



## **Review of Principal Arterial Routes on the National Highway System For MAP-21**

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**October 17, 2012**

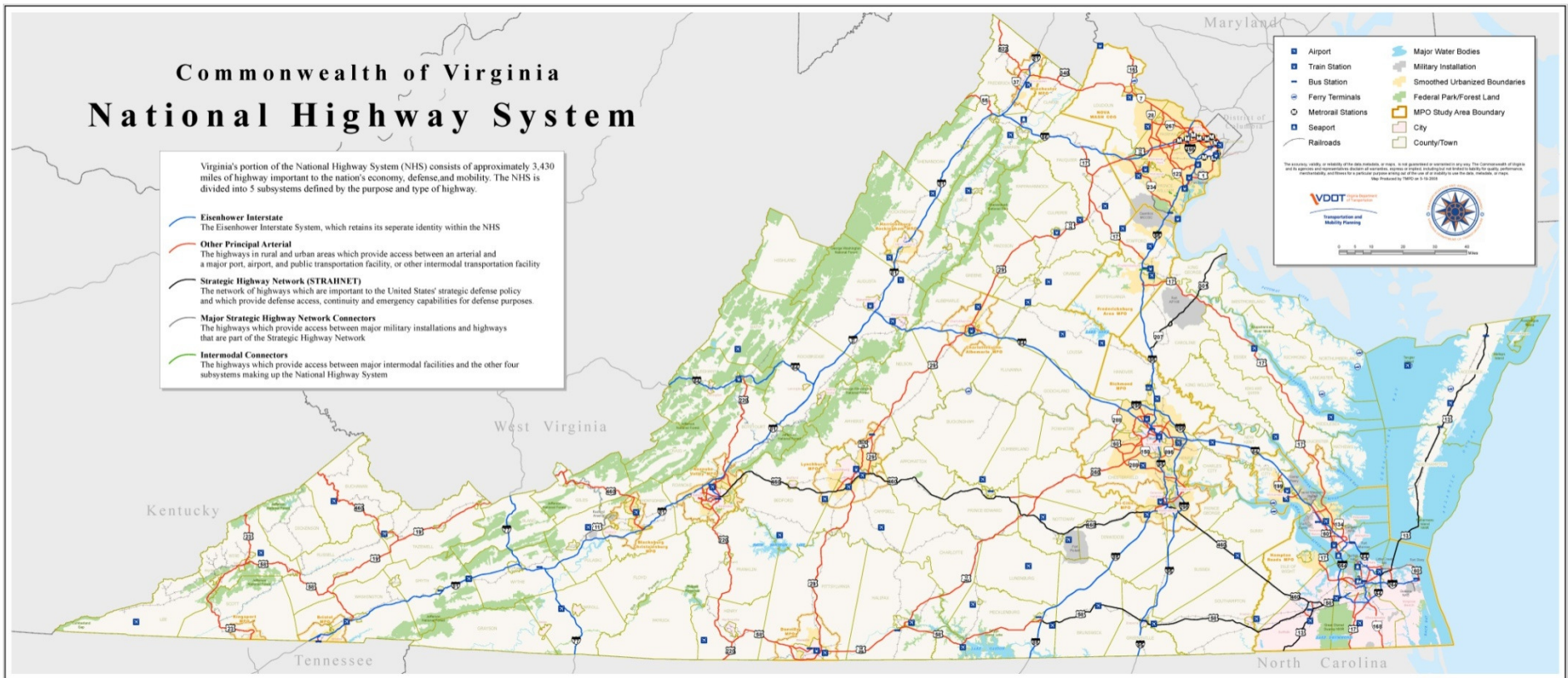
## Background

- This information is a follow-up to my discussion at the September CTB meeting. This is for informational purposes only and does not require CTB action.
- National Highway System (NHS) is comprised of roads important to the nation's economy, defense and mobility including the Interstate.
- The NHS was capped at 160,000 miles of which Virginia has 3,441. With MAP-21 the cap is eliminated which allows for an expansion of the NHS by adding existing principal arterials to the NHS effective October 1, 2012.
- On September 5<sup>th</sup> VDOT received a directive from FHWA to review all non-NHS principal arterials for consideration of inclusion in NHS. The due date for this effort was September 20<sup>th</sup> – I briefed the CTB on this request at the September 19<sup>th</sup> CTB meeting.
- MAP-21 requires inclusion of the NHS into the federal funding category National Highway Performance Program (NHPP) including the principal arterials that are to be added.

## Background (con't)

- **VDOT is in the process of updating the federal functional classifications due to changes provided by the 2010 Census. This effort is scheduled to be completed in February 2013.**
- **VDOT completed an accelerated review and developed a listing of roads to be added to the principal arterial classification.**
- **VDOT submitted the listing with the request that FHWA grant conditional approval of additional mileage pending input from MPOs, PDCs and localities which is the standard process for adding routes to the NHS.**
- **FHWA conditionally approved the listing, adding the changes to the principal arterial functionally classified roadways to the NHS as of October 1<sup>st</sup>. These roadways are now eligible for NHPP funding.**

# Pre MAP-21 National Highway System (NHS)



## Impetus Behind Functional Class Updates

### Statewide Update

- **Functional classification typically updated after decennial Census (2010)**
- **Updated Guidance for the Functional Classification of Highways**
  - ✓ October 14, 2008
  - ✓ No longer requires a change at the location of urbanized boundary (e.g. rural class can continue within urban boundary)
  - ✓ Functional classifications should be assigned based on actual functional criteria, rather than the location of an urban/rural boundary
  - ✓ Some existing principal arterials did not meet suggested characteristics of principal arterials including:
    - trip length and travel density characteristics indicative of substantial statewide or interstate travel
    - providing an integrated network without stub connections (connectivity)

### MAP-21 – Accelerated Principal Arterial Review

- Removed mileage cap which allowed for expansion of NHS
- Established NHPP funding category (in which NHS routes are eligible)
- Established a performance basis for maintaining and improving the NHS

## Methodology

- **The accelerated review of the principal arterial network in Virginia included:**
  - ✓ Reviewing existing arterials and minor arterials by way of GIS
  - ✓ Including a parallel review by our consultant (Michael Baker Corporation, who is currently completing the Federal Functional Classification update based on the 2010 Census)
  - ✓ Reviewing current non-NHS principal arterial facilities and recommended facilities for inclusion on the NHS, as well as facilities that should not be included on the NHS
  - ✓ Reviewing minor arterials in Virginia to identify facilities that should be upgraded and incorporated into the NHS
- **Notified District Planners of FHWA memo and short deadline. District Planners in turn notified MPOs**
- **Changes submitted September 20, 2012 will be considered conditional pending MPO and locality coordination**

## Findings and Implications

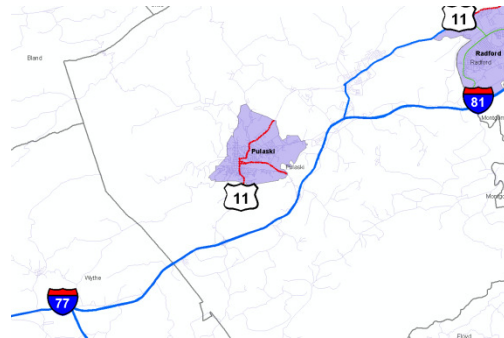
<b>Mileage FHWA would have automatically included in NHS</b>	<b>779 m</b>
<b>Minor Arterials to be upgraded to Principal</b>	<b>455 m</b>
<b>Collectors to be upgraded to Principal Arterials</b>	<b>5 m</b>
<b>Less: Principal Arterials to be downgraded</b>	<b><u>(322) m</u></b>
<b>Net Change to Principal Arterials in the NHS</b>	<b>917 m</b>
<b>Current NHS Mileage pre-MAP-21</b>	<b><u>3,441 m</u></b>
<b>New total NHS Mileage with MAP-21</b>	<b>4,358 m</b>
<b>Net Change to Principal Arterials in the NHS</b>	<b>917 m</b>
<b>Mileage that would have been automatically included in NHS</b>	<b><u>779 m</u></b>
<b>Net Change to NHS Mileage with MAP-21</b>	<b>138 m</b>

**NOTE:** These totals subject to change pending more extensive review by localities, MPOs and VDOT staff

## Findings and Implications (Cont'd)

- **Focus of Recommended Changes**

- ✓ Eliminating the “islands” of principal arterials created in the urban clusters;



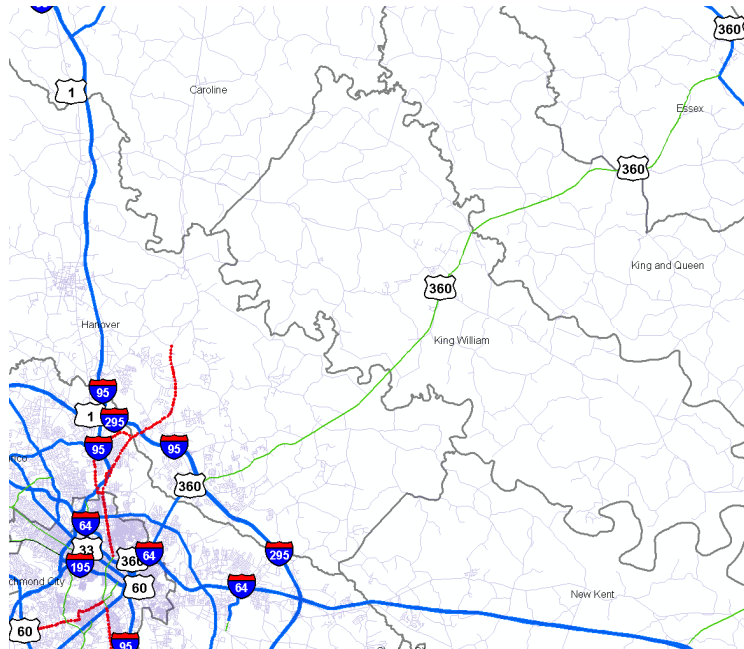
**Ex. Town of Pulaski  
Urban Cluster**

- ✓ Eliminating redundant principal arterials parallel to existing NHS facilities (within 1/2 mile);
- ✓ Reducing the number of intra-urban principal arterials in smaller MPO areas and urban clusters;
- ✓ Largely maintaining the intra-urban principal arterials in larger MPOs (TMAs) to allow for greater regional mobility in highly congested areas;



## Findings and Implications (Cont'd)

- **Focus of Recommended Changes (cont'd)**
  - ✓ Adding new facilities that provide for long distance in travel in areas that were not served by an existing NHS facility; and
  - ✓ Adding new facilities that provide consistency at the state border with surrounding states' functionally classified facilities.



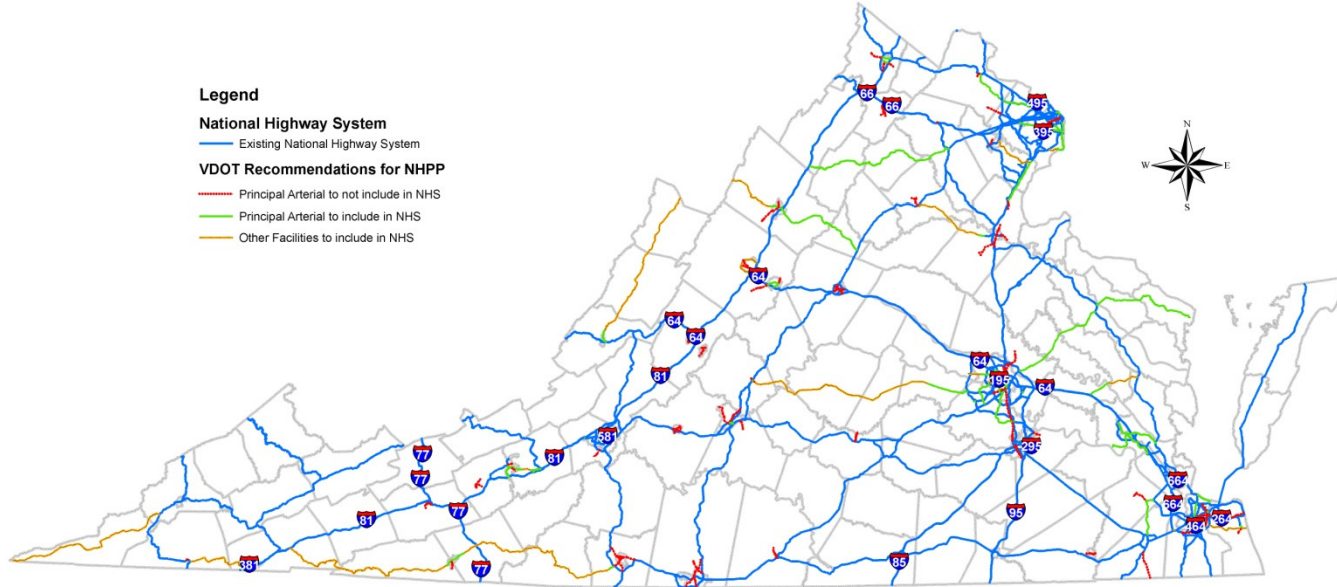
**Ex. Route 360 to  
Tappahannock**

## Findings and Implications (con't)

- **All NHS facilities will become eligible for NHPP funding starting October 1, 2012.**
- **NHPP is Interstate Maintenance, NHS and Bridge funding programs combined- funding remains at SAFETEA-LU levels.**
- **NHS facilities must meet statewide performance targets per MAP-21. Targets to be determined based on the development of national goals in 18 months. Inability to meet targets may result in:**
  - ✓ Federal guidance on allocation of NHPP funding in VA
  - ✓ Requirement for increased state match to federal NHPP funded projects

# Proposed Changes to National Highway System (NHS) – October 2012

MAP-21 Proposed NHS Expansion



- Legend**
- National Highway System**
    - Existing National Highway System
  - VDOT Recommendations for NHPP**
    - Principal Arterial to not include in NHS
    - Principal Arterial to include in NHS
    - Other Facilities to include in NHS

Created by the Transportation and Mobility Planning Division  
9/27/2012

0 37.5 75 150 Miles

## Next Steps

- **Work with MPOs and impacted localities over the next few months on the statewide functional classification update – incorporate coordination on NHS changes.**
- **Await FHWA / USDOT guidance on performance goals for the NHPP.**
- **Pending outcome of statewide functional classification update and coordination with regional planning partners, submit any final changes to NHS to FHWA.**