



COMMONWEALTH of VIRGINIA

Office of the

SECRETARY of TRANSPORTATION

# SMART SCALE

## Transportation Prioritization Process

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Virginia Department of Rail and Public Transportation



# Virginia's Statewide Prioritization Process

- **Legislation championed by Democratic Governor and the Republican Speaker of the House**
  - **Unanimously passed House and Senate**
- **Requires Commonwealth Transportation Board to use objective and quantifiable process for the allocation of construction funds**
- **Policy developed over a 14 month period and adopted by Commonwealth Transportation Board in June 2015**

## Context for Reform

- **Legislature enacted significant transportation revenue package in 2013**
- **Decision-making process was opaque and sense that it was driven by politics**
- **Lawmakers and stakeholders concerned that state was not advancing projects that addressed the more urgent needs**
- **Governor campaigned on reforming transportation to ‘pick the right projects, build the best ones’**

# Keys to Political Support

- **Broad based evaluation – something for everyone**
- **Recognizes that different parts of the state have different needs**
- **Mode-neutral**
- **Legislature controlled by opposite party of Administration**
- **Did not impact fully-funded projects**

# Public Engagement is Critical

- **27 Commonwealth Transportation Board public hearings across the state**
- **Stakeholder session in every construction district**
- **Individual meetings with every Metropolitan Planning Organization**
- **Numerous presentations at stakeholder and association conferences**

# Broad-Based Evaluation Factors

All projects are evaluated using the following:

- Congestion mitigation
- Economic development
- Accessibility
- Safety
- Environmental Quality
- Land Use (only in areas over 200,000)



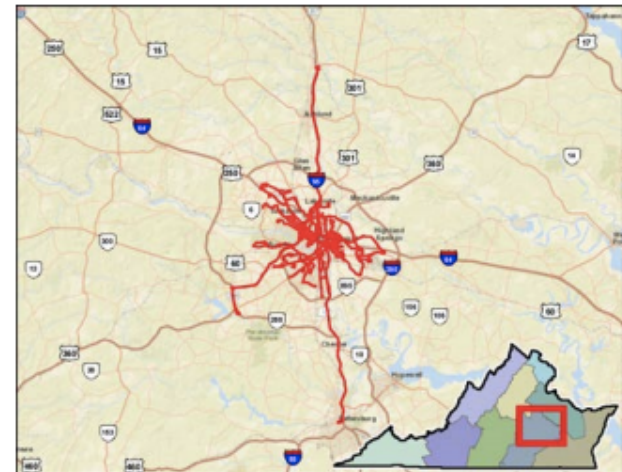
# Transparency and Accountability

E Smart Cities: Centralized Transit SP / EV Preemption

App Id: 1014

A citywide centralized TSP/EVP system to manage priority and preemption requests is proposed to improve emergency response, maintain transit schedules, lower emissions, and improve multimodal operations. The system will leverage ongoing ATMS upgrades

Project Location..... Richmond  
 SMART SCALE Area Type..... B  
 Submitting Entity..... Richmond City  
 Preliminary Engineering..... Not Started  
 Right of Way..... Not Needed  
 Construction..... Not Started  
 Expenditures to Date..... N/A  
 Key Fund Sources..... N/A  
 Administered By..... Locality  
 Eligible Funding Program(s)..... Both  
 VTrans Need..... East-West CoSS  
 ( Click for details )



<b>20.8</b> SMART SCALE SCORE	<b>#45</b> OF 404 STATEWIDE
	<b>#7</b> OF 72 DISTRICTWIDE

SMART SCALE Requested Funds..... **\$1,911,080**  
 Total Project Cost..... **\$1,911,080**  
 Project Benefit..... **4.0**  
 Project Benefit / Total Cost..... **20.8**

# Transparency and Accountability

Factor	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use
	Increase in Peak Period Person Throughput	Reduction in Peak Period Delay	Reduction in Fatal and Injury Crashes	Reduction in Fatal and Injury Crash Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Increase in Access to Multimodal Travel Choices	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Other Factor Values Scaled by Potential Acreage Impacted	Support of Transportation-Efficient Land Development
Measure Value	174.0 persons	86.7 person hrs.	0.0 EPDO	0.0 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	870.0 adjusted users	3,883,147.5 thousand adj sq. ft.	0.0 thousand adj daily tons	660,157.1 adj. buffer time index	348.0 adjusted points	3.6 scaled points	14,128.8 adjusted jobs & pop.
Normalized Measure Value (0-100)	1.7	2.7	0.0	0.0	0.0	0.0	5.9	13.8	0.0	0.0	2.0	7.1	12.5
Measure Weight (% of Factor)	50%	50%	100%	0%	60%	20%	20%	60%	20%	20%	50%	50%	100%
Factor Value	2.2		0.0		1.2			8.3			4.5		12.5
Factor Weight (% of Project Score)	15%		20%		25%			20%			10%		10%
Weighted Factor Value	0.3		0.0		0.3			1.7			0.5		1.2
Project Benefit	4.0												
SMART SCALE Cost	\$1,911,080												
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	20.9												



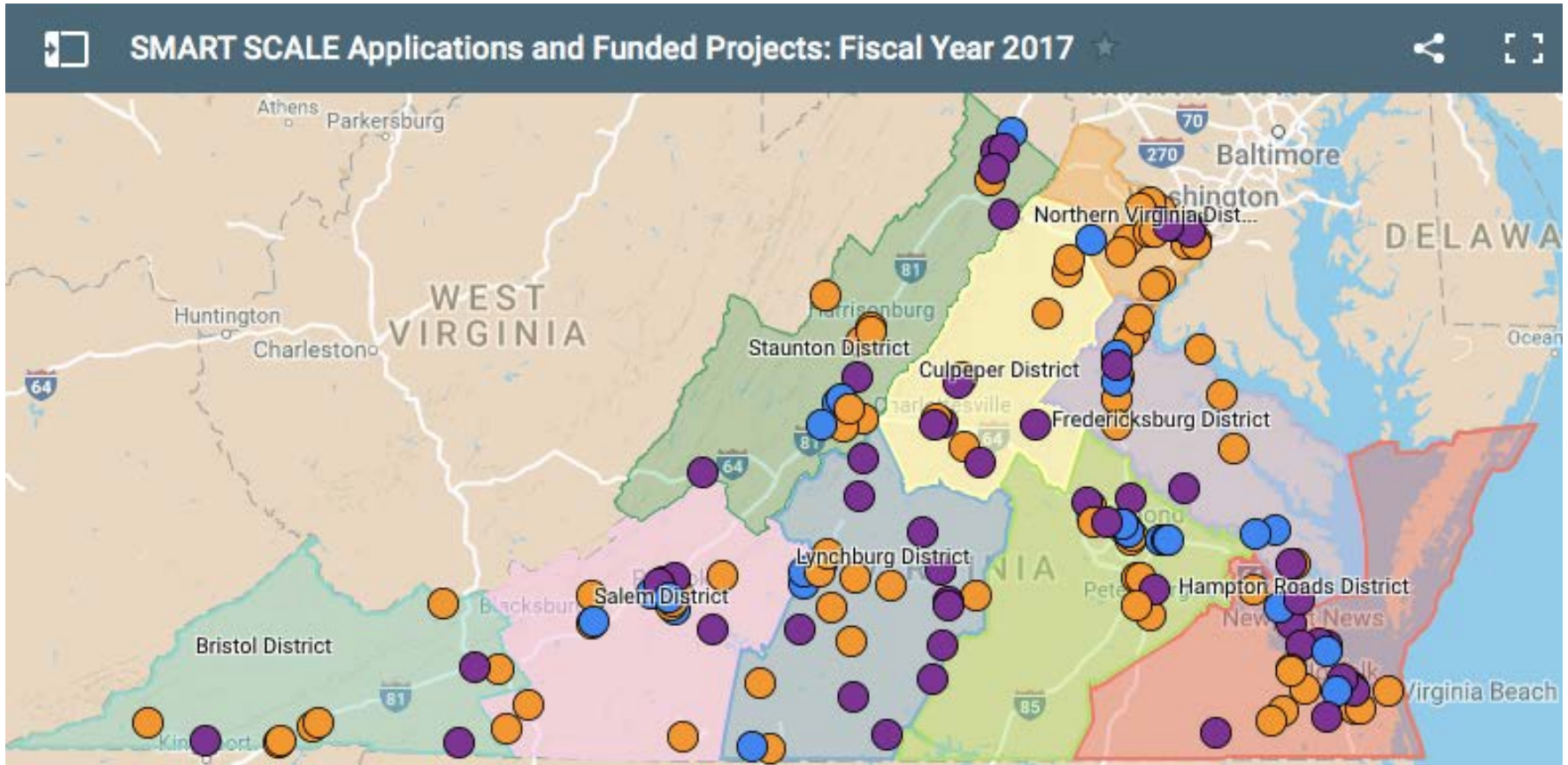
# Programming Cycle

- **Funds awarded on a biennial basis**
- **Selected projects will be fully funded**
- **Solicit projects from local governments and MPOs in the fall of even-numbered years**
- **Evaluate projects and release results in January**
- **Board will develop program based on top scoring projects and public input**

# SMART SCALE Requests

	Round 1	Round 2	Round 3
Total # Submitted	321	436	457
Requested Funding	7.2B	9.7B	8.2B
Available Funding	1.4B	1B	0.8B
Funded Projects	163	147	98
Success Rate	51%	34%	21%

# First Round – Funded Projects



# Transportation Needs are Regional in Nature

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“the staff-recommended draft project list would seem to indicate that the rating system is seriously broken ... includes less than \$16 million in highway funding, with \$184 million going to transit, [bike/ped] projects”

“no funding is directed to Prince William County, and only \$1.3 million to Loudoun, the two fastest-growing localities in [NOVA]”

“It is obvious that this is not the best way to reduce road congestion in Northern Virginia”

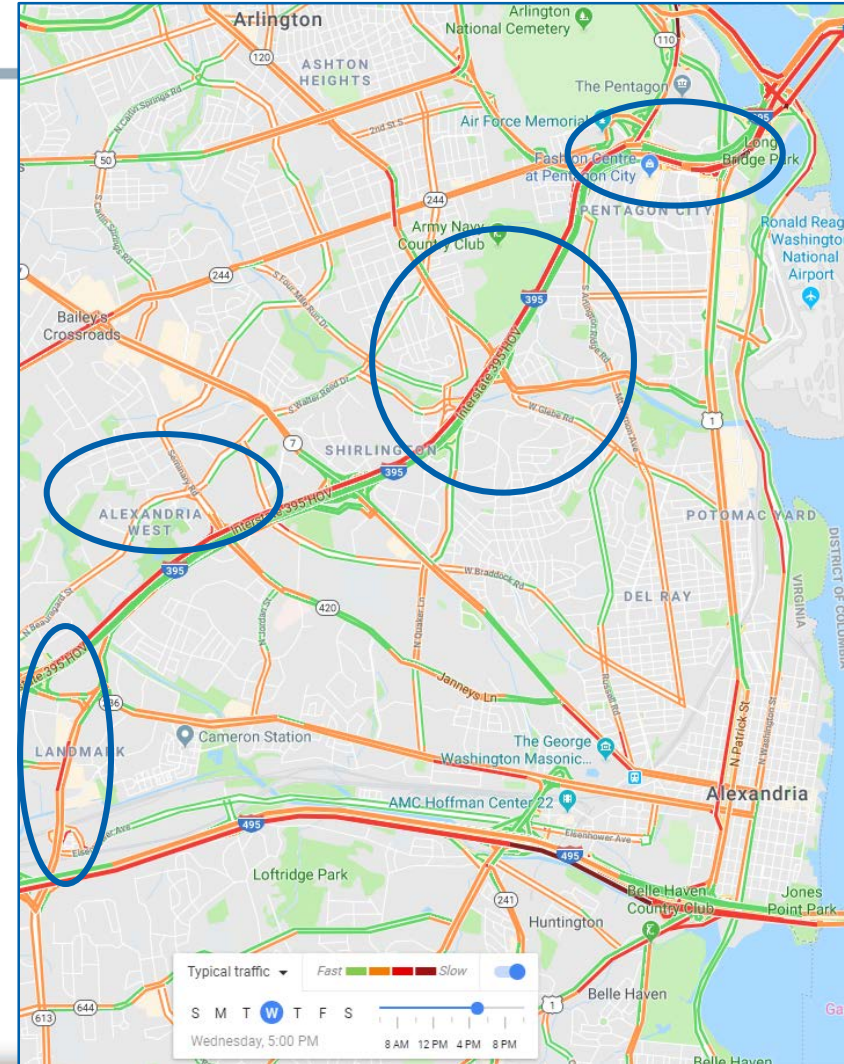
# Transportation Needs are Regional in Nature

## West End Transitway

Anticipated to eliminate 643.9 peak-period, person hours of delay per day

- I-395, Route 110, Van Dorn St and Beauregard St

~113 person hours of delay per \$10M in requested funding



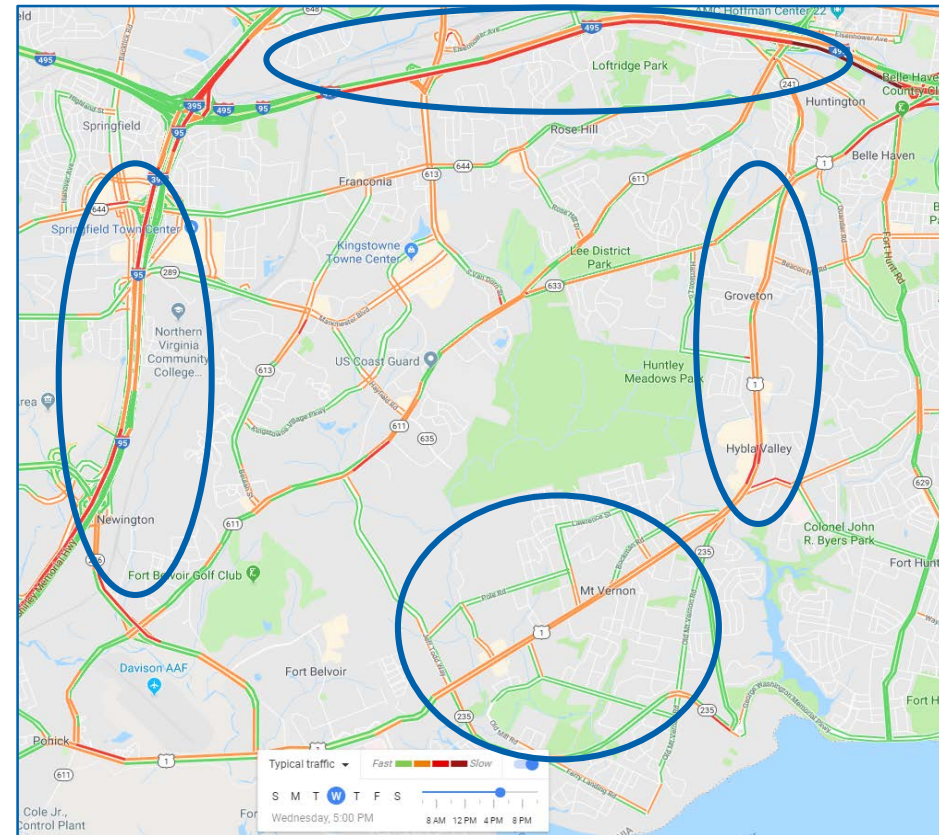
# Transportation Needs are Regional in Nature

## Richmond Highway Bus Rapid Transit

Anticipated to eliminate 141.6 peak-period, person hours of delay per day

- I-495, Route 1, and I-95

~28 person hours of delay per \$10M in requested funding



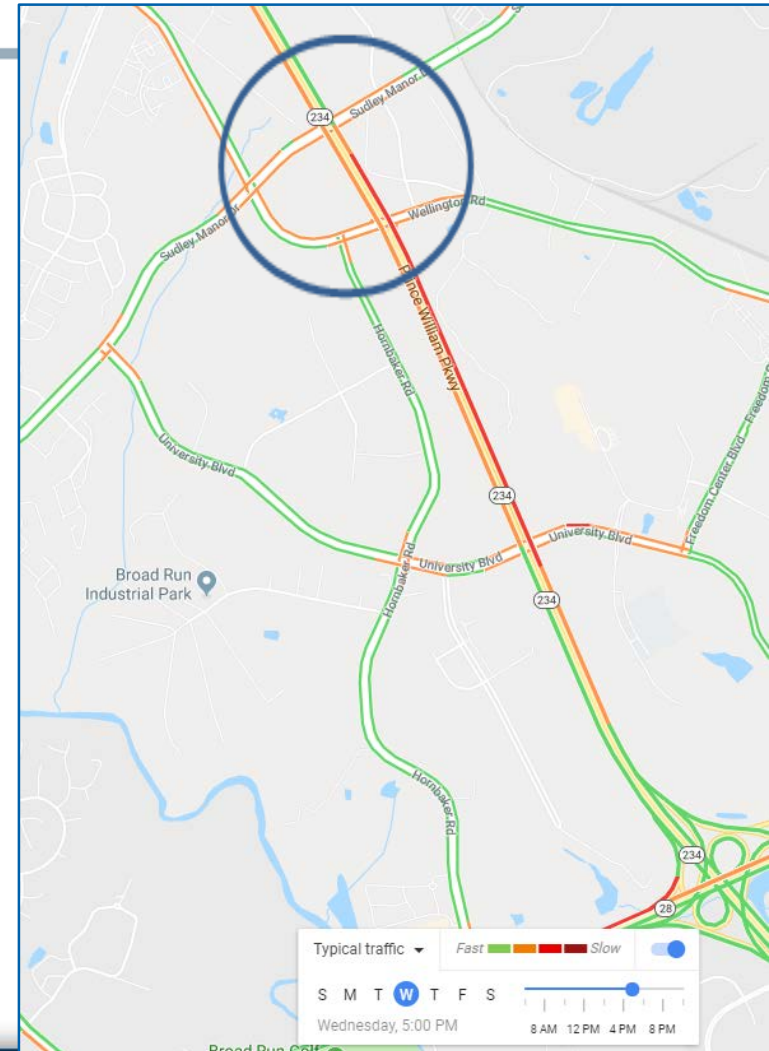
# Transportation Needs are Regional in Nature

## Route 234 and Sudley Manor Drive Interchange

Anticipated to eliminate 104.2 peak-period, person hours of delay per day

- Route 234, Sudley Manor Dr

~6 person hours of delay per \$10M in requested funding



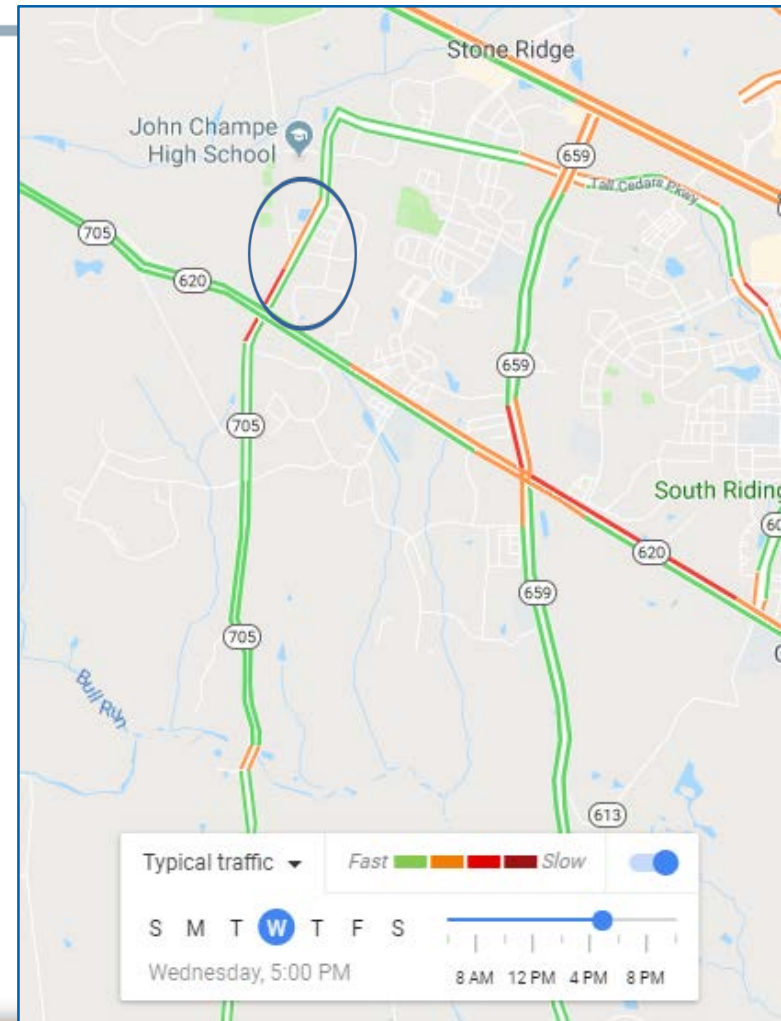
# Transportation Needs are Regional in Nature

**Northstar Blvd (Braddock Rd to Tall Cedars Parkway)**

**Anticipated to eliminate 5.8 peak-period, person hours of delay**

**- Northstar Blvd**

**~2 person hours of delay per \$10M in requested funding**





# Common Sense Engineering

## I-81 Exit 17 Interchange – Revised design funded in Round 1

- **Original design - \$157M**
  - Full interchange reconstruction
  - Improved level-of-service from E to B
- **Revised design - \$21M**
  - Realigning existing ramps and adding one new ramp
  - Improved level-of-service from E to C



# Common Sense Engineering

- **Bryan Park Interchange has been bottleneck for decades in Richmond region**
- **VDOT implemented \$80,000 northbound improvement to help improve travel flow and safety**
- **Re-striped and re-allocated lanes to align with traffic flow instead of wasting for tens of millions to rebuild entire interchange**
- **Project implemented in less than a month**

# Bryan Park Interchange Before and After (Jun-Aug '16 vs '17)

- Travel times from I-64 E and I-195 N to I-95 N were reduced by 15%
- Crashes reduced 31% from 39 to 27
- Reliability was significantly improved

