

Network for Success

# Local Programs Workshop



## Partnership and Innovation

# Engineering Directorate Leadership Meeting

February 26, 2013





# Today's Objectives

- Seize the opportunities to better our organization
- A high-level understanding of my vision and expectations
- Openly discuss how we model the behavior we expect from each other and our staff
- Identify and collaborate on ideas for how to make us stronger
- Interact as a team with open, frank, and professional discussion

# Expectations

- Focus on safety
- Encourage an atmosphere of trust and respect
- Make customer service a priority (look to serve our internal and external customers)
- Model an environment of problem solving
- Ensure our approach is always results/outcome oriented
- Appreciate your role and the
- impact you have on others



# Safety



- Total Number of Injuries between FY10 and FY12 **REDUCED** by 17% (587 vs. 489)
- Total Number of Lost Time Injuries between FY10 and FY12 **REDUCED** by 25% (159 vs. 119)

But can we do better?

# Trust and Respect



Arrogance

Distrust

Forcing the numbers

Telling somebody

Micro-management

Empowering others

Humility

Trust

Integrity

Demonstrating through  
action

Meet your commitments

# Customer Service

- We are each others customers
  - Districts have responsibility to deliver a dependable program
  - Divisions have responsibility to develop policies/procedures that enable the Districts
- We work for the Public and through Elected Officials
  - Are we proactively addressing the issues raised?
  - Are we focused on what's important to them?
- Look for the connection between our actions and our customers

Strength  
Together =

# Customer Service



“Gate Keeper”

“Process Enforcer”

Discounts concerns

Waits

Enabler

Provides actionable ideas

Proactive

Mentor

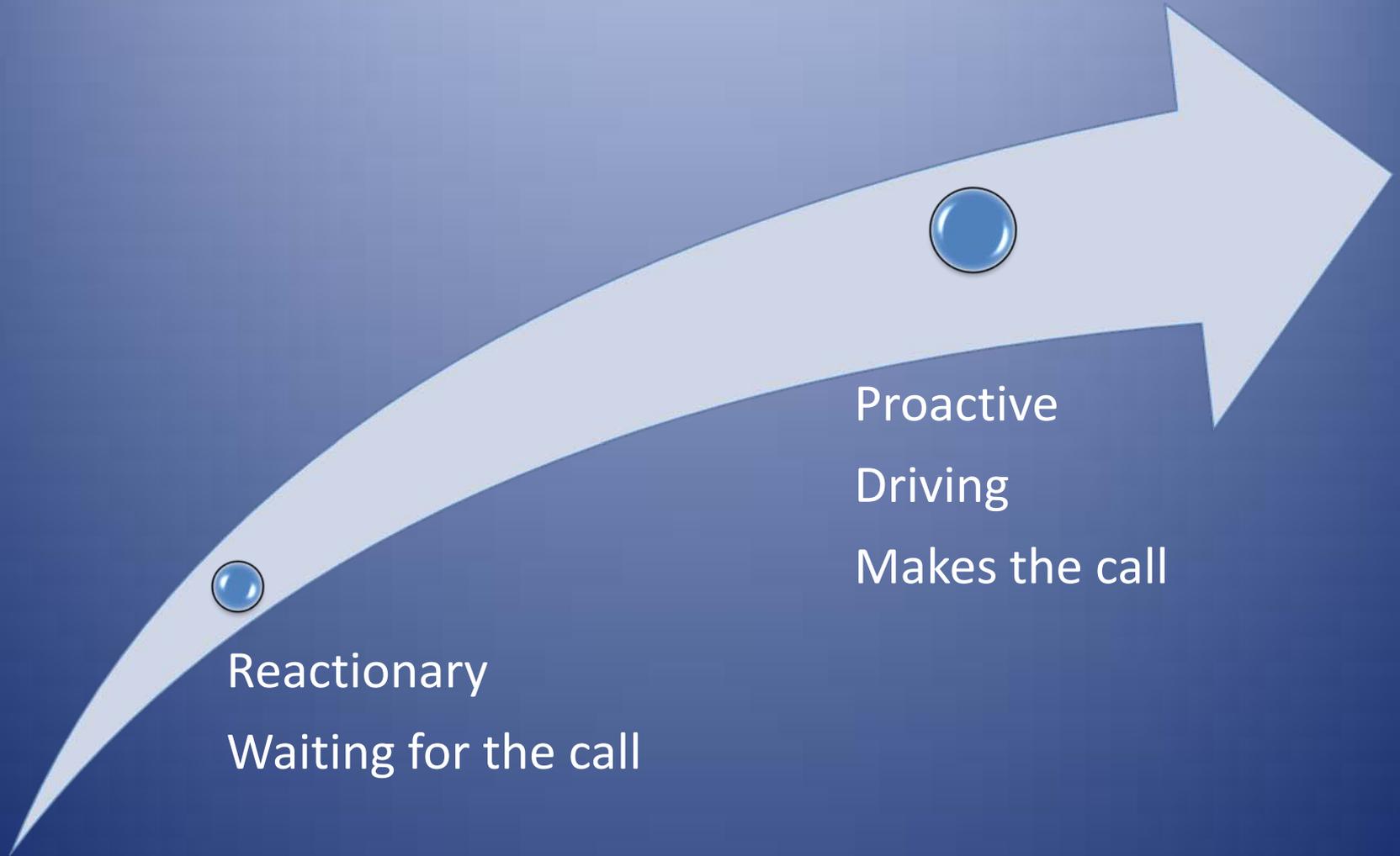
Helper

Keeps advancing

Meets deadlines and budgets

Provides economic solutions

# Customer Service



# Customer Service

*"... VDOT residency engineer is working to solve problems."*

*The Prince George Journal*



Disengaged with  
the community  
Adversary



Engaged with the  
community  
Partner

# Customer Service



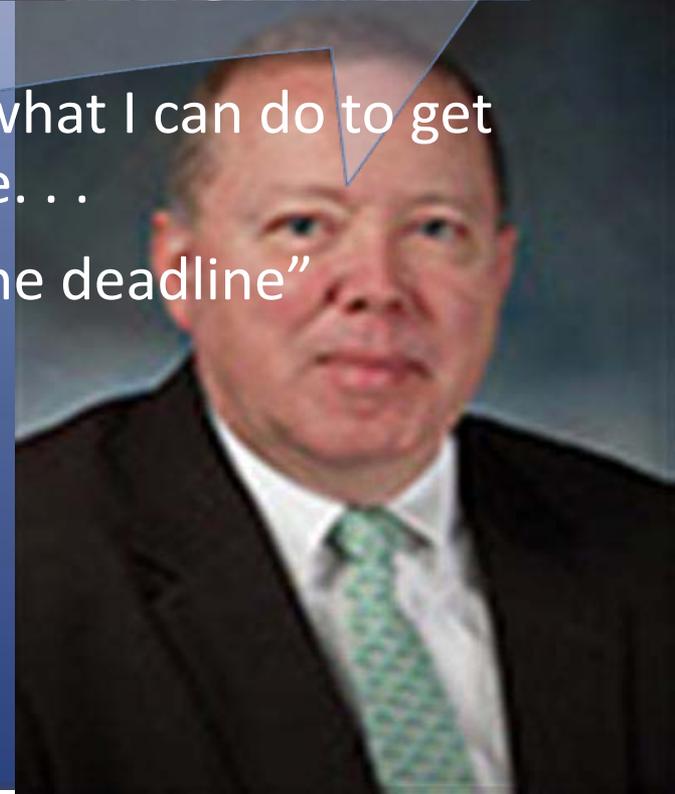
Here's what I can do to get us there...

“Beat the deadline”

You didn't have the correct box checked.

..

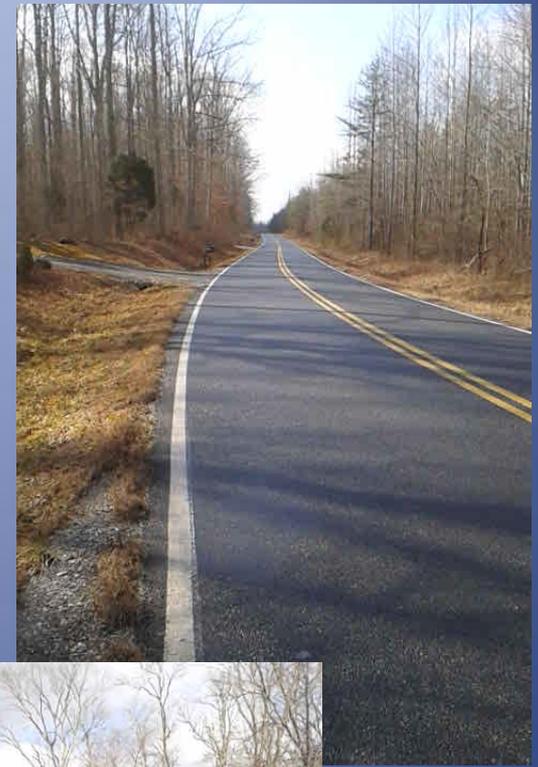
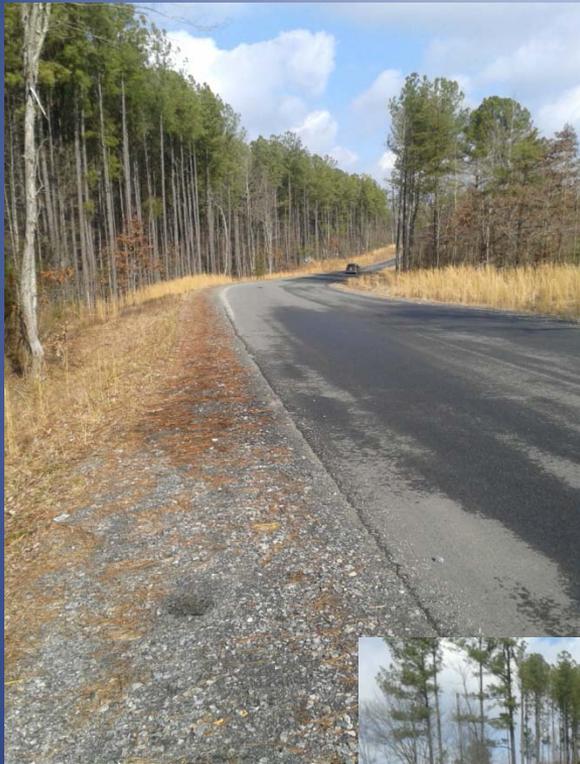
Asking for minutia



# Results/Outcome Oriented



# Problem Solving



# Problem Solving



# Problem Solving



It can't  
be done...

Thinking  
inside the  
box, to make  
it work!

# Problem Solving



It can't  
be done...

EA on I-95  
HOT Lanes  
in 9  
months!!!

# Results/Outcome Oriented

- Test all we do against the result or outcome it will produce
- Be clear about what is important
  - Bridge performance data
    - I/P/S
  - Congestion
  - Emergency response
  - Financial Stewardship
    - On budget
    - Paying bills on time
  - Pavement condition
  - Program Delivery
  - Tracking our Most Important Infrastructure



Bridge Condition	
Target 92% Non-Red (Non-SD)	
R	1601
Y	4763
G	14649
Green and Yellow Percent: 92.4%	





# Results/Outcome Oriented

PRELIMINARY DISTRICT PERFORMANCE REPORT FOR FY13 THROUGH Q2																	
District Performance Report				FY13 Performance Results													
Measure	Definition	Target	Time period or date of data capture for FY13Q2	Statewide Performance Result	Notes	Among districts performance results...			Performance Results by District								
						Least desirable result	Median value	Best result	Bristol	Culpeper	Fburg	Hampton Roads	Lynchburg	Northern Virginia	Richmond	Salem	Staunton
Project Development	Advertisement On-Time VDOT-Managed Projects	70%	Dashboard 1/4/13	76%	VDOT range	52%	81%	94%	52%	81%	90%	86%	56%	93%	70%	77%	94%
	Advertisement On-Time Locally-Managed Projects	70%		54%	VDOT range	45%	56%	72%	50%	67%	54%	45%	71%	48%	63%	56%	72%
	Cost Estimation VDOT-Managed Projects	74%		81%	VDOT range	68%	83%	94%	85%	92%	78%	94%	88%	79%	77%	68%	83%
Project Delivery	Federal Strategy																
	On-Time (all projects)	76%	Final results for FY13 Q2 based on 2/9/13 Dashboard data	83%		55%	87%	96%	80%	85%	91%	55%	87%	88%	77%	92%	96%
	Construction On Time	75%		80%	40%	86%	100%	77%	77%	91%	40%	88%	86%	74%	100%	89%	
	Maintenance On Time	77%		85%	59%	89%	100%	81%	90%	91%	59%	87%	89%	78%	91%	100%	
	On-Budget (all projects)	85%		94%	89%	94%	98%	92%	91%	94%	90%	97%	98%	89%	97%	98%	
	Construction On Budget	82%		93%	85%	91%	100%	91%	85%	91%	100%	100%	100%	89%	88%	95%	
	Maintenance On Budget	90%		95%	87%	96%	100%	93%	95%	96%	87%	97%	97%	89%	98%	100%	
	Environmental Compliance	100%		99.1%	97.5%	99.0%	100.0%	98.7%	100.0%	98.8%	98.8%	97.5%	99.0%	100.0%	99.2%	100.0%	
	CGIP	91%		FY13 through Q2	91.5%	86.8%	91.7%	94.1%	92.0%	89.7%	92.6%	91.7%	91.3%	86.8%	94.1%	91.1%	94.1%
Work Zone Crashes	N/A	2/9/2011 through 2/9/2012		3,542	2,110	112	46	104	46	102	403	55	2,110	446	164	112	
Maintenance and Operations	CEI Expenditures																
	Maintenance Spending - Expenditures vs. Plan	N/A		96%	Statewide objective, reported in C-2	96%			101%	106%	94%	131%	96%	92%	90%	91%	105%
	Maintenance Spending - Projection vs. Allocation	94.1% to 100%*	FY13 through Q2	99%	VDOT reported 100% over, not in statewide objective	106%			110%	113%	96%	103%	104%	114%	94%	107%	106%
	Pavement - Interstate	82%	2012 assessment	82.9%		71.7%	88.0%	96.0%	79.9%	91.0%	96.0%	72.0%	n/a	90.0%	71.7%	86.0%	95.7%
	Pavement - Primary	82%	assessment since pavement's last or worse	81.2%	Actual assessment	67.4%	82.8%	90.2%	77.1%	89.0%	82.8%	85.2%	90.2%	67.4%	74.6%	78.7%	87.0%
	Pavement - Secondary	65%		60.7%		40.3%	61.9%	72.8%	59.0%	65.2%	56.7%	72.8%	68.5%	40.3%	56.4%	61.9%	72.4%
Safety and Risk Management	Bridge Condition	92%	Dashboard 1/3/13	92.9%	VDOT maintenance target	90.3%	93.3%	97.5%	91.4%	93.3%	91.0%	96.0%	94.5%	97.5%	90.6%	90.3%	93.6%
	Recordable Injuries Incident Rate	N/A	FY13 through Q2	3.40		7.77	4.04	2.19	5.11	7.77	3.61	4.04	2.56	2.19	2.69	6.06	4.95
	Vacancy Rate	N/A	PMIS 1/1/13	5.8%	Statewide objective, reported in C-2, tracking and accurate (contractors' rates)	7.9%	4.8%	2.6%	4.8%	5.2%	2.6%	7.9%	3.9%	5.4%	4.7%	7.4%	4.3%
	Prompt Pay Certification	95%	FY13 through Q2	97.1%		96.5%	98.4%	99.2%	99.2%	98.4%	97.1%	97.5%	98.9%	98.5%	96.5%	98.4%	98.9%
	SWaM	40%	Not available as of report date														
Administrative Support	Administrative Budget	C	FY13 through Q2	C	Statewide objective, reported in C-2, tracking and accurate (contractors' rates)	C	C	C	C	C	C	C	C	C	C	C	C
	Inventory Compliance	C	FY13 through Q2	C	Statewide objective, reported in C-2, tracking and accurate (contractors' rates)	C	C	C	C	C	C	C	C	C	C	C	C

\* Maintenance Spending Projection vs. Allocation target is a statewide target and does not apply to individual districts. It is based on current allocation and VDOT goal of no more than \$100 million carry-over at fiscal year end. Percentage target will change if expected allocation changes.  
 \*\* Prompt pay results for Central Office orgs cannot be verified, therefore the statewide prompt pay result reported here is suspect. There is no such issue with the districts' results; their results do reconcile.

This is not a District performance card; this is everyone's performance card.

What actions do you take daily to ensure the program's success???

# My Commitment to You. . .

- To be willing to have the tough, but necessary, conversations
- To listen; to be frank, but respectful; to encourage a healthy dialogue; to promote an environment in which you can express yourself and your ideas are welcomed.
- To trust you to take action
- To pull us together as an effective unit
- In return, I expect excellence, honesty, and a sharing of a common purpose.

I can't do this alone; you have to be willing to work with me. . . what actions can you commit to taking? What successes can you build upon?

“The best way to predict the future is to create it.”  
Peter F. Drucker (1909-2005)

# Expectations

- Focus on safety
- Encourage an atmosphere of trust and respect
- Make customer service a priority (look to serve our internal and external customers)
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- Ensure our approach is always results/outcome oriented
- Appreciate your role and the impact you have on others

Your Thoughts/Questions?

U.S. Route 17/Dominion Boulevard

Local Programs Workshop  
September 26, 2013

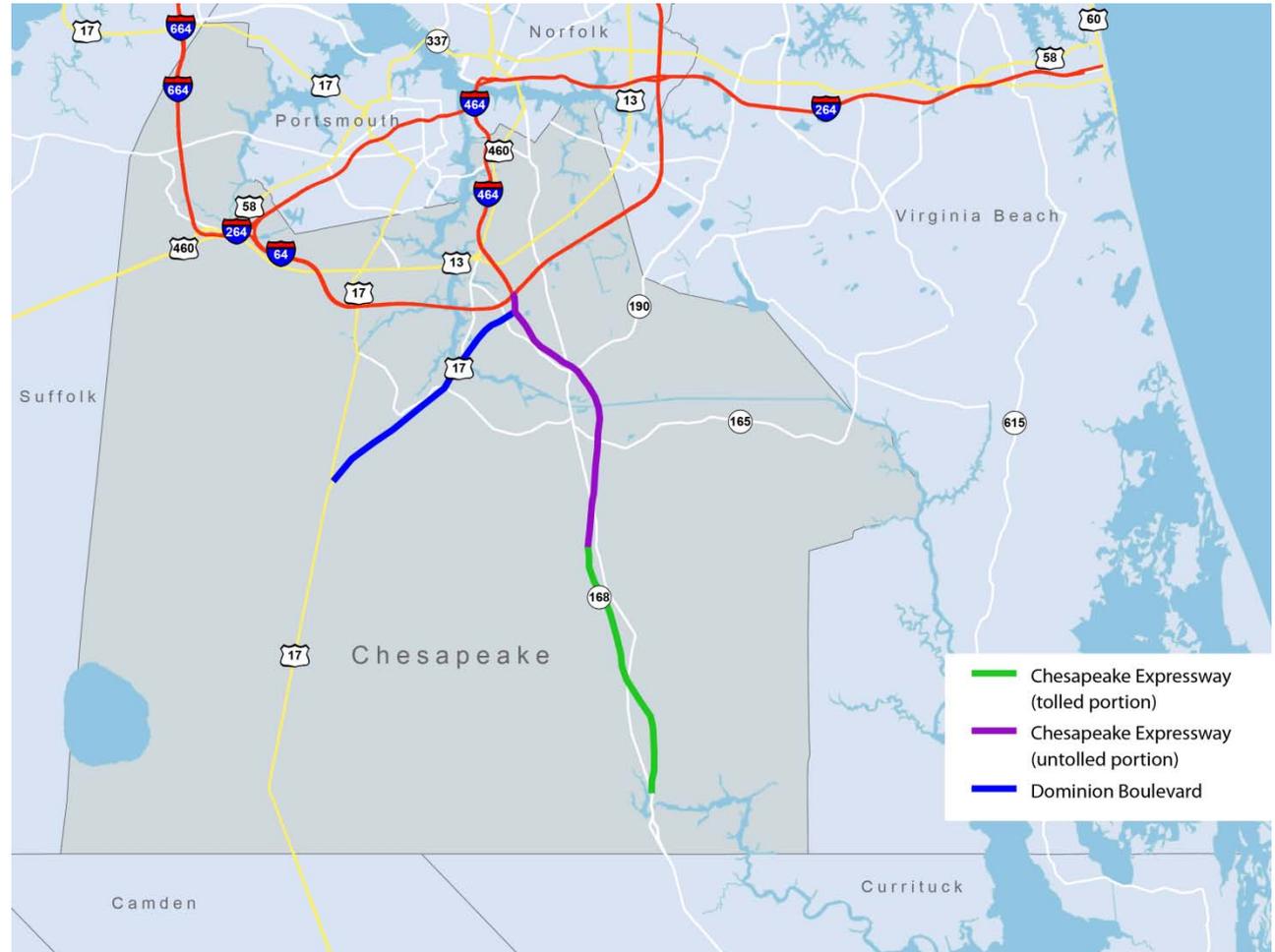
# *Chesapeake Transportation Projects*

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- Legacy of successfully delivering large-scale transportation projects
- Recurring themes of intergovernmental partnering, planning, prioritizing, perseverance, policy and legislative support, and public engagement
- Guiding principles of:
  - safety
  - congestion relief
  - economic vitality
  - fiscal feasibility

# Chesapeake Transportation System

- The Chesapeake Transportation System (CTS) consists of the existing Chesapeake Expressway and the improved Dominion Boulevard
- The CTS will operate as a single facility, with operations being combined to reduce redundancy and overhead
- Tolls on the Dominion Blvd portion will not be imposed until construction is complete



## *Historical Perspective*

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- Development of Dominion Boulevard and the Chesapeake Transportation System used an incremental approach spanning over 35 years
  - VDOT conducted location studies and held location public hearings on the corridor in 1972
  - Great Bridge Bypass opened in 1981 to alleviate traffic through the Great Bridge commercial corridor (\$34M)
  - Oak Grove Connector opened in 1999 and connected the Great Bridge Bypass to Dominion Boulevard and Interstates 64 and 464 (\$38M)
  - Chesapeake Expressway Toll Road opened in 2001 to address safety and mobility issues associated with heavy OBX bound traffic (\$125M)
  - U.S. Route 17 South opened in 2005 and provided a four-lane controlled access facility from Dominion Boulevard to the North Carolina state line (\$58M)
  - Dominion Boulevard construction began January 2013 and is scheduled for completion April 2017 (\$345M)
  - Dominion Boulevard, Ph. 2, will improve the remaining 2 mile section of Dominion Boulevard, providing a direct connection from Interstates 64/464 to NC (\$18M)
- Total investment, adjusted for inflation to current year dollars, is \$722M

# *Innovative Financing Approach*

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- Oak Grove Connector
  - Unique financing in that the City dedicated its share of State recordation taxes distributed to localities to finance half of the annual debt service; other half of debt service supported by local general revenues
  - Bonds were sold by the State with the City administering the project
- Chesapeake Expressway
  - Funds consisted of a combination of Toll Facilities Revolving Account (TFRA), Urban Allocations, local contributions, and Senior Lien Bonds
  - Toll revenues support payback of the debt
  - Evaluated PPTA options but ultimately chose to develop project with all public funds in order to deliver project at the lowest possible cost to the public
- Dominion Boulevard
  - Funding consists of:
    - \$150M senior lien bonds with net interest rate of 4.599%
    - \$152M loan through the Virginia Transportation Infrastructure Bank, 3.33% interest rate
    - \$85M of RSTP funds

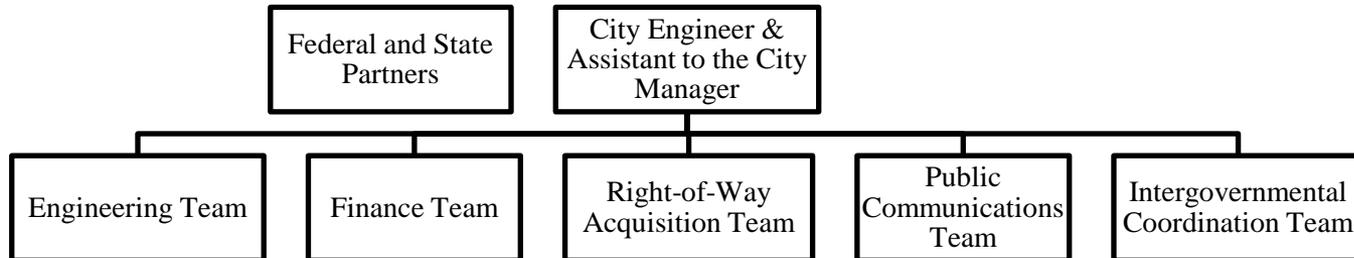
# *Dominion Boulevard Project Development*

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- In 2008, at Mayor's request, staff presented a strategy for funding and financing a \$350M - \$400M project
- Outlook for state funding was bleak at best
- Existing infrastructure conditions represented public safety threat
- In 2009, City Council appropriated \$1.3M for an investment-grade traffic and revenue study
- From 2010 – 2011, City applied five times for Federal TIFIA and TIGER grants
- In 2010, City Council created the Chesapeake Transportation System to enhance the creditworthiness for financing Dominion Boulevard
- In 2011, General Assembly created authority for the VTIB program
- In 2012, City of Chesapeake receives the first ever loan through the VTIB
- Mayor Krasnoff championed the project, provided excellent leadership, and devoted endless energy to advancing the project to construction

# *Dominion Boulevard Project Team*

- City Manager appointed the City Engineer and Assistant to the City Manager as co-leads for management of a multi-disciplinary project team



- Engineering Team led by City Senior Project Manager, supported by Parsons Brinkerhoff, VDOT Project Manager and FHWA Area Engineer
- Finance Team led by City's Financial Advisor, supported by SDG as Traffic and Revenue consultant, PFM as project financial advisor, and City & VDOT Finance staff
- Right-of-Way Team led by Deputy City Attorney and City Right-of-Way Agent, supported by project attorney and consulting firm of G&O
- Public Communications Team lead by Public Works Information Specialist
- Intergovernmental Coordination led by Assistant to the City Manager, with support from the Philip A. Shucet Company
- All teams worked in parallel (to the extent possible) to expedite project delivery

## *Project Execution*

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- Each respective team held regular meetings to resolve outstanding issues and to prepare for joint monthly team meeting
- As deadlines loomed, monthly meetings were accelerated to weekly coordination meetings
- Weekly utility coordination meetings commenced once utility relocations began
- Quarterly project briefings provided to City Council
- Briefings also provided to HRTPO, CTB, and City Legislative Delegation
- Project website maintained and updated as needed
- Received Certification No. III from VDOT/FHWA which allowed the project to be advertised for construction although all right-of-way acquisitions and utility relocations had not been completed
  - early start helped reduce overall project costs (at 3% annual inflation, inflationary impact was over \$28,000 per day)
- Quarterly meetings with ACOE, VDOT, and legislative delegation for past 20 years key to building relationships

# *Dominion Boulevard Improvements – Scope of Work*

- Roadway widening from 2 to 4 lanes from Cedar Rd. to Great Bridge Blvd.
- Replacement of the 2-lane drawbridge with a 4-lane, fixed-span, high-rise bridge
- Interchanges at Cedar Rd., Bainbridge Blvd., and Great Bridge Blvd.
- Fully automated toll collection system using E-Zpass
- Largest locally-administered project in the history of the Commonwealth



# *Dominion Boulevard Project Details*

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*Contractor:*

Dominion Boulevard Constructors – a joint venture of McClean Contracting Company, E.V. Williams Inc., Bryant Contracting, and R.R. Dawson Bridge Company

*Original Contract Value:*

\$188 million

*Construction Start:*

January 7, 2013

*Fixed Completion Date:*

April 1, 2017

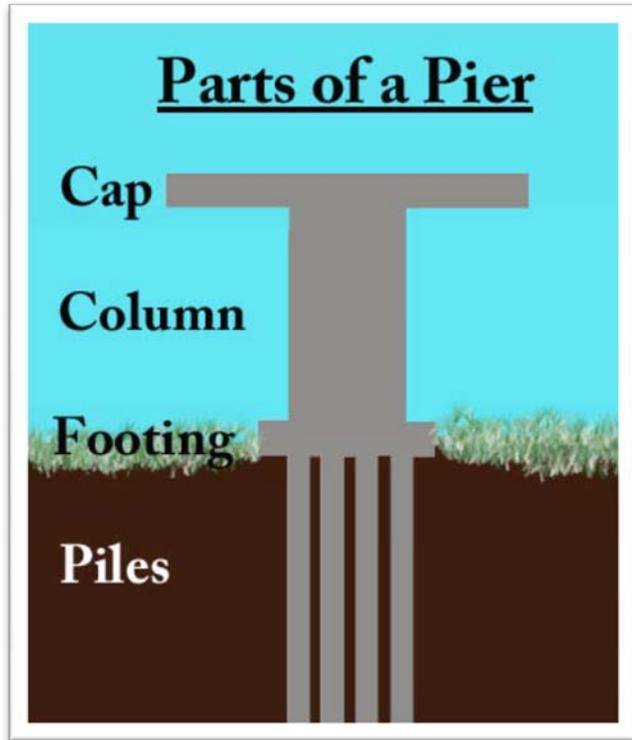
# *Dominion Boulevard Construction Highlights*

- Fully Electronic Open Road Toll System -- no toll booths!
- Pile supported bridge approaches to reduce settlement concerns
- Wick Drains to decrease soil consolidation times
- On-site concrete batch plant to reduce number of deliveries across local street network and provide ultimate control of concrete scheduling



# Construction Photos

## Pile Driving Operations



# Construction Photos

Pier Construction



Pile Bents



# Dominion Boulevard Toll Rate Schedule

- A 2010 traffic and revenue study established a theoretical toll of \$2.30 which has been reduced by:
  - Deferring projects and re-directing funds to Dominion Boulevard
  - Securing low-interest VTIB loan
  - Securing \$55 million in grant funds
- Because of those efforts, a toll rate of \$1 for 2-axle E-ZPass users was adopted
- Tolls will increase 5% each year
- Non E-ZPass rate will be \$2 higher and collected by Video/License Plate Recognition

FY Ending 6/30	<u>E-ZPass Rate</u>		<u>Non-E-ZPass Rate</u>	
	Two Axles	Each Additional Axle	Two Axles	Each Additional Axle
2017	\$1.00	\$0.50	\$3.00	\$0.50
2018	\$1.05	\$0.53	\$3.05	\$0.53
2019	\$1.10	\$0.55	\$3.10	\$0.55
2020	\$1.16	\$0.58	\$3.16	\$0.58
2021	\$1.22	\$0.61	\$3.22	\$0.61
2022	\$1.28	\$0.64	\$3.28	\$0.64
2023	\$1.34	\$0.67	\$3.34	\$0.67
2024	\$1.41	\$0.70	\$3.41	\$0.70
2025	\$1.48	\$0.74	\$3.48	\$0.74
2026	\$1.55	\$0.78	\$3.55	\$0.78
2027	\$1.63	\$0.81	\$3.63	\$0.81
2028	\$1.71	\$0.86	\$3.71	\$0.86
2029	\$1.80	\$0.90	\$3.80	\$0.90
2030	\$1.89	\$0.94	\$3.89	\$0.94
2031	\$1.98	\$0.99	\$3.98	\$0.99
2032	\$2.08	\$1.04	\$4.08	\$1.04
2033	\$2.18	\$1.09	\$4.18	\$1.09
2034	\$2.29	\$1.15	\$4.29	\$1.15
2035	\$2.41	\$1.20	\$4.41	\$1.20

Note: Adoption of long-term rate schedule viewed favorably by rating agencies

# *Transportation Toll Facility Advisory Committee*

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- TTFAC established to serve in an advisory capacity to the Chesapeake City Council and to review and provide recommendations to City Council on any proposed increase in tolls, fees, or other charges
- The TTFAC shall hold at least one public hearing prior to considering rate increases
- Five member committee consisting of:
  - One member with a technical background, such as an engineer or architect;
  - One member that is a principle, officer, or owner of a business;
  - One member that has a financial background;
  - One resident at large; and
  - One attorney
- Meetings are held quarterly; staff support provided by Public Works

## *Keys To Success*

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- A vision for the future
- Strong political leadership
- Willingness to prioritize and make hard decisions
- Excellent project partners
- Clear and frequent communication
- A great team with numerous subject matter experts – it really does take a village to deliver a large-scale transportation project!

# Chesapeake

VIRGINIA

Department of Public Works





# BLUE RIDGE CROZET TUNNEL REHABILITATION & TRAIL PROJECT

**Stephen A. Carter | County Administrator | Nelson County**

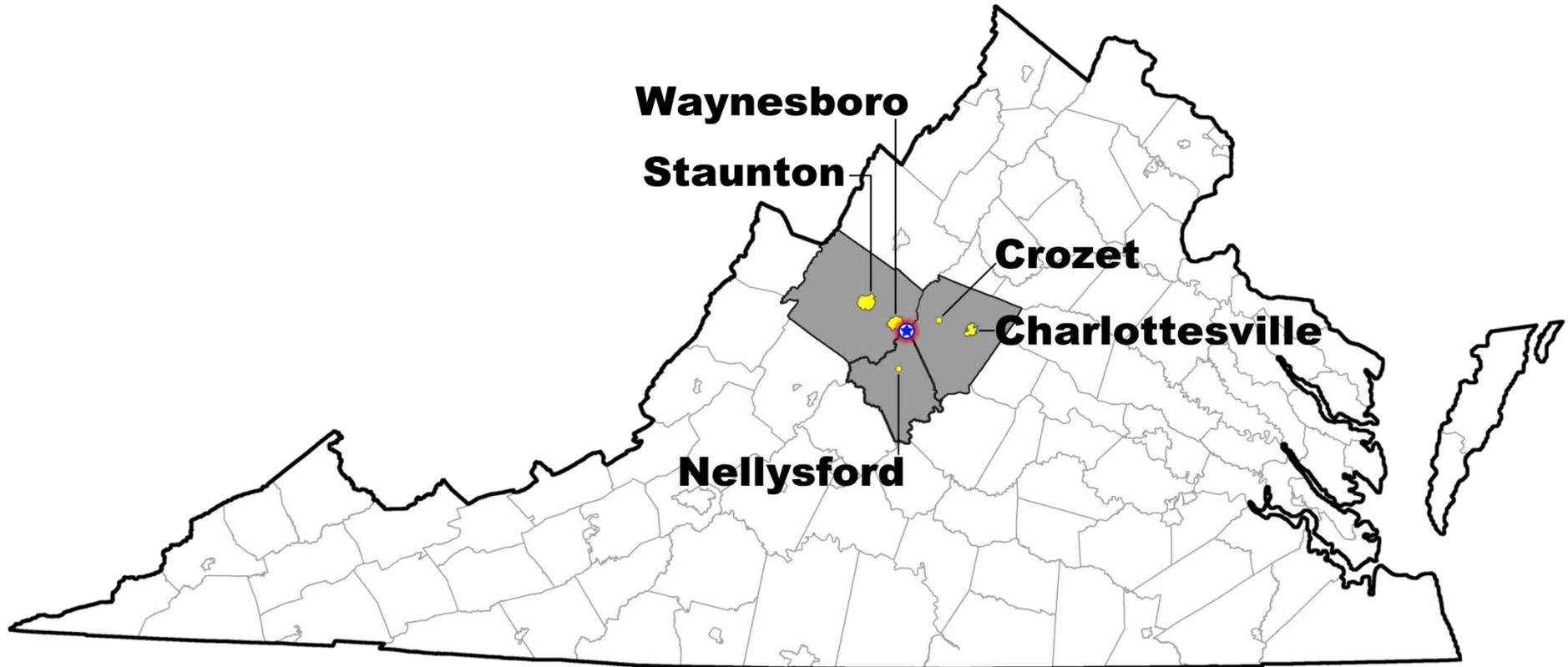
**Presentation to the Local Programs Workshop  
September 26, 2013**

# (Introductory Remarks & Overview)

- Blue Ridge Tunnel: history and information
- Tunnel project: overview and status
- Tunnel project: process and highlights

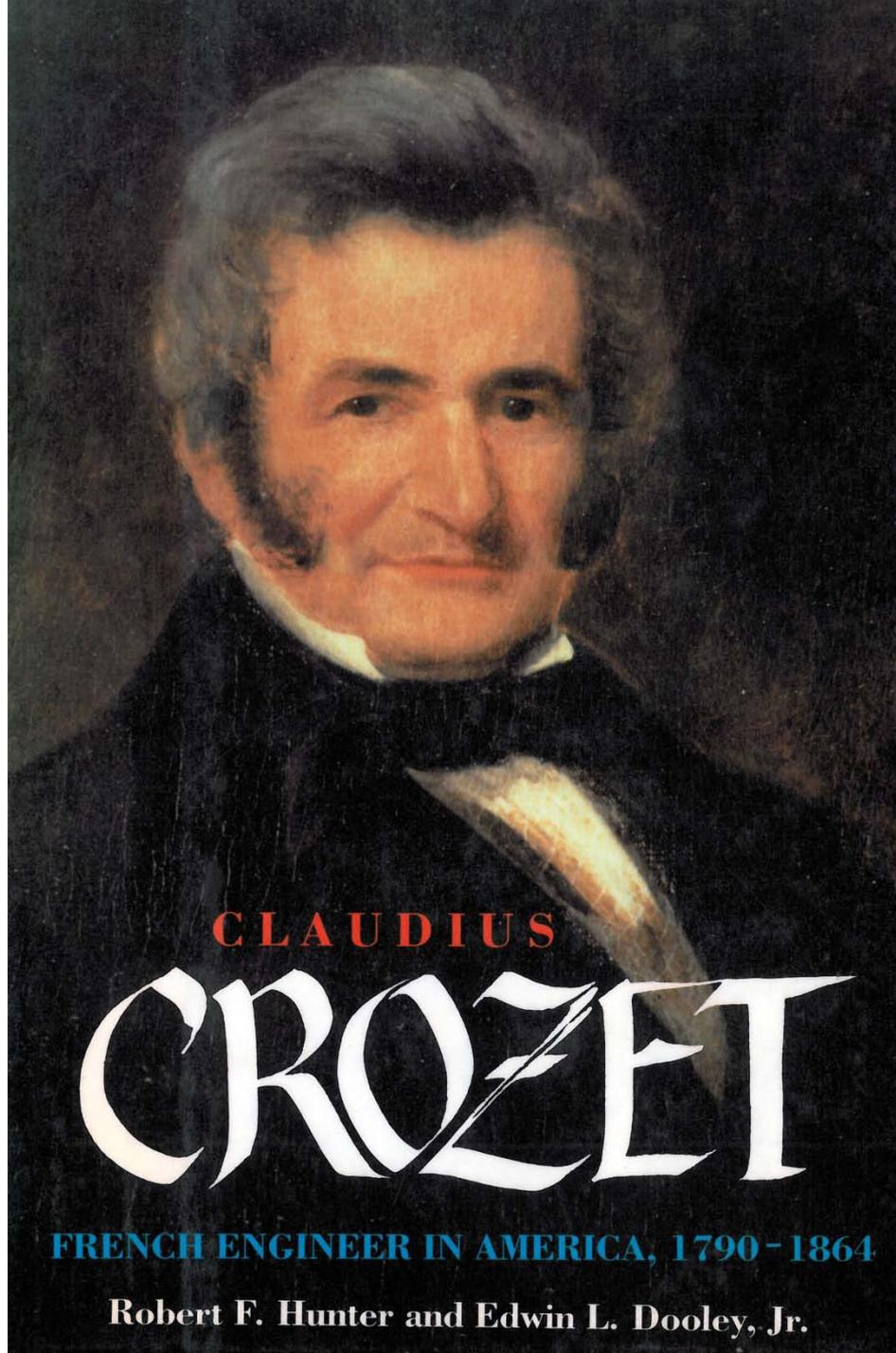


# Tunnel Location: Commonwealth of Virginia



The Blue Ridge Tunnel is located at the intersection of Albemarle County, Augusta County, and Nelson County (adjacent to Waynesboro).

# Tunnel History

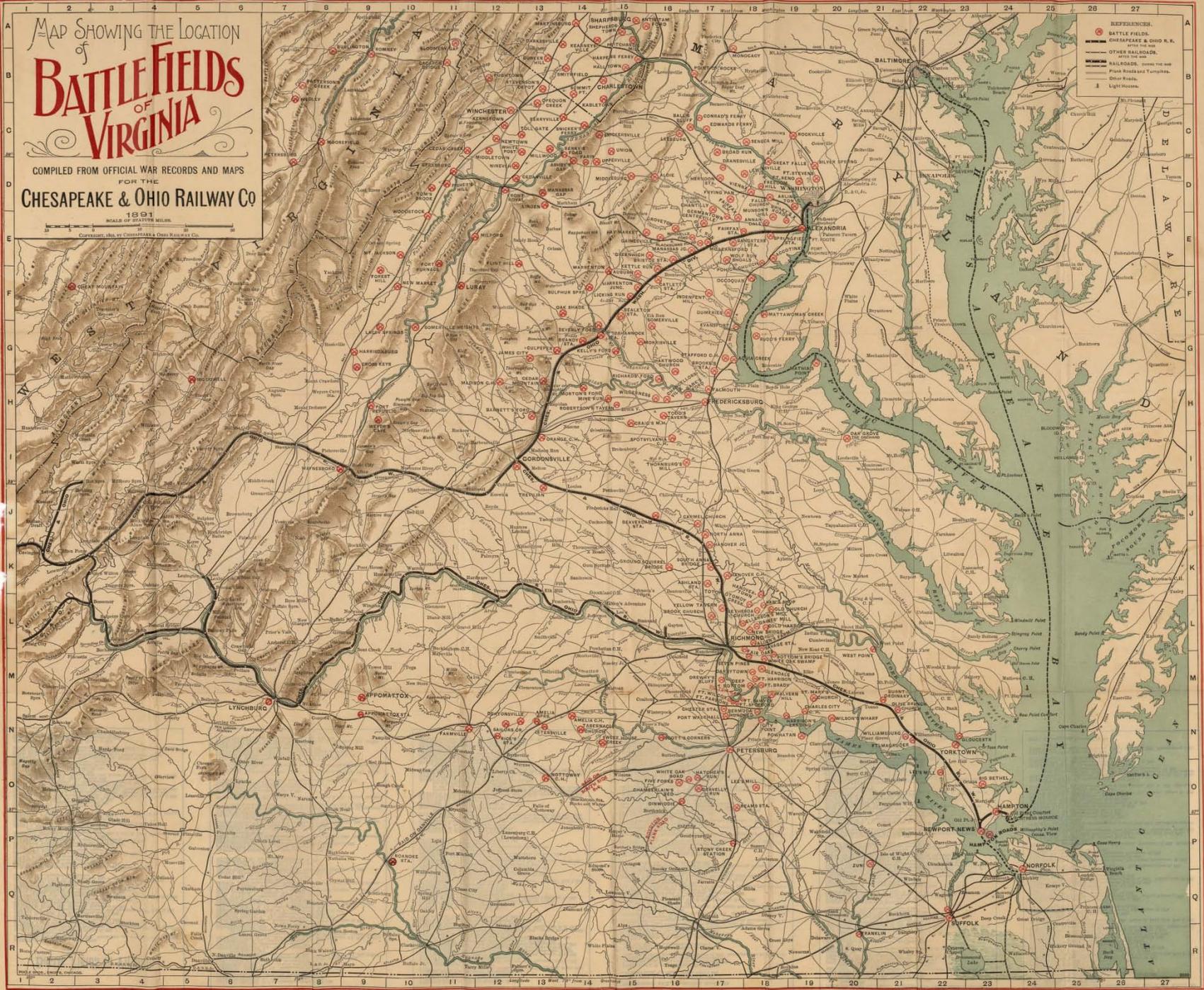


CLAUDIUS

CROZET

FRENCH ENGINEER IN AMERICA, 1790 - 1864

Robert F. Hunter and Edwin L. Dooley, Jr.



MAP SHOWING THE LOCATION  
of  
**BATTLEFIELDS  
of  
VIRGINIA**

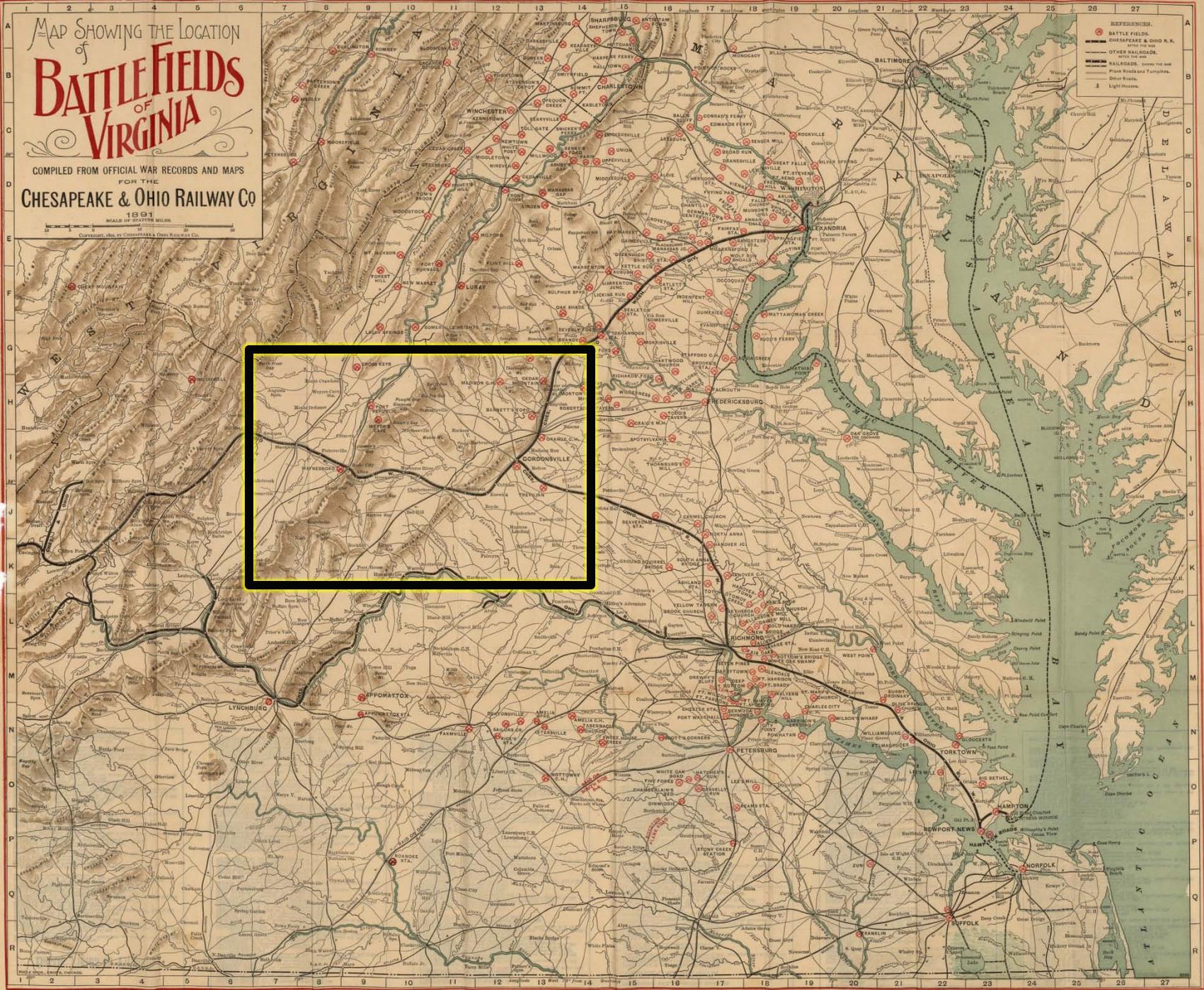
COMPILED FROM OFFICIAL WAR RECORDS AND MAPS  
FOR THE  
**CHESAPEAKE & OHIO RAILWAY CO**

1891

SCALE OF SEVENTY MILES

COPYRIGHT, 1891, BY CHESAPEAKE & OHIO RAILWAY CO.

- BATTLEFIELDS.
- CHESAPEAKE & OHIO R. R.
- OTHER RAILROADS.
- RAILROADS. (shown for use)
- ROAD AND TURNPIKES.
- OTHER ROADS.
- LIGHT HOUSES.



MAP SHOWING THE LOCATION  
of  
**BATTLEFIELDS  
of  
VIRGINIA**  
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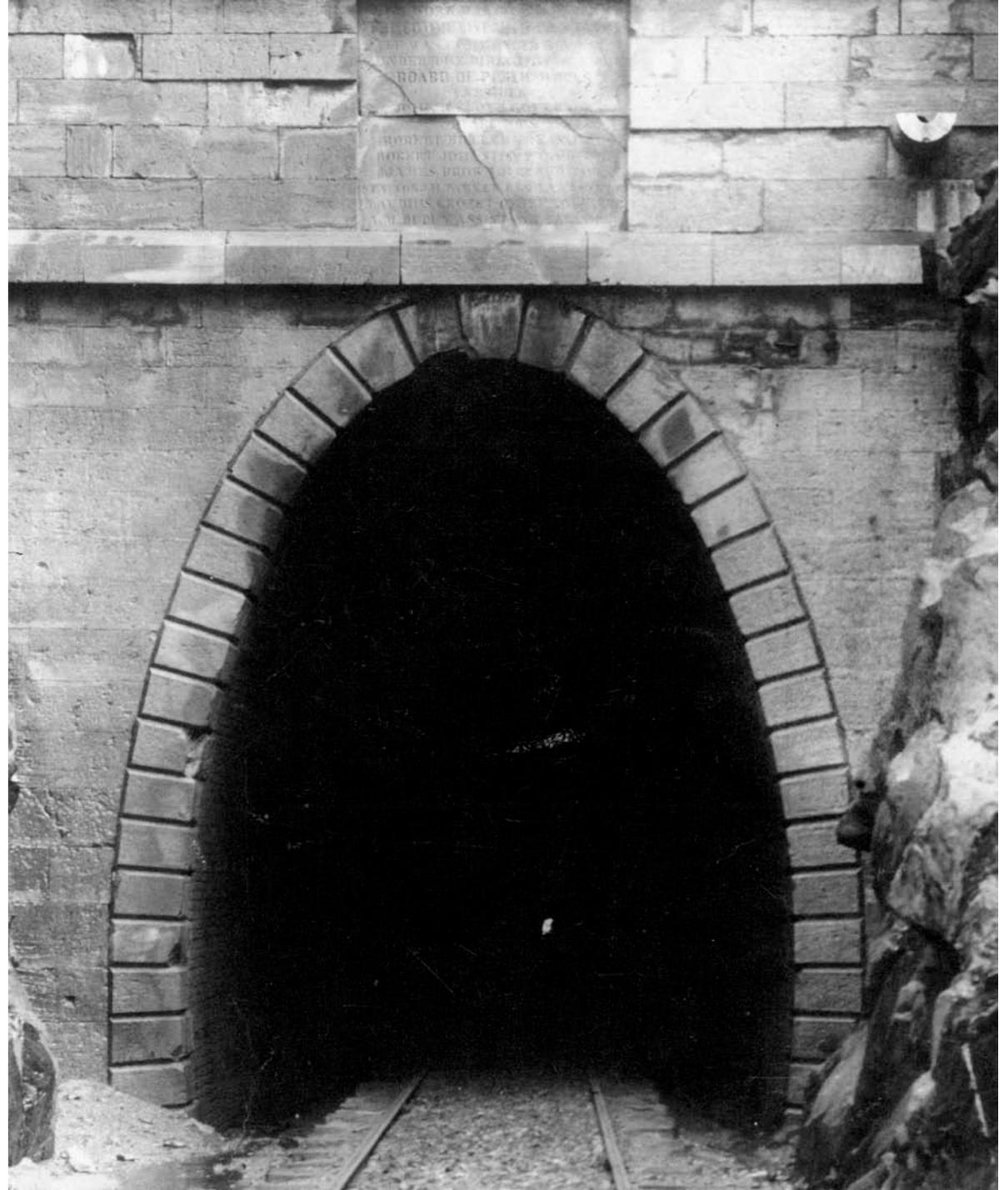


# Tunnel History

## West Portal

Augusta County  
Near Waynesboro

(historic photo:  
unknown date)



# Tunnel History

“New” East Portal (left) and Original East Portal (right-center)

(historic photo: 1968)



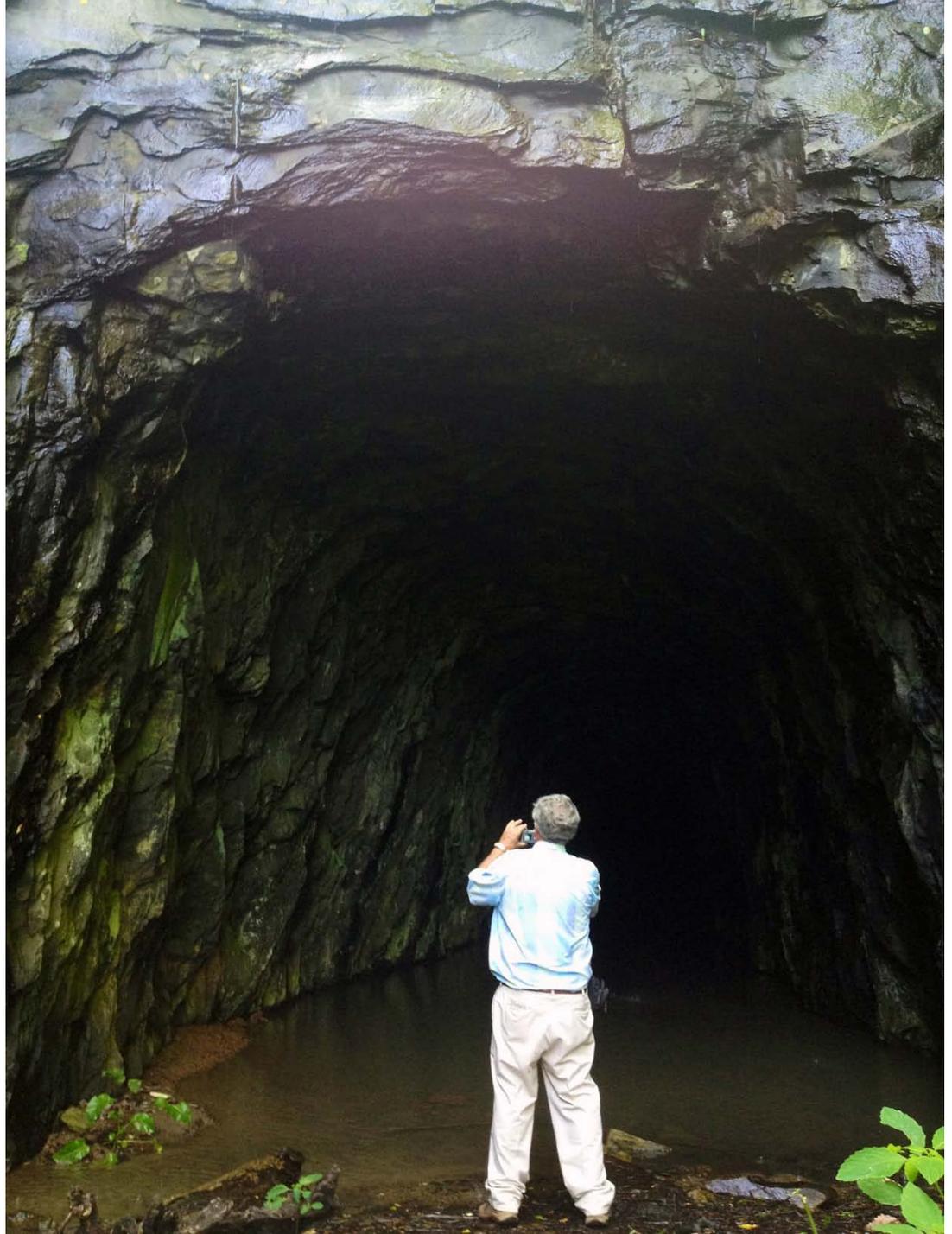
C&O E8 No. 4014 leads the eastbound Sportsman out of modern-day Blue Ridge Tunnel's east portal. The dark area above No. 4014 is the east portal of the original tunnel. Photo by the author, April 14, 1968.

**Original East Portal**  
Afton | Nelson County | Summer 2013



# Original East Portal

Afton | Nelson County  
Spring 2012





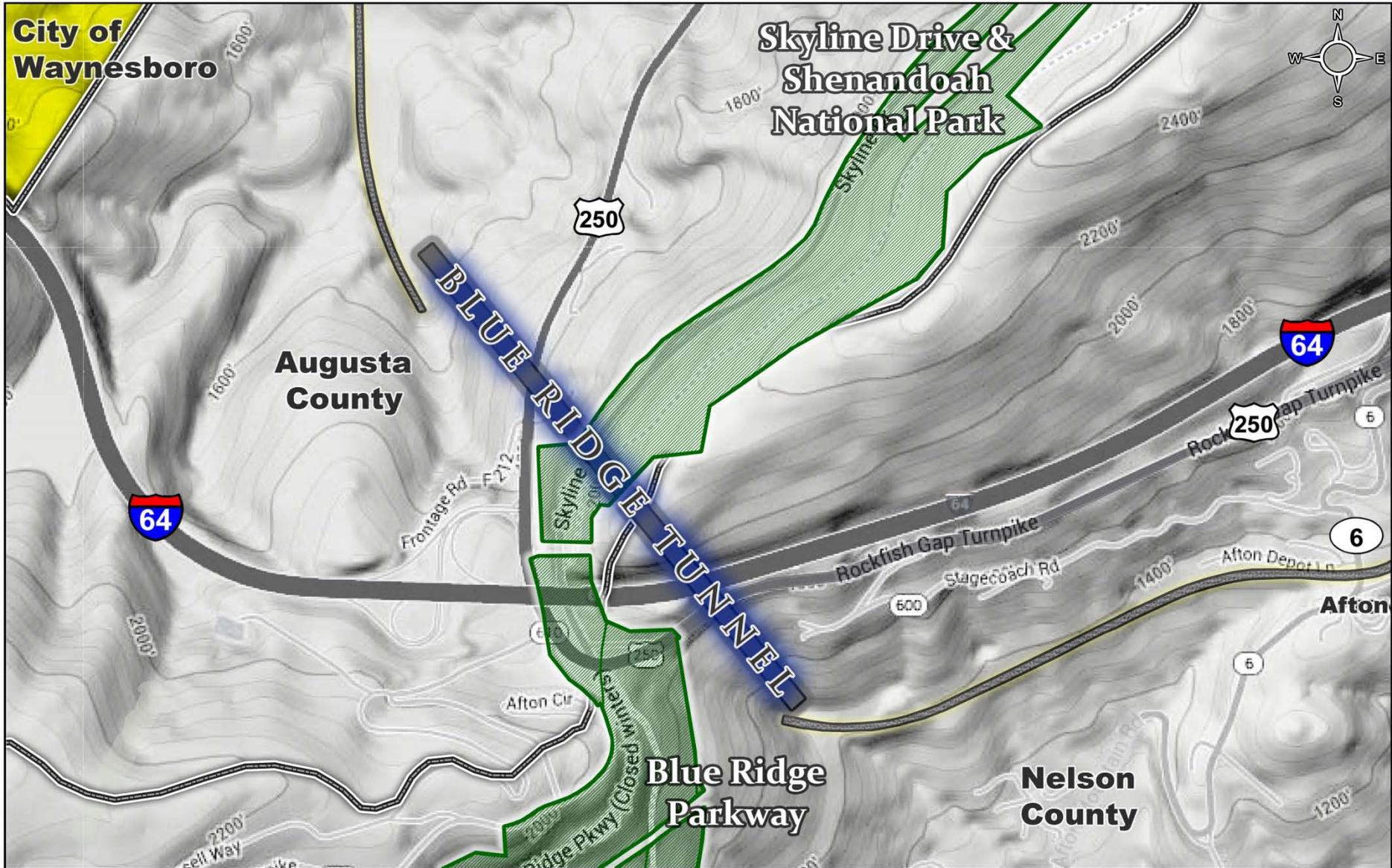
# Current Status: Blue Ridge Tunnel

- Currently closed to the public (off limits)
  - Illegal visitation is a growing problem
- Increasing vandalism... (esp. west portal)
  - Graffiti
  - Trash / litter
  - Physical vandalism to Tunnel itself
- Promising future...
  - Shovel-ready project
  - Phase I construction funds awarded (VDOT/MAP-21)

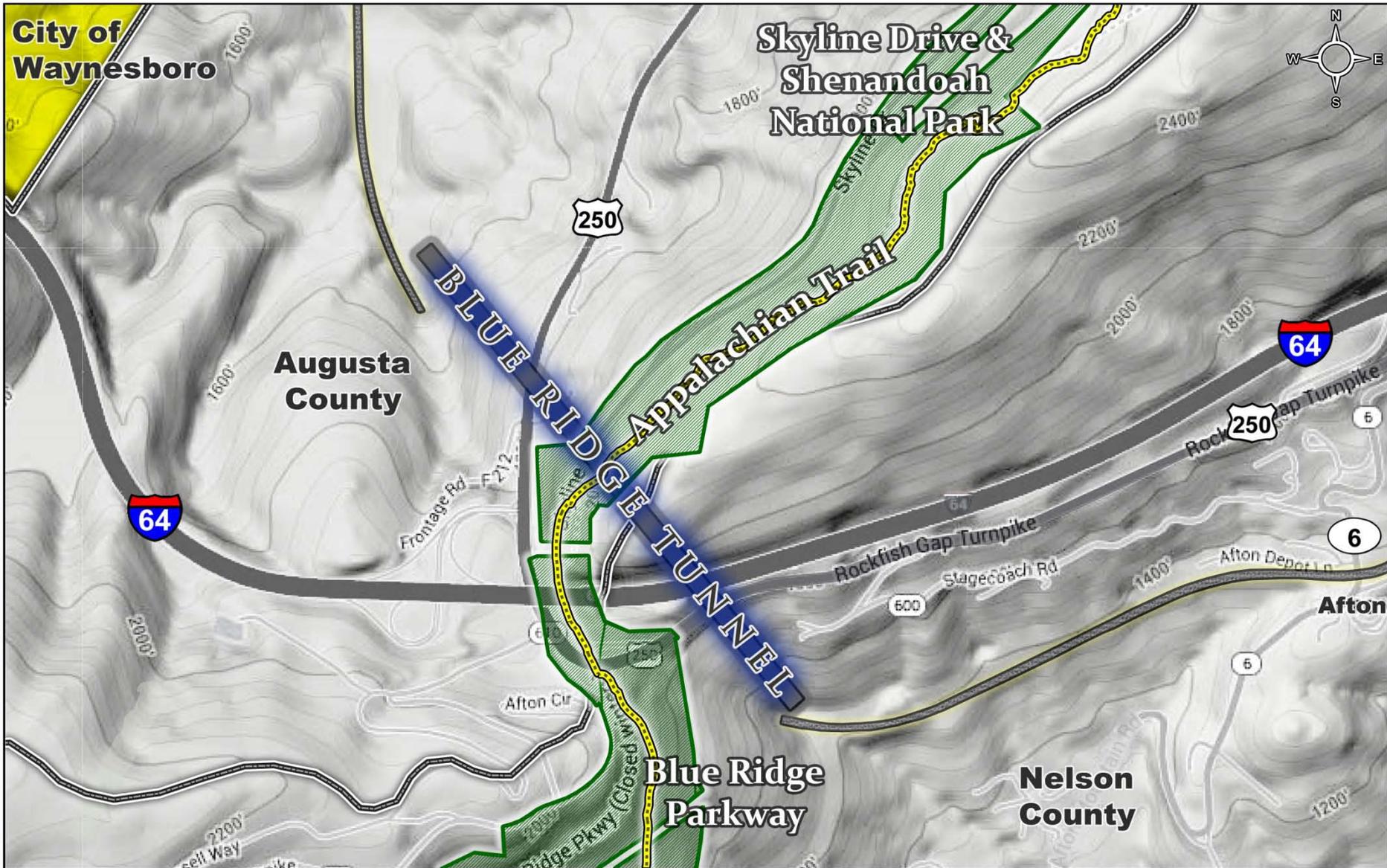
# Tunnel Context: Rockfish Gap near Waynesboro



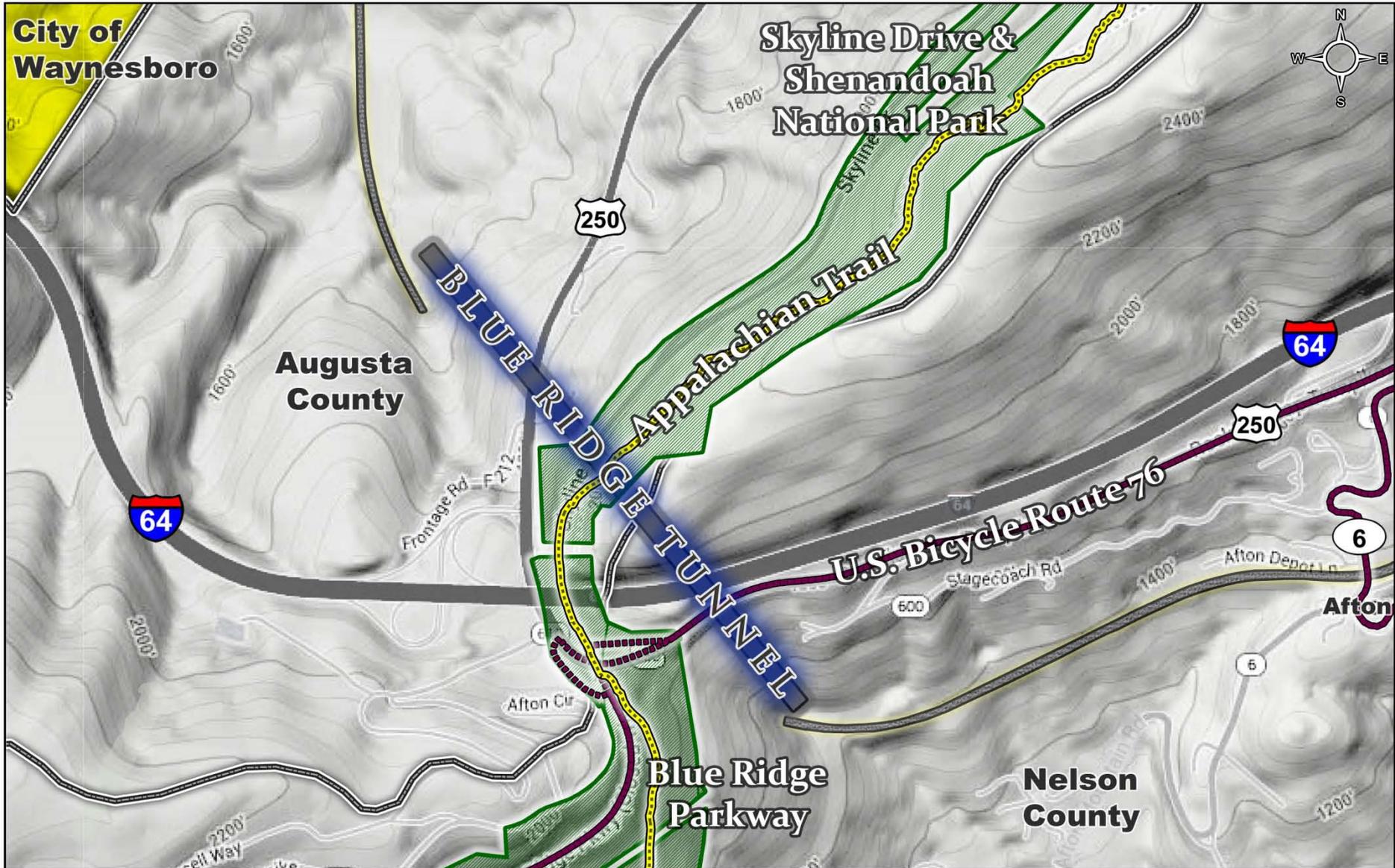
# Tunnel Context: Two National Park Units



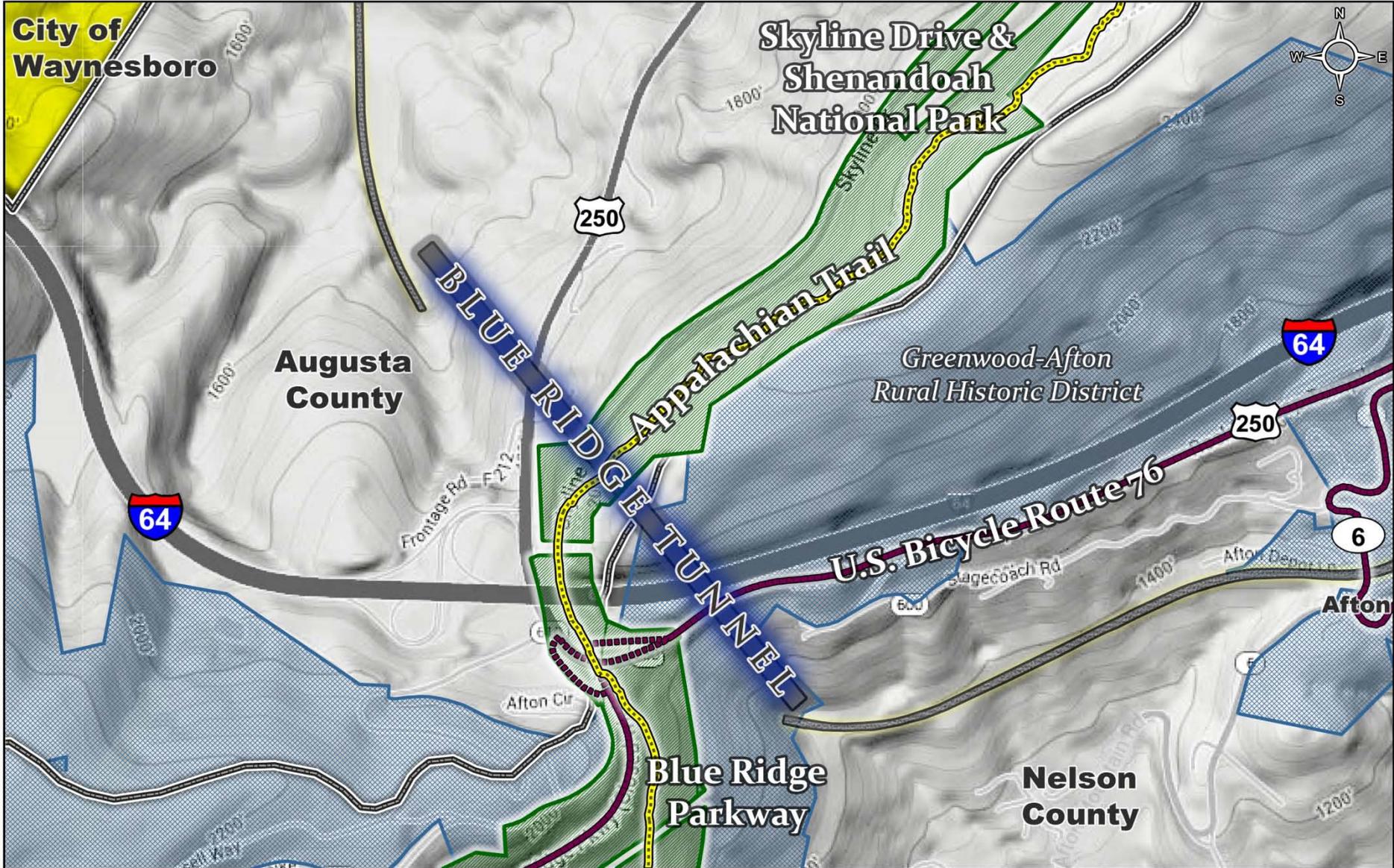
# Tunnel Context: Appalachian Trail



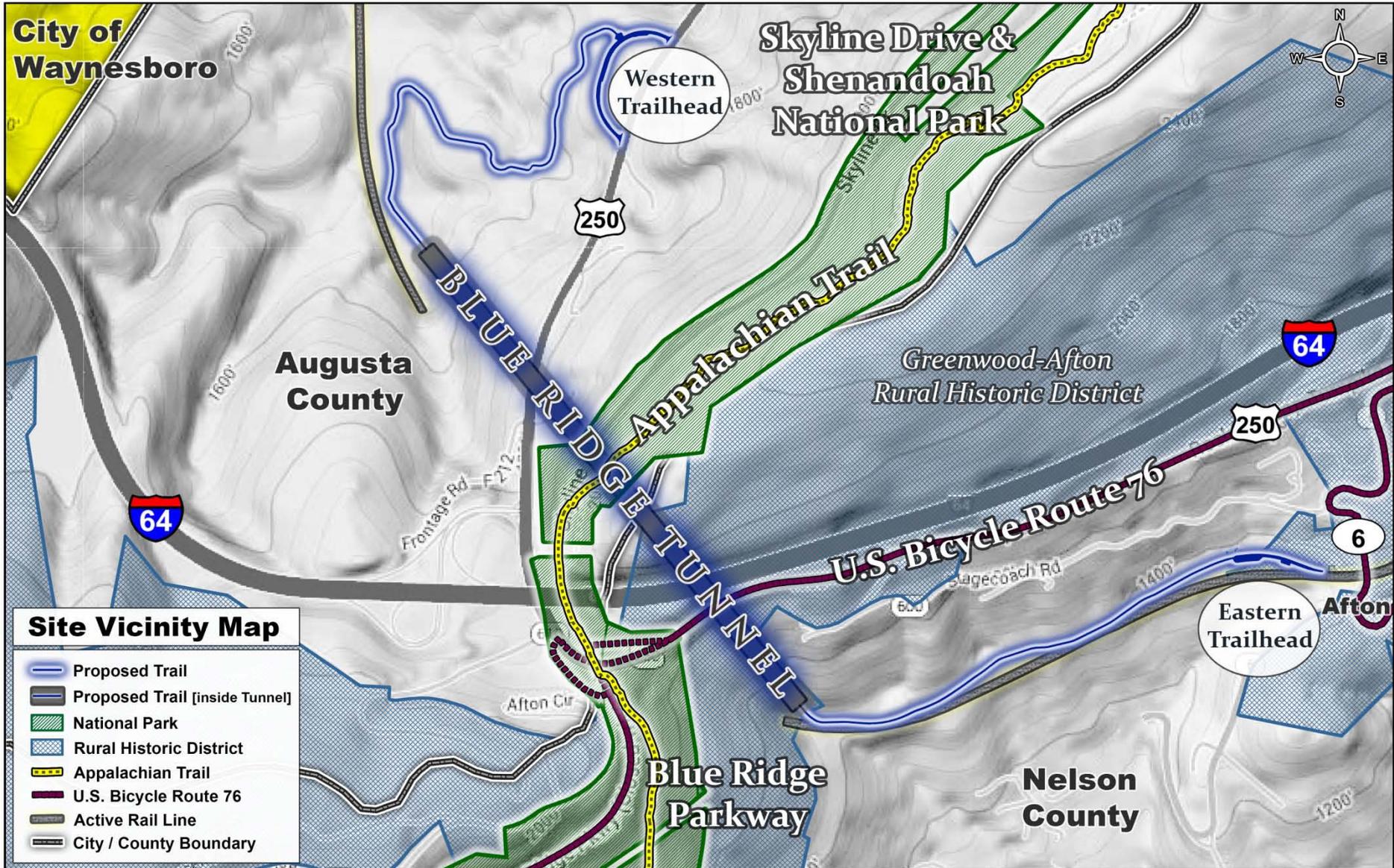
# Tunnel Context: TransAmerica Bicycle Route 76



# Tunnel Context: Rural Historic District



# Blue Ridge Tunnel Project: Special Location & Opportunity













# Tunnel Project Status: Phase I

- East Trailhead (Afton)
- site improvements (drainage, etc.)
- 1+ mile long universal-access trail leading 1,400' into Tunnel (ending at existing "bulkhead")
- barrier between trail and active rail line ("Rails-WITH-Trails")

to 151



**Afton  
Mountain  
Road  
Route 6**

to 250

**EAST TRAILHEAD**

**Universal-Access Trail  
To East Portal  
& Into Blue Ridge Tunnel**

# Tunnel Project Status:

## Recent Grant Awards

### MAP-21 program

(Phase I implementation funds)



### NPS Rivers, Trails, and Conservation Assistance program

(technical assistance)



### Recreational Trails Grant program

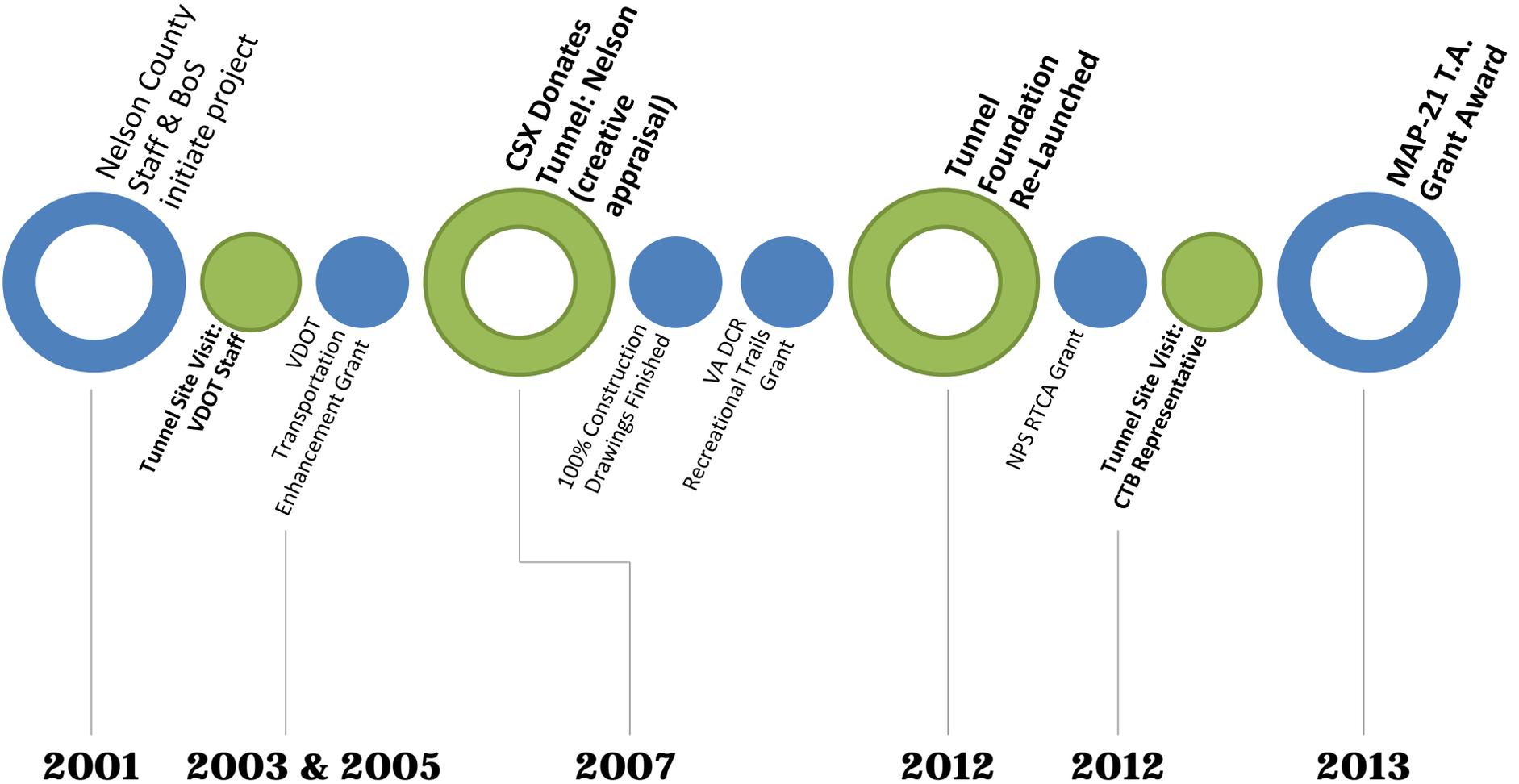
(property acquisition funds)



# Blue Ridge Tunnel Project: Timeline & Milestones

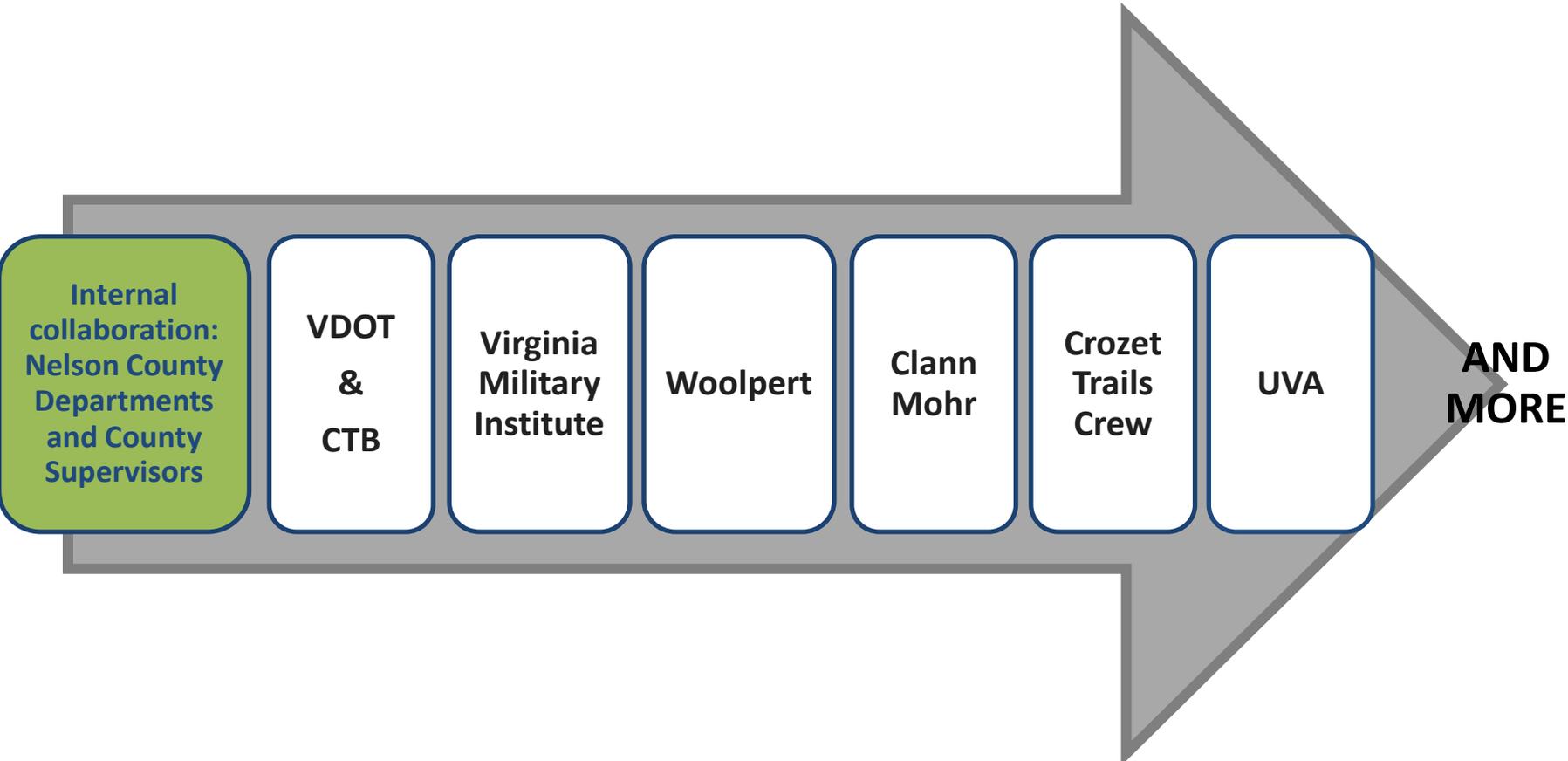
 = conventional activity

 = creative activity



# Tunnel Project Status: Regional Collaboration

...steadily increasing regional participation and commitment...



# Tunnel Project Status: Regional Collaboration

## Local / Regional Government

Nelson County

Albemarle County

Augusta County

City of Waynesboro

Central Shenandoah  
PDC

Thomas Jefferson PDC

## State / Federal Government

VDOT & CTB

Virginia DCR

Virginia DHR

National Park Service:  
Rivers, Trails, and  
Conservation Assistance

*Blue Ridge Parkway*

*Shenandoah National  
Park*

*Appalachian Trail*

## Community Organizations

Clann Mhor

Crozet Trails Crew

Augusta County  
Historical Society

Nelson County  
Historical Society

## Public Institutions

Virginia Military  
Institute

UVA School of  
Architecture

UVA Institute for  
Environmental  
Negotiation

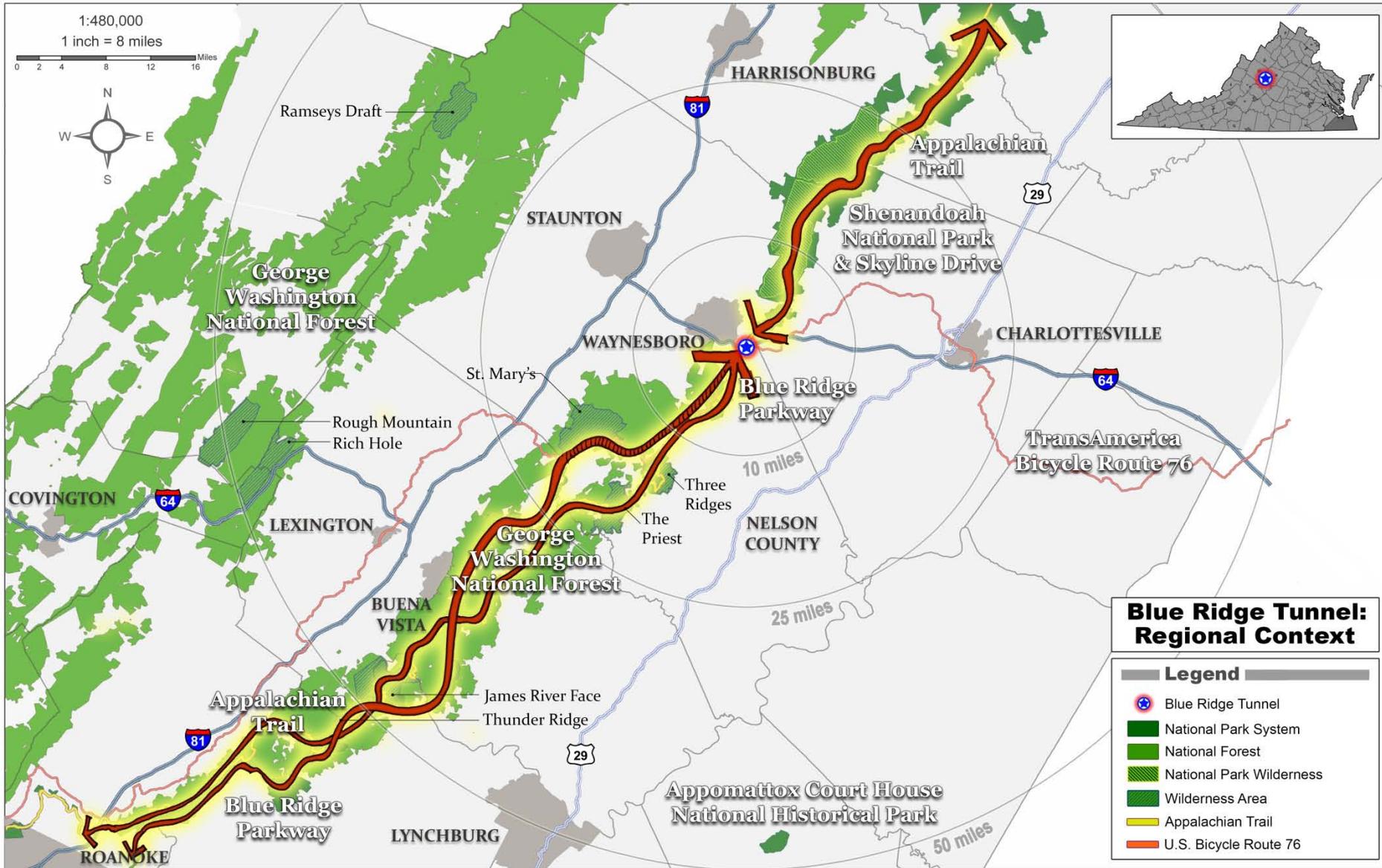
# Regional Collaboration & Coordination:



- Non-profit organization
- Established 2007; revised 2012
- Comprised of leaders from all project partners (and growing)
- Private fundraising and public/private support and participation
- Partnership development
- Multimedia and marketing

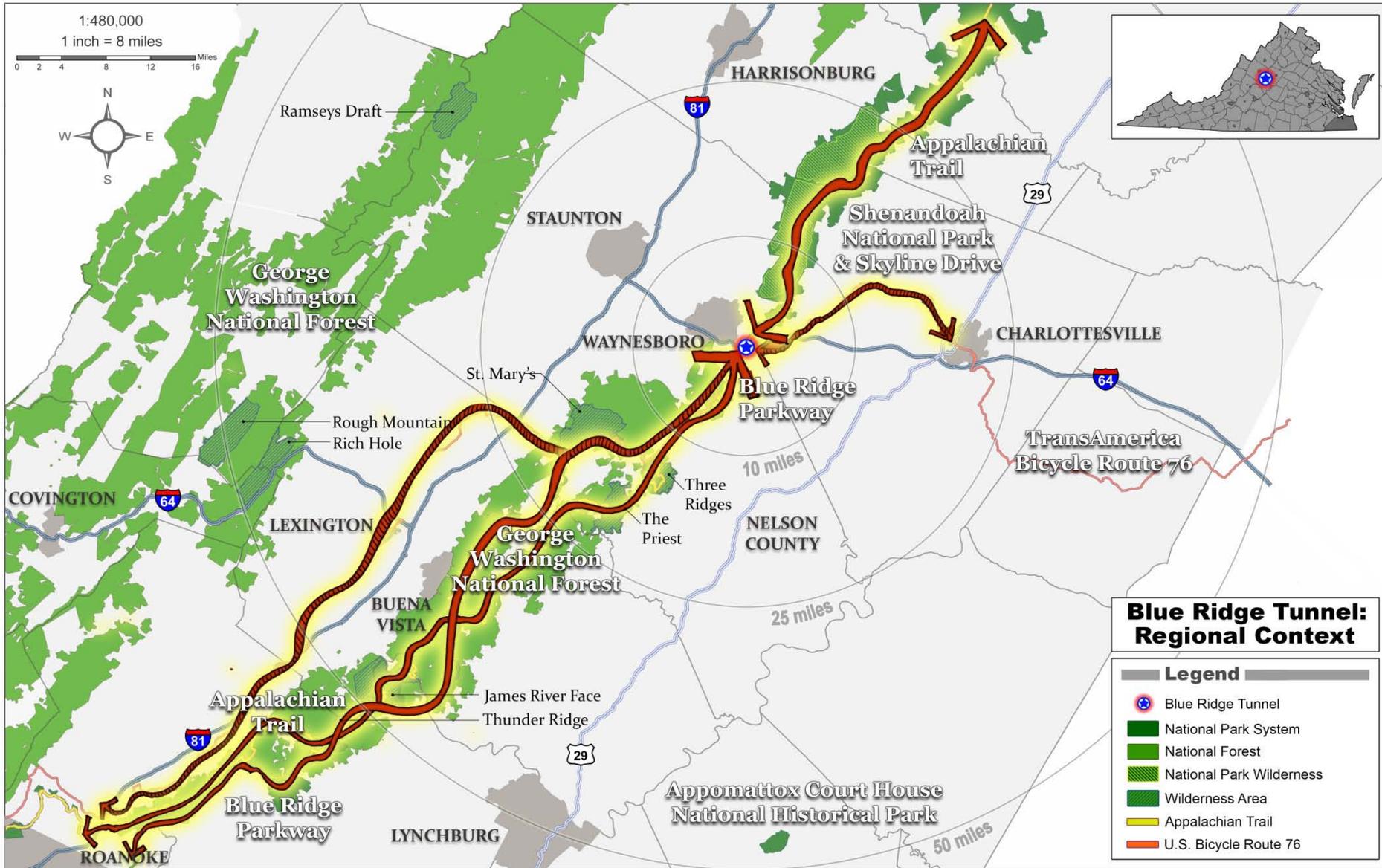
# Regional Vision: National Park Units

## Blue Ridge Parkway + Shenandoah NP + A.T.



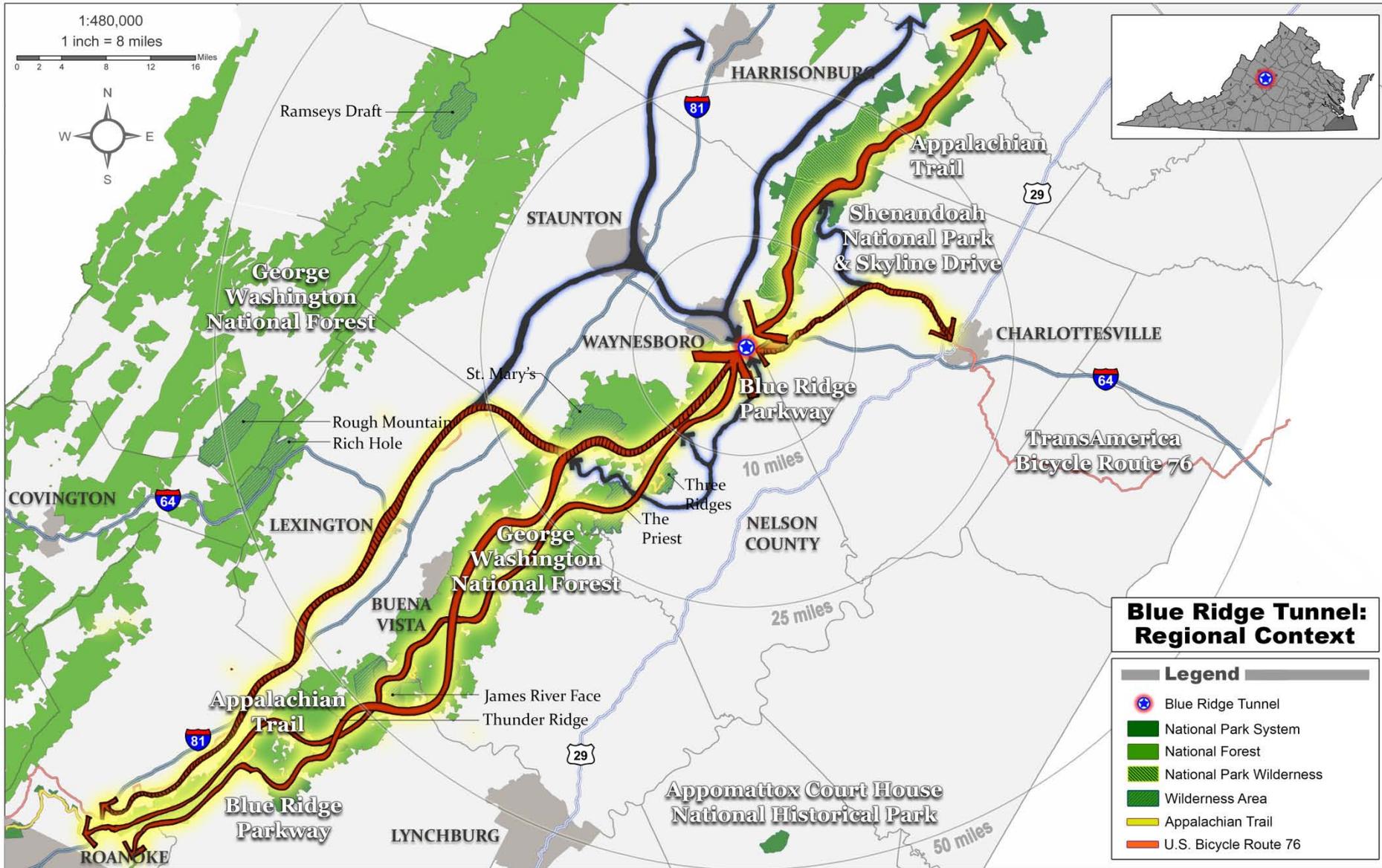
# Regional Vision: TransAmerica Bicycle Route 76

## Long-distance bicycle touring throughout Central Virginia



# Regional Vision: Community Connections

## support local & regional non-motorized trail systems



### Blue Ridge Tunnel: Regional Context

- Legend**
-  Blue Ridge Tunnel
  -  National Park System
  -  National Forest
  -  National Park Wilderness
  -  Wilderness Area
  -  Appalachian Trail
  -  U.S. Bicycle Route 76

# (Questions?)

