehicles, 58 large heavy-duty vehicles, 12 support vehicles
Employee Commuter Service (Surry County to Williamsburg region)	Route 31	$100,000*	$550,000 (Four 30-foot medium-duty buses)
Two Transportation Centers and shelter - 85, approximately five per year	Existing Service Corridors		$4,520,000
Medical Circulator (Doctors Hospital of Williamsburg Proposal)	Route 60, Internal Road System to be developed	$100,000*	$275,000 (Two 30-foot medium-duty buses)

*Currently not in Williamsburg Area Transport Plan

Total Annual Ridership - 2.8 million FY 07 core service, Shuttle service, Employee Commuter and Medical Circulator service to add 82,000 passengers on annual basis

REVENUE SOURCES

	Annual Operating	Replacement/New Capital	Total
Federal	$ 116,200	$36,606,400	$36,722,600
State	$ 91,300	$ 4,575,800	$ 4,667,100
Local	$ 103,750	$ 4,575,800	$4,679,550
Fare/Student Fees	$ 103,750	- 0 -	$ 103,750
Total	$415,000	$ 45,758,000	$ 46,173,000

*Expenses/Revenues based upon FY 2006 baseline adjusted for inflation and anticipated Federal, State, and local participation. RSTP/CMAQ grants would be sought to offset costs.

APPENDIX G- AIDS TO DEVELOPMENT OF CANDIDATE PROJECTS LIST

This appendix contains materials distributed to Team2030 at its July 6, 2005 meeting to aid members in developing lists of candidate projects.

Document #1- “Developing a List of Candidate 2030 Projects using Highway Deficiencies Forecast”

Document #2- “2030 Highway Deficiencies Highlights”

Document #3- “2030 Existing Plus Committed Highway Congestion Maps”

Document #4- “2030 Existing Plus Committed Highway Forecast”

Document #1

“Developing a List of Candidate 2030 Projects using Highway Deficiencies Forecast”

Developing a List of Candidate 2030 Projects using Highway Deficiencies Forecast

Given limited construction dollars, only cost-effective projects should be built in Hampton Roads. The effects which projects are designed to produce—greater throughput, higher efficiency (speed), improved safety, and increase accessibility—are mostly related to congestion on the no-build highway network. Projects which serve congested corridors (via widenings or new alignments) tend to cost-effectively improve throughput, efficiency, accessibility, and even safety.

The growth (and decline) of population and employment in the various areas of Hampton Roads expected by the year 2030 will impact the ability of the region's highways to move people and goods in a timely and safe manner. PDC staff has plugged 2030 socioeconomic data and committed highway projects* into the regional model to **identify expected future congestion and thereby assist local government in proposing candidate 2030 Plan projects.**

Since the total population of Hampton Roads is expected to increase approximately 30% from 2000 to 2030, the traffic on our roadways will increase, on average, roughly 30%. If expected socioeconomic growth was spread evenly across the region, one could simply use current congestion to guide the selection of candidate congestion-relief projects. But growth is expected to be concentrated in certain areas: outside the beltway for population, and along the region's primary corridors for employment (see "Hampton Roads 2000 and 2030 Socioeconomic Data by TAZ", HRPDC, Dec. 2004). Therefore, traffic growth will vary across the network.

One doesn't need a computer model to forecast higher congestion, for example, on Indian River Road and no congestion on Old Buckroe Road. Therefore, mainly new information garnered from the model is discussed below.

For this analysis, **a new category of congestion has been introduced**. Because so much of the region's network will be congested, and because the amount of money available to address this congestion is decreasing, those roadways expected to carry 30% more trips than their capacity have been labeled "**beyond severe**" to differentiate them from roadways with simply "severe" congestion.

*Committed highway projects were either under construction as of December 2004 or had a construction ad date in the FY05-08 TIP. This analysis assumes these committed projects and the existing highway network are in place.

Document #2

“2030 Highway Deficiencies Highlights”

2030 Highway Deficiencies Highlights

Regional Interstates

- The sections of **I-264** which are expected to be **beyond severe** are the **Downtown Tunnel** and the section from I-64 to Independence Blvd.
- Essentially the entire length of **I-64** in Hampton Roads (from New Kent Co to Bowers Hill) is expected to have at least severe congestion.
- The 13-mile 4-lane section of **I-64** from Rte 199 at Kingsmill to Jefferson Ave at PHF airport is expected to be **beyond severe**.
- This **I-64** congestion will force vehicles onto parallel US 60 (Warwick Blvd) and Rte 143 (Jefferson Ave), causing, in part, the severe congestion of those routes.
- Volume growth is so high on **I-64** on the Peninsula (e.g. 77,000 additional trips between Oyster Point Rd and JC Morris Blvd), that much of the newly completed 8-lane section from Jefferson Ave at PHF to I-664 will be **beyond severe**.
- Although the current volume at **HRBT** is approximately 90k, the 2030 demand* there is 130k, or 40% higher.
- The **High-Rise Bridge** volume is expected to increase only 8k by 2030, or 9%.
- The 2030 volumes on **I-64** from GW Hwy (at Deep Creek) to Bowers Hill will be higher than today's High-Rise Bridge volume.
- **I-664** congestion will be severe from Bowers Hill to Bridge Rd (US 17).
- The **MMBT** will experience only moderate (LOS D) congestion in 2030.
- The **average increase in traffic is over 20k** vehicles per day for the region's interstates on a typical weekday.

*"Demand" represents the number of vehicles which would travel a given segment if there were no congestion (i.e. adequate capacity) on that segment and on the entire network.

Regional Arterial Linkages

- The volume of traffic on **Centreville Tnpk**, from Etheridge Manor Blvd (in Chesapeake) to Indian River Rd (in Va. Beach) is expected to double and triple, becoming severe or **beyond severe** along this entire section. The demand along this section is approximately 50k vehicles per day, or higher than the current volume on Battlefield Blvd at the Chesapeake Hospital.

- Surprisingly, 2-lane **Elbow Rd**, from Chesapeake to Va. Beach, is NOT expected to be severely congested in 2030 (with no SEPG).

- The section of **US 58/460** along the Hampton Roads Airport—which links Chesapeake to Suffolk, links Southside to Richmond and points north, and links all of Hampton Roads to points west and south—is expected to have severe congestion, due to increased volume combined with a lack of access controls (i.e. having intersections instead of interchanges).

- The volume along the 12 miles of **Volvo Pkwy / Lynnhaven Pkwy** from Greenbrier Pkwy (in Chesapeake) to I-264 (in Va. Beach) is expected to have severe, and in two segments **beyond severe**, congestion; indicating the pressure on this VB-Chesapeake link.

- The volume on the **James River Bridge** is expected to almost double to 52k vpd. The bridge itself, as a limited access facility, can handle this volume, but US 17 at either end—from Smiths Neck Rd to Brewers Neck Blvd (in Isle of Wight) and from River Rd to Mercury Blvd (in Newport News)—may need improvement.

- The 2-lane **Ft. Eustis Blvd** from near Jefferson Ave to Richneck Rd will have **beyond severe** congestion.

- **US 17** will have **beyond severe** congestion from Cook Rd (in York County) to I-64 (in Newport News). The worst congestion, by far, along this section will occur between Hampton Hwy and Lakeside Dr with 77k vehicles on 4 lanes.

- **Wythe Creek Rd** will be severely congested from Alphus St (in Poquoson) to Cary's Chapel Rd (at the Poquoson/Hampton CL), it will have **beyond severe** congestion from Cary's Chapel Rd to Armistead Ave (in Hampton).

- The volume on **US 17 / Bridge Rd** will almost double in Suffolk between Bennetts Pasture Rd and Western Freeway / I-664 becoming severely congested. In addition to serving northern Suffolk, this roadway is heavily used by traffic to and from Smithfield / Northern Isle of Wight.

- The volume on **Rte 10 / Godwin Blvd** will almost double in Suffolk between Everetts Rd and the Isle of Wight CL becoming severely congested. In addition to

serving northern Suffolk, this roadway is heavily used by traffic to and from Smithfield / Northern Isle of Wight.

- Because of increasing population and employment and because of the traffic signals along this section, **Rte 199** from Rte 5 (in JCC) to Mounts Bay Rd (entrance to Kings Mill) will have severe congestion (even with the 4 lanes currently under construction).

- The **Midtown Tunnel** will continue to have congestion problems with an additional 18k vpd expected on a typical weekday.

- **Portsmouth Blvd** between I-664 (in Chesapeake) and Elmhurst Ln (in Portsmouth) is expected to be severely congested.

- Traffic is expected to grow by up to 23k vpd on **Northampton Blvd** between I-64 and Independence Blvd.

Chesapeake

- The volume on the newly widened **Great Bridge Bridge** is expected to increase 77% and have **beyond severe** congestion.

- **Battlefield Blvd** from Cedar Rd to Johnstown Rd will have **beyond severe** congestion. Although the cost per acre of additional r.o.w. in this area would be high, this is a short segment.

- The volume of traffic on **Butts Station Rd** is expected to more than double, becoming **beyond severe**.

- The two-lane **Steel Bridge** will have **beyond severe** congestion and a demand of 57k, which would fill a 6-laned signalized arterial to capacity.

- Not surprisingly, the **Deep Creek Bridge** will have **beyond severe** congestion.

- The volume on Chesapeake's **Greenbrier Pkwy** "gateway" (from I-64 to Eden Way) will increase 32% and have **beyond severe** congestion.

- Surprisingly, the volumes on **Military Hwy** from Bowers Hill to Va. Beach are not expected to exceed 40k.

- The volume on **Mt Pleasant Rd** from Centerville Tnpk to Great Bridge Bypass is expected to increase more than 50% and have **beyond severe** congestion.

- The **Oak Grove Connector** is expected to have severe congestion.

- The volume on **Great Bridge Bypass** from Mt Pleasant Rd to Kempsville and Battlefield Roads (which includes the bridge over the ICW) is expected to increase 50% and cause severe congestion.

Gloucester

- Not surprisingly, **US 17** will be severely congested in 2030.

Hampton

- **Big Bethel Rd** between Todd's Lane and Thomas Nelson Dr will be severely congested with an additional 7k vehicles per day (vpd).

- A large growth in traffic volume (increase of up to 26k vpd) is expected on the **Hampton Roads Center Pkwy** between Newport News and I-64.

- The ADT on **Mercury Blvd** is expected to grow by up to 11k vpd between Queen St and Armistead Ave but congestion will remain moderate.

Isle of Wight

- **Rte 10 Bypass** (from S. Church St. to Main St.) is forecasted to have "severe" congestion, but if access is limited to interchanges (as at Fairway Drive) and improvements are made at the Main St. intersection, this segment may operate well thru 2030.

- **Smiths Neck Rd** from US 17 to Reynolds Dr will be severely congested.

- **Main St / US 258** in Smithfield on the west side of the Bypass will be severely congested.

James City County

- **Rte 5** from Ironbound Rd to Rte 199 will be severely congested.

- There will be severe congestion on **Longhill Rd** from Centerville Rd to Rte 199 and a growth in traffic of 18k vpd on **Longhill Connector Rd.**

- Portions of **Rte 60** leading to Williamsburg (from Croaker Rd to Rte 199 and from Newport News to Grove interchange) will be severely congested.

Newport News

- Three connections between Warwick Blvd and Jefferson Ave in the central part of the city—**Denbigh Blvd**, **JC Morris Blvd**, and **Oyster Point Rd**—will all have **beyond severe** congestion.

- Given the level of congestion on I-64, it is surprising that the only section of **Jefferson Ave** that will experience **beyond severe** congestion is Bland Blvd to I-64.

- Of the two main linear arterials, **Warwick Blvd** will be much more congested than Jefferson Ave. Warwick Blvd will have **beyond severe** congestion for almost the entire section from Yorktown Rd to Main St. By far the worst congestion will occur between Atkinson Blvd and Oyster Point Rd, carrying approximately 70k vehicles on 4 lanes! An examination of the unconstrained demand along this section indicates that this volume would occur even with improvement to the section of I-64 which parallels. This growth in traffic appears to be due to population growth planned for this corridor.

Norfolk

- **Hampton Blvd** between Brambleton Ave and 38th St will be severely congested.

- **Military Highway** near I-64 is expected to be severe or worse in congestion.

- All of **Newtown Rd** is expected to be severely congested or worse, drawing up to an additional 15k vpd.

- The demand for **Tidewater Dr** exceeds its capacity by over 40% for most of the portion between I-64 and Cromwell Rd and will result in severe congestion.

- There is growth in traffic volume of approximately 15k vpd expected on **Va Beach Blvd** between Azalea Garden Rd and Kempsville Rd.

Poquoson

- Population is forecasted to grow 58% in Poquoson from 2000 to 2030. This will contribute to the severe congestion on the entire length of **Rte 171 / Victory Blvd / Little Florida Rd** from I-64 to Poquoson Ave.

Portsmouth

- Traffic on the **Western Fwy** is expected to grow by more than 30k vpd (more than double the recent volumes) and result in severely congested segments.

Suffolk

- Volume on **Nansemond Pkwy** from Kings Hwy to Chesapeake CL will double and cause **beyond severe** congestion to this 2 lane road.

- Volume on **Wilroy Rd / Nansemond Pkwy** from Suffolk Bypass to Kings Hwy will more than double and cause severe congestion to this 2 lane road.

Va. Beach

- Most of **Dam Neck Rd** will be at least severely congested and the portion between Holland Rd and London Bridge Rd will have a very high demand (75k vpd).

- The volume on **Holland Rd** between Dam Neck Rd and Nimmo Pkwy is expected to grow by 15k vpd, almost double its recent volume.

- Most of **Independence Blvd** will be severely congested with the highest growth in traffic being between I-264 and Va Beach Blvd (increase of 18k vpd).

- **Lynnhaven Pkwy** south of I-264 will have a growth in traffic of up to 13k vpd.

- **Princess Anne Rd** between Dam Neck Rd and Nimmo Pkwy is expected to grow by up to 22k vpd.

- The demand for the use of **Providence Rd** between Indian River Rd and Princess Anne Rd is very high (up to 4 times its capacity).

- The use of **Va. Beach Blvd** will grow by approximately 20k vpd between Newtown Rd. and Rosemont Rd.

- The traffic on **Wesleyan Dr** is expected to grow by up to 15k vpd and result in severe congestion at Baker Rd.

Williamsburg

- Volume on **Ironbound Rd** from Longhill Connector Rd to Treyburn Dr Extension will more than double, causing severe congestion. 36k vehicles per day will desire to use this route.

- Volume on **Monticello Ave** from Ironbound Rd to Richmond Rd will grow by 10k vpd, causing **beyond severe** congestion.

- **Richmond Rd** will be severely congested from Ironbound Rd to Jamestown Rd.

York

- All of **G.W. Hwy** will be severely congested or worse, with up to an additional 23k vpd using the highway. Also, the roads feeding into G.W. Hwy (**Denbigh Blvd, Ft Eustis Blvd, Goodwin Neck Rd, Victory Blvd**) will be severely congested.

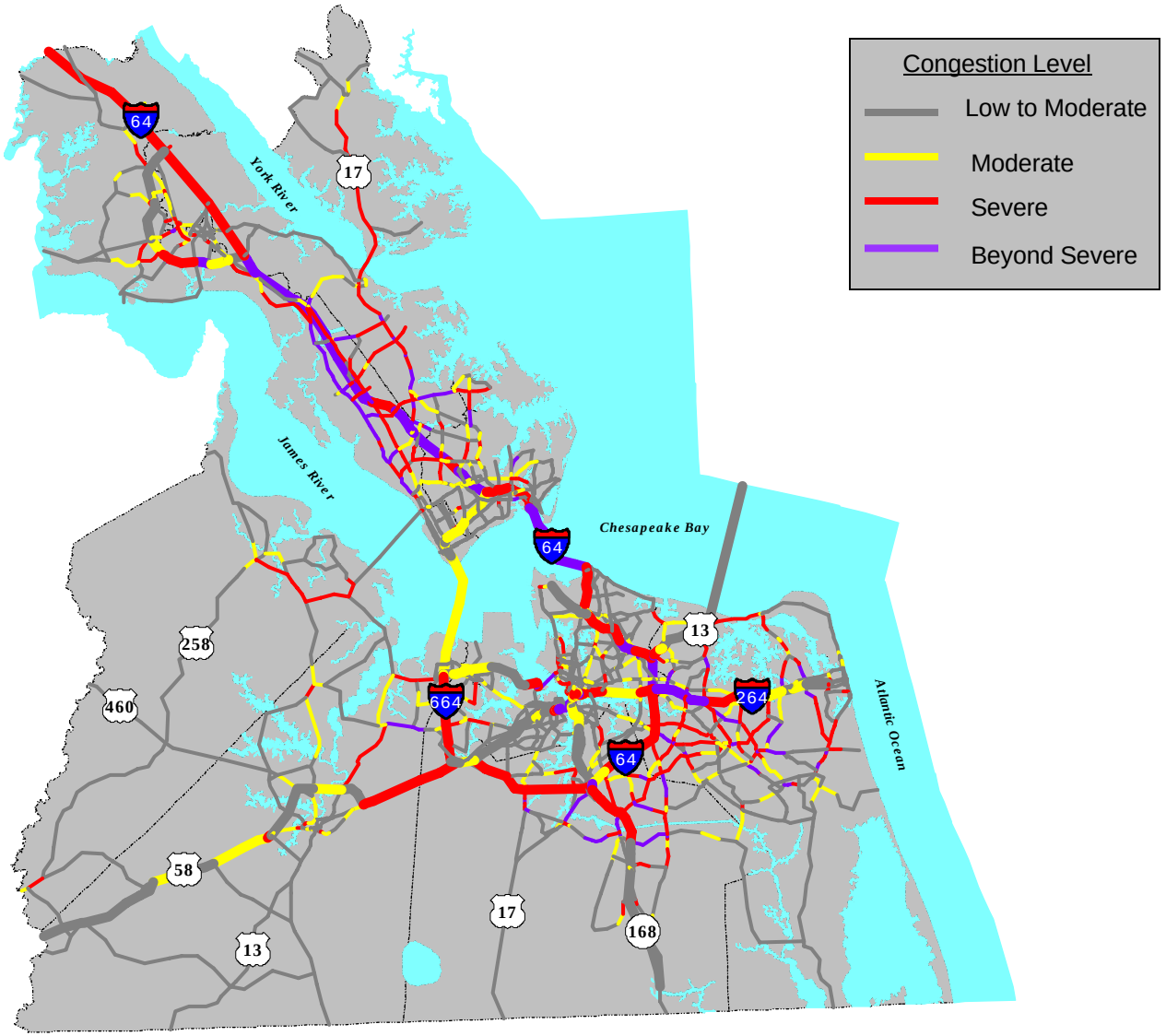
- All of **Victory Blvd** will be severely congested or worse, with an increase in traffic of up to 11k vpd.

- **Bypass Rd** is expected to have an increase in traffic of up to 15k vpd.

Document #3

“2030 Existing Plus Committed Highway Congestion Maps”

2030 Existing Plus Committed Highway Congestion Map

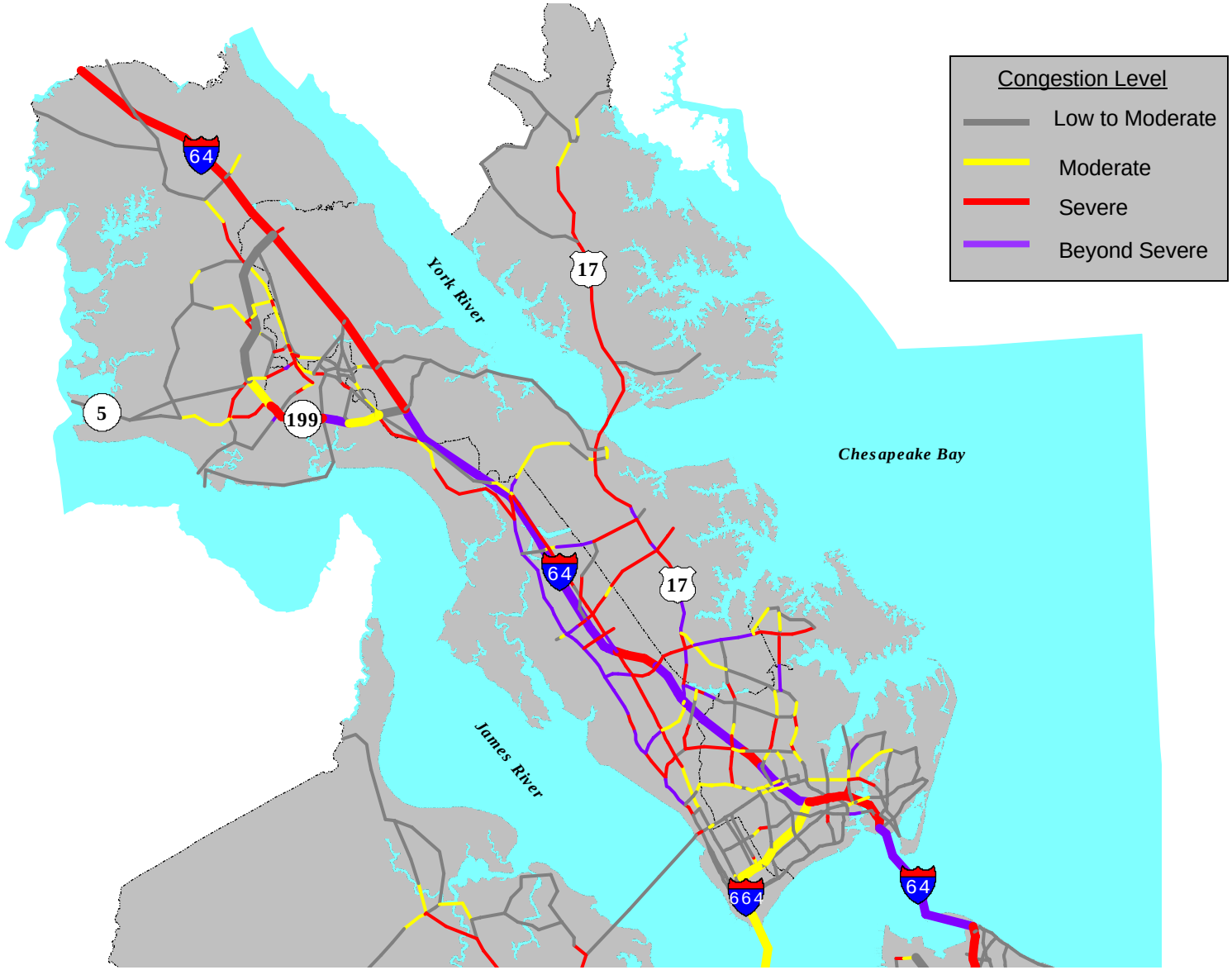


"Existing Plus Committed" is existing facilities plus roads with a construction ad date in the FY05-08 TIP or under construction as of December 2004.

HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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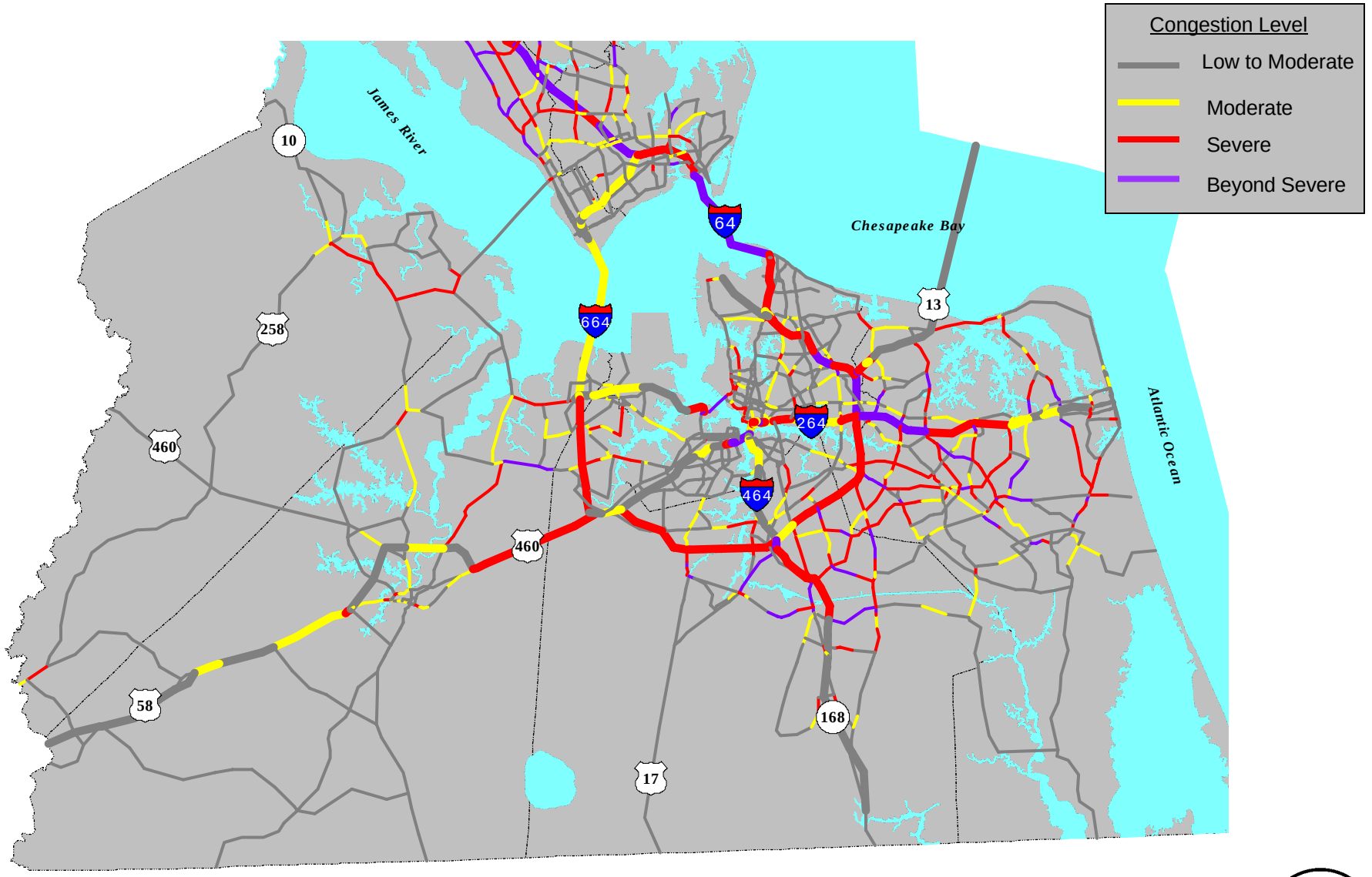
HAMPTON ROADS PLANNING DISTRICT COMMISSION
June 2005

2030 Existing Plus Committed Highway Congestion Map



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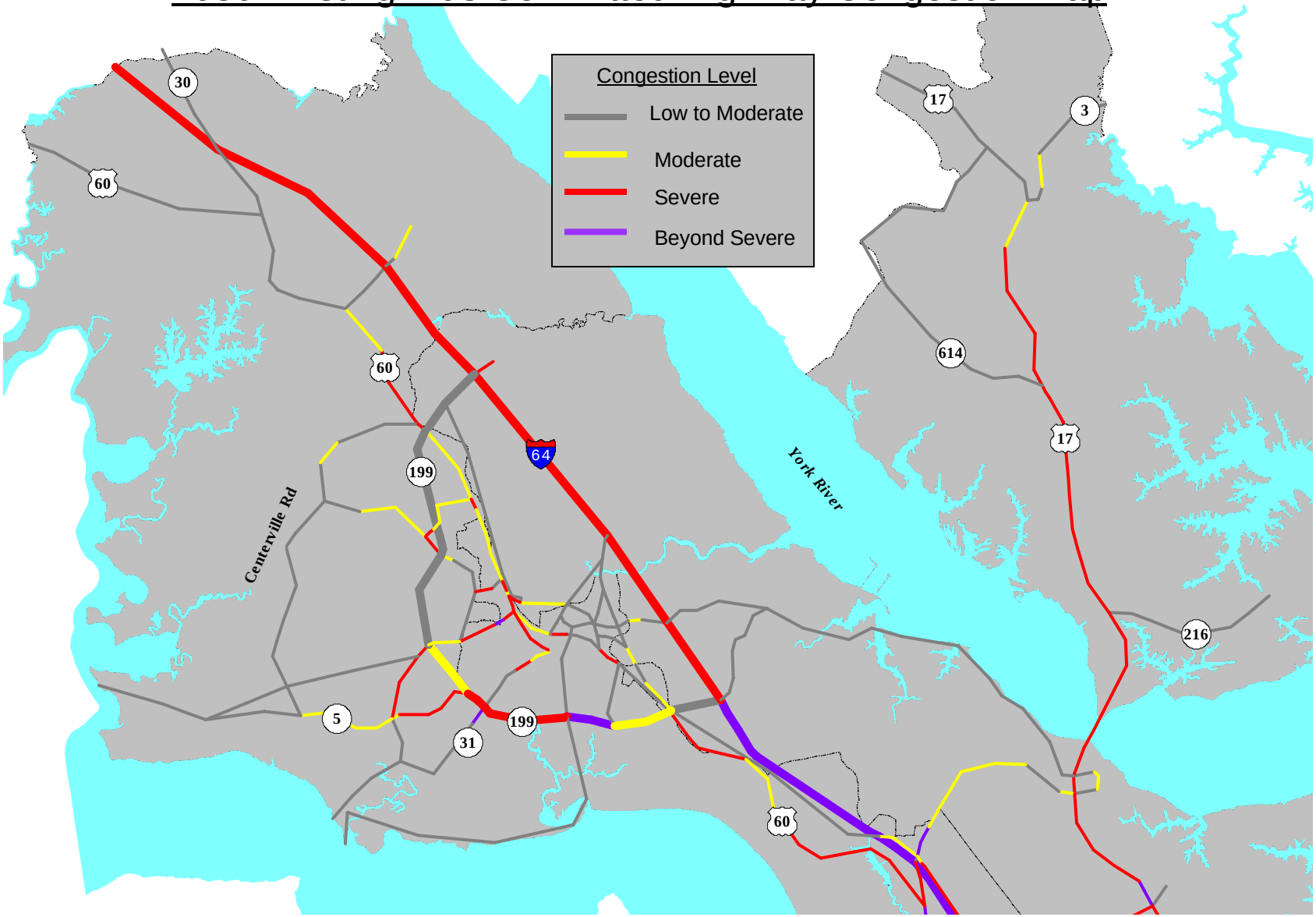
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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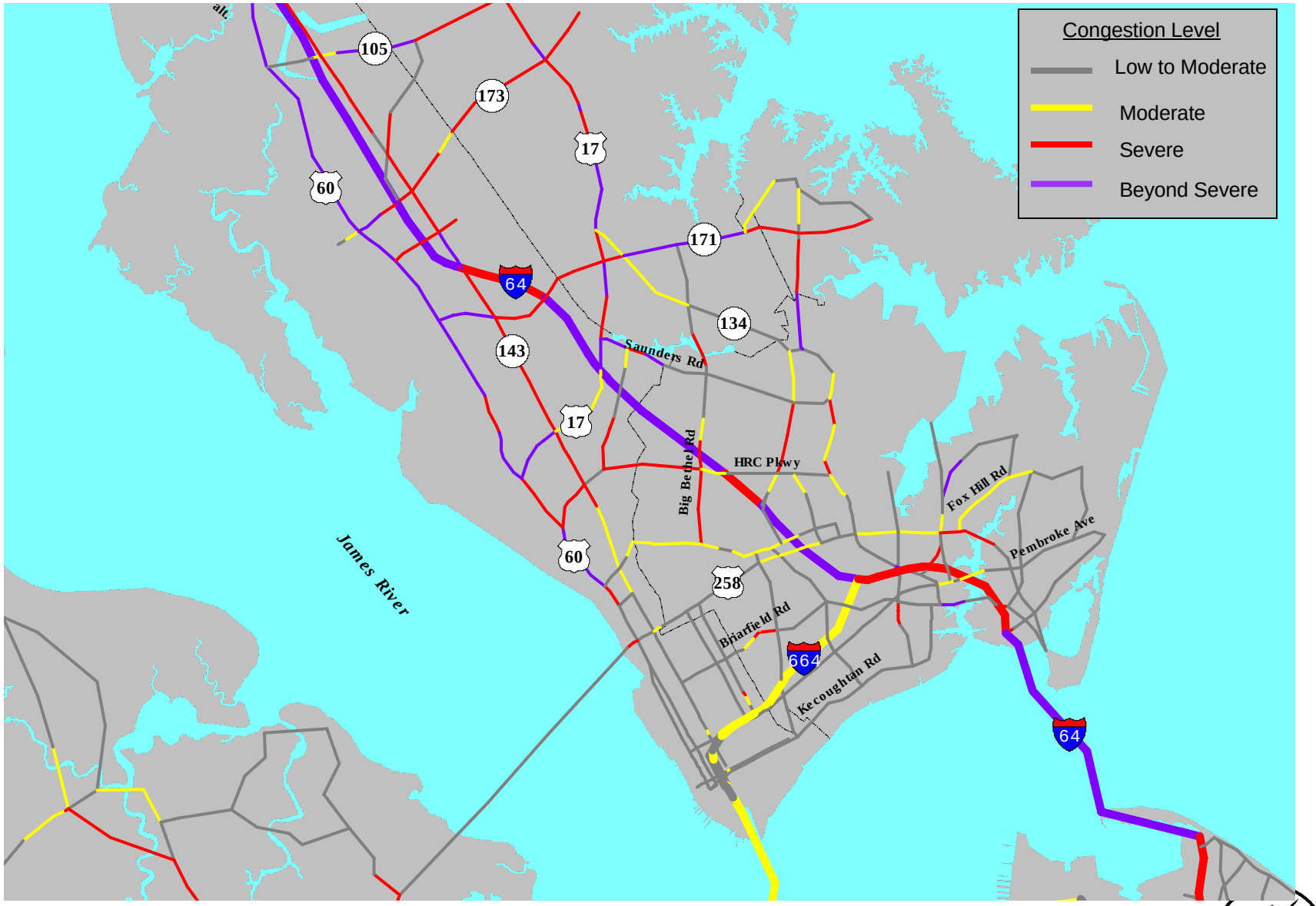
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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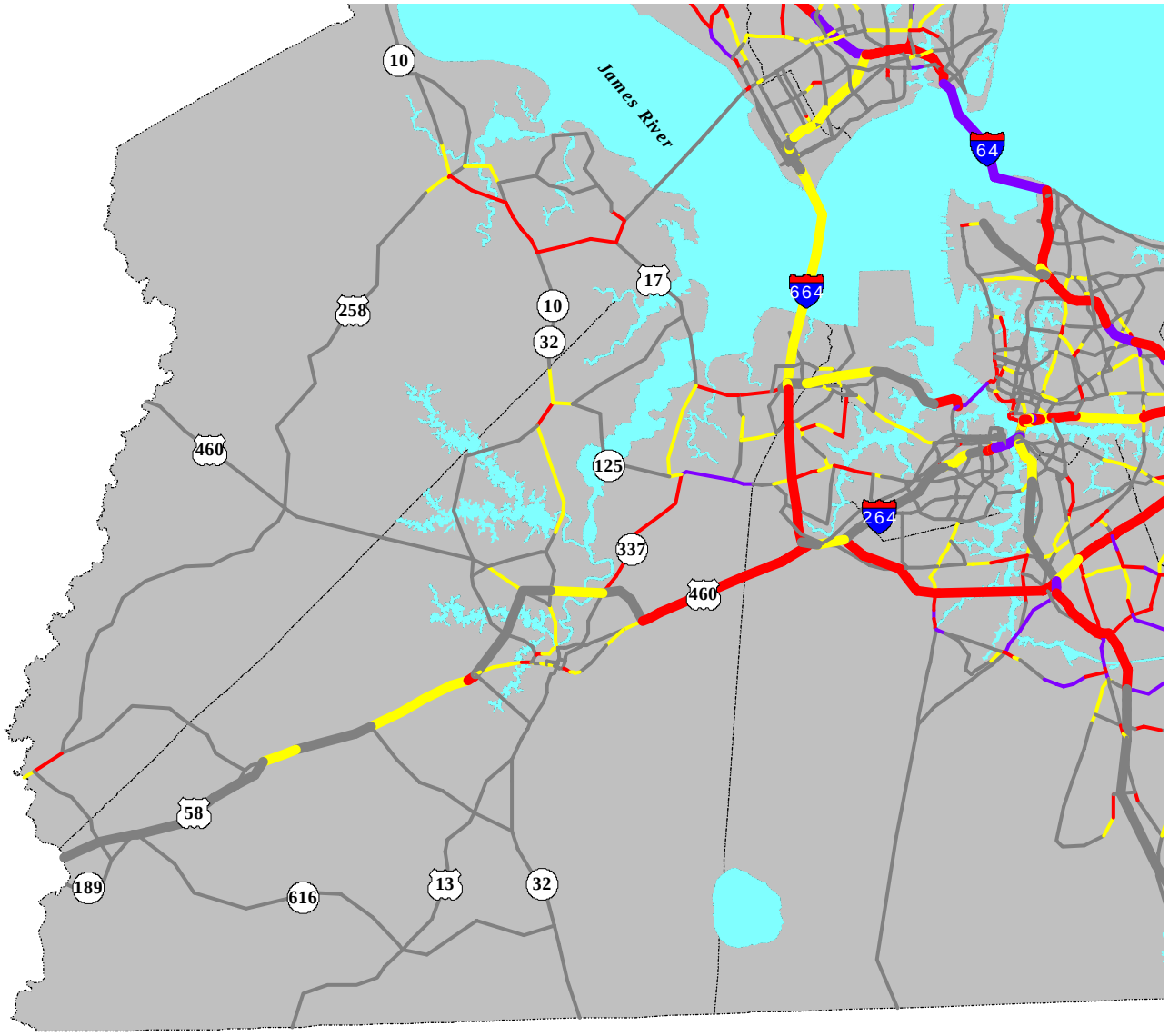
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



Congestion Level

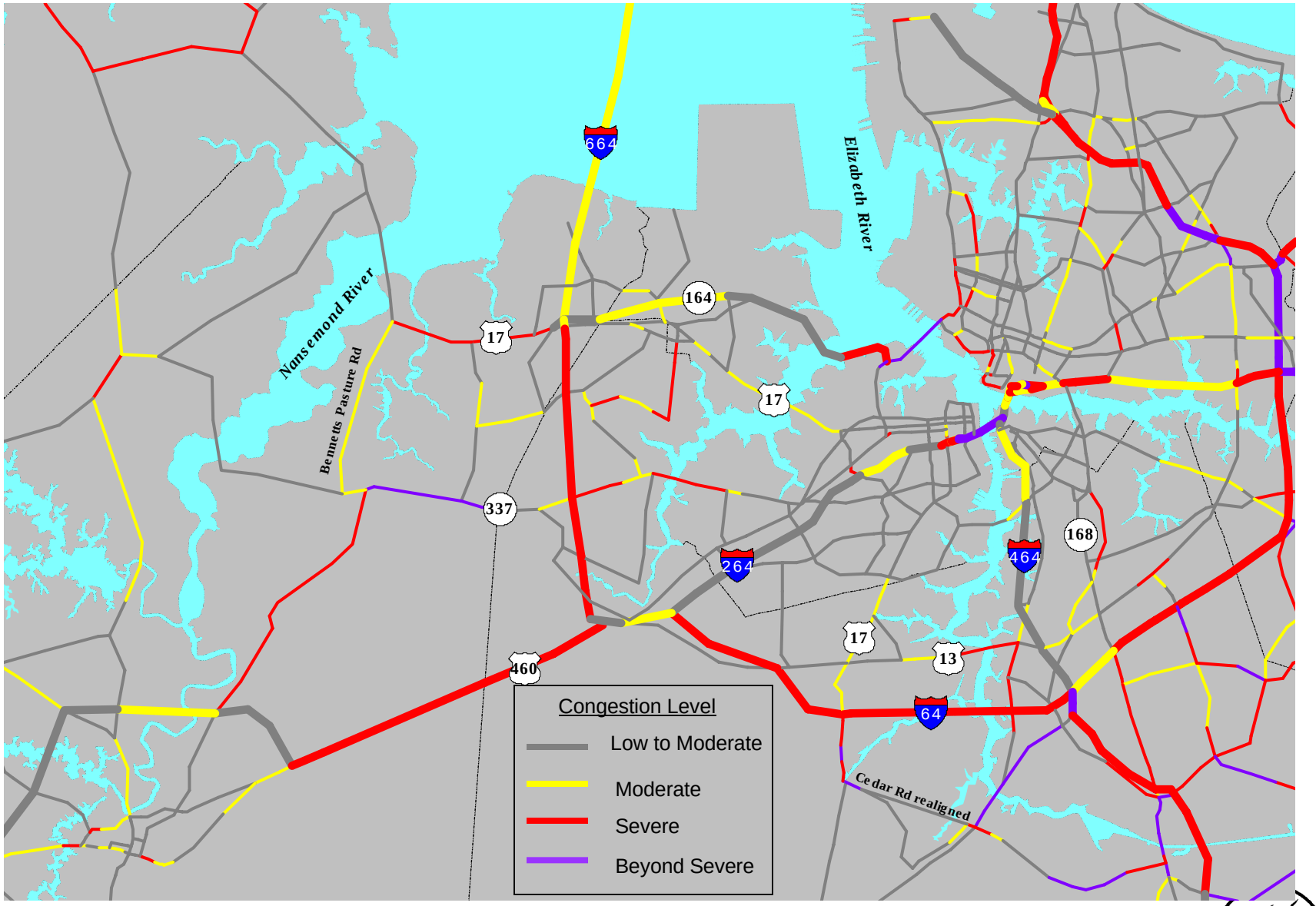
- Low to Moderate
- Moderate
- Severe
- Beyond Severe

"Existing Plus Committed" is existing facilities plus roads with a construction ad date in the FY05-08 TIP or already under construction.

HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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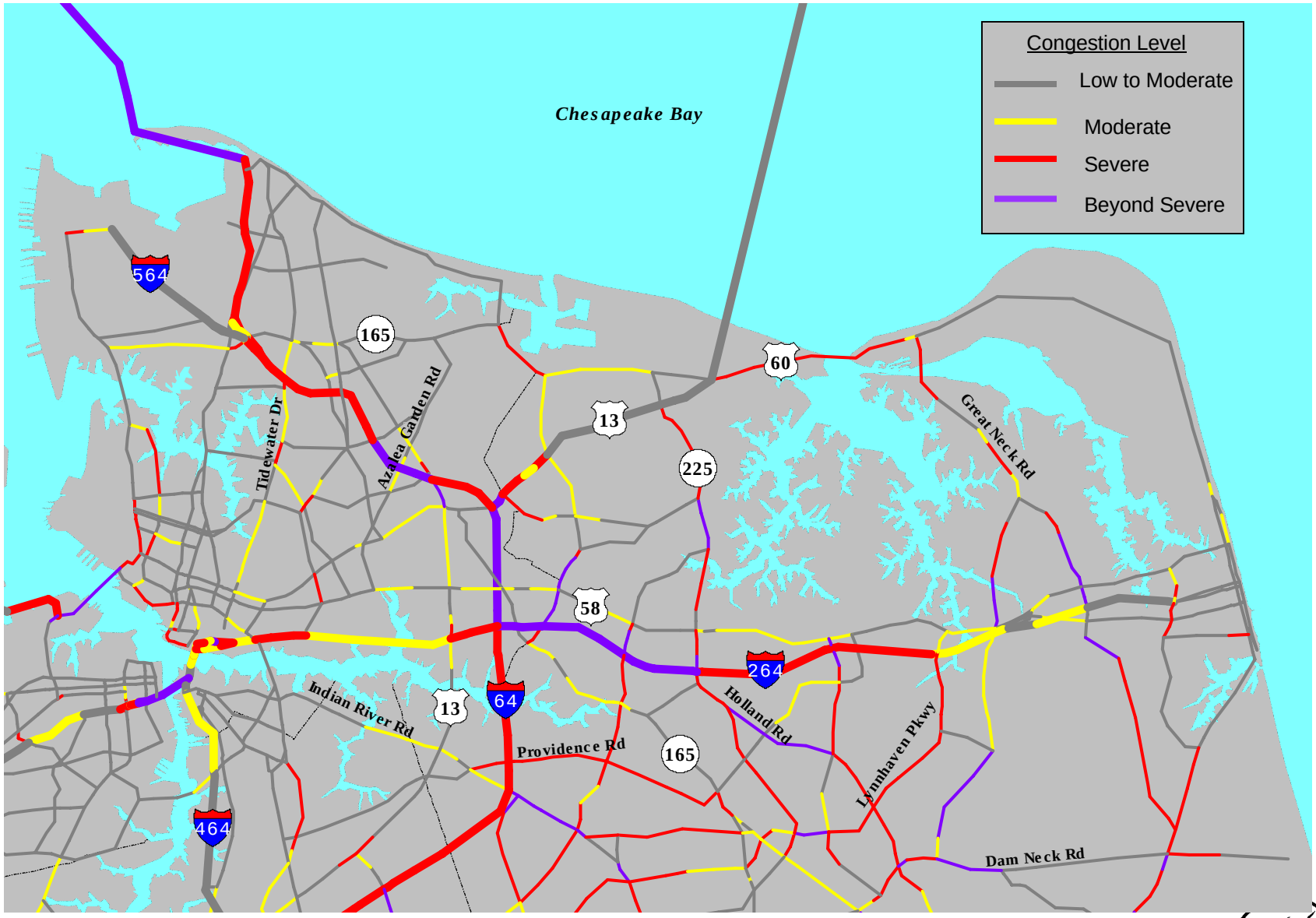
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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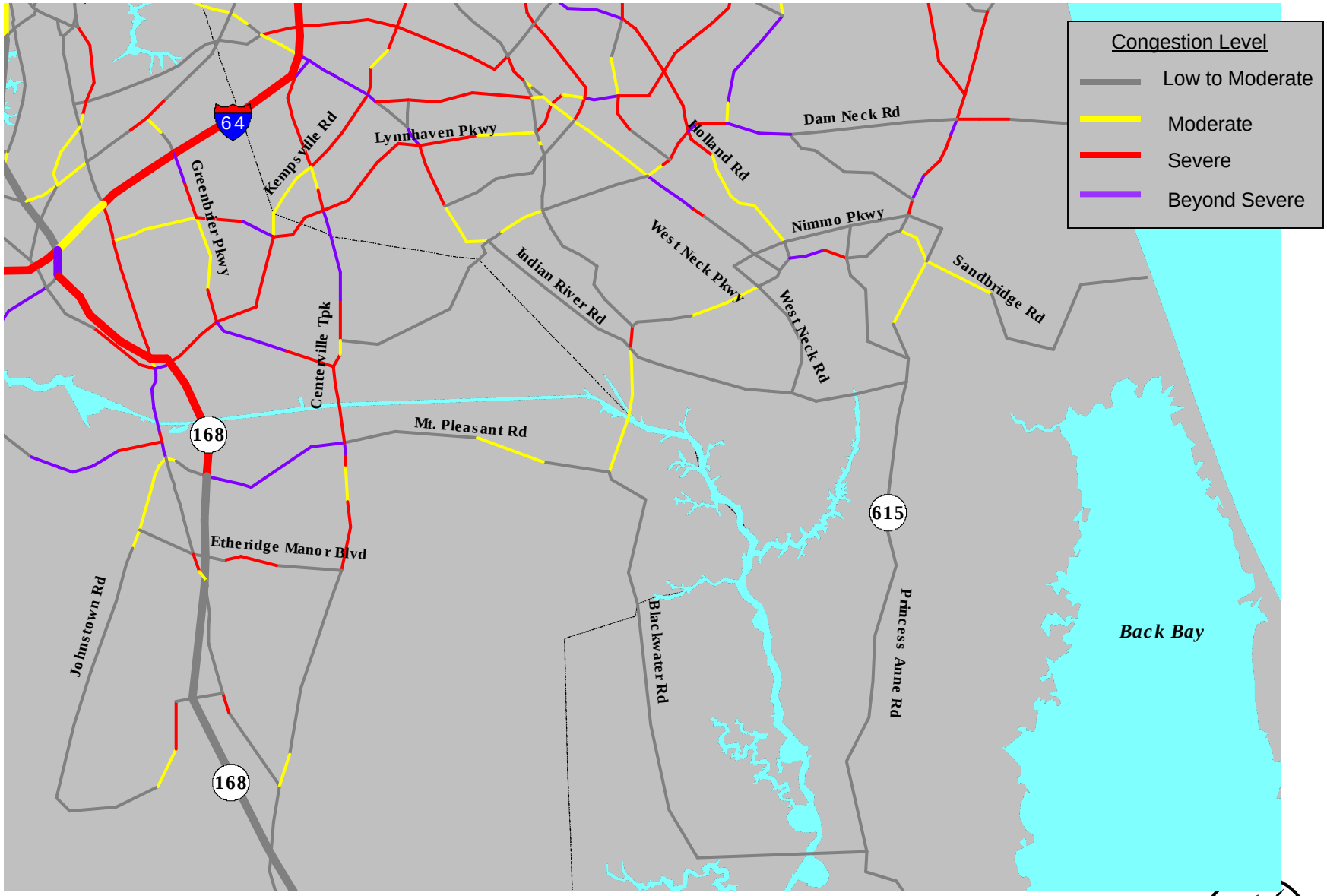
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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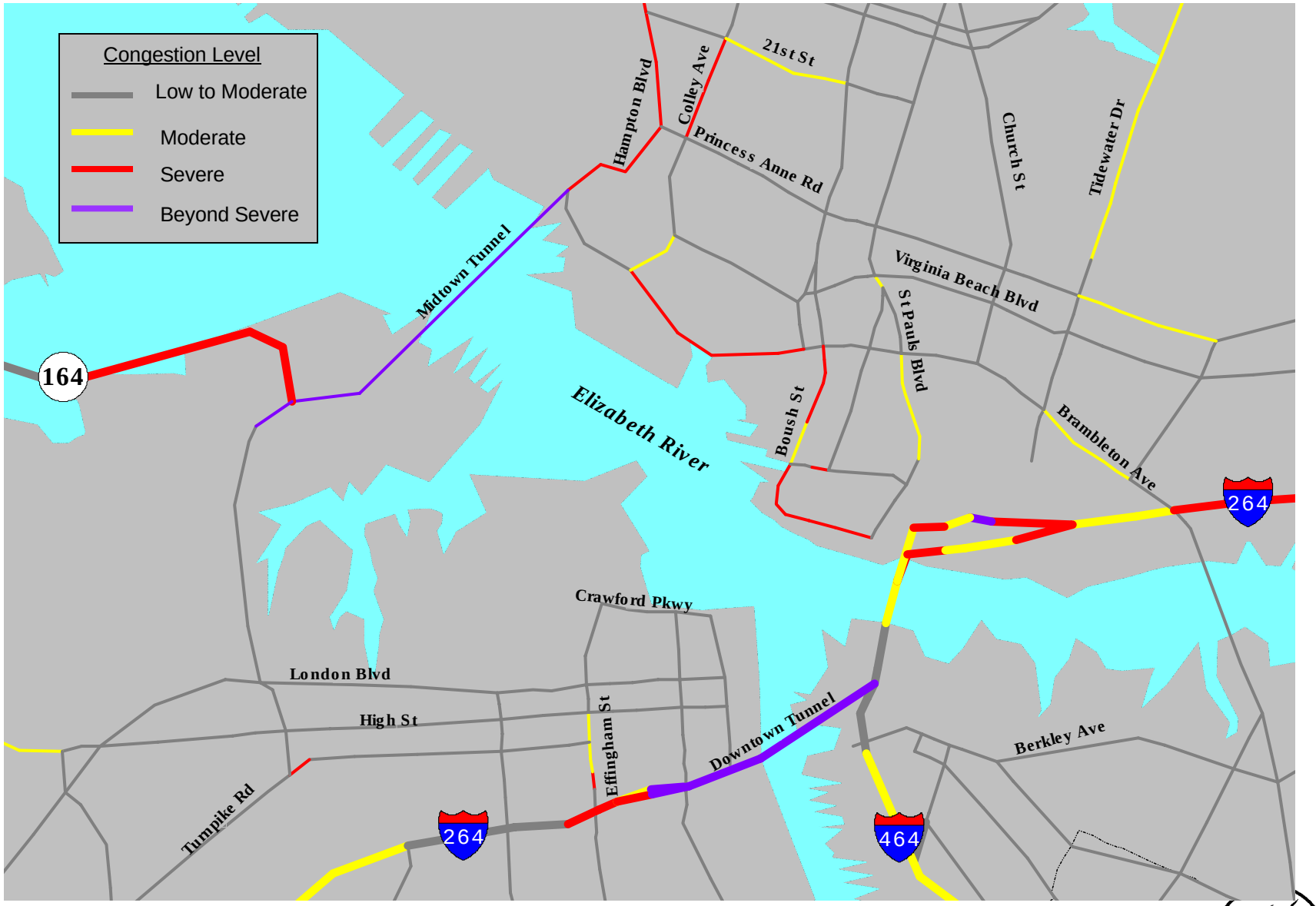
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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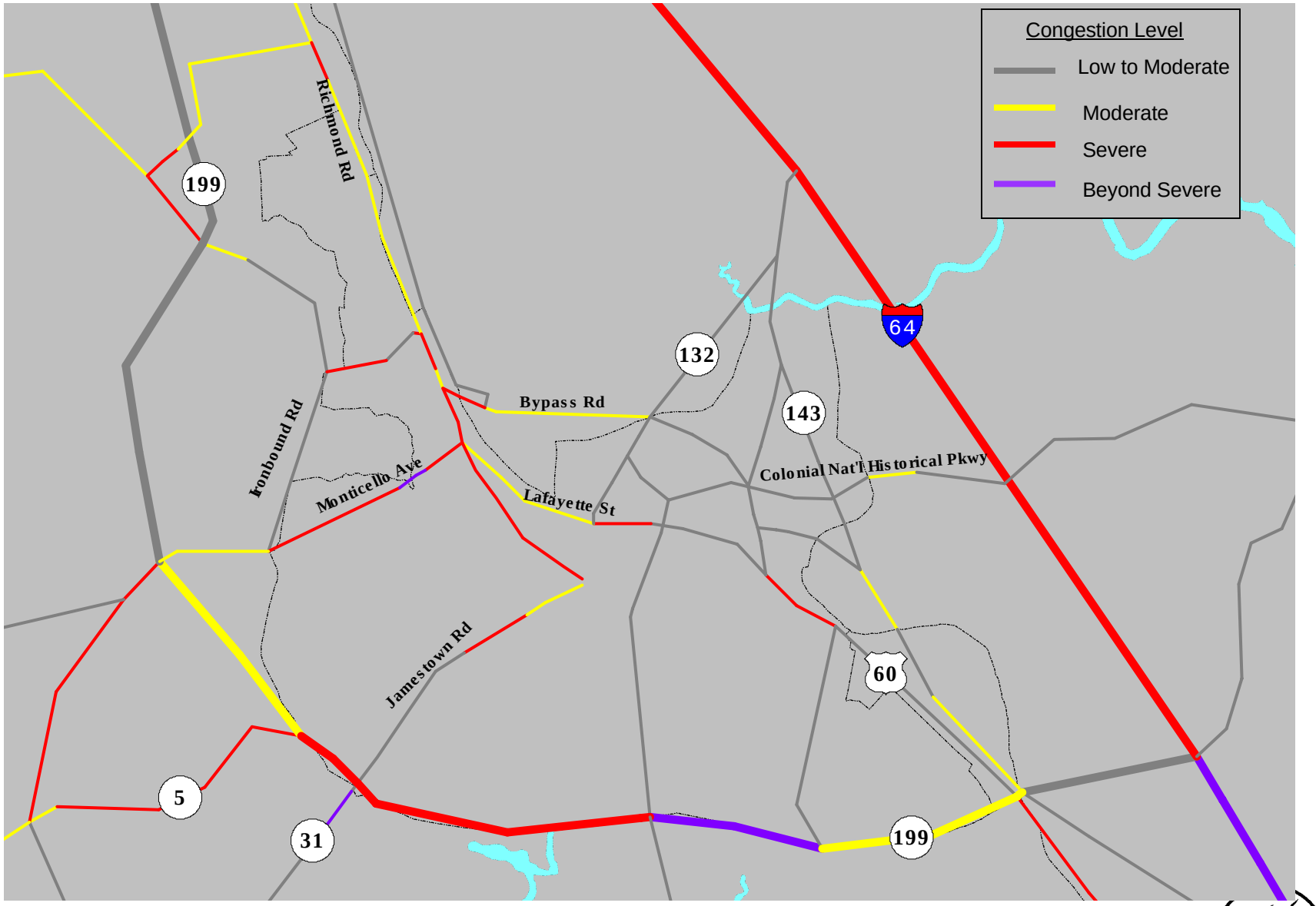
HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

2030 Existing Plus Committed Highway Congestion Map



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HAMPTON ROADS PLANNING DISTRICT COMMISSION

June 2005

Document #4

“2030 Existing Plus Committed Highway Forecast”

2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11310800	Che	I-264	I-64&664	WCL PORTSMOUTH	50,806	2003	4	5,000	56,000	Low to mod.	47,000	0.6	-9,000
11240840	Por	I-264	WCL PORTSMOUTH	GREENWOOD DR	50,806	2003	4	5,000	56,000	Low to mod.	47,000	0.6	-9,000
11240850	Por	I-264	GREENWOOD DR	VICTORY BLVD	49,505	2003	4	8,000	58,000	Low to mod.	51,000	0.7	-7,000
11240860	Por	I-264	VICTORY BLVD	PORTSMOUTH BLVD	63,855	2003	6	11,000	75,000	Low to mod.	57,000	0.5	-18,000
11240870	Por	I-264	PORTSMOUTH BLVD	FREDERICK BLVD	68,321	2003	6	10,000	78,000	Low to mod.	68,000	0.6	-10,000
11240880	Por	I-264	FREDERICK BLVD	M L K FWY	82,090	2003	6	8,000	90,000	Moderate	81,000	0.7	-9,000
11240890	Por	I-264	M L K FWY	DES MOINES AVE	82,090	2003	6	8,000	90,000	Moderate	81,000	0.7	-9,000
11240900	Por	I-264	DES MOINES AVE	EFFINGHAM ST	79,072	2003	6	7,000	86,000	Low to mod.	78,000	0.7	-8,000
11240910	Por	I-264	EFFINGHAM ST	COURT ST	n.a.	n.a.	4	n.a.	77,000	Severe	59,000	0.8	-18,000
11240920	Por	I-264	COURT ST	NORFOLK CL	101,429	2003	4	24,000	125,000	Beyond Severe	125,000	1.6	0
11220900	Nor	I-264	PORTSMOUTH CL	I-464	101,429	2003	4	24,000	125,000	Beyond Severe	125,000	1.6	0
11221145	Nor	I-264	I-464	WTR/TIDEW/CITY HALL	121,818	2003	8	17,000	139,000	Moderate	128,000	0.8	-11,000
11221155	Nor	I-264	WTR/TIDEW/CITY HALL	BRAMBLETON AVE	110,452	2003	8	10,000	120,000	Moderate	85,000	0.5	-35,000
11221170	Nor	I-264	BRAMBLETON AVE	MERRIMAC AVE	130,286	2003	8	13,000	143,000	Severe	138,000	1.0	-5,000
11221180	Nor	I-264	MERRIMAC AVE	MILITARY HWY	136,330	2003	8	-4,000	132,000	Moderate	132,000	0.9	0
11221200	Nor	I-264	MILITARY HWY	I-64	n.a.	n.a.	8	n.a.	190,000	Severe	199,000	1.3	9,000
11222695	Nor	I-264	I-64	VAB CL / NEWTOWN RD	241,927	2003	10	55,000	297,000	Beyond Severe	276,000	1.5	-21,000
11341940	VaB	I-264	NORF CL / NEWTOWN RD	WITCHDUCK RD	215,046	2003	10	31,000	246,000	Beyond Severe	211,000	1.2	-35,000
11341950	VaB	I-264	WITCHDUCK RD	INDEPENDENCE BLVD	218,988	2003	10	25,000	244,000	Beyond Severe	210,000	1.1	-34,000
11341960	VaB	I-264	INDEPENDENCE BLVD	ROSEMONT RD	174,480	2003	10	18,000	192,000	Severe	166,000	1.1	-26,000
11341970	VaB	I-264	ROSEMONT RD	LYNNHAVEN PKWY	145,210	2003	8	23,000	168,000	Severe	147,000	0.9	-21,000
11341980	VaB	I-264	LYNNHAVEN PKWY	LASKIN RD	114,238	2003	8	18,000	132,000	Moderate	113,000	0.7	-19,000
11341990	VaB	I-264	LASKIN RD	FIRST COLONIAL RD	81,537	2003	6	21,000	103,000	Moderate	29,000	0.2	-74,000
11342000	VaB	I-264	FIRST COLONIAL RD	S.E. PKWY & GRNBELT	67,315	2003	6	7,000	74,000	Low to mod.	40,000	0.3	-34,000
11342005	VaB	I-264	S.E. PKWY & GRNBELT	BIRDNECK RD	67,315	2003	6	7,000	74,000	Low to mod.	40,000	0.3	-34,000
11342010	VaB	I-264	BIRDNECK RD	PARKS AVE	28,084	2003	6	10,000	38,000	Low to mod.	25,000	0.2	-13,000
11310810	Che	I-464	I-64	MILITARY HWY	53,286	2003	6	22,000	75,000	Low to mod.	72,000	0.6	-3,000
11310820	Che	I-464	MILITARY HWY	FREEMAN AVE	49,694	2003	6	26,000	76,000	Low to mod.	61,000	0.5	-15,000
11310830	Che	I-464	FREEMAN AVE	POINDEXTER ST	48,210	2003	6	26,000	74,000	Low to mod.	54,000	0.4	-20,000
11310840	Che	I-464	POINDEXTER ST	NORFOLK CL	50,253	2003	4	15,000	65,000	Moderate	49,000	0.6	-16,000
11221210	Nor	I-464	NORFOLK CL	MAIN ST	50,253	2003	4	15,000	65,000	Moderate	49,000	0.6	-16,000
11221225	Nor	I-464	MAIN ST	BERKLEY AVE / I-264	45,138	2003	4	17,000	62,000	Moderate	47,000	0.6	-15,000
11221240	Nor	I-564	ADM TAUSSIG BLVD	INTERMODAL CONN	46,032	2003	6	-3,000	43,000	Low to mod.	47,000	0.5	4,000
11221250	Nor	I-564	INTERMODAL CONN	INT TERMINAL BLVD	46,032	2003	6	-3,000	43,000	Low to mod.	47,000	0.5	4,000
11221260	Nor	I-564	INT TERMINAL BLVD	I-64	66,116	2003	6	-3,000	63,000	Low to mod.	71,000	0.7	8,000
10470460	JCC	I-64	NEW KENT CL	RTE 30	44,583	2004	4	33,000	78,000	Severe	78,000	1.0	0
10470470	JCC	I-64	RTE 30	CROAKER RD	49,374	2004	4	29,000	78,000	Severe	92,000	1.1	14,000
10470480	JCC	I-64	CROAKER RD	YORK CO LINE	55,234	2004	4	49,000	104,000	Severe	110,000	1.4	6,000
10990360	York	I-64	JAMES CITY CL	RTE 199 (@ LIGHTFOOT)	55,234	2004	4	49,000	104,000	Severe	110,000	1.4	6,000
10990370	York	I-64	RTE 199 (@ LIGHTFOOT)	CAMP PEARY RD	55,337	2004	4	39,000	94,000	Severe	85,000	1.1	-9,000
10990380	York	I-64	CAMP PEARY RD	RTE 199 (@ KINGSMILL)	58,253	2004	4	33,000	91,000	Severe	77,000	0.9	-14,000
10990390	York	I-64	RTE 199 (@ KINGSMILL)	GROVE INTERCHANGE	78,626	2004	4	37,000	116,000	Beyond Severe	125,000	1.5	9,000
10990395	York	I-64	GROVE INTERCHANGE	JAMES CITY CL	80,740	2004	4	39,000	120,000	Beyond Severe	159,000	2.0	39,000
10470490	JCC	I-64	YORK CO LINE	NEWPORT N CL	80,740	2004	4	39,000	120,000	Beyond Severe	159,000	2.0	39,000
11210920	NN	I-64	JAMES CITY CL	JEFFERSON AVE @ CL	80,740	2004	4	39,000	120,000	Beyond Severe	159,000	2.0	39,000
11210930	NN	I-64	JEFFERSON AVE @ CL	YORKTOWN RD	80,941	2004	4	33,000	114,000	Beyond Severe	153,000	2.0	39,000
11210940	NN	I-64	YORKTOWN RD	FT EUSTIS BLVD	87,136	2004	4	33,000	120,000	Beyond Severe	161,000	2.0	41,000
11210950	NN	I-64	FT EUSTIS BLVD	BLAND BLVD	97,970	2004	4	29,000	127,000	Beyond Severe	143,000	1.8	16,000

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Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11210955	NN	I-64	BLAND BLVD	JEFFERSON AVE	97,970	2004	4	29,000	127,000	Beyond Severe	143,000	1.8	16,000
11210960	NN	I-64	JEFFERSON AVE	OYSTER POINT RD	117,732	2004	8	42,000	160,000	Severe	120,000	0.8	-40,000
11210970	NN	I-64	OYSTER POINT RD	J C MORRIS BLVD	123,615	2003	8	77,000	201,000	Beyond Severe	149,000	1.0	-52,000
11210980	NN	I-64	J C MORRIS BLVD	HAMPTON CL	136,945	2004	8	60,000	197,000	Beyond Severe	167,000	1.2	-30,000
11141100	Hamp	I-64	NEWPORT NEWS CL	HRC PARKWAY	136,945	2004	8	60,000	197,000	Beyond Severe	167,000	1.2	-30,000
11141110	Hamp	I-64	HRC PARKWAY	MAGRUDER BLVD	122,228	2001	8	59,000	181,000	Severe	162,000	1.1	-19,000
11141120	Hamp	I-64	MAGRUDER BLVD	MERCURY BLVD	142,597	2001	8	60,000	203,000	Beyond Severe	180,000	1.3	-23,000
11141130	Hamp	I-64	MERCURY BLVD	I-664	137,663	2001	8	49,000	187,000	Beyond Severe	166,000	1.1	-21,000
11141140	Hamp	I-64	I-664	ARMISTEAD AVE	119,045	2001	6	25,000	144,000	Severe	169,000	1.4	25,000
11141150	Hamp	I-64	ARMISTEAD AVE	RIP RAP RD	n.a.	n.a.	6	n.a.	129,000	Severe	146,000	1.2	17,000
11141153	Hamp	I-64	RIP RAP RD	KING ST	97,800	2004	6	27,000	125,000	Severe	133,000	1.1	8,000
11141155	Hamp	I-64	KING ST	TYLER ST	97,800	2004	6	27,000	125,000	Severe	133,000	1.1	8,000
11141160	Hamp	I-64	TYLER ST	MALLORY ST	99,150	2004	6	21,000	120,000	Severe	142,000	1.2	22,000
11141185	Hamp	I-64	MALLORY ST	HAMPTON CL	91,225	2003	4	15,000	106,000	Beyond Severe	130,000	1.7	24,000
11221280	Nor	I-64	HAMPTON CL	15TH VIEW ST	91,225	2003	4	15,000	106,000	Beyond Severe	130,000	1.7	24,000
11221285	Nor	I-64	15TH VIEW ST	4TH VIEW ST	93,712	2003	4	10,000	104,000	Beyond Severe	128,000	1.6	24,000
11221290	Nor	I-64	4TH VIEW ST	BAY AVE	88,062	2003	4	1,000	89,000	Severe	114,000	1.5	25,000
11221300	Nor	I-64	BAY AVE	GRANBY ST	98,260	2003	4	2,000	100,000	Severe	122,000	1.6	22,000
11221310	Nor	I-64	GRANBY ST	I-564 / LITTLE CRK RD	97,090	2003	4	-1,000	96,000	Severe	112,000	1.4	16,000
11221325	Nor	I-64	I-564 / LITTLE CRK RD	TIDEWATER DR	148,429	2003	8	-8,000	140,000	Severe	157,000	1.2	17,000
11221340	Nor	I-64	TIDEWATER DR	CHESAPEAKE BLVD	139,350	2003	8	0	139,000	Severe	140,000	1.1	1,000
11221350	Nor	I-64	CHESAPEAKE BLVD	NORVIEW AVE	150,625	2003	8	10,000	161,000	Severe	176,000	1.4	15,000
11221360	Nor	I-64	NORVIEW AVE	ROBIN HOOD RD	171,005	2003	8	-2,000	169,000	Beyond Severe	189,000	1.4	20,000
11221370	Nor	I-64	ROBIN HOOD RD	MILITARY HWY	n.a.	n.a.	8	n.a.	169,000	Beyond Severe	189,000	1.4	20,000
11221380	Nor	I-64	MILITARY HWY	NORTHAMPTON BLVD	171,696	2003	8	-8,000	164,000	Severe	178,000	1.4	14,000
11221390	Nor	I-64	NORTHAMPTON BLVD	I-264	178,304	2003	8	0	178,000	Beyond Severe	185,000	1.4	7,000
11221400	Nor	I-64	I-264	VA BEACH CL	149,545	2003	8	10,000	160,000	Severe	160,000	1.2	0
11340580	VaB	I-64	NORFOLK CL	INDIAN RIVER RD	142,018	2003	8	17,000	159,000	Severe	160,000	1.1	1,000
11340590	VaB	I-64	INDIAN RIVER RD	CHES CL / CITYLINE RD	128,511	2003	8	13,000	142,000	Severe	132,000	0.9	-10,000
11310850	Che	I-64	VAB CL / CITY LINE RD	GREENBRIER PKWY	128,511	2003	8	13,000	142,000	Severe	132,000	0.9	-10,000
11310860	Che	I-64	GREENBRIER PKWY	BATTLEFIELD BLVD	129,554	2003	8	7,000	137,000	Severe	119,000	0.8	-18,000
11310870	Che	I-64	BATTLEFIELD BLVD	I-464	116,723	2003	8	11,000	128,000	Moderate	109,000	0.8	-19,000
11310880	Che	I-64	I-464	G WASH HWY	87,988	2003	4	8,000	96,000	Severe	73,000	0.9	-23,000
11310890	Che	I-64	G WASH HWY	MILITARY HWY	73,421	2003	4	18,000	91,000	Severe	79,000	1.0	-12,000
11310900	Che	I-64	MILITARY HWY	I-264&664	72,104	2003	4	24,000	96,000	Severe	91,000	1.2	-5,000
11310910	Che	I-664	I-64 / I-264	RTE 13/58/460	110,542	2003	8	29,000	140,000	Moderate	125,000	0.8	-15,000
11310922	Che	I-664	RTE 13/58/460	DOCK LANDING RD	78,625	2003	4	16,000	95,000	Severe	73,000	0.9	-22,000
11310924	Che	I-664	DOCK LANDING RD	PORTSMOUTH BLVD	73,215	2003	4	23,000	96,000	Severe	67,000	0.8	-29,000
11310930	Che	I-664	PORTSMOUTH BLVD	PUGHSVILLE RD	72,407	2003	4	16,000	88,000	Severe	70,000	0.9	-18,000
11310940	Che	I-664	PUGHSVILLE RD	SUFFOLK CL	67,642	2003	4	15,000	83,000	Severe	82,000	1.0	-1,000
11330400	Suf	I-664	NCL CHESAPEAKE	BRIDGE RD	67,642	2003	4	15,000	83,000	Severe	82,000	1.0	-1,000
11330410	Suf	I-664	BRIDGE RD	WESTERN FWY	n.a.	n.a.	4	n.a.	67,000	Moderate	66,000	0.8	-1,000
11330420	Suf	I-664	WESTERN FWY	COLLEGE DR	54,019	2003	4	14,000	68,000	Moderate	48,000	0.6	-20,000
11330430	Suf	I-664	COLLEGE DR	E-W CONN / NN CL	52,344	2003	4	22,000	74,000	Moderate	59,000	0.7	-15,000
11210990	NN	I-664	E-W CONN / SUFFOLK CL	TERMINAL AVE	52,344	2003	4	22,000	74,000	Moderate	59,000	0.7	-15,000
11211000	NN	I-664	TERMINAL AVE	23RD ST	48,016	2004	6	27,000	75,000	Low to mod.	60,000	0.5	-15,000
11211010	NN	I-664	23RD ST	HAMPTON CL	52,860	2004	6	38,000	91,000	Moderate	42,000	0.4	-49,000
11141200	Hamp	I-664	NEWPORT NEWS CL	ABERDEEN RD	64,964	2004	6	34,000	99,000	Moderate	55,000	0.5	-44,000
11141210	Hamp	I-664	ABERDEEN RD	POWHATAN PKWY	61,347	2004	6	43,000	104,000	Moderate	55,000	0.5	-49,000

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11141220	Hamp	I-664	POWHATAN PKWY	I-64	67,871	2004	6	30,000	98,000	Moderate	48,000	0.4	-50,000
11310010	Che	22ND ST	LIBERTY ST	NOR CL / BERK AVE EXT	6,711	2002	4	3,000	10,000	Low to mod.	12,000	0.4	2,000
11310020	Che	AIRLINE BLVD	I-664	PORTSMOUTH CL	14,462	2003	4	4,000	18,000	Low to mod.	16,000	0.5	-2,000
11310040	Che	ATLANTIC AVE	CAMPOSTELLA RD	PROVIDENCE RD	20,037	2002	4	4,000	24,000	Low to mod.	25,000	0.7	1,000
11310050	Che	ATLANTIC AVE	PROVIDENCE RD	OLD ATLANTIC AVE	17,556	2002	4	4,000	22,000	Low to mod.	21,000	0.6	-1,000
11310070	Che	ATLANTIC AVE	OLD ATLANTIC AVE	CAMPOSTELLA RD	10,620	2002	4	0	11,000	Low to mod.	11,000	0.3	0
11310060	Che	ATLANTIC AVE, OLD	ATLANTIC AVE	LIBERTY ST	5,978	2002	4	8,000	14,000	Low to mod.	12,000	0.5	-2,000
11310080	Che	BAINBRIDGE BLVD	DOMINION BLVD	GREAT BR BLVD	4,579	2002	2	11,000	16,000	Severe	3,000	0.2	-13,000
11310090	Che	BAINBRIDGE BLVD	GREAT BR BLVD	MILITARY HWY	8,707	2002	2	9,000	18,000	Severe	8,000	0.5	-10,000
11310100	Che	BAINBRIDGE BLVD	MILITARY HWY	FREEMAN AVE	n.a.	n.a.	2	n.a.	14,000	Moderate	11,000	0.6	-3,000
11310110	Che	BAINBRIDGE BLVD	FREEMAN AVE	SWAIN AVE	11,068	2002	4	3,000	14,000	Low to mod.	14,000	0.4	0
11310120	Che	BAINBRIDGE BLVD	SWAIN AVE	POINDEXTER ST	11,068	2002	2	1,000	12,000	Low to mod.	15,000	0.9	3,000
11310130	Che	BAINBRIDGE BLVD	POINDEXTER ST	NORFOLK CL	1,687	2002	2	4,000	6,000	Low to mod.	6,000	0.4	0
11310142	Che	BATTLEFIELD BLVD	GALLBUSH RD / TOLL RD	INDIAN CRK RD / TOLL RD	11,974	2002	2	-4,000	8,000	Low to mod.	32,000	1.6	24,000
11310150	Che	BATTLEFIELD BLVD	INDIAN CRK RD / TOLL RD	CENTERVILLE TNPK	14,729	2002	2	-1,000	14,000	Low to mod.	39,000	2.0	25,000
11310155	Che	BATTLEFIELD BLVD	CENTERVILLE TNPK	HILLCREST PKWY	16,294	2002	2	7,000	23,000	Severe	30,000	1.5	7,000
11310165	Che	BATTLEFIELD BLVD	HILLCREST PKWY	GREAT BR BYP	7,260	2003	2	7,000	14,000	Moderate	30,000	1.5	16,000
11310170	Che	BATTLEFIELD BLVD	GREAT BR BYP	HANBURY RD	7,489	2002	2	14,000	21,000	Severe	32,000	1.9	11,000
11310175	Che	BATTLEFIELD BLVD	HANBURY RD	JOHNSTOWN RD	n.a.	n.a.	2	n.a.	6,000	Low to mod.	13,000	0.8	7,000
11310180	Che	BATTLEFIELD BLVD	JOHNSTOWN RD	CEDAR RD	31,684	2002	4	17,000	49,000	Beyond Severe	64,000	1.9	15,000
11310190	Che	BATTLEFIELD BLVD	CEDAR RD	ALBEMARLE DR	n.a.	n.a.	4	n.a.	47,000	Severe	69,000	1.8	22,000
11310200	Che	BATTLEFIELD BLVD	ALBEMARLE DR	WAYNE AVE	34,348	2002	4	27,000	61,000	Beyond Severe	85,000	2.1	24,000
11310210	Che	BATTLEFIELD BLVD	WAYNE AVE	GREAT BR BLVD	34,348	2002	4	25,000	59,000	Beyond Severe	83,000	2.1	24,000
11310220	Che	BATTLEFIELD BLVD	GREAT BR BLVD	GREAT BR BYP	35,238	2002	6	18,000	53,000	Moderate	98,000	1.7	45,000
11310230	Che	BATTLEFIELD BLVD	GREAT BR BYP	VOLVO PKWY	43,567	2002	6	21,000	65,000	Severe	59,000	1.0	-6,000
11310240	Che	BATTLEFIELD BLVD	VOLVO PKWY	I-64	n.a.	n.a.	6	n.a.	70,000	Severe	66,000	1.1	-4,000
11310250	Che	BATTLEFIELD BLVD	I-64	MILITARY HWY	41,523	2003	6	3,000	45,000	Low to mod.	54,000	0.9	9,000
11310260	Che	BATTLEFIELD BLVD	MILITARY HWY	ROBERT HALL DR	21,661	1999	4	4,000	26,000	Low to mod.	29,000	0.8	3,000
11310270	Che	BATTLEFIELD BLVD	ROBERT HALL DR	CAMPOSTELLA RD	28,000	2002	4	-3,000	25,000	Low to mod.	28,000	0.7	3,000
11310280	Che	BENEFIT RD	JOHNSTOWN RD	SIGN PINE RD	1,714	2002	2	8,000	10,000	Low to mod.	9,000	0.6	-1,000
11310290	Che	BLACKWATER RD	VA BEACH CL	FENTRESS AIRFIELD RD	2,591	2004	2	1,000	4,000	Low to mod.	5,000	0.3	1,000
11310300	Che	BRUCE RD	TAYLOR RD	TYRE NECK RD	12,380	2002	2	5,000	17,000	Severe	16,000	1.0	-1,000
11310310	Che	BUTTS STATION RD	KEMPSVILLE RD	CENTERVILLE TNPK	11,370	2002	2	12,000	23,000	Beyond Severe	23,000	1.4	0
11310320	Che	CAMPOSTELLA RD	GREAT BR BLVD	MILITARY HWY	6,900	2002	2	6,000	13,000	Low to mod.	8,000	0.5	-5,000
11310330	Che	CAMPOSTELLA RD	MILITARY HWY	BATTLEFIELD BLVD	12,527	2002	2	1,000	14,000	Moderate	12,000	0.7	-2,000
11310340	Che	CAMPOSTELLA RD	BATTLEFIELD BLVD	PROVIDENCE RD	14,156	2002	2	2,000	16,000	Severe	18,000	1.1	2,000
11310350	Che	CAMPOSTELLA RD	PROVIDENCE RD	ATLANTIC AVE	14,681	2002	2	3,000	18,000	Severe	21,000	1.3	3,000
11310360	Che	CAMPOSTELLA RD	ATLANTIC AVE	NOR CL / BERK AVE EXT	20,539	2002	6	0	21,000	Low to mod.	21,000	0.4	0
11310370	Che	CANAL DR	MILITARY HWY	G.W. HWY	13,976	2002	4	3,000	17,000	Low to mod.	18,000	0.6	1,000
11310380	Che	CAVALIER BLVD	MILITARY HWY	PORTSMOUTH CL	12,768	2002	4	5,000	18,000	Low to mod.	14,000	0.4	-4,000
11310390	Che	CEDAR RD (EXISTING)	G.W. HWY EXIST.	SHIPYARD RD / CEDAR RD (NEW)	13,974	2002	2	19,000	33,000	Beyond Severe	41,000	2.4	8,000
11310395	Che	CEDAR RD (EXISTING)	SHIPYARD RD / CEDAR RD (NEW)	DOMINION BLVD	11,101	2002	2	3,000	14,000	Moderate	4,000	0.2	-10,000
11310400	Che	CEDAR RD (EXISTING)	DOMINION BLVD	BRIARFIELD DR	23,205	2002	4	24,000	47,000	Beyond Severe	38,000	1.1	-9,000
11310410	Che	CEDAR RD (EXISTING)	BRIARFIELD DR	BATTLEFIELD BLVD	23,327	2002	3	6,000	29,000	Severe	32,000	1.3	3,000
11310385	Che	CEDAR RD (NEW)	G.W. HWY RELOC	DOMINION BLVD	not blt.	n.a.	4	n.a.	24,000	Low to mod.	31,000	0.9	7,000
11310420	Che	CENTERVILLE TPK	BATTLEFIELD BLVD	ETHERIDGE MNR BLVD	6,354	2002	2	8,000	14,000	Moderate	17,000	1.0	3,000
11310430	Che	CENTERVILLE TPK	ETHERIDGE MNR BLVD	MT PLEASANT RD	12,504	2002	2	12,000	25,000	Beyond Severe	39,000	2.3	14,000
11310440	Che	CENTERVILLE TPK	MT PLEASANT RD	BUTTS STATION RD	15,979	2002	2	6,000	22,000	Severe	46,000	2.7	24,000
11310445	Che	CENTERVILLE TPK	BUTTS STATION RD	ELBOW RD	9,328	2002	2	8,000	17,000	Severe	51,000	3.0	34,000

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Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11310450	Che	CENTERVILLE TPK	ELBOW RD	S.E. PKWY & GRNBELT	7,767	2002	2	11,000	19,000	Severe	45,000	2.6	26,000
11310460	Che	CENTERVILLE TPK	S.E. PKWY & GRNBELT	VA BEACH CL	7,767	2002	2	17,000	25,000	Beyond Severe	52,000	3.0	27,000
11310470	Che	CHURCHLAND BLVD	W BRANCH BLVD	TOWN PT RD	6,190	2002	2	2,000	8,000	Low to mod.	6,000	0.4	-2,000
11310480	Che	CHURCHLAND BLVD	TOWN PT RD	PORTSMOUTH CL	17,258	2003	4	-1,000	16,000	Low to mod.	13,000	0.4	-3,000
11310490	Che	DOCK LANDING RD	JOLLIFF RD	I-664	5,547	2002	4	5,000	11,000	Low to mod.	20,000	0.6	9,000
11310500	Che	DOCK LANDING RD	I-664	PORTSMOUTH BLVD	6,060	2002	2	2,000	8,000	Low to mod.	9,000	0.6	1,000
11310510	Che	DOMINION BLVD	G.W. HWY	CEDAR RD	8,413	2002	2	2,000	10,000	Low to mod.	10,000	0.5	0
11310520	Che	DOMINION BLVD	CEDAR RD	BAINBRIDGE BLVD	28,411	2003	2	13,000	41,000	Beyond Severe	57,000	2.9	16,000
11310530	Che	DOMINION BLVD	BAINBRIDGE BLVD	GREAT BR BLVD	26,440	2002	2	2,000	28,000	Beyond Severe	56,000	2.9	28,000
11310540	Che	DOMINION BLVD	GREAT BR BLVD	OAK GROVE CONN	42,570	2000	4	14,000	57,000	Low to mod.	76,000	1.0	19,000
11310550	Che	ELBOW RD	CENTERVILLE TNPK	VA BEACH CL	5,096	2003	2	3,000	8,000	Low to mod.	12,000	0.7	4,000
11310560	Che	FENTRESS AIRFIELD RD	BLACKWATER RD	MT PLEASANT RD	4,593	2003	2	1,000	6,000	Low to mod.	7,000	0.4	1,000
11310570	Che	FREEMAN AVE	I-464	BAINBRIDGE BL	10,710	2002	4	7,000	18,000	Low to mod.	14,000	0.6	-4,000
11310580	Che	G.W. HWY (EXISTING)	N.C. STATE LINE	DOMINION BLVD	9,885	2003	4	6,000	16,000	Low to mod.	16,000	0.4	0
11310590	Che	G.W. HWY (EXISTING)	DOMINION BLVD	G.W. HWY RELO	3,917	2002	2	7,000	11,000	Low to mod.	10,000	0.5	-1,000
11310595	Che	G.W. HWY (EXISTING)	G.W. HWY RELO	CEDAR RD @ HINTON AVE	3,917	2002	2	6,000	10,000	Low to mod.	3,000	0.1	-7,000
11310600	Che	G.W. HWY (EXISTING)	CEDAR RD @ HINTON AVE	MILL CREEK PKWY	n.a.	n.a.	2	n.a.	50,000	Beyond Severe	51,000	2.6	1,000
11310605	Che	G.W. HWY (EXISTING)	MILL CREEK PKWY	WILLOWWOOD DR	22,857	2002	4	27,000	50,000	Beyond Severe	54,000	1.4	4,000
11310610	Che	G.W. HWY (EXISTING)	WILLOWWOOD DR	I-64	22,857	2002	4	24,000	47,000	Severe	56,000	1.5	9,000
11310620	Che	G.W. HWY (EXISTING)	I-64	MILITARY HWY	22,577	2002	4	11,000	34,000	Moderate	44,000	1.1	10,000
11310630	Che	G.W. HWY (EXISTING)	MILITARY HWY	CANAL DR	14,460	2001	2	4,000	18,000	Moderate	45,000	2.3	27,000
11310640	Che	G.W. HWY (EXISTING)	CANAL DR	PORTSMOUTH CL	30,183	2003	4	6,000	36,000	Moderate	60,000	1.6	24,000
11310650	Che	GREAT BR BLVD	BAINBRIDGE BLVD	CAMPOSTELLA RD	4,801	2002	2	5,000	10,000	Low to mod.	7,000	0.4	-3,000
11310660	Che	GREAT BR BLVD	CAMPOSTELLA RD	I-64	n.a.	n.a.	2	n.a.	11,000	Low to mod.	5,000	0.3	-6,000
11310670	Che	GREAT BR BLVD	I-64	DOMINION BLVD	11,912	2002	4	9,000	21,000	Low to mod.	12,000	0.4	-9,000
11310680	Che	GREAT BR BLVD	DOMINION BLVD	RIVERWALK PKWY (N)	n.a.	n.a.	4	n.a.	20,000	Low to mod.	14,000	0.4	-6,000
11310690	Che	GREAT BR BLVD	RIVERWALK PKWY (N)	BATTLEFIELD BLVD	9,282	2002	2	10,000	19,000	Severe	17,000	1.0	-2,000
11310740	Che	GREENBR PKWY	KEMPSVILLE RD	VOLVO PKWY	22,513	2002	4	12,000	35,000	Severe	32,000	1.0	-3,000
11310750	Che	GREENBR PKWY	VOLVO PKWY	EDEN WAY	42,268	2002	6	16,000	58,000	Severe	40,000	0.8	-18,000
11310760	Che	GREENBR PKWY	EDEN WAY	I-64	78,141	2002	6	25,000	103,000	Beyond Severe	91,000	1.9	-12,000
11310770	Che	GREENBR PKWY	I-64	MILITARY HWY	34,358	2002	6	6,000	40,000	Moderate	30,000	0.6	-10,000
11310780	Che	HANBURY RD / ETHRG MNR	JOHNSTOWN RD	BATTLEFIELD BLVD	7,860	2002	2	4,000	12,000	Low to mod.	8,000	0.5	-4,000
11310790	Che	HANBURY RD / ETHRG MNR	BATTLEFIELD BLVD	GREAT BR BYP	n.a.	n.a.	4	n.a.	23,000	Low to mod.	17,000	0.5	-6,000
11310795	Che	HANBURY RD / ETHRG MNR	GREAT BR BYP	CENTERVILLE TNPK	10,171	2002	4	13,000	23,000	Severe	21,000	1.3	-2,000
11311403	Che	HILLCREST PKWY	EDINBURGH PKWY	CHESAPEAKE EXPR	2,455	2003	4	15,000	17,000	Low to mod.	26,000	0.8	9,000
11311405	Che	HILLCREST PKWY	CHESAPEAKE EXPR	BATTLEFIELD BLVD	11,652	2003	4	3,000	15,000	Low to mod.	1,000	0.0	-14,000
11310950	Che	INDIAN RIVER RD	NORFOLK CL	KEMP LANE	24,852	2003	6	5,000	30,000	Low to mod.	38,000	0.8	8,000
11310960	Che	INDIAN RIVER RD	KEMP LANE	VA BEACH CL	35,252	2003	6	6,000	41,000	Moderate	48,000	1.0	7,000
11310970	Che	JOHNSTOWN RD	BENEFIT RD	STONEGATE PKWY	3,603	2002	2	7,000	11,000	Low to mod.	10,000	0.6	-1,000
11310975	Che	JOHNSTOWN RD	STONEGATE PKWY	HANBURY RD	10,392	2002	2	5,000	15,000	Moderate	13,000	0.8	-2,000
11310980	Che	JOHNSTOWN RD	HANBURY RD	PARKER RD	9,238	2003	2	4,000	13,000	Moderate	26,000	1.6	13,000
11310990	Che	JOHNSTOWN RD	PARKER RD	BATTLEFIELD BLVD	14,018	2002	4	16,000	30,000	Moderate	25,000	0.8	-5,000
11311000	Che	JOLLIFF RD	AIRLINE BLVD	DOCK LANDING RD	3,285	2002	2	6,000	9,000	Low to mod.	14,000	0.9	5,000
11311010	Che	JOLLIFF RD	DOCK LANDING RD	PORTSMOUTH BLVD	2,879	2002	2	4,000	7,000	Low to mod.	12,000	0.8	5,000
11311020	Che	KEMPSVILLE RD	BATTLEFIELD BLVD	GREAT BR BYP	n.a.	n.a.	4	n.a.	50,000	Beyond Severe	84,000	2.5	34,000
11311030	Che	KEMPSVILLE RD	GREAT BR BYP	GREENBRIER PKWY	18,163	2002	6	38,000	56,000	Severe	66,000	1.3	10,000
11311040	Che	KEMPSVILLE RD	GREENBRIER PKWY	VOLVO PKWY	n.a.	n.a.	6	n.a.	57,000	Severe	53,000	1.0	-4,000
11311050	Che	KEMPSVILLE RD	VOLVO PKWY	VA BEACH CL	29,819	2003	6	12,000	42,000	Moderate	39,000	0.8	-3,000
11311060	Che	LIBERTY ST	SCL NORFOLK	22ND ST	4,978	2003	2	1,000	6,000	Low to mod.	5,000	0.3	-1,000

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11311080	Che	LIBERTY ST	22ND ST	POINDEXTER RD	n.a.	n.a.	4	n.a.	21,000	Low to mod.	21,000	0.6	0
11311090	Che	LIBERTY ST	POINDEXTER RD	OLD ATLANTIC AVE	9,693	2002	4	3,000	13,000	Low to mod.	11,000	0.3	-2,000
11311100	Che	LIBERTY ST	OLD ATLANTIC AVE	CAMPOSTELLA RD	5,698	2002	4	6,000	12,000	Low to mod.	11,000	0.3	-1,000
11311110	Che	MILITARY HWY	SUFFOLK CL	I-664	64,793	2003	6	11,000	76,000	Severe	90,000	1.5	14,000
11311130	Che	MILITARY HWY	AIRLINE BLVD	I-64	8,101	2002	4	12,000	20,000	Low to mod.	11,000	0.3	-9,000
11311140	Che	MILITARY HWY	I-64	CAVALIER BLVD	14,537	1999	4	9,000	24,000	Low to mod.	18,000	0.5	-6,000
11311150	Che	MILITARY HWY	CAVALIER BLVD	G.W. HWY	17,061	2002	4	5,000	22,000	Low to mod.	17,000	0.4	-5,000
11311160	Che	MILITARY HWY	G.W. HWY	CANAL DR	18,398	2002	4	7,000	25,000	Low to mod.	19,000	0.5	-6,000
11311170	Che	MILITARY HWY	CANAL DR	BAINBRIDGE BLVD	34,491	2003	4	4,000	38,000	Severe	41,000	1.1	3,000
11311180	Che	MILITARY HWY	BAINBRIDGE BLVD	I-464	n.a.	n.a.	4	n.a.	31,000	Low to mod.	28,000	0.7	-3,000
11311190	Che	MILITARY HWY	I-464	CAMPOSTELLA RD	26,818	2002	4	6,000	33,000	Moderate	28,000	0.7	-5,000
11311200	Che	MILITARY HWY	CAMPOSTELLA RD	BATTLEFIELD BLVD	28,579	2002	4	7,000	36,000	Moderate	29,000	0.8	-7,000
11311210	Che	MILITARY HWY	BATTLEFIELD BLVD	ALLISON DR	31,964	2002	6	7,000	39,000	Low to mod.	32,000	0.6	-7,000
11311220	Che	MILITARY HWY	ALLISON DR	GREENBRIER PKWY	34,312	2002	4	6,000	40,000	Severe	33,000	0.9	-7,000
11311230	Che	MILITARY HWY	GREENBRIER PKWY	VA BEACH CL	36,344	2002	4	4,000	40,000	Severe	34,000	0.9	-6,000
11311250	Che	MT PLEASANT RD	BATTLEFIELD BLVD	GREAT BR BYP	18,640	2002	4	9,000	28,000	Moderate	23,000	0.7	-5,000
11311260	Che	MT PLEASANT RD	GREAT BR BYP	CENTERVILLE TNPK	17,950	2002	2	10,000	28,000	Beyond Severe	32,000	1.9	4,000
11311270	Che	MT PLEASANT RD	CENTERVILLE TNPK	FENTRESS AIRFIELD RD	9,655	2003	2	4,000	14,000	Moderate	17,000	1.0	3,000
11311280	Che	MT PLEASANT RD	FENTRESS AIRFIELD RD	VA BEACH CL	9,513	2003	2	5,000	15,000	Moderate	12,000	0.7	-3,000
11311550	Che	OAK GROVE CONN	DOMINION BLVD	BATTLEFIELD BLVD	55,285	2002	4	20,000	75,000	Severe	57,000	0.7	-18,000
11311290	Che	POINDEXTER ST	PORTSMOUTH CL	I-464	7,919	2003	2	8,000	16,000	Moderate	7,000	0.4	-9,000
11311300	Che	POINDEXTER ST	I-464	BAINBRIDGE BLVD	14,073	1999	4	4,000	18,000	Low to mod.	15,000	0.5	-3,000
11311310	Che	POINDEXTER ST	BAINBRIDGE BLVD	LIBERTY ST	9,757	2002	2	2,000	12,000	Low to mod.	14,000	0.8	2,000
11311320	Che	PORTSMOUTH BLVD	SUFFOLK CL	JOLLIFF RD	13,017	2002	4	13,000	26,000	Low to mod.	21,000	0.6	-5,000
11311330	Che	PORTSMOUTH BLVD	JOLLIFF RD	I-664	18,660	2002	4	11,000	30,000	Moderate	21,000	0.6	-9,000
11311340	Che	PORTSMOUTH BLVD	I-664	TAYLOR RD	27,056	2002	4	6,000	33,000	Severe	36,000	1.1	3,000
11311350	Che	PORTSMOUTH BLVD	TAYLOR RD	PORTSMOUTH CL	31,792	2003	4	6,000	38,000	Severe	50,000	1.5	12,000
11311360	Che	PROVIDENCE RD	ATLANTIC AVE	CAMPOSTELLA RD	n.a.	n.a.	4	n.a.	9,000	Low to mod.	7,000	0.2	-2,000
11311370	Che	PROVIDENCE RD	CAMPOSTELLA RD	VA BEACH CL	17,299	2002	4	2,000	19,000	Low to mod.	24,000	0.7	5,000
11311380	Che	PUGHSVILLE RD	SUFFOLK CL	I-664	7,231	2002	4	16,000	23,000	Low to mod.	21,000	0.6	-2,000
11311390	Che	PUGHSVILLE RD	I-664	TAYLOR RD	19,323	2002	4	7,000	26,000	Low to mod.	31,000	0.9	5,000
11310140	Che	RTE 168 (NC TO SE PKWY)	N.C. ST LINE	BALLAHACK RD	19,244	2003	4	8,000	27,000	Low to mod.	27,000	0.7	0
11310141	Che	RTE 168 (NC TO SE PKWY)	BALLAHACK RD	B'FIELD BLVD @ GALLB. RD	19,244	2003	4	8,000	27,000	Low to mod.	27,000	0.7	0
11311580	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ GALLB. RD	B'FIELD BLVD @ IND CRK RD	6,761	2002	4	12,000	19,000	Low to mod.	5,000	0.1	-14,000
11311570	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ IND CRK RD	HILLCREST PKWY	n.a.	n.a.	4	n.a.	24,000	Low to mod.	1,000	0.0	-23,000
11311560	Che	RTE 168 (NC TO SE PKWY)	HILLCREST PKWY	B'FIELD BLVD @ KEGMAN RD	19,529	2003	4	33,000	53,000	Low to mod.	26,000	0.3	-27,000
11310700	Che	RTE 168 (NC TO SE PKWY)	B'FIELD BLVD @ KEGMAN RD	HANBURY ROAD	17,546	2002	4	33,000	51,000	Low to mod.	25,000	0.3	-26,000
11310710	Che	RTE 168 (NC TO SE PKWY)	HANBURY ROAD	MT PLEASANT RD	33,481	2002	4	23,000	56,000	Low to mod.	21,000	0.3	-35,000
11310720	Che	RTE 168 (NC TO SE PKWY)	MT PLEASANT RD	B'FIELD / KEMPSVILLE	56,403	2002	4	31,000	87,000	Severe	54,000	0.7	-33,000
11311400	Che	SIGN PINE / ST BR / EDINB	BENEFIT RD	HILLCREST PKWY	2,455	2003	2	11,000	13,000	Moderate	13,000	0.8	0
11311410	Che	TAYLOR RD	PORTSMOUTH BLVD	BRUCE RD	19,437	2003	4	11,000	30,000	Moderate	35,000	1.1	5,000
11311420	Che	TAYLOR RD	BRUCE RD	PUGHSVILLE RD	21,692	2002	4	8,000	30,000	Moderate	35,000	1.1	5,000
11311430	Che	TAYLOR RD	PUGHSVILLE RD	WESTERN BRANCH BLVD	15,348	2000	4	5,000	20,000	Low to mod.	19,000	0.6	-1,000
11311440	Che	TOWN POINT RD	PORTSMOUTH CL	CHURCHLAND BLVD	25,220	2003	4	2,000	27,000	Moderate	20,000	0.6	-7,000
11311450	Che	TYRE NECK RD	BRUCE RD	SILVERWOOD BLVD	11,761	2002	2	2,000	14,000	Severe	13,000	1.1	-1,000
11311455	Che	TYRE NECK RD	SILVERWOOD BLVD	PORTSMOUTH CL	12,400	2003	2	2,000	14,000	Severe	22,000	1.9	8,000
11311460	Che	VOLVO PKWY	BATTLEFIELD BLVD	GREENBRIER PKWY	27,132	2002	4	2,000	29,000	Moderate	20,000	0.6	-9,000
11311470	Che	VOLVO PKWY	GREENBRIER PKWY	FAIRWAY REACH RD	21,032	2002	4	19,000	40,000	Severe	22,000	0.7	-18,000
11311480	Che	VOLVO PKWY	FAIRWAY REACH RD	KEMPSVILLE RD	25,387	2001	4	24,000	49,000	Beyond Severe	32,000	0.9	-17,000

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11311490	Che	VOLVO PKWY	KEMPSVILLE RD	VA BEACH CL	not blt.	n.a.	4	n.a.	37,000	Severe	24,000	0.7	-13,000
11311510	Che	WESTERN BRANCH BLVD	SUFFOLK CL	CHURCHLAND BLVD	22,415	2003	4	4,000	26,000	Low to mod.	29,000	0.8	3,000
11311520	Che	WESTERN BRANCH BLVD	CHURCHLAND BLVD	TAYLOR RD	19,707	2002	4	14,000	34,000	Moderate	37,000	1.0	3,000
11311530	Che	WESTERN BRANCH BLVD	TAYLOR RD	PORTSMOUTH CL	23,758	2003	4	1,000	25,000	Low to mod.	24,000	0.6	-1,000
10360090	Glo	BELROI RD	RTE 614	US 17	4,609	2003	2	6,000	11,000	Low to mod.	7,000	0.4	-4,000
10360030	Glo	G.W. HWY	YORK CL	GUINEA RD	34,980	2003	4	15,000	50,000	Severe	50,000	1.3	0
10360040	Glo	G.W. HWY	GUINEA RD	FEATHERBED LN	36,168	2003	4	12,000	48,000	Severe	53,000	1.3	5,000
10360050	Glo	G.W. HWY	FEATHERBED LN	US 17 BUS S	29,232	2003	4	16,000	45,000	Severe	49,000	1.2	4,000
10360060	Glo	G.W. HWY	US 17 BUS S	ARK RD	17,672	2003	4	4,000	22,000	Low to mod.	23,000	0.6	1,000
10360070	Glo	GUINEA RD	US 17	RTE 649	9,275	2003	2	2,000	11,000	Low to mod.	11,000	0.7	0
10360080	Glo	HICKORY FORK RD	US 17	RTE 616	5,734	2003	2	2,000	8,000	Low to mod.	6,000	0.4	-2,000
10360020	Glo	MAIN ST	US 17 (s. end)	RTE 3 &14 E	21,754	2003	4	5,000	27,000	Moderate	27,000	0.8	0
10360010	Glo	RTE 3/14	US 17 BUS	COW CREEK	17,110	2003	4	7,000	24,000	Low to mod.	24,000	0.8	0
11140010	Hamp	ABERDEEN RD	TODDS LA	MERCURY BLVD	13,605	2002	4	1,000	15,000	Low to mod.	20,000	0.6	5,000
11140020	Hamp	ABERDEEN RD	MERCURY BLVD	BRIARFIELD RD	17,792	2003	4	1,000	19,000	Low to mod.	22,000	0.7	3,000
11140030	Hamp	ABERDEEN RD	BRIARFIELD RD	I-664	19,090	2003	4	5,000	24,000	Low to mod.	27,000	0.8	3,000
11140040	Hamp	ABERDEEN RD	I-664	PEMBROKE AVE	16,610	2005	4	2,000	19,000	Low to mod.	16,000	0.5	-3,000
11140050	Hamp	ABERDEEN RD	PEMBROKE AVE	NEWPORT NEWS CL	12,451	2002	4	4,000	16,000	Low to mod.	16,000	0.5	0
11140060	Hamp	ARMISTEAD AVE	WYTHE CRK RD	NASA MAIN GATE	15,181	2003	4	7,000	22,000	Low to mod.	22,000	0.7	0
11140200	Hamp	ARMISTEAD AVE	NASA MAIN GATE	CMDR SHEP BLVD	20,097	2003	4	9,000	29,000	Moderate	27,000	0.8	-2,000
11140070	Hamp	ARMISTEAD AVE	CMDR SHEP BLVD	HRC PARKWAY	29,173	2003	4	6,000	35,000	Severe	38,000	1.2	3,000
11140080	Hamp	ARMISTEAD AVE	HRC PARKWAY	MERCURY BLVD	35,453	2003	4	-3,000	32,000	Moderate	28,000	0.7	-4,000
11140090	Hamp	ARMISTEAD AVE	MERCURY BLVD	ARM/664 CONN	22,029	2003	4	6,000	28,000	Low to mod.	32,000	0.8	4,000
11140095	Hamp	ARMISTEAD AVE	ARM/664 CONN	LA SALLE AVE	22,029	2003	4	6,000	28,000	Low to mod.	31,000	0.8	3,000
11140100	Hamp	ARMISTEAD AVE	LA SALLE AVE	RIP RAP RD	17,860	2003	4	2,000	20,000	Low to mod.	29,000	0.9	9,000
11140105	Hamp	ARMISTEAD AVE	RIP RAP RD	PEMBROKE AVE	13,131	2003	4	4,000	17,000	Low to mod.	27,000	0.8	10,000
11140110	Hamp	ARMISTEAD AVE	PEMBROKE AVE	SETTLERS LANDING RD	12,854	2003	4	5,000	18,000	Low to mod.	15,000	0.5	-3,000
11140120	Hamp	BIG BETHEL RD	YORK CL	SEMPLE FARM RD	12,802	2004	2	4,000	17,000	Severe	17,000	1.0	0
11140130	Hamp	BIG BETHEL RD	SEMPLE FARM RD	SAUNDERS RD	16,398	2003	4	3,000	19,000	Low to mod.	21,000	0.6	2,000
11140135	Hamp	BIG BETHEL RD	SAUNDERS RD	THOMAS NELSON DR	22,214	2003	4	8,000	30,000	Moderate	35,000	1.0	5,000
11140140	Hamp	BIG BETHEL RD	THOMAS NELSON DR	HRC PKWY	27,113	2004	4	7,000	34,000	Severe	40,000	1.2	6,000
11140150	Hamp	BIG BETHEL RD	HRC PKWY	TODDS LANE	34,089	2003	4	6,000	40,000	Severe	46,000	1.4	6,000
11140170	Hamp	BRIARFIELD RD	NEWPORT NEWS CL	ABERDEEN RD	12,574	2002	2	4,000	17,000	Severe	15,000	0.9	-2,000
11140180	Hamp	BRIARFIELD RD	ABERDEEN RD	QUEEN ST	14,466	2003	4	3,000	17,000	Low to mod.	15,000	0.5	-2,000
11140190	Hamp	CHESTNUT AVE	NEWPORT NEWS CL	MERCURY BLVD	8,835	2003	2	-1,000	8,000	Low to mod.	11,000	1.0	3,000
11140205	Hamp	CMDR SHEP BLVD	ARMISTEAD AVE	MAGRUDER BLVD	8,087	2003	4	4,000	12,000	Low to mod.	7,000	0.2	-5,000
11140210	Hamp	CMDR SHEP BLVD EXT	MAGRUDER BLVD	BIG BETHEL RD	not blt.	n.a.	4	n.a.	5,000	Low to mod.	2,000	0.1	-3,000
11140220	Hamp	COLISEUM DR	MERCURY BLVD	HRC PARKWAY	20,897	2002	4	9,000	30,000	Moderate	24,000	0.7	-6,000
11140230	Hamp	COUNTY ST	WOODLAND RD	MALLORY ST	5,139	2002	2	4,000	9,000	Low to mod.	9,000	0.6	0
11140240	Hamp	CUNNINGHAM DR	TODDS LA	COLISEUM DR	23,518	2003	4	6,000	30,000	Moderate	26,000	0.8	-4,000
11140250	Hamp	CUNNINGHAM DR	COLISEUM DR	MERCURY BLVD	14,902	2003	4	1,000	16,000	Low to mod.	16,000	0.5	0
11140260	Hamp	FOX HILL RD	MERCURY BLVD	WOODLAND RD	28,701	2003	4	1,000	30,000	Moderate	49,000	1.5	19,000
11140270	Hamp	FOX HILL RD	WOODLAND RD	OLD BUCKROE RD	13,953	2004	4	0	14,000	Low to mod.	24,000	1.1	10,000
11140280	Hamp	HARRIS CREEK RD	FOX HILL RD	LITTLE BACK RIVER RD	3,615	2002	2	1,000	5,000	Low to mod.	7,000	0.6	2,000
11140290	Hamp	HRC PARKWAY	NEWPORT NEWS CL	BIG BETHEL RD	15,721	2003	4	22,000	38,000	Severe	33,000	0.9	-5,000
11140300	Hamp	HRC PARKWAY	BIG BETHEL RD	I-64	42,994	2003	4	26,000	69,000	Moderate	64,000	0.8	-5,000
11140310	Hamp	HRC PARKWAY	I-64	MAGRUDER BLVD	52,676	2003	4	0	53,000	Low to mod.	43,000	0.6	-10,000
11140320	Hamp	HRC PARKWAY	MAGRUDER BLVD	COLISEUM DR	38,379	2003	4	2,000	40,000	Low to mod.	34,000	0.4	-6,000
11140330	Hamp	HRC PARKWAY	COLISEUM DR	ARMISTEAD AVE	33,244	2004	4	-4,000	29,000	Low to mod.	33,000	0.9	4,000

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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11140340	Hamp	KECOUGHTAN RD	NEWPORT NEWS CL	POWHATAN PKWY	6,484	2003	4	2,000	8,000	Low to mod.	8,000	0.2	0
11140350	Hamp	KECOUGHTAN RD	POWHATAN PKWY	LA SALLE AVE	7,944	2004	4	1,000	9,000	Low to mod.	12,000	0.4	3,000
11140360	Hamp	KECOUGHTAN RD	LA SALLE AVE	VICTORIA BLVD	9,058	2003	4	1,000	10,000	Low to mod.	9,000	0.3	-1,000
11140370	Hamp	KECOUGHTAN RD	VICTORIA BLVD	SETTLERS LNDG RD	13,288	2002	4	2,000	15,000	Low to mod.	12,000	0.4	-3,000
11140380	Hamp	KING ST	PEMBROKE AVE	I-64	10,155	2004	3	1,000	11,000	Low to mod.	8,000	0.3	-3,000
11140390	Hamp	KING ST	I-64	RIP RAP RD	10,155	2004	4	2,000	12,000	Low to mod.	8,000	0.2	-4,000
11140400	Hamp	KING ST	RIP RAP RD	MERCURY BLVD	20,044	2003	4	2,000	22,000	Low to mod.	26,000	0.8	4,000
11140410	Hamp	KING ST	MERCURY BLVD	OLD FOX HILL RD	n.a.	n.a.	4	n.a.	27,000	Moderate	27,000	0.8	0
11140420	Hamp	KING ST	OLD FOX HILL RD	LITTLE BACK RIVER RD	23,536	2003	4	3,000	27,000	Moderate	27,000	0.8	0
11140430	Hamp	KING ST	LITTLE BACK RIVER RD	LANGLEY AFB	7,979	2003	2	1,000	9,000	Low to mod.	12,000	0.7	3,000
11140440	Hamp	LA SALLE AVE	KECOUGHTAN RD	SETTLERS LANDING RD	15,848	2003	2	1,000	17,000	Severe	19,000	1.2	2,000
11140450	Hamp	LA SALLE AVE	SETTLERS LANDING RD	PEMBROKE AVE	16,827	2004	4	0	17,000	Low to mod.	20,000	0.6	3,000
11140460	Hamp	LA SALLE AVE	PEMBROKE AVE	ARMISTEAD AVE	23,766	2003	4	0	24,000	Low to mod.	22,000	0.7	-2,000
11140470	Hamp	LA SALLE AVE	ARMISTEAD AVE	MERCURY BLVD	16,976	2003	4	-2,000	15,000	Low to mod.	8,000	0.2	-7,000
11140480	Hamp	LA SALLE AVE	MERCURY BLVD	LANGLEY GATE	15,669	2003	4	3,000	19,000	Low to mod.	11,000	0.3	-8,000
11140490	Hamp	LITTLE BACK RIVER RD	KING ST	HARRIS CREEK RD	12,707	2003	2	4,000	17,000	Beyond Severe	14,000	1.2	-3,000
11140500	Hamp	MAGRUDER BLVD	YORK CO LINE	SMPL FARM RD	28,865	2003	4	1,000	30,000	Low to mod.	19,000	0.5	-11,000
11140510	Hamp	MAGRUDER BLVD	SMPL FARM RD	CMDR SHEP BLVD	31,107	2002	4	3,000	34,000	Moderate	23,000	0.6	-11,000
11140520	Hamp	MAGRUDER BLVD	CMDR SHEP BLVD	HRC PARKWAY	34,812	2003	4	12,000	47,000	Severe	30,000	0.8	-17,000
11140530	Hamp	MAGRUDER BLVD	HRC PARKWAY	I-64	24,496	2000	4	9,000	33,000	Moderate	28,000	0.7	-5,000
11140540	Hamp	MAGRUDER RAMP	I-64	CUNNINGHAM DR	3,441	2001	1	3,000	6,000	Low to mod.	9,000	0.9	3,000
11140550	Hamp	MALLORY ST	I-64	COUNTY ST	12,650	2004	2	4,000	17,000	Severe	14,000	0.8	-3,000
11140560	Hamp	MALLORY ST	COUNTY ST	MERCURY BLVD	10,490	2003	2	3,000	13,000	Low to mod.	10,000	0.6	-3,000
11140570	Hamp	MALLORY ST	MERCURY BLVD	PEMBROKE AVE	7,807	2003	4	4,000	12,000	Low to mod.	9,000	0.3	-3,000
11140580	Hamp	MELLEN ST	MALLORY ST	MERCURY BLVD	5,927	2003	2	2,000	8,000	Low to mod.	8,000	0.5	0
11140590	Hamp	MERCURY BLVD	NEWPORT NEWS CL	ABERDEEN RD	49,507	2003	8	10,000	60,000	Low to mod.	54,000	0.7	-6,000
11140600	Hamp	MERCURY BLVD	ABERDEEN RD	QUEEN ST	56,070	2001	8	11,000	67,000	Moderate	49,000	0.6	-18,000
11140610	Hamp	MERCURY BLVD	QUEEN ST	I-64	55,096	1999	8	9,000	64,000	Moderate	61,000	0.8	-3,000
11140620	Hamp	MERCURY BLVD	I-64	COLISEUM DR	53,371	1999	8	10,000	63,000	Moderate	75,000	1.0	12,000
11140621	Hamp	MERCURY BLVD	COLISEUM DR	CUNNINGHAM DR	50,639	2001	8	7,000	58,000	Low to mod.	62,000	0.8	4,000
11140630	Hamp	MERCURY BLVD	CUNNINGHAM DR	ARMISTEAD AVE	49,031	1999	8	11,000	60,000	Low to mod.	64,000	0.8	4,000
11140640	Hamp	MERCURY BLVD	ARMISTEAD AVE	LA SALLE AVE	56,318	2003	8	3,000	59,000	Moderate	61,000	0.9	2,000
11140650	Hamp	MERCURY BLVD	LA SALLE AVE	KING ST	64,403	2003	8	-4,000	60,000	Moderate	59,000	0.9	-1,000
11140660	Hamp	MERCURY BLVD	KING ST	FOX HILL RD	42,078	2005	6	6,000	48,000	Severe	57,000	1.2	9,000
11140670	Hamp	MERCURY BLVD	FOX HILL RD	ANDREWS BLVD	36,444	2003	4	-3,000	33,000	Severe	25,000	0.8	-8,000
11140680	Hamp	MERCURY BLVD	ANDREWS BLVD	PEMBROKE AVE	18,872	2004	4	3,000	22,000	Low to mod.	22,000	0.7	0
11140690	Hamp	MERCURY BLVD	PEMBROKE AVE	WOODLAND RD	n.a.	n.a.	4	n.a.	7,000	Low to mod.	6,000	0.2	-1,000
11140700	Hamp	MERCURY BLVD	WOODLAND RD	MALLORY ST	11,366	2003	4	3,000	14,000	Low to mod.	10,000	0.3	-4,000
11140710	Hamp	MERCURY BLVD	MALLORY ST	MELLEN ST	5,628	2003	4	0	6,000	Low to mod.	6,000	0.2	0
11140730	Hamp	OLD BUCKROE RD	PEMBROKE AVE	FOX HILL RD	7,137	2003	2	1,000	8,000	Low to mod.	9,000	0.8	1,000
11140740	Hamp	PEMBROKE AVE	NEWPORT NEWS CL	ABERDEEN RD	9,815	2005	4	6,000	16,000	Low to mod.	10,000	0.3	-6,000
11140750	Hamp	PEMBROKE AVE	ABERDEEN RD	POWHATAN PKWY	10,838	2003	4	0	11,000	Low to mod.	11,000	0.3	0
11140760	Hamp	PEMBROKE AVE	POWHATAN PKWY	SETTLERS LNDG RD	12,165	2003	4	5,000	17,000	Low to mod.	19,000	0.6	2,000
11140770	Hamp	PEMBROKE AVE	SETTLERS LNDG RD	LA SALLE AVE	10,999	2003	4	5,000	16,000	Low to mod.	16,000	0.5	0
11140780	Hamp	PEMBROKE AVE	LA SALLE AVE	ARMISTEAD AVE	7,854	2003	4	7,000	15,000	Low to mod.	17,000	0.5	2,000
11140790	Hamp	PEMBROKE AVE	ARMISTEAD AVE	KING ST	15,702	2004	4	14,000	30,000	Moderate	37,000	1.1	7,000
11140800	Hamp	PEMBROKE AVE	KING ST	EATON ST	n.a.	n.a.	4	n.a.	27,000	Moderate	42,000	1.3	15,000
11140810	Hamp	PEMBROKE AVE	EATON ST	BARRON ST	10,302	2004	2	4,000	14,000	Moderate	24,000	1.5	10,000
11140820	Hamp	PEMBROKE AVE	BARRON ST	MERCURY BLVD	10,302	2004	3	3,000	13,000	Low to mod.	23,000	0.9	10,000

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Less than -15,000
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THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11140830	Hamp	PEMBROKE AVE	MERCURY BLVD	WOODLAND RD	7,906	2003	4	9,000	17,000	Low to mod.	25,000	0.8	8,000
11140840	Hamp	PEMBROKE AVE	WOODLAND RD	OLD BUCKROE RD	11,924	2003	4	8,000	20,000	Low to mod.	34,000	1.0	14,000
11140850	Hamp	PEMBROKE AVE	OLD BUCKROE RD	MALLORY ST	3,502	2003	2	1,000	5,000	Low to mod.	10,000	0.6	5,000
11140900	Hamp	POWER PLANT PKWY	MERCURY BLVD	PINE CHAPEL RD	11,860	2003	4	3,000	15,000	Low to mod.	14,000	0.4	-1,000
11140910	Hamp	POWER PLANT PKWY	PINE CHAPEL RD	BRIARFIELD RD	24,679	2003	4	-3,000	22,000	Low to mod.	18,000	0.6	-4,000
11140860	Hamp	POWHATAN PKWY	KECOUGHTAN RD	PEMBROKE AVE	8,702	2003	2	1,000	10,000	Low to mod.	15,000	0.9	5,000
11140870	Hamp	POWHATAN PKWY	PEMBROKE AVE	I-664	21,985	2002	4	1,000	23,000	Low to mod.	30,000	0.9	7,000
11140880	Hamp	POWHATAN PKWY	I-664	BRIARFIELD RD	14,419	2002	4	0	14,000	Low to mod.	14,000	0.4	0
11140920	Hamp	QUEEN ST	BRIARFIELD RD	MICHIGAN DR	14,015	2003	4	2,000	16,000	Low to mod.	11,000	0.3	-5,000
11140970	Hamp	QUEEN ST	MICHIGAN DR	PEMBROKE AVE	14,015	2003	4	1,000	15,000	Low to mod.	11,000	0.3	-4,000
11140930	Hamp	RIP RAP RD	ARMISTEAD AVE	I-64	8,408	2005	2	5,000	13,000	Low to mod.	25,000	1.5	12,000
11140935	Hamp	RIP RAP RD	I-64	KING ST	10,084	2003	2	7,000	17,000	Severe	27,000	1.6	10,000
11140940	Hamp	ROANOKE AVE	NEWPORT NEWS CL	MERCURY BLVD	4,205	2003	2	1,000	5,000	Low to mod.	2,000	0.2	-3,000
11140950	Hamp	SAUNDERS RD	NEWPORT NEWS CL	BIG BETHEL RD	10,318	2003	4	7,000	17,000	Low to mod.	17,000	0.8	0
11140960	Hamp	SEMPLE FARM RD	MAGRUDER BLVD	WYTHE CRK RD	18,334	2002	4	7,000	25,000	Low to mod.	26,000	0.8	1,000
11140980	Hamp	SETTLERS LNDG RD	PEMBROKE AVE	LA SALLE AVE	11,454	2002	4	-1,000	10,000	Low to mod.	9,000	0.3	-1,000
11140990	Hamp	SETTLERS LNDG RD	LA SALLE AVE	KECOUGHTAN RD	10,508	2005	4	6,000	17,000	Low to mod.	16,000	0.5	-1,000
11140995	Hamp	SETTLERS LNDG RD	KECOUGHTAN RD	ARMISTEAD AVE	20,945	2003	4	4,000	25,000	Low to mod.	22,000	0.7	-3,000
11141000	Hamp	SETTLERS LNDG RD	ARMISTEAD AVE	TYLER ST	26,709	2003	2	-1,000	26,000	Beyond Severe	25,000	1.4	-1,000
11141010	Hamp	SETTLERS LNDG RD	TYLER ST	I-64	24,033	2005	4	-1,000	23,000	Low to mod.	22,000	0.7	-1,000
11141020	Hamp	TODDS LA	NEWPORT NEWS CL	BIG BETHEL RD	21,475	2003	4	10,000	31,000	Moderate	40,000	1.2	9,000
11141030	Hamp	TODDS LA	BIG BETHEL RD	ABERDEEN RD	22,387	2004	4	5,000	27,000	Moderate	34,000	1.0	7,000
11141040	Hamp	TODDS LA	ABERDEEN RD	CUNNINGHAM DR	27,961	2004	4	2,000	30,000	Moderate	38,000	1.2	8,000
11140890	Hamp	TODDS LA	CUNNINGHAM DR	MERCURY BLVD	15,057	2003	4	7,000	22,000	Low to mod.	24,000	0.7	2,000
11141050	Hamp	WOODLAND RD	I-64	COUNTY ST	30,154	2003	4	2,000	32,000	Severe	22,000	0.7	-10,000
11141060	Hamp	WOODLAND RD	COUNTY ST	MERCURY BLVD	23,659	2003	4	-2,000	22,000	Low to mod.	11,000	0.3	-11,000
11141070	Hamp	WOODLAND RD	MERCURY BLVD	PEMBROKE AVE	13,124	2004	4	5,000	18,000	Low to mod.	13,000	0.4	-5,000
11141080	Hamp	WOODLAND RD	PEMBROKE AVE	FOX HILL RD	10,520	2003	4	6,000	17,000	Low to mod.	12,000	0.4	-5,000
11141090	Hamp	WYTHE CRK RD	ARMISTEAD AVE	POQUOSON CL	16,714	2002	2	10,000	27,000	Beyond Severe	28,000	1.7	1,000
13000015	IW	BATTERY PARK RD	S CHURCH ST	SM CL / NIKE PARK RD	8,654	2002	2	-2,000	7,000	Low to mod.	4,000	0.2	-3,000
10460195	IW	BATTERY PARK RD	SM CL / NIKE PARK RD	COUNTRY WAY	3,811	2002	2	0	4,000	Low to mod.	5,000	0.3	1,000
10460120	IW	BREWERS NECK BLVD	RTE 10 & 32	RTE 670	21,801	2002	4	18,000	40,000	Severe	41,000	1.2	1,000
10460130	IW	BREWERS NECK BLVD	RTE 670	US 17	21,801	2002	4	15,000	37,000	Severe	40,000	1.2	3,000
13000040	IW	CHURCH ST, N	MAIN ST	SMITHFIELD CL	9,958	2002	2	2,000	12,000	Low to mod.	12,000	0.8	0
10460050	IW	CHURCH ST, N	SMITHFIELD CL	JENKINS LN	4,739	2002	2	2,000	7,000	Low to mod.	6,000	0.4	-1,000
10460060	IW	CHURCH ST, N	JENKINS LN	RTE 10 BYP	1,867	2002	2	1,000	3,000	Low to mod.	2,000	0.1	-1,000
13000080	IW	CHURCH ST, S	RTE 10 BYP	BATTERY PARK RD	15,004	2002	4	4,000	19,000	Low to mod.	13,000	0.4	-6,000
13000085	IW	CHURCH ST, S	BATTERY PARK RD	CYPRESS CREEK BR	13,571	2002	2	1,000	15,000	Moderate	8,000	0.5	-7,000
13000095	IW	CHURCH ST, S	CYPRESS CREEK BR	MAIN ST	13,742	2002	2	1,000	15,000	Moderate	8,000	0.5	-7,000
10460180	IW	NIKE PARK RD	TITUS CREEK DR	BATTERY PARK RD	7,439	2001	2	1,000	8,000	Low to mod.	6,000	0.4	-2,000
10460210	IW	RESCUE RD	NEWPORT ST	SMITH'S NECK RD	826	2002	2	1,000	2,000	Low to mod.	2,000	0.1	0
10460010	IW	RTE 10	SUFFOLK CL	RIDDICK RD	10,899	2002	4	7,000	18,000	Low to mod.	19,000	0.6	1,000
10460020	IW	RTE 10	RIDDICK RD	BREWERS NK BLVD	10,899	2002	4	8,000	19,000	Low to mod.	19,000	0.6	0
10460110	IW	RTE 10	BREWERS NK BLVD	RTE 644 / ECL SM	n.a.	n.a.	4	n.a.	40,000	Severe	44,000	1.3	4,000
13000045	IW	RTE 10	RTE 644 / ECL SM	S. CHURCH ST	26,681	2002	4	12,000	39,000	Severe	42,000	1.2	3,000
10460045	IW	RTE 10	BUS RTE 10	SURRY CL	7,222	2002	2	3,000	10,000	Low to mod.	10,000	0.6	0
13000055	IW	RTE 10 BYPASS	S. CHURCH ST	RTE 710 (FAIRWAY DR)	15,222	2002	2	3,000	18,000	Severe	26,000	1.5	8,000
13000065	IW	RTE 10 BYPASS	RTE 710 (FAIRWAY DR)	MAIN ST	15,222	2002	2	3,000	18,000	Severe	26,000	1.5	8,000
13000070	IW	RTE 10 BYPASS	MAIN ST	SMITHFIELD CL	10,159	2002	2	4,000	14,000	Moderate	15,000	0.9	1,000

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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
10460030	IW	RTE 10 BYPASS	SMITHFIELD CL	BUS RTE 10	6,665	2002	2	6,000	13,000	Low to mod.	14,000	0.8	1,000
10460080	IW	RTE 17	NEWPORT NEWS CL	BREWERS NK BLVD	27,513	2003	4	24,000	52,000	Severe	40,000	0.9	-12,000
10460075	IW	RTE 17	BREWERS NK BLVD	W. END CHUC BR	11,991	2002	4	15,000	27,000	Low to mod.	25,000	0.6	-2,000
10460065	IW	RTE 17	W. END CHUC BR	SUFFOLK CL	11,991	2002	2	15,000	27,000	Low to mod.	25,000	0.6	-2,000
10460320	IW	RTE 258 (GREAT MILL HWY)	SUFFOLK CL	US 58 BUS	3,440	2002	2	3,000	6,000	Low to mod.	15,000	0.9	9,000
10460300	IW	RTE 58 BUS	FRANKLIN CL	US 258	8,508	2002	2	7,000	16,000	Severe	14,000	0.9	-2,000
10460310	IW	RTE 58 BUS	US 258	SUFFOLK CL	3,212	2002	2	3,000	6,000	Low to mod.	4,000	0.2	-2,000
10460140	IW	SMITH'S NECK RD	CARROLLTON BLVD	REYNOLDS DR	8,834	2001	2	8,000	17,000	Severe	17,000	1.1	0
10460150	IW	SMITH'S NECK RD	REYNOLDS DR	TITUS CREEK DR	6,990	2002	2	2,000	9,000	Low to mod.	8,000	0.5	-1,000
10460160	IW	SMITH'S NECK RD	TITUS CREEK DR	RESCUE RD	1,455	2002	2	1,000	2,000	Low to mod.	2,000	0.1	0
10460170	IW	TITUS CREEK DR	SMITH'S NECK RD	NIKE PARK RD	n.a.	n.a.	2	n.a.	8,000	Low to mod.	5,000	0.3	-3,000
10460205	IW	TODD AVE / WARWICK ST	COUNTRY WAY	NEWPORT ST	1,053	2002	2	2,000	3,000	Low to mod.	3,000	0.2	0
10460250	IW	US 258 (INCLUDING MAIN ST)	CARRSVILLE HWY	WINDSOR CL	4,862	2002	2	3,000	8,000	Low to mod.	3,000	0.2	-5,000
10460240	IW	US 258 (INCLUDING MAIN ST)	WINDSOR SCL	US 460	4,569	2002	2	1,000	6,000	Low to mod.	1,000	0.1	-5,000
10460230	IW	US 258 (INCLUDING MAIN ST)	US 460	WINDSOR NCL	4,898	2002	2	5,000	10,000	Low to mod.	7,000	0.4	-3,000
10460220	IW	US 258 (INCLUDING MAIN ST)	WINDSOR CL	MONUMENT CIR	4,898	2002	2	4,000	9,000	Low to mod.	6,000	0.3	-3,000
10460100	IW	US 258 (INCLUDING MAIN ST)	MONUMENT CIR	SMITHFIELD CL	5,171	2002	2	3,000	8,000	Low to mod.	4,000	0.2	-4,000
13000020	IW	US 258 (INCLUDING MAIN ST)	SMITHFIELD CL	RTE 10 BYPASS	12,892	2002	2	3,000	16,000	Severe	16,000	1.0	0
13000030	IW	US 258 (INCLUDING MAIN ST)	RTE 10 BYPASS	S. CHURCH ST	5,666	2002	2	5,000	11,000	Low to mod.	17,000	1.1	6,000
10460260	IW	US 460	SOUTHAMPTON CL	WINDSOR WCL	11,754	2002	4	12,000	24,000	Low to mod.	24,000	0.6	0
10460270	IW	US 460	WINDSOR WCL	US 258	n.a.	n.a.	4	n.a.	26,000	Low to mod.	27,000	0.7	1,000
10460280	IW	US 460	US 258	WINDSOR ECL	13,097	2002	4	11,000	24,000	Low to mod.	26,000	0.7	2,000
10460290	IW	US 460	WINDSOR ECL	SUFFOLK CL	14,531	2002	4	9,000	24,000	Low to mod.	28,000	0.7	4,000
10470030	JCC	BARHAMSVILLE RD	I-64	RTE 60	6,215	2004	4	14,000	20,000	Low to mod.	11,000	0.3	-9,000
10470040	JCC	CENTERVILLE RD	RTE 5 E	ALT RTE 5	4,844	2003	2	3,000	8,000	Low to mod.	7,000	0.4	-1,000
10470050	JCC	CENTERVILLE RD	ALT RTE 5	BRICK BAT RD	4,844	2003	2	1,000	6,000	Low to mod.	5,000	0.3	-1,000
10470060	JCC	CENTERVILLE RD	BRICK BAT RD	LONGHILL RD	5,073	2003	2	7,000	12,000	Low to mod.	9,000	0.6	-3,000
10470070	JCC	CENTERVILLE RD	LONGHILL RD	RTE 60	9,279	2003	2	4,000	13,000	Moderate	11,000	0.7	-2,000
10470080	JCC	COLONIAL PARKWAY	JAMESTOWN	NCL WMSBRG	n.a.	n.a.	2	n.a.	6,000	Low to mod.	2,000	0.1	-4,000
10470090	JCC	CROAKER RD	RTE 60	ROSE LN	8,434	2003	2	3,000	11,000	Low to mod.	14,000	0.9	3,000
10470100	JCC	CROAKER RD	ROSE LN	I-64	8,434	2003	4	14,000	22,000	Low to mod.	18,000	0.6	-4,000
10470110	JCC	CROAKER RD	I-64	FENTON MILL RD	n.a.	n.a.	4	n.a.	17,000	Low to mod.	21,000	0.7	4,000
10470120	JCC	CROAKER RD	FENTON MILL RD	RIVERVIEW RD	3,564	2003	2	9,000	13,000	Moderate	17,000	1.1	4,000
10470140	JCC	IRONBOUND RD	MONTICELLO AVE	WLMBG CL	10,860	2003	4	0	11,000	Low to mod.	9,000	0.3	-2,000
10470132	JCC	IRONBOUND RD / NEWS RD	MONTICELLO AVE	RTE 5 / J TYLER HWY	11,183	2003	2	9,000	20,000	Severe	23,000	1.4	3,000
10470135	JCC	IRONBOUND RD / SANDY B	RTE 5 / J TYLER HWY	JAMESTOWN RD	8,336	2003	2	1,000	9,000	Low to mod.	7,000	0.4	-2,000
10470150	JCC	JAMESTOWN RD	JAMES RIVER	WCL WLMBG	8,244	2003	2	1,000	9,000	Low to mod.	14,000	0.8	5,000
10470160	JCC	JOHN TYLER HWY	CHARLES CITY CL	MONTICELLO AVE	3,455	2004	2	4,000	7,000	Low to mod.	7,000	0.4	0
10470170	JCC	JOHN TYLER HWY	MONTICELLO AVE	CENTERVILLE RD	3,699	2003	2	3,000	7,000	Low to mod.	5,000	0.3	-2,000
10470180	JCC	JOHN TYLER HWY	CENTERVILLE RD	IRONBOUND RD	10,821	2003	2	4,000	15,000	Moderate	16,000	0.9	1,000
10470190	JCC	JOHN TYLER HWY	IRONBOUND RD	RTE 199	11,808	2003	2	6,000	18,000	Severe	15,000	0.9	-3,000
10470220	JCC	LONGHILL CONN RD	LONGHILL RD	IRONBOUND RD	6,037	2003	4	18,000	24,000	Low to mod.	38,000	1.2	14,000
10470200	JCC	LONGHILL RD	CENTERVILLE RD	RTE 199	16,937	2003	2	1,000	18,000	Severe	31,000	1.8	13,000
10470210	JCC	LONGHILL RD	RTE 199	LONGHILL CONN RD	16,880	2001	4	14,000	31,000	Moderate	41,000	1.2	10,000
10470230	JCC	MERRIMAC TRL (RTE 143)	NN CL / I-64	YORK CL @ GROVE	10,195	2004	4	12,000	22,000	Low to mod.	8,000	0.2	-14,000
10470240	JCC	MERRIMAC TRL (RTE 143)	YORK CL @ GOV'T RD	YORK CL @ PENN. RD	15,902	2004	4	11,000	27,000	Moderate	7,000	0.2	-20,000
10470010	JCC	MONTICELLO AVE	RTE 5	CENTERVILLE RD	4,277	2003	2	6,000	10,000	Low to mod.	12,000	0.7	2,000
10470235	JCC	MONTICELLO AVE	CENTERVILLE RD	NEWS RD / IRONBOUND	8,738	2003	2	4,000	13,000	Low to mod.	14,000	0.8	1,000
10470245	JCC	MONTICELLO AVE	NEWS RD / IRONBOUND	RTE 199	33,982	2003	4	4,000	38,000	Severe	38,000	1.1	0

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10470250	JCC	MONTICELLO AVE	RTE 199	IRONBOUND RD	19,927	2003	4	8,000	28,000	Moderate	25,000	0.8	-3,000
10470260	JCC	OLD STAGE RD	NEW KENT CL	BARNES RD	7,601	2004	2	3,000	11,000	Low to mod.	11,000	0.7	0
10470270	JCC	OLD STAGE RD	BARNES RD	I-64	7,601	2004	4	11,000	19,000	Low to mod.	24,000	0.8	5,000
10470215	JCC	OLDE TOWNE RD	LONGHILL RD	RICHMOND RD	10,472	2003	2	6,000	16,000	Severe	16,000	1.0	0
10470280	JCC	POCAHONTAS TR	ECL WLMBG	YORK CL @ 199	9,840	2004	4	20,000	30,000	Low to mod.	86,000	2.2	56,000
10470290	JCC	POCAHONTAS TR	YORK CL @ GRV	BASF RD / 60 RELO	12,625	2003	2	6,000	19,000	Severe	8,000	0.4	-11,000
10470295	JCC	POCAHONTAS TR	BASF RD / 60 RELO	NEWPORT NEWS CL	9,244	2003	2	10,000	19,000	Severe	9,000	0.5	-10,000
10470310	JCC	RICHMOND RD	NEW KENT CL	RTE 30	5,816	2003	4	3,000	9,000	Low to mod.	7,000	0.2	-2,000
10470320	JCC	RICHMOND RD	RTE 30	CROAKER RD	18,184	2003	4	9,000	27,000	Low to mod.	19,000	0.6	-8,000
10470325	JCC	RICHMOND RD	CROAKER RD	CENTERVILLE RD	18,828	2003	4	20,000	39,000	Severe	36,000	1.1	-3,000
10470335	JCC	RICHMOND RD	CENTERVILLE RD	RTE 199	28,372	2003	4	13,000	41,000	Severe	37,000	0.9	-4,000
10470340	JCC	RICHMOND RD	RTE 199	NCL WLMBG	22,175	2003	4	16,000	38,000	Severe	51,000	1.3	13,000
10470350	JCC	RTE 199	YORK CL	RICHMOND RD	19,733	2004	4	11,000	31,000	Low to mod.	30,000	0.4	-1,000
10470360	JCC	RTE 199	RICHMOND RD	LONGHILL RD	18,366	2004	4	16,000	34,000	Low to mod.	24,000	0.3	-10,000
10470370	JCC	RTE 199	LONGHILL RD	MONTICELLO AVE	24,063	2004	4	10,000	34,000	Low to mod.	28,000	0.4	-6,000
10470380	JCC	RTE 199	MONTICELLO AVE	RTE 5	23,273	2004	4	14,000	37,000	Moderate	32,000	0.8	-5,000
10470390	JCC	RTE 199	RTE 5	WCL WLMBG	30,553	2004	4	14,000	45,000	Severe	42,000	1.1	-3,000
10470410	JCC	RTE 199	ECL WLMBG	COLONIAL PKWY	29,003	2004	4	20,000	49,000	Severe	46,000	1.2	-3,000
10470425	JCC	RTE 199	COLONIAL PKWY	RTES 60 & 143 / YORK CL	29,134	2004	4	23,000	52,000	Beyond Severe	40,000	1.0	-12,000
11210020	NN	23/25TH ST CONN	HUNTINGTON AVE	JEFFERSON AVE	n.a.	n.a.	2	n.a.	14,000	Low to mod.	12,000	0.6	-2,000
11210030	NN	25TH ST	JEFFERSON AVE	26TH ST	3,423	2003	2	2,000	5,000	Low to mod.	8,000	0.5	3,000
11210040	NN	25TH ST	26TH ST	HAMPTON CL	6,484	2003	2	1,000	7,000	Low to mod.	10,000	0.6	3,000
11210050	NN	26TH ST	25TH ST	ROANOKE AVE	1,667	2003	2	0	2,000	Low to mod.	2,000	0.1	0
11210055	NN	26TH ST	ROANOKE AVE	JEFFERSON AVE	2,937	2003	2	1,000	4,000	Low to mod.	6,000	0.4	2,000
11210060	NN	26TH ST OVERPASS	JEFFERSON AVE	WARWICK BLVD	n.a.	n.a.	2	n.a.	14,000	Moderate	15,000	0.9	1,000
11210070	NN	26TH ST OVERPASS	WARWICK BLVD	HUNTINGTON AVE	6,389	2001	2	5,000	11,000	Low to mod.	8,000	0.2	-3,000
11210080	NN	39TH ST	HUNTINGTON AVE	MADISON AVE	4,946	2003	4	2,000	7,000	Low to mod.	2,000	0.1	-5,000
11210090	NN	39TH ST	MADISON AVE	HAMPTON CL	8,830	2003	4	1,000	10,000	Low to mod.	5,000	0.1	-5,000
11210100	NN	BLAND BLVD	WARWICK BLVD	I-64	29,379	2003	4	8,000	37,000	Severe	42,000	1.3	5,000
11210105	NN	BLAND BLVD	I-64	JEFFERSON AVE	29,379	2003	4	8,000	37,000	Severe	42,000	1.3	5,000
11210110	NN	BLAND BLVD	JEFFERSON AVE	SIEMENS WAY	17,576	2003	4	14,000	32,000	Severe	23,000	0.7	-9,000
11210120	NN	BRIARFIELD RD	JEFFERSON AVE	HAMPTON CL	10,828	2003	2	1,000	12,000	Low to mod.	15,000	0.9	3,000
11210130	NN	BUXTON AVE	HAMPTON CL	25TH ST	11,716	2003	2	0	12,000	Low to mod.	16,000	0.9	4,000
11210140	NN	CENTER AVENUE	WARWICK BLVD	JEFFERSON AVE	4,470	2003	4	7,000	11,000	Low to mod.	3,000	0.1	-8,000
11210150	NN	CHESTNUT AVE	39TH ST	44TH ST	8,531	2003	4	2,000	11,000	Low to mod.	7,000	0.3	-4,000
11210160	NN	CHESTNUT AVE	44TH ST	BRIARFIELD RD	8,531	2003	2	2,000	11,000	Severe	9,000	0.8	-2,000
11210170	NN	CHESTNUT AVE	BRIARFIELD RD	HAMPTON CL	8,835	2003	4	-1,000	8,000	Low to mod.	11,000	0.5	3,000
11210175	NN	DENBIGH BLVD	LUCAS CREEK RD	WARWICK BLVD	20,788	2003	4	7,000	28,000	Moderate	22,000	0.7	-6,000
11210180	NN	DENBIGH BLVD	WARWICK BLVD	JEFFERSON AVE	36,879	2003	4	7,000	44,000	Beyond Severe	44,000	1.3	0
11210190	NN	DENBIGH BLVD	JEFFERSON AVE	YORK CL	27,312	2003	4	12,000	39,000	Severe	49,000	1.5	10,000
11210210	NN	FT EUSTIS BLVD	WARWICK BLVD	I-64	38,945	2003	4	18,000	57,000	Low to mod.	42,000	0.5	-15,000
11210220	NN	FT EUSTIS BLVD	I-64	JEFFERSON AVE	24,879	2004	4	12,000	37,000	Moderate	33,000	0.8	-4,000
11210230	NN	FT EUSTIS BLVD	JEFFERSON AVE	.54M E JEFFERSON AVE	16,997	2003	4	18,000	35,000	Moderate	26,000	0.7	-9,000
11210240	NN	FT EUSTIS BLVD	.54M E JEFFERSON AVE	YORK CL	16,997	2003	2	9,000	26,000	Beyond Severe	23,000	1.2	-3,000
11210250	NN	HARPERSVILLE RD	J C MORRIS BLVD	SAUNDERS RD	12,878	2003	2	2,000	15,000	Beyond Severe	18,000	1.6	3,000
11210260	NN	HARPERSVILLE RD	SAUNDERS RD	HRC PARKWAY	14,018	2003	2	-2,000	12,000	Severe	19,000	1.7	7,000
11210270	NN	HARPERSVILLE RD	HRC PARKWAY	JEFFERSON AVE	21,391	2003	6	19,000	40,000	Low to mod.	22,000	0.4	-18,000
11210280	NN	HARPERSVILLE RD	JEFFERSON AVE	WARWICK BLVD	13,198	2003	2	8,000	21,000	Severe	25,000	1.5	4,000
11210200	NN	HRC PARKWAY	HARPERSVILLE RD	HAMPTON CL	15,721	2003	4	22,000	38,000	Severe	33,000	0.9	-5,000

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11210290	NN	HUNTINGTON AVE	71ST ST	39TH ST	12,671	2003	3	2,000	15,000	Low to mod.	13,000	0.5	-2,000
11210300	NN	HUNTINGTON AVE	39TH ST	23RD ST	7,409	2003	3	4,000	11,000	Low to mod.	14,000	0.6	3,000
11210340	NN	J C MORRIS BLVD	WARWICK BLVD	JEFFERSON AVE	38,271	2003	4	14,000	52,000	Beyond Severe	37,000	1.2	-15,000
11210330	NN	J C MORRIS BLVD	JEFFERSON AVE	I-64	47,496	2003	6	5,000	52,000	Moderate	65,000	1.1	13,000
11210320	NN	J C MORRIS BLVD	I-64	HARPERSVILLE RD	41,480	2003	4	16,000	57,000	Beyond Severe	87,000	2.3	30,000
11210310	NN	J C MORRIS BLVD	HARPERSVILLE RD	YORK CO LINE	33,903	2003	4	15,000	49,000	Severe	74,000	1.9	25,000
11210350	NN	JEFFERSON AVE	JCC CL @ I-64	YORKTOWN RD	13,524	2003	4	15,000	29,000	Moderate	14,000	0.4	-15,000
11210362	NN	JEFFERSON AVE	YORKTOWN RD	FT EUSTIS BLVD	10,571	2003	4	22,000	33,000	Severe	9,000	0.3	-24,000
11210370	NN	JEFFERSON AVE	FT EUSTIS BLVD	ATKINSON BLVD	23,013	2003	4	19,000	42,000	Severe	32,000	0.8	-10,000
11210380	NN	JEFFERSON AVE	ATKINSON BLVD	DENBIGH BLVD	30,667	2003	6	25,000	56,000	Severe	51,000	0.9	-5,000
11210390	NN	JEFFERSON AVE	DENBIGH BLVD	BLAND BLVD	58,750	2003	6	10,000	69,000	Severe	61,000	1.1	-8,000
11210400	NN	JEFFERSON AVE	BLAND BLVD	I-64	67,896	2003	6	18,000	86,000	Beyond Severe	79,000	1.4	-7,000
11210410	NN	JEFFERSON AVE	I-64	OYSTER PT RD	58,505	2003	6	8,000	67,000	Severe	115,000	2.0	48,000
11210425	NN	JEFFERSON AVE	OYSTER PT RD	MIDDLEGROUND BLVD	57,350	2003	6	16,000	73,000	Severe	120,000	2.1	47,000
11210440	NN	JEFFERSON AVE	MIDDLEGROUND BLVD	J C MORRIS BLVD	55,288	2003	6	19,000	74,000	Severe	126,000	2.2	52,000
11210450	NN	JEFFERSON AVE	J C MORRIS BLVD	HARPERSVILLE RD	56,897	2003	6	10,000	67,000	Severe	119,000	2.1	52,000
11210460	NN	JEFFERSON AVE	HARPERSVILLE RD	MAIN ST	58,865	2003	6	1,000	60,000	Severe	113,000	2.0	53,000
11210470	NN	JEFFERSON AVE	MAIN ST	CENTER AVE	46,429	2003	6	0	46,000	Moderate	72,000	1.2	26,000
11210480	NN	JEFFERSON AVE	CENTER AVE	MERCURY BLVD	45,684	2003	6	-1,000	45,000	Low to mod.	70,000	1.2	25,000
11210490	NN	JEFFERSON AVE	MERCURY BLVD	BRIARFIELD RD	36,618	2003	6	2,000	39,000	Low to mod.	83,000	1.4	44,000
11210500	NN	JEFFERSON AVE	BRIARFIELD RD	41ST ST	34,018	2003	6	0	34,000	Moderate	76,000	1.9	42,000
11210510	NN	JEFFERSON AVE	41ST ST	35TH ST	n.a.	n.a.	4	n.a.	20,000	Low to mod.	45,000	1.2	25,000
11210520	NN	JEFFERSON AVE	35TH ST	27TH ST / 25TH ST	15,026	2003	2	-4,000	11,000	Low to mod.	15,000	0.9	4,000
11210540	NN	MAIN ST	WARWICK BLVD	JEFFERSON AVE	14,823	2003	4	10,000	25,000	Low to mod.	47,000	1.4	22,000
11210550	NN	MAIN ST	JEFFERSON AVE	HAMPTON CL	14,321	2003	4	0	14,000	Low to mod.	26,000	0.8	12,000
11210590	NN	MERCURY BLVD	RIVER RD	ISLE WIGHT CO	27,513	2003	4	24,000	52,000	Low to mod.	40,000	0.5	-12,000
11210580	NN	MERCURY BLVD	RIVER RD	WARWICK BLVD	25,785	2003	4	21,000	47,000	Severe	40,000	1.0	-7,000
11210570	NN	MERCURY BLVD	WARWICK BLVD	JEFFERSON AVE	38,513	2003	6	5,000	44,000	Low to mod.	44,000	0.8	0
11210560	NN	MERCURY BLVD	JEFFERSON AVE	HAMPTON CL	43,704	2003	6	2,000	46,000	Moderate	43,000	0.8	-3,000
11210610	NN	OYSTER PT RD	WARWICK BLVD	JEFFERSON AVE	46,330	2003	4	19,000	65,000	Beyond Severe	76,000	2.0	11,000
11210620	NN	OYSTER PT RD	JEFFERSON AVE	I-64	49,507	2003	6	15,000	65,000	Severe	65,000	1.1	0
11210640	NN	RICHNECK RD	DENBIGH BLVD	JEFFERSON AVE	3,859	2003	2	7,000	11,000	Low to mod.	4,000	0.2	-7,000
11210650	NN	RICHNECK RD	JEFFERSON AVE	YORK CL	8,138	2003	2	13,000	21,000	Severe	17,000	1.0	-4,000
11210660	NN	ROANOKE AVE	I-664	43RD ST	3,409	2003	4	2,000	5,000	Low to mod.	2,000	0.1	-3,000
11210670	NN	ROANOKE AVE	43RD ST	BRIARFIELD RD	3,409	2003	4	2,000	5,000	Low to mod.	2,000	0.1	-3,000
11210680	NN	ROANOKE AVE	BRIARFIELD RD	HAMPTON CL	4,205	2003	2	2,000	6,000	Low to mod.	15,000	1.3	9,000
11210690	NN	SAUNDERS RD	HARPERSVILLE	HAMPTON CL	10,318	2003	2	5,000	15,000	Beyond Severe	18,000	1.6	3,000
11210720	NN	VICTORY BLVD	I-64	YORK CL	52,524	2003	6	12,000	65,000	Severe	61,000	1.1	-4,000
11210730	NN	WARWICK BLVD	JAMES CITY CL	YORKTOWN RD	14,384	2003	2	6,000	20,000	Severe	9,000	0.5	-11,000
11210740	NN	WARWICK BLVD	YORKTOWN RD	FT EUSTIS BLVD	16,331	2003	2	15,000	31,000	Beyond Severe	26,000	1.4	-5,000
11210750	NN	WARWICK BLVD	FT EUSTIS BLVD	ATKINSON BLVD	38,434	2003	4	22,000	60,000	Beyond Severe	55,000	1.7	-5,000
11210760	NN	WARWICK BLVD	ATKINSON BLVD	DENBIGH BLVD	47,554	2003	4	19,000	67,000	Beyond Severe	60,000	1.8	-7,000
11210770	NN	WARWICK BLVD	DENBIGH BLVD	BLAND BLVD	39,322	2003	4	26,000	65,000	Beyond Severe	72,000	2.2	7,000
11210780	NN	WARWICK BLVD	BLAND BLVD	OYSTER PT RD	44,912	2003	4	27,000	72,000	Beyond Severe	64,000	1.9	-8,000
11210790	NN	WARWICK BLVD	OYSTER PT RD	MIDDLEGROUND BLVD	34,219	2003	4	12,000	46,000	Beyond Severe	44,000	1.3	-2,000
11210800	NN	WARWICK BLVD	MIDDLEGROUND BLVD	DEEP CREEK RD	38,313	2003	6	19,000	57,000	Severe	47,000	0.9	-10,000
11210810	NN	WARWICK BLVD	DEEP CREEK RD	J C MORRIS BLVD	50,025	2003	6	23,000	73,000	Beyond Severe	62,000	1.3	-11,000
11210820	NN	WARWICK BLVD	J C MORRIS BLVD	HARPERSVILLE RD	34,109	2003	6	24,000	58,000	Severe	43,000	0.8	-15,000
11210830	NN	WARWICK BLVD	HARPERSVILLE RD	MAIN ST	38,981	2003	4	13,000	52,000	Beyond Severe	51,000	1.6	-1,000

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11210840	NN	WARWICK BLVD	MAIN ST	CENTER AVE	29,028	2003	4	4,000	33,000	Severe	59,000	1.8	26,000
11210850	NN	WARWICK BLVD	CENTER AVE	MERCURY BLVD	31,694	2003	6	4,000	36,000	Low to mod.	52,000	1.1	16,000
11210860	NN	WARWICK BLVD	MERCURY BLVD	HUNTINGTON AVE	30,991	2003	6	-3,000	28,000	Low to mod.	30,000	0.6	2,000
11210880	NN	WARWICK BLVD	HUNTINGTON AVE	39TH ST	11,903	2003	3	6,000	18,000	Low to mod.	13,000	0.5	-5,000
11210870	NN	WARWICK BLVD	39TH ST	23RD ST	4,431	2003	3	6,000	10,000	Low to mod.	5,000	0.2	-5,000
11210890	NN	YORKTOWN RD	YORK CO LINE	CRAFFORD RD	9,957	2003	2	5,000	15,000	Moderate	23,000	1.4	8,000
11210895	NN	YORKTOWN RD	CRAFFORD RD	JEFFERSON AVE	11,860	2003	2	13,000	25,000	Beyond Severe	25,000	1.5	0
11210900	NN	YORKTOWN RD	JEFFERSON AVE	I-64	10,527	2004	4	11,000	22,000	Low to mod.	18,000	0.6	-4,000
11210910	NN	YORKTOWN RD	I-64	WARWICK BLVD	6,298	2003	2	15,000	21,000	Severe	19,000	1.1	-2,000
11220010	Nor	21ST ST	HAMPTON BLVD	COLLEY AVE	8,467	2003	2	-1,000	7,000	Low to mod.	2,000	0.1	-5,000
11220020	Nor	21ST ST	COLLEY AVE	LLEWELLYN ST	14,686	2003	2	0	15,000	Moderate	13,000	0.8	-2,000
11220030	Nor	21ST ST	LLEWELLYN ST	MONTICELLO AVE	10,202	2003	2	2,000	12,000	Low to mod.	11,000	0.7	-1,000
11220040	Nor	26TH ST	HAMPTON BLVD	COLLEY AVE	10,702	2000	3	0	11,000	Low to mod.	4,000	0.2	-7,000
11220050	Nor	26TH ST	COLLEY AVE	LLEWELLYN AVE	8,756	2003	3	2,000	11,000	Low to mod.	6,000	0.2	-5,000
11220060	Nor	26TH ST	LLEWELLYN AVE	MONTICELLO AVE	9,440	2003	3	2,000	11,000	Low to mod.	9,000	0.4	-2,000
11220070	Nor	26TH ST	MONTICELLO AVE	CHURCH ST	9,799	2003	3	1,000	11,000	Low to mod.	6,000	0.2	-5,000
11220080	Nor	26TH ST	CHURCH ST	27TH ST	9,481	2003	2	2,000	11,000	Low to mod.	7,000	0.4	-4,000
11220090	Nor	27TH ST	HAMPTON BLVD	COLLEY AVE	n.a.	n.a.	3	n.a.	8,000	Low to mod.	1,000	0.0	-7,000
11220100	Nor	27TH ST	COLLEY AVE	LLEWELLYN AVE	8,340	2003	3	1,000	9,000	Low to mod.	7,000	0.3	-2,000
11220110	Nor	27TH ST	LLEWELLYN	MONTICELLO AVE	10,640	2003	3	-1,000	10,000	Low to mod.	5,000	0.2	-5,000
11220120	Nor	27TH ST	MONTICELLO AVE	CHURCH ST	n.a.	n.a.	3	n.a.	19,000	Low to mod.	16,000	0.7	-3,000
11220130	Nor	27TH ST	CHURCH ST	26TH ST	n.a.	n.a.	3	n.a.	15,000	Low to mod.	11,000	0.5	-4,000
11220140	Nor	38TH ST	HAMPTON BLVD	COLLEY AVE	6,023	2003	2	1,000	7,000	Low to mod.	10,000	0.6	3,000
11220150	Nor	38TH ST	COLLEY AVE	LLEWELLYN AVE	8,149	2003	2	3,000	11,000	Low to mod.	24,000	1.5	13,000
11220160	Nor	38TH ST	LLEWELLYN AVE	GRANBY ST	4,569	2003	2	-1,000	4,000	Low to mod.	23,000	1.4	19,000
11220170	Nor	4TH VIEW ST	I-64	OCEAN VIEW AVE	13,806	2003	4	14,000	28,000	Low to mod.	30,000	0.8	2,000
11220180	Nor	ADM TAUSSIG BLVD	HAMPTON BLVD	I-564	33,595	2003	4	5,000	39,000	Severe	10,000	0.3	-29,000
11220190	Nor	AZALEA GARDEN RD	VA BEACH BLVD	PRINCESS ANNE RD	11,624	2003	2	1,000	13,000	Low to mod.	8,000	0.5	-5,000
11220200	Nor	AZALEA GARDEN RD	PRINCESS ANNE RD	SEWELLS PT RD	16,705	2003	4	1,000	18,000	Low to mod.	8,000	0.2	-10,000
11220210	Nor	AZALEA GARDEN RD	SEWELLS PT RD	ROBIN HOOD RD	10,329	2003	2	2,000	12,000	Low to mod.	11,000	0.7	-1,000
11220220	Nor	AZALEA GARDEN RD	ROBIN HOOD RD	I-64	10,713	2003	2	3,000	14,000	Moderate	9,000	0.6	-5,000
11220230	Nor	AZALEA GARDEN RD	I-64	MILITARY HWY	10,012	2003	2	2,000	12,000	Low to mod.	7,000	0.4	-5,000
11220240	Nor	AZALEA GARDEN RD	MILITARY HWY	NORVIEW AVE	n.a.	n.a.	4	n.a.	25,000	Low to mod.	19,000	0.6	-6,000
11220250	Nor	AZALEA GARDEN RD	NORVIEW AVE	LITTLE CRK RD	14,536	2003	4	3,000	18,000	Low to mod.	8,000	0.2	-10,000
11220260	Nor	BAINBRIDGE BLVD	SCL NORFOLK	S MAIN ST	1,551	2003	2	3,000	5,000	Low to mod.	6,000	0.4	1,000
11220270	Nor	BALLENTINE BLVD	I-264	VA BEACH BLVD	27,525	2003	4	3,000	31,000	Moderate	15,000	0.5	-16,000
11220280	Nor	BALLENTINE BLVD	VA BEACH BLVD	PRINCESS ANNE RD	14,383	2003	2	4,000	18,000	Severe	15,000	0.9	-3,000
11220290	Nor	BALLENTINE BLVD	PRINCESS ANNE RD	CHESAPEAKE BLVD	11,969	2003	2	-1,000	11,000	Low to mod.	20,000	1.2	9,000
11220300	Nor	BAY AVE	FIRST VIEW ST	I-64 RAMP	17,199	2003	4	-4,000	13,000	Low to mod.	11,000	0.3	-2,000
11220310	Nor	BAY AVE	I-64 RAMP	GRANBY ST	2,476	2000	4	0	2,000	Low to mod.	1,000	0.0	-1,000
11220320	Nor	BAY VIEW BLVD	GRANBY ST	TIDEWATER DR	9,146	2003	2	0	9,000	Low to mod.	20,000	1.2	11,000
11220330	Nor	BAY VIEW BLVD	TIDEWATER DR	CHESAPEAKE BLVD	12,939	2003	2	-2,000	11,000	Low to mod.	31,000	1.9	20,000
11220340	Nor	BAY VIEW BLVD	CHESAPEAKE BLVD	CAPE VIEW AVE	6,722	2003	2	1,000	8,000	Low to mod.	22,000	1.3	14,000
11220360	Nor	BERKLEY AVE	I-464	STATE ST	14,543	2003	4	8,000	23,000	Low to mod.	24,000	0.7	1,000
11220370	Nor	BERKLEY AVE	STATE ST	MAIN ST	13,263	2003	4	5,000	18,000	Low to mod.	27,000	0.8	9,000
11220380	Nor	BERKLEY AVE	MAIN ST	BERKLEY AVE EXT	12,967	2003	4	1,000	14,000	Low to mod.	16,000	0.5	2,000
11221410	Nor	BERKLEY AVE	BERKLEY AVE EXT	INDIAN RIVER RD	13,895	2003	4	-3,000	11,000	Low to mod.	14,000	0.4	3,000
11220385	Nor	BERKLEY AVE EXT	BERKLEY AVE	WILSON RD	3,274	2003	2	2,000	5,000	Low to mod.	3,000	0.2	-2,000
11220390	Nor	BERKLEY AVE EXT	WILSON ST	CAMPOSTELLA RD	3,074	2003	2	10,000	13,000	Low to mod.	9,000	0.6	-4,000

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11220465	Nor	BRAMBLETON AVE	HAMPTON BLVD	COLLEY AVE	30,840	2003	6	13,000	44,000	Low to mod.	33,000	0.6	-11,000
11220480	Nor	BRAMBLETON AVE	COLLEY AVE	BOUSH ST	43,980	2000	6	14,000	58,000	Severe	51,000	0.9	-7,000
11220490	Nor	BRAMBLETON AVE	BOUSH ST	MONTICELLO AVE	36,426	2003	6	5,000	41,000	Low to mod.	60,000	1.1	19,000
11220500	Nor	BRAMBLETON AVE	MONTICELLO AVE	ST PAULS BLVD	36,426	2003	6	6,000	42,000	Low to mod.	56,000	1.0	14,000
11220510	Nor	BRAMBLETON AVE	ST PAULS BLVD	CHURCH ST	23,913	2003	4	4,000	28,000	Low to mod.	50,000	1.3	22,000
11220520	Nor	BRAMBLETON AVE	CHURCH ST	TIDEWATER DR	29,252	2003	4	0	29,000	Low to mod.	75,000	2.0	46,000
11220530	Nor	BRAMBLETON AVE	TIDEWATER DR	PARK AVE	36,846	2003	4	-3,000	34,000	Moderate	85,000	2.2	51,000
11220540	Nor	BRAMBLETON AVE	PARK AVE	I-264	47,524	2003	5	-10,000	38,000	Low to mod.	84,000	1.8	46,000
11220560	Nor	CAMPOSTELLA RD	CHES CL / BERKLEY AVE EXT	INDIAN RIVER RD	24,571	2003	6	-5,000	20,000	Low to mod.	23,000	0.4	3,000
11220570	Nor	CAMPOSTELLA RD	INDIAN RIVER RD	WILSON RD	30,755	2003	6	-1,000	30,000	Low to mod.	36,000	0.6	6,000
11220580	Nor	CAMPOSTELLA RD	WILSON RD	KIMBALL TER	43,395	2003	6	2,000	45,000	Low to mod.	52,000	0.9	7,000
11220550	Nor	CAMPOSTELLA RD	KIMBALL TER	I-264	43,395	2003	6	2,000	45,000	Low to mod.	51,000	0.9	6,000
11220590	Nor	CHESAPEAKE BLVD	BALLENTINE BLVD	CROMWELL RD	n.a.	n.a.	4	n.a.	36,000	Severe	32,000	1.0	-4,000
11220600	Nor	CHESAPEAKE BLVD	CROMWELL RD	ROBIN HOOD RD	n.a.	n.a.	4	n.a.	40,000	Severe	30,000	0.9	-10,000
11220610	Nor	CHESAPEAKE BLVD	ROBIN HOOD RD	HYDE CIR	22,116	2003	4	7,000	29,000	Moderate	19,000	0.6	-10,000
11220620	Nor	CHESAPEAKE BLVD	HYDE CIR	SEWELLS PT RD	22,116	2003	6	3,000	25,000	Low to mod.	16,000	0.3	-9,000
11220630	Nor	CHESAPEAKE BLVD	SEWELLS PT RD	I-64	20,125	2003	6	2,000	22,000	Low to mod.	6,000	0.1	-16,000
11220640	Nor	CHESAPEAKE BLVD	I-64	JOHNSTONS RD	26,467	2003	6	3,000	29,000	Low to mod.	26,000	0.5	-3,000
11220650	Nor	CHESAPEAKE BLVD	JOHNSTONS RD	LITTLE CREEK RD	26,467	2003	6	0	26,000	Low to mod.	32,000	0.7	6,000
11220660	Nor	CHESAPEAKE BLVD	LITTLE CREEK RD	SHEPPARD AVE	25,276	2003	4	-1,000	24,000	Low to mod.	37,000	1.1	13,000
11220670	Nor	CHESAPEAKE BLVD	SHEPPARD AVE	BAY VIEW BLVD	25,276	2003	4	0	25,000	Low to mod.	35,000	1.1	10,000
11220680	Nor	CHESAPEAKE BLVD	BAY VIEW BLVD	CHESAPEAKE ST	14,622	2003	4	-3,000	12,000	Low to mod.	11,000	0.3	-1,000
11220690	Nor	CHESAPEAKE BLVD	CHESAPEAKE ST	OCEAN VIEW AVE	6,864	2003	4	-2,000	5,000	Low to mod.	3,000	0.1	-2,000
11220700	Nor	CHURCH ST	BRAMBLETON AVE	VA BEACH BLVD	15,852	2003	4	0	16,000	Low to mod.	25,000	0.8	9,000
11220710	Nor	CHURCH ST	VA BEACH BLVD	PRINCESS ANNE RD	17,176	2003	4	-2,000	15,000	Low to mod.	22,000	0.7	7,000
11220720	Nor	CHURCH ST	PRINCESS ANNE RD	26TH ST	19,936	2003	4	5,000	25,000	Low to mod.	16,000	0.5	-9,000
11220730	Nor	CHURCH ST	26TH ST	27TH ST	14,160	2003	4	6,000	20,000	Low to mod.	12,000	0.4	-8,000
11220740	Nor	CHURCH ST	27TH ST	MONTICELLO AVE	11,673	2003	4	3,000	15,000	Low to mod.	7,000	0.2	-8,000
11220750	Nor	CHURCH ST	MONTICELLO AVE	GRANBY ST	n.a.	n.a.	4	n.a.	25,000	Low to mod.	24,000	0.6	-1,000
11220760	Nor	CITY HALL AVE	BOUSH ST	GRANBY ST	n.a.	n.a.	2	n.a.	11,000	Low to mod.	8,000	0.6	-3,000
11220770	Nor	CITY HALL AVE	GRANBY ST	MONTICELLO AVE	n.a.	n.a.	2	n.a.	14,000	Severe	9,000	0.6	-5,000
11220780	Nor	CITY HALL AVE	MONTICELLO AVE	ST PAULS BLVD	n.a.	n.a.	4	n.a.	23,000	Low to mod.	15,000	0.5	-8,000
11220810	Nor	COLLEY AVE	BRAMBLETON AVE	OLNEY RD	18,211	2003	4	9,000	27,000	Moderate	19,000	0.6	-8,000
11220820	Nor	COLLEY AVE	OLNEY RD	PRINCESS ANNE RD	14,704	2003	4	3,000	18,000	Low to mod.	15,000	0.5	-3,000
11220830	Nor	COLLEY AVE	PRINCESS ANNE RD	21ST ST	16,524	2003	2	1,000	18,000	Severe	27,000	1.7	9,000
11220840	Nor	COLLEY AVE	21ST ST	26TH ST	15,483	2003	4	2,000	17,000	Low to mod.	25,000	0.8	8,000
11220850	Nor	COLLEY AVE	26TH ST	27TH ST	n.a.	n.a.	4	n.a.	18,000	Low to mod.	28,000	0.9	10,000
11220860	Nor	COLLEY AVE	27TH ST	38TH ST	14,476	2003	2	1,000	15,000	Moderate	25,000	1.5	10,000
11220870	Nor	COLLEY AVE	38TH ST	53RD ST	14,476	2003	2	2,000	16,000	Severe	25,000	1.6	9,000
11220880	Nor	CROMWELL RD	TAIT TERR	CHESAPEAKE BLVD	15,980	2003	4	1,000	17,000	Low to mod.	5,000	0.1	-12,000
11220890	Nor	CROMWELL RD	CHESAPEAKE BLVD	TIDEWATER DR	13,457	2003	2	1,000	14,000	Moderate	18,000	1.1	4,000
11220895	Nor	DUKE ST	OLNEY RD	BRAMBLETON AVE	n.a.	n.a.	4	n.a.	8,000	Low to mod.	10,000	0.5	2,000
11220930	Nor	GRANBY ST	CHURCH ST	38TH ST	24,293	2003	4	0	24,000	Low to mod.	24,000	0.6	0
11220940	Nor	GRANBY ST	38TH ST	LLEWELLYN AVE	24,293	2003	4	-1,000	23,000	Low to mod.	47,000	1.2	24,000
11220950	Nor	GRANBY ST	LLEWELLYN AVE	WILLOW WOOD DR	40,039	2003	6	-4,000	36,000	Low to mod.	50,000	0.9	14,000
11220960	Nor	GRANBY ST	WILLOW WOOD DR	THOLE ST	39,655	2003	6	-3,000	37,000	Low to mod.	46,000	0.8	9,000
11220970	Nor	GRANBY ST	THOLE ST	LITTLE CREEK RD	32,156	2003	6	2,000	34,000	Low to mod.	45,000	0.8	11,000
11220980	Nor	GRANBY ST	LITTLE CREEK RD	I-564	27,824	2003	6	-1,000	27,000	Low to mod.	35,000	0.6	8,000
11220990	Nor	GRANBY ST	I-564	I-64	n.a.	n.a.	4	n.a.	41,000	Severe	56,000	1.7	15,000

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11221000	Nor	GRANBY ST	I-64	BAY VIEW BLVD	19,693	2000	4	2,000	22,000	Low to mod.	30,000	0.9	8,000
11221010	Nor	GRANBY ST	BAY VIEW BLVD	BAY AVE	15,767	2003	4	-1,000	15,000	Low to mod.	13,000	0.4	-2,000
11221020	Nor	GRANBY ST	BAY AVE	TIDEWATER DR	n.a.	n.a.	4	n.a.	18,000	Low to mod.	14,000	0.4	-4,000
11221030	Nor	GRANBY ST	TIDEWATER DR	OCEAN VIEW AVE	9,359	2003	4	0	9,000	Low to mod.	3,000	0.1	-6,000
11221050	Nor	HAMPTON BLVD	BRAMBLETON AVE	PRINCESS ANNE RD	35,008	2001	4	4,000	39,000	Severe	48,000	1.3	9,000
11221060	Nor	HAMPTON BLVD	PRINCESS ANNE RD	21ST ST	38,698	2003	4	-1,000	38,000	Severe	46,000	1.2	8,000
11221070	Nor	HAMPTON BLVD	21ST ST	26TH ST	41,819	2003	4	1,000	43,000	Severe	51,000	1.4	8,000
11221080	Nor	HAMPTON BLVD	26TH ST	27TH ST	n.a.	n.a.	4	n.a.	37,000	Severe	38,000	1.0	1,000
11221090	Nor	HAMPTON BLVD	27TH ST	38TH ST	41,048	2003	4	3,000	44,000	Severe	39,000	1.0	-5,000
11221100	Nor	HAMPTON BLVD	38TH ST	JAMESTOWN CRES	36,775	2000	6	0	37,000	Low to mod.	30,000	0.5	-7,000
11221110	Nor	HAMPTON BLVD	JAMESTOWN CRES	LITTLE CREEK RD	40,780	2003	6	-3,000	38,000	Low to mod.	34,000	0.6	-4,000
11221120	Nor	HAMPTON BLVD	LITTLE CREEK RD	INT TERM BLVD	37,387	2003	6	2,000	39,000	Low to mod.	36,000	0.6	-3,000
11221130	Nor	HAMPTON BLVD	INT TERM BLVD	INTERMODAL CONN	25,809	2003	6	9,000	35,000	Low to mod.	35,000	0.6	0
11221135	Nor	HAMPTON BLVD	INTERMODAL CONN	ADM TAUSSIG BLVD	25,809	2003	6	8,000	34,000	Low to mod.	34,000	0.6	0
11221420	Nor	INDIAN RIVER RD	BERKLEY AVE	WILSON RD	13,895	2003	4	3,000	17,000	Low to mod.	16,000	0.5	-1,000
11221430	Nor	INDIAN RIVER RD	WILSON RD	CAMPOSTELLA RD	n.a.	n.a.	4	n.a.	19,000	Low to mod.	22,000	0.7	3,000
11221440	Nor	INDIAN RIVER RD	CAMPOSTELLA RD	CHESAPEAKE CL	24,852	2003	6	4,000	29,000	Low to mod.	36,000	0.7	7,000
11221450	Nor	INGLESIDE RD	VA BEACH BLVD	PRINCESS ANNE RD	15,623	2003	4	1,000	17,000	Low to mod.	8,000	0.2	-9,000
11221460	Nor	INGLESIDE RD	PRINCESS ANNE RD	TAIT TERR	16,219	2003	4	3,000	19,000	Low to mod.	7,000	0.2	-12,000
11221470	Nor	INT TERMINAL BLVD	HAMPTON BLVD	I-564	29,711	2003	4	0	30,000	Low to mod.	35,000	0.9	5,000
11221480	Nor	JAMESTOWN CRES	53RD ST	HAMPTON BLVD	6,834	2003	2	7,000	14,000	Moderate	21,000	1.3	7,000
11221490	Nor	JOHNSTONS RD	SEWELLS PT	CHESAPEAKE BLVD	n.a.	n.a.	2	n.a.	15,000	Moderate	28,000	1.7	13,000
11221500	Nor	JOHNSTONS RD	CHESAPEAKE BLVD	MILITARY HWY	13,730	2003	2	-2,000	12,000	Low to mod.	19,000	1.2	7,000
11221510	Nor	JOHNSTONS RD	MILITARY HWY	LITTLE CREEK RD	8,155	2003	2	0	8,000	Low to mod.	12,000	0.7	4,000
11221520	Nor	KEMPSVILLE RD	NEWTOWN RD	VA BEACH BLVD	23,257	2003	4	6,000	29,000	Low to mod.	15,000	0.4	-14,000
11221530	Nor	KEMPSVILLE RD	VA BEACH BLVD	NORTHAMPTON BLVD	12,559	2003	2	1,000	14,000	Low to mod.	22,000	1.1	8,000
11221540	Nor	LAFAYETTE BLVD	27TH ST	TIDEWATER DR	16,237	2003	4	2,000	18,000	Low to mod.	10,000	0.3	-8,000
11221550	Nor	LAFAYETTE BLVD	TIDEWATER DR	CHESAPEAKE BLVD	22,169	2003	4	3,000	25,000	Low to mod.	18,000	0.6	-7,000
11221560	Nor	LIBERTY ST	STATE ST	S MAIN ST	3,704	2003	2	5,000	9,000	Low to mod.	1,000	0.0	-8,000
11221570	Nor	LIBERTY ST	S MAIN ST	NCL CHESAPEAKE	4,978	2003	2	1,000	6,000	Low to mod.	6,000	0.4	0
11221580	Nor	LITTLE CREEK RD	HAMPTON BLVD	GRANBY ST	23,930	2003	4	4,000	28,000	Moderate	24,000	0.8	-4,000
11221590	Nor	LITTLE CREEK RD	GRANBY ST	I-64	38,860	2003	4	0	39,000	Severe	33,000	1.0	-6,000
11221600	Nor	LITTLE CREEK RD	I-64	TIDEWATER DR	29,948	2000	6	1,000	31,000	Low to mod.	29,000	0.5	-2,000
11221610	Nor	LITTLE CREEK RD	TIDEWATER DR	SEWELLS PT RD	n.a.	n.a.	4	n.a.	33,000	Moderate	25,000	0.7	-8,000
11221620	Nor	LITTLE CREEK RD	SEWELLS PT RD	CHESAPEAKE BLVD	29,324	2003	4	2,000	31,000	Moderate	27,000	0.7	-4,000
11221630	Nor	LITTLE CREEK RD	CHESAPEAKE BLVD	MILITARY HWY	46,106	2003	4	-11,000	35,000	Moderate	33,000	0.9	-2,000
11221640	Nor	LITTLE CREEK RD	MILITARY HWY	AZALEA GARDEN RD	29,565	2003	4	0	30,000	Low to mod.	31,000	0.8	1,000
11221650	Nor	LITTLE CREEK RD	AZALEA GARDEN RD	SHORE DR	25,524	2003	4	3,000	29,000	Low to mod.	24,000	0.6	-5,000
11221660	Nor	LLEWELLYN AVE	VA BEACH BLVD	PRINCESS ANNE RD	10,637	2003	4	1,000	12,000	Low to mod.	8,000	0.2	-4,000
11221670	Nor	LLEWELLYN AVE	PRINCESS ANNE RD	21ST ST	10,763	2003	4	3,000	14,000	Low to mod.	4,000	0.1	-10,000
11221680	Nor	LLEWELLYN AVE	21ST ST	26TH ST	9,198	2003	4	0	9,000	Low to mod.	6,000	0.2	-3,000
11221690	Nor	LLEWELLYN AVE	26TH ST	27TH ST	9,198	2003	3	-2,000	7,000	Low to mod.	7,000	0.3	0
11221700	Nor	LLEWELLYN AVE	27TH ST	35TH ST	8,203	2003	3	2,000	10,000	Low to mod.	14,000	0.6	4,000
11221710	Nor	LLEWELLYN AVE	35TH ST	38TH ST	8,203	2003	3	2,000	10,000	Low to mod.	14,000	0.6	4,000
11221720	Nor	LLEWELLYN AVE	38TH ST	DELAWARE AVE	13,292	2003	3	3,000	16,000	Low to mod.	8,000	0.3	-8,000
11221730	Nor	LLEWELLYN AVE	DELAWARE AVE	GRANBY ST	7,454	2003	2	3,000	10,000	Low to mod.	2,000	0.1	-8,000
11221735	Nor	MAIN ST	I-464	BAINBRIDGE BLVD	n.a.	n.a.	2	n.a.	2,000	Low to mod.	1,000	0.1	-1,000
11221740	Nor	MAIN ST	BAINBRIDGE BLVD	LIBERTY ST	n.a.	n.a.	2	n.a.	7,000	Low to mod.	7,000	0.4	0
11221750	Nor	MAIN ST	LIBERTY ST	BERKLEY AVE	n.a.	n.a.	2	n.a.	10,000	Low to mod.	18,000	1.1	8,000

2030 volumes and demand are for average weekdays.
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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11221760	Nor	MIDTOWN TUNNEL	PORTSMOUTH CL	BRAMBLETON AVE	35,309	2003	2	18,000	53,000	Beyond Severe	56,000	1.4	3,000
11221770	Nor	MILITARY HWY	NCL VA BEACH	I-264	51,099	2003	8	14,000	65,000	Moderate	63,000	0.8	-2,000
11221780	Nor	MILITARY HWY	I-264	VA BEACH BLVD	52,785	2003	8	1,000	54,000	Low to mod.	60,000	0.8	6,000
11221785	Nor	MILITARY HWY	VA BEACH BLVD	LOWERY RD	n.a.	n.a.	8	n.a.	62,000	Moderate	54,000	0.7	-8,000
11221790	Nor	MILITARY HWY	LOWERY RD	PRINCESS ANNE RD	54,028	2003	8	13,000	67,000	Moderate	57,000	0.8	-10,000
11221800	Nor	MILITARY HWY	PRINCESS ANNE RD	I-64 / ROBIN HOOD RD	51,231	2003	4	5,000	56,000	Beyond Severe	67,000	1.7	11,000
11221810	Nor	MILITARY HWY	I-64 / ROBIN HOOD RD	AZALEA GARDEN RD	31,651	2003	4	5,000	37,000	Severe	39,000	1.0	2,000
11221820	Nor	MILITARY HWY	AZALEA GARDEN RD	NORVIEW AVE	30,362	2003	4	1,000	31,000	Moderate	35,000	0.9	4,000
11221830	Nor	MILITARY HWY	NORVIEW AVE	JOHNSTONS RD	31,077	2003	4	-4,000	27,000	Low to mod.	30,000	0.8	3,000
11221840	Nor	MILITARY HWY	JOHNSTONS RD	LITTLE CREEK RD	n.a.	n.a.	4	n.a.	15,000	Low to mod.	16,000	0.4	1,000
11221850	Nor	MONTICELLO AVE	CITY HALL AVE	BRAMBLETON AVE	6,592	2003	4	6,000	13,000	Low to mod.	8,000	0.2	-5,000
11221860	Nor	MONTICELLO AVE	BRAMBLETON AVE	ST PAULS BLVD	6,523	2003	4	6,000	13,000	Low to mod.	4,000	0.1	-9,000
11221870	Nor	MONTICELLO AVE	ST PAULS BLVD	VA BEACH BLVD	28,887	2003	4	5,000	34,000	Moderate	35,000	0.9	1,000
11221880	Nor	MONTICELLO AVE	VA BEACH BLVD	PRINCESS ANNE RD	24,948	2003	4	4,000	29,000	Low to mod.	39,000	1.0	10,000
11221890	Nor	MONTICELLO AVE	PRINCESS ANNE RD	21ST ST	24,948	2003	4	5,000	30,000	Low to mod.	39,000	1.0	9,000
11221900	Nor	MONTICELLO AVE	21ST ST	26TH ST	18,048	2003	4	8,000	26,000	Low to mod.	33,000	0.9	7,000
11221910	Nor	MONTICELLO AVE	26TH ST	27TH ST	n.a.	n.a.	4	n.a.	22,000	Low to mod.	28,000	0.7	6,000
11221920	Nor	MONTICELLO AVE	27TH ST	CHURCH ST	n.a.	n.a.	4	n.a.	12,000	Low to mod.	18,000	0.5	6,000
11221930	Nor	NEWTOWN RD	KEMPSVILLE RD	I-264	32,264	2003	4	6,000	38,000	Severe	33,000	1.0	-5,000
11221940	Nor	NEWTOWN RD	I-264	VA BEACH BLVD	40,196	2003	4	12,000	52,000	Beyond Severe	67,000	2.1	15,000
11221950	Nor	NEWTOWN RD	VA BEACH BLVD	VA BEACH CL	38,699	2003	4	15,000	54,000	Beyond Severe	58,000	1.8	4,000
11221960	Nor	NORTHAMPTON BLVD	MILITARY HWY	KEMPSVILLE RD	n.a.	n.a.	6	n.a.	44,000	Low to mod.	47,000	0.8	3,000
11221970	Nor	NORTHAMPTON BLVD	KEMPSVILLE RD	I-64	39,750	2003	6	-6,000	34,000	Low to mod.	30,000	0.5	-4,000
11221980	Nor	NORTHAMPTON BLVD	I-64	VB CL / WESLEYAN DR	92,726	2003	8	23,000	116,000	Beyond Severe	118,000	1.5	2,000
11221995	Nor	NORVIEW AVE	TIDEWATER DR	CHESAPEAKE BLVD	5,793	2003	2	2,000	8,000	Low to mod.	10,000	0.6	2,000
11222010	Nor	NORVIEW AVE	CHESAPEAKE BLVD	I-64	23,289	2003	4	2,000	25,000	Low to mod.	28,000	0.8	3,000
11222020	Nor	NORVIEW AVE	I-64	MILITARY HWY	30,018	2003	4	0	30,000	Low to mod.	25,000	0.7	-5,000
11222030	Nor	NORVIEW AVE	MILITARY HWY	AZALEA GARDEN RD	16,551	2003	4	-2,000	15,000	Low to mod.	12,000	0.3	-3,000
11222050	Nor	OCEAN VIEW AVE	4TH VIEW ST	TIDEWATER DR	n.a.	n.a.	4	n.a.	30,000	Low to mod.	30,000	0.8	0
11222060	Nor	OCEAN VIEW AVE	TIDEWATER DR	GRANBY ST	15,964	2003	4	-1,000	15,000	Low to mod.	15,000	0.4	0
11222070	Nor	OCEAN VIEW AVE	GRANBY ST	CHESAPEAKE BLVD	n.a.	n.a.	4	n.a.	30,000	Low to mod.	24,000	0.6	-6,000
11222080	Nor	OCEAN VIEW AVE	CHESAPEAKE BLVD	21ST BAY ST (SHORE DR)	22,721	2003	4	-3,000	20,000	Low to mod.	21,000	0.6	1,000
11222090	Nor	OLNEY RD	COLLEY AVE	LLEWELLYN AVE	10,851	2003	4	5,000	16,000	Low to mod.	10,000	0.3	-6,000
11222100	Nor	PARK AVE	BRAMBLETON AVE	VA BEACH BLVD	17,343	2003	4	3,000	20,000	Low to mod.	14,000	0.4	-6,000
11222110	Nor	PARK AVE	VA BEACH BLVD	PRINCESS ANNE RD	14,120	2003	4	2,000	16,000	Low to mod.	12,000	0.3	-4,000
11222120	Nor	PRINCESS ANNE RD	HAMPTON BLVD	COLLEY AVE	5,582	2003	2	1,000	7,000	Low to mod.	33,000	2.0	26,000
11222130	Nor	PRINCESS ANNE RD	COLLEY AVE	LLEWELLYN AVE	8,129	2003	2	2,000	10,000	Low to mod.	41,000	2.6	31,000
11222140	Nor	PRINCESS ANNE RD	LLEWELLYN AVE	MONTICELLO AVE	9,109	2003	2	2,000	11,000	Low to mod.	36,000	2.2	25,000
11222150	Nor	PRINCESS ANNE RD	MONTICELLO AVE	CHURCH ST	9,292	2003	2	2,000	11,000	Low to mod.	44,000	2.7	33,000
11222160	Nor	PRINCESS ANNE RD	CHURCH ST	TIDEWATER DR	14,066	2003	4	7,000	21,000	Low to mod.	26,000	0.8	5,000
11222170	Nor	PRINCESS ANNE RD	TIDEWATER DR	MAY AVE	n.a.	n.a.	4	n.a.	30,000	Moderate	43,000	1.3	13,000
11222180	Nor	PRINCESS ANNE RD	MAY AVE	PARK AVE	n.a.	n.a.	4	n.a.	30,000	Moderate	43,000	1.3	13,000
11222190	Nor	PRINCESS ANNE RD	PARK AVE	BALLENTINE BLVD	22,211	2003	4	0	22,000	Low to mod.	33,000	0.9	11,000
11222200	Nor	PRINCESS ANNE RD	BALLENTINE BLVD	INGLESIDE RD	n.a.	n.a.	4	n.a.	30,000	Low to mod.	34,000	0.9	4,000
11222210	Nor	PRINCESS ANNE RD	INGLESIDE RD	AZALEA GARDEN RD	23,075	2003	4	8,000	31,000	Moderate	29,000	0.8	-2,000
11222220	Nor	PRINCESS ANNE RD	AZALEA GARDEN RD	SEWELLS PT RD	25,125	2003	4	4,000	29,000	Low to mod.	27,000	0.7	-2,000
11222230	Nor	PRINCESS ANNE RD	SEWELLS PT RD	MILITARY HWY	26,948	2000	4	7,000	34,000	Moderate	30,000	0.8	-4,000
11222240	Nor	ROBIN HOOD RD	CHESAPEAKE BLVD	SEWELLS PT RD	7,344	2003	2	2,000	9,000	Low to mod.	11,000	0.7	2,000
11222250	Nor	ROBIN HOOD RD	SEWELLS PT RD	AZALEA GARDEN	6,013	2003	2	4,000	10,000	Low to mod.	11,000	0.7	1,000

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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11222260	Nor	ROBIN HOOD RD	AZALEA GARDEN	MILITARY HWY	9,911	2003	4	5,000	15,000	Low to mod.	18,000	0.6	3,000
11222270	Nor	SEWELLS PT RD	PRINCESS ANNE RD	AZALEA GARDEN RD	n.a.	n.a.	2	n.a.	8,000	Low to mod.	2,000	0.1	-6,000
11222280	Nor	SEWELLS PT RD	AZALEA GARDEN RD	ROBIN HOOD RD	n.a.	n.a.	4	n.a.	23,000	Low to mod.	12,000	0.4	-11,000
11222290	Nor	SEWELLS PT RD	ROBIN HOOD RD	CHESAPEAKE BLVD	13,773	2003	4	1,000	15,000	Low to mod.	7,000	0.2	-8,000
11222295	Nor	SEWELLS PT RD	CHESAPEAKE BLVD	PARTRIDGE ST	9,978	2003	4	1,000	11,000	Low to mod.	11,000	0.3	0
11222300	Nor	SEWELLS PT RD	PARTRIDGE ST	PHILPOTTS RD	9,978	2003	4	1,000	11,000	Low to mod.	11,000	0.3	0
11222310	Nor	SEWELLS PT RD	PHILPOTTS RD	I-64	n.a.	n.a.	4	n.a.	21,000	Low to mod.	27,000	0.8	6,000
11222320	Nor	SEWELLS PT RD	I-64	LITTLE CREEK RD	n.a.	n.a.	4	n.a.	13,000	Low to mod.	8,000	0.2	-5,000
11222330	Nor	SHORE DRIVE	21ST BAY ST	LITTLE CR RD	24,064	2003	4	4,000	28,000	Low to mod.	29,000	0.8	1,000
11222340	Nor	SHORE DRIVE	LITTLE CR RD	WCL VA BEACH	34,891	2003	4	3,000	38,000	Severe	40,000	1.1	2,000
11222350	Nor	ST PAULS BLVD	WATERSIDE DR	CITY HALL AVE	20,820	2003	6	-2,000	19,000	Low to mod.	20,000	0.4	1,000
11222360	Nor	ST PAULS BLVD	CITY HALL AVE	MARKET ST / MALL	n.a.	n.a.	6	n.a.	6,000	Low to mod.	5,000	0.1	-1,000
11222370	Nor	ST PAULS BLVD	MARKET ST / MALL	BRAMBLETON AVE	41,857	2003	6	6,000	48,000	Moderate	43,000	0.8	-5,000
11222380	Nor	ST PAULS BLVD	BRAMBLETON AVE	MONTICELLO AVE	n.a.	n.a.	6	n.a.	22,000	Low to mod.	26,000	0.5	4,000
11222390	Nor	STATE ST	LIBERTY ST	BERKLEY AVE	3,704	2003	2	5,000	9,000	Low to mod.	1,000	0.0	-8,000
11222430	Nor	THOLE ST	GRANBY ST	TIDEWATER DR	11,824	2003	2	0	12,000	Low to mod.	12,000	0.7	0
11222440	Nor	TIDEWATER DR	CITY HALL AVE	BRAMBLETON AVE	26,840	2003	6	2,000	29,000	Low to mod.	33,000	0.6	4,000
11222450	Nor	TIDEWATER DR	BRAMBLETON AVE	VA BEACH BLVD	33,916	2003	6	1,000	35,000	Low to mod.	53,000	0.9	18,000
11222462	Nor	TIDEWATER DR	VA BEACH BLVD	PRINCESS ANNE RD	n.a.	n.a.	6	n.a.	38,000	Low to mod.	55,000	0.9	17,000
11222472	Nor	TIDEWATER DR	PRINCESS ANNE RD	LAFAYETTE BLVD	26,724	2003	6	5,000	32,000	Moderate	47,000	1.2	15,000
11222480	Nor	TIDEWATER DR	LAFAYETTE BLVD	CROMWELL RD	n.a.	n.a.	4	n.a.	30,000	Low to mod.	43,000	1.1	13,000
11222490	Nor	TIDEWATER DR	CROMWELL RD	NORVIEW AVE	35,639	2003	4	8,000	44,000	Severe	67,000	1.7	23,000
11222500	Nor	TIDEWATER DR	NORVIEW AVE	THOLE ST	34,507	2003	4	-1,000	34,000	Moderate	56,000	1.5	22,000
11222510	Nor	TIDEWATER DR	THOLE ST	I-64	n.a.	n.a.	4	n.a.	38,000	Severe	53,000	1.4	15,000
11222520	Nor	TIDEWATER DR	I-64	LITTLE CREEK RD	24,746	2003	4	2,000	27,000	Moderate	26,000	0.8	-1,000
11222530	Nor	TIDEWATER DR	LITTLE CREEK RD	BAY VIEW BLVD	15,461	2003	4	3,000	18,000	Low to mod.	6,000	0.2	-12,000
11222540	Nor	TIDEWATER DR	BAY VIEW BLVD	GRANBY ST	11,404	2003	4	4,000	15,000	Low to mod.	16,000	0.5	1,000
11222550	Nor	TIDEWATER DR	GRANBY ST	OCEAN VIEW AVE	6,723	2003	4	2,000	9,000	Low to mod.	9,000	0.3	0
11222560	Nor	VA BEACH BLVD	OLNEY RD	GRANBY ST	5,285	2003	4	6,000	11,000	Low to mod.	1,000	0.0	-10,000
11222570	Nor	VA BEACH BLVD	GRANBY ST	MONTICELLO AVE	n.a.	n.a.	4	n.a.	25,000	Low to mod.	13,000	0.4	-12,000
11222580	Nor	VA BEACH BLVD	MONTICELLO AVE	CHURCH ST	14,724	2003	4	3,000	18,000	Low to mod.	1,000	0.0	-17,000
11222590	Nor	VA BEACH BLVD	CHURCH ST	TIDEWATER DR	n.a.	n.a.	4	n.a.	23,000	Low to mod.	3,000	0.1	-20,000
11222600	Nor	VA BEACH BLVD	TIDEWATER DR	PARK AVE	15,621	2003	4	1,000	17,000	Low to mod.	17,000	0.4	0
11222610	Nor	VA BEACH BLVD	PARK AVE	BALLENTINE BLVD	16,465	2003	4	7,000	23,000	Low to mod.	17,000	0.4	-6,000
11222620	Nor	VA BEACH BLVD	BALLENTINE BLVD	INGLESIDE RD	n.a.	n.a.	6	n.a.	36,000	Low to mod.	30,000	0.5	-6,000
11222630	Nor	VA BEACH BLVD	INGLESIDE RD	AZALEA GARDEN RD	30,684	2003	6	7,000	38,000	Low to mod.	34,000	0.6	-4,000
11222640	Nor	VA BEACH BLVD	AZALEA GARDEN RD	JETT ST	30,894	2003	6	16,000	47,000	Moderate	39,000	0.7	-8,000
11222650	Nor	VA BEACH BLVD	JETT ST	MILITARY HWY	30,894	2003	6	14,000	45,000	Low to mod.	37,000	0.6	-8,000
11222660	Nor	VA BEACH BLVD	MILITARY HWY	KEMPSVILLE RD	29,904	2003	6	17,000	47,000	Moderate	17,000	0.3	-30,000
11222680	Nor	VA BEACH BLVD	KEMPSVILLE RD	NEWTOWN RD	36,304	2003	6	13,000	49,000	Moderate	35,000	0.6	-14,000
11222715	Nor	WATERSIDE DR / BOUSH ST	ST PAULS BLVD	CITY HALL AVE	32,273	2001	4	6,000	38,000	Severe	25,000	0.7	-13,000
11220420	Nor	WATERSIDE DR / BOUSH ST	CITY HALL AVE	BUTE ST	30,305	2001	4	8,000	38,000	Severe	27,000	0.7	-11,000
11220430	Nor	WATERSIDE DR / BOUSH ST	BUTE ST	BRAMBLETON AVE	n.a.	n.a.	4	n.a.	37,000	Severe	27,000	0.7	-10,000
11220440	Nor	WATERSIDE DR / BOUSH ST	BRAMBLETON AVE	OLNEY RD	9,516	2003	3	-2,000	8,000	Low to mod.	11,000	0.5	3,000
11220450	Nor	WATERSIDE DR / BOUSH ST	OLNEY RD	VA BEACH BLVD	n.a.	n.a.	3	n.a.	8,000	Low to mod.	7,000	0.3	-1,000
11222720	Nor	WESLEYAN DR	NORTHAMPTON BLVD	NCL VA BEACH	21,027	2003	4	15,000	36,000	Severe	29,000	0.9	-7,000
11222730	Nor	WILLOW WOOD DR	GRANBY ST	TIDEWATER DR	12,077	2003	2	1,000	13,000	Low to mod.	17,000	1.0	4,000
11222740	Nor	WILSON RD	CHES CL / BERKLEY AVE EXT	INDIAN RIVER RD	9,184	2003	2	1,000	10,000	Low to mod.	14,000	0.9	4,000
11222750	Nor	WILSON RD	INDIAN RIVER RD	CAMPOSTELLA RD	n.a.	n.a.	4	n.a.	7,000	Low to mod.	8,000	0.2	1,000

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Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11470080	Poq	EAST YORKTOWN RD	YORK CL	POQUOSON AVE	4,028	2004	2	10,000	14,000	Moderate	14,000	0.9	0
11470060	Poq	LITTLE FLORIDA RD	WYTHE CRK RD	POQUOSON AVE	12,836	2004	2	7,000	20,000	Severe	28,000	1.7	8,000
11470070	Poq	POQUOSON AVE	WYTHE CRK RD	LITTLE FLA RD	3,589	2004	2	4,000	8,000	Low to mod.	10,000	0.6	2,000
11470050	Poq	VICTORY BLVD	YORK CO LINE	WYTHE CRK RD	14,073	2004	2	8,000	22,000	Severe	21,000	1.2	-1,000
11470010	Poq	WYTHE CRK RD	HAMPTON CL	ALPHUS ST	13,457	2004	2	9,000	22,000	Severe	25,000	1.5	3,000
11470020	Poq	WYTHE CRK RD	ALPHUS ST	LITTLE FLA RD	15,040	2004	4	8,000	23,000	Low to mod.	24,000	0.7	1,000
11470030	Poq	WYTHE CRK RD	LITTLE FLA RD	HUDGINS RD	13,123	2004	4	7,000	20,000	Low to mod.	15,000	0.5	-5,000
11470040	Poq	WYTHE CRK RD	HUDGINS RD	POQUOSON AVE	8,001	2004	2	7,000	15,000	Moderate	10,000	0.6	-5,000
11240010	Por	AIRLINE BLVD	CHESAPEAKE CL	GREENWOOD DR	14,462	2003	3	3,000	17,000	Low to mod.	15,000	0.6	-2,000
11240020	Por	AIRLINE BLVD	GREENWOOD DR	ELMHURST LN	15,231	2003	3	2,000	17,000	Low to mod.	16,000	0.7	-1,000
11240030	Por	AIRLINE BLVD	ELMHURST LN	.55ME ELMHURST LN	11,413	2003	3	2,000	13,000	Low to mod.	13,000	0.5	0
11240040	Por	AIRLINE BLVD	.55ME ELMHURST LN	VICTORY BLVD	11,413	2003	4	3,000	14,000	Low to mod.	3,000	0.1	-11,000
11240050	Por	AIRLINE BLVD	VICTORY BLVD	PORTSMOUTH BLVD	15,800	2003	4	2,000	18,000	Low to mod.	11,000	0.3	-7,000
11240060	Por	AIRLINE BLVD	PORTSMOUTH BLVD	FREDERICK BLVD	20,060	2003	4	-1,000	19,000	Low to mod.	17,000	0.5	-2,000
11240070	Por	AIRLINE BLVD	FREDERICK BLVD	HIGH ST	21,154	2003	4	-1,000	20,000	Low to mod.	19,000	0.6	-1,000
11240090	Por	CAVALIER BLVD	CHESAPEAKE CL	GREENWOOD DR	11,684	2003	4	4,000	16,000	Low to mod.	11,000	0.3	-5,000
11240100	Por	CEDAR LN	HIGH ST	W NORFOLK RD	13,439	2003	2	-2,000	11,000	Low to mod.	13,000	0.8	2,000
11240110	Por	CEDAR LN	W NORFOLK RD	WESTERN FREEWAY	15,456	2003	4	3,000	18,000	Low to mod.	18,000	0.6	0
11240150	Por	CHURCHLAND BLVD	CHESAPEAKE CL	W NORFOLK RD	17,258	2003	4	-1,000	16,000	Low to mod.	13,000	0.6	-3,000
11240160	Por	CHURCHLAND BLVD	W NORFOLK RD	TYRE NECK RD	13,202	2003	4	-1,000	12,000	Low to mod.	11,000	0.3	-1,000
11240170	Por	CHURCHLAND BLVD	TYRE NECK RD	HIGH ST	13,834	2003	4	-2,000	12,000	Low to mod.	10,000	0.3	-2,000
11240190	Por	COUNTY ST	TURNPIKE RD	PENINSULA AVE	6,547	2003	4	-1,000	6,000	Low to mod.	28,000	1.1	22,000
11240200	Por	COUNTY ST	PENINSULA AVE	ELM AVE	5,214	2003	4	0	5,000	Low to mod.	27,000	0.8	22,000
11240210	Por	COUNTY ST	ELM AVE	EFFINGHAM ST	4,555	2003	4	4,000	9,000	Low to mod.	18,000	0.6	9,000
11240230	Por	COURT ST	I-264	COUNTY ST	8,245	2003	4	3,000	11,000	Low to mod.	12,000	0.4	1,000
11240240	Por	COURT ST	COUNTY ST	HIGH ST	6,827	2003	4	3,000	10,000	Low to mod.	11,000	0.3	1,000
11240250	Por	COURT ST	HIGH ST	LONDON BLVD	4,236	2003	4	1,000	5,000	Low to mod.	5,000	0.2	0
11240260	Por	COURT ST	LONDON BLVD.	CRAWFORD PKWY	1,199	2003	4	1,000	2,000	Low to mod.	1,000	0.1	-1,000
11240270	Por	CRAWFORD PKWY	EFFINGHAM ST	CRAWFORD ST	4,574	2003	4	0	5,000	Low to mod.	6,000	0.2	1,000
11240280	Por	CRAWFORD ST	CRAWFORD PKWY	LONDON BLVD	3,994	2003	4	1,000	5,000	Low to mod.	4,000	0.1	-1,000
11240290	Por	CRAWFORD ST	LONDON BLVD	HIGH ST	8,071	2003	4	3,000	11,000	Low to mod.	8,000	0.2	-3,000
11240300	Por	CRAWFORD ST	HIGH ST	COUNTY ST	8,425	2003	4	2,000	10,000	Low to mod.	9,000	0.3	-1,000
11240310	Por	CRAWFORD ST	COUNTY ST	I-264	8,699	2003	4	4,000	13,000	Low to mod.	8,000	0.2	-5,000
11240320	Por	DEEP CREEK BLVD	VICTORY BLVD	GREENWOOD DR	6,615	2003	2	1,000	8,000	Low to mod.	3,000	0.2	-5,000
11240330	Por	DEEP CREEK BLVD	GREENWOOD DR	PORTSMOUTH BLVD	8,790	2003	2	1,000	10,000	Low to mod.	5,000	0.3	-5,000
11240340	Por	DEEP CREEK BLVD	PORTSMOUTH BLVD	FREDERICK BLVD	8,753	2003	2	1,000	10,000	Low to mod.	5,000	0.3	-5,000
11240350	Por	DEEP CREEK BLVD	FREDERICK BLVD	DES MOINES AVE	6,577	2003	2	-1,000	6,000	Low to mod.	5,000	0.3	-1,000
11240360	Por	DES MOINES AVE	DEEP CREEK BLVD	I-264	8,809	2003	2	-1,000	8,000	Low to mod.	7,000	0.4	-1,000
11240650	Por	EFFINGHAM ST	FREDERICK BLVD	ELM AVE	20,457	2003	4	2,000	22,000	Low to mod.	40,000	1.0	18,000
11240660	Por	EFFINGHAM ST	ELM AVE	PORTSMOUTH BLVD	18,250	2003	4	-2,000	16,000	Low to mod.	36,000	0.9	20,000
11240370	Por	EFFINGHAM ST	PORTSMOUTH BLVD	I-264	26,939	2003	6	-1,000	26,000	Low to mod.	41,000	0.7	15,000
11240380	Por	EFFINGHAM ST	I-264	SOUTH ST	37,288	2003	4	2,000	39,000	Severe	47,000	1.2	8,000
11240390	Por	EFFINGHAM ST	SOUTH ST	HIGH ST	28,192	2003	4	7,000	35,000	Moderate	44,000	1.1	9,000
11240400	Por	EFFINGHAM ST	HIGH ST	LONDON BLVD	23,495	2003	4	3,000	26,000	Low to mod.	27,000	0.7	1,000
11240410	Por	EFFINGHAM ST	LONDON BLVD	NORTH ST	17,317	2003	5	5,000	22,000	Low to mod.	25,000	0.6	3,000
11240420	Por	EFFINGHAM ST	NORTH ST	CRAWFORD PKWY	16,878	2003	4	0	17,000	Low to mod.	21,000	0.7	4,000
11240440	Por	ELM AVE	LONDON BLVD	HIGH ST	6,822	2003	3	5,000	12,000	Low to mod.	4,000	0.2	-8,000
11240450	Por	ELM AVE	HIGH ST	COUNTY ST	9,799	2003	4	4,000	14,000	Low to mod.	8,000	0.2	-6,000
11240460	Por	ELM AVE	COUNTY ST	SOUTH ST	10,434	2003	4	2,000	12,000	Low to mod.	10,000	0.3	-2,000

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11240470	Por	ELM AVE	SOUTH ST	I-264	9,401	2003	2	0	9,000	Low to mod.	11,000	0.7	2,000
11240480	Por	ELM AVE	I-264	PORTSMOUTH BLVD	9,086	2003	2	-1,000	8,000	Low to mod.	10,000	0.6	2,000
11240490	Por	ELM AVE	PORTSMOUTH BLVD	GEORGE WASH HWY	7,087	2003	4	2,000	9,000	Low to mod.	6,000	0.2	-3,000
11240500	Por	ELM AVE	GEORGE WASH HWY	VICTORY BLVD	9,628	2003	2	0	10,000	Low to mod.	5,000	0.3	-5,000
11240510	Por	ELM AVE	VICTORY BLVD	BURTONS PT RD	9,757	2003	4	4,000	14,000	Low to mod.	5,000	0.1	-9,000
11240520	Por	ELM AVE	BURTONS PT RD	CHESAPEAKE CL	7,919	2003	2	5,000	13,000	Low to mod.	4,000	0.2	-9,000
11240540	Por	ELMHURST LN	AIRLINE BLVD	PORTSMOUTH BLVD	7,459	2003	4	1,000	8,000	Low to mod.	6,000	0.2	-2,000
11240550	Por	FREDERICK BLVD	GEORGE WASH HWY	PORTSMOUTH BLVD	13,657	2003	4	1,000	15,000	Low to mod.	22,000	0.6	7,000
11240560	Por	FREDERICK BLVD	PORTSMOUTH BLVD	DEEP CREEK BLVD	15,518	2003	4	-1,000	15,000	Low to mod.	20,000	0.5	5,000
11240570	Por	FREDERICK BLVD	DEEP CREEK BLVD	I-264	20,780	2003	4	2,000	23,000	Low to mod.	27,000	0.7	4,000
11240580	Por	FREDERICK BLVD	I-264	TURNPIKE RD	43,929	2003	4	4,000	48,000	Severe	60,000	1.6	12,000
11240590	Por	FREDERICK BLVD	TURNPIKE RD	AIRLINE BLVD	26,835	2003	5	9,000	36,000	Low to mod.	41,000	0.8	5,000
11240600	Por	FREDERICK BLVD	AIRLINE BLVD	HIGH ST	20,509	2003	4	2,000	23,000	Low to mod.	27,000	0.7	4,000
11240610	Por	G.W. HWY	CHESAPEAKE CL	VICTORY BLVD	30,183	2003	4	6,000	36,000	Moderate	60,000	1.6	24,000
11240620	Por	G.W. HWY	VICTORY BLVD	DAVIS ST	22,962	2003	4	1,000	24,000	Low to mod.	47,000	1.2	23,000
11240630	Por	G.W. HWY	DAVIS ST	GREENWOOD DR	23,239	2003	4	0	23,000	Low to mod.	48,000	1.2	25,000
11240640	Por	G.W. HWY	GREENWOOD DR	FREDERICK BLVD	27,088	2003	4	-4,000	23,000	Low to mod.	47,000	1.2	24,000
11240670	Por	GREENWOOD DR	AIRLINE BLVD	I-264	17,534	2003	4	2,000	20,000	Low to mod.	18,000	0.6	-2,000
11240680	Por	GREENWOOD DR	I-264	CAVALIER BLVD	15,824	2003	4	2,000	18,000	Low to mod.	14,000	0.4	-4,000
11240690	Por	GREENWOOD DR	CAVALIER BLVD	VICTORY BLVD	10,469	2003	4	5,000	15,000	Low to mod.	12,000	0.4	-3,000
11240700	Por	GREENWOOD DR	VICTORY BLVD	INDEPENDENCE ST	4,428	2003	4	1,000	5,000	Low to mod.	4,000	0.1	-1,000
11240710	Por	GREENWOOD DR	INDEPENDENCE ST	DEEP CREEK BLVD	3,926	2003	2	0	4,000	Low to mod.	5,000	0.3	1,000
11240720	Por	GREENWOOD DR	DEEP CREEK BLVD	GEORGE WASH HWY	3,375	2003	2	1,000	4,000	Low to mod.	5,000	0.3	1,000
11240730	Por	HIGH ST	CHESAPEAKE CL	TYRE NECK RD	23,758	2003	4	-1,000	23,000	Low to mod.	25,000	0.7	2,000
11240740	Por	HIGH ST	TYRE NECK RD	CHURCHLAND BLVD	23,388	2003	4	-1,000	22,000	Low to mod.	29,000	0.8	7,000
11240750	Por	HIGH ST	CHURCHLAND BLVD	CEDAR LA	33,493	2003	4	-2,000	31,000	Moderate	37,000	1.0	6,000
11240760	Por	HIGH ST	CEDAR LA	FREDERICK BLVD	40,944	2003	4	-8,000	33,000	Moderate	44,000	1.1	11,000
11240780	Por	HIGH ST	FREDERICK BLVD	AIRLINE BLVD	18,264	2003	4	-3,000	15,000	Low to mod.	21,000	0.6	6,000
11240790	Por	HIGH ST	AIRLINE BLVD	MT VERNON AVE	17,333	2003	5	-3,000	14,000	Low to mod.	20,000	0.5	6,000
11240800	Por	HIGH ST	MT VERNON AVE	M L K FWY	19,625	2003	4	-2,000	18,000	Low to mod.	23,000	0.7	5,000
11240810	Por	HIGH ST	M L K FWY	ELM AVE	17,589	2003	4	3,000	21,000	Low to mod.	9,000	0.3	-12,000
11240820	Por	HIGH ST	ELM AVE	EFFINGHAM ST	12,009	2003	4	2,000	14,000	Low to mod.	5,000	0.1	-9,000
11240830	Por	HIGH ST	EFFINGHAM ST	CRAWFORD ST	7,291	2003	2	3,000	10,000	Low to mod.	14,000	0.9	4,000
11240930	Por	LONDON BLVD	HIGH ST	MT VERNON AVE	n.a.	n.a.	6	n.a.	17,000	Low to mod.	16,000	0.3	-1,000
11240940	Por	LONDON BLVD	MT VERNON AVE	M L K FWY	25,963	2003	6	-2,000	24,000	Low to mod.	21,000	0.4	-3,000
11240950	Por	LONDON BLVD	M L K FWY	ELM AVE	27,192	2003	6	8,000	35,000	Low to mod.	21,000	0.4	-14,000
11240960	Por	LONDON BLVD	ELM AVE	EFFINGHAM ST	23,357	2003	6	4,000	27,000	Low to mod.	22,000	0.4	-5,000
11240970	Por	LONDON ST	EFFINGHAM ST	CRAWFORD ST	8,166	2003	2	0	8,000	Low to mod.	6,000	0.4	-2,000
11241035	Por	MIDTOWN TUNNEL	MLK / WESTERN FRWY	NORFOLK CL	35,309	2003	2	18,000	53,000	Beyond Severe	56,000	1.4	3,000
11240990	Por	MLK FWRY	TURNPIKE RD	HIGH ST	4,302	2003	2	1,000	5,000	Low to mod.	27,000	0.7	22,000
11241000	Por	MLK FWRY	HIGH ST	LONDON BLVD	n.a.	n.a.	4	n.a.	31,000	Low to mod.	35,000	0.5	4,000
11241015	Por	MLK FWRY	LONDON BLVD	MIDTOWN / WESTERN	23,695	2000	4	16,000	40,000	Low to mod.	29,000	0.4	-11,000
11241090	Por	PORTCENTRE PKWY	PORTSMOUTH BLVD	CRAWFORD ST	9,599	2003	4	1,000	11,000	Low to mod.	10,000	0.4	-1,000
11241100	Por	PORTSMOUTH BLVD	CHESAPEAKE CL	ELMHURST LN	31,792	2003	4	6,000	38,000	Severe	55,000	1.7	17,000
11241110	Por	PORTSMOUTH BLVD	ELMHURST LN	VICTORY BLVD	30,228	2003	4	-2,000	28,000	Moderate	48,000	1.5	20,000
11241120	Por	PORTSMOUTH BLVD	VICTORY BLVD	AIRLINE BLVD	22,138	2003	4	-2,000	20,000	Low to mod.	43,000	1.3	23,000
11241130	Por	PORTSMOUTH BLVD	AIRLINE BLVD	TURNPIKE RD	18,161	2003	4	1,000	19,000	Low to mod.	36,000	1.1	17,000
11241140	Por	PORTSMOUTH BLVD	TURNPIKE RD	I-264	14,720	2003	4	2,000	17,000	Low to mod.	22,000	0.7	5,000
11241150	Por	PORTSMOUTH BLVD	I-264	DEEP CREEK BLVD	12,161	2003	4	1,000	13,000	Low to mod.	12,000	0.4	-1,000

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11241160	Por	PORTSMOUTH BLVD	DEEP CREEK BLVD	FREDERICK BLVD	8,134	2003	4	1,000	9,000	Low to mod.	8,000	0.2	-1,000
11241170	Por	PORTSMOUTH BLVD	FREDERICK BLVD	ELM AVE	7,835	2003	4	1,000	9,000	Low to mod.	6,000	0.2	-3,000
11241180	Por	PORTSMOUTH BLVD	ELM AVE	EFFINGHAM ST	6,064	2003	4	1,000	7,000	Low to mod.	1,000	0.0	-6,000
11241190	Por	PORTSMOUTH BLVD	EFFINGHAM ST	PORTCENTRE PKWY	5,260	2003	2	0	5,000	Low to mod.	5,000	0.3	0
11241220	Por	TOWN POINT RD	SUFFOLK CL	TWIN PINES RD	12,048	2003	2	-2,000	10,000	Moderate	6,000	0.5	-4,000
11241210	Por	TOWN POINT RD	TWIN PINES RD	WESTERN FWY	30,426	2003	4	-4,000	26,000	Low to mod.	25,000	0.8	-1,000
11241200	Por	TOWN POINT RD	WESTERN FWY	CHESAPEAKE CL	25,220	2003	4	2,000	27,000	Moderate	20,000	0.6	-7,000
11241230	Por	TURNPIKE RD	PORTSMOUTH BLVD	FREDERICK BLVD	7,488	2003	2	2,000	9,000	Low to mod.	20,000	1.2	11,000
11241240	Por	TURNPIKE RD	FREDERICK BLVD	HOWARD ST	15,167	2003	4	2,000	17,000	Low to mod.	23,000	0.7	6,000
11241250	Por	TURNPIKE RD	HOWARD ST	HARBOR DR	10,781	2003	2	1,000	12,000	Low to mod.	19,000	1.2	7,000
11241260	Por	TURNPIKE RD	HARBOR DR	COUNTY ST	n.a.	n.a.	2	n.a.	20,000	Severe	42,000	2.6	22,000
11241270	Por	TWIN PINES RD	TOWN POINT RD	HEDGEROW LN	10,957	2003	2	1,000	12,000	Low to mod.	9,000	0.6	-3,000
11241280	Por	TYRE NECK RD	CHESAPEAKE CL	HIGH ST	12,400	2003	2	2,000	14,000	Severe	22,000	1.9	8,000
11241290	Por	TYRE NECK RD	HIGH ST	CHURCHLAND BLVD	5,592	2003	2	1,000	7,000	Low to mod.	8,000	0.7	1,000
11241300	Por	TYRE NECK RD	CHURCHLAND BLVD	W NORFOLK RD	3,593	2003	2	1,000	5,000	Low to mod.	6,000	0.5	1,000
11241310	Por	VICTORY BLVD	PORTSMOUTH BLVD	AIRLINE BLVD	8,111	2003	4	1,000	9,000	Low to mod.	8,000	0.2	-1,000
11241320	Por	VICTORY BLVD	AIRLINE BLVD	I-264	26,716	2003	6	-1,000	26,000	Low to mod.	18,000	0.4	-8,000
11241330	Por	VICTORY BLVD	I-264	GREENWOOD DR	26,304	2003	4	0	26,000	Low to mod.	26,000	0.8	0
11241340	Por	VICTORY BLVD	GREENWOOD DR	DEEP CREEK BLVD	18,408	2003	4	1,000	19,000	Low to mod.	20,000	0.6	1,000
11241350	Por	VICTORY BLVD	DEEP CREEK BLVD	GEORGE WASH HWY	18,956	2003	4	3,000	22,000	Low to mod.	20,000	0.6	-2,000
11241360	Por	VICTORY BLVD	GEORGE WASH HWY	ELM AVE	7,446	2003	4	8,000	15,000	Low to mod.	10,000	0.3	-5,000
11241370	Por	W NORFOLK RD	CHURCHLAND BLVD	TYRE NECK RD	3,906	2003	2	-1,000	3,000	Low to mod.	1,000	0.1	-2,000
11241380	Por	W NORFOLK RD	TYRE NECK RD	CEDAR LN	6,685	2003	2	1,000	8,000	Low to mod.	9,000	0.6	1,000
11241390	Por	W NORFOLK RD	CEDAR LN	WESTERN FWY	6,084	2003	4	1,000	7,000	Low to mod.	4,000	0.1	-3,000
11241410	Por	WESTERN FWY	SUFFOLK CL	TOWN POINT RD	36,421	2003	4	25,000	61,000	Moderate	50,000	0.6	-11,000
11241420	Por	WESTERN FWY	TOWN POINT RD	CEDAR LN	n.a.	n.a.	4	n.a.	73,000	Moderate	59,000	0.8	-14,000
11241425	Por	WESTERN FWY	CEDAR LN	CRANEY ISL CONN	24,427	2003	4	33,000	57,000	Low to mod.	39,000	0.5	-18,000
11241435	Por	WESTERN FWY	CRANEY ISL CONN	W NORFOLK RD	24,427	2003	4	33,000	57,000	Low to mod.	39,000	0.5	-18,000
11241445	Por	WESTERN FWY	W NORFOLK RD	MLK / MIDTOWN TNL	27,000	2000	4	49,000	76,000	Severe	56,000	0.7	-20,000
11330010	Suf	BENNETTS PASTURE RD	KINGS HWY	BRIDGE RD	7,091	2002	2	9,000	16,000	Moderate	11,000	0.6	-5,000
11330020	Suf	BRIDGE RD	ISLE OF WIGHT CL	E. END CHUCKATUCK BR	11,538	2002	2	15,000	27,000	Low to mod.	25,000	0.6	-2,000
11330030	Suf	BRIDGE RD	E. END CHUCKATUCK BR	CRITTENDEN RD	11,538	2002	4	14,000	26,000	Low to mod.	24,000	0.6	-2,000
11330040	Suf	BRIDGE RD	CRITTENDEN RD	N. END NANSE BR	14,966	2002	4	14,000	29,000	Low to mod.	30,000	0.8	1,000
11330050	Suf	BRIDGE RD	N. END NANSE BR	S. END NANSE BR	14,966	2002	2	15,000	30,000	Low to mod.	31,000	0.8	1,000
11330060	Suf	BRIDGE RD	S. END NANSE BR	BENNETTS PASTURE RD	14,966	2002	4	15,000	30,000	Low to mod.	31,000	0.8	1,000
11330070	Suf	BRIDGE RD	BENNETTS PASTURE RD	SHOULDERS HILL RD	n.a.	n.a.	4	n.a.	43,000	Severe	39,000	1.0	-4,000
11330080	Suf	BRIDGE RD	SHOULDERS HILL RD	HARBOR VIEW BLVD	23,441	2002	4	18,000	41,000	Severe	48,000	1.2	7,000
11330085	Suf	BRIDGE RD	HARBOR VIEW BLVD	WESTERN FWY	n.a.	n.a.	4	n.a.	45,000	Severe	53,000	1.3	8,000
11330090	Suf	BRIDGE RD	WESTERN FWY	I-664	n.a.	n.a.	4	n.a.	9,000	Low to mod.	10,000	0.2	1,000
11330100	Suf	BRIDGE RD	I-664	COLLEGE DR	17,648	2002	4	4,000	22,000	Low to mod.	18,000	0.5	-4,000
11330110	Suf	BRIDGE RD	COLLEGE DR	CHESAPEAKE CL	22,415	2003	4	4,000	26,000	Low to mod.	29,000	0.8	3,000
11330120	Suf	CAROLINA RD	NC STATE LINE	WHALEYVILLE BLVD	3,507	2002	2	3,000	7,000	Low to mod.	8,000	0.5	1,000
11330130	Suf	CAROLINA RD	WHALEYVILLE BLVD	TURLINGTON RD	n.a.	n.a.	4	n.a.	26,000	Low to mod.	27,000	0.7	1,000
11330140	Suf	CAROLINA RD	TURLINGTON RD	SW SUFFOLK BYP	15,342	2002	4	14,000	29,000	Low to mod.	30,000	0.8	1,000
11330150	Suf	CAROLINA RD	SW SUFFOLK BYP	FAYETTE ST	15,083	2002	4	5,000	20,000	Low to mod.	28,000	0.7	8,000
11330160	Suf	COLLEGE DR	BRIDGE RD	WESTERN FREEWAY	14,765	2002	4	0	15,000	Low to mod.	19,000	0.6	4,000
11330170	Suf	COLLEGE DR	WESTERN FREEWAY	TOWN POINT RD	16,473	2002	4	9,000	25,000	Low to mod.	35,000	1.0	10,000
11330180	Suf	COLLEGE DR	TOWN POINT RD	I-664	19,810	2002	4	-2,000	18,000	Low to mod.	25,000	0.7	7,000
11330190	Suf	COLLEGE DR	I-664	HARBOR VIEW BLVD	8,277	2002	2	-2,000	6,000	Low to mod.	6,000	0.3	0

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Greater than +15,000
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Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11330200	Suf	CONSTANCE RD	HOLLAND RD	PITCHKETTLE RD	9,964	2002	2	2,000	12,000	Low to mod.	11,000	0.7	-1,000
11330210	Suf	CONSTANCE RD	PITCHKETTLE RD	MAIN ST	11,156	2002	2	5,000	16,000	Severe	16,000	1.0	0
11330220	Suf	CONSTANCE RD	MAIN ST	WILROY RD	15,066	2002	4	8,000	23,000	Low to mod.	20,000	0.6	-3,000
11330240	Suf	COPELAND RD	HOLLAND RD	WHALEYVILLE BLVD	n.a.	n.a.	2	n.a.	2,000	Low to mod.	2,000	0.1	0
11330250	Suf	COPELAND RD	WHALEYVILLE BLVD	CAROLINA RD	n.a.	n.a.	2	n.a.	1,000	Low to mod.	1,000	0.1	0
11330260	Suf	CRITTENDEN RD	KINGS HWY	BRIDGE RD	1,753	2002	2	9,000	11,000	Low to mod.	3,000	0.2	-8,000
11330270	Suf	EVERETTS RD	LAKE PRINCE DR	MOORE FARM LN	1,820	2002	2	4,000	6,000	Low to mod.	1,000	0.1	-5,000
11330280	Suf	EVERETTS RD	MOORE FARM LN	GODWIN BLVD	1,740	2002	2	4,000	6,000	Low to mod.	1,000	0.1	-5,000
11330290	Suf	FINNEY AVE	N. MAIN ST	PINNER ST	7,186	2002	2	1,000	8,000	Low to mod.	1,000	0.1	-7,000
11330300	Suf	GODWIN BLVD	PRUDEN BLVD	SUFFOLK BYP	18,732	2002	4	2,000	21,000	Low to mod.	22,000	0.6	1,000
11330310	Suf	GODWIN BLVD	SUFFOLK BYP	KINGS FORK RD	13,404	2000	4	12,000	25,000	Low to mod.	26,000	0.7	1,000
11330320	Suf	GODWIN BLVD	KINGS FORK RD	NANS RVR (W BRNCH)	10,393	2002	4	7,000	17,000	Low to mod.	15,000	0.4	-2,000
11330330	Suf	GODWIN BLVD	NANS RVR (W BRNCH)	EVERETTS RD	10,393	2002	2	6,000	16,000	Moderate	14,000	0.7	-2,000
11330340	Suf	GODWIN BLVD	EVERETTS RD	KINGS HWY	13,263	2001	2	11,000	24,000	Severe	17,000	0.9	-7,000
11330350	Suf	GODWIN BLVD	KINGS HWY	ISLE OF WIGHT CL	10,348	2002	2	8,000	18,000	Moderate	18,000	0.9	0
11330360	Suf	HARBOR VIEW BLVD	BRIDGE RD	TOWN POINT RD	n.a.	n.a.	4	n.a.	9,000	Low to mod.	9,000	0.3	0
11330385	Suf	HOLLAND RD	SUFFOLK BYP	CONSTANCE RD	12,426	2002	2	4,000	16,000	Severe	23,000	1.4	7,000
11330440	Suf	KINGS FORK RD	PITCHKETTLE RD	PRUDEN BLVD	2,044	2002	2	5,000	7,000	Low to mod.	2,000	0.1	-5,000
11330450	Suf	KINGS FORK RD	PRUDEN BLVD	GODWIN BLVD	2,931	2002	2	6,000	9,000	Low to mod.	7,000	0.4	-2,000
11330460	Suf	KINGS HWY	GODWIN BLVD	CRITTENDEN RD	4,792	2001	2	11,000	16,000	Moderate	3,000	0.2	-13,000
11330470	Suf	KINGS HWY	CRITTENDEN RD	BENNETTS PASTURE RD	2,681	2002	2	8,000	11,000	Low to mod.	6,000	0.3	-5,000
11330480	Suf	KINGS HWY	BENNETTS PASTURE RD	NANSEMOND PKWY	n.a.	n.a.	2	n.a.	14,000	Moderate	8,000	0.5	-6,000
11331010	Suf	LAKE PRINCE DR	RTE 460	EVERETTS RD	1,744	2002	2	3,000	5,000	Low to mod.	2,000	0.1	-3,000
11330490	Suf	MAIN ST	FAYETTE ST	WASHINGTON ST	13,300	2002	4	1,000	14,000	Low to mod.	30,000	0.8	16,000
11330500	Suf	MAIN ST	WASHINGTON ST	CONSTANCE RD	21,500	2002	4	6,000	27,000	Low to mod.	26,000	0.7	-1,000
11330510	Suf	MAIN ST	CONSTANCE RD	GODWIN BLVD	28,692	2003	4	6,000	35,000	Moderate	39,000	1.0	4,000
11330520	Suf	MARKET ST	WASHINGTON ST	MAIN ST	5,020	2002	4	3,000	8,000	Low to mod.	6,000	0.2	-2,000
11330530	Suf	MILITARY HWY	SUFFOLK BYP	WCL CHESAPEAKE	64,793	2003	6	12,000	77,000	Severe	90,000	1.5	13,000
11330540	Suf	NANSEMOND PKWY	WILROY RD	KINGS HWY	6,280	2002	2	13,000	19,000	Severe	21,000	1.2	2,000
11330550	Suf	NANSEMOND PKWY	KINGS HWY	SHOULDERS HILL RD	11,171	2002	2	15,000	26,000	Beyond Severe	29,000	1.7	3,000
11330560	Suf	NANSEMOND PKWY	SHOULDERS HILL RD	CHESAPEAKE CL	13,017	2002	2	13,000	26,000	Beyond Severe	21,000	1.2	-5,000
11330570	Suf	PINNER ST	WASHINGTON ST	CONSTANCE RD	12,627	2002	2	-1,000	12,000	Low to mod.	10,000	0.6	-2,000
11330580	Suf	PITCHKETTLE RD	CONSTANCE RD	SUFFOLK BYP	3,022	2002	2	6,000	9,000	Low to mod.	5,000	0.3	-4,000
11330590	Suf	PITCHKETTLE RD	SUFFOLK BYP	KINGS FORK RD	1,766	2002	2	10,000	12,000	Low to mod.	8,000	0.5	-4,000
11330605	Suf	PORTSMOUTH BLVD	WILROY RD	WASHINGTON ST	18,642	2002	4	-4,000	15,000	Low to mod.	6,000	0.2	-9,000
11330610	Suf	PORTSMOUTH BLVD	WASHINGTON ST	SUFFOLK BYP	23,335	2002	4	7,000	30,000	Moderate	40,000	1.2	10,000
11331000	Suf	PROVIDENCE RD	KINGS FORK RD	RTE 460	1,079	2002	2	6,000	7,000	Low to mod.	4,000	0.2	-3,000
11330650	Suf	PRUDEN BLVD	SUFFOLK BYP	GODWIN BLVD	13,208	2002	4	6,000	19,000	Low to mod.	19,000	0.6	0
11330660	Suf	PUGHSVILLE RD	SHOULDERS HILL RD	TOWN POINT RD	3,175	2002	2	12,000	15,000	Moderate	11,000	0.6	-4,000
11330670	Suf	PUGHSVILLE RD	TOWN POINT RD	WCL CHESAPEAKE	7,231	2002	4	12,000	19,000	Low to mod.	16,000	0.5	-3,000
11330960	Suf	RTE 189 (IN HOLLAND)	BUS RTE 58 W.	RTE 58	752	2002	4	1,000	2,000	Low to mod.	1,000	0.0	-1,000
11330965	Suf	RTE 189 (NEAR FRANKLIN)	SOUTHAMPTON CL	RTE 272	4,159	2002	2	0	4,000	Low to mod.	4,000	0.2	0
11330975	Suf	RTE 189 (NEAR FRANKLIN)	RTE 272	RTE 58	n.a.	n.a.	2	n.a.	4,000	Low to mod.	3,000	0.2	-1,000
11330980	Suf	RTE 258 (GREAT MILL HWY)	US 58	ISLE OF WIGHT CL	3,372	2002	2	3,000	6,000	Low to mod.	15,000	0.9	9,000
11330990	Suf	RTE 272	RTE 189	RTE 58	1,406	2002	2	3,000	4,000	Low to mod.	3,000	0.2	-1,000
11330910	Suf	RTE 58	SOUTHAMPTON CL	RTES 189&260	17,340	2002	4	9,000	26,000	Low to mod.	26,000	0.7	0
11330920	Suf	RTE 58	RTES 189&260	RTE 272	17,513	2002	4	9,000	27,000	Low to mod.	38,000	1.0	11,000
11330930	Suf	RTE 58	RTE 272	RTE 189 (IN HOLLAND)	18,297	2002	4	4,000	22,000	Low to mod.	38,000	1.0	16,000
11330940	Suf	RTE 58	RTE 189 (IN HOLLAND)	RTE 58 BUS (IN HOLLAND)	18,741	2002	4	10,000	29,000	Low to mod.	44,000	0.5	15,000

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11330950	Suf	RTE 58	RTE 58 BUS (IN HOLLAND)	LUMMIS RD	21,893	2002	4	10,000	32,000	Moderate	47,000	1.2	15,000
11330370	Suf	RTE 58	LUMMIS RD	SUFFOLK BYP	28,450	2002	4	13,000	41,000	Severe	56,000	1.4	15,000
11330890	Suf	RTE 58 BUS	ISLE OF WIGHT CL	RTE 189 (IN HOLLAND)	3,212	2002	2	4,000	7,000	Low to mod.	4,000	0.2	-3,000
11330900	Suf	RTE 58 BUS	RTE 189 (IN HOLLAND)	RTE 58	3,284	2002	4	4,000	7,000	Low to mod.	5,000	0.1	-2,000
11331020	Suf	RTE 616	RTE 58	RTE 13	231	2002	2	3,000	3,000	Low to mod.	1,000	0.0	-2,000
11331030	Suf	RTE 616	RTE 13	RTE 32	n.a.	n.a.	2	n.a.	1,000	Low to mod.	1,000	0.1	0
11330680	Suf	SHOULDERS HILL RD	NANSEMOND PKWY	PUGHSVILLE RD	4,727	2002	2	4,000	9,000	Low to mod.	17,000	1.0	8,000
11330690	Suf	SHOULDERS HILL RD	PUGHSVILLE RD	BRIDGE RD	4,893	2002	2	9,000	14,000	Moderate	10,000	0.6	-4,000
11330700	Suf	SUFFOLK BYP	HOLLAND RD	PITCHKETTLE RD	28,460	2002	4	19,000	47,000	Low to mod.	46,000	0.6	-1,000
11330710	Suf	SUFFOLK BYP	PITCHKETTLE RD	PRUDEN BLVD	30,195	2002	4	15,000	45,000	Low to mod.	45,000	0.6	0
11330720	Suf	SUFFOLK BYP	PRUDEN BLVD	GODWIN BLVD	38,145	2002	4	19,000	57,000	Low to mod.	61,000	0.8	4,000
11330730	Suf	SUFFOLK BYP	GODWIN BLVD	WILROY RD	45,605	2002	4	19,000	65,000	Moderate	70,000	0.9	5,000
11330740	Suf	SUFFOLK BYP	WILROY RD	MILITARY HWY	36,884	2002	4	9,000	46,000	Low to mod.	49,000	0.6	3,000
11330750	Suf	SW SUFFOLK BYP	CAROLINA RD	HOLLAND RD	9,074	2003	4	4,000	13,000	Low to mod.	6,000	0.1	-7,000
11330760	Suf	TOWN POINT RD	PUGHSVILLE RD	BRIDGE RD	1,165	2003	2	4,000	5,000	Low to mod.	5,000	0.3	0
11330765	Suf	TOWN POINT RD	HARBOR VIEW BLVD	COLLEGE DR	5,466	2002	4	14,000	19,000	Low to mod.	17,000	0.5	-2,000
11330770	Suf	TOWN POINT RD	COLLEGE DR	PORTSMOUTH CL	12,048	2003	2	-2,000	10,000	Low to mod.	8,000	0.5	-2,000
11330620	Suf	US 460	ISLE OF WIGHT CL	LAKE PRINCE DR	15,245	2002	4	15,000	30,000	Low to mod.	34,000	0.9	4,000
11330630	Suf	US 460	LAKE PRINCE DR	KINGS FORK RD	n.a.	n.a.	4	n.a.	29,000	Low to mod.	33,000	0.8	4,000
11330640	Suf	US 460	KINGS FORK RD	SUFFOLK BYP	n.a.	n.a.	4	n.a.	32,000	Moderate	35,000	0.9	3,000
11330780	Suf	WASHINGTON ST	W CONSTANCE RD	SARATOGA ST	9,631	2002	2	4,000	14,000	Moderate	22,000	1.4	8,000
11330790	Suf	WASHINGTON ST	SARATOGA ST	MAIN ST	7,992	2002	3	3,000	11,000	Low to mod.	19,000	0.8	8,000
11330800	Suf	WASHINGTON ST	MAIN ST	PINNER ST	11,243	2002	2	2,000	13,000	Low to mod.	33,000	2.0	20,000
11330810	Suf	WASHINGTON ST	PINNER ST	PORTSMOUTH BLVD	13,981	2002	2	6,000	20,000	Severe	33,000	2.0	13,000
11330820	Suf	WESTERN FWY	BRIDGE RD	I-664	18,718	2002	4	14,000	33,000	Low to mod.	40,000	0.5	7,000
11330830	Suf	WESTERN FWY	I-664	COLLEGE DR	28,235	2002	4	21,000	49,000	Low to mod.	34,000	0.4	-15,000
11330840	Suf	WESTERN FWY	COLLEGE DR	PORTSMOUTH CL	36,421	2003	4	25,000	61,000	Moderate	50,000	0.6	-11,000
11330850	Suf	WHALEYVILLE BLVD	NC STATE LINE	CAROLINA RD	7,939	2003	2	6,000	14,000	Low to mod.	14,000	0.7	0
11330870	Suf	WILROY RD	CONSTANCE RD	SUFFOLK BYP	7,617	2002	2	0	8,000	Low to mod.	9,000	0.6	1,000
11330880	Suf	WILROY RD	SUFFOLK BYP	NANSEMOND PKWY	8,024	2002	2	11,000	19,000	Severe	25,000	1.5	6,000
11340010	VaB	21ST ST	PARKS AVE	PACIFIC AVE	14,981	2003	4	4,000	19,000	Low to mod.	13,000	0.3	-6,000
11340020	VaB	21ST ST	PACIFIC AVE	ATLANTIC AVE	n.a.	n.a.	3	n.a.	8,000	Low to mod.	10,000	0.3	2,000
11340030	VaB	22ND ST	PARKS AVE	PACIFIC AVE	11,720	2003	4	7,000	19,000	Low to mod.	18,000	0.5	-1,000
11340040	VaB	22ND ST	PACIFIC AVE	ATLANTIC AVE	3,735	2003	3	1,000	5,000	Low to mod.	8,000	0.3	3,000
11340050	VaB	ATLANTIC AVE	SHORE DR	PACIFIC AVE	26,014	2003	4	6,000	32,000	Moderate	25,000	0.7	-7,000
11340060	VaB	ATLANTIC AVE	PACIFIC AVE	LASKIN RD	5,931	2003	2	4,000	10,000	Moderate	3,000	0.3	-7,000
11340070	VaB	ATLANTIC AVE	LASKIN RD	25TH ST	n.a.	n.a.	2	n.a.	8,000	Low to mod.	9,000	0.8	1,000
11340080	VaB	ATLANTIC AVE	25TH ST	22ND AVE	n.a.	n.a.	2	n.a.	8,000	Low to mod.	9,000	0.8	1,000
11340090	VaB	ATLANTIC AVE	22ND AVE	21ST AVE	n.a.	n.a.	2	n.a.	7,000	Low to mod.	10,000	0.9	3,000
11340100	VaB	ATLANTIC AVE	21ST ST	VA BEACH BLVD	11,280	2003	2	-5,000	6,000	Low to mod.	5,000	0.5	-1,000
11340110	VaB	ATLANTIC AVE	VA BEACH BLVD	5TH ST	8,357	2003	2	-1,000	7,000	Low to mod.	6,000	0.6	-1,000
11340120	VaB	BAXTER RD	PRINCESS ANNE RD	INDEPENDENCE BLVD	24,393	2003	4	1,000	25,000	Low to mod.	56,000	1.7	31,000
11340130	VaB	BIRDNECK RD	GEN BOOTH BLVD	NORFOLK AVE	18,116	2003	4	6,000	24,000	Low to mod.	13,000	0.4	-11,000
11340140	VaB	BIRDNECK RD	NORFOLK AVE	VA BEACH BLVD	n.a.	n.a.	4	n.a.	33,000	Severe	29,000	0.9	-4,000
11340150	VaB	BIRDNECK RD	VA BEACH BLVD	I-264	36,411	2003	4	-3,000	33,000	Severe	17,000	0.5	-16,000
11340160	VaB	BIRDNECK RD	I-264	LASKIN RD	24,858	2003	4	6,000	31,000	Severe	22,000	0.7	-9,000
11340170	VaB	BLACKWATER RD	PUNGO FERRY RD	CHESAPEAKE CL	2,591	2004	2	2,000	5,000	Low to mod.	5,000	0.3	0
11340180	VaB	CENTERVILLE TPK	CHESAPEAKE CL	LYNNHAVEN PKWY	7,767	2002	2	17,000	25,000	Beyond Severe	52,000	3.2	27,000
11340190	VaB	CENTERVILLE TPK	LYNNHAVEN PKWY	KEMPSVILLE RD	13,987	2003	2	7,000	21,000	Severe	52,000	3.2	31,000

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11340200	VaB	CENTERVILLE TPK	KEMPSVILLE RD	JAKE SEARS RD	17,414	2003	2	4,000	21,000	Severe	45,000	2.7	24,000
11340210	VaB	CENTERVILLE TPK	JAKE SEARS RD	INDIAN RIVER RD	19,647	2003	2	2,000	22,000	Beyond Severe	47,000	2.9	25,000
11340240	VaB	DAM NECK RD	PRINCESS ANNE RD	ROSEMONT RD	n.a.	n.a.	4	n.a.	33,000	Severe	35,000	1.1	2,000
11340245	VaB	DAM NECK RD	ROSEMONT RD	HOLLAND RD	35,390	2003	4	4,000	39,000	Severe	45,000	1.4	6,000
11340250	VaB	DAM NECK RD	HOLLAND RD	LONDON BR CONN	42,733	2003	4	2,000	45,000	Beyond Severe	75,000	2.2	30,000
11340260	VaB	DAM NECK RD	LONDON BR CONN	LONDON BR RD	49,046	2003	4	-4,000	45,000	Beyond Severe	75,000	2.2	30,000
11340270	VaB	DAM NECK RD	LONDON BR RD	S.E. PKWY & GRNBELT	29,676	2003	4	-4,000	26,000	Low to mod.	28,000	0.8	2,000
11340275	VaB	DAM NECK RD	S.E. PKWY & GRNBELT	GEN BOOTH BLVD	26,902	2003	4	-1,000	26,000	Low to mod.	27,000	0.8	1,000
11340280	VaB	DAM NECK RD	GEN BOOTH BLVD	UPTON DR	34,615	2003	4	1,000	36,000	Severe	35,000	1.0	-1,000
11340290	VaB	DAM NECK RD	UPTON DR	USN TRAINING CTR	18,833	2003	4	1,000	20,000	Low to mod.	20,000	0.6	0
11340300	VaB	DIAMOND SPRINGS RD	NEWTOWN RD	WESLEYAN DR	21,976	2003	4	3,000	25,000	Low to mod.	55,000	1.7	30,000
11340310	VaB	DIAMOND SPRINGS RD	WESLEYAN DR	NORTHAMPTON BLVD	22,192	2002	4	7,000	29,000	Moderate	30,000	0.9	1,000
11340320	VaB	DIAMOND SPRINGS RD	NORTHAMPTON BLVD	SHORE DR	28,848	2003	4	1,000	30,000	Moderate	39,000	1.2	9,000
11340330	VaB	ELBOW RD	CHESAPEAKE CL	INDIAN RIVER RD	5,096	2003	2	3,000	8,000	Low to mod.	12,000	0.7	4,000
11340340	VaB	ELBOW RD	INDIAN RIVER RD	SALEM RD	5,735	2003	2	8,000	14,000	Moderate	20,000	1.2	6,000
11340350	VaB	ELBOW RD (PROP'D)	SALEM RD	PRINCESS ANNE RD	not blt.	n.a.	2	n.a.	13,000	Low to mod.	12,000	0.7	-1,000
11340360	VaB	FERRELL PKWY	INDIAN RIVER RD	PRINCESS ANNE RD	40,307	2003	4	-3,000	37,000	Severe	17,000	0.5	-20,000
11341273	VaB	FIRST COL / OCEANA BLVD	GEN BOOTH BLVD	TOMCAT BLVD / SEP&G	25,560	2002	4	11,000	37,000	Severe	39,000	1.2	2,000
11341295	VaB	FIRST COL / OCEANA BLVD	TOMCAT BLVD / SEP&G	VA BEACH BLVD	32,305	2003	4	5,000	37,000	Severe	40,000	1.2	3,000
11340380	VaB	FIRST COL / OCEANA BLVD	VA BEACH BLVD	I-264	n.a.	n.a.	6	n.a.	33,000	Low to mod.	20,000	0.4	-13,000
11340390	VaB	FIRST COL / OCEANA BLVD	I-264	LASKIN RD	40,764	2003	4	4,000	45,000	Beyond Severe	33,000	1.0	-12,000
11340400	VaB	FIRST COL / OCEANA BLVD	LASKIN RD	GREAT NECK RD	42,667	2003	4	1,000	44,000	Beyond Severe	47,000	1.4	3,000
11340405	VaB	GEN BOOTH BLVD	PRINCESS ANNE RD	FERRELL PKWY	n.a.	n.a.	4	n.a.	24,000	Low to mod.	45,000	1.3	21,000
11340410	VaB	GEN BOOTH BLVD	FERRELL PKWY	LONDON BRIDGE RD	33,076	2002	4	11,000	44,000	Severe	45,000	1.3	1,000
11340420	VaB	GEN BOOTH BLVD	LONDON BRIDGE RD	DAM NECK RD	35,008	2002	4	12,000	47,000	Beyond Severe	54,000	1.6	7,000
11340430	VaB	GEN BOOTH BLVD	DAM NECK RD	OCEANA BLVD	53,902	2002	6	8,000	62,000	Severe	61,000	1.2	-1,000
11340440	VaB	GEN BOOTH BLVD	OCEANA BLVD	BIRDNECK RD	36,972	2003	4	2,000	39,000	Severe	32,000	1.0	-7,000
11340450	VaB	GEN BOOTH BLVD	BIRDNECK RD	OLD RUDEE BLVD	24,532	2003	4	-3,000	22,000	Low to mod.	20,000	0.6	-2,000
11340460	VaB	GREAT NECK RD	POTTERS RD	I-264	17,882	2003	4	14,000	32,000	Moderate	20,000	0.6	-12,000
11340470	VaB	GREAT NECK RD	I-264	VA BEACH BLVD	17,882	2003	4	14,000	32,000	Moderate	20,000	0.6	-12,000
11340480	VaB	GREAT NECK RD	VA BEACH BLVD	FIRST COLONIAL RD	41,260	2003	4	6,000	47,000	Beyond Severe	41,000	1.2	-6,000
11340490	VaB	GREAT NECK RD	FIRST COLONIAL RD	SHOREHAVEN RD	44,499	2003	6	6,000	50,000	Severe	53,000	1.1	3,000
11340500	VaB	GREAT NECK RD	SHOREHAVEN RD	SHORE DR	24,981	2004	4	7,000	32,000	Severe	22,000	0.7	-10,000
11340510	VaB	HAYGOOD RD	NEWTOWN RD	WESLEYAN DR	n.a.	n.a.	2	n.a.	9,000	Low to mod.	4,000	0.3	-5,000
11340520	VaB	HAYGOOD RD	WESLEYAN DR	INDEPENDENCE BLVD	19,559	2003	4	3,000	23,000	Low to mod.	24,000	0.7	1,000
11340530	VaB	HOLLAND RD	INDEPENDENCE BLVD	PLAZA TRAIL	41,923	2003	4	2,000	44,000	Beyond Severe	75,000	2.3	31,000
11340540	VaB	HOLLAND RD	PLAZA TRAIL	ROSEMONT RD	38,667	2003	4	9,000	48,000	Beyond Severe	76,000	2.3	28,000
11340550	VaB	HOLLAND RD	ROSEMONT RD	LYNNHAVEN PKWY	32,587	2003	4	6,000	39,000	Severe	62,000	1.9	23,000
11340560	VaB	HOLLAND RD	LYNNHAVEN PKWY	DAM NECK RD	35,039	2003	4	3,000	38,000	Severe	55,000	1.7	17,000
11340565	VaB	HOLLAND RD	DAM NECK RD	NIMMO PKWY	16,991	2003	4	15,000	32,000	Severe	24,000	0.7	-8,000
11340572	VaB	HOLLAND RD	NIMMO PKWY	PRINCESS ANNE RD	11,546	2003	2	0	12,000	Low to mod.	15,000	0.9	3,000
11340605	VaB	INDEPENDENCE BLVD	INDIAN RIVER RD	SALEM RD	7,206	2003	2	2,000	9,000	Low to mod.	6,000	0.3	-3,000
11340620	VaB	INDEPENDENCE BLVD	SALEM RD	PRINCESS ANNE RD	21,423	2003	4	0	21,000	Low to mod.	13,000	0.4	-8,000
11340630	VaB	INDEPENDENCE BLVD	PRINCESS ANNE RD	LYNNHAVEN PKWY	28,115	2003	4	5,000	33,000	Severe	24,000	0.7	-9,000
11340640	VaB	INDEPENDENCE BLVD	LYNNHAVEN PKWY	PLAZA TRAIL	36,718	2002	4	-1,000	36,000	Severe	24,000	0.7	-12,000
11340650	VaB	INDEPENDENCE BLVD	PLAZA TRAIL	HOLLAND RD	35,112	2003	4	5,000	40,000	Severe	35,000	1.1	-5,000
11340660	VaB	INDEPENDENCE BLVD	HOLLAND RD	BAXTER RD	80,128	2003	8	9,000	89,000	Severe	112,000	1.5	23,000
11340670	VaB	INDEPENDENCE BLVD	BAXTER RD	I-264	n.a.	n.a.	8	n.a.	97,000	Severe	135,000	1.8	38,000
11340680	VaB	INDEPENDENCE BLVD	I-264	VA BEACH BLVD	81,851	2003	8	18,000	100,000	Beyond Severe	117,000	1.5	17,000

2030 volumes and demand are for average weekdays.
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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11340690	VaB	INDEPENDENCE BLVD	VA BEACH BLVD	JEANNE ST	53,472	2003	8	5,000	58,000	Low to mod.	88,000	1.1	30,000
11340700	VaB	INDEPENDENCE BLVD	JEANNE ST	PEMBROKE AVE	53,472	2003	6	13,000	66,000	Severe	71,000	1.2	5,000
11340710	VaB	INDEPENDENCE BLVD	PEMBROKE AVE	HAYGOOD RD	52,029	2003	4	2,000	54,000	Beyond Severe	60,000	1.6	6,000
11340720	VaB	INDEPENDENCE BLVD	HAYGOOD RD	NORTHAMPTON BLVD	43,743	2003	4	-2,000	42,000	Severe	53,000	1.4	11,000
11340730	VaB	INDEPENDENCE BLVD	NORTHAMPTON BLVD	SHORE DR	24,898	2003	4	3,000	28,000	Low to mod.	29,000	0.8	1,000
11340575	VaB	INDIAN LAKES BLVD	FERRELL PKWY	INDIAN RIVER RD	12,583	2003	4	1,000	14,000	Low to mod.	5,000	0.1	-9,000
11340740	VaB	INDIAN RIVER RD	CHESAPEAKE CL	MILITARY HWY	35,252	2003	6	6,000	41,000	Moderate	48,000	1.0	7,000
11340750	VaB	INDIAN RIVER RD	MILITARY HWY	PROVIDENCE RD	32,869	2003	6	7,000	40,000	Moderate	55,000	1.1	15,000
11340760	VaB	INDIAN RIVER RD	PROVIDENCE RD	I-64	39,142	2003	6	6,000	45,000	Moderate	41,000	0.8	-4,000
11340770	VaB	INDIAN RIVER RD	I-64	CENTERVILLE TPK	78,122	2003	8	17,000	95,000	Beyond Severe	148,000	2.2	53,000
11340780	VaB	INDIAN RIVER RD	CENTERVILLE TPK	KEMPSVILLE RD	67,533	2003	6	6,000	74,000	Beyond Severe	111,000	2.3	37,000
11340790	VaB	INDIAN RIVER RD	KEMPSVILLE RD	FERRELL PKWY	64,453	2003	6	4,000	68,000	Beyond Severe	92,000	1.9	24,000
11340800	VaB	INDIAN RIVER RD	FERRELL PKWY	LYNNHAVEN PKWY	17,396	2003	4	9,000	26,000	Low to mod.	71,000	2.2	45,000
11340810	VaB	INDIAN RIVER RD	LYNNHAVEN PKWY	INDEPENDENCE BLVD	16,315	2003	2	6,000	22,000	Severe	47,000	2.8	25,000
11340820	VaB	INDIAN RIVER RD	INDEPENDENCE BLVD	ELBOW RD	11,236	2003	2	5,000	16,000	Moderate	41,000	2.4	25,000
11340825	VaB	INDIAN RIVER RD	ELBOW RD	S.E. PKWY & GRNBELT	5,465	2003	2	7,000	12,000	Low to mod.	39,000	2.3	27,000
11340830	VaB	INDIAN RIVER RD	S.E. PKWY & GRNBELT	N LANDING RD	5,465	2003	2	7,000	12,000	Low to mod.	39,000	2.3	27,000
11340835	VaB	INDIAN RIVER RD	N LANDING RD	WEST NECK RD	7,348	2003	2	1,000	8,000	Low to mod.	13,000	0.8	5,000
11340845	VaB	INDIAN RIVER RD	WEST NECK RD	PRINCESS ANNE RD	4,404	2000	2	3,000	7,000	Low to mod.	7,000	0.4	0
11340850	VaB	INTERNATIONAL PKWY	LYNNHAVEN PKWY	LONDON BRIDGE RD	14,301	2003	4	6,000	20,000	Low to mod.	12,000	0.4	-8,000
11340860	VaB	KEMPSVILLE RD	CHESAPEAKE CL	CENTERVILLE TPK	29,819	2003	6	12,000	42,000	Moderate	42,000	0.8	0
11340870	VaB	KEMPSVILLE RD	CENTERVILLE TPK	INDIAN RIVER RD	34,230	2003	4	5,000	39,000	Severe	52,000	1.6	13,000
11340880	VaB	KEMPSVILLE RD	INDIAN RIVER RD	PROVIDENCE RD	30,362	2003	4	5,000	35,000	Severe	67,000	2.0	32,000
11340890	VaB	KEMPSVILLE RD	PROVIDENCE RD	PRINCESS ANNE RD	33,520	2003	4	5,000	39,000	Severe	78,000	2.4	39,000
11340900	VaB	LASKIN RD	VA BEACH BLVD	FIRST COLONIAL RD	30,231	2003	4	1,000	31,000	Moderate	76,000	2.0	45,000
11340910	VaB	LASKIN RD	FIRST COLONIAL RD	WINWOOD DR	30,511	2002	6	2,000	33,000	Low to mod.	57,000	1.0	24,000
11340915	VaB	LASKIN RD	WINWOOD DR	BIRDNECK RD	28,776	2003	6	11,000	40,000	Low to mod.	53,000	0.9	13,000
11340920	VaB	LASKIN RD	BIRDNECK RD	PACIFIC AVE	29,604	2003	6	-1,000	29,000	Low to mod.	36,000	0.6	7,000
11340930	VaB	LASKIN RD	PACIFIC AVE	ATLANTIC AVE	7,753	2003	4	3,000	11,000	Low to mod.	5,000	0.1	-6,000
11340950	VaB	LONDON BR EXT	DAM NECK RD	SHIPPS CORNER RD	18,813	2003	4	11,000	30,000	Moderate	20,000	0.6	-10,000
11340940	VaB	LONDON BR RD	GEN BOOTH BLVD	DAM NECK RD	23,102	2003	4	1,000	24,000	Low to mod.	40,000	1.2	16,000
11340960	VaB	LONDON BR RD	SHIPPS CORNER RD	INTERNATIONAL PKWY	27,157	2003	4	16,000	43,000	Beyond Severe	32,000	1.0	-11,000
11340970	VaB	LONDON BR RD	INTERNATIONAL PKWY	POTTERS RD	16,399	2003	4	13,000	29,000	Moderate	23,000	0.7	-6,000
11340980	VaB	LYNNHAVEN PKWY	CHESAPEAKE CL	CENTERVILLE TPK	not blt.	n.a.	4	n.a.	37,000	Severe	24,000	0.7	-13,000
11340990	VaB	LYNNHAVEN PKWY	CENTERVILLE TPK	INDIAN RIVER RD	not blt.	n.a.	4	n.a.	32,000	Severe	20,000	0.6	-12,000
11341050	VaB	LYNNHAVEN PKWY	INDIAN RIVER RD	SALEM RD	24,436	2003	4	10,000	34,000	Severe	33,000	1.0	-1,000
11341060	VaB	LYNNHAVEN PKWY	SALEM RD	PRINCESS ANNE RD	23,857	2003	4	11,000	35,000	Severe	27,000	0.8	-8,000
11341070	VaB	LYNNHAVEN PKWY	PRINCESS ANNE RD	INDEPENDENCE BLVD	27,826	2003	4	4,000	32,000	Severe	31,000	0.9	-1,000
11341080	VaB	LYNNHAVEN PKWY	INDEPENDENCE BLVD	ROSEMONT RD	39,282	2003	4	5,000	44,000	Beyond Severe	55,000	1.7	11,000
11341090	VaB	LYNNHAVEN PKWY	ROSEMONT RD	HOLLAND DR	31,957	2003	4	7,000	39,000	Severe	44,000	1.3	5,000
11341100	VaB	LYNNHAVEN PKWY	HOLLAND RD	LYNNHAVEN RD	39,655	2002	6	13,000	53,000	Severe	53,000	1.1	0
11341110	VaB	LYNNHAVEN PKWY	LYNNHAVEN RD	INTERNATIONAL PKWY	n.a.	n.a.	6	n.a.	48,000	Severe	47,000	1.0	-1,000
11341120	VaB	LYNNHAVEN PKWY	INTERNATIONAL PKWY	I-264	48,518	2003	6	9,000	58,000	Severe	51,000	1.1	-7,000
11341130	VaB	LYNNHAVEN PKWY	I-264	VA BEACH BLVD	32,719	2003	4	-3,000	30,000	Moderate	48,000	1.5	18,000
11341140	VaB	MILITARY HWY	CHESAPEAKE CL	PROVIDENCE RD	36,344	2002	6	-6,000	30,000	Low to mod.	27,000	0.5	-3,000
11341150	VaB	MILITARY HWY	PROVIDENCE RD	INDIAN RIVER RD	34,862	2003	6	-2,000	33,000	Low to mod.	21,000	0.4	-12,000
11341160	VaB	MILITARY HWY	INDIAN RIVER RD	NORFOLK CL	51,099	2003	8	-3,000	48,000	Low to mod.	46,000	0.6	-2,000
11341170	VaB	N LANDING RD	CHESAPEAKE CL	INDIAN RIVER RD	9,513	2003	2	5,000	15,000	Moderate	12,000	0.7	-3,000
11341180	VaB	N LANDING RD	INDIAN RIVER RD	SALEM RD	n.a.	n.a.	2	n.a.	18,000	Severe	30,000	1.8	12,000

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2030 EXISTING PLUS COMMITTED HIGHWAY FORECAST

Greater than +15,000
Less than -15,000
Demand is 30%+ over capacity

THID	JUR	ROAD	FROM	TO	Recent Count	Recent Count Year	2030 EC # Thru Lanes	Volume Growth or Decline (Forecast minus Recent)	2030 EC Volume Forecast	2030 EC Congestion	2030 EC Demand	Demand / Capacity Ratio	Demand minus Forecast
11341185	VaB	N LANDING RD	SALEM RD	WEST NECK RD	7,639	2003	2	7,000	15,000	Moderate	25,000	1.5	10,000
11341195	VaB	N LANDING RD	WEST NECK RD	PRINCESS ANNE RD	17,679	1999	2	-6,000	12,000	Low to mod.	29,000	1.8	17,000
11341200	VaB	NEWTOWN RD	NORFOLK CL	DIAMOND SPRINGS RD	38,699	2003	4	7,000	46,000	Beyond Severe	59,000	1.8	13,000
11341210	VaB	NEWTOWN RD	DIAMOND SPRINGS RD	HAYGOOD RD	7,268	2003	2	2,000	9,000	Low to mod.	4,000	0.3	-5,000
11340856	VaB	NIMMO PKWY	WEST NECK RD	PRINCESS ANNE RD	n.a.	n.a.	4	n.a.	17,000	Low to mod.	2,000	0.1	-15,000
11340361	VaB	NIMMO PKWY	PRINCESS ANNE RD	HOLLAND RD	not blt.	n.a.	4	n.a.	26,000	Low to mod.	7,000	0.2	-19,000
11340362	VaB	NIMMO PKWY	HOLLAND RD	GEN BOOTH BLVD	not blt.	n.a.	4	n.a.	22,000	Low to mod.	5,000	0.1	-17,000
11340372	VaB	NIMMO PKWY	GEN BOOTH BLVD	UPTON DR	10,176	2003	4	5,000	15,000	Low to mod.	1,000	0.0	-14,000
11341220	VaB	NORFOLK AVE	BIRDNECK RD	PACIFIC AVE	10,228	2003	2	1,000	11,000	Severe	9,000	0.8	-2,000
11341240	VaB	NORTHAMPTON BLVD	NORF CL / WESLEYAN DR	DIAMOND SPRINGS RD	66,186	2003	8	11,000	77,000	Severe	87,000	1.1	10,000
11341250	VaB	NORTHAMPTON BLVD	DIAMOND SPRINGS RD	INDEPENDENCE BLVD	39,750	2003	6	23,000	63,000	Low to mod.	66,000	0.6	3,000
11341260	VaB	NORTHAMPTON BLVD	INDEPENDENCE BLVD	SHORE DR	28,895	2003	6	8,000	37,000	Low to mod.	49,000	0.4	12,000
11340220	VaB	NORTHAMPTON BLVD	SHORE DR	TOLL PLAZA	8,123	2003	4	7,000	15,000	Low to mod.	15,000	0.2	0
11341310	VaB	PACIFIC AVE	ATLANTIC AVE	LASKIN RD	23,423	2003	4	-7,000	16,000	Low to mod.	14,000	0.4	-2,000
11341320	VaB	PACIFIC AVE	LASKIN RD	22ND ST	23,019	2003	4	5,000	28,000	Low to mod.	20,000	0.5	-8,000
11341330	VaB	PACIFIC AVE	22ND ST	21ST ST	n.a.	n.a.	4	n.a.	27,000	Low to mod.	20,000	0.5	-7,000
11341340	VaB	PACIFIC AVE	21ST ST	VA BEACH BLVD	20,996	2003	4	2,000	23,000	Low to mod.	25,000	0.8	2,000
11341350	VaB	PACIFIC AVE	VA BEACH BLVD	5TH ST	20,981	2003	4	3,000	24,000	Low to mod.	20,000	0.6	-4,000
11341360	VaB	PACIFIC AVE	5TH ST	OLD RUDEE BLVD	24,532	2003	4	-2,000	23,000	Low to mod.	21,000	0.6	-2,000
11341370	VaB	PEMBROKE BLVD	WITCHDUCK RD	INDEPENDENCE BLVD	11,602	2003	4	2,000	14,000	Low to mod.	9,000	0.3	-5,000
11341380	VaB	PLAZA TRAIL	PRINCESS ANNE RD	INDEPENDENCE BLVD	10,578	2003	4	13,000	24,000	Low to mod.	40,000	1.2	16,000
11341390	VaB	PLAZA TRAIL	INDEPENDENCE BLVD	HOLLAND RD	13,868	2003	4	8,000	22,000	Low to mod.	30,000	0.9	8,000
11341400	VaB	PLAZA TRAIL	HOLLAND RD	MARINA LAKES RD	10,728	2003	4	5,000	16,000	Low to mod.	26,000	0.8	10,000
11341410	VaB	PLAZA TRAIL	MARINA LAKES RD	ROSEMONT RD	10,728	2003	2	3,000	14,000	Moderate	24,000	1.5	10,000
11341420	VaB	PLAZA TRAIL	ROSEMONT RD	I-264	12,146	2003	4	5,000	17,000	Low to mod.	12,000	0.4	-5,000
11341430	VaB	PLAZA TRAIL	I-264	VA BEACH BLVD	12,146	2003	4	5,000	17,000	Low to mod.	9,000	0.3	-8,000
11341440	VaB	PRINCESS ANNE RD	NEWTOWN RD / NORF CL	KEMPSVILLE RD	27,532	2003	4	7,000	35,000	Moderate	24,000	0.6	-11,000
11341450	VaB	PRINCESS ANNE RD	KEMPSVILLE RD	BAXTER RD	28,048	2003	4	5,000	33,000	Moderate	48,000	1.2	15,000
11341460	VaB	PRINCESS ANNE RD	BAXTER RD	PROVIDENCE RD	35,224	2003	4	-8,000	27,000	Low to mod.	5,000	0.1	-22,000
11341470	VaB	PRINCESS ANNE RD	PROVIDENCE RD	FERRELL PKWY	35,500	2003	4	8,000	43,000	Severe	65,000	1.7	22,000
11341490	VaB	PRINCESS ANNE RD	FERRELL PKWY	LYNNHAVEN PKWY	50,332	2001	8	10,000	60,000	Moderate	62,000	0.9	2,000
11341500	VaB	PRINCESS ANNE RD	LYNNHAVEN PKWY	INDEPENDENCE BLVD	44,981	2001	8	13,000	58,000	Moderate	50,000	0.8	-8,000
11341510	VaB	PRINCESS ANNE RD	INDEPENDENCE BLVD	DAM NECK RD	46,546	2003	8	11,000	58,000	Moderate	48,000	0.7	-10,000
11341515	VaB	PRINCESS ANNE RD	DAM NECK RD	S.E. PKWY & GRNBELT	23,737	2003	4	22,000	46,000	Beyond Severe	32,000	0.9	-14,000
11341520	VaB	PRINCESS ANNE RD	S.E. PKWY & GRNBELT	NIMMO PKWY	23,122	2003	4	11,000	34,000	Severe	20,000	0.6	-14,000
11341521	VaB	PRINCESS ANNE RD	NIMMO PKWY	N LANDING RD	15,500	2003	2	-14,000	2,000	Low to mod.	1,000	0.1	-1,000
11341530	VaB	PRINCESS ANNE RD	N LANDING RD	HOLLAND RD	n.a.	n.a.	2	n.a.	10,000	Low to mod.	27,000	1.7	17,000
11341540	VaB	PRINCESS ANNE RD	HOLLAND RD	CROSSROAD TR	25,012	2003	2	-4,000	21,000	Beyond Severe	33,000	2.0	12,000
11341550	VaB	PRINCESS ANNE RD	CROSSROAD TR	GEN BOOTH BLVD	n.a.	n.a.	4	n.a.	8,000	Low to mod.	16,000	0.5	8,000
11341555	VaB	PRINCESS ANNE RD	GEN BOOTH BLVD	SANDBRIDGE RD	12,635	2003	2	1,000	14,000	Moderate	32,000	1.9	18,000
11341562	VaB	PRINCESS ANNE RD	SANDBRIDGE RD	SEABOARD RD	10,739	2003	2	3,000	14,000	Moderate	13,000	0.8	-1,000
11341567	VaB	PRINCESS ANNE RD	SEABOARD RD	INDIAN RIVER RD	9,179	2000	2	4,000	13,000	Low to mod.	12,000	0.7	-1,000
11341570	VaB	PRINCESS ANNE RD	INDIAN RIVER RD	PUNGO FERRY RD	8,088	2003	2	5,000	13,000	Low to mod.	13,000	0.8	0
11341580	VaB	PRINCESS ANNE RD	PUNGO FERRY RD	NC STATE LINE	3,182	2003	2	0	3,000	Low to mod.	3,000	0.2	0
11341590	VaB	PROVIDENCE RD	CHESAPEAKE CL	MILITARY HWY	17,299	2002	4	2,000	19,000	Low to mod.	22,000	0.7	3,000
11341600	VaB	PROVIDENCE RD	MILITARY HWY	INDIAN RIVER RD	18,233	2003	4	4,000	22,000	Low to mod.	43,000	1.3	21,000
11341610	VaB	PROVIDENCE RD	INDIAN RIVER RD	KEMPSVILLE RD	25,491	2003	4	11,000	36,000	Severe	60,000	1.8	24,000
11341620	VaB	PROVIDENCE RD	KEMPSVILLE RD	PRINCESS ANNE RD	15,587	2003	2	4,000	20,000	Severe	65,000	4.0	45,000
11341630	VaB	PUNGO FERRY RD	BLACKWATER RD	PRINCESS ANNE RD	2,843	2003	2	2,000	5,000	Low to mod.	1,000	0.1	-4,000

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Demand is 30%+ over capacity

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11341640	VaB	ROSEMONT RD	DAM NECK RD	FACULTY BLVD	10,004	2003	2	2,000	12,000	Low to mod.	11,000	0.7	-1,000
11341650	VaB	ROSEMONT RD	FACULTY BLVD	LYNNHAVEN PKWY	18,721	2004	2	1,000	20,000	Severe	18,000	1.1	-2,000
11341660	VaB	ROSEMONT RD	LYNNHAVEN PKWY	HOLLAND RD	23,334	2003	4	4,000	27,000	Moderate	20,000	0.6	-7,000
11341670	VaB	ROSEMONT RD	HOLLAND RD	PLAZA TRAIL	33,928	2003	4	1,000	35,000	Severe	35,000	1.1	0
11341680	VaB	ROSEMONT RD	PLAZA TRAIL	I-264	35,296	2003	4	9,000	44,000	Beyond Severe	63,000	1.9	19,000
11341690	VaB	ROSEMONT RD	I-264	VA BEACH BLVD	n.a.	n.a.	4	n.a.	74,000	Beyond Severe	84,000	2.6	10,000
11341700	VaB	SALEM RD	N LANDING RD	ELBOW RD	5,411	2003	2	4,000	9,000	Low to mod.	3,000	0.2	-6,000
11341710	VaB	SALEM RD	ELBOW RD	INDEPENDENCE BLVD	9,624	2003	2	3,000	13,000	Low to mod.	21,000	1.3	8,000
11341720	VaB	SALEM RD	INDEPENDENCE BLVD	LYNNHAVEN PKWY	n.a.	n.a.	4	n.a.	22,000	Moderate	24,000	1.0	2,000
11341730	VaB	SALEM RD	LYNNHAVEN PKWY	PRINCESS ANNE RD	13,500	2003	6	4,000	17,000	Low to mod.	19,000	0.3	2,000
11341750	VaB	SANDBRIDGE RD	PRINCESS ANNE RD	LOTUS DR	10,205	2003	2	4,000	14,000	Moderate	15,000	0.9	1,000
11341760	VaB	SANDBRIDGE RD	LOTUS DR	SANDPIPER DR	10,509	2003	2	1,000	12,000	Low to mod.	13,000	0.8	1,000
11341765	VaB	SEABOARD RD	NIMMO PKWY	PA RD (@ PA ELEM)	n.a.	n.a.	2	n.a.	8,000	Low to mod.	7,000	0.4	-1,000
11341766	VaB	SEABOARD RD	PA RD (@ PA ELEM)	PA RD (@ PUNGO FLD)	2,719	2003	2	3,000	6,000	Low to mod.	2,000	0.1	-4,000
11341770	VaB	SHORE DRIVE	NORFOLK CL	DIAMOND SPRINGS RD	34,891	2003	4	3,000	38,000	Severe	40,000	1.1	2,000
11341780	VaB	SHORE DRIVE	DIAMOND SPRINGS RD	INDEPENDENCE BLVD	28,862	2003	4	2,000	31,000	Moderate	33,000	0.9	2,000
11341790	VaB	SHORE DRIVE	INDEPENDENCE BLVD	NORTHAMPTON BLVD	20,441	2003	4	3,000	23,000	Low to mod.	27,000	0.7	4,000
11341800	VaB	SHORE DRIVE	NORTHAMPTON BLVD	GREAT NECK RD, N	42,747	2003	4	4,000	47,000	Severe	65,000	1.7	18,000
11341810	VaB	SHORE DRIVE	GREAT NECK RD, N	ATLANTIC AVE	12,155	2003	4	2,000	14,000	Low to mod.	12,000	0.3	-2,000
11341778	VaB	UPTON DR	NIMMO PKWY	SANDBRIDGE RD	16,851	2004	4	-2,000	15,000	Low to mod.	1,000	0.0	-14,000
11341830	VaB	VA BEACH BLVD	NEWTOWN RD / NORF CL	WITCHDUCK RD	46,111	2003	8	17,000	63,000	Moderate	62,000	0.8	-1,000
11341840	VaB	VA BEACH BLVD	WITCHDUCK RD	INDEPENDENCE BLVD	36,500	2003	8	23,000	59,000	Low to mod.	35,000	0.5	-24,000
11341850	VaB	VA BEACH BLVD	INDEPENDENCE BLVD	ROSEMONT RD	49,607	2003	8	22,000	72,000	Moderate	53,000	0.7	-19,000
11341860	VaB	VA BEACH BLVD	ROSEMONT RD	LYNNHAVEN PKWY	58,071	2003	8	10,000	68,000	Moderate	69,000	0.9	1,000
11341870	VaB	VA BEACH BLVD	LYNNHAVEN PKWY	GREAT NECK RD	60,903	2003	8	8,000	69,000	Moderate	72,000	0.9	3,000
11341880	VaB	VA BEACH BLVD	GREAT NECK RD	LASKIN RD	35,336	2003	8	8,000	43,000	Low to mod.	37,000	0.5	-6,000
11341890	VaB	VA BEACH BLVD	LASKIN RD	FIRST COLONIAL RD	28,989	2003	4	2,000	31,000	Moderate	50,000	1.5	19,000
11341900	VaB	VA BEACH BLVD	FIRST COLONIAL RD	OCEANA BLVD	21,383	2003	4	3,000	24,000	Low to mod.	29,000	0.9	5,000
11341910	VaB	VA BEACH BLVD	OCEANA BLVD	BIRDNECK RD	15,026	2003	4	7,000	22,000	Low to mod.	27,000	0.8	5,000
11341920	VaB	VA BEACH BLVD	BIRDNECK RD	PACIFIC AVE	14,239	2003	4	4,000	18,000	Low to mod.	13,000	0.4	-5,000
11341930	VaB	VA BEACH BLVD	PACIFIC AVE	ATLANTIC AVE	n.a.	n.a.	4	n.a.	15,000	Low to mod.	13,000	0.4	-2,000
11342020	VaB	WESLEYAN DR	NORFOLK CL	BAKER RD	21,027	2003	4	15,000	36,000	Severe	26,000	0.8	-10,000
11342030	VaB	WESLEYAN DR	BAKER RD	DIAMOND SPRINGS RD	15,362	2003	4	12,000	27,000	Moderate	28,000	0.8	1,000
11342040	VaB	WESLEYAN DR	DIAMOND SPRINGS RD	HAYGOOD DR	18,340	2003	4	13,000	31,000	Moderate	42,000	1.3	11,000
11342140	VaB	WEST NECK RD	NIMMO PKWY	N LANDING RD	n.a.	n.a.	4	n.a.	17,000	Low to mod.	2,000	0.1	-15,000
11342150	VaB	WEST NECK RD	N LANDING RD	INDIAN RIVER RD	2,619	2003	2	4,000	7,000	Low to mod.	1,000	0.1	-6,000
11342050	VaB	WITCHDUCK RD	PRINCESS ANNE RD	I-264	29,985	2003	4	9,000	39,000	Severe	37,000	1.1	-2,000
11342060	VaB	WITCHDUCK RD	I-264	VA BEACH BLVD	35,262	2003	4	9,000	44,000	Beyond Severe	58,000	1.8	14,000
11342070	VaB	WITCHDUCK RD	VA BEACH BLVD	PEMBROKE BLVD	19,676	2003	4	5,000	25,000	Low to mod.	19,000	0.6	-6,000
11370010	Wb	BYPASS RD	RICHMOND RD	YORK CL	21,871	2004	4	16,000	38,000	Severe	67,000	1.7	29,000
11370020	Wb	BYPASS RD	YORK CL	CAPITOL LANDING RD	13,304	2004	4	14,000	27,000	Low to mod.	54,000	1.4	27,000
11370040	Wb	CAPITOL LANDING RD	BYPASS RD	MERRIMAC TRL	6,859	2004	4	5,000	12,000	Low to mod.	19,000	0.6	7,000
11370030	Wb	COLONIAL PARKWAY	JAMES CITY CL	YORK CL	5,881	2001	2	7,000	13,000	Low to mod.	7,000	0.4	-6,000
11370250	Wb	HENRY ST	LAFAYETTE ST	RTE 132Y	7,463	2004	2	0	7,000	Low to mod.	2,000	0.1	-5,000
11370050	Wb	IRONBOUND RD	JAMES CITY CL	LONGHILL CONN RD	10,860	2003	4	0	11,000	Low to mod.	9,000	0.3	-2,000
11370065	Wb	IRONBOUND RD	LONGHILL CONN RD	RICHMOND RD	8,710	2004	2	10,000	19,000	Severe	36,000	2.2	17,000
11370080	Wb	JAMESTOWN RD	JAMES CITY CL	RTE 199	15,466	2003	4	10,000	25,000	Low to mod.	36,000	1.1	11,000
11370090	Wb	JAMESTOWN RD	RTE 199	OLD RTE 5	12,010	2004	4	1,000	13,000	Low to mod.	13,000	0.4	0
11370100	Wb	JAMESTOWN RD	OLD RTE 5	COLLEGE CREEK	13,548	2004	4	2,000	16,000	Low to mod.	14,000	0.4	-2,000

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11370110	Wb	JAMESTOWN RD	COLLEGE CREEK	BOUNDARY ST	13,548	2004	2	2,000	16,000	Severe	22,000	1.3	6,000
11370120	Wb	LAFAYETTE ST	RICHMOND RD	HENRY ST	9,497	2004	2	6,000	15,000	Moderate	8,000	0.5	-7,000
11370130	Wb	LAFAYETTE ST	HENRY ST	CAPITOL LANDING RD	10,846	2004	2	5,000	16,000	Severe	11,000	0.7	-5,000
11370140	Wb	LAFAYETTE ST	CAPITOL LANDING RD	PAGE ST	9,006	2004	2	3,000	12,000	Low to mod.	8,000	0.5	-4,000
11370150	Wb	MERRIMAC TRL (RTE 143)	YORK CL @ FARM FRESH	CAPITOL LANDING RD	7,247	2004	2	3,000	10,000	Low to mod.	10,000	0.6	0
11370160	Wb	MERRIMAC TRL (RTE 143)	CAPITOL LANDING RD	YORK CL @ QUEENS CRK	9,154	2004	4	4,000	13,000	Low to mod.	19,000	0.6	6,000
11370175	Wb	MONTICELLO AVE	IRONBOUND RD	RICHMOND RD	16,182	2004	2	10,000	26,000	Beyond Severe	23,000	1.4	-3,000
11370190	Wb	PAGE ST	CAPITOL LANDING RD	SECOND ST	12,309	2004	4	18,000	30,000	Low to mod.	67,000	1.7	37,000
11370200	Wb	PAGE ST	SECOND ST	YORK ST	14,714	2004	4	9,000	24,000	Low to mod.	72,000	1.9	48,000
11370340	Wb	QUARTERPATH RD	RTE 199	YORK ST	1,473	2001	2	8,000	9,000	Low to mod.	3,000	0.2	-6,000
11370210	Wb	RICHMOND RD	JAMES CITY CL	IRONBOUND RD	22,175	2003	4	10,000	32,000	Moderate	51,000	1.3	19,000
11370220	Wb	RICHMOND RD	IRONBOUND RD	BYPASS RD	26,495	2004	4	19,000	45,000	Severe	78,000	2.0	33,000
11370230	Wb	RICHMOND RD	BYPASS RD	MONTICELLO AVE	20,168	2003	4	14,000	34,000	Severe	45,000	1.4	11,000
11370240	Wb	RICHMOND RD	MONTICELLO AVE	BROOKS ST	13,180	2001	2	7,000	20,000	Severe	26,000	1.6	6,000
11370245	Wb	RICHMOND RD	BROOKS ST	BOUNDARY ST	13,304	2003	2	7,000	20,000	Severe	21,000	1.3	1,000
11370260	Wb	RTE 132	RTE 132Y	YORK CL	9,244	2004	4	2,000	11,000	Low to mod.	5,000	0.1	-6,000
11370270	Wb	RTE 132Y	COLONIAL PARKWAY	RTE 132	5,267	2004	4	4,000	9,000	Low to mod.	3,000	0.1	-6,000
11370280	Wb	RTE 199	JAMES CITY WCL	JAMESTOWN RD	30,553	2004	4	14,000	45,000	Severe	42,000	1.1	-3,000
11370290	Wb	RTE 199	JAMESTOWN RD	JAMES CITY ECL	29,003	2004	4	18,000	47,000	Severe	47,000	1.2	0
11370300	Wb	SECOND ST	PAGE ST	YORK CL	21,869	2004	4	2,000	24,000	Low to mod.	20,000	0.6	-4,000
11370330	Wb	YORK ST	PAGE ST	JAMES CITY CL	9,840	2004	2	11,000	21,000	Severe	80,000	4.0	59,000
10990005	York	BALLARD ST	MOORE HOUSE RD	COLONIAL PARKWAY	3,706	2004	2	10,000	14,000	Moderate	1,000	0.0	-13,000
10990010	York	BIG BETHEL RD	VICTORY BLVD	HAMPTON HWY	6,900	2004	2	3,000	10,000	Low to mod.	4,000	0.2	-6,000
10990020	York	BIG BETHEL RD	HAMPTON HWY	HAMPTON CL	14,165	2004	2	3,000	17,000	Severe	17,000	1.0	0
10990030	York	BYPASS RD	NWCL WMSBG	RTE 132	28,983	2001	4	9,000	38,000	Severe	67,000	1.7	29,000
10990040	York	BYPASS RD	RTE 132	NCL WMSBG	13,304	2004	4	15,000	28,000	Low to mod.	52,000	1.3	24,000
10990050	York	COLONIAL PARKWAY	WMSBG CL	BALLARD ST	2,812	2001	2	8,000	11,000	Low to mod.	2,000	0.1	-9,000
10990015	York	COOK RD	GOOSLEY RD	MOORE HOUSE RD	n.a.	n.a.	2	n.a.	15,000	Moderate	2,000	0.1	-13,000
10990060	York	DENBIGH BLVD	NEWPORT NEWS CL	US 17	15,857	2003	2	8,000	24,000	Severe	28,000	1.4	4,000
10990540	York	EAST YORKTOWN RD	VICTORY BLVD	POQUOSON CL	4,028	2004	2	10,000	14,000	Moderate	14,000	0.9	0
10990070	York	FT EUSTIS BLVD	NEWPORT NEWS CL	US 17	17,842	2004	2	9,000	27,000	Beyond Severe	24,000	1.2	-3,000
10990080	York	G.W. HWY	NEWPORT NEWS CL	VICTORY BLVD	33,903	2003	4	17,000	51,000	Beyond Severe	75,000	1.9	24,000
10990090	York	G.W. HWY	VICTORY BLVD	HAMPTON HWY	39,963	2004	4	1,000	41,000	Severe	56,000	1.4	15,000
10990100	York	G.W. HWY	HAMPTON HWY	GDWN NK RD / DENBIGH B	55,511	2003	4	21,000	77,000	Beyond Severe	81,000	2.0	4,000
10990110	York	G.W. HWY	GDWN NK RD / DENBIGH B	FT EUSTIS BLVD	35,482	2004	4	17,000	52,000	Beyond Severe	68,000	1.7	16,000
10990120	York	G.W. HWY	FT EUSTIS BLVD	GOOSLEY RD	34,362	2004	4	23,000	57,000	Beyond Severe	61,000	1.5	4,000
10990130	York	G.W. HWY	GOOSLEY RD	GLOU CL	34,980	2003	4	15,000	50,000	Severe	60,000	1.5	10,000
10990140	York	GOODWIN NECK RD	US 17	WOLF TRAP RD	9,319	2004	2	2,000	11,000	Severe	6,000	0.5	-5,000
10990490	York	GOOSLEY RD	COOK RD	US 17	n.a.	n.a.	2	n.a.	3,000	Low to mod.	2,000	0.1	-1,000
10990480	York	GOOSLEY RD	US 17	CRAWFORD RD	6,489	2004	2	9,000	15,000	Moderate	20,000	1.2	5,000
10990470	York	GOOSLEY RD	CRAWFORD RD	OLD WILLIAMSBURG RD	6,489	2004	2	2,000	8,000	Low to mod.	19,000	1.1	11,000
10990160	York	HAMPTON HWY	US 17	VICTORY BLVD	23,062	2004	4	11,000	34,000	Moderate	23,000	0.6	-11,000
10990170	York	HAMPTON HWY	VICTORY BLVD	BIG BETHEL RD	33,615	2004	4	0	34,000	Moderate	21,000	0.6	-13,000
10990175	York	HAMPTON HWY	BIG BETHEL RD	NCL HAMPTON	28,865	2003	4	1,000	30,000	Low to mod.	19,000	0.5	-11,000
10990210	York	MERRIMAC TRL (RTE 143)	JCC CL @ GROVE	I-64 RAMP (@ GROVE)	10,195	2004	4	12,000	22,000	Low to mod.	8,000	0.2	-14,000
10990220	York	MERRIMAC TRL (RTE 143)	I-64 RAMP (@ GROVE)	RTE 199	14,817	2004	4	12,000	27,000	Low to mod.	46,000	1.2	19,000
10990230	York	MERRIMAC TRL (RTE 143)	RTE 199	JCC CL @ GOV'T RD	n.a.	n.a.	4	n.a.	29,000	Moderate	8,000	0.2	-21,000
10990240	York	MERRIMAC TRL (RTE 143)	JCC CL @ PENN. RD	SECOND ST	n.a.	n.a.	4	n.a.	27,000	Moderate	9,000	0.3	-18,000
10990250	York	MERRIMAC TRL (RTE 143)	SECOND ST	SCL WLMBG	7,247	2004	2	3,000	10,000	Low to mod.	10,000	0.6	0

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10990190	York	MERRIMAC TRL (RTE 143)	WLMBG CL @ QUEENS CRK	RTE 132	9,154	2004	4	4,000	13,000	Low to mod.	19,000	0.6	6,000
10990200	York	MERRIMAC TRL (RTE 143)	RTE 132	I-64	17,104	2004	4	2,000	19,000	Low to mod.	23,000	0.7	4,000
10990510	York	MOORETOWN RD	RTE 199	OLD MOORETOWN RD	n.a.	n.a.	4	n.a.	10,000	Low to mod.	7,000	0.2	-3,000
10990520	York	MOORETOWN RD	OLD MOORETOWN RD	WALLER MILL RD	6,357	2004	2	4,000	10,000	Low to mod.	11,000	0.7	1,000
10990180	York	NEWMAN RD	I-64	FENTON MILL RD	n.a.	n.a.	2	n.a.	17,000	Severe	17,000	1.1	0
10990460	York	OLD WILLIAMSBURG RD	GOOSLEY RD	NEWPORT NEWS CL	9,957	2003	2	4,000	14,000	Moderate	17,000	1.0	3,000
10990550	York	PENNIMAN RD	RTE 199	COLONIAL PARKWAY	4,444	2003	2	6,000	10,000	Low to mod.	3,000	0.2	-7,000
10990260	York	POCAHONTAS TR	JCC CL @ 199	GROVE INTERCHANGE	11,980	2004	4	37,000	49,000	Severe	38,000	1.0	-11,000
10990270	York	POCAHONTAS TR	GROVE INTERCHANGE	JCC CL @ BUSCH GRDNS	12,625	2003	2	5,000	18,000	Moderate	8,000	0.4	-10,000
10990290	York	RICHNECK RD	WCL NN	FORT EUSTIS BLVD	3,194	2003	2	10,000	13,000	Low to mod.	3,000	0.2	-10,000
10990280	York	RTE 1050 PROPOSED	US 17	RTE 173	not blt.	n.a.	4	n.a.	17,000	Low to mod.	14,000	0.3	-3,000
10990410	York	RTE 132	WMSBG CL	RTE 60	9,244	2004	4	2,000	11,000	Low to mod.	5,000	0.1	-6,000
10990400	York	RTE 132	RTE 60	RTE 143	9,373	2004	2	-1,000	8,000	Low to mod.	6,000	0.3	-2,000
10990415	York	RTE 199	I-64	MOORETOWN RD	20,584	2004	4	13,000	34,000	Low to mod.	33,000	0.4	-1,000
10990425	York	RTE 199	MOORETOWN RD	JCC CL	19,733	2004	4	11,000	31,000	Low to mod.	30,000	0.4	-1,000
10990435	York	RTE 199	RTES 60 & 143 / JCC CL	I-64	25,617	2003	4	29,000	55,000	Low to mod.	42,000	0.5	-13,000
10990450	York	RTE 199	I-64	PENNIMAN RD	7,993	2004	4	18,000	26,000	Low to mod.	20,000	0.6	-6,000
10990300	York	SECOND ST	ECL WMSBG	MERRIMAC TRAIL	21,869	2004	4	-1,000	21,000	Low to mod.	7,000	0.2	-14,000
10990310	York	VICTORY BLVD	NEWPORT NEWS CL	US 17	52,524	2003	6	11,000	64,000	Severe	60,000	1.0	-4,000
10990320	York	VICTORY BLVD	US 17	HAMPTON HWY	30,801	2004	4	6,000	37,000	Severe	40,000	1.2	3,000
10990330	York	VICTORY BLVD	HAMPTON HWY	BIG BETHEL RD	20,450	2004	2	4,000	24,000	Beyond Severe	37,000	2.2	13,000
10990340	York	VICTORY BLVD	BIG BETHEL RD	EAST YORKTOWN RD	22,254	2004	2	8,000	30,000	Beyond Severe	43,000	2.5	13,000
10990345	York	VICTORY BLVD	EAST YORKTOWN RD	POQUOSON CL	14,073	2004	2	8,000	22,000	Severe	21,000	1.2	-1,000
10990530	York	WALLER MILL RD	RTE 60	MOORETOWN RD	5,174	2004	4	18,000	23,000	Low to mod.	19,000	0.6	-4,000

2030 volumes and demand are for average weekdays.
"Existing plus committed" (EC) is the existing highway network plus projects under construction as of 12/04 or with an ad date in the FY05-08 TIP.

APPENDIX H- ENVIRONMENTAL CONSULTATION RESPONSES

Consultation Re: the Development of the Plan:

Document #1- “Response from Michelle Edwards, Va. Dept. of Conservation and Recreation”

Document #2- “Response from Robert Munson, Va. Dept. of Conservation and Recreation”

Document #3- “Response from Marc Holma, Va. Dept. of Historic Resources”

Consultation Re: the Environmental Mitigation Discussion:

Document #4- “Response from Robert Munson, Va. Dept. of Conservation and Recreation”

Document #5- “Response from Marc Holma, Va. Dept. of Historic Resources”

L. Preston Bryant, Jr.
Secretary of Natural Resources

Joseph H. Maroon
Director

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~~DLF~~
~~RC~~
→ ~~AR~~

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

217 Governor Street
Richmond, Virginia 23219-2010
(804) 786-7951 FAX (804) 371-2674

October 6, 2006

Andy Pickard
Hampton Roads Planning District Commission
Heaquaters-Regional Building
723 Woodlank Drive
Chesapeake, VA 23320

Re: #06-060: Hampton Roads 2030 Regional Transportation Plan

Dear Mr. Pickard:

The Department of Conservation and Recreation (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

 # 2, 9, 13, 30, 39, 40, 42, 44, 63, 64, 65, 66, 68, 51, 57, 73, 77, 78, 79, 82, 83, 84, 86, 92, 94, 95, 102, 104, 108, 111, 118, 123, 124, 126, 130, 132, 133, 134, 136, 138, 142, 143, 145, 146, 147, 148, 149, 150, 151, 153, 164, 168, 169, 170, 171, 172, 173, 176, 178, 179, 180, 181, 182, 211, 213, 214, 226, 228, 229, 230, 231, 234, 236, 237, 238:

Biotics documents the presence of natural heritage resources in the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

#62 (Ft. Eustis Blvd.) and #192 Oriana Blvd.:

DCR reiterates comments previously provided in 2005 and 2002.

DCR has identified exceptional examples of the Coastal Plain Depression Wetland Community in the project vicinity.

For DCR purposes, significant communities are defined to include both outstanding examples of common community types and all examples of rare community types. Rare community types include both small remnants of types that formerly occupied a much larger land area, and those restricted to habitats that have always been widely scattered on the landscape. As functional landscape units, natural communities are important for several reasons. They support a myriad of life forms too cryptic or poorly known to be catalogued and prioritized individually and provide the nurturing environment for both rare and common

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species. They also contribute to the maintenance of larger ecosystems and possess unique intrinsic scientific, educational, and aesthetic values.

Coastal Plain seasonal ponds fall within the Coastal Plain depression wetland community group. Coastal Plain depression wetlands are a diverse group of poorly drained basin wetlands that are characteristic of flat Coastal Plain terraces with fluctuating, seasonally perched water tables. Similar wetlands are scattered throughout the mid-Atlantic Coastal Plain. The best-documented examples of this group in Virginia are the Grafton Ponds, located on The Peninsula in York County, but other sizeable complexes occur on Coastal Plain terraces in Dinwiddie, Surry, Isle of Wight, Gloucester, and Matthews Counties. Most of these wetlands are seasonally flooded and are believed to be sinkhole features that formed through dissolution of underlying carbonate-rich, shell marl deposits. The marl deposits are too deep to influence soil or water chemistry of the depressions, which are strongly acidic in most examples. Coastal Plain depression wetlands are relatively rare, small-patch communities that provide important habitat for the state-rare chicken turtle (Deirochelys reticularia) and three state-listed amphibians: Mabee's salamander (*Ambystoma mabeei*), tiger salamander (*Ambystoma tigrinum*), and barking tree frog (*Hyla gratiosa*). In addition, the globally rare plants Harper's fimbristylis (*Fimbristylis perpusilla*) and pondspice (*Litsea aestivalis*) are confined to these habitats in Virginia. (Fleming and Moorhead, 1998, Rawinski, 1997)

The Coastal Plain seasonal ponds near Grafton (i.e. Grafton ponds) are globally rare natural communities. They are formed over thousands of years by the dissolution of carbonate-rich layers of the Yorktown Formation by groundwater and subsequent subsidence or compaction of the overlying sediment layers, causing a depression on the surface (Clark, 1998). The hydrology of these ponds is driven by ground and surface waters, with water typically present in the winter and spring, drawing down in the late spring and summer, and drying by late summer and early fall; however, variations to this pattern may be seen among ponds and from year to year (Clark, 1998). Soils tend to vary from very sandy to heavy clay and the ponds may either be forested or open (emergent) wetlands. Pond vegetation is a complex of concentric, sometimes irregular, zones where both dominant species and species present may vary widely from pond to pond (Schafale and Weakley, 1990). The tree species present may include red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), and sweet gum (*Liquidambar styraciflua*) while the shrub layer may be dominated by highbush blueberry (*Vaccinium corymbosum*) and common buttonbush (*Cephalanthus occidentalis*), among others. The herb layer is typically poorly developed but in open or semi-open ponds, many graminoids such as panicgrass (*Panicum* spp.) and slender fimbristylis (*Fimbristylis autumnalis*) may occur. Coastal Plain seasonal ponds usually produce high biological diversity and may provide habitat for many rare plant and animal species. Any activity that alters the hydrologic regime is a significant threat to these communities.

Based on a review of data from surrounding areas, the species that occur within the Grafton Ponds Complex are:

Ambystoma mabeei	Mabee's salamander	G4/S1S2/NL/LT
Hyla gratiosa	Barking treefrog	G5/S1/NL/LT
Crotalus horridus atricaudatus	Canebrake rattlesnake	G4TUQ/S1/NL/LE
Fimbristylis perpusilla	Harper's fimbristylis	G2/S1/SOC/LE
Litsea aestivalis	Pondspice	G3/S1/SOC/SC

In addition, the following state rare species have also been documented at the Grafton Ponds complex and may also occur in the study area: featherfoil (*Hottonia inflata*, G4/S2/NF/NS), Cuthbert turtlehead (*Chelone cuthbertii*, G3/S2/NL/NL), pine barrens reedgrass (*Calamovilfa brevipilis*, G4/S1/NL/NL), slender marsh rose-pink (*Sabatia campanulata*, G5/S2/NL/NL), large-leaf peatmoss (*Sphagnum*

macrophyllum var. *macrophyllum*, G3T3/S2/NL/NL), and duckweed firetail (*Telebasis byersi*, G5/S1/NL/NL).

In Virginia, Mabee's salamander breeds in fish-free vernal ponds (Pague & Mitchell, 1991). Threats to this species include drainage of the breeding sites and other hydrological alterations that may affect the breeding sites, and urbanization and forestry practices that degrade the nonbreeding habitat (Pague & Mitchell, 1991). Please note that this species is currently classified as threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

The barking treefrog inhabits areas near shallow ponds in pine savannas and in low wet woods and swamps (Martof et al., 1980). In Virginia, this species breeds in fish-free vernal ponds (Pague & Young, 1991). When inactive during cold or dry seasons, they burrow under tree roots, vegetation, or in the soil; otherwise, this species is mostly arboreal and thus dependent on trees near the water (Pague & Young, 1991). Major threats to the barking treefrog include continued logging of native pine, destruction of breeding ponds, and over collecting (Pague & Young, 1991). Please note that this species is currently classified as threatened by the VDGIF.

The canebrake rattlesnake, a state-listed endangered species, has been documented in the general area and may occur at the project location if suitable habitat is present. This species inhabits hardwood and mixed hardwood-pine forests, cane thickets and the ridges and glades of swampy areas. The primary threat to this species is the loss of habitat due to development activities (Mitchell, 1994).

In Virginia, Harper's fimbristylis, a state-listed endangered species, is known only from Grafton Ponds, south of Yorktown. This species is an annual sedge that appears late in the season in ephemeral, summer-dry bodies of water. The extent and timing of seasonal water level fluctuations play a critical role in determining whether a population appears in a given season (Virginia Natural Heritage Program, 1988). Harper's fimbristylis may lie dormant in the seed bank for several years until conditions are appropriate for germination (Kral, 1973, in Wieboldt, 1991). Spotty distribution, limited habitat availability, and competition from other plant species all contribute to the threatened status of this plant. Filling and draining of the ephemeral ponds, development activities and road construction also are threats to the habitat of Harper's fimbristylis (Virginia Natural Heritage Program, 1988). Harper's fimbristylis is a particularly high priority for protection since this plant is extant at fewer than 20 locations worldwide. Please note that this species is currently classified as a species of concern by the United States Fish and Wildlife Service (USFWS); however this designation has no official legal status.

Pondspice has been documented in the project vicinity and may occur at this location if suitable habitat is present. Pondspice had not been recorded in Virginia since 1841 until 1995 when it was documented at Grafton Ponds. Pondspice inhabits wet, sandy or peaty, acidic soils in seasonally flooded depressional wetlands with strongly fluctuating water levels. Please note that this species is currently classified as a species of concern by the USFWS; however this designation has no official legal status.

Project directly intersects with the Grafton Ponds Natural Area Preserve, which is located on both sides of Ft. Eustis Blvd. Natural Areas are identified on the basis of their biodiversity significance, which incorporates the number of rare species occurrences and the quality, viability, and defensibility of these occurrences. The Grafton Ponds Natural Area is the finest natural area in York County, and consists of the best remaining example of a coastal plain sinkhole pond complex in Virginia.

Grafton Ponds is identified as a natural area, in part for its geologic significance. The older ponds contain sediments with fossil pollen records which indicate that the ponds range in age from 80,000 to 800,000 years old. The ponds form when limey beds in the underlying Yorktown Formation are leached by

groundwater, and the overlying sediments slowly subside or collapse suddenly into the void created by dissolution. The resulting basins on the otherwise level plain collect and retain water. The coincidence of these conditions makes the Grafton Ponds Complex geologically unique, and provide specialized habitat for several natural heritage resources.

Recommendations:

1) DCR supports the elimination of construction-related activities within the limits of the scenic easement and the Grafton Ponds Natural Area Preserve. DCR recommends surveys to locate and clearly mark the NAP boundaries and Scenic Easement boundary prior to construction.

2) DCR recommends that additional groundwater and soil studies be conducted to better quantify impacts of the proposed construction on adjacent wetlands.

3) DCR recommends that VDOT contact Dr. Joe Mitchell (804-740-7086) to investigate the possiblity of installing crossings for salamanders and other species.

4) As part of the mitigation package, DCR recommends purchasing acreage within the Grafton Ponds complex that contains seasonal ponds and preserving it in perpetuity. DCR recommends this form of mitigation instead of a donation to the Aquatic Resources Trust Fund. DCR biologists are available to assist VDOT in selecting appropriate mitigation sites.

5) DCR recommends that revegetation of disturbed areas be accomplished by using native species found in surrounding areas.

6) DCR recommends a 15 year monitoring program for invasive species along the Route 105 corridor, with the development of a specific control plan if invasive species are found.

7) Due to the potential for this site to support populations of natural heritage resources, DCR recommends an inventory for the resources in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources.

8) Please note that several of the aforementioned species are listed as threatened or endangered at the state and/or federal level. To ensure compliance with Virginia endangered species legislation, DCR recommends coordination with the USFWS, VDGIF and the Virginia Department of Agriculture and Consumer Services (VDACS).

#70 (SE Expressway):

The following natural heritage resources have been documented in the project vicinity:

Bald Cypress-Tupleo Swamp		
Crotalus horridus atricaudatus	Canebrake rattlesnake	G4TUQ/S1/NL/LE
Ilex coriacea	Bay-gall holly	G5/S2/NL/NL
Ludwigia brevipes	Long beach seedbox	G4G5/S2/NL/NL
Eleocharis vivipara	Viviparous spikerush	G5/S1/NL/NL
Eleocharis baldwinii	Baldwin spikerush	G4G5/S1/NL/NL
Trillium pusillum var. *virginianum*	Virginia least trillium	G3T2/S2/SOC/NL

The project occurs adjacent to / bisects significant Bald Cypress - Tupelo Swamp natural community. Bald cypress-tupelo swamp communities are forested wetlands that form in low-lying areas such as depressions, floodplains, abandoned river channels, or sloughs that are flooded year-round. This community type occurs in Virginia in the southeastern coastal plain on oxygen-deprived, nutrient-poor soils. Bald cypress (*Taxodium distichum*) and water tupelo (*Nyssa aquatica*) dominate the canopy layer. The understory is comprised of red maple (*Acer rubrum*), water ash (*Fraxinus caroliniana*), and swamp gum (*Nyssa biflora*) (Fleming et.al. 1998). Other shrubs and herbs typically associated with bald cypress-tupelo swamp communities include button bush (*Cephalanthus occidentalis*), swamp rose (*Rosa palustris*), Virginia willow (*Itea virginica*), lizard's tail (*Saururus cernuus*), and cardinal flower (*Lobelia cardinalis*). Spanish-moss (*Tillandsia usneoides*), which reaches its northern-most limits in southeast Virginia, may be found draping the trees and shrubs (Fleming et.al. 1998). Threats to this community type include changes in the natural hydrology, logging, development, and water pollution.

Bay-gall holly is a southern shrub of the coastal plain that reaches the northern limit of its range in the region of the Dismal Swamp. This wetland shrub may reach 2 meters in height and looks quite similar to the Inkberry, *Ilex glabra*, a smaller member of the genus with which it often co-occurs. While the Inkberry's leaves are usually around a centimeter wide and bear many teeth towards their tips, the leaves of *Ilex coriacea* are wider (generally 2-3 cm) and have fewer teeth, which are irregularly spaced. The Virginia Division of Natural Heritage has records for six Virginia sites, all in swamps and pocosin habitats.

Long beach seedbox , a state rare plant species, inhabits interdunal swales, low wet places, pond shores, gravel pits and wetlands underlain by sand. It has fleshy leaves and four-part yellow flowers (Ludwig, 1996) that bloom from June to September (Radford et. al, 1968). Long beach sandbox is currently known from 12 locations, and historically known from 5 locations, in Virginia's coastal plain.

The viviparous spikerush is a plant that grows in low-lying, sandy, wet soils. It prefers wet areas that contain fibrous peat. In Virginia, this plant reaches the northern limits of its range. Viviparous spikerush is known currently from four locations in Virginia, and historically from one additional location.

Baldwin spikerush, a rare annual sedge, inhabits ponds and bogs (TNC, 1996) and blooms from July to September (Radford et. al., 1968). In Virginia, Baldwin spikerush is currently known from five locations in the coastal plain. Historically, it has been identified at three additional locations.

Virginia least trillium, a state rare perennial herb, primarily inhabits somewhat acidic, moist to saturated soils, although it does not grow in standing water. The plant is most often found on the margins of swamps, on high spots within swamps or in ground-water seepage areas. Direct destruction of individuals, loss of habitat, and alterations of water quality are the primary threats to this species (Clark and Potter, 1995). This herb species blooms from late March to May (Radford et. al., 1968). Please note that this species is currently tracked as a species of concern by the USFWS, however this designation has no official legal status.

Due to the potential for this site to support populations of canebrake rattlesnake, DCR recommends an inventory for the resource in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR also recommends avoidance of Bald Cypress - Tupelo Swamp natural community and poulations of Bay-gall holly, Long beach seedbox, viviparous spikerush, Baldwin spikerush, and Virginia least trillium. Due to the legal status of canebrake rattlesnake, DCR recommends coordination with VDGIF to ensure compliance with protected species legislation. Detailed project plans are needed to further assess impacts and make additional recommendations.

wrong name: this is I-64 on Peninsula

#239 (SE Expressway of I-64):

The project is adjacent to a significant Oak / Heath Forest natural community in the Naval Weapons Center facility on the east side of Interstate 64. This group of oak-dominated forests is prominent on xeric, infertile upland sites in every physiographic province of Virginia, and is wide-ranging in the Appalachians and adjacent provinces outside of the Commonwealth. In some cases, particularly in the mountains and foothills, these communities have replaced former mixed oak – American chestnut (*Castanea dentata*) forests following the decimation of chestnut overstory trees by an introduced fungal blight (*Cryphonectria parasitica*) early in the twentieth century. Habitats are variable, ranging from sterile, low-elevation "flatwoods" to steep, rocky mountainsides. All have soils with a distinctly oligotrophic nutrient regime, *i.e* ., strongly acidic, with low base cation levels and relatively high levels of iron. Accumulations of thick duff and high biomass of inflammable shrubs in these forests make them susceptible to periodic fires, which in turn favors recruitment of oaks. Regionally varying mixtures of white oak (*Quercus alba*), chestnut oak (*Quercus montana*, = Quercus prinus), scarlet oak (*Quercus coccinea*), black oak (*Quercus velutina*), northern red oak (*Quercus rubra*), southern red oak (*Quercus falcata*), and post oak (*Quercus stellata*) compose the overstories of these forests. Bigtooth aspen (*Populus grandidentata*) and pines – including pitch pine (*Pinus rigida*) in the mountains, shortleaf and Virginia pines (*Pinus echinata* and *Pinus virginiana*) in the Piedmont, and loblolly pine (*Pinus taeda*) in the Coastal Plain – are common associates that usually indicate past disturbance. Hickories (*Carya* spp.) are generally unimportant and mostly restricted to the understory.

DCR recommends that the project be designed to minimize impacts to the east side of road where the Oak/Heath Forest exists. Detailed project plans are needed in order for DCR to further assess impacts and make additional recommendations.

#3 Cedar Rd., 7 GW Highway S., 8 GW Highway N.:

The following natural heritage resources have been documented in the project vicinity:

Ilex coriacea	Bay-gall holly	G5/S2/NL/NL
Crotalus horridus atricaudatus	Canebrake rattlesnake	G4TUQ/S1/NL/LE

Due to the potential for this site to support populations of canebrake rattlesnake, DCR recommends an inventory for the resource in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR also recommends avoidance of populations of Bay-gall holly and coordination with VDGIF to ensure compliance with protected species legislation.

#224 I-64 Southside:

Elliott goldenrod *(Solidago latissimifolia,* G5/S2/NL/NL), has been documented within the project vicinity.

Elliott goldenrod occurs in peaty ground and disturbed wetlands in southeast Virginia and on the eastern shore, where it reaches the northern limit of its range. This goldenrod looks like many other species of the genus *Solidago*, featuring small, bright yellow flowers in sprays on the upper branches. The plant blooms in September and October (Ludwig 2004). Elliott goldenrod is currently known from 10 occurrences in Virginia, and historically known from 1 occurrence. DCR recommends avoidance of populations of Elliot goldenrod.

#63 I-64, Hamptons Roads Third Crossing:

According to the information currently in our files, natural heritage resources have been documented in the project vicinity. Due to the scope of the activity and the distance to the resources, we do not anticipate that the wharf construction or dredging aspects of the project will adversely impact these natural heritage resources.

However, the species that have been documented on Craney Island, the dredge disposal site are:

Charadrius melodus,	Piping Plover	G3/S2B,S1N/LT/LT
Sterna antillarum	Least Tern	G4/S2B/NL/SC
Himantopus mexicanus	Black-necked Stilt	G5/S1B/NL/NL

The Piping Plover inhabits coastal areas, utilizing the flat, sandy beaches of barrier islands for breeding. Threats to this species include predation of eggs and young and the development and disturbance of barrier island breeding sites (Cross, 1991). The Piping Plover was last observed breeding on Craney Island in 1997. However it is currently using the island for migration and foraging from early spring to late August. Please note that this species is listed as threatened by the United States Fish and Wildlife Service (USFWS) and the Virginia Department of Game and Inland Fisheries (VDGIF).

The Least Tern nests on broad, flat beaches with minimal vegetation and forages in saltwater near the shore. Threats to this species include loss of nesting habitat due to development and disturbance of breeding colonies by human activities and high numbers of predators (Beck, 1991). Please note that the Least Tern is listed as a special concern species by VDGIF.

Black-necked Stilts primarily occur near shallow salt or fresh water bodies with soft muddy bottoms, including grassy marshes, wet savannas, mudflats, shallow ponds, flooded fields, and the borders of salt ponds. They nest along the shallow water of ponds, lakes, swamps, or lagoons and may nest on the ground or in the shallow water on a plant tussock. Black-necked Stilts feed on insects, crustaceans, and small fish, as well as the seeds of aquatic plants.

Due to the legal status of the piping plover, DCR recommends continued coordination with USFWS and VDGIF to ensure compliance with protected species legislation. DCR also recommends avoidance of the nesting sites for the Least Tern (April 15-August 1) and Black-necked Stilt (April 15-July 15).

#69 U.S. 460:

The following natural heritage resources have been documented in the project vicinity:

Crotalus horridus atricaudatus	Canebrake rattlesnake	G4TUQ/S1/NL/LE
Ilex coriacea	Bay-gall holly	G5/S2/NL/NL
Desmodium strictum	Pineland tick-trefoil	G4/S2/NL/NL
Ludwigia ravenii	Raven's seedbox	G2?/S1/SOC/NL

Pineland tick-trefoil, a state rare perennial, inhabits sandhills and other dry woodlands and produces purple flowers that bloom from July to August (Radford et. al., 1968; Weakley, in prep.). Pineland tick-trefoil is currently known from 12 locations, and historically known from 4 locations, in Virginia's coastal plain.

Raven's seedbox is a southern species which reaches the northern limit of its range in southeast Virginia. This herb of open, boggy wetlands grows up to a meter tall; the branching gives it a somewhat shrubby appearance. In late summer and fall it features small, petal-less flowers clustered towards the ends of its branches and is quite similar to the closely related and equally rare Hairy seedbox, *Ludwigia pilosa*, (Ludwig, 1996). In Virginia, the Division of Natural Heritage has nine sites recorded for this species, four of which have been seen since 1989.

Due to the potential for this site to support populations of canebrake rattlesnake, DCR recommends an inventory for the resource in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR also recommends avoidance of populations of Bay-gall holly, pineland tick-trefoil, and Raven's seedbox. Due to the legal staus of the canebrake rattlesnake, DCR recommends coordination with VDGIF to ensure compliance with protected species legislation. Detailed project plans are needed to further assess impacts and make additional recommendations

#22 Rte. 17, south and #23 Rte. 17, north:

The following natural heritage resources have been documented in the project vicinity:

Trillium pusillum var. *virginianum*	Virginia least trillium	G3T2/S2/SOC/NL
Isotria medeoloides	Small whorled pogonia	G2/S2/LT/LE

Small whorled pogonia (*Isotria medeoloides*, G2/S2/LT/LE) grows in a variety of woodland habitats in Virginia, but tends to favor mid-aged woodland habitats on gently north or northeast facing slopes often within small draws. It is quite natural for plants of this species to remain dormant in the soil for long periods of time. Direct destruction, as well as habitat loss and alteration, are principle reasons for the species' decline (Ware, 1991). Please note that this species is currently classified as threatened by the USFWS and as endangered by the Virginia Department of Agriculture and Consumer Services (VDACS). Due to the legal status of this species, DCR recommends coordination with the USFWS and VDACS. DCR also recommends avoidance of populations of Virginia least trillium and small whorled pogonia.

#193 Rte. 17, #194 US 17, #194 Victory Blvd., and #195 Victory Blvd.:

Canebrake rattlesnake (*Crotalus horridus atricaudatus*, G4TUQ/S1/NL/LE) has been documented in the project vicinity.

Due to the potential for this site to support populations of canebrake rattlesnake, DCR recommends an inventory for the resource in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR also recommends coordination with VDGIF to ensure compliance with protected species legislation.

#37 Hampton Roads Center Parkway:

Canebrake rattlesnake (*Crotalus horridus atricaudatus*, G4TUQ/S1/NL/LE) has been documented in the project vicinity.

Due to the potential for this site to support populations of canebrake rattlesnake, DCR recommends an inventory for the resource in the study area. With the survey results we can more accurately evaluate

potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR also recommends coordination with VDGIF to ensure compliance with protected species legislation. Detailed project plans are needed to further assess impacts and make additional recommendations.

#44 Magruder Blvd.

Virginia least trillium (*Trillium pusillum* var. *virginianum*, G3T2/S2/SOC/NL) has been documented in the project vicinity. DCR recommends avoidance of populations of Virginia least trillium.

#232 and #233 Nimmo Parkway:

The following natural heritage resources have been documented in the project vicinity:

Eleocharis vivipara	Viviparous spikerush	G5/S1/NL/NL
Rhynchospora debilis	Savannah beakrush	G4?/S1/NL/NL
Hydrocotyle bonariensis	Coastal water-pennywort	G5/S1?/NL/NL
Ludwigia alata	Winged seedbox	G4/S1/NL/NL
Erigeron vernus	White-top fleabane	G5/S2/NL/NL

Savannah beakrush, a state rare plant species, inhabits savannas and sandhill seeps (Weakley, in prep.). It has also been documented in such disturbed areas as powerline rights-of-way (TNC, 1996). This plant blooms from July to September (Weakley, in prep.). In Virginia, savannah beakrush has historically been documented at seven locations on the coastal plain and piedmont. However, it is currently known from a single location in the City of Suffolk.

Coastal water-pennywort, a state rare perennial herb, inhabits low, wet, sandy areas and blooms from April to September (Weakley, in prep.). Coastal water-pennywort is currently known from three locations (and historically from one location) in Virginia's coastal plain where it reaches the northern limit of its range.

Winged seedbox, a state rare plant species, is restricted to high quality, well-diversified coastal marshes. Winged seedbox is frequently found along marsh boarders and has a narrow geographic range, limited to the outer coastal plain. Threats to its habitat are wetland disturbance, invasion of its marsh habitat by common reed (*Phragmites australis*), and siltation due to erosion (Ludwig, 2004). In Virginia, the winged seedbox is currently known from five locations and historically known from one location.

White-top fleabane, a state rare perennial herb, is a coastal plant found within five miles of the Atlantic Ocean (Ludwig, 1996). It inhabits wet savannas, seepages, interdunal swales, (Weakley, in prep.) bogs, and ditches (Radford et. al., 1968). It has also been documented in such disturbed areas as powerline rights-of-way (TNC, 1996). It has a daisy-like flower that blooms in spring, and it grows approximately one foot tall (Ludwig, 1996). White-top fleabane is currently known from eight locations in Virginia's coastal plain, as well as multiple historic locations. Virginia is the northern limit of this species' range.

DCR recommends avoidance of populations of viviparous spikerush, Savannah beakrush, Coastal water-pennywort, winged seedbox, and White-top fleabane.

The Virginia Department of Agriculture and Consumer Services (VDACS), which has regulatory authority to conserve rare and endangered plant and insect species through the Virginia Endangered Plant

and Insect Species Act, has established a Memorandum of Agreement with the Virginia Department of Conservation and Recreation (DCR). Under this Agreement DCR's Division of Natural Heritage, in consultation with VDACS, represents VDACS in its comments and recommendations regarding the potential impact of reviewed projects or activities on state-listed plant and insect species. Since it has been determined that this project or activity may impact small whorled pogonia and Harper's fimbristylis, state-protected plants, VDACS will respond directly to ensure compliance with Virginia's Endangered Plant and Insect Species Act. Further correspondence regarding the potential impacts of this project or activity on state-listed plant and insect species should be directed to VDACS.

In addition, our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, which may contain information not documented in this letter. Their database may be accessed from http://www.dgif.virginia.gov/wildlife/info_map/index.html , or contact Shirl Dressler at (804) 367-6913.

Should you have any questions or concerns, feel free to contact me at 804-692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

Michelle E. Edwards

Michelle E. Edwards
Locality Liaison

cc: Eric Davis, USFWS
Andy Zadnik, VDGIF
Keith Tignor, VDACS

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L. Preston Bryant, Jr.
Secretary of Natural Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street, Suite 326
Richmond, Virginia 23219-2010
(804) 786-2556 FAX (804) 371-7899

September 27, 2006

Dwight Farmer,
Deputy Executive Director of Transportation
Hampton Roads Planning District Commission
723 Woodlake Drive
Chesapeake, Va. 23320

Robert J. Scott, Director
Va Beach Planning
2405 Courthouse Drive
Building 2, Room 115
Virginia Beach, VA 23456-9013

SUBJECT: DCR-06-060: Hampton Roads 2030 Regional Transportation Plan, dated September 6, 2006

Dear Sirs,

The Department of Conservation and Recreation (DCR) administers the Virginia Scenic Rivers and the Virginia Byways programs. Additionally, DCR is responsible for developing the Virginia Outdoors Plan (VOP), the state's comprehensive outdoor recreation and open space plan. The VOP recognizes the importance of scenery to all Virginians especially those who drive for pleasure, visit natural areas, parks, and scenic areas. Tourists who visit Virginia come in search of our advertised scenic beauty and their expenditures, while in Virginia, contribute significantly to our economy. The proposed transportation improvements for the Hampton Roads area impact the Virginia designated Green Sea Byway. The following sections, as shown in the documents sent to DCR, are part of or intersect the Green Sea Byway. Design for these sections needs to take into account the criteria for a scenic byway. Radical improvements may cause a de-designation of all or a portion other Green Sea Byway.

Sections that impact the Green Sea Byway include: 151, 168, 173, 179, 180, 231, 232, and 233.

Here are the complete descriptions as designated by the Commonwealth Transportation Board in January of 2003.

- Sandfiddler Road - From the Back Bay National Refuge to the intersection with Sandbridge Road.
- Sandpiper Road - From the Back Bay National Refuge to the intersection with Sandbridge Road
- Sandbridge Road - From the intersection with Sandfiddler Road to the intersection with New Bridge Road
- Indian River Road - From the intersection with Elbow Road to the intersection with Muddy Creek Road
- Muddy Creek Road - From the intersection with Indian River Road to the intersection with Nawney Creek Rd.
- Nawney Creek Road - From the intersection with Muddy Creeek Road to the intersection with Mill Landing Rd.
- Mill Landing Road - From the intersection with Nawney Creek Road to the intersection with Morris Neck Rd.
- Morris Neck Road - From the intersection with Mill Landing Road to the intersection with Princess Ann Road
- Pungo Ferry Road - From the intersection with Morris Neck Road to the intersection with Blackwater Road
- Princess Ann Road - From the intersection with Pungo Ferry Road to the North Carolina State Line
- Blackwater Road - From the intersection with Pungo Ferry Road to the North Carolina State Line

In order to protect the integrity of the Byway program and the impacted sections of the Green Sea Byway, we make the following mitigation recommendations.

- Create development standards for development along the byway corridor that require attractive signage, prevent billboards, architectural and landscape features.
- Maintain the attractive corridor through establishment of minimum landscaping in buffers and setbacks that provide necessary access and sight-lines.
- Keep speed limits at touring rates through design and traffic calming techniques.
- Add grass and landscape medians instead of concrete ones.
- Provide mulit-use trails along corridor.

Something else to be aware of is that some improvements along the Green Sea Byway are eligible for national byway funds. These funds can be used for Corridor Management Plans, Safety Improvements, Byway Facilities, Access to Recreation, Resource Protection, Interpretive Information and Marketing.

Should you have any questions, concerns or need additional help, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Thank you for the opportunity to comment on this project.

Sincerely,

Robert S. Munson
Planning Bureau Manager

CC: H. Wade Chenault, VDOT

COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

September 26, 2006

Mr. Andy Pickard
Hampton Roads Planning District Commission
The Regional Building
723 Woodlake Drive
Chesapeake, Virginia 23320

Re: Hampton Roads 2030 Regional Transportation Plan
DHR File # 2006-1407

Dear Mr. Pickard:

We have received your request for our review and comment on the Hampton Roads 2030 Regional Transportation Plan. The plan identifies numerous candidate projects including widening of existing roadways, bridge reconstruction, interchange improvements, and construction of roads along new alignment. Many of these projects have the potential to affect significant historic properties listed in or eligible for the National Register of Historic Places and the Virginia Landmarks Register.

Road projects that receive funding from the Federal Highway Administration or the Virginia Department of Transportation, or require permits from the U.S. Army Corps of Engineers or state Department of Environmental Quality, will require review and comment by the Department of Historic Resources pursuant to applicable state and federal historic preservation laws. We therefore request that the Hampton Roads Planning District Commission consult with DHR on individual projects. Please reference our website at http://www.dhr.virginia.gov/review/section_106.htm for guidance on what information is necessary in order to initiate consultation.

If you have any questions regarding our comments, please contact me at (804) 367-2323, Ext. 114.

Sincerely,

Marc Holma, Architectural Historian
Office of Review and Compliance

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1624
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7535

L. Preston Bryant, Jr.
Secretary of Natural Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-6124

MEMORANDUM

DATE: April 13, 2007

TO: Andy Pickard, Hampton Roads PDC

FROM: Robert S. Munson, Planning Bureau Manager, DCR-DPRR

SUBJECT: DCR 07-054: Hampton Roads Long Range Transportation Plan

The Department of Conservation and Recreation (DCR) administers the Virginia Scenic Rivers and jointly the Virginia Byways program with VDOT. Additionally, DCR- Division of Planning and Recreational Resources (DPRR) is responsible for developing and helping to implement the Virginia Outdoors Plan (VOP), the state's comprehensive outdoor recreation and open space plan.

The very general nature of the proposed transportation plan necessitates a general response from DCR-DPRR. According to the VOP, walking for pleasure is a favored activity in the Virginia. The VOP also recognizes the importance of scenery to Virginians who walk and drive for pleasure, visit natural areas, parks, and scenic areas. Therefore the VOP acknowledges the need for walking opportunities close to home.

To mitigate disruption to communities, new sidewalks and corridor paths should be developed. These can provide context sensitive solutions to isolated neighborhoods. These paths can provide more energy efficient ways to access parks and recreation areas as well; they insure that more of the community is accessible to all citizens. Whenever a road is installed or realigned, a path needs to be provided, preferably separate from the vehicle area to provide for other modes of transportation, like pedestrians, bicyclists, in-line skaters, etc. This will help reduce air pollution, thereby supporting and improving air quality in the area.

Also recognized in the VOP, as the second highest outdoor recreation need, that of access to waterways. DCR recommends that whenever a road crosses a water body, recreational water access be made available to the public for fishing and boating.

To address the Scenic River program the following recommendations are made as they relate to transportation issues.

- DCR should include Scenic River corridors, existing and qualified as elements of a green infrastructure land-planning model. If greenway corridors along rivers are to be protected, adequate bridge spans need to be provided. These bridges should not only provide protection for

the greenway, but each should be installed with the appropriate space for trails and or blueways to cross under the bridges.

- DCR will continue to review and comment on various permit applications to state and federal regulatory agencies with respect to possible impacts to existing and potential components of the Scenic River system. DCR will also continue to review and comment on all bridges to provide visual and boating access to rivers whenever possible.

- All bridges should provide an opportunity to view the river section and for pedestrians and cyclists to cross over and under safely. Open parapet bridges to allow views to all rivers, especially scenic rivers, should be used whenever possible.

- DCR should assist local governments with development of planning tools (e.g., land-use overlays, corridor management plans) that will afford special recognition and protection to Virginia's Scenic Rivers.

- Scenic river signage should be coordinated with VDOT and DCR under the Tourist Oriented Directional Signage (TODS) program to improve scenic river program awareness.

To address the Scenic Byway program the following recommendations are made as they relate to transportation issues.

- Track changes and provide a basis for technical assistance opportunities for corridor management through annual visual inspections of designated byways.

- Localities should incorporate Scenic Byway Corridors, existing and qualified, in the green infrastructure land planning effort and management plans should be developed to support donation of conservation easements along designated byways.

- DCR and VDOT should assist local governments with the development of land-use planning tools (i.e., overlay zones) along scenic highways and Virginia Byways to protect the attractive character of the scenic byways.

- Localities should partner with state, local and professional organizations to determine implementation strategies to protect the scenic assets of byway corridors.

- VDOT should incorporate accommodations to meet the needs of pedestrians and bicyclists when making improvements to designated scenic byways.

- DCR should continue to review and comment on permit applications to protect scenic roads and rivers, especially at bridge crossings and at major primary and interstate road crossings.

In addition, transportation projects such as public roads and railroads and their appurtenant structures are exempted projects under Section 9 VAC 10-20-150 B 1 of the Chesapeake Bay Preservation Area Designation and Management Regulations, provided such projects are constructed in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law and the Stormwater Management Act, (ii) an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation, or (iii) local water quality protection criteria at least as stringent as the above state requirements.

Lastly, The DCR's Division of Natural Heritage has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

DCR has reviewed the Draft Environmental Mitigation Discussion dated March 21, 2007. DCR reiterates comments made in our October 6, 2006 letter. Following are general comments regarding mitigation for the Hampton Roads Long Range Transportation Plan that repeat or expand upon our previous comments. However, please note that in many cases surveys for specific natural heritage resources are recommended, and we cannot provide specific recommendations until we review the survey results.

The amphibians and reptiles mentioned in our previous letter could be disturbed upon impacts from the proposed project. DCR recommends avoidance of impacts to these natural heritage resources and their habitats. DCR requests to review projects before these species are relocated; this potential mitigation option depends on the species, the impacts, and the site to which these species would be relocated. Relocation may be detrimental.

DCR continues to recommend avoidance of the rare plant species mentioned in our previous letter and preservation of their surrounding habitat. Surveys are recommended to determine the species presence on the site and/or exact location.

Additionally, as part of the mitigation package, DCR recommends purchasing acreage within the Grafton Ponds complex that contains seasonal ponds and preserving it in perpetuity. DCR recommends this form of mitigation instead of a donation to the Aquatic Resources Trust Fund. DCR biologists are available to assist VDOT in selecting appropriate mitigation sites (see previous letter for this and other recommendations). DCR recommends that the DCR-DNH Wetland Restoration Catalogue, which contains potential wetland restoration sites, be used in selecting a mitigation site. (Please see the enclosed explanation of the methodology used in developing the catalogue.) DCR specifically recommends Grafton Ponds site 22 (see enclosed map).

DCR recommends that project sites be submitted and reviewed by DCR on a case by case basis. Once areas of impacts are located for each project and surveys are conducted to located species and communities, DCR can then make specific recommendations and suggest mitigation options. Due to the legal status of the natural heritage resources associated with these sites, DCR recommends continued coordination with the U.S. Fish and Wildlife Service (USFWS), VDGIF, and the Virginia Department of Agriculture and Consumer Services (VDACS) to ensure compliance with protected species legislation.

VDACS, which has regulatory authority to conserve rare and endangered plant and insect species through the Virginia Endangered Plant and Insect Species Act, has established a Memorandum of Agreement with the Virginia Department of Conservation and Recreation (DCR). Under this Agreement DCR's Division of Natural Heritage, in consultation with VDACS, represents VDACS in its comments and recommendations regarding the potential impact of reviewed projects or activities on state-listed plant and insect species. Since it has been determined that this project or activity may impact small whorled pogonia and Harper's fimbristylis**,** a state-protected plants, VDACS will respond directly to ensure compliance with Virginia's Endangered Plant and Insect Species Act. Further correspondence regarding the potential impacts of this project or activity on state-listed plant and insect species should be directed to VDACS.

In addition, our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, that may contain information not documented in this letter. Their database may be accessed from www.dgif.virginia.gov/wildlifeinfo_map/index.html, or contact Shirl Dressler at (804) 367-6913.

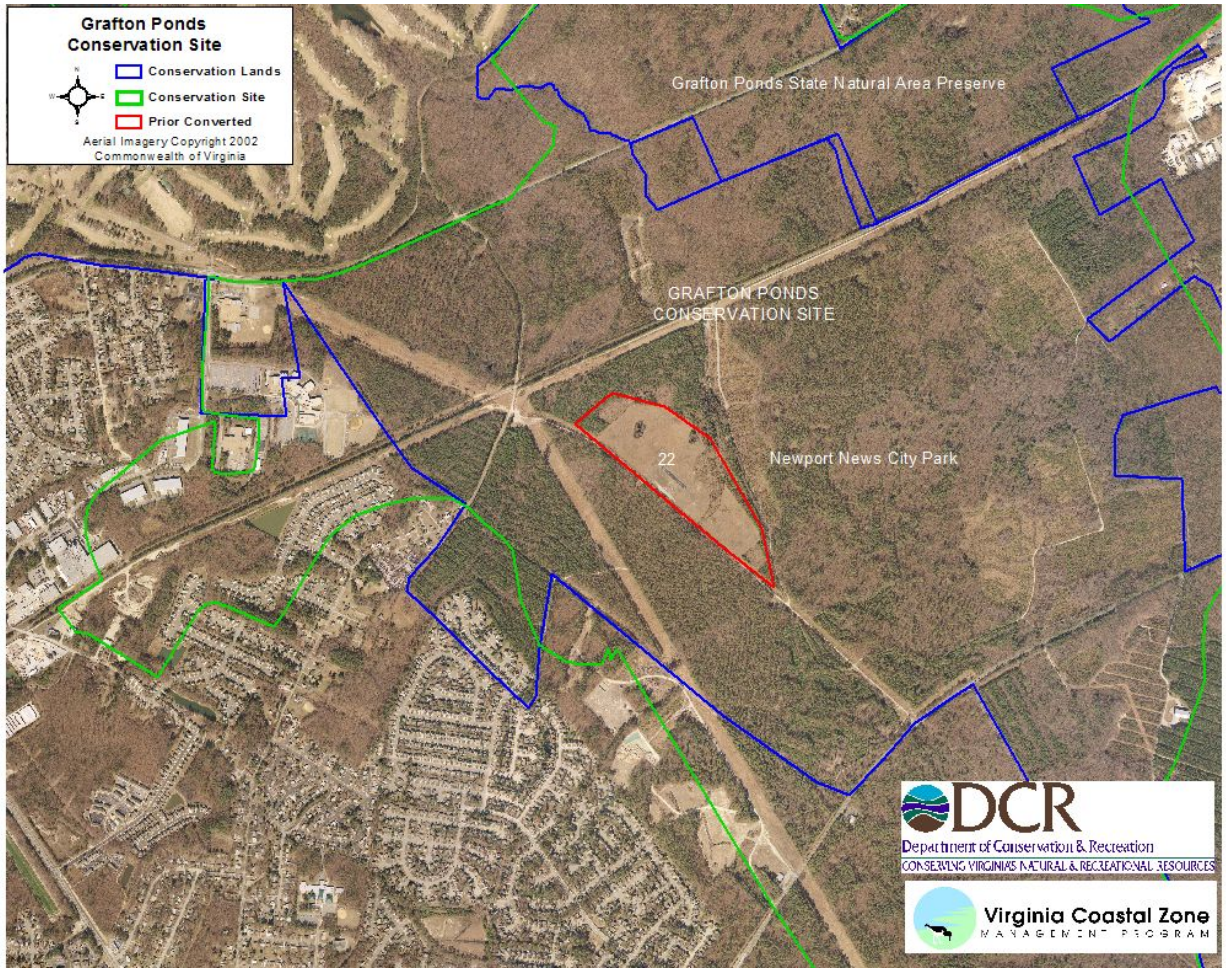
Thank you for the opportunity to comment on this project.

Attachment to letter from Robert Munson, DCR

DCR Wetland Restoration Catalogue- Methodology

Natural Heritage Conservation sites over 100 acres with a biodiversity rank of BI (outstanding significance), B2 (very high significance) and B3 (high significance) were selected. Chief Biologist, J. Chris Ludwig, reviewed each conservation site against 2002 Virginia Basemap aerial photography. Chris has visited many of these sites and used his personal experience, as well as his photo-interpretation skills, to delineate patches of land that appeared to be converted wetlands. In most cases these polygons terminate at the edge of a conservation site even if the converted area seemed to extend over the site boundary.

These sites have not been field verified and property information has not been referenced. It is believed that these patches occur on a mix of private and public lands. Additional property research and site evaluation will be necessary to determine which areas are suitable for restoration.



COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

April 25, 2007

Mr. Dwight Farmer
Hampton Roads Planning District Commission
The Regional Building
723 Woodlake Drive
Chesapeake, Virginia 23320

Re: Hampton Roads Long-Range Transportation Plan Year 2030
Hampton Roads Region
DHR File # 2007-0435

Dear Mr. Farmer:

We have received your request for our review and comment regarding the Hampton Roads Long-Range Transportation Plan Year 2030. The recently approved federal transportation bill, SAFETEA-LU, requires regional authorities such as the Hampton Roads Planning District Commission (HRPDC) to consult with the appropriate local, state, and federal agencies regarding land use management, natural resource, environmental protection, conservation, and historic property issues. Although the Long-Range Plan includes specific projects, SAFETEA-LU requires only that the Plan be reviewed by agencies at a general policy level to address potential environmental mitigation activities and potential mitigation areas.

The spreadsheet provided correctly identifies a variety of potential mitigation activities and areas. However, as the qualities of each affected historic property and the circumstances surrounding individual projects are unique, there may be many more mitigation options available that no one can now anticipate. We request that HRPDC maintain open all possibilities for mitigation that will address the characteristics of the historic property being impacted and produce the greatest public benefit achievable. We want to point out that in the existing matrix under "Key applicable requirements" for cultural resources that the State Environmental Review Process (SERP) is not mentioned.

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1624
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7031
Fax: (540) 868-7033

A cursory review of the proposed transportation activities included in the Plan indicates that many of them have the potential to affect historic properties. Therefore, it is important for HRPDC to coordinate the planned undertakings with the Department of Historic Resources (DHR) early in the scoping process. When HRPDC is prepared to consult with DHR on individual undertakings in its Plan pursuant to applicable state and federal environmental laws, we request that it reference our website at http://www.dhr.virginia.gov/review/section_106.htm for guidance on what materials are necessary for our review.

If you have any questions regarding our comments, please contact me at (804) 367-2323, Ext. 114.

Sincerely,

Marc Holma, Architectural Historian
Office of Review and Compliance

Cc: Mr. Randy Turner, DHR (Tidewater Regional Preservation Office)

APPENDIX I- ENVIRONMENTAL CONSULTATION REVIEW MATERIALS

Document #1- “Materials for Review of the Development of the Plan”

Document #2- “Materials for Review of the Environmental Mitigation Discussion”

HAMPTON ROADS
PLANNING DISTRICT COMMISSION

JEANNE ZEIDLER, CHAIR • PAUL D. FRAIM, VICE-CHAIRMAN • JAMES O. MCREYNOLDS, TREASURER
ARTHUR L. COLLINS, EXECUTIVE DIRECTOR/SECRETARY

September 6, 2006

Memorandum #2006-148

TO: **Frank Daniel, VDEQ**
Robert Grabb, VMRC
Chelsea Jenkins, HRCCC
Bob Munson, VDCR
Dave Slack, VDOF
Randolph Turner, VDHR
David Whitehurst, VDGIF
Ed Zimmer, VDOF

BY: **Dwight Farmer, Deputy Executive Director of Transportation**

RE: **Hampton Roads 2030 Regional Transportation Plan**

The Hampton Roads Planning District Commission (HRPDC) is currently facilitating the development of the region's 2030 fiscally-constrained long-range transportation plan (LRP). As a part of this process, we are asking for your comments on the enclosed table and map of projects (candidates for the 2030 LRP) with regard to your particular area of expertise.

The guidance that we can provide for your review is pursuant to the Federal Law known as the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users" (a.k.a. SAFETEA–LU, Public Law 109–59, August 10, 2005) which states that:

> "In each metropolitan area, the metropolitan planning organization shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of a long-range transportation plan.
> The consultation shall involve, as appropriate—
>
> (i) comparison of transportation plans with State conservation plans or maps, if available; or
>
> (ii) comparison of transportation plans to inventories of natural or historic resources, if available."

Your assistance with this is greatly appreciated. Please provide your comments to us by September 29, 2006. You can provide comments either via regular mail, or you can e-mail Andy Pickard on our staff at apickard@hrpdc.org.

AP:fh
Enclosures

HEADQUARTERS • THE REGIONAL BUILDING • 723 WOODLAKE DRIVE • CHESAPEAKE, VIRGINIA 23320 • (757) 420-8300
PENINSULA OFFICE • 2101 EXECUTIVE DRIVE • SUITE C • HAMPTON, VIRGINIA 23666 • (757) 262-0094

AP

Candidate Projects for
Hampton Roads 2030 Regional Transportation Plan

Candidate Projects are those regionally-significant projects being considered for inclusion in the 2030 Regional Transportation Plan.
However, not all Candidates will be included in the final Plan, as the Plan is subject to financial constraints.
Additional smaller-scale projects such as intersection improvements, bike and ped accomodations, etc. are accounted for in the development of the Plan but are not listed individually.

"Lanes" indicates the total number of lanes (non-directional) for that segment of road.
For HOV lanes, the notation is, for example, "8 + 2HOV" indicates 8 conventional lanes plus 2 lanes for use by high-occupancy vehicles

Project ID	Locality	Project	From	To	Work	2006 Lanes	Proposed Lanes
2	CH	Cedar Rd	Albemarle Dr	Battlefield Blvd	Widening	3	4
3	CH	Cedar Rd (incl'g Deep Crk br)	Mill Creek Pkwy	Shipyard Rd	Widening	2	4
7	CH	GW Hwy (in Deep Creek, south)	Sawyers Mill Rd	Cedar Rd	New Alignment	0	4
8	CH	GW Hwy (in Deep Creek, north)	Mill Creek Pkwy	I-64	Widening	4	6
9	CH	Hanbury Rd	Johnstown Rd	Battlefield Blvd	Widening	2	4
13	CH	Military Hwy	Allison Dr	VB CL	Widening	4	6
224	CH	I-64 (Southside, full project, with toll)	I-464	Bowers Hill	Widening	4	6
228	CH	Dominion Blvd (with toll)	Great Bridge Blvd	GW Hwy	Widening	2	4
22	GLO	Rte 17 (Gloucester), south	Coleman Bridge	Main St. (south)	Widening	4	6
23	GLO	Rte 17 (Gloucester), north	Main St. (south)	Ark Rd.	Widening	4	6
30	HM	Armistead Ave	Mercury Blvd	HRC Pkwy	Widening	4	6
39	HM	I-64 @ Armistead Ave & Lasalle Ave	n.a.	n.a.	Modify Interchange	n.a.	n.a.
40	HM	I-64 (Hampton)	I-664	Mallory Rd	Widening	6	8
42	HM	Little Back River Rd	King St	Harris Creek Rd	Widening	2	4
44	HM	Magruder Blvd	Cmdr Shep Blvd ext	HRCP	Widening	4	6
236	HM	Wythe Creek Rd	Comm Shepard Blvd	Poquoson CL	Widening	2	4
51	IW	Smithfield Connector	Nike Park Rd	Smith's Neck Rd	New Alignment	0	4
57	JC	Rte 60 relo. - east section- JCC	Rte 60 near Distr Ctr.	Newport News CL	New alignment	0	4
37	MULTI	Hampton Roads Center Pkwy	Harpersville Rd	I-64	Widening	4	6
62	MULTI	Ft Eustis Blvd	0.54 mi. e. Jefferson Ave	Rte 17	Widening	2	4
63	MULTI	Hampton Roads Third Crossing (1)	n.a.	n.a.	Widen & New Alignment	varies	varies
64	MULTI	I-264 (add two lanes, I-64 to Indep Blvd)	I-64	Independence Blvd	Widening	8 + 2HOV	10 + 2HOV
65	MULTI	I-264 (prepare existing lanes for all uses)	I-64	Independence Blvd	Widening	8 + 2HOV	10
66	MULTI	I-64 (Peninsula, with toll)	Jefferson Ave (exit 255)	Rte 199 (exit 242)	Widening	4	6 + 2HOV
68	MULTI	Midtown Tnl / MLK Ext (w/ toll & on DTT) (2)	Hampton Blvd	I-264	Widen & New Alignment	varies	varies
69	MULTI	U.S. 460 (3)	Bowers Hill	S'hamp Co CL at Zuni	Varies	varies	varies
70	MULTI	SP&G / Dominion Blvd (4)	Va. Beach	Chesapeake	Widen & New Alignment	varies	varies
239	MULTI	I-64 (Peninsula, without toll)	Jefferson Ave (exit 255)	Rte 199 (exit 242)	Widening	4	6 + 2HOV
77	NN	Atkinson Blvd	Warwick Blvd	Jefferson Ave	New Alignment	0	4
78	NN	Harpersville Rd	Jefferson Ave	Warwick Blvd	Widening	2	4
79	NN	I-64 / Bland intx	n.a.	n.a.	Interchange(s), New	n.a.	n.a.
82	NN	Jefferson Ave	Grn Grove Ln / Atkinson	Ft. Eustis Blvd	Widening	4	6
83	NN	Middleground Blvd	Jefferson Ave	Warwick Blvd	New Alignment	0	4
84	NN	Oyster Point Rd	Jefferson Ave	Warwick Blvd	Widening	4	6
85	NN	Rte 17 (J Clyde Morris Blvd)	I-64	Harpersville Rd	Widening	4	6
86	NN	Rte 60 relo. - east section- NN	James City CL	Ft Eustis Blvd	New alignment	0	4
92	NOR	Brambleton Ave / I-264 Interchange	n.a.	n.a.	Modify Interchange	n.a.	n.a.
94	NOR	Brambleton Ave	St. Pauls Blvd	I-264	Widening	4	6
95	NOR	Church St / Wood St	Brambleton Blvd	St Paul's Blvd	Widening	2	4
102	NOR	Little Creek Rd	Tidewater Dr	Military Hwy	Widening	4	6
104	NOR	Military Hwy	Northampton Blvd	Robin Hood Rd	Widening	4	6

Candidate Projects for
Hampton Roads 2030 Regional Transportation Plan

Project ID	Locality	Project	From	To	Work	2006 Lanes	Proposed Lanes
108	NOR	Va. Beach Blvd	Military Circle entr.	Newtown Rd	Widening	4 / 6	8
235	NOR	Little Creek Rd	Military Highway	Azalea Garden Rd	Widening	4	6
111	POQ	Wythe Creek Rd (w/o br. widening)	Alphus St	Hampton CL	Widening	2	4
118	PORT	Turnpike Rd	Portsmouth Blvd	Constitution Ave	Widening	2	4
123	SM	Battery Park Rd	S. Church St	Nike Park Rd	Widening	2	4
124	SUF	Kings Highway Bridge	n.a.	n.a.	Reconstruct	2	2
126	SUF	Nansemond Pkwy - Ports. Blvd	Shoulders Hill Rd	Chesapeake CL	Widening	2	4
226	SUF	Finney Ave extension	Washington St	Finney Ave	New Alignment	0	2
211	Transit	Naval Base Ext'n (LRT)- PE Only	(unspecified location)	Naval Base	PE Only	n.a.	n.a.
213	Transit	Norfolk Light Rail	Newtown Rd	Norfolk General	Capital cost	n.a.	n.a.
214	Transit	Peninsula Fixed Guideway (LRT)	n.a.	n.a.	Capital cost	n.a.	n.a.
130	VB	Baker Rd Ext'd	Summit Arch	w. of Witchduck Rd	New Alignment	0	2
132	VB	Buckner Blvd / Shipps Corner Rd	Rosemont Rd	Holland Rd	New Alignment	0	4
133	VB	Centerville Tnpk	Ches CL	Kempsville Rd	Widening	2	4
134	VB	Centerville Tnpk	Kempsville Rd	Indian River Rd	Widening	2	6
136	VB	Constitution Dr ext'd	Columbus St	Bonney Rd	New Alignment	0	4
138	VB	Elbow Rd / Dam Neck Rd	Indian River Rd	GTE VB Amphitheater	Widening	2	4
142	VB	Holland Rd	Dam Neck Rd	Rosemont Rd	Widening	4	6
143	VB	I-64 / City Line Interchange & Road	n.a.	n.a.	New interchange	n.a.	n.a.
145	VB	I-264 / Independence Blvd intx	n.a.	n.a.	Interchange imp.	n.a.	n.a.
146	VB	I-264 / Lynnhaven Pkwy intx	n.a.	n.a.	Interchange imp.	n.a.	n.a.
147	VB	I-264 / Rosemont Rd intx	n.a.	n.a.	Interchange imp.	n.a.	n.a.
148	VB	Independence Blvd	Haygood Rd	Northampton Blvd	Widening	4	6
149	VB	Indian River Rd	Centerville Tnpk	Ferrell Pkwy	Widening	6	8
150	VB	Indian River Rd	Lynnhaven Pkwy	Elbow Rd	Widening	2	4
151	VB	Indian River Rd	Elbow Rd	North Landing Rd	Widening	2	4
153	VB	Jeanne St	Constitution Dr	Independence Blvd	Widening	2	4
164	VB	Northampton Blvd / Shore Dr intx	n.a.	n.a.	Improve interchange	n.a.	n.a.
168	VB	Princess Anne Rd	Upton Dr	General Booth Blvd	Widening	2	4
169	VB	Providence Rd	Kempsville Rd	PA Rd	Widening	2	4
170	VB	Rosemont Rd	VB Blvd	Holland Rd	Widening	4	6
171	VB	Salem Rd	North Landing Rd	Elbow Rd	Widening	2	4
172	VB	Salem Rd	Elbow Rd	Independence Blvd	Widening	2	4
173	VB	Sandbridge Rd	Princess Anne Rd	Atwoodtown Rd	Widening	2	4
176	VB	Shore Dr / Lesner Bridge	west approaches	east approaches	Br. Reconstruction	4	6
178	VB	West Neck Pkwy ext'd	Elbow Rd	North Landing Rd	New Alignment	0	4
179	VB	West Neck Pkwy ext'd	North Landing Rd	Indian River Rd	New Alignment	0	4
180	VB	West Neck Rd	North Landing Rd	Indian River Rd	Widening	2	4
181	VB	Witchduck Rd	I-264	VB Blvd	Widening	4	6
182	VB	Witchduck Rd	Princess Anne Rd	I-264	Widening	4	6
229	VB	First Colonial Rd	Old Donation Rd	Republic Rd	Widening	4	6
230	VB	General Booth Blvd	Princess Anne Rd	Dam Neck Rd	Widening	4	6
231	VB	Nimmo Pkwy	Ind Rvr / N Landing Rds	West Neck Rd ext'd	New Alignment	0	2
232	VB	Nimmo Pkwy	Upton Dr	Atwoodtown Rd	New Alignment	0	2
233	VB	Nimmo Pkwy	Atwoodtown Rd	Sandfiddler Rd	New Alignment	0	2
234	VB	Upton Dr	Nimmo Pkwy	Culver Ln	Widening	2	4
237	VB	Princess Anne Rd	Providence Rd	Baxter Rd	Widening	4	6
238	VB	Holland Rd	Rosemont Rd	Independence Blvd	Widening	4	6

Candidate Projects for
Hampton Roads 2030 Regional Transportation Plan

Project ID	Locality	Project	From	To	Work	2006 Lanes	Proposed Lanes
73	**WMB**	**Ironbound Rd**	Longhill Conn Rd	Richmond Rd	Widening	2	4
192	**YC**	**Oriana Blvd realigned**	1.2 mi. west of Rte 17	Denbigh Blvd, 0.2mi e NN CL	Realign	2	2
193	**YC**	**Rte 17 (York Co.)**	Hampton Hwy	Goodwin Nk / Denbigh B	Widening	4	6
194	**YC**	**US 17 (NN CL to Hampton Hwy)**	Hampton Hwy	Newport News CL	Widening	4	6
195	**YC**	**Victory Blvd (Rte 171)**	Rte 17	Hampton Hwy	Widening	4	6
196	**YC**	**Victory Blvd (Rte 171)**	Hampton Hwy	Poquoson CL	Widening	2	4

Locality Abbreviations:

CH: Chesapeake
GLO: Gloucester County
HM: Hampton
IW: Isle of Wight County
JC: James City County
MULTI: multiple localities
NN: Newport News
NOR: Norfolk
POQ: Poquoson
PORT: Portsmouth
SM: Smithfield
SUF: Suffolk
VB: Virginia Beach
WMB: Williamsburg
YC: York County

Footnotes:

(1) Hampton Roads Third Crossing:
Seg. 1: I-564 to MMMBT, new 4L highway plus 2L for transit
Seg. 2: MMMBT, widen to 8L plus 2L for transit (2nd tube)
Seg. 3: Craney Island Connector, new 4L highway
Seg. 4: I-664 in Newport News, widen to 8L
Seg. 5: I-664 from Seg. 1 to Bowers Hill, widen to 6L
Seg. 6: I-64 to Intermodal Connector, widen to 8L plus 2L for transit
(2) Midtown Tunnel / MLK Freeway: construct add'l 2L Midtown Tunnel and extend MLK to I-264
(3) Rte 460 improvements:
from I-664 to e. end Suffolk bypass: upgrade to interstate design standards
from w. end Suffolk bypass to I-295: new 4L highway at interstate design standards
(4) SP&G: Southeastern Parkway and Greenbelt
I-264 to Rte 168: 4L; Oak Grove Conn: 8L;
Dominion Blvd: 4L arterial from GW Hwy to Cedar Rd; 4L limited-access highway from Cedar Rd. to I-64 w/ intx at Great Bridge Blvd.

Candidate Projects for 2030 Regional Transportation Plan

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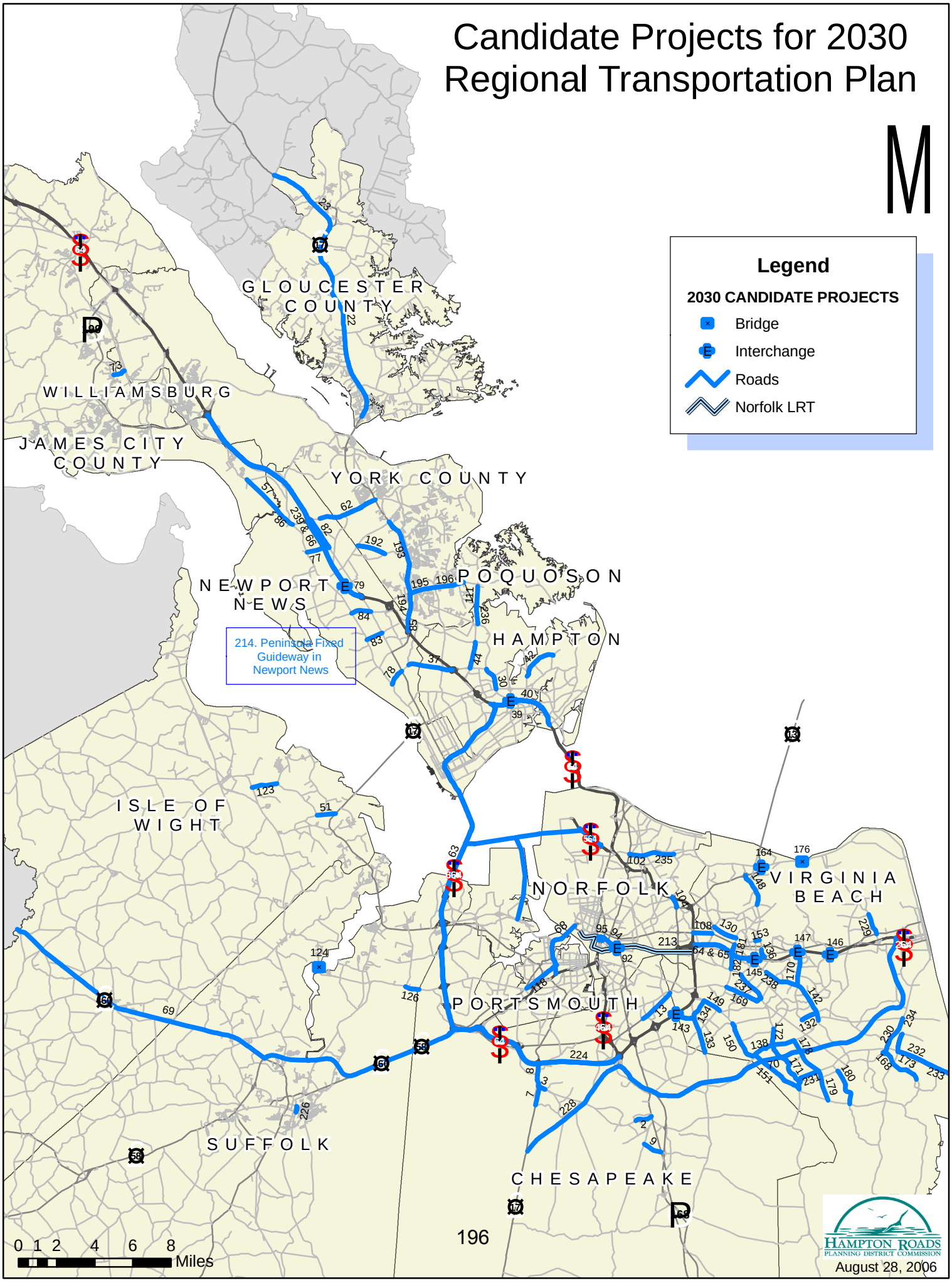
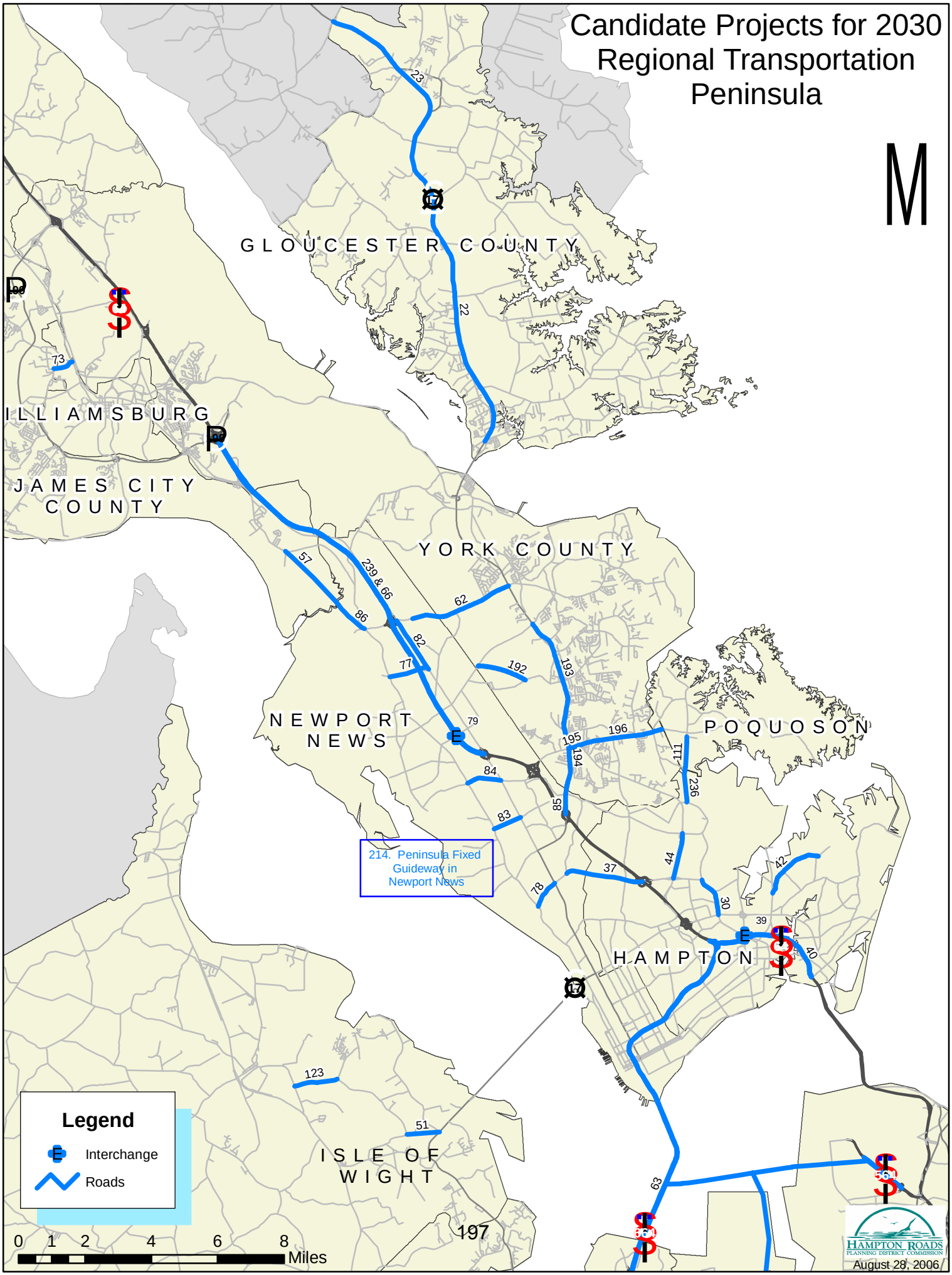
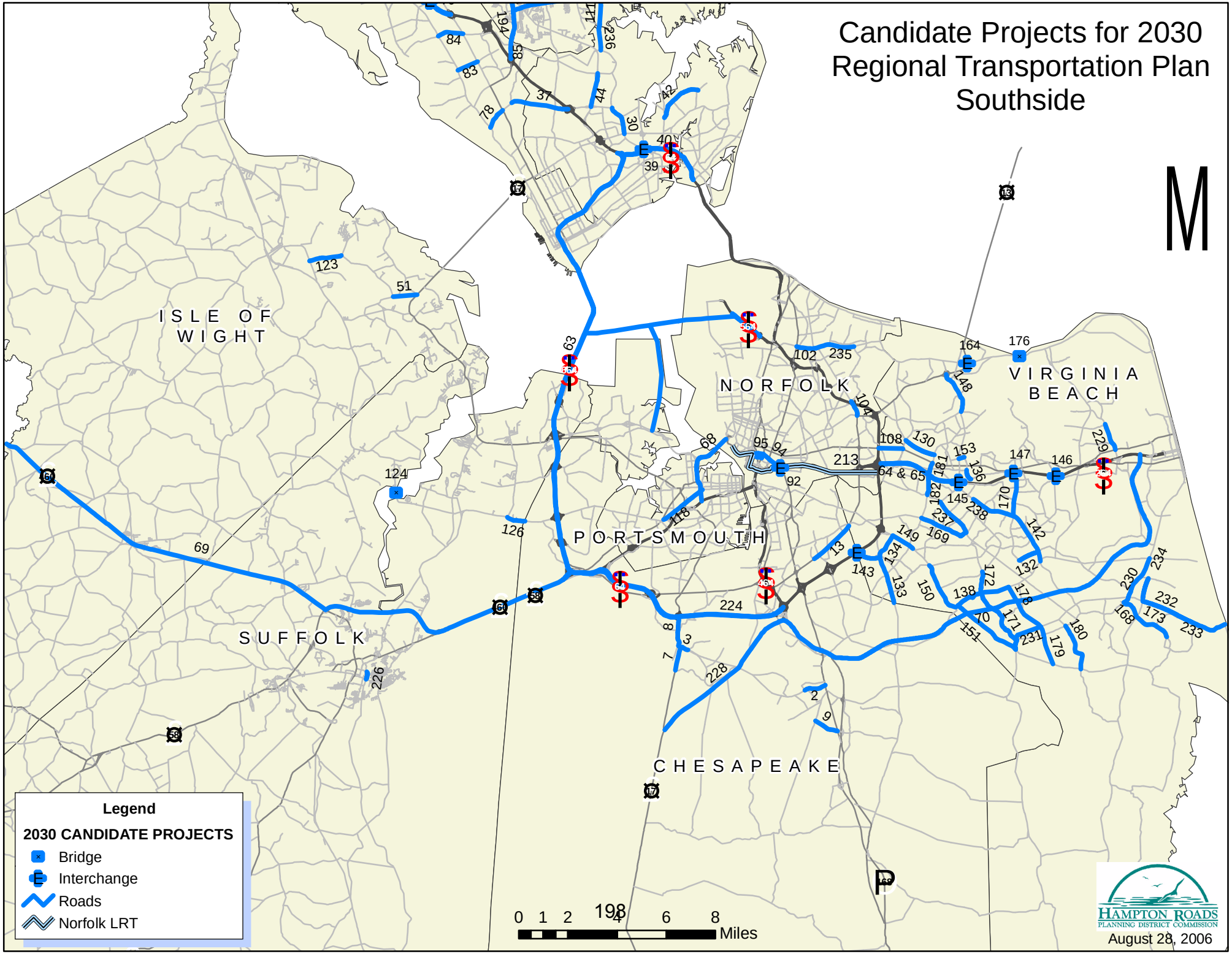


HAMPTON ROADS PLANNING DISTRICT COMMISSION

August 28, 2006


Candidate Projects for 2030
Regional Transportation
Peninsula
M
GLOUCESTER COUNTY
ILLIAMSBURG
JAMES CITY
COUNTY
YORK COUNTY
NEWPORT
NEWS
POQUOSON
HAMPTON
ISLE OF
WIGHT
214. Peninsula Fixed
Guideway in
Newport News
Legend
Interchange
Roads
0 1 2 4 6 8
Miles
197
HAMPTON ROADS
PLANNING DISTRICT COMMISSION
August 28, 2006


Candidate Projects for 2030
Regional Transportation Plan
Southside
M
ISLE OF WIGHT
SUFFOLK
NORFOLK
PORTSMOUTH
CHESAPEAKE
VIRGINIA BEACH
Legend
2030 CANDIDATE PROJECTS
Bridge
Interchange
Roads
Norfolk LRT
0 1 2 4 6 8
Miles
198
HAMPTON ROADS
PLANNING DISTRICT COMMISSION
August 28, 2006

HAMPTON ROADS
PLANNING DISTRICT COMMISSION

PAUL D. FRAIM, CHAIRMAN • BRUCE C. GOODSON, VICE CHAIRMAN • JAMES O. McREYNOLDS, TREASURER
ARTHUR L. COLLINS, EXECUTIVE DIRECTOR/SECRETARY

March 21, 2007

Memorandum #2007-58

TO: **Frank Daniel, VDEQ**
Robert Grabb, VMRC
Bob Munson, VDCR
Dave Slack, VDOF
Randolph Turner, VDHR
David Whitehurst, VDGIF
Ed Zimmer, VDOF
Donald Welsh, USEPA
Colonel Dionysios Anninos, USACE
Charles Myers, USDA
Denise Doetzer, USDA
Patricia Hooks, NPS
William Hester, USFWS
Lloyd Woosley, USGS
Chris Jaeschke, FHWA

BY: **Dwight Farmer, Deputy Executive Director, Transportation** DF

RE: **Draft Environmental Mitigation Discussion**

The Hampton Roads Planning District Commission (HRPDC) is currently preparing a document for the region's 2030 fiscally-constrained long-range transportation plan. Included in the document will be a required environmental mitigation discussion, and we are asking for your comments on the enclosed draft discussion with regard to your particular area of expertise.

The guidance that we can provide for your review is pursuant to the federal law known as the "Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users" (a.k.a. SAFETEA–LU, Public Law 109–59, August 10, 2005) which states that:

> "A long-range transportation plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.
> The discussion shall be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies."

MAILED
MAR 21 2007
HRPDC

HEADQUARTERS • THE REGIONAL BUILDING • 723 WOODLAKE DRIVE • CHESAPEAKE, VIRGINIA 23320 • (757) 420-8300
PENINSULA OFFICE • 2101 EXECUTIVE DRIVE • SUITE C • HAMPTON, VIRGINIA 23666 • (757) 262-0094

AP

Your assistance with this is greatly appreciated. Please provide your comments to us by April 13, 2007. You can direct your comments to Andy Pickard via either regular mail or e-mail at apickard@hrpdc.org.

AP/kg
Attachments

Potential Environmental Mitigation Activities and Areas

Background

The following discussion and table are based on text developed by VDOT staff for use by Metropolitan Planning Organizations around the state. VDOT developed this generalized mitigation discussion text and table with preliminary review and input of senior staff in VDOT planning, environmental, and right-of-way divisions, and the Virginia Division of FHWA planning office. The text and table were designed in consideration of the relevant metropolitan transportation planning provisions in 23USC134 as amended by SAFETEA-LU, as well as the FHWA and FTA June 9, 2006 Notice of Proposed Rulemaking for updating 23CFR450 to implement SAFETEA-LU.

Discussion

Metropolitan transportation planning is a regional process that is used to identify the transportation issues and needs in metropolitan areas. In metropolitan areas over 50,000 in population, the responsibility for transportation planning lies with designated Metropolitan Planning Organizations (MPO). This planning process is a collaborative effort between the member jurisdictions, the Virginia Department of Transportation, transit operators, and other modal representatives. During the plan development, the MPO examines land development patterns, demographics, travel patterns and trends to identify existing and future transportation problems. The MPO then identifies alternatives to meet current and projected future demands that will provide a safe and efficient transportation system that meets the needs of the traveling public while limiting adverse impacts to the environment.

The jurisdictions in the region work together to develop a constrained long-range transportation plan. The constrained long-range transportation plan (CLRP) for this region identifies and recommends a capital investment strategy to meet the existing and future transportation needs of the public over the next 20 years. The inclusion of a recommended improvement in the long-range transportation plan represents preliminary regional support for that improvement. The CLRP is a decision-making tool to determine which projects should be implemented. However, transportation improvements go through several steps from conception to implementation and take many years to successfully complete.

The considerations and recommendations made during the planning process are preliminary in nature. Detailed environmental analysis conducted through the National Environmental Policy Act (NEPA) do not apply to long-range transportation plans. With exceptions for regional ambient air quality, offsetting environmental impacts during the long-range planning process is not required. However, per SAFETEA-LU, the inclusion of a discussion regarding potential environmental mitigation activities, areas to provide the mitigation, and activities that may have the greatest potential to restore and maintain the environment is required.

Detailed environmental analysis of individual transportation projects occurs later in the project development process as the improvement approaches the preliminary engineering stage. At this stage, project features may be narrowed and refined, and the environmental impacts and environmental mitigation strategies can be appropriately ascertained. Virginia's State Environmental Review Process directs the project-by-project interagency review, study and identification of environmental concerns. Related requirements that typically apply at this stage involve public hearings, environmental permit-processing, and NEPA studies. A variety

of environmental documentation, permit and mitigation needs are usually identified and environmental findings are closely considered and evaluated. Common project environmental mitigation measures (required silt-fence barriers, precautions to control dust, etc) are managed using Road and Bridge Standards that apply to all construction activities. Special environmental concerns, however, may differ widely by project and location. As environmental studies are conducted and undergo public and interagency review, needed mitigation plans are specified and committed to within the environmental documents on the particular transportation project or activity. Environmental management systems are then used to monitor, and ensure compliance with, the environmental mitigation commitments.

Potential environmental mitigation activities may include: avoiding impacts altogether, minimizing a proposed activity/project size or its involvement, rectifying impacts (restoring temporary impacts), precautionary and/or abatement measures to reduce construction impacts, employing special features or operational management measures to reduce impacts, and/or compensating for environmental impacts by providing suitable, replacement or substitute environmental resources of equivalent or greater value, on or off-site. Where on-site mitigation areas are not reasonable or sufficient, relatively large off-site compensatory natural resource mitigation areas generally may be preferable, if available. These may offer greater mitigation potential with respect to planning, buffer protection and providing multiple environmental habitat value (example: wetland, plant and wildlife banks). Mitigation activities and the mitigation areas will be consistent with legal and regulatory requirements relating to the human and natural environment. These may pertain to neighborhoods and communities, homes and businesses, cultural resources, parks, and recreation areas, wetlands and other water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The following table illustrates some potential mitigation activities and potential mitigation areas for these resources.

Table of Potential Resource Mitigation Activities and Areas

Resource	Key applicable requirements	Potential mitigation activities for project implementation	Potential mitigation areas for project implementation
Neighborhoods and communities, and homes and businesses	Uniform Relocation Assistance and Real Property Acquisition Policy Act at 42 USC 4601 et seq.	Impact avoidance or minimization; context sensitive solutions for communities (appropriate functional and/or aesthetic design features)	Mitigation on-site or in the general community. (Mitigation for homes and businesses is in accord with 49 CFR 24)
Cultural resources	National Historic Preservation Act at 16 USC 470	Avoidance, minimization; landscaping for historic properties; preservation in place or excavation for archaeological sites; Memoranda of Agreement with the Department of Historic Resources; design exceptions and variances; environmental compliance monitoring	On-site landscaping of historic properties, on-site mitigation of archeological sites; preservation in place
Parks and recreation areas	Section 4(f) of the U.S. Department of Transportation Act at 49 USC 303	Avoidance, minimization, mitigation; design exceptions and variances; environmental compliance monitoring	On site screening or on-site replacement of facilities; in some cases, replacement of affected property adjacent to existing

Wetlands and water resources	Clean Water Act at 33 USC 1251-1376; Rivers and Harbors Act at 33 USC 403	Mitigation sequencing requirements involving avoidance, minimization, compensation (could include preservation, creation, restoration, in-lieu fees, riparian buffers); design exceptions and variances; environmental compliance monitoring	Based on on-site/off-site and in-kind/out-of-kind sequencing requirements; private or publicly operated mitigation banks used in accordance with permit conditions
Forested and other natural areas	Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309; 15.2-4313); Open Space Land Act (Section 10.1-1700-1705, 1800-1804)	Avoidance, minimization; Replacement property for open space easements to be of equal fair market value and of equivalent usefulness; design exceptions and variances; environmental compliance monitoring	Landscaping within existing rights of way; replacement property for open space easements to be contiguous with easement; replacement of forestry operation within existing agriculture / forestal district
Agricultural areas	Farmland Protection Policy Act of 1981 at 7 USC 4201-4209, Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309; 15.2-4313)	Avoidance, minimization; design exceptions and variances; environmental compliance monitoring	Replacement of agricultural operation within existing agriculture / forestal district
Endangered and threatened species	Endangered Species Act at 16 USC 1531-1544	Avoidance, minimization; time of year restrictions; construction sequencing; design exceptions and variances; species research; species fact sheets; Memoranda of Agreements for species management; environmental compliance monitoring	Relocation of species to suitable habitat adjacent to project limits
Ambient air quality	Clean Air Act at 42 USC 7401-7671, and Conformity regulations at 40 CFR 93	Transportation control measures, transportation emission reduction measures	Within air quality non-attainment and maintenance areas

Source: Based on work by VDOT in August 2006.
Env_consultation_handout.pdf

APPENDIX J- VDOT AND VIRGINIA FHWA BICYCLE AND PEDESTRIAN ACCOMMODATIONS POLICIES

Document #1- “VDOT Policy for Integrating Bicycle and Pedestrian Accommodations”

Document #2- “FHWA Virginia Division Policy on Bicycle and Pedestrian Facilities”

1. Introduction

Bicycling and walking are fundamental travel modes and integral components of an efficient transportation network. Appropriate bicycle and pedestrian accommodations provide the public, including the disabled community, with access to the transportation network; connectivity with other modes of transportation; and independent mobility regardless of age, physical constraints, or income. Effective bicycle and pedestrian accommodations enhance the quality of life and health, strengthen communities, increase safety for all highway users, reduce congestion, and can benefit the environment. Bicycling and walking are successfully accommodated when travel by these modes is efficient, safe, and comfortable for the public. A strategic approach will consistently incorporate the consideration and provision of bicycling and walking accommodations into the decision-making process for Virginia's transportation network.

2. Purpose

This policy provides the framework through which the Virginia Department of Transportation will accommodate bicyclists and pedestrians, including pedestrians with disabilities, along with motorized transportation modes in the planning, funding, design, construction, operation, and maintenance of Virginia's transportation network to achieve a safe, effective, and balanced multimodal transportation system.

For the purposes of this policy, an accommodation is defined as any facility, design feature, operational change, or maintenance activity that improves the environment in which bicyclists and pedestrians travel. Examples of such accommodations include the provision of bike lanes, sidewalks, and signs; the installation of curb extensions for traffic calming; and the addition of paved shoulders.

3. Project Development

The Virginia Department of Transportation (VDOT) will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking. Factors that support the need to provide bicycle and pedestrian accommodations include, but are not limited to, the following:

- project is identified in an adopted transportation or related plan
- project accommodates existing and future bicycle and pedestrian use
- project improves or maintains safety for all users
- project provides a connection to public transportation services and facilities
- project serves areas or population groups with limited transportation options
- project provides a connection to bicycling and walking trip generators such as employment, education, retail, recreation, and residential centers and public facilities
- project is identified in a Safe Routes to School program or provides a connection to a school
- project provides a regional connection or is of regional or state significance
- project provides a link to other bicycle and pedestrian accommodations

- project provides a connection to traverse natural or man-made barriers
- project provides a tourism or economic development opportunity

Project development for bicycle and pedestrian accommodations will follow VDOT's project programming and scheduling process and concurrent engineering process. VDOT will encourage the participation of localities in concurrent engineering activities that guide the project development.

3.1 Accommodations Built as Independent Construction Projects

Bicycle and pedestrian accommodations can be developed through projects that are independent of highway construction, either within the highway right-of-way or on an independent right-of-way. Independent construction projects can be utilized to retrofit accommodations along existing roadways, improve existing accommodations to better serve users, and install facilities to provide continuity and accessibility within the bicycle and pedestrian network. These projects will follow the same procedures as those for other construction projects for planning, funding, design, and construction. Localities and metropolitan planning organizations will be instrumental in identifying and prioritizing these independent construction projects.

3.2 Access-Controlled Corridors

Access-controlled corridors can create barriers to bicycle and pedestrian travel. Bicycling and walking may be accommodated within or adjacent to access-controlled corridors through the provision of facilities on parallel roadways or physically separated parallel facilities within the right-of-way. Crossings of such corridors must be provided to establish or maintain connectivity of bicycle and pedestrian accommodations.

3.3 Additional Improvement Opportunities

Bicycle and pedestrian accommodations will be considered in other types of projects. Non-construction activities can be used to improve accommodations for bicycling and walking. In addition, any project that affects or could affect the usability of an existing bicycle or pedestrian accommodation within the highway system must be consistent with state and federal laws.

3.3.1 Operation and Maintenance Activities

Bicycling and walking should be considered in operational improvements, including hazard elimination projects and signal installation. Independent operational improvements for bicycling and walking, such as the installation of pedestrian signals, should be coordinated with local transportation and safety offices. The maintenance program will consider bicycling and walking so that completed activities will not hinder the movement of those choosing to use these travel modes. The maintenance program may produce facility changes that will enhance the environment for bicycling and walking, such as the addition of paved shoulders.

3.3.2 Long Distance Bicycle Routes

Long distance bicycle routes facilitate travel for bicyclists through the use of shared lanes, bike lanes, and shared use paths, as well as signage. All projects along a long distance route meeting the criteria for an American Association of State Highway and Transportation Officials

(AASHTO) or *Manual on Uniform Traffic Control Devices* (MUTCD) approved numbered bicycle route system should provide the necessary design features to facilitate bicycle travel. Independent construction projects and other activities can be utilized to make improvements for existing numbered bicycle routes. Consideration should be given to facilitating the development of other types of long distance routes.

3.3.3 Tourism and Economic Development

Bicycling and walking accommodations can serve as unique transportation links between historic, cultural, scenic, and recreational sites, providing support to tourism activities and resulting economic development. Projects along existing or planned tourism and recreation corridors should include bicycle and pedestrian accommodations. In addition, the development of independent projects to serve this type of tourism and economic development function should be considered and coordinated with economic development organizations at local, regional, and state levels, as well as with other related agencies. Projects must also address the need to provide safety and connectivity for existing and planned recreational trails, such as the Appalachian Trail, that intersect with the state's highway system.

3.4 Exceptions to the Provision of Accommodations

Bicycle and pedestrian accommodations should be provided except where one or more of the following conditions exist:

- scarcity of population, travel, and attractors, both existing and future, indicate an absence of need for such accommodations
- environmental or social impacts outweigh the need for these accommodations
- safety would be compromised
- total cost of bicycle and pedestrian accommodations to the appropriate system (i.e., interstate, primary, secondary, or urban system) would be excessively disproportionate to the need for the facility
- purpose and scope of the specific project do not facilitate the provision of such accommodations (e.g., projects for the Rural Rustic Road Program)
- bicycle and pedestrian travel is prohibited by state or federal laws

3.5 Decision Process

The project manager and local representatives will, based on the factors listed previously in this section, develop a recommendation on how and whether to accommodate bicyclists and pedestrians in a construction project prior to the public hearing. The district administrator should confirm this recommendation prior to the public hearing. Public involvement comments will be reviewed and incorporated into project development prior to the preparation of the design approval recommendation. When a locality is not in agreement with VDOT's position on how bicyclists and pedestrians will or will not be accommodated in a construction project, the locality can introduce a formal appeal by means of a resolution adopted by the local governing body. The resolution must be submitted to the district administrator to be reviewed and considered prior to the submission of the design approval recommendation to the chief engineer for program development. Local resolutions must be forwarded to the chief engineer for program development for consideration during the project design approval or to the Commonwealth

Transportation Board for consideration during location and design approval, if needed for a project. The resolution and supporting information related to the recommendation must be included in the project documentation.

The decisions made by VDOT and localities for the provision of bicycle and pedestrian travel must be consistent with state and federal laws regarding accommodations and access for bicycling and walking.

4. Discipline Participation in Project Development

VDOT will provide the leadership to implement this policy. Those involved in the planning, funding, design, construction, operation, and maintenance of the state's highways are responsible for effecting the guidance set forth in this policy. VDOT recognizes the need for interdisciplinary coordination to efficiently develop, operate, and maintain bicycle and pedestrian accommodations.

Procedures, guidelines, and best practices will be developed or revised to implement the provisions set forth in this policy. For example, objective criteria will be prepared to guide decisions on the restriction of bicycle and pedestrian use of access-controlled facilities. VDOT will work with localities, regional planning agencies, advisory committees, and other stakeholders to facilitate implementation and will offer training or other resource tools on planning, designing, operating, and maintaining bicycle and pedestrian accommodations.

4.1 Planning

VDOT will promote the inclusion of bicycle and pedestrian accommodations in transportation planning activities at local, regional, and statewide levels. These planning activities include, but are not limited to, corridor studies, small urban studies, regional plans, and the statewide multimodal long-range transportation plan. To carry out this task, VDOT will coordinate with local government agencies, regional planning agencies, and community stakeholder groups. In addition, VDOT will coordinate with the Virginia Department of Rail and Public Transportation (VDRPT) and local and regional transit providers to identify needs for bicycle and pedestrian access to public transportation services and facilities.

4.2 Funding

Highway construction funds can be used to build bicycle and pedestrian accommodations either concurrently with highway construction projects or as independent transportation projects. Both types of bicycle and pedestrian accommodation projects will be funded in the same manner as other highway construction projects for each system (i.e., interstate, primary, secondary, or urban). VDOT's participation in the development and construction of an independent project that is not associated with the interstate, primary, secondary, or urban systems will be determined through a negotiated agreement with the locality or localities involved.

Other state and federal funding sources eligible for the development of bicycle and pedestrian accommodations may be used, following program requirements established for these sources.

These sources include, but are not limited to, programs for highway safety, enhancement, air quality, congestion relief, and special access.

VDOT may enter into agreements with localities or other entities in order to pursue alternate funding to develop bicycle and pedestrian accommodations, so long as the agreements are consistent with state and federal laws.

4.3 Design and Construction

VDOT will work with localities to select and design accommodations, taking into consideration community needs, safety, and unique environmental and aesthetic characteristics as they relate to specific projects. The selection of the specific accommodations to be used for a project will be based on the application of appropriate planning, design, and engineering principles. The accommodations will be designed and built, or installed, using guidance from VDOT and AASHTO publications, the MUTCD, and the *Americans with Disabilities Act Accessibility Guidelines (ADAAG).* Methods for providing flexibility within safe design parameters, such as context sensitive solutions and design, will be considered.

During the preparation of an environmental impact statement (EIS), VDOT will consider the current and anticipated future use of the affected facilities by bicyclists and pedestrians, the potential impacts of the alternatives on bicycle and pedestrian travel, and proposed measures, if any, to avoid or reduce adverse impacts to the use of these facilities by bicyclists and pedestrians.

During project design VDOT will coordinate with VDRPT to address bicyclist and pedestrian access to existing and planned transit connections.

Requests for exceptions to design criteria must be submitted in accordance with VDOT's design exception review process. The approval of exceptions will be decided by the Federal Highway Administration or VDOT's Chief Engineer for Program Development.

VDOT will ensure that accommodations for bicycling and walking are built in accordance with design plans and VDOT's construction standards and specifications.

4.4 Operations

VDOT will consider methods of accommodating bicycling and walking along existing roads through operational changes, such as traffic calming and crosswalk marking, where appropriate and feasible.

VDOT will work with VDRPT and local and regional transit providers to identify the need for ancillary facilities, such as shelters and bike racks on buses, that support bicycling and walking to transit connections.

VDOT will enforce the requirements for the continuance of bicycle and pedestrian traffic in work zones, especially in areas at or leading to transit stops, and in facility replacements in accordance with the MUTCD, *VDOT Work Area Protection Manual*, and *VDOT Land Use*

Permit Manual when construction, utility, or maintenance work, either by VDOT or other entities, affects bicycle and pedestrian accommodations.

VDOT will continue to research and implement technologies that could be used to improve the safety and mobility of bicyclists and pedestrians in Virginia's transportation network, such as signal detection systems for bicycles and in-pavement crosswalk lights.

4.5 Maintenance

VDOT will maintain bicycle and pedestrian accommodations as necessary to keep the accommodations usable and accessible in accordance with state and federal laws and VDOT's asset management policy. Maintenance of bike lanes and paved shoulders will include repair, replacement, and clearance of debris. As these facilities are an integral part of the pavement structure, snow and ice control will be performed on these facilities.

For sidewalks, shared use paths, and bicycle paths built within department right-of-way, built to department standards, and accepted for maintenance, VDOT will maintain these bicycle and pedestrian accommodations through replacement and repair. VDOT will not provide snow or ice removal for sidewalks and shared use paths. The execution of agreements between VDOT and localities for maintenance of such facilities shall not be precluded under this policy.

5. Effective Date

This policy becomes effect upon its adoption by the Commonwealth Transportation Board on March 18, 2004, and will apply to projects that reach the scoping phase after its adoption.

This policy shall supersede all current department policies and procedures related to bicycle and pedestrian accommodations. VDOT will develop or revise procedures, guidelines, and best practices to support and implement the provisions set forth in this policy, and future departmental policies and procedural documents shall comply with the provisions set forth in this policy.

FHWA VIRGINIA DIVISION POLICY
BICYCLE AND PEDESTRIAN FACILITIES

Today, bicycle and pedestrian facilities play an increasingly important role in providing a balanced, intermodal transportation system. As stipulated in TEA-21, these facilities are to be considered in conjunction with all projects involving new construction and reconstruction of transportation facilities, except where prohibited.

This provision of TEA-21 is being implemented through guidance developed by FHWA and US DOT. The FHWA Virginia Division Office is committed to this effort of making bicycle and pedestrian facilities an integral part of Virginia's transportation system. This effort is being documented in the following policy as we work with VDOT and other partners to implement the bicycle and pedestrian provisions of TEA-21:

Bicycle and pedestrian facilities will be included on all new and reconstruction Federal-aid transportation projects, both exempt and nonexempt, except under the following circumstances:

1. On the Interstate system where prohibited by state policy and/or law;

2. On non-Interstate controlled access facilities where the speed and/or volume of traffic would create an unsafe condition;

3. The design year average daily traffic count does not justify the inclusion of paved shoulders;

4. The scarcity of population and/or the scarcity of the bicycle/pedestrian traffic does not justify the need or planned use of the facility*;*

5. The cost would be excessively disproportionate to the need or planned use of the facility;

6. Severe environmental or social (environmental justice) impacts outweigh the need or planned use of the facility; and

7. The bicycle and pedestrian facilities are inconsistent with the MPO's bicycle and pedestrian policies in urbanized areas.

The FHWA Virginia Division Office will work with VDOT in developing specific criteria and thresholds to be used in the above determinations.

To help ensure the success of this policy, the FHWA Virginia Division Office has committed personnel and other resources as follows:

1. Actively participate in technology sharing and the various VDOT or Virginia bicycling committees.

2 Planners will encourage and actively assist in the development of statewide and regional plans to include the intermodal aspect of biking and walking.

3. Environmental specialists will ensure that bicyclists and pedestrians are adequately considered in the National Environmental Policy Act (NEPA) process.

4. Safety specialists and others will promote the safety aspects of bicycling and walking.

5. Field operations engineers and others will consider bicycle and pedestrian facilities to be an integral part of a Federal-aid project and will review plans for their inclusion.

6. Federal participation will be withdrawn on any major project that severs an existing bicycle or pedestrian route, unless an alternate route exists or is provided.

Bicycle and pedestrian facilities should be funded at the same federal-state ratio as the typical highway improvement.

Typically, the termini for a highway improvement and a corresponding bicycle and pedestrian facilities will be the same. However, this may not always be prudent. Therefore, in the scoping and design processes, termini for the bicycle and pedestrian facilities should be considered independently from the roadway termini.

Compliance with this policy will be achieved through Federal oversight; program and process reviews and through the review and approval processes carried out during the planning, design, right-of-way, and construction stages of individual projects.

February 2001

APPENDIX K- SENIOR SERVICES OF SOUTHEASTERN VIRGINIA (SSSV) 2030 PLAN

Senior Services of Southeastern Virginia, Inc.
The Area Agency on Aging "I-Ride"
Public Transit Plan for 2030

Community transit is a necessity for the future in Southeastern Virginia including our rural areas covered by the MPO. As our population grows, more seniors, more youth and more disabled will need transit that is universally accessible and available. People in rural communities will need access to suburban neighborhoods, beaches and historic areas by linking with light rail, urban transit, para-transit, private transportation service, medical transportation services and the busses of tomorrow. In 2007, Senior Services began a simple, private transit service in Isle of Wight and Smithfield called "I-Ride". Six months later, citizens ride this bus to work, to school, to the doctor and to buy groceries. Now, poorer neighbors able to reach the grocery store or their children's schools for programs and disabled residents are more independent with a wheelchair lift on the bus. The cost of $1.00 per ride is affordable.

Senior Services of Southeastern Virginia plans to develop a transit system based on five precepts: availability, acceptability, accessibility, adaptability and affordability. With a transit hub and vehicle service/dispatch operation planned near or in the small city of Franklin, Senior Services intends to apply for federal, state (set aside and general funds), municipal funding and private foundation and corporation funds to grow fixed route bus service that will connect non-drivers (youth and elderly) and less able citizens to universally accessible vehicles at an affordable price. Senior Services further intends to attract the "green passenger" (those wanting to save on fossil or other fuels) and the convenience passenger (those who wants to ride and walk to destinations.) The passenger riding because it's affordable is the loyal passenger, the one with few options due to poverty and often minority status. All of these are passengers who can become loyal if their expectations for availability, acceptability, accessibility, adaptability and affordability are met.

The Planning Services Area citizens have begun to notice how unlivable our community is without connecting biking to bus rides to shopping and to medical care. Senior Services will provide: fixed bus routes from rural towns such as Courtland, Newsomes (Southampton County) and Boykins for connections to transit providers in Sussex, Newport News and the Metropolitan Planning Organization Area of Suffolk, Norfolk, Portsmouth, Smithfield, Isle of Wight Co, Virginia Beach and Chesapeake. HRT will be our partner in this web of service as will transit providers working with Medicaid, taxis and shuttles and the Light Rail.

A maximum of 15 routes are planned with no more than 45 minutes between return stops, all running 12-24 hours per day, 7 days per week as long as passenger census is at 50 percent or more per route. Funding is anticipated from the Federal Transit Administration, from Virginia Department for the Aging, from the Virginia Department of Rail and Transit to support the $50,000-$80,000 per route cost per year. Jurisdictions will provide the federally required 20-50% of matching funds for capital and operations. Transit vehicles, the capital, and bus transfer stations can cost much more than $50,000

each. One transfer and operations center in Virginia is currently priced at $3.5 million dollars for a rural community. Neighborhood transfer stations, not bus stops, will be safe places with good lighting, inside resting and community support. The cost cannot be calculated at this time, although a standard design will be implemented.

By 2030, we can get the pricing and the funding worked out with an endorsement and inclusion in the long range plan for our area. This endorsement and inclusion will address co-coordinated, community human services public transit for our future.

APPENDIX L- PROPOSED 20 YEAR TRANSIT PLAN (HRT)

Transportation District Commission of Hampton Roads

PROPOSED 20 YEAR TRANSIT PLAN

HAMPTON ROADS 2030 LONG RANGE TRANSPORTATION PLAN

Prepared for:
Hampton Roads Transit
Hampton Roads Planning District Commission

Prepared by:

AECOM CONSULT
A DMJM HARRIS Affiliate

Parsons Brinckerhoff Corporation
Connetics Transportation Group
URS Corporation

August 2006

Table of Contents

REGIONAL TRANSIT PLAN

1.0 Introduction

This report presents a 2030 Regional Transit Plan for Hampton Roads Transit (HRT). This plan has been prepared by HRT and its consultants for the Hampton Roads Planning District Commission (HRPDC) for use in their long-range transportation planning efforts. This report presents rail and bus operating plan assumptions, ferry service, vanpool and paratransit service assumptions. The bus plans build from prior bus and rail planning work for HRT. Specifically, the following documents have been used as sources for defining a 2030 Regional Transit Plan.

- FEIS Norfolk Light Rail Transit (LRT) Rail Project (October 2005)
- Peninsula Rapid Transit Project – AA/DEIS Scoping Summary Report (January 2005)
- Hampton Roads Transit "Vision for the Future" - Vision Plan (October 2005)
- Hampton Roads Transit Regional Bus Plan – 2000 General Assembly Session
- Peninsula Alternatives Analysis Study – Transit Operations Plans Report (September 2002)
- Norfolk Minimum Operable Segment SDEIS – Transit Operations Plans and O&M Cost Results Report (September 2001)
- Chesapeake and Portsmouth Corridor Planning Study – Transit Operations Plans Report (February 2001)
- HRT Bus Service and Fleet Management Plan (August 2004)
- HRT Comprehensive Operations Analysis – Service Improvement Proposals – Southside (January 2002)
- HRT Comprehensive Operations Analysis – Service Improvement Proposals, Peninsula (January 2002)
- Naval Base Pre-EIS Study – Transit Operations Plans Report (February 1999)

The 2030 Regional Transit Plan includes the following major elements:

1. A light rail Minimum Operable Segment (MOS) in Norfolk.
2. Fixed guideway service on the Peninsula.
3. Approximately 1.5%/year average growth in fixed route bus service.
4. Approximately .75%/year average growth in paratransit service.
5. Additional vanpools for the TRAFFIX vanpool program.
6. Expanded ferryboat service.

The following elements present detailed descriptions of rail and bus service assumptions for the 2030 Regional Transit Plan.

2.0 Rail Service

These projects are proposed as a means to address travel needs that require high capacity transit services in heavily congested travel corridors. Following are descriptions of each project.

2.1 Norfolk LRT Project

The Norfolk LRT Project reflects service from the Eastern Virginia Medical Center (EVMC) to Newtown Road (approximately 7.34 miles). This project has recently completed preliminary engineering and received a Record of Decision in April 2006. This project will soon be entering into Final Design.

The system would use a combination of an existing railroad corridor and city streets. From EVMC, the alignment generally follows Brambleton Avenue, York Street, Bute Street, Charlotte Street, Monticello Avenue, Plume Street, Main Street and Park Avenue. The alignment then follows the existing Norfolk Southern railroad right-of-way adjacent to I-264 and ends just west of Newtown Road. Figure 2-1 depicts the LRT MOS alignment and station locations. Eleven stations would be constructed as part of this project. Stations are proposed at the following locations:

- Newtown Road
- Military Highway
- Ingleside Road
- Ballentine Boulevard
- Norfolk State University
- Harbor Park
- Government Center
- Plume Street
- Monticello Avenue
- York Street
- EVMC

Parking will be provided at Harbor Park, Ballentine, Military Highway and Newtown Road stations. Eight of the 11 stations will have bus access – either via adjacent on-street locations or off-street bus bays.

The Norfolk project includes a new rail vehicle maintenance and storage yard. The proposed site is located between the Norfolk State University campus and I-264. Sixteen (16) light rail vehicles (LRV's) could be stored at this yard. The yard will be used for overnight storage and daily (routine) inspection and maintenance.

The Norfolk light rail line will operate seven days a week from approximately 6:00 a.m. to 10:00 p.m. Monday through Thursday, 6:00 a.m. to 12:00 midnight Friday and Saturday, and 7:00 a.m. to 9:00 p.m. on Sunday. Service may be augmented for special events.

Figure 2-1
Norfolk LRT Project Alignment

3.0 OTHER FIXED GUIDEWAY PROJECTS

3.1 Peninsula DEIS Fixed Guideway Project

HRT is preparing an AA/DEIS for the Peninsula Rapid Transit Project (PRTP) to study a new transit corridor in the city of Newport News. Alternatives presently under consideration for this project are described in the following paragraphs. The alignment and mode are still yet to be determined. Therefore, the Peninsula DEIS fixed guideway project is currently identified as a "placeholder" in the plan.

Conceptual Alternatives

Two alternative alignments were advanced for assessment (Figure 3-1). The advancement of the chosen alternative alignment(s) recognizes that there are diverse transportation needs on the Peninsula that could possibly be addressed through a major transit capital investment project using Federal Transit Administration (FTA) funding. The MOS project, however, has not yet been identified as part of a DEIS. Therefore, for modeling purposes, the A3 Alignment was used for ridership projection. As noted in the introduction of this report, the 2030 Regional Transit Plan assumes a Minimum Operable Segment (MOS) on the Peninsula.

The travel markets that are the focus of the current alternatives include:

- North/South travel needs in Newport News, with Northrop Grumman Shipyard trips being an important travel market.
- Localized travel needs in northern Newport News, primarily along Jefferson Ave.

Current Defined Alternatives

Alternatives that are currently being analyzed as part of the DEIS screening effort are described below.

- **No-Build Alternative**

  The No-Build Alternative is intended to reflect improvements to the existing HRT bus network on the Peninsula that are consistent with HRT long-range plans.

- **Baseline Alternative**

  The Federal Transit Administration (FTA) project development process requires the development of a Baseline Alternative. The Baseline Alternative is intended to provide a "best bus" level of service that meets the travel market needs of the study area. For the Peninsula Corridor, this means that the Baseline Alternative includes premium limited stop fixed route bus service and associated facility improvements, which would meet the needs recognized by the advancement of two potential alternative alignments:

  - **Newport News to Denbigh Boulevard**

    Totally within the City of Newport News, this alignment would begin at the City Hall Station and proceed northwesterly along Washington Avenue and then turn

north in the vicinity of the shipyard parking access road to Huntington Avenue. The alignment would continue along Huntington Avenue, join the CSX right-of-way in the vicinity of 71st Street and Warwick Boulevard, and then continue along the west side of the existing CSX railroad tracks to its northern terminus at Denbigh Boulevard.

The following modal options are being considered for this alignment:

LRT – This modal option considers LRT for the full length of the alignment.

BRT – This modal option considers BRT for the full length of the alignment.

- **Christopher Newport University to Mary Immaculate Hospital.**

The A3 Alternative Alignment would be totally located within the city of Newport News. The southern terminus would be Christopher Newport University near the intersection of J. Clyde Morris Boulevard and Warwick Boulevard. The alignment would follow J. Clyde Morris Boulevard easterly to Jefferson Avenue and turn north on Jefferson Avenue to Bland Boulevard. The alignment would turn east at Bland Boulevard and north at McManus Boulevard with a northern terminus at Mary Immaculate Hospital.

The following modal options are being studied for this alignment:

LRT – This modal option considers LRT for the full length of the alignment.

BRT – This modal option considers BRT for the full length of the alignment.

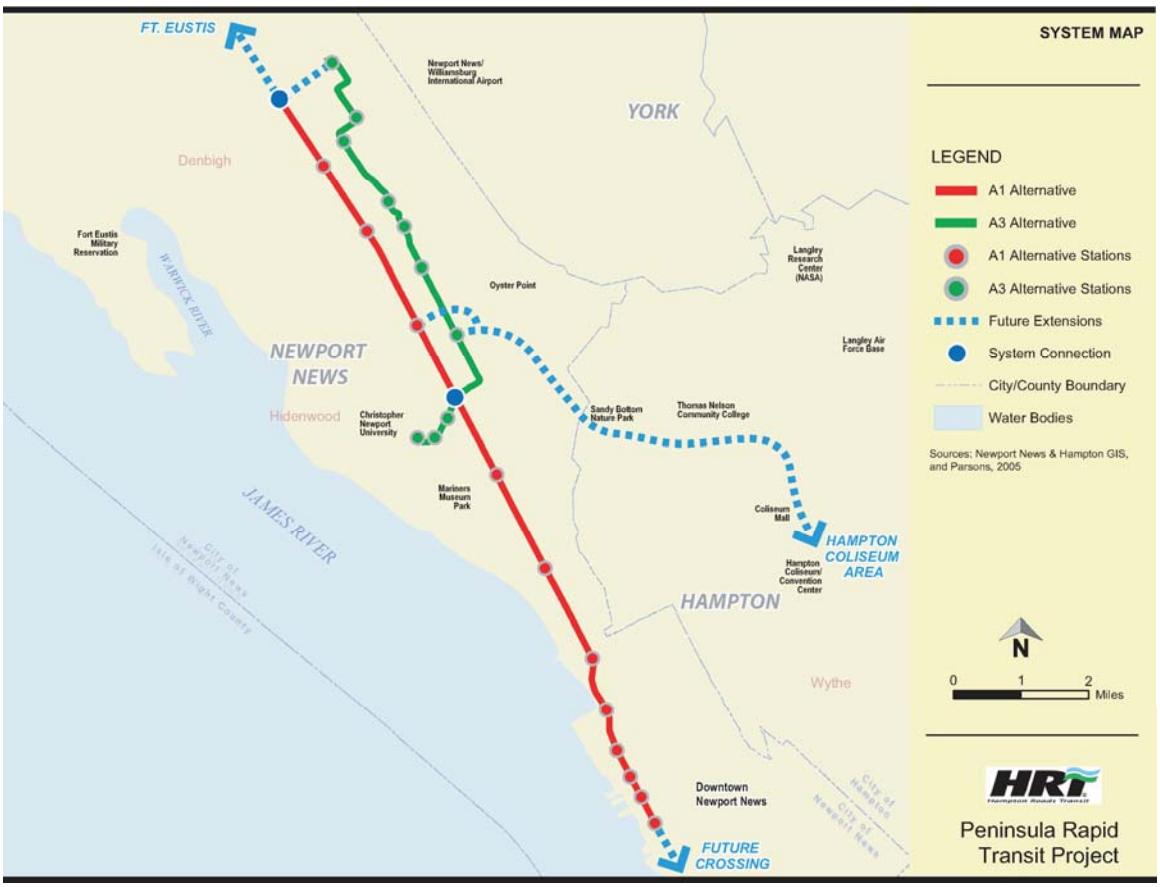


Figure 3-1
Proposed Peninsula Fixed Guideway Alignments

3.2 Naval Base Fixed Guideway Service

In 1998/1999, pre-EIS activities were completed on a Naval Base extension alignment from a proposed east-west light rail system. The preferred alignment identified by the Tidewater Transportation District Commission at that time was a 16.76-mile alignment along Military Highway and I-64, with a loop track on the Naval Base. The intent of the pre-EIS activities was to further refine technical information of the recommended alignment. Pre-EIS activities included ridership forecasts, LRT and bus operating plans, a financial feasibility analysis, identification of specific station locations, and preparation of necessary information in order to support "New Starts" justification criteria.

Additional EIS and FTA New Starts activities, however, need to be completed on this project. Those activities could alter mode, alignment and station location assumptions from the 1998/1999 pre-EIS activities. In light of this, the Naval Base Corridor is identified as a "placeholder" also. Please note, the bus service plans presented for the Naval Base Corridor can be easily modified to support fixed guideway service once a final alignment and station locations have been identified.

3.3. Other Potential Fixed Guideway Corridors

It is also important to recognize prior corridor studies that were completed in Chesapeake and in Portsmouth in 1999 and updated in 2004. Potential corridors were identified in both cities, with potential connections to the Norfolk MOS project. Potential corridors identified in Portsmouth were:

- MLK/CSX Corridor with a crossing at the Midtown Tunnel (approximately 12.8 miles);
- CSX Corridor with a crossing through the downtown tunnel (9.0 miles);
- I-264 with a crossing through the downtown tunnel (approximately 8.4 miles);
- High Street corridor with a crossing via Elizabeth River ferry service (approximately 7.7 miles);
- High Street/Airline Boulevard corridor with a crossing via Elizabeth River ferry service (approximately 7.4 miles);
- CSX railroad corridor with a crossing via Elizabeth River ferry service (approximately 7.0 miles); and
- CSX railroad corridor with a crossing via a new LRT tunnel near the Naval Hospital (approximately 11.5 miles).

Potential corridors identified in Chesapeake were:

- NSRR corridor with a crossing at the Campostella Bridge (approximately 17 miles);
- NSRR corridor with a crossing at the Sewells Point RR bridge and with stub service to south Norfolk (approximately 19 miles);
- NSRR corridor with a crossing at the Lamberts Point Branch bridge (approximately 18 miles)
- Military Highway corridor (approximately 18 miles);
- Military Highway/NSRR (south of Military Highway) corridor (approximately 17 miles)
- I-664 corridor with I-264 crossing into downtown Norfolk (approximately 19 miles).

Although there are significant regional, local and circulator bus service improvements for both Portsmouth and Chesapeake intra-city and inter-city, this plan does not include fixed guideway projects in either of these communities. However, the identified bus service improvements would provide the necessary supporting background bus network that is needed to compliment a fixed guideway project.

4.0 Bus Service

Existing bus service has been modified to reflect LRT in Norfolk, a starter fixed guideway system in Newport News, and expanded coverage and frequencies elsewhere in the HRT service area. Bus operating plans have been prepared for weekday, Saturday and Sunday service. Figures 4-1 through 4-12 in this section illustrate proposed route alignments for each Hampton Roads local jurisdiction. Following are descriptions of service plans for HRT Southside Local and HRT Peninsula Local major service routes, Naval Base, and Express/Regional routes. Route descriptions pivot from existing service. LRT station connections are also noted in descriptions.

A strong local bus network infrastructure is an essential element for the overall HRT system. The local bus network must be the backbone of all transit services. Without it, the proposed regional bus and fixed guideway services will not realize maximum ridership potential. A phased approach of expansion has been proposed for use as an implementation tool by HRT. HRT can approach its member cities and recommend specific service proposals for the upcoming year that fits within the defined stages for each period. This section of the report presents the long range vision for local bus services.

4.1 Southside Local Bus Service

Route 1: Granby/Oceanview – This route's alignment is modified to operate only between the Amphibious Base and downtown Norfolk. (South of Wards Corner 30 peak/30 midday) and (North of Wards Corner 30 peak/30 midday).
Rail station connections: Wards Corner, Downtown Norfolk

Route 2: NSN/Hampton – Operates between downtown Norfolk and the Naval Station Norfolk primarily via Hampton Boulevard. No changes are proposed to this route's alignment. (30 peak/30 midday)
Rail station connections: Naval Exchange Mall, Naval Base Medical Center, Fleet Park, Downtown Norfolk

Route 3: Chesapeake Blvd. – This route's alignment is modified to operate only between Oceanview/Granby and downtown Norfolk. (30 peak/30 midday)
Rail station connections: Naval Exchange Mall, Chesapeake Blvd., Downtown Norfolk

Route 4: ODU/Sentara –
4A - This route's alignment is modified to operate between ODU and Norfolk Sentara Hospital/EVMC LRT station via Colley Avenue, with continuing service to Monticello/Charlotte. (30 peak/30 midday)
4B – Route currently operates between downtown Norfolk (Charlotte/Monticello Transfer Center) ODU, Norfolk Sentara Hospital via Church Street, 21st Street, Colley Avenue, and Hampton Avenue. (60 peak/60 midday).
Rail station connections: Downtown Norfolk

Route 5: Willoughby – Operates between Wards Corner and Willoughby via Granby, Bay View, Tidewater, and Ocean View. No changes are proposed to this route's alignment. (60 peak/60 midday)

Route 6: Liberty/Atlantic – Operates between downtown Norfolk and Robert Hall via Liberty, Atlantic, Campostella, and Military Highway. No changes are proposed to this route's alignment (30 peak/30 midday). Supplemental short-turn service is proposed north of 20th/Seaboard. (60 peak/60 midday)

Route 8: Tidewater Drive – This route's alignment is modified to operate between Wards Corner and downtown Norfolk, primarily along Little Creek Road and Tidewater Drive. (30 peak/30 midday)

Route 9: Sewells Point – This route's alignment is modified to provide less of a deviation on Widgeon Road and Philpotts Road (in conjunction with Route 8 alignment changes). (30 peak/30 midday)

Route 11: Colonial Place – This route's alignment is modified to include service to the EVMC LRT station, with continuing service to Monticello/Charlotte. (30 peak/30 midday)

Route 12: Indian River Road – Operates between South Norfolk and Tidewater Community College (TCC) Virginia Beach campus via Wilson, Indian River, Lynnhaven Parkway, and Buckner. No changes are proposed to this route's alignment. (60 peak/60 midday)

Route 13: Campostella – This route's alignment is modified to operate only between downtown Norfolk and Robert Hall Boulevard, without the mid-route deviation to Bethel Road/Border (15 peak/30 midday). Supplemental short-turn service is proposed north of 20th/Seaboard (30 peak/60 midday).

Route 15: Military Highway Crosstown – This route's alignment is modified to operate only between Robert Hall Blvd. and Wards Corner (Little Creek/Granby). (30 peak/ 30 midday). Supplemental short-turn service is proposed north of the Military Highway LRT (30 peak/30 midday).

Route 17: NET – In conjunction with proposed LRT service, NET service is modified to circulate through the downtown Norfolk area and to/from the Cedar Grove parking lot on Monticello Avenue. Service to Harbor Park will be replaced with LRT. (6 peak/9 midday).

Route 18: Ballentine Boulevard – In conjunction with proposed LRT service, this route's alignment is modified to operate between Chesterfield Heights, Tidewater Drive, and Chesapeake Boulevard. (30 peak/30 midday).

Route 20: Virginia Beach Boulevard – In conjunction with proposed Norfolk LRT and new Virginia Beach service, this route's alignment is broken into two route segments: Pacific/19th to the Military Highway LRT station and from downtown Norfolk to the Military Highway LRT station. The Virginia Beach route pattern would also deviate to the proposed Town Center station near Constitution Drive. (30 peak/30 midday).

Route 23: Princess Anne – This route's alignment is modified to deviate from Princess Anne Road to Monticello/Charlotte. This route's east end alignment is also modified to operate on Kempsville Road to the Newtown Road LRT station. (30 peak/30 midday)

Route 25: Newtown Road – This route's southern alignment is modified to continue on Princess Anne Road to the Virginia Beach Municipal Center. The north end of the alignment is modified to no longer operate on Greenwich Road, and to remain on Princess Anne and Kempsville Road to Virginia Beach Boulevard and the Military Circle Mall transit center. (30 peak/60 midday) north of the TCC-VB campus and (30 peak/60 midday) south of the TCC-VB campus.

Route 26: Lynnhaven Parkway – This route's alignment is modified to operate between the TCC-Virginia Beach campus and the Hilltop Shopping Center area, with service to Lynnhaven Mall with a stop at a Great Neck station. (60 peak/60 midday).

Route 27: Northampton Boulevard – This route's alignment is modified to operate between the Newtown Road LRT station and Pleasure House/Shore Drive. (60 peak/60 midday).

Route 29: Great Neck/1st Colonial – This route's alignment is modified to operate between Pleasure House/Shore Drive and Pacific/19th with service through the Hilltop Shopping Center area. (60 peak/60 midday)

Route 33: General Booth Boulevard – This route's alignment is extended north to Ft. Story. (60 peak/60 midday)

Route 36: Holland Road – This route's alignment is modified to operate between the TCC-Virginia Beach campus and Pleasure House/Shore Drive, with service through the Virginia Beach Town Center and a stop at the Town Center station. (30 peak/30 midday)

Route 37: Dam Neck – Operates between Naval Air Station Oceana Dam Neck Annex and the Lynnhaven Mall. Pembroke Mall and the Virginia Beach Municipal Center via Constitution, Columbus, Independence, Holland, Dam Neck, Rosemont, and Buckner and Princess Anne. In the westbound direction, the route operates on Vanguard, Dam Neck, through Naval Air Station Oceana, continuing on Dam Neck to London Bridge and International Parkway. In the eastbound direction, it operates on International, Dam Neck, and Vanguard directly to the Oceana Dam Neck Annex. No changes are proposed to this route. It will continue to operate as an Oceana-based service on Friday evenings, Saturdays and Sundays.

Route 41: Cradock – This route's alignment is modified to operate between downtown Portsmouth and the Camelot subdivision. (30 peak/30 midday)

Route 43: Taylor Road – This is a proposed new route that operates primarily between the Churchland Shopping Center, Chesapeake Square Mall, and Victory Crossing. (60 peak/60 midday).

Route 44: Midtown/Portsmouth – This route's alignment is modified to operate from the EVMC LRT station to Victory Crossing, with continuing service south of Victory Crossing to Gust Lane/Beechdale Road (30 peak/30 midday)

Route 45: Portsmouth Blvd. – This route's alignment is modified to operate from County/Court Streets in downtown Portsmouth to Chesapeake Square Mall, with service through the Victory Crossing area (30 peak/30 midday). A short turn pattern is proposed from downtown Norfolk to Victory Crossing. (30 peak/30 midday). This route will connect to a high frequency shuttle bus route that operates between downtown Portsmouth and downtown Norfolk.

Route 47: Norfolk/High Street – This route's alignment is modified to operate from downtown Portsmouth to the Churchland Shopping Center, with service through the new Mid City shopping center. (30 peak/30 midday). This route will connect to a high frequency shuttle bus route that operates between downtown Portsmouth and downtown Norfolk.

Route 49: Park-n-Sail – No changes are proposed to this route.

Route 50: Portsmouth/Victory Crossing – This route's alignment is modified to operate from downtown Portsmouth through Victory Crossing, with continuing service to the Cavalier Industrial Park. (30 peak/60 midday)

Route 57: Robert Hall/Victory Crossing – This route's alignment is modified to operate from the Chesapeake Battlefield Boulevard Wal-Mart and Robert Hall Boulevard to Victory Crossing, without service into the Camelot subdivision. (60 peak/60 midday)

Route 58: Bainbridge Boulevard – Operates between South Norfolk (20th and Seaboard) and the Robert Hall Shopping Center via Bainbridge, Libertyville, and Campostella Road. No changes are proposed to this route's alignment. (60 peak/60 midday)

Route 59: Greenbrier Circulators – These are two new proposed circulator routes in the Greenbrier area. One would travel north on Greenbrier Parkway, east on Woodlake Drive, south on Sara Drive, around Greenbrier Circle, north on Greenbrier Road, west on Military Highway to the Robert Hall Transfer Center at the junction of Military Highway and Battlefield Parkway. This would provide service to the Chesapeake Service Center. The second circulator would travel south on Greenbrier Parkway, west on Volvo Parkway, north on Battlefield Boulevard to the Battlefield Wal-Mart with continuing service into the Battlefield Corporate Center. (15 peak/30 midday)

Route 64: Commerce & Industrial Parks – This is a proposed new route that's part of the Norfolk LRT feeder bus service plans. This route would operate from the Ballantine LRT station to Azalea garden/Military Highway. (30peak/30 midday)

Route 65: Little Creek/Independence – This is a proposed new route that would operate from Pleasure House/Shore Drive to the Naval Station Norfolk with service through Wards Corner. Replaces portions of Routes 8 and 15. (30 peak/30 midday)

Route 66: NSN-Oceanview – This is a proposed new route that would replace portions of existing Route 3 service. (30 peak/30 midday)

Route 67: South Norfolk Circulator – This is a proposed new circulator route in the South Norfolk/North Chesapeake area that provides continuing service to the 20th and Seaboard Transit Center (30 peak/30 midday).

Route 68: Cedar/Battlefield – This is a proposed new route that operates from Robert Hall Boulevard to the TCC – Chesapeake campus. Replaces portions of Route 13. (60 peak/60 midday).

Route 69: ODU/21st Street – This is a proposed new route that operates from Old Dominion University to Tidewater Drive through the Ghent neighborhood. It will replace portions of Route 4. (30 peak/30 midday)

Route 70: Portsmouth Circulator – This is a proposed new circulator route in the downtown Portsmouth area. Alignment from US Naval Hospital is south on Washington Street, south on Crawford Street, west on County Street, north on Washington Street, east on High Street, and back to Crawford Street. (10 peak/10 midday)

Route 71: Cleveland/Bonney – This is a proposed new route that would operate from the Newtown Road LRT station to the Virginia Beach Town Center and Lynnhaven Mall. This route includes stops at the Norfolk LRT station, the Witchduck station, the Town Center station, and the Lynn Shores Station. (60 peak/60 midday)

Route 72: S. Chesapeake/TCC Virginia Beach – This is a proposed new route that would begin at the Battlefield Boulevard Wal-Mart in South Chesapeake. The route operates through the Greenbrier area to Greenbrier Mall, and then continues to the TCC-Virginia Beach campus transit center. (60 peak/60 midday)

Route 73: Lynnhaven Circulator – This is a proposed new circulator route that would operate between the Lynnhaven Road Transit Center and Lynnhaven Mall. The proposed alignment would be south on Lynnhaven Parkway, south on Viking Drive and Phoenix Drive into Lynnhaven Mall then continue east on International Parkway. (15 peak/15 midday)

Route 74: Town Center Circulator – This is a proposed new circulator route in the Virginia Beach Town Center area that would operate between the Silverleaf park-and-ride lot on Independence Boulevard, to the Town Center, to Corporation Lane (east of the Pembroke Mall) and to the Lynn Shores station. (15 peak/15 midday)

Route 75: Portsmouth/Norfolk Shuttle – This is a proposed new shuttle route that operates between County/Court Streets in downtown Portsmouth to downtown Norfolk. This shuttle route is proposed as a means to improve on-time performance on Route 45 (the existing Portsmouth route that connects to downtown Norfolk). (10 peak/30 midday)

Route 85: Harbourview – This route's alignment is modified to operate between the Churchland Shopping Center and the Harbourview area of Suffolk. Proposed routing is west on Churchland and Bridge Road, north on Harbour Park Boulevard, east on River Club Drive and south on College Drive, back to Bridge Road. (30 peak/30 midday)

Service descriptions for these routes are detailed in figures 4-1 through 4-4.

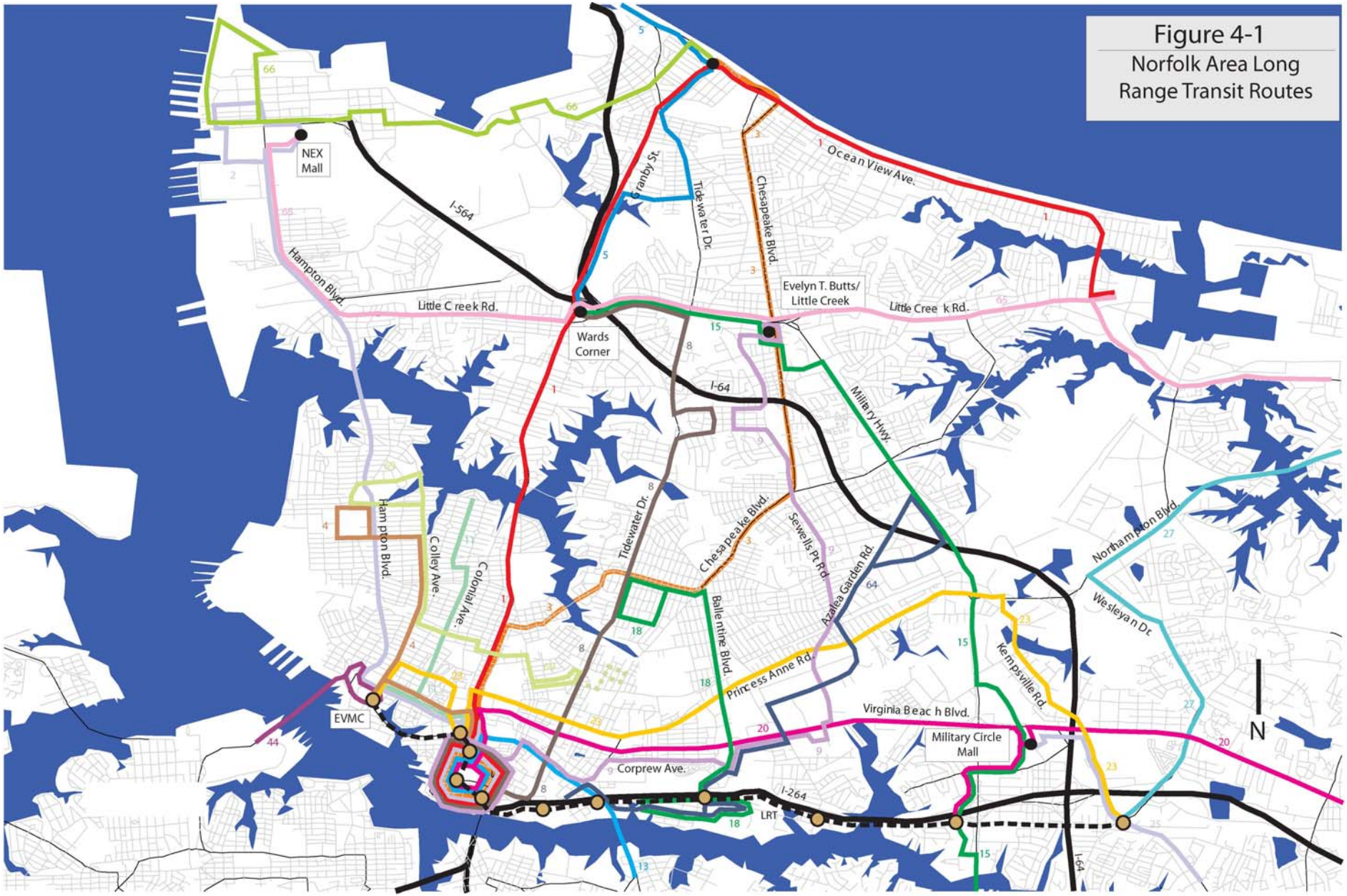


Figure 4-1
Norfolk Area Long Range Transit Routes
NEX Mall
I-564
Hampton Blvd.
Little Creek Rd.
Granby St.
Tidewater Dr.
Chesapeake Blvd.
Ocean View Ave.
Evelyn T. Butts/ Little Creek
Little Creek Rd.
Wards Corner
I-64
Military Hwy.
Hampton Blvd.
Colley Ave.
Colonial Ave.
Tidewater Dr.
Chesapeake Blvd.
Sewells Pt Rd.
Azalea Garden Rd.
Northampton Blvd.
Wesleyan Dr.
Ballentine Blvd.
Princess Anne Rd.
Kempsville Rd.
EVMC
Virginia Beach Blvd.
Military Circle Mall
Corprew Ave.
I-264
LRT
I-64
N

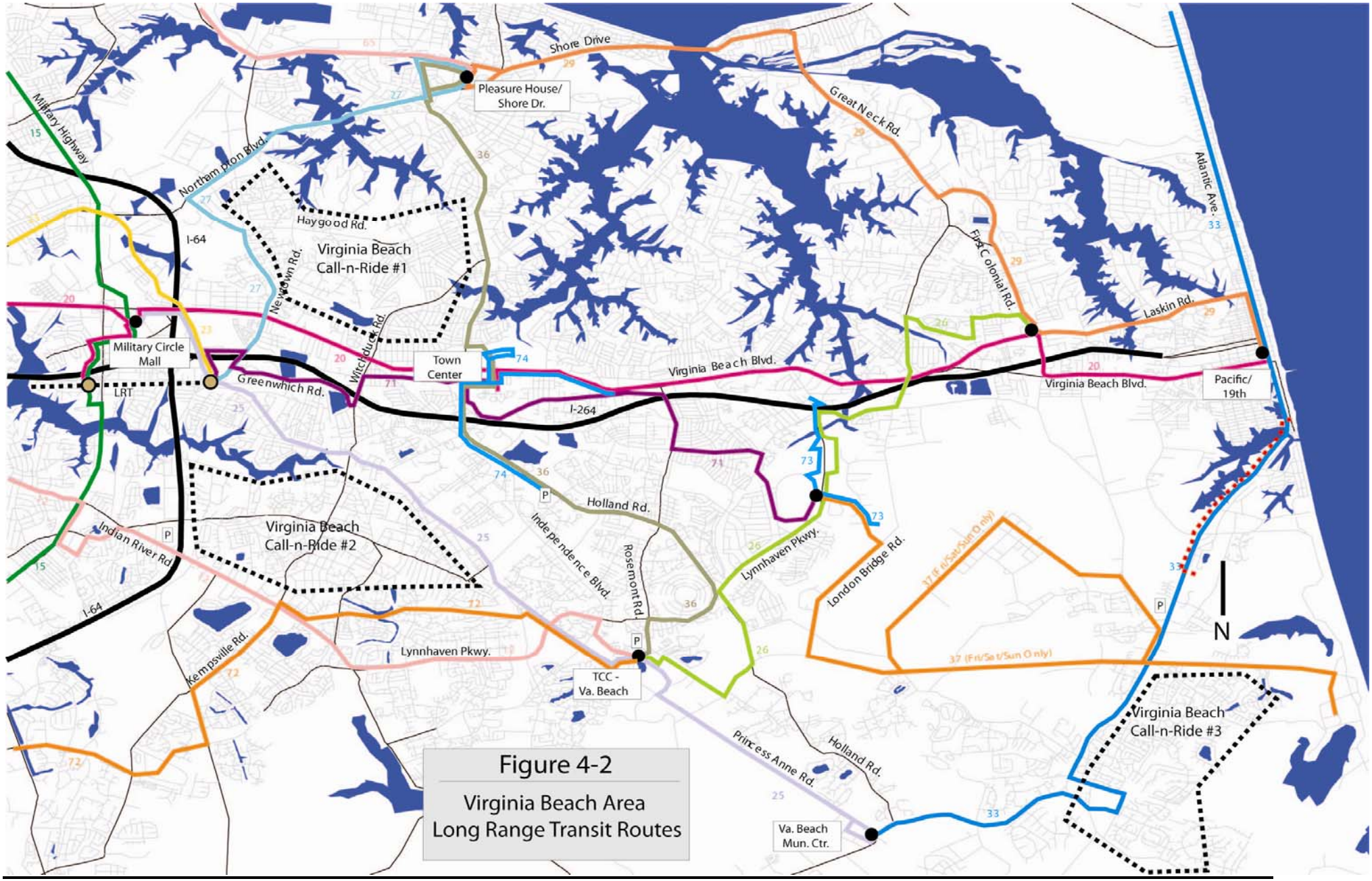


Figure 4-2

Virginia Beach Area
Long Range Transit Routes

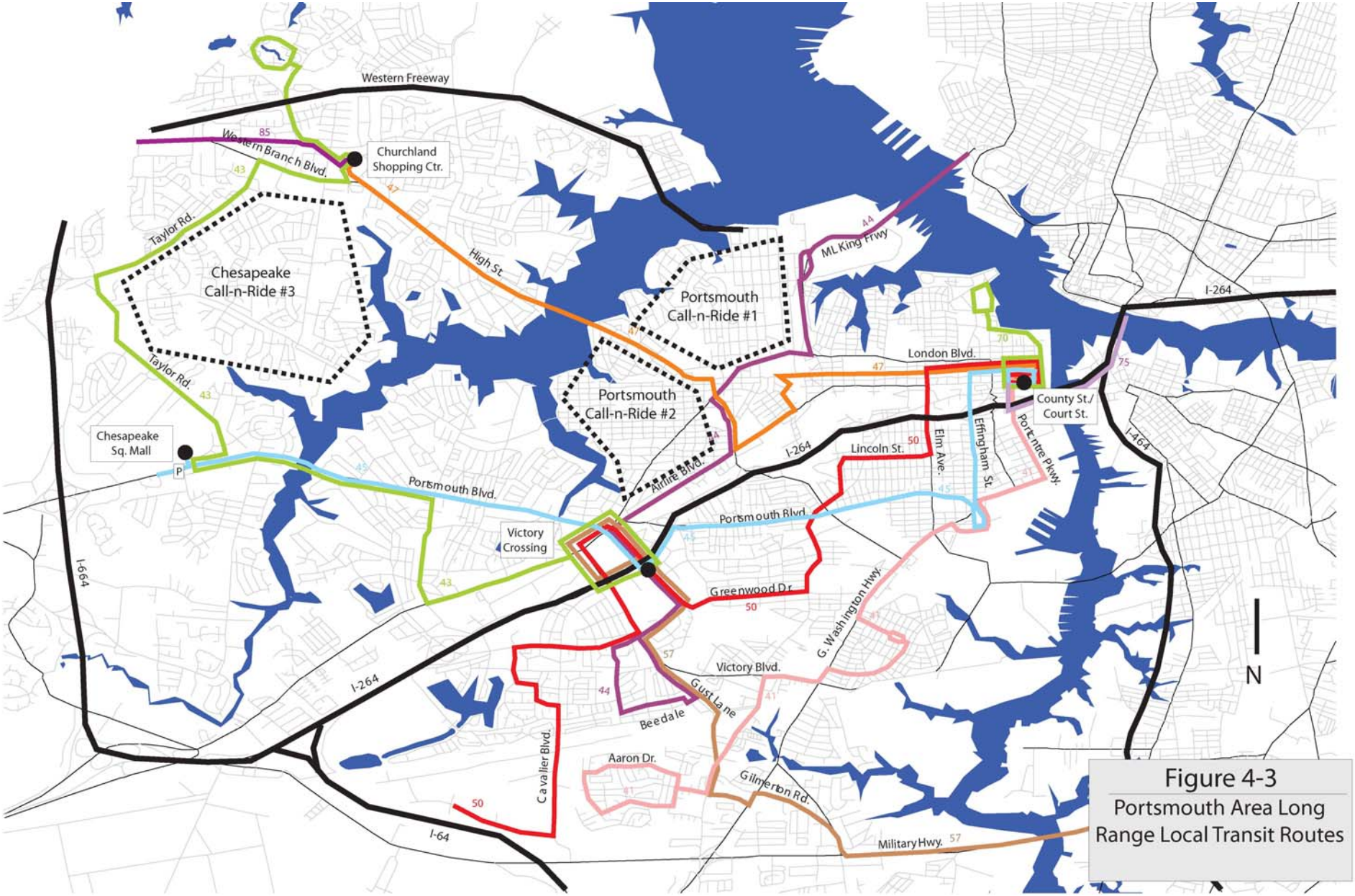


Figure 4-3
Portsmouth Area Long Range Local Transit Routes

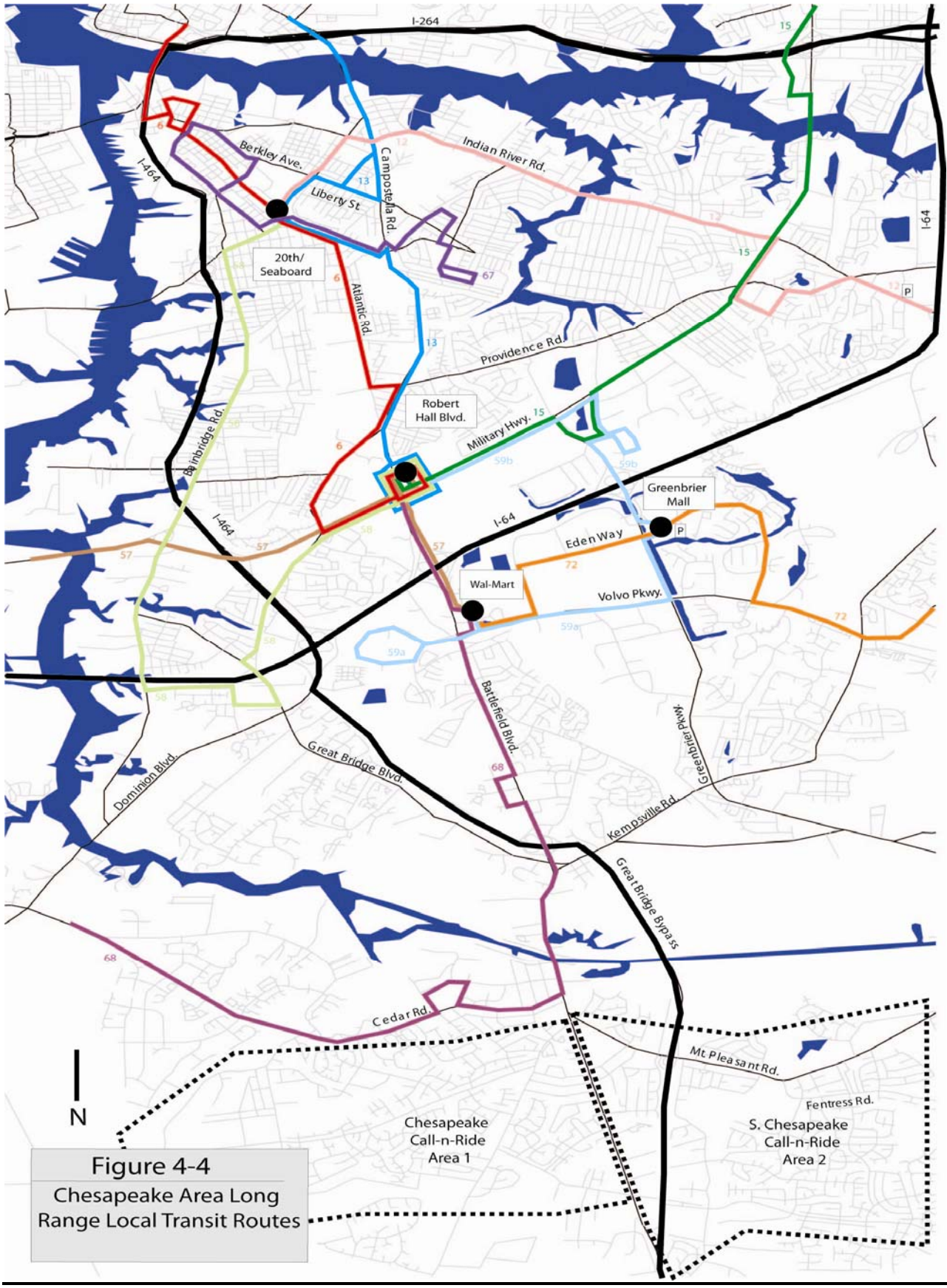


Figure 4-4
Chesapeake Area Long Range Local Transit Routes

4.2 Peninsula Local Bus Service

As previously noted, the 2030 Regional Transit Plan assumes a yet-to-be-defined Minimum Operable Segment (MOS) LRT project on the Peninsula. For ridership modeling purposes, the A3 Fixed Guideway Alignment was used for the following bus route descriptions.

Route 101: Kecoughtan – Operates between downtown Hampton and Newport News vial Kecoughtan Road and the 25th/26th Street one-way pair. No changes are proposed to the route alignment. (15 peak/30 midday)

Route 102: Coliseum – This route is realigned to operate between the Hampton Transit Center (HTC) and the Thomas Nelson Community College (TNCC). (60 peak/60 midday).

Route 103: Newport News/Hampton – Operates between the Hampton and Newport News Transit Centers north of Kecoughtan along Shell Road/Pembroke Avenue. No changes are proposed to the route alignment. (30 peak/30 midday)

Route: 104 Marshall – This route is realigned to operate between the Newport News Transit Center (NNTC) and the Thomas Nelson Community College (TNCC). (30 peak/30 midday).

Route 105: Aberdeen – This route is realigned to operate between the NNTC and the Coliseum Central area via Aberdeen and Todds Lane/Cunningham. (60 peak/60 midday)

Route 106: N. Warwick – This route is realigned to operate between Ft. Eustis and Patrick Henry Mall via Warwick Ave. It would make a short mid-route deviation to the Denbigh Boulevard Park-and-Ride and terminate at the Patrick Henry Mall Station. (30 peak/30 midday)
Fixed Guideway Station served:

- Patrick Henry Mall Park-and-Ride.

Route 107: S. Warwick – This route was defined as operating between Patrick Henry Mall and Ivy Avenue at 6th Street in Newport News, via the Newport News Transportation Center and NET Center primarily along Warwick Avenue and terminates at the Patrick Henry Mall Station. (30 peak/30 midday)
Fixed Guideway Stations served:

- Patrick Henry Mall Park-and-Ride and
- Warwick Boulevard.

Route 109: Pembroke – Operates along Pembroke Road between downtown Hampton and the Buckroe Beach area. No changes are proposed to the route alignment. (60 peak/60 midday)

Route 110: Briarfield – This route is realigned to operate only between the Hampton Transit Center (HTC) and the NET Center. (60 peak/60 midday).

Route 111: TNCC/Riverside Hospital – This route would be modified slightly in the Oyster Point area, serving the Thimble Shoals Boulevard Station. The deviation from Thimble Shoals Boulevard via Fishing Point Drive and Middle Ground Boulevard would be eliminated. (60 peak/60 midday)
Fixed Guideway Stations Served:

- Thimble Shoals Boulevard

- Riverside Regional Medical Center

Route 112: S. Jefferson – This route's alignment is extended to Patrick Henry Mall. Existing service to the Riverside Regional Medical Center is eliminated. In Oyster Point, the route would be modified slightly, serving the Thimble Shoals Boulevard Station. The deviation from Thimble Shoals Boulevard via Fishing Point Drive and Middle Ground Boulevard would be eliminated. (30 peak/30 midday)
Fixed Guideway Stations Served:

- Thimble Shoals Boulevard
- Applied Research
- Patrick Henry Mall Park and Ride

Route 113: Ft. Eustis Express – This route would connect to the Patrick Henry Mall Station. No changes are proposed to the weekday service frequencies. This route provides weekend service in both directions (Friday evenings, Saturdays, and Sundays only).
Fixed Guideway Station Served:
Patrick Henry Mall Park-and-Ride.

Route 114: Weaver Road – This route's alignment is modified to operate between the HTC and the NET Center, with service primarily along Armistead Avenue, Pine Chapel Road and Weaver Road. (30 peak/30 midday)

Route 115: Fox Hill – This route's alignment is modified to operate only between the Hampton Transit Center and the Buckroe Shopping Center. (60 peak/60 midday)

Route 116: N. Jefferson/Oyster Point –This route is defined as operating between Lee Hall (at the transfer point to Williamsburg Area Transport), Oakland Industrial Park, Patrick Henry Mall, and Oyster Point, via Jefferson. It will make a short deviation to serve the Denbigh Boulevard park-and-ride lot and the deviation through the Habersham retail area would be eliminated. In addition, the portion of the route south of the Patrick Henry Mall Station would follow Route 119's alignment in the No-Build Alternative to Oyster Point. (30 peak/60 midday)
Fixed Guideway Stations Served:

- Ferguson Enterprises
- Patrick Henry Mall Park and Ride
- Thimble Shoals Boulevard

Route 117: Phoebus – Operates between the Hampton Transit Center and the Phoebus business district via Settlers Landing Road, Emancipation Ave., M.L. King Boulevard, and Mallory. No changes are proposed to this route's alignment. (30 peak/30 midday)

Route 118: N. Armistead/Langley – This route's alignment is modified to operate between the Langley Air Force Base and the proposed Coliseum Central Transit Center. (60 peak/60 midday)

Route 119: Oyster Point – This route operates from the Oyster Point Transfer Center to the airport via Patrick Henry Mall. This route will be replaced with fixed guideway service.
Route 120: Mallory – Operates between the Hampton Transit Center and Buckroe Beach via Pembroke, Mercury, Woodlan, County, and Mallory. No changes are proposed to this route's alignment. (60 peak/60 midday)

Route 121: Newport News Transportation Center/Williamsburg - This route's alignment is modified to run primarily along I-64 and I-664 between Colonial Williamsburg and the NNTC. Mid-route stops are proposed at the Coliseum Central transit center and at the Patrick Henry Mall transfer area. (3 morning round trips and 3 afternoon round trips)
Fixed Guideway Station served:

- Patrick Henry Mall Park-and-Ride.

Route 122: Mercury Boulevard – This is a proposed new route that would operate along Mercury Boulevard, from 73rd/Warwick to the Phoebus area. (30 peak/30 midday)

Route 123: Lucas Creek Road – This route would be modified slightly, adding a deviation to serve the Mary Immaculate Hospital Station and eliminating the deviation to the Old Courthouse park-and-ride, serving the Denbigh Boulevard park-and-ride instead. (30 peak/60 midday)
Fixed Guideway Stations Served:

- Mary Immaculate Hospital
- Patrick Henry Mall Park and Ride

Route 124: Kiln Creek - This is a proposed new route serving the Villages of Kiln Creek residential area and the Kiln Creek Shopping Center. It would operate between Kiln Creek Parkway and the Patrick Henry Mall Station. It would begins at the Village Square at Kiln Creek Shopping Center and proceed North on Kiln Creek Parkway loop (north side). It would then go west on Brick Kiln Boulevard and proceed southeast on Jefferson Avenue and to the Patrick Henry Mall Park and Ride Station. It would return northwest on Jefferson Avenue, east on Brick Kiln, south on Kiln Creek Parkway loop (Southside), and end a Village Square at Kiln Creek Parking Center. (60 peak/60 midday).
Fixed Guideway Station Served:

- Patrick Henry Mall Park and Ride

Route 131: Newport News City Hall/Denbigh Boulevard - This route would operate as premium limited stop bus service from downtown Newport News to Denbigh Boulevard. This route would provide regional connections between the LRT service in the A3 alignment and downtown Newport News. Where Route 131 parallels the LRT alignment along Jefferson Avenue, transfers between it and the LRT alignment would be possible only at the Thimble Shoals Boulevard and Patrick Henry Mall LRT stations. (30 peak/60 midday)
Fixed Guideway Stations served:

- Newport News City Hall;
- 35th Street/Transit Center;
- 41st Street;
- 50th Street;
- Shipyard North (62nd Street);
- NET Center Transfer Area Facility;
- Main Street;
- Harpersville Road;
- Thimble Shoals Boulevard LRT Station;
- Patrick Henry Mall LRT Station; and
- Denbigh Boulevard Park-and-Ride.

Service descriptions for these routes are detailed in figure 4-5.

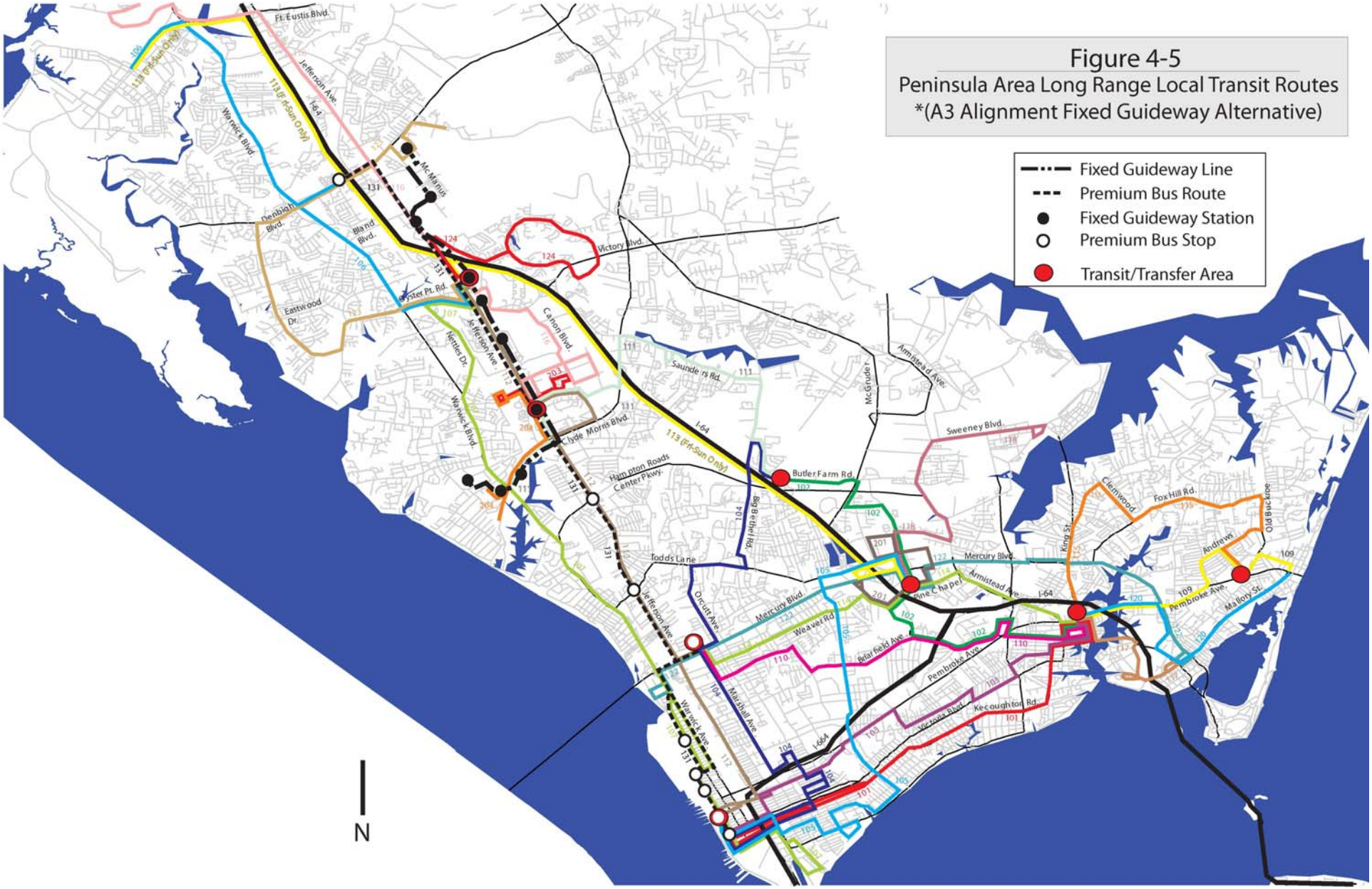


Figure 4-5
Peninsula Area Long Range Local Transit Routes
*(A3 Alignment Fixed Guideway Alternative)
Fixed Guideway Line
Premium Bus Route
Fixed Guideway Station
Premium Bus Stop
Transit/Transfer Area
Ft. Eustis Blvd.
Jefferson Ave.
I-64
Warwick Blvd.
Denbigh Blvd.
Bland Blvd.
McManus
Victory Blvd.
Oyster Pt. Rd.
Eastwood Dr.
Nettles Dr.
Canon Blvd.
Saunders Rd.
Clyde Morris Blvd.
Hampton Roads Center Pkwy.
Butler Farm Rd.
McGruder
Armistead Ave.
Sweeney Blvd.
Big Bethel Rd.
Todd's Lane
Orcutt Ave.
Mercury Blvd.
Weaver Rd.
Briarfield Ave.
Marshall Ave.
Pembroke Ave.
Kecoughtan Rd.
Victoria Blvd.
Clermont
Fox Hill Rd.
King St.
Andrews
Old Buckroe
Mallory St.
N

4.3 Activity Center Circulator Service

This service is intended to provide internal circulator service in the Hampton Coliseum and Oysters Point Activity Centers:

Coliseum Central Circulators:

- **Route 201** – This is a proposed new circulator route that would operate between Marcella Drive and Power Plant Pkwy. (15 peak/15 midday)

- **Route 202** - This is a proposed new circulator route that would operate between the Hampton Coliseum/Convention Center and the Sentara Careplex Hospital. This route would follow Coliseum Drive, the north side of the Mall, Executive Drive and Hardy Cash Drive into the Sentara Careplex Hospital. (30 peak/30 midday)

Oyster Point Circulators:

- **Route 203** – This proposed new circulator route was defined consistent with current HRT plans for a City Center shuttle route between Oyster Point and Port Warwick. This route would be modified slightly to serve the Thimble Shoals Boulevard Station. From Loftis Boulevard at Jefferson Avenue, routing would be south on Jefferson Avenue and east on Thimble Shoals Boulevard. (15 peak/15 midday)

  Fixed Guideway Station Served:
  Patrick Henry Mall Park and Ride

- **Route 204** – This is a proposed new circulator route that would provide service to Port Warwick, the Virginia Living Museum, Riverside Regional Medical Center, Christopher Newport University and the Mariner's Museum. The alignment would be around Styron Square and northeast on Loftis Boulevard in Port Warwick, southeast on Jefferson Avenue, and southwest on J. Clyde Morris Boulevard/Avenue of the Arts. (30 peak/30 midday).

  Fixed Guideway Stations Served:
  Thimble Shoals Boulevard
  Riverside Regional Medical Center
  Warwick Boulevard
  Christopher Newport University

4.4 Williamsburg Area Transport Local Bus Service

Long range bus service plans were developed for Williamsburg Area Transport (WAT) as part of the Peninsula Alternatives Analysis study. These plans pivot from WAT's long-Range Transportation Plan (March 2001). Figure 4-6 reflects current and proposed future service in Williamsburg.

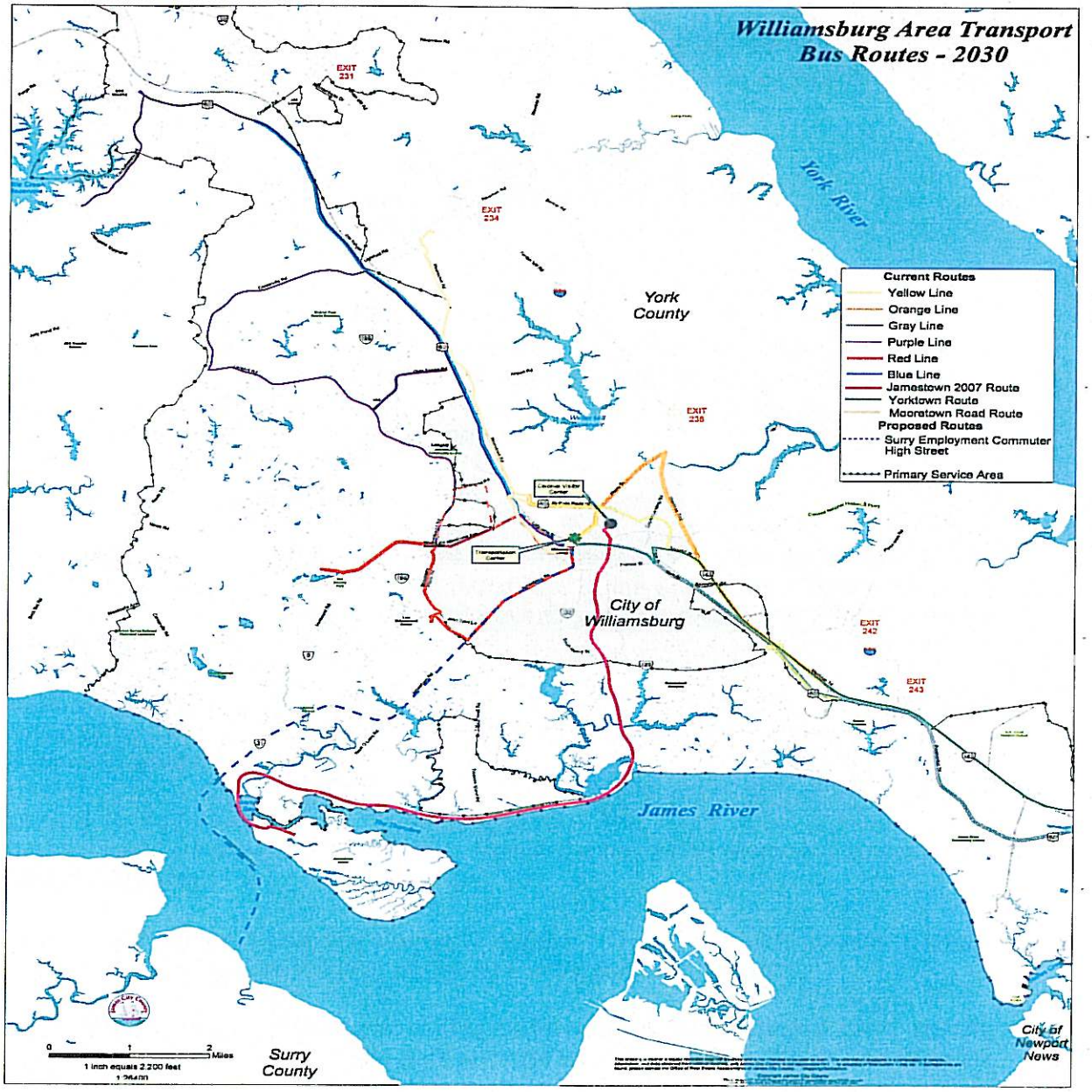
WAT has proposed the following 3 routes for new service:

High Street – This new route is conceptually a circulator which will operate between Williamsburg Transportation Center, College of William and Mary, three commercial areas, and one shopping center. The corridors of alignment will be High Street, New Town Road, Boundary Street, Lafayette Street, Richmond Road, and Monticello Avenue. Frequency will be 30 minutes all day.

Employee Commuter Service – This new service will operate from Surry County to the Williamsburg Route 31 Region. It will connect to or through an un-named park and ride center with 60 minute service all day.

Medical Center Circulator – This proposed new service is intended to service the new Regional Doctors Hospital of Williamsburg. It is intended to operate near Route 60 with an internal road system to be built to accommodate the service. As the Hospital itself is still a proposal, this service is included as a placeholder with no defined alignment or frequency.

Figure 4-6
Williamsburg Area Transit Service Map



4.5 Regional/Express Bus Service

This plan includes substantial improvements to regional bus transit service in the Hampton Roads region as a means to address long-distance travel needs. These regional services are generally targeted towards major regional employment centers, and can be categorized as follows:

- Northrup Grumman Shipyard Express/Limited Stop Service;
- Naval Station Norfolk Express and On-Base Circulator Service;
- Southside Regional/Express Service
- Crossroads and Norfolk Express Service; and
- Suffolk Service

Figure 4-7 illustrates proposed regional services on the Peninsula. Figures 4-8 and 4-9 illustrate proposed Naval Station Norfolk Express Service. Figure 4-10 illustrates Southside Regional/Express Service. Figure 4-11 illustrates Crossroads and Norfolk Express Service. Figure 4-12 illustrates Suffolk Service.

4.6 Shipyard Express Bus Service

Five new express and limited stop routes are proposed. Each route would operate with two inbound trips in the early a.m., two round trips at the end of the 1st shift/start of the 2nd shift and two outbound trips in the late evening, at the end of the 2nd shift. These routes are shown in figure 4-7.

Route 301: Old Courthouse/Shipyard – This route would provide "Limited Stop" service along Warwick Boulevard, from the old Courthouse park-and-ride lot. This route will be eliminated and replaced with "premium service."

Route 302: Coliseum Transit Center/Shipyard – This route would provide "Limited Stop" service from the Coliseum Central Transit Center, along Mercury Boulevard and Warwick Boulevard.

Route 303: Buckroe Shopping Center/Shipyard – This route would provide Express service from the proposed Buckroe Shopping Center park-and-ride lot.

Route 304: Highway 17/Shipyard – This route would provide "Limited Stop" service from the proposed Highway 17/I-64 park-and-ride lot along J. Clyde Morris and Warwick Boulevard.

Route 305: Highway 238/Shipyard – This route would provide Express service from the Highway 238/I-64 park-and-ride lot.

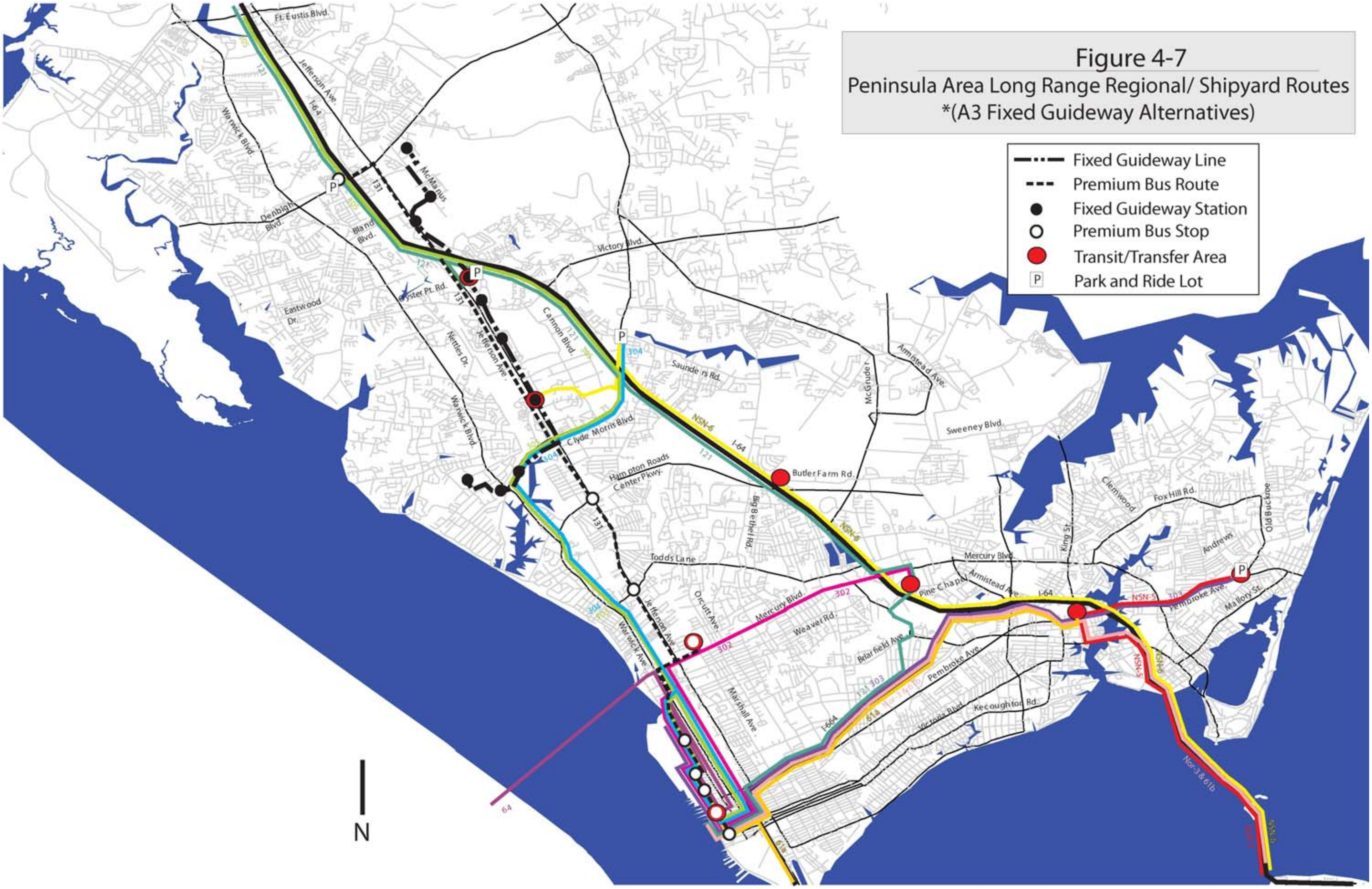


Figure 4-7
Peninsula Area Long Range Regional/ Shipyard Routes
*(A3 Fixed Guideway Alternatives)
Fixed Guideway Line
Premium Bus Route
Fixed Guideway Station
Premium Bus Stop
Transit/Transfer Area
Park and Ride Lot
N
Jefferson Ave.
I-64
Warwick Blvd.
Denbigh Blvd.
Victory Blvd.
Canon Blvd.
Clyde Morris Blvd.
Hampton Roads Center Pkwy.
Saunders Rd.
Armistead Ave.
Sweeney Blvd.
Butler Farm Rd.
Mercury Blvd.
Pembroke Ave.
Mallory St.
Fox Hill Rd.
Todds Lane
Kecoughtan Rd.
Victoria Blvd.
I-664
NSN-6
131
121
302
304
64

4.7 Naval Base Service

Naval Station Norfolk (NSN) Express and On-Base Circulator Service:

NSN-1 (currently known as Route 19): NSN/Silverleaf – No changes are proposed to this route's alignment. Service is expanded to reflect 10 peak a.m. and 10 peak p.m. direction trips.

NSN-2 (currently known as Route 22): NSN/Greenbrier – No changes are proposed to this route's alignment. Service is expanded to reflect 7 peak a.m. and 7 peak p.m. direction trips.

NSN-3: NSN/Portsmouth – This is a proposed new NSN Express route that would operate from a proposed new Chesapeake Square Mall park-and-ride lot and stop at Victory Crossing. Five peak a.m. and five peak p.m. peak direction trips are proposed.

NSN-4: NSN/S. Chesapeake – This is a proposed new NSN Express route that would operate from a proposed new park-and-ride lot located along South Battlefield Boulevard (south of Cedar Road). This route would follow the Great Bridge Bypass, I-464 and Hampton Boulevard to the NSN. Proposed frequencies are 3 peak a.m. and 3 peak p.m. direction trips.

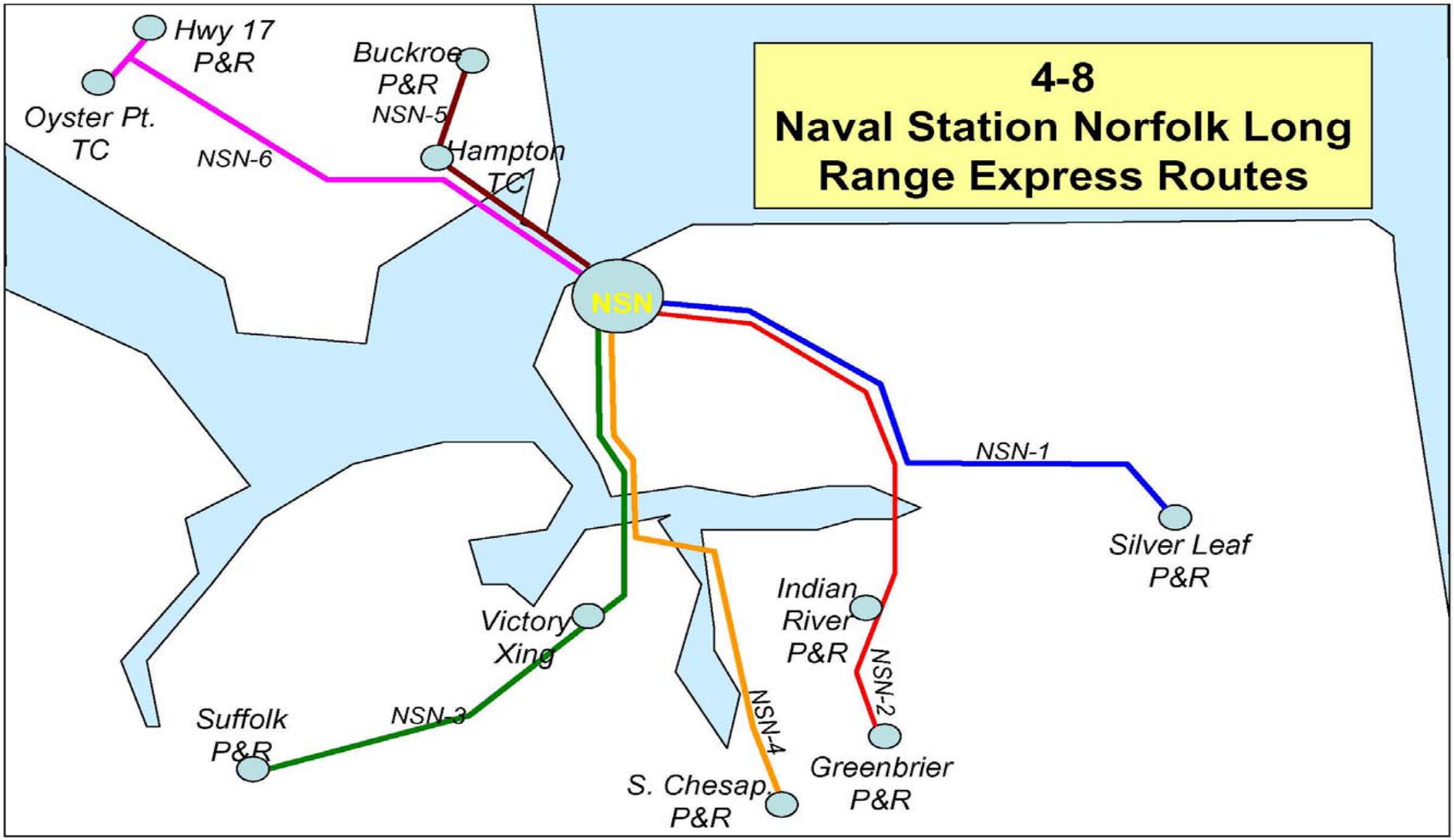
NSN-5: NSN/Hampton (currently known as Route 63a) – This route's alignment is modified to operate from the proposed Buckroe park-and-ride lot, and stop at the Hampton Transit Center before continuing to the NSN. Proposed frequencies are 3 peak a.m. and 3 peak p.m. direction trips.

NSN-6: NSN/Newport News (currently known as Route 63b) – This route would start from the Oyster Point transfer center, stop at the Hwy 17 park-and-ride lot before continuing to the NSN. This route would be extended in the Oyster Point area to serve the Thimble Shoals Boulevard Station. Proposed frequencies are 3 peak a.m. and 3 peak direction trips.
Fixed Guideway Station Served:

- Thimble Shoals Boulevard

NSN On-Base Circulator - The express services described above would connect to this circulator service in addition to a proposed Multimodal Center (east of Hampton Boulevard near D Avenue and adjacent to the Fleet Recreation Park or west of Hampton Boulevard north of Terminal Boulevard). The proposed NSN Circulator would operate from this Multi-Modal Center, and follow Hampton Boulevard to B Avenue. It would then make a loop following Hampton Boulevard, Gilbert Street, Bainbridge Avenue, Moffett Avenue, Dillingham Boulevard, Bacon Avenue, Hughes Drive, Decatur Avenue, 2nd Street and B Avenue, back to Hampton Boulevard. (5 peak/20 midday)

The Naval Base Service is shown in figure 4-8 and 4-9.


4-8
Naval Station Norfolk Long Range Express Routes
Hwy 17 P&R
Oyster Pt. TC
NSN-6
Buckroe P&R
NSN-5
Hampton TC
NSN
NSN-1
Silver Leaf P&R
Indian River P&R
NSN-2
Victory Xing
NSN-3
Suffolk P&R
NSN-4
S. Chesap. P&R
Greenbrier P&R

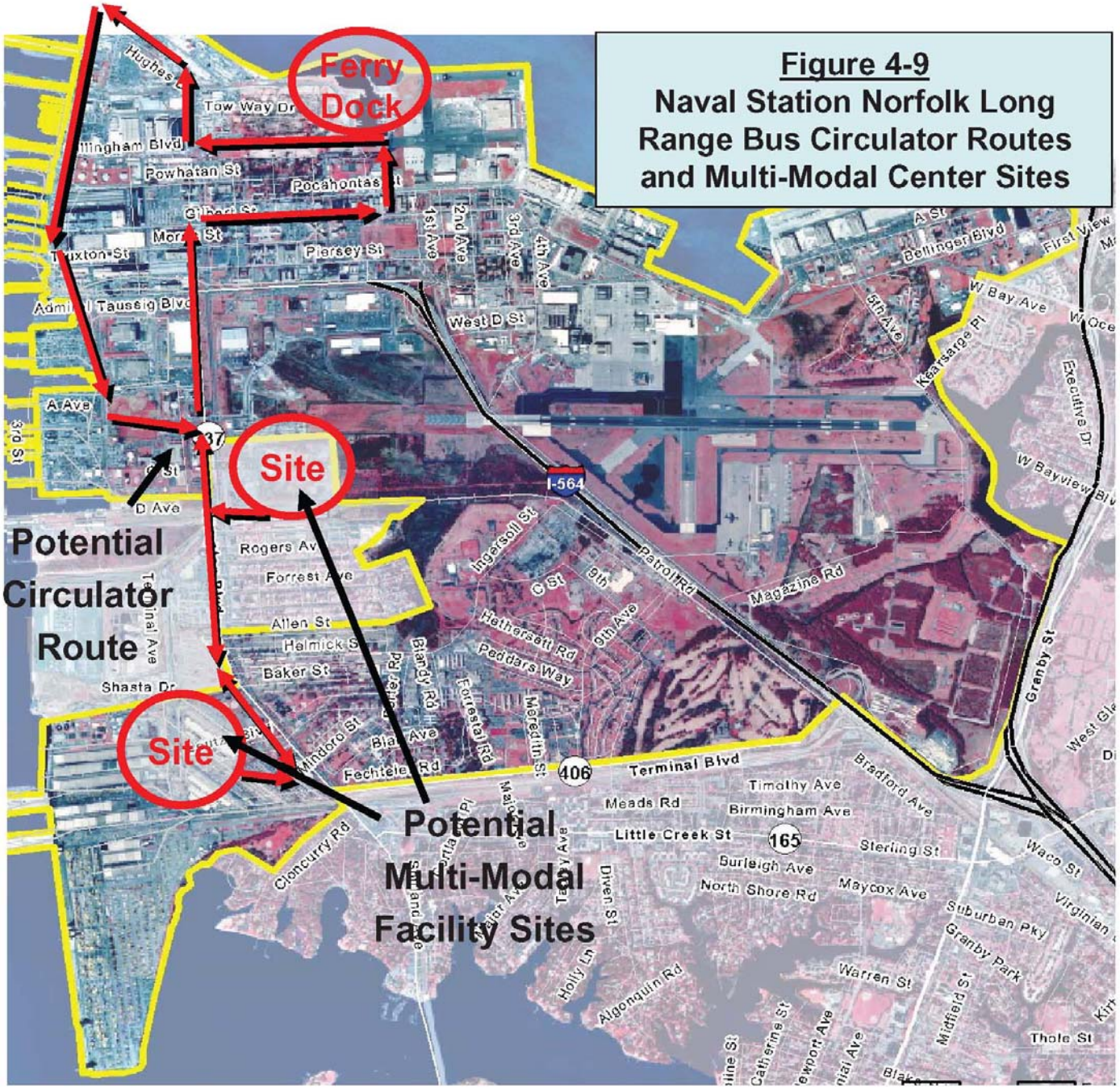


Figure 4-9
Naval Station Norfolk Long Range Bus Circulator Routes and Multi-Modal Center Sites
Ferry Dock
Site
Site
Potential Circulator Route
Potential Multi-Modal Facility Sites
Tow Way Dr
Powhatan St
Pocahontas St
Plersey St
West D St
A Ave
D Ave
Rogers Av
Forrest Ave
Allen St
Helmick St
Baker St
Shasta Dr
Terminal Blvd
Meads Rd
Little Creek St
Timothy Ave
Birmingham Ave
Burleigh Ave
North Shore Rd
Maycox Ave
Sterling St
Suburban Pky
Granby Park
Warren St
Thole St
Bellinger Blvd
W Bay Ave
Kearsarge Pl
Executive Dr
W Bayview Blvd
Granby St
Magazine Rd
Patrol Rd
Ingersoll St
C St
9th
9th Ave
Hathersett Rd
Paddars Way
Biandy Rd
Forrestal Rd
Meredith St
Fechteler Rd
Blair Ave
Mindoro St
Cloncurry Rd
Algonquin Rd
Holly Ln
Catherine St
Midfield St
Bradford Ave
Waco St
Virginian
I-564
406
165
37

4.8 Regional/Express Service

R-1 – Newport News - This is a proposed new regional route that operates between the Newport News 35th Street Transit Center and the Kempsville Center LRT station in Norfolk via I-664, I-64 and I-264, with stops at the Churchland Shopping Center and the Sams Club in Chesapeake. (60 peak/60 midday)

Route R-2 – Newport News/Wards Corner - This is a proposed new regional route that operates between the Newport News 35th Street Transit Center and the Wards Corner rail station in Norfolk, with a stop at the Hampton Transit Center. (60 peak/60 midday)
Rail station connections: Wards Corner

Route R-3 – Churchland/EVMC - This is a proposed new express route that operates from a new park-and-ride lot assumed near Churchland Shopping Center, and the EVMC LRT station. Four a.m. and four p.m. peak period, peak direction trips are assumed.
Rail station connections: EVMC

Route R-4 – Chesapeake/Norfolk CBD - This is a proposed new express route that operates from a new park-and-ride lot assumed near Sams Club on Battlefield Boulevard, and downtown Norfolk. Four a.m. and four p.m. peak period, peak direction trips are assumed.
Rail station connections: Downtown Norfolk

Route R-5 – Pacific& 19th/Newtown Road - This is a proposed new express route that operates from Pacific/19th at the Oceanfront to the Newtown LRT station. This route replaces the existing Route 24. (30 peak/60 midday)
Rail station connections: Newtown Road

Route R-6 – Williamsburg/Hampton - This is a proposed new express route that operates between Williamsburg and downtown Hampton. This route would start from a new park-and-ride lot near the Williamsburg Shopping Center, travel south to a second park-and-ride lot near 199 and I-64, stop at the Patrick Henry mall, and continue south on I-64 to the Hampton Transit Center. (30 peak/60 midday)

Route R-7 – Williamsburg/Newport News - This is a proposed new express route that operates between Williamsburg and downtown Newport News. This route would start from a new park-and-ride lot near the Williamsburg Shopping Center, travel south to a second park-and-ride lot near 199 and I-64, stop at the Patrick Henry mall, and continue south on Jefferson Avenue with limited stop service to the Newport News Transit Center and the Newport News City Hall. (30 peak/60 midday)

These routes are shown in figure 4-10.

Figure 4-10
Southside Area Long Range
Regional/Express Routes

4.9 Crossroads Service

The routes referenced in sections 4.9 and 4.10 are illustrated in figure 4-11.

Route 63a: West Crossroads – This is a proposed new route that begins at the Suffolk Magnolia park-and-ride lot, stops at the Chesapeake Square Mall, the NNTC, and ends at the Hampton TC. (60peak/60 midday)

Route 63b: East Crossroads – This is a proposed new route that begins at the Newport News Transit Center, stops at the Hampton Transit Center, Wards Corner and ends at the Newtown Road LRT station. (60 peak/60 midday)

Route 63c: South Crossroads – This is a proposed new route that begins at the Newtown Road LRT station, stops at the Robert Hall transfer area, and ends at the Chesapeake Square Mall. Proposed frequencies are 60-minutes all-day.

4.10 Norfolk Express/RAPID Routes

Route Norfolk Exp.-1: Suffolk/Portsmouth/Norfolk – This is a proposed new express route that would start at the Suffolk Magnolia park-and-ride lot, and stop at the Victory Crossing transit center before continuing into downtown Norfolk. Three peak direction trips and one reverse peak direction trip is proposed in each peak period.

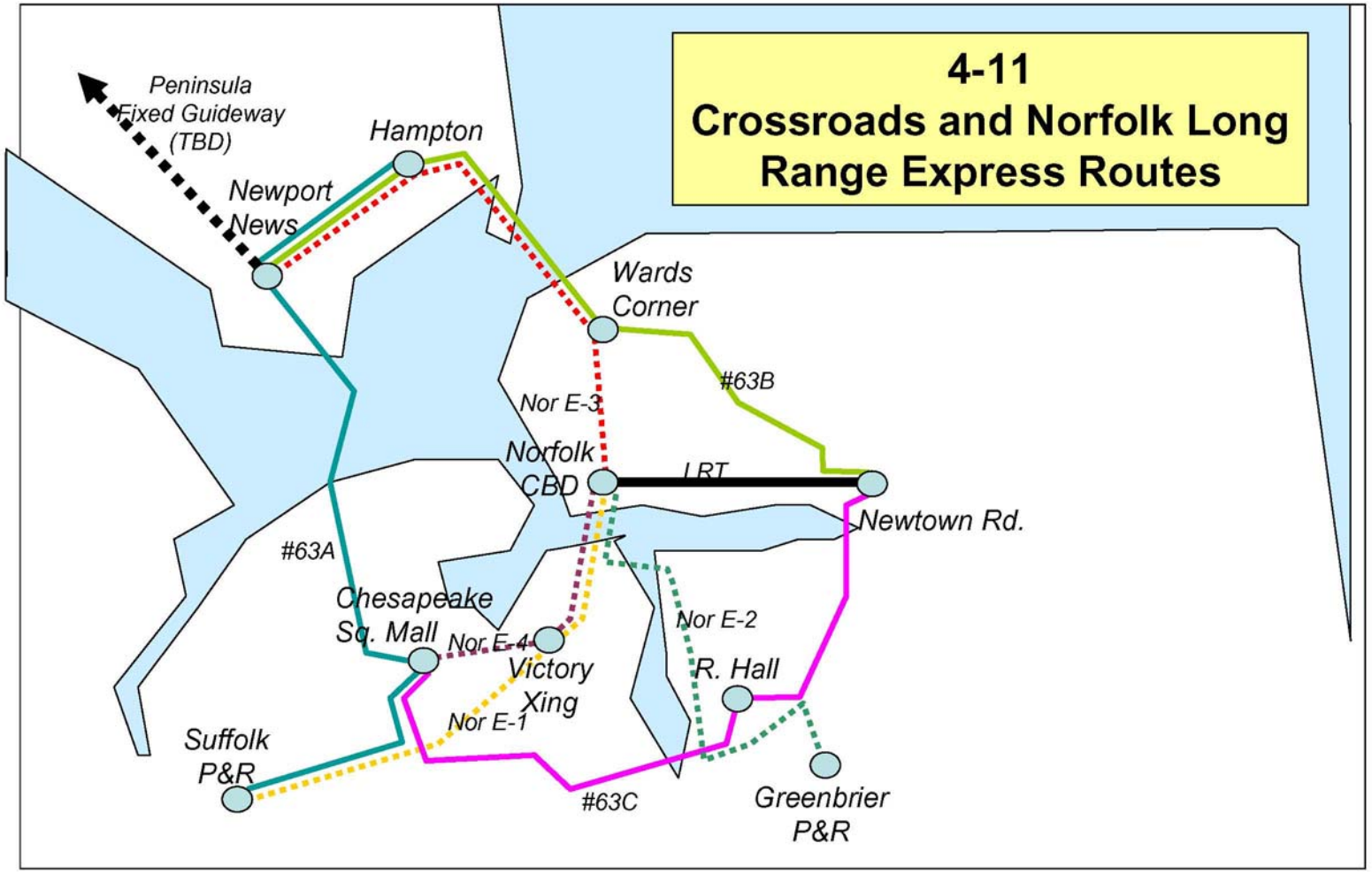
Route Norfolk Exp.-2: South Chesapeake/Norfolk – This is a proposed new express route that would start at the Greenbrier Mall park-and-ride lot and operate non-stop to downtown Norfolk. Three peak direction trips and one reverse peak direction trip is proposed in each peak period.

Route Norfolk Exp.-3: Peninsula/Norfolk – This is a proposed new express route that's similar to the existing 261 Crossroads service. This route would operate from the Newport News Transit Center, through the Hampton Transit Center, through Wards Corner and into downtown Norfolk. Five peak direction and two reverse peak direction trips are proposed each peak period.

Route Norfolk Exp.- 4: Chesapeake/Norfolk – This is a proposed new express route that would start at a proposed new park-and-ride lot near the Chesapeake Square Mall and stop at the Victory Crossing transit center before continuing into downtown Norfolk. Three peak direction trips and one reverse peak direction trip is proposed in each peak period.

Route 60: HRT RAPID Express Bus Service - This is a proposed new route that will start in Downtown Norfolk (Charlotte and Monticello) and proceed to Harbor Park, Charlotte and Bank, Silverleaf park-and-ride, end at 19th and Pacific near the Virginia Beach Oceanfront. (20 peak/20 midday from Downtown Norfolk to 19th and Pacific) (10 peak/10 midday from Downtown Norfolk to Silverleaf)

Route 62: HRT RAPID Express Bus Service - This is a proposed new route that will start in Downtown Norfolk (Charlotte and Monticello) with stops at Harbor Park, Charlotte and Bank, Portsmouth (Victory Crossing), Magnolia park-and-ride, and end in Downtown Suffolk. (15 peak/15 midday)


4-11
Crossroads and Norfolk Long Range Express Routes
Peninsula Fixed Guideway (TBD)
Hampton
Newport News
Wards Corner
#63B
Nor E-3
Norfolk CBD
LRT
Newtown Rd.
#63A
Chesapeake Sq. Mall
Nor E-4
Victory Xing
Nor E-2
R. Hall
Nor E-1
Suffolk P&R
#63C
Greenbrier P&R

4.10 Suffolk Service

HRT buses also provide service in Suffolk. HRT contractually provides buses and bus maintenance to the City of Suffolk. Bus service is then operated within Suffolk by City-paid drivers. Proposed service plans are:

- ***Suffolk Route 1, 2, 3, 4 (currently known as Route 71, 72, 73, 74)*** - It is proposed that these 4 Suffolk local routes be re-labeled with no changes to service or frequency. (60 peak/60 midday)

- ***Suffolk Route 5*** – A new local route is proposed to connect downtown Suffolk with the growing North Suffolk area (around Harbour Park Drive). (60 peak/60 midday)

- ***Suffolk Route 6*** – A new local route is proposed to connect downtown Suffolk and the Magnolia park-and-ride lot with all day service to Victory Crossing in Portsmouth. (60 peak/60 midday)

- ***Saturday Service*** – It is also proposed that Suffolk local route service be expanded to include Saturday service.

Figure 4-12 shows only current service in Suffolk

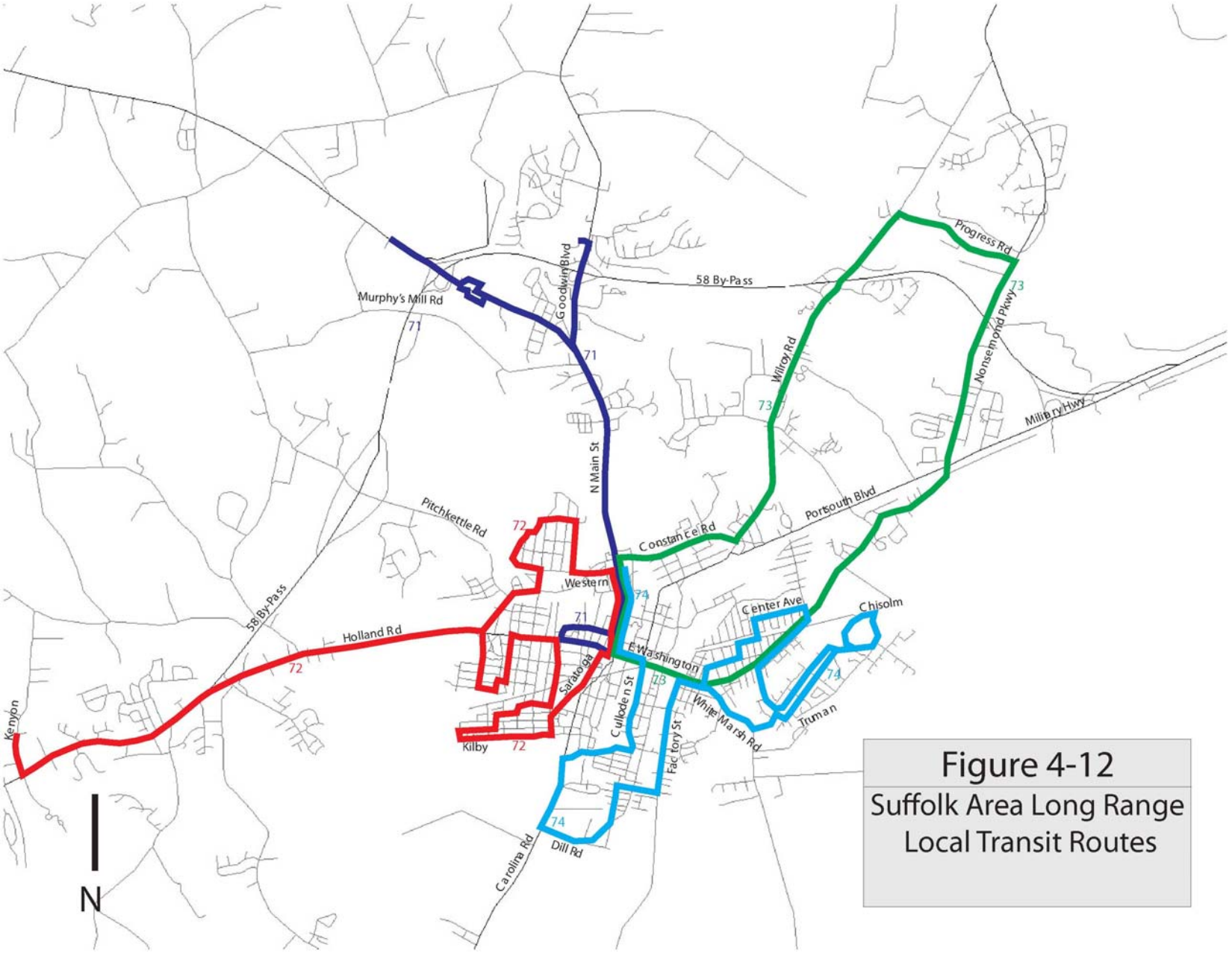


Figure 4-12

Suffolk Area Long Range Local Transit Routes

4.11 Bus Facility Requirements

Expanded bus service, as described above, will require expanded bus facilities. Following is a listing of bus-only transit centers, park-and-ride lots and maintenance facilities that are assumed in the 2030 regional Transit Plan. (Several of the facilities listed below currently exist but will be upgraded). *(*denotes a center that is already in place.)*

Northside Transit Facilities

Transit Center Facilities

- Newport News Transit Center*
- Hampton Transit Center*
- Coliseum Central
- Oyster Point
- The NET Center*
- Patrick Henry Mall
- Thomas Nelson Community College
- Buckroe Shopping Center

Park-and-Ride Lots

- Highway 238/I-64*
- Old Courthouse Road*
- Highway 17/I-64
- Buckroe Shopping Center

Southside Transit Facilities

Transit Center Facilities

- Charlotte/Monticello
- Wards Corner*
- County Street/Court Street
- Victory Crossing
- 20th/Seaboard
- Evelyn T. Butts/Little Creek
- Military Circle Mall
- Chesapeake Square Mall
- Churchland Shopping Center
- Robert Hall Boulevard
- TCC-Virginia Beach
- Pleasure House/Shore Drive
- Pacific/19th Street*
- Virginia Beach Town Center
- Downtown Suffolk

Park-and-Ride Lots

- Silverleaf in Virginia Beach*
- Indian River Road*
- Greenbrier Mall
- South Battlefield Boulevard
- Chesapeake Square Mall
- Suffolk Magnolia*

Bus Maintenance Facilities

- Peninsula (site to be determined)
- Virginia Beach Trolley
- 15th/18th Street* (replacements in sites to be determined)

Bus Maintenance Facilities

Proposed bus maintenance facilities include: a new maintenance facility on the Peninsula, replacement of the Virginia Beach trolley bus facility, and replacement of the Norfolk 15th/18th Street facility. Prior cost estimates and projected time frames for these new facilities are as follows:

- Virginia Beach Trolley Facility – Approximately $6.5 million. This plan assumes this facility to be in place by 2012.
- Southside Maintenance Facility – Approximately $45 million. Prior HRT financial planning efforts have assumed this facility to be in place by 2011 at a yet un-determined site.
- Peninsula Maintenance Facility – Approximately $12 million. Prior HRT financial planning efforts have assumed this facility to be in place by 2015 at a yet un-determined site.

Transit Center/Park & Ride Lots

This plan includes several new transit centers, transfer areas and park-and-ride lots. Existing passenger facilities are also assumed to be upgraded. Prior HRT financial planning efforts have assumed approximately $350,000 for each new park-and-ride lot and $1 million for new transit centers. An allocation of $250,000 has been assumed for transit centers and transfer areas that have been identified in this Plan for amenity improvements. Overall, approximately $9,000,000 has been assumed for new transit centers/transfer areas, improvements to existing transit centers/transfer areas, and new park-and-ride lots. Figure 4-13 presents projected capital costs for these facility improvements. This table does not yet include a cost estimate for a downtown Norfolk off-street transit center.

Figure 4-13
Transit Center/Park-and-Ride Lot Facility Improvements
Capital Cost Estimates

Phase	Facility	Cost	Phase Cost
Near-Term	Coliseum Central Tr. Ctr.	$1,000,000	
	Hwy 17/I-64 p&r	$350,000	
	Buckroe p&r	$350,000	
	Charlotte/Monticello Tr. Ctr.	$250,000	
	County St./Court St. Tr. Ctr.	$250,000	**$2,200,000**
Short-Range	Oyster Point Tr. Ctr.	$1,000,000	
	Victory Xing Tr. Ctr.	$1,000,000	
	P. Henry Mall Tr. Area	$250,000	
	Buckroe Tr. Area	$250,000	
	Hwy 238/I-64 p&r (Exp.)	$350,000	
	S. Battlefield p&r	$350,000	
	Ches. Sq. Mall p&r	$350,000	**$3,550,000**
Long-Range	20th/Seaboard Tr. Ctr.	$1,000,000	
	TNCC Tr. Area	$250,000	
	E.T. Butts/L. Crk. Tr. Area	$250,000	
	Mil. Circle Mall Tr. Area	$250,000	
	Chesp. Sq. Mall Tr. Area	$250,000	
	Churchland Tr. Area	$250,000	
	R. Hall Blvd. Tr. Area	$250,000	
	TCC-VB Tr. Area	$250,000	
	Ples. Hse/Sh. Dr. Tr. Area	$250,000	
	Suffolk CBD Tr. Area	$250,000	**$3,250,000**

4.12 Bus Service Growth Levels

Overall, HRT service in the 2030 Regional Transit Plan (without any LRT service in the Peninsula) reflects a requirement of 437 buses. Annual revenue bus-hours of service for HRT are anticipated to grow by approximately 1.5 percent per year. As Williamsburg Area Transport prepares to merge with Colonial Williamsburg to become a regional authority, their service will require 45 buses.

5.0 OTHER TRANSIT SERVICES

In addition to LRT, fixed guideway, and fixed route bus service, the 2030 Regional Transit Plan addresses paratransit (Handi-Ride), residential service (school trips), Call Zone Services, vanpool (*Traffix*) and ferry boat service assumptions.

5.1 Paratransit

HRT's paratransit service is marketed as "Handi-Ride." This service is contracted through MV with the use of lift-equipped vans. Paratransit service is both ADA compliant and FTA mandated within ¼ mile of either side of existing fixed route service. Since many of the fixed route service improvements identified above are associated with frequency improvements along existing transit routes, it is anticipated that paratransit service requirements will grow at a slower rate than fixed route service.

5.2 Residential Service

Residential related bus service is assumed to remain at current service levels.

5.3 Call Zone Services (Call-and-Ride Districts)

There are many areas of the region that may still warrant transit service, but do not have the density or road network necessary to support fixed route service. Further, as the Hampton Road's population ages, it will become more difficult for some people to access transit stops that are located ¼ mile or more away at a nearby collector or arterial road. Therefore, this plan calls for the creation of several "Call Zone" service areas. Many transit agencies around the country are operating similar concepts as a means to serve low density residential areas. The service would work as follows: a person would call HRT in advance (e.g., a minimum of 2-hours) and schedule a pick-up within the designated call zone district. Pick-up points should be limited to through streets (i.e., not cul-de-sacs). Trip requests would then be "strung" together at the specified time to pick-up/discharge multiple trips. Passengers would be taken to a nearby transit facility to connect to the fixed route system. Drop-offs would work in a similar manner. Passengers would be taken from a nearby transit facility to a drop-off point near their final destination.

This flexible route service that is provided in these zones can be tailored to meet specific travel market needs based on time-of-day. For example, bus service within call zones can be targeted to/from nearby transit centers during the peak periods. During the lower-demand off-peak periods, these buses can be used to provide localized travel needs. For example, a passenger that resides within the specified zone may have a doctor's appointment within the same zone. This call zone service can be used to meet these types of specific localized travel needs.

This service would operate with small (25 foot) buses. One or two buses (depending on demand) would be assigned to each call zone district. Figures 4-2, 4-3, 4-4, and 5-1 show Call Zone Districts in relation to and location of the local service for each city where the service will operate. Proposed Call Zone Districts are:

Virginia Beach Call Zone #1 – This proposed district is in the Wesleyan Drive/Haygood Road area, between Baker Road and Independence Boulevard. Proposed transit facility pick-up/discharge locations are: the Newtown Road LRT Station, Pleasure House/Shore Drive transit center, and the Town Center Transfer Station/Facility.

Virginia Beach Call Zone #2 – This proposed district is in the Providence Road, area, between I-64 and Princess Anne Road. Proposed transit facility pick-up/discharge locations are: the Newtown Road LRT station, the Indian River park-and-ride lot, and TCC-Virginia Beach.

Virginia Beach Call Zone #3 – This proposed area is south of Dam Neck Road and east of General Booth Boulevard. Proposed transit facility pick-up/discharge locations are: the Virginia Beach Municipal Center, and the Birdneck Transfer Station/Facility.

Portsmouth Call Zone #1 – This proposed area is west of the M.L. King Freeway and north of High Street. Proposed transit facility pick-up/discharge locations are: Victory Crossing and downtown Portsmouth.

Portsmouth Call Zone #2 – This proposed area is south of High Street and west of Frederick Boulevard. Proposed transit facility pick-up/discharge locations are: Victory Crossing and downtown Portsmouth.

Chesapeake Call Zone #1 – This proposed area is south of Cedar Road and west of Battlefield Boulevard. Proposed transit facility pick-up/discharge locations are: the Battlefield Boulevard Wal-Mart and Robert Hall Boulevard.

Chesapeake Call Zone #2 – This proposed area is south of Mt. Pleasant Road and east of Battlefield Boulevard. Proposed transit facility pick-up/discharge locations are: the Battlefield Boulevard Wal-Mart and Robert Hall Boulevard.

Chesapeake Call Zone #3 – This proposed area is east of Taylor Road. Proposed transit facility pick-up/discharge locations are: the Chesapeake Square Mall and Churchland Shopping Center.

Newport News Call Zone #1 – This proposed area is generally north of Denbigh Boulevard and west of Warwick Boulevard. Patrick Henry Mall is the proposed transit facility pick-up/discharge location.

Newport News Call Zone #2 – This proposed area is west of Warwick Boulevard and north of the Mariner's Museum. The Oyster Point transit center is the proposed transit facility pick-up/discharge location.

Hampton Call Zone #1 – This proposed area is north of Fox Hill Road. The proposed transit facility pick-up/discharge location is the Hampton Transit Center.

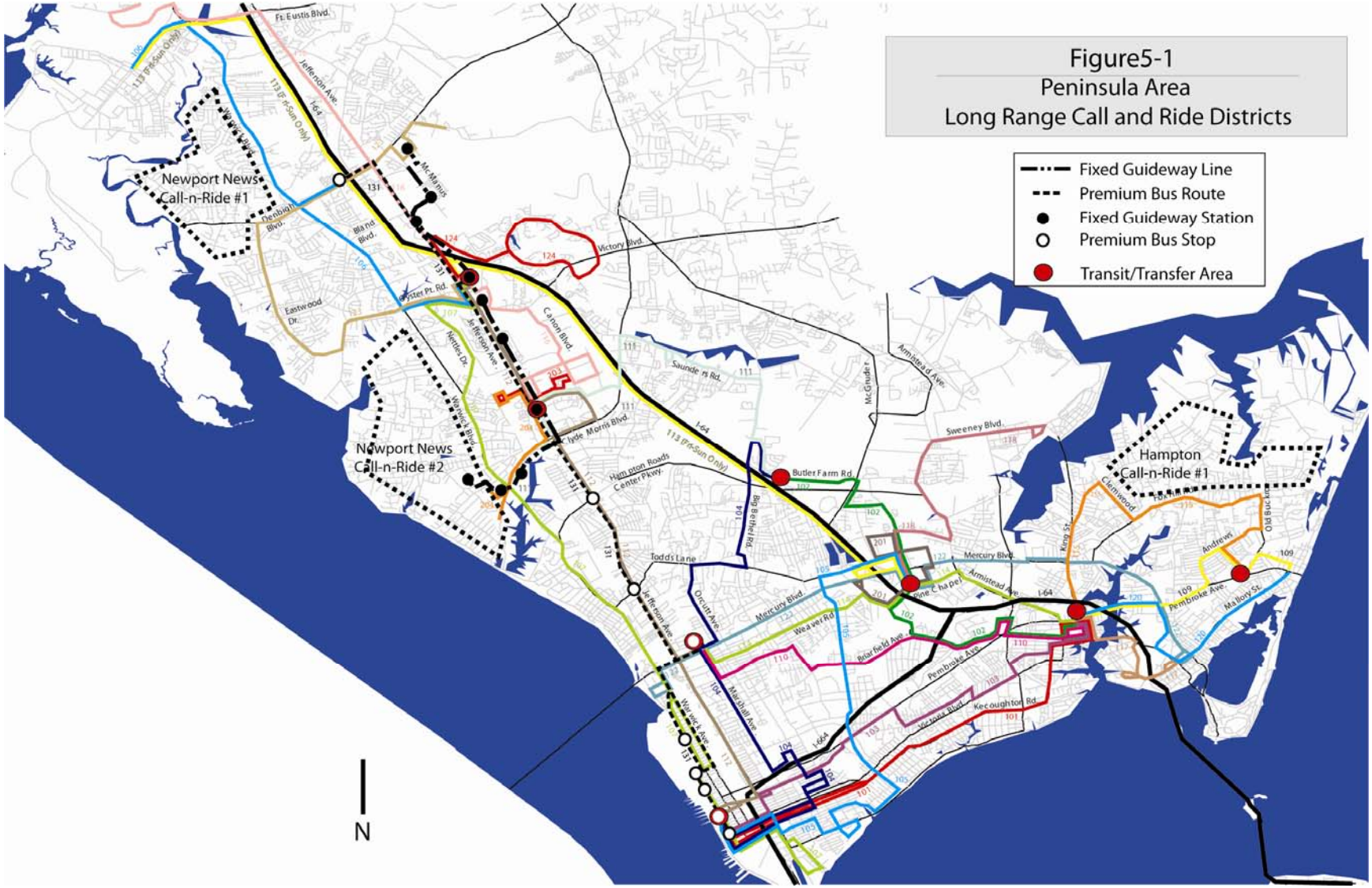


Figure5-1
Peninsula Area
Long Range Call and Ride Districts
Fixed Guideway Line
Premium Bus Route
Fixed Guideway Station
Premium Bus Stop
Transit/Transfer Area
Newport News
Call-n-Ride #1
Newport News
Call-n-Ride #2
Hampton
Call-n-Ride #1
Ft. Eustis Blvd.
Jefferson Ave.
I-64
Warwick Blvd.
Denbigh Blvd.
Blaine Blvd.
Oyster Pt. Rd.
Eastwood Dr.
Nettles Dr.
Canon Blvd.
Victory Blvd.
Saunders Rd.
Clyde Morris Blvd.
Hampton Roads Center Pkwy.
Butler Farm Rd.
McGuder
Armistead Ave.
Sweeney Blvd.
Big Bethel Rd
Todds Lane
Orcutt Ave.
Mercury Blvd.
Weaver Rd.
Bellefield Ave.
Pembroke Ave.
Victoria Blvd.
Kecoughtan Rd.
Marshall Ave.
Wesley St.
King St.
Clemwood
Andrews
Old Buck Rd.
Mallory St.
N

5.4 Vanpool

TRAFFIX is the brand associated with HRT's regional vanpool program. *TRAFFIX* promotes vanpooling in that it helps reduce traffic, pollution and commuting costs. HRT currently has a total of 55 vans in its fleet of which 37 are leased to various individuals and employers. For purposes of this plan, the *TRAFFIX* vanpool program is assumed to grow by an average 2 vanpools per year for a total of 48 additional vanpools.

5.5 Ferryboat

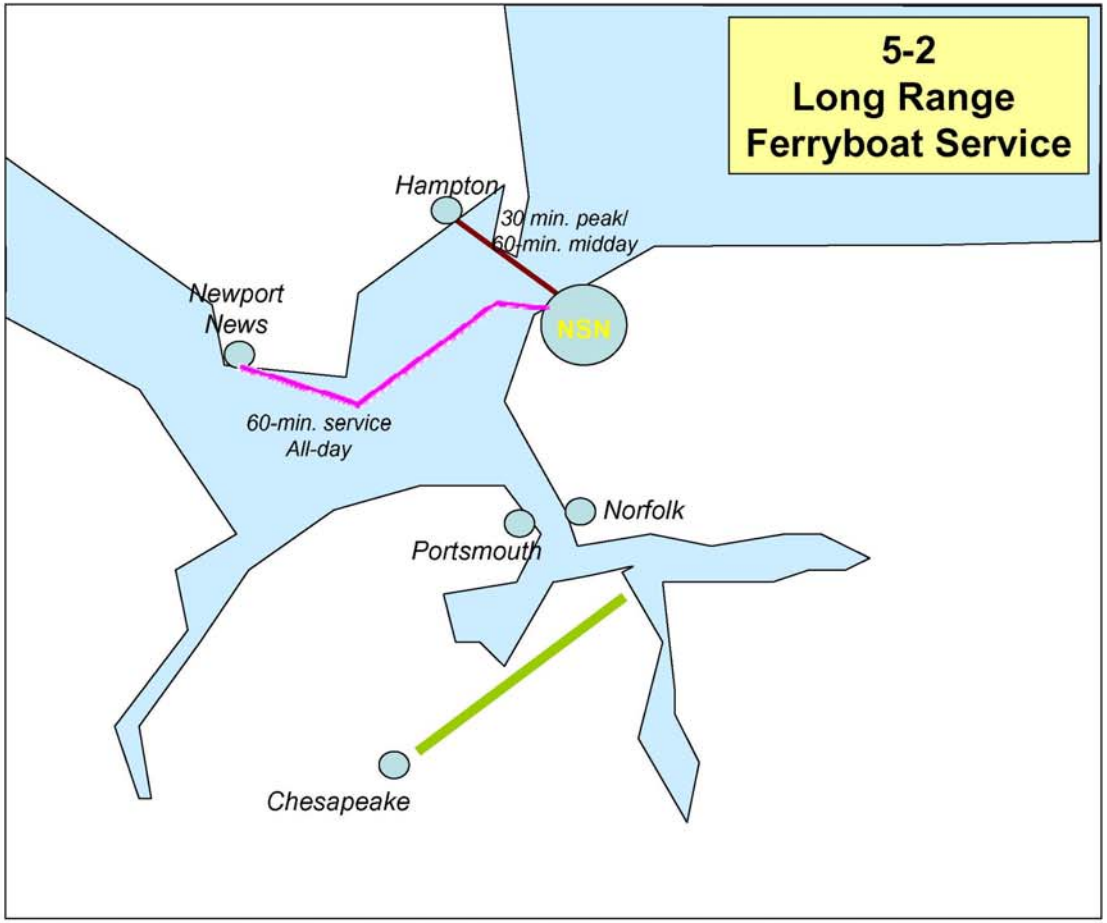
Expanded ferry service is an important component of HRT's regional transit network as a means to provide alternative mode service between the Peninsula and the Southside. HRT currently provides ferry service between downtown Norfolk (at the Waterside) and downtown Portsmouth (the North Landing and High Street) across the Elizabeth River. This service is provided year-round, and operates at 15 minute frequencies at peak times on weekends, and generally at 30 minute frequencies at other times. HRT has proposed two new "high speed" ferry routes:

- **Newport News Ferry Service –** This is a new proposed ferry route from downtown Newport News to Naval Station Norfolk. The estimated ferry travel time 16 minutes. This time is an estimate due to security into/out of Naval Station Norfolk.

- **Hampton Ferry Service –** This is a new proposed ferry route from downtown Hampton to the Naval Station Norfolk. This route would operate at 30 minute frequencies in the peak periods and 60 minute frequencies in the midday. The estimated ferry travel time from Hampton to Naval Station Norfolk is 22 minutes. Again, this time is an estimate due to security into/out of Naval Station Norfolk.

- **Ferry Operations/Facilities -** The service plan described above requires 5 fleet vehicles for operation. In addition to replacing the 3 current Portsmouth/Norfolk vessels, it is anticipated that there will be a purchase of 5 additional vessels to accommodate the recommended service. Thus, a total of 8 new vehicles are required for purchase. Dock facilities and adjacent bus facilities are also required at Newport News, Hampton and at Naval Station Norfolk. Ferry service is assumed to be at the same levels as in 2001.

- In addition, Chesapeake is looking to add new ferry service to South Norfolk to for a new planned development.


5-2
Long Range
Ferryboat Service
Hampton
30 min. peak/
60-min. midday
Newport
News
NSN
60-min. service
All-day
Norfolk
Portsmouth
Chesapeake

FINANCIAL PLAN

6.0 INTRODUCTION

This report presents a financial overview of the sources and uses of funds related to the 2030 Long Range Plan for Hampton Roads Transit (HRT). It has been prepared by HRT and its' consultants for the Hampton Roads Planning District Commission (HRPDC) for use in long-range transportation planning efforts. This plan is consistent with the assumptions in the 2030 Regional Transit Plan for Hampton Roads prepared by Connectics Transportation Group, and should be used in conjunction with it.

The basic structure of this document is to set forth the primary projects considered by HRT for the long-range plan. These projects are described in groups of similar projects, along with the funding sources recommended for the projects. Relevant assumptions are discussed throughout the document as necessary.

All financial amounts discussed in this report are in year of expenditure dollars and, unless otherwise stated, have their cost or revenue tied to the projected Consumer Price Index for purposes of estimating inflation.

A summary table indicating all sources and uses of funds is provided in the Section 9.0 of this document.

7.0 USES OF FUNDS

The 24-year financial plan for HRT totals $3.8 billion, divided between operating expenditures ($2.7 billion) and capital expenditures ($1.1 billion). The overall plan is summarized in the table below, and the rest of this section provides additional detail on each major project.

Total Uses of Funds FY07-FY30 (in millions)		**Total**
Operating Expenditures	$	2,650.6
Capital Expansion Projects	$	512.1
Bus Purchases	$	283.4
Capital Improvement Program	$	258.9
Major Facility Investments	$	80.2
CAD/AVL	$	6.1
Total Uses	**$**	**3,791.3**

Operating Expenditures

The ultimate service plan for 2030 is discussed in great detail in the companion report – *2030 Regional Transit Plan for Hampton Roads*. The same service is assumed by 2030 in this financial plan.

Included in the service plan is the opening of significant rail and ferry service in the region. The financial plan is based on service beginning in the following years for each corridor:

- Norfolk Light Rail Transit (LRT) Minimum Operable Segment (MOS) – 2010
- Ferry Expansion from Newport News to Naval Station Norfolk – 2013
- Peninsula Fixed Guideway (7.4 mile starter segment) – 2015

The financial plan forecasts substantial growth in bus service during the build-up of the rail transit lines during the first eight years of the plan. It also assumes that total operating costs grow in line with the Consumer Price Index. The operating costs developed for this plan do not include the expense of HRT staff and their expenses related to working on major capital projects; rather, these expenses and their reimbursement are included in each relevant capital project described below.

Capital Expansion Projects

A major rail transit project, a fixed guideway project, ferry expansion, and one light rail preliminary engineering study are proposed for the plan period, with total expenses of $512 million. The proposed expenses are allocated between the projects as follows:

- Norfolk MOS (remaining costs) $228 million
- Ferry Expansion $ 18 million
- Peninsula MOS $250 million
- PE – Naval Base LRT $ 16 million

Each of these projects are planned to receive a combination of STP and Federal Discretionary fund grants (and associated state and local matching funds) during the early stages of the project. These stages include the Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) stage and the Preliminary Engineering/Final Environmental Impact Statement stage (PE/FEIS). The Norfolk MOS has already received funds for the two stages, and the Peninsula MOS has received AA/DEIS funding.

Subsequent stages of final design and construction would be handled by utilizing Full Funding Grant Agreements under the terms of the New Starts program, in which the federal government would generally provide 50% of the funds required for the remaining portions of the project.

The plan forecasts $17.9 million of investment ferry projects. These projects more specifically involve the purchase of 5 additional ferries for use in new ferry service from Newport News to Naval Station Norfolk in addition to the purchase of 3 replacement ferries. The ferry expansion would be funded through a combination of Federal 5307 Formula, State, and Local funds.

The Regional Transit Plan provides proposed route alignments and operating details related to the three expansion projects. The Peninsula MOS has not yet been selected, but when it is, it will represent a starter portion of the Locally Preferred Alignment (LPA).

Bus Purchases

$283.4 million is designated for the purchase of new and replacement buses. This program is designed both to gradually reduce the average fleet age (replacing an average of about 20 buses per year, or a total of 487 over the plan period), and also to provide the additional buses needed (a total of 105 over the plan period). The price of bus purchases includes the additional features, such as ADA lifts, fareboxes and radio equipment that are provided for each bus. The price rises with the Consumer Price Index over the plan period.

HRT forecasts its 2030 fleet at 376 peak buses, and 451 total buses, an increase of 35 percent over the current fleet size. The spare ratio is calculated at 20%.

Capital Improvement Program

The plan forecasts spending $258.9 million on a number of on-going projects, many of which are part of the current Transportation Improvement Program (TIP). These projects include, but are not limited to:

- ADA Paratransit-Related Projects, including van purchases
- Transfer Center spending, including improvements to the existing Hampton and Newport News Information Centers, and development of six new transit centers and eleven transit areas.
- Five new Park and Ride Facilities
- ITS Integration and Computer Software/Hardware funding
- Facility Improvements at existing facilities, including Victoria Blvd. in Hampton, and a new operations and maintenance facility on the Southside.
- Transit Enhancement funding, in line with grant requirements
- Equipment, including shop tools, office furniture, safety, and security equipment
- Fare Collection Equipment, in addition to that purchased for new buses
- Funding for TRAFFIX, including the purchase of new vans to allow an increased number of vanpools in the region
- Support Vehicles
- EMS
- Bus Leases
- Rail Modernization Expenses
- Environmental Management System

Major Facility Investment

The plan forecasts spending $80.2 million on three major facilities (replacement of the Southside Maintenance Facility at 15th Street in Norfolk, development of a Bus Maintenance Facility on the Peninsula, and replacement of the Virginia Beach Trolley Maintenance Facility).

Computer Aided Dispatch/Advanced Vehicle Locator Investment (CAD/AVL)

The plan forecasts spending $7.9 million to advance the CAD/AVL project, which will assist HRT is managing its operations more effectively. Some of these expenses have already been met; therefore, the portion of the CAD/AVL project included in the long range plan totals $6.1 million.

8.0 SOURCES OF FUNDS

The 24-year financial plan for HRT utilizes $3.8 billion in total revenues and funding, as summarized in the table below:

Total Sources of Funds FY07-FY30 (in millions)		**Total**
Passenger/Agency Revenues	$	657.6
Federal Funds	$	1,116.8
State Funds	$	664.1
STP/CMAQ	$	348.0
Local General Funds	$	821.3
Local New Source	$	183.5
Total Sources	**$**	**3,791.3**

Additional detail on each of these categories is provided in the remaining pages of the report.

Passenger/Agency Revenues

The plan forecasts $658 million will be contributed by passenger fares, as well as small amounts of agency revenue developed from sources such as charters, advertising, leases and interest income. Farebox revenue is modeled to grow with ridership, and fares are periodically adjusted (every five years) in a manner linked to the CPI. The farebox recovery ration fluctuates between 22% and 28% during the duration of the plan.

Federal Funds

The plan forecasts $1.1 billion will be available through a variety of federal sources. The detailed programs include:

Total Sources of Federal Funds FY07-FY30 (in millions)		**Total**
Federal Formula Funds		
Section 5307 Used for Operations	*$*	*395.3*
Section 5307 Used for CIP	*$*	*150.4*
Section 5309 Fixed Guideway Modernization - Operations	*$*	*80.1*
Section 5309 Fixed Guideway Modernization - CIP	*$*	*3.4*
Other Federal Reimbursements for Operations	$	139.0
Federal New Starts Funds	$	253.0
Federal Discretionary Funds	$	95.6
Total Sources	**$**	**1,116.8**

The formula funds originate in two major programs – Section 5307 and Section 5309. This plan has assumed continuation of the existing federal funding programs under existing formula conditions, and growth in the total amounts available consistent with both inflation and national growth in transit service.

A portion of the Section 5307 funding is used for operating expenses, such as ADA operations (HRT uses the maximum 10% of its 5307 grant) and preventive maintenance (PM). The PM funding currently utilizes 65% of the total 5307 funds available. This

proportion remains fairly constant for the future, even though eligible PM expenses will increase at a faster rate with the introduction of rail and ferry transit projects.

Federal New Starts funds are used for 50% to 55% of the funding for final design and construction of each of the 2 major rail transit projects. These funds are matched by 32% state and 68% local funding, as described below.

Finally, federal discretionary funds (through 5309 Bus Allocations and New Starts Allocations not included in the Full Funding Grant Agreements) are used for a combination of bus purchases, planning studies for the pre-Full Funding Grant Agreement phase of rail transit projects and for construction of major facilities.

Federal STP/CMAQ Funding

The plan forecasts $348 million available for transit under the federal STP and CMAQ programs. The state and local matching funds for the STP and CMAQ grants are included in the state and local funding sections described below. The funds are divided as follows:

Total Sources of STP/CMAQ Funds FY07-FY30 (in millions)		**Total**
STP Funds		
Used for Traffic Demand Management (TDM)	*$*	*32.9*
Used for Capital Program	*$*	*265.5*
CMAQ Funds		
Used for Demonstration Projects (Operating)	*$*	*36.7*
Used for Capital Funds	*$*	*12.9*
Total Sources	**$**	**348.0**

The STP funds are calculated at 34% of the funds forecast by HRPDC as available to the entire region. This is consistent with current allocation practice. HRPDC has provided forecasts through FY10, after which the program is assumed to grow in a manner consistent with the CPI. HRT has assumed that $1 million in current year dollars will be designated for TDM activities (the $33 million in the table above adjusts for inflation). The balance will be used for major capital projects described above.

The CMAQ funds used for operations are calculated at approximately 10% of the funds forecast by HRPDC as available to the entire region for years of significant service expansion (2007 through 2017). This is consistent with current allocation practice. HRPDC has provided forecasts through FY10, after which the program is assumed to grow in a manner consistent with the CPI. It is assumed that additional CMAQ funds will be available to fund 50% of the new fixed guideway service (ferry expansion and Peninsula MOS) operating expenses (in 2006$) for the first 3 years of operation. During periods of minimal service expansion (2018 through 2030), the CMAQ funds used for operations are closer to 1% of the CMAQ funds available to the region.

State funds provide 100% of the non-federal share of above projects is assumed in the total dollar figures provided in the table above. This results in an 80% federal, 20% state funding relationship for the majority of the projects. The only exceptions are the funds used for CMAQ Demonstration Projects. These projects are funded with no state funds, and the 20% non-federal share is provided by the localities receiving service.

State Funds

The plan forecasts $664 million will be available through two major state sources. The detailed programs include:

Total Sources of State Funds FY07-FY30 (in millions)		**Total**
State Operating Funds	$	490.9
State Capital Matching Funds (includes STP Match)	$	173.2
Total Sources	**$**	**664.1**

This plan has assumed continuation of the existing state funding programs under existing formula conditions, and growth in the total amounts available consistent with both inflation and statewide growth in transit service. The plan will be revised as changes in the state funding program develop.

State operating assistance is estimated at 20% of total operating expenses (excluding depreciation), which is similar to the amount available in HRT's FY06 budget. This relationship is assumed to continue throughout the plan period.

State capital matching funds are assumed to be available to fully provide the non-federal share of discretionary grants (Section 5309 Bus Allocations and New Starts Allocations not included in Full Funding Grant Agreements). In addition, state funds have been assumed to provide 32% of total non-federal share of project costs for rail and ferry transit expansion projects in final design and construction. A 14% share of total project cost is also provided for the CAD/AVL project. Finally, the state is assumed to continue provision of an average of 32% of the non-federal share of formula-funded capital projects in the CIP (excluding non-eligible projects, such as planning studies).

Local General Funds

The seven cities that currently support HRT with subsidies from their municipal general funds will continue to do so in the future. These local funds are needed to provide for operating subsidies, as well as funds to provide the capital match on various projects that are not 100% funded by state and local sources.

This plan has assumed that continued contributions will come from general fund sources, but that the growth in this funding will be limited to the growth in population and the CPI (and the addition of large expansion projects such as the Peninsula MOS). The total amount generated by such an approach is estimated to be $821.3 million over the plan period.

However, operating and capital match requirements for the plan described in this document exceed that available from a limited general fund contribution. Thus, additional sources of local funding are described in the section below.

Local Funds From New Sources

The plan described in this document needs a balance of $183.5 million to provide the capital and operating needs not met from other sources. This plan assumes that these

needs could be met from a combination of new revenue sources, including but not limited to a fuel sales tax, a general sales tax and a vehicle registration fee.

The total amount needed from new sources of local funds would increase by an additional amount in the likely scenario that the 32% local match needed for capital projects such as rail and bus rapid transit, and the CAD/AVL project were provided utilizing municipal bonds. In these instances, the local funds could be readily provided through the regional revenue sources indicated above.

9.0 SUMMARY TABLE

A summary table providing the detailed sources and uses discussed in the document above is attached.

Summary of Sources and Uses by Project

Project	Total Project Cost	Passenger/ Agency Revenues	FTA Funds	Federal STP Funds	Federal CMAQ Funds	State Funds	Local Funds	Total Funds/ Revenues
Operations	**$ 2,651**	$ 658	$ 614	$ 33	$ 37	$ 491	$ 818	**$ 2,651**
Capital								
Capital Expansion								
Norfolk MOS (remaining costs)	**$ 228**		$ 129	$ 32		$ 28	$ 39	**$ 228**
Ferry Expansion	**$ 18**		$ 12			$ 2	$ 4	**$ 18**
Peninsula MOS	**$ 250**		$ 125	$ 39		$ 37	$ 49	**$ 250**
PE-Naval Base	**$ 16**			$ 13		$ 3		**$ 16**
Bus Purchases	**$ 283**		$ 22	$ 181	$ 13	$ 38	$ 30	**$ 283**
Capital Improvement Program	**$ 259**		$ 154			$ 48	$ 58	**$ 259**
Major Facility Investments	**$ 80**		$ 56			$ 17	$ 7	**$ 80**
CAD/AVL	**$ 6**		$ 5			$ 1	$ 0	**$ 6**
Total	**$ 3,791**	**$ 658**	**$ 1,117**	**$ 298**	**$ 50**	**$ 664**	**$ 1,005**	**$ 3,791**

Notes: All numbers are in millions.
STP and CMAQ Funds include the federal portion only. The state/local matches are included in the State or Local Funds columns.
Totals may not sum due to rounding.