



COMMONWEALTH of VIRGINIA

Office of the

SECRETARY of TRANSPORTATION

# SMART SCALE Overview and Evolution

TRB Conference

Performance and Data in Transportation Decision Making

September 2019

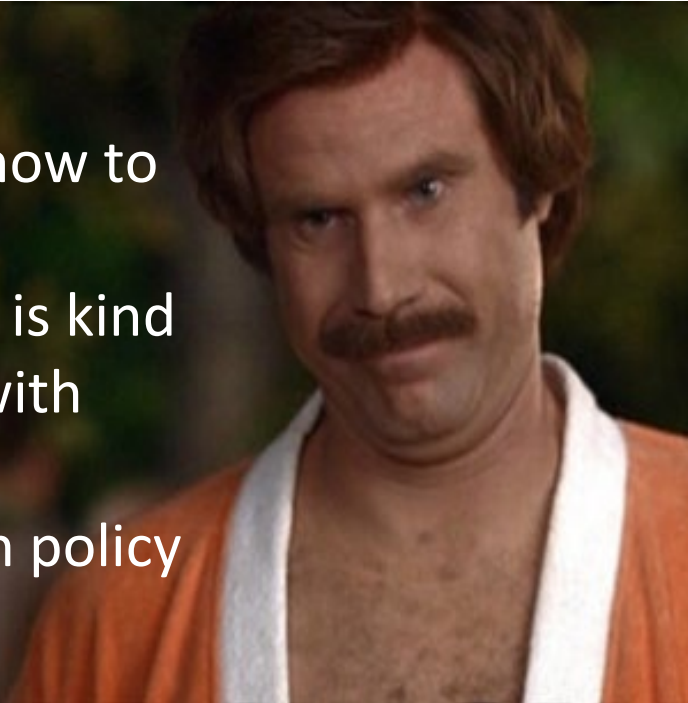
Chad Tucker



# What is SMART SCALE?



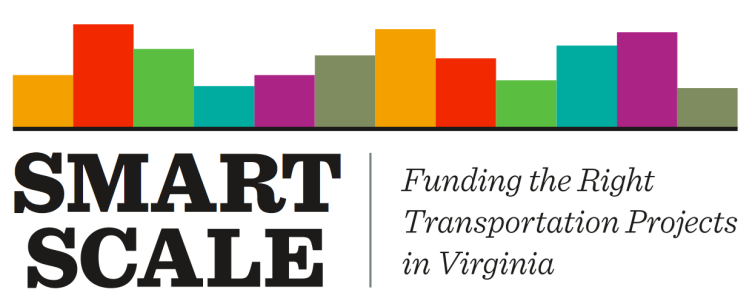
I don't know how to  
put this.. but..  
SMART SCALE is kind  
of a big deal with  
respect to  
transportation policy



# What is SMART SCALE?

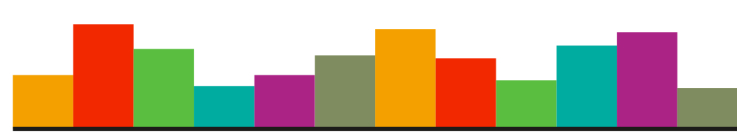


- SMART SCALE is the set of policies and methods used to score and evaluate transportation projects that are ultimately funded in the Virginia's six-year improvement program (SYIP)
- Projects are scored based on an objective, outcome-based process that is transparent to the public and allows decision-makers to be held accountable to taxpayers
- Has been used over the past 4 years to allocate over **\$3.59B** in funding for **\$10.6B in operational and capacity** transportation **improvements** (**over \$7B leveraged** from regional/local funding sources)



# Virginia's Statewide Prioritization Process

- Legislation championed by Democratic Governor and the Republican Speaker of the House
- Required Commonwealth Transportation Board (CTB) to use objective and quantifiable process for the allocation of construction funds
  - CTB allocates construction funds for the Commonwealth
  - Programming of funds for capacity enhancing projects
  - Intent for the CTB to select the highest ranking projects however, they maintain the authority to propose adjustments to the rankings.
- Policy developed over a 14 month period and adopted by Commonwealth Transportation Board in June 2015



# SMART SCALE

*Funding the Right  
Transportation Projects  
in Virginia*

## Context for Reform

- Legislature enacted significant transportation revenue package in 2013
- Desire by lawmakers to demonstrate to public the benefits from new taxes
- 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’
- Decision-making process was opaque and **sense that it was driven by politics**



# SMART SCALE

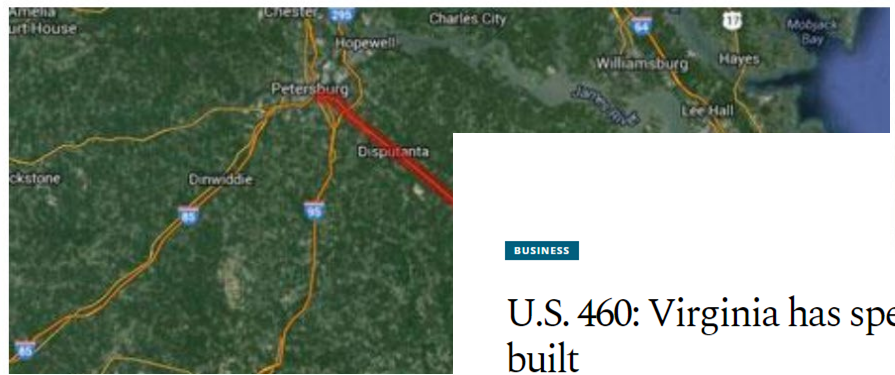
*Funding the Right Transportation Projects in Virginia*

...sense that it was driven by politics

ROADS

## State suspends \$1.4 billion U.S. 460 project

BY JIM NOLAN AND MICHAEL MARTZ  
Richmond Times-Dispatch Mar 14, 2014



\$300M paid on \$1.4B project before Corps of Engineers issued a permit

## Contract terminated for team chosen to complete Route 460 project

POSTED 4:10 PM, APRIL 15, 2015, BY BECCA MITCHELL AND NADEEN YANES, UPDATED AT 09:21PM, APRIL 15, 2015

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**BUSINESS**

## U.S. 460: Virginia has spent \$270 million for a road that may not be built

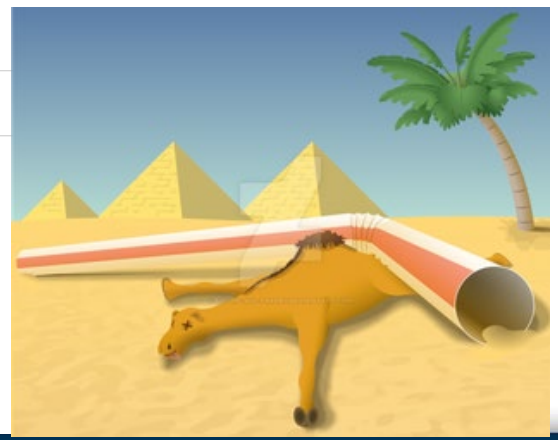
By TRAVIS FAIN and TFAIN@DAILYPRESS.COM  
DAILY PRESS | APR 05, 2014 | 7:34 PM | RICHMOND

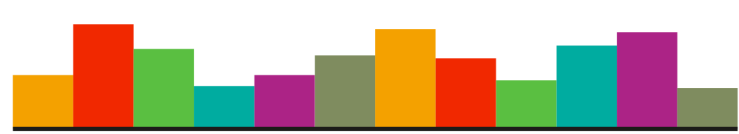
With more than \$270 million already spent and more on the line, state transportation officials are working against the clock to keep the state's U.S. 460 project from becoming an unmitigated disaster.

Not an inch has been paved. Taxpayers have already sunk at least \$180 million into the road, and bond holders another \$95 million.

And the private consortium that agreed to do the work? Not a penny.

Although the project website says US 460 Mobility Partners was chosen because its





# SMART SCALE

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## Keys to Political Support

Process  
Development

- 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

Process  
Implementation

- Did not impact fully-funded projects
- Provide transparency in the process
- Deliver! Demonstrate effective and efficient use of funding by delivering on time and on budget

# Concerns of State and Local Officials

- ‘All the funds will all go to Northern Virginia’
- ‘Rural areas will lose out in this process’
- ‘My region pays taxes and has transportation needs’
- ‘Prioritization should be done at a regional level, not a statewide level’
- ‘Politics will still drive this process – I do not think this is going to change anything’

# 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 (MPO)
- Numerous presentations at stakeholder and association conferences

# Reformed Funding Formulas

- In 2015 legislature adopted Administration's recommended revisions to funding formulas
- Runs all state and federal construction revenues, excluding specialized programs, through formula
- After capital rehabilitation and reconstruction
  - 50% of funds distributed at statewide-level based on prioritization process
  - 50% of funds set-aside for districts based on formula and then distributed within the district using prioritization process

# SMART SCALE Cycle

- Funds award on a biennial basis (~\$800M to \$1B)
- ***Selected projects are fully funded***
- ***Solicit projects from local governments, MPOs/PDCs, transit organizations*** in even-numbered years
- Evaluate projects and ***release results*** in January - ***CTB sees results same time as public***
- Board develops Capital Improvement Program ***based on top scoring projects and public input***

# Broad-Based Evaluation Factors

**All projects are evaluated using the following:**

- Safety
- Congestion
- Accessibility
- Land Use
- Environmental Quality
- Economic development

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- System for the
- Management and
- Allocation of
- Resources for
- Transportation

That sweet acronym only cost  
\$83,000\*

\* this is a joke, it couldn't have been more than \$47,000\*\*

\*\* this too is a joke

# Guiding Principles for Measures

- Analyze what matters to people and has a meaningful impact
- Ensure fair and accurate benefits to cost analysis
- Transparent and understandable
- Must work for both urban and rural areas
- Must work for all modes of transportation
- Minimize overlap in measures

# Process Used to Develop Measures

- Researched best practices from other state DOTs and MPOs
- Secretary established an Executive Work Group to oversee implementation
- Established sub-work group focused specifically on measures and the online portal
- Held peer exchange workshop
- Held outreach meetings with key stakeholders
- Surveyed stakeholders
- Pilot project evaluation brought before the Board

# Factor Areas

## Goals that guided measure development



- **Safety** – reduce the number and rate of fatalities and severe injuries
- **Congestion** – reduce person hours of delay and increase person throughput
- **Accessibility** – increase access to jobs and travel options
- **Economic Development** – support economic development and improve goods movement
- **Environmental Quality** – improve air quality and avoid impacts to the natural environment
- **Land Use** – support transportation efficient land development patterns

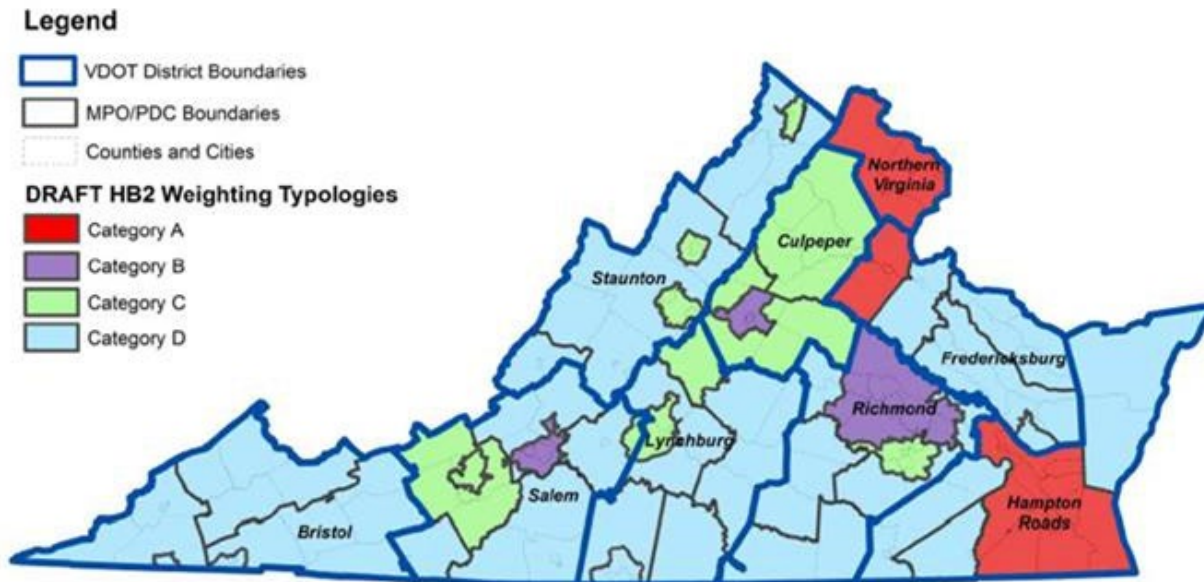
Scoring focused on outcomes, not the size of the problem



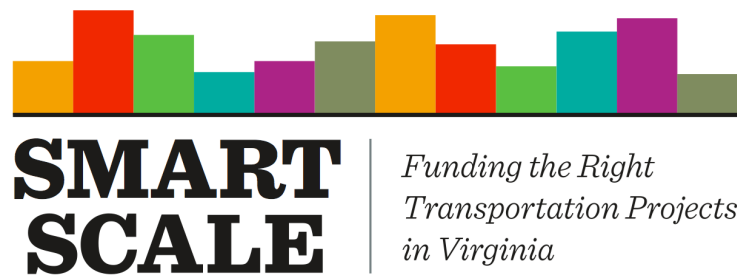
# SMART SCALE

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# Area Type Weighting



Factor	Congestion Mitigation	Economic Development	Accessibility	Safety	Environmental Quality	Land Use
Category A	45%	5%	15%	5%	10%	20%
Category B	15%	20%	25%	20%	10%	10%
Category C	15%	25%	25%	25%	10%	
Category D	10%	35%	15%	30%	10%	

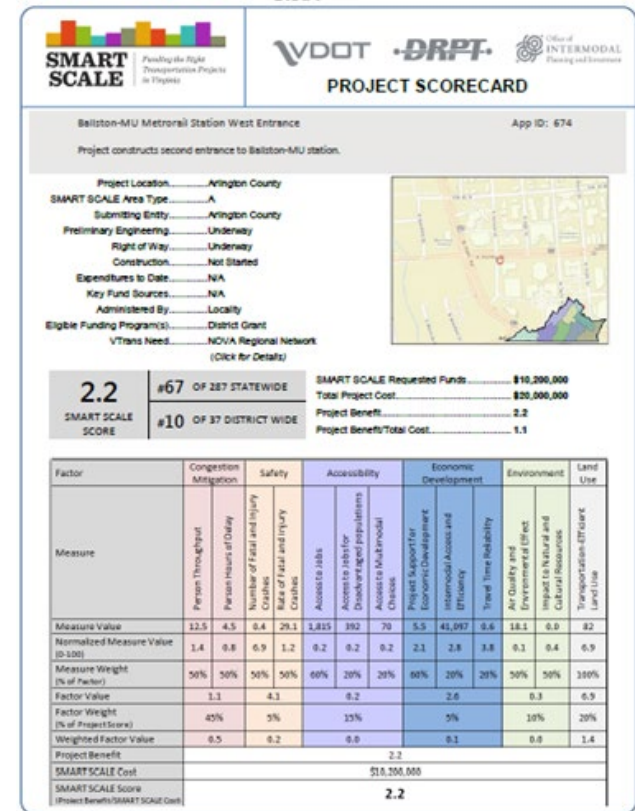


# SMART SCALE

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# Increased Transparency

<http://dashboard.vasmartscale.org>



Results from latest round of SMART SCALE  
<http://smartscale.org/projects/fy-2020-projects.asp>

<https://smartportal.virginiahb2.org/#/public/apps>



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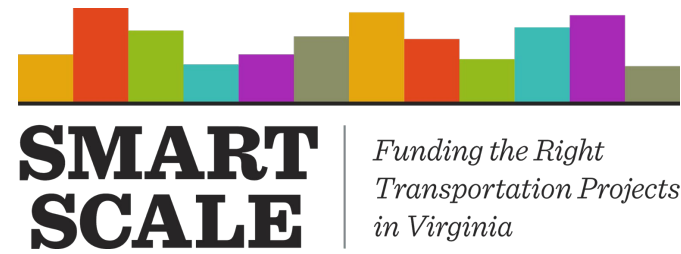
## Impact of SMART SCALE

- **Greater emphasis on the planning process** and linkage to VTrans needs - project must meet identified need to be scored
- **Better planning** - projects must be sufficiently developed such that benefits can be calculated
- **Importance of cost** – need to focus the project scope on solving the problem/needs and don't let perfect get in the way of good
- **Wants versus Needs** - Reinforcing the concept of *value engineering* – applicants are seeing the importance of *lean and focused scope of work*
- **Thinking beyond SOVs and Capacity Expansion** – opportunities for bike/ped, transit, travel demand management (P&R, HOV) – non-SOV users used as scaling factor for several measures

# Free Advice Moving Forward

- Be open and communicate - communication is key
- Respond directly to feedback and concerns
- Be transparent with mis-steps and issues
- Recognize that there is always room for improvement
- Challenge past practices
  - **Focus on outcome achieved, not size of the problem**
  - **Less ‘control’ may be beneficial**
    - In SMART SCALE VDOT and DRPT cannot submit projects for evaluation - CTB only gets 2 optional applications per round
  - **Examine benefits relative to cost**
    - Cannot stress this one enough

# Programmatic Budgetary Performance



- **\$2.4 Billion allocated in Rounds 1 and 2**
  - Over 300 projects selected for funding
- **\$77 million in cost savings based on Construction Award**
- **\$75 million re-allocated to cover cost increases**
  - 80% of cost increases on 2 projects (Rte 7, Laskin Rd)
  - Cost increases represent only 3% of SMART SCALE funds allocated in Rounds 1 and 2
- **Success is driven by rescoring policy** - if scope changes such that benefits would be affected or costs increase above threshold then project must be rescored.
- For project change policy see - <http://smartscale.org/documents/smart-scale-rescoring-guidance-version.pdf>