



Funding the Right  
**Transportation Projects**

## **House Bill 2 Overview**



# Agenda

- **Background**
- **Summary of the HB2 Process**
- **Results from Round 1**
- **Lessons Learned from Round 1**
- **Annual Cycle**
- **Looking Ahead**



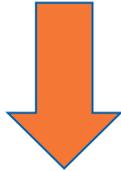
# House Bill 2 (HB2) Background

- **2014 Bill directed the Commonwealth Transportation Board to develop a statewide prioritization process**
  - Board must use quantifiable and objective measures for 6 factor areas
  - Board must consider highway, transit, rail, road, operational improvements and transportation demand management projects
- **From 2014 to June 2015, staff worked closely with regional stakeholders, potential applicants, industry experts, and district staff to develop the HB2 prioritization process**
- **First round of applications were received by October 1, 2015 for funding in the FY2017-FY2022 SYIP**
- **Second round of HB2 will begin in August 2016 with the open period for applications, but pre-application discussions and planning should begin now**



# *Strategic Framework for Funding the Right Projects*

How it's planned.



How it's scored.



How it's funded.

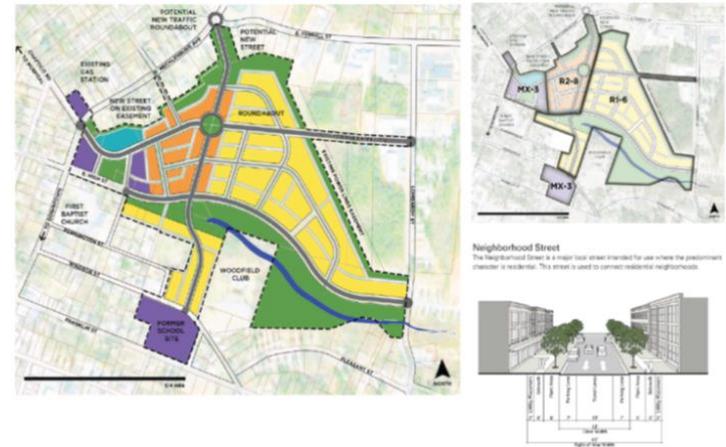
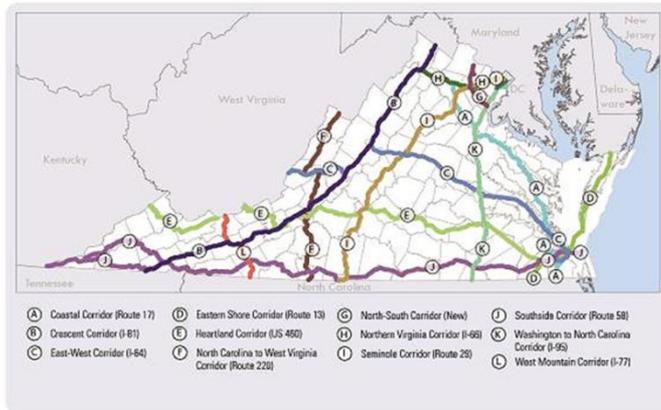
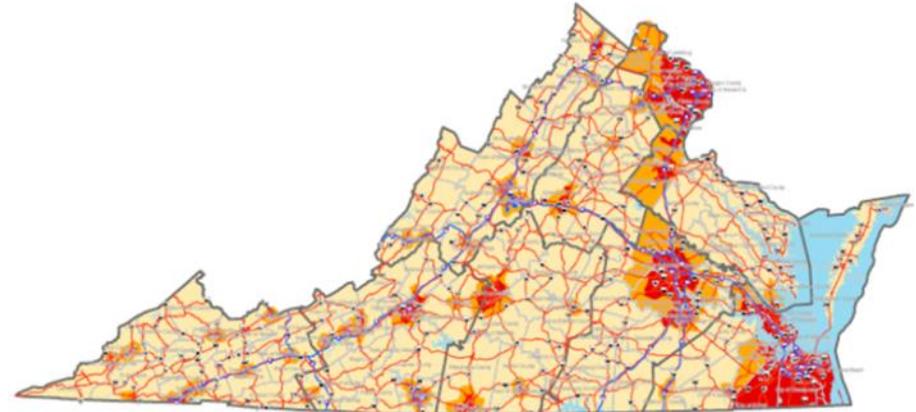




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# VTrans Needs Screening

- Eligibility and screening:
  - Corridors of statewide significance
  - Regional networks
  - Urban development areas





# Eligible Applicants – High Priority Projects

High Priority Projects	Regional Entities	Local Governments	Transit Agencies
Corridors of Statewide Significance	Yes	Yes, with support from regional entity	Yes, with support from relevant regional entity
Regional Networks	Yes	Yes	Yes, with support from relevant entity

**Projects must be located within the boundaries of the applying agency**

**Board may choose to submit up to 2 projects for consideration per solicitation**



# Eligible Applicants – Construction District Grants

- **Only local governments may submit projects for consideration**
- **Project must be located within the boundary of the relevant local government**
- **Local governments may submit a joint application for projects that cross the boundary of a single local government**



# Application Process – Screening Process

- **High Priority Projects – Project must meet a need identified for**
  - Corridor of Statewide Significance
  - Regional Network
- **Construction District Grant Programs – Project must meet a need identified for—**
  - Corridor Statewide Significance
  - Regional Network
  - Urban Development Area
  - Safety

# Factor Areas



**Safety**



**Congestion mitigation**



**Accessibility**



**Environmental quality**

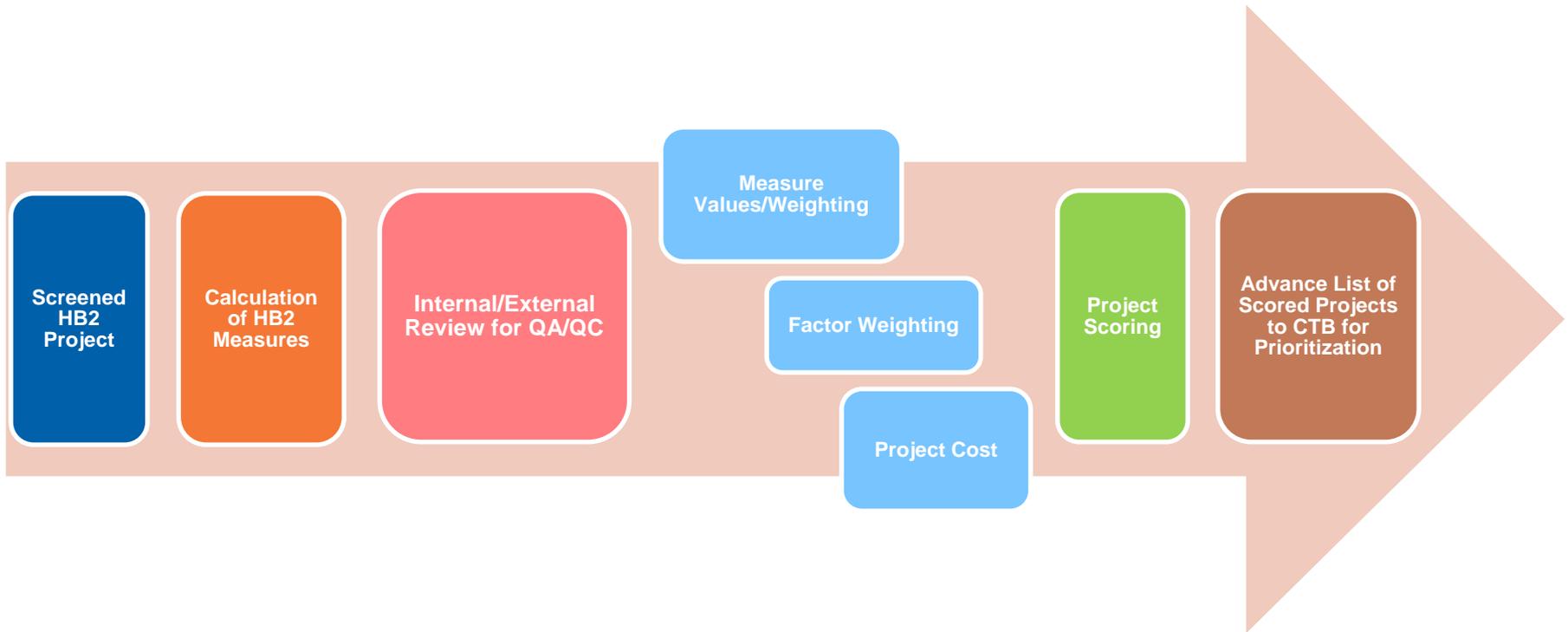


**Economic development**



**Land use and transportation coordination (areas with over 200,000 people)**

# Developing Project Scores



# Measures Selection

- **Transparent and understandable process**
  - Easy to communicate to project sponsors
  - Ability to evaluate projects with available resources
- **Measures applicable statewide and across modes**
- **Meet implementation schedule**
  - Establish process that can be implemented in Year 1 and improved over time



# Evaluation Measures – Safety

- **50% based on expected reduction in fatal and severe injury crashes on the facility (100% of score for transit projects)**
- **50% based on expected reduction in the rate of fatal and severe injury crashes on the facility**



# Evaluation Measures - Congestion Mitigation

- **50% based on expected reduction in person hours of delay up to posted speed limit**
- **50% based on expected increase in person throughput in the corridor**



# Evaluation Measures - Accessibility

- **60% based on cumulative increase in access to jobs in the region**
- **20% based on cumulative increase in access to jobs for disadvantaged populations in the region**
- **20% based on increase in access to multimodal choices:**
  - Projects receive points based on features that enhance multimodal access (Transit, Park and Ride, Bike/Ped, etc.)

# Evaluation Measures- Environmental

- **50% on the degree to which the project is expected to reduce air emissions and greenhouse gases**
  - **Points awarded based on:**
    - Providing bicycle or pedestrian facilities
    - Improvements for transit
    - Addressing freight bottlenecks
    - New or expanded Park and Ride lot
    - Provisions for hybrid/electric vehicles or
    - Energy efficient infrastructure
- **50% on potential impact to natural, cultural and historic resources from the project (based on acres of land impacted)**



# Evaluation Measures - Economic Development

- **60% based on support for economic development plans**
  - Points awarded based on consistency with local/regional economic development strategy
  - For each project, development sites are identified that the project supports – used to weight ED points
- **20% based on expected improvements to travel time reliability of the facility**
- **20% based on improved intermodal access and efficiency**

# Evaluation Measures – Land Use

- **100% on the support of transportation efficient land use patterns**
  - **Points awarded based on:**
    - Promoting walkable bicycle friendly mixed use development
    - Supporting in-fill development
    - Having an adopted corridor/access management plan
  - **Points scaled by projected population and employment density**

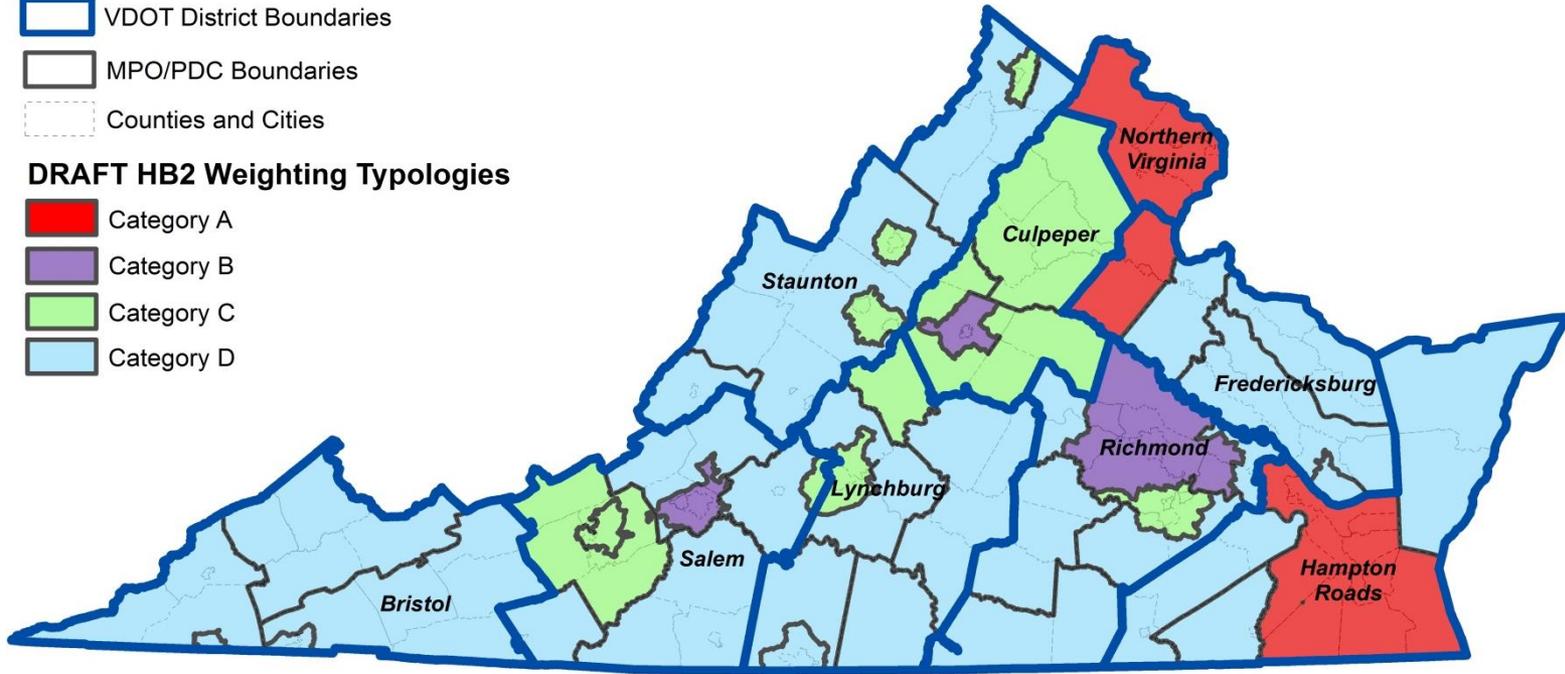
# Factor Weighting Categories by MPO and PDC

## Legend

-  VDOT District Boundaries
-  MPO/PDC Boundaries
-  Counties and Cities

## DRAFT HB2 Weighting Typologies

-  Category A
-  Category B
-  Category C
-  Category D



# Factor Weighting Framework

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%	



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# Project Scoring

## Everything is Relative

Highest Value  
Dictates Scores

Project	Measure	Score
A	250	50
B	300	60
C	75	15
D	15	3
E	500	100
F	150	30

Change here  
only affects  
one score

Project	Measure	Score
A	200	40
B	300	60
C	75	15
D	15	3
E	500	100
F	150	30

Change here  
affects all  
scores

Project	Measure	Score
A	250	33.3
B	300	40
C	75	10
D	15	2
E	750	100
F	150	20

The best project for that measure dictates the score for  
all other projects



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# Project Scoring

Project located in Typology													
Category A	Congestion		Safety		Accessibility			Environment		Econ. Dev			Land Use
	Throughput	Delay	F&SI Crashes	F&SI Crash Rate	Access to Jobs	Access to Jobs (Disadvantaged Areas)	Multimodal Choices	Air Quality	Natural and Cult. Resources	Economic Development	Intermodal Access	Travel Time Reliability	Future Land Use Policy Consistency
Measure Score	62	48	20	32	10	20	10	38	28	30	20	20	17
Measure Weight	50%	50%	50%	50%	60%	20%	20%	50%	50%	60%	20%	20%	100%
Weighted Measure Score	31	24	10	16	6	4	2	19	14	18	4	4	17
Raw Factor Score	55		26		12			33		26			17
Factor Weighting	45%		5%		15%			10%		5%			20%
Weighted Factor Score	24.8		1.3		1.8			3.3		1.3			3.4
Project Score	35.9												
Total Project Cost	\$20,000,000												
Score Divided by Total Cost	18.0												
HB2 Cost	\$10,000,000												
Score Divided by HB2 Cost	35.9												



# Summary of Applications Received

- **321 applications submitted**
- **131 entities submitted at least one application**
- **Requested \$6.95 billion in HB2 funds**
- **Applications include other funding equal to \$7.93 billion**
- **84% of projects identified highways as the principal improvement type**



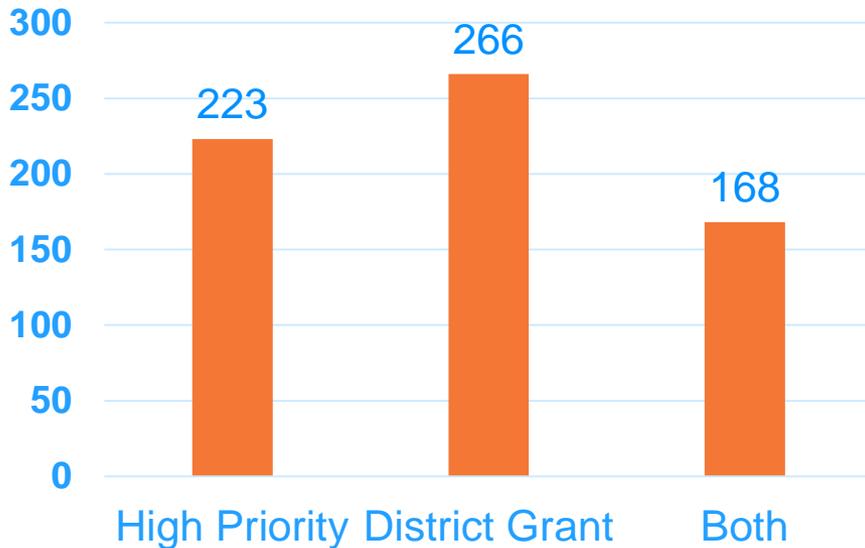
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# Summary of Applications

District	#Apps	HB2 \$ (billions)	Total \$ (billions)
Bristol	32	\$0.22	\$0.23
Culpeper	17	\$0.31	\$0.32
Fredericksburg	22	\$0.37	\$0.45
Hampton Roads	45	\$1.86	\$6.37
Lynchburg	38	\$0.20	\$0.23
NOVA	46	\$2.11	\$5.19
Richmond	54	\$0.77	\$0.85
Salem	38	\$0.70	\$0.80
Staunton	29	\$0.40	\$0.44
<b>Grand Total</b>	<b>321</b>	<b>\$6.95</b>	<b>\$14.88</b>

# Applications by Program

Applications by Program



HB2 \$ Request by Program (billions)



## Average HB2 \$ Requests:

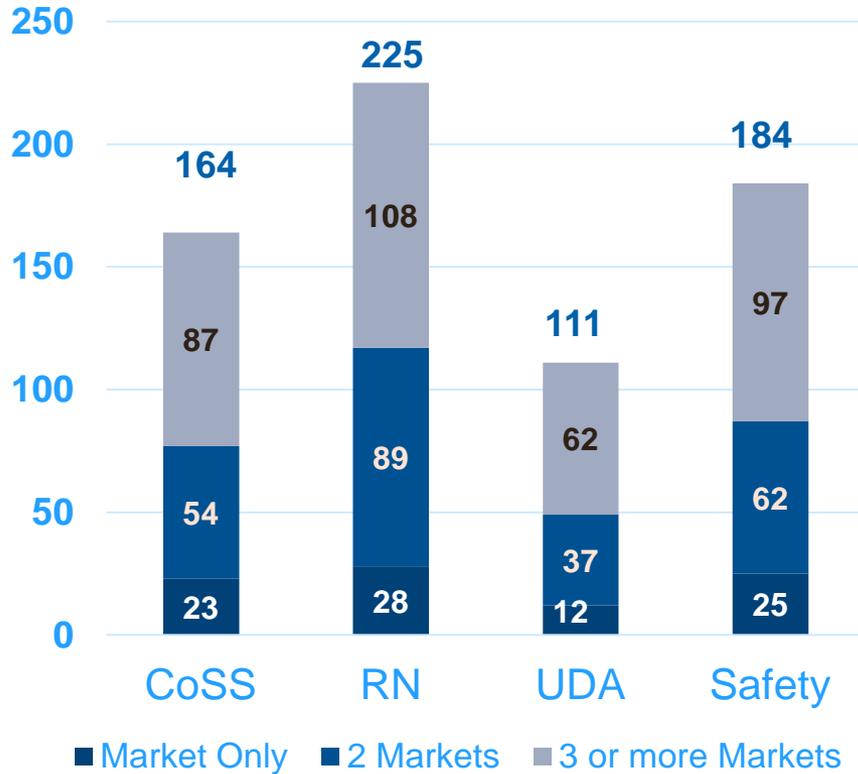
- High Priority = \$26 million
- District Grant = \$16 million

## Average Total Project Cost:

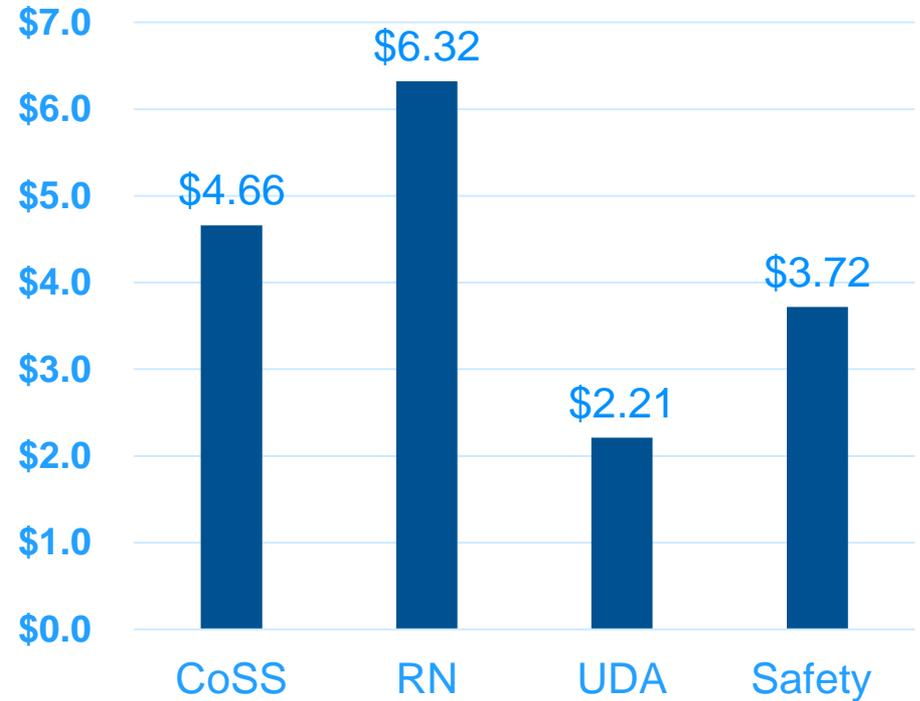
- High Priority = \$52 million
- District Grant = \$29 million

# Applications by Market or Need

Applications by VTrans Need Category



HB2 \$ Request by Market (billions)





## Funds Available for HB 2 (in millions)

HB 1887 Grant Programs	Percentage	Round 1 Total	Reserved for Round 2 (FY2022)
<b>District Grant Program</b>			
Bristol	7.0%	\$62.2	\$10.5
Culpeper	6.2%	\$54.9	\$9.2
Fredericksburg	6.9%	\$60.5	\$10.2
Hampton Roads	20.2%	\$178.0	\$30.0
Lynchburg	7.1%	\$63.1	\$10.6
Northern Virginia	20.7%	\$183.1	\$30.8
Richmond	14.4%	\$127.4	\$21.4
Salem	9.6%	\$84.9	\$14.3
Staunton	7.8%	\$68.9	\$11.6
<b>High Priority Projects Program (Statewide)</b>			
		\$833.1	\$148.6
<b>Total</b>	<b>100.0%</b>	<b>\$1,716.2</b>	<b>\$297.2</b>



# HB2 Round 1 Funding Scenario

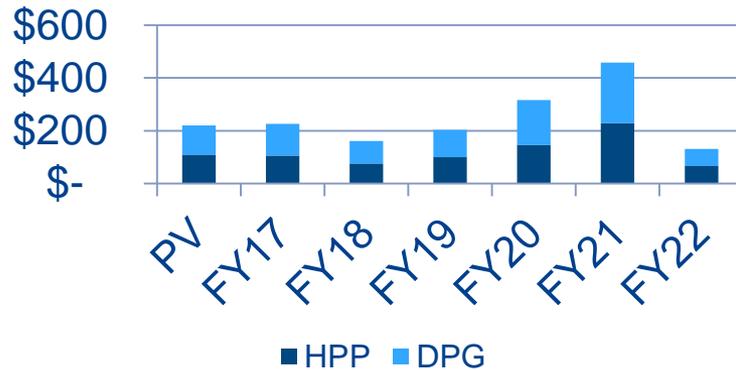
- **Step 1**
  - Fund top scoring projects w/i each district eligible for DGP funds using DGP funds until remaining funds are insufficient to fund the next highest scoring project, excluding any project originally included solely because it does not have an environmental impact
- **Step 2**
  - Fund top scoring projects using HPP funds w/i each district that would have otherwise been funded with DGP funds, but were not because they are only eligible for HPP (as long as their HB2 cost < total DG funds available)
- **Step 3**
  - In any district where unallocated DGP funds are available, co-mingle remaining DGP funds with HPP funds to fund the next highest scoring project eligible for both programs
- **Step 4**
  - Fund projects with an HB2 score over 1.0 based on the highest project benefit until funds are insufficient to fund the unfunded project with the highest project benefit



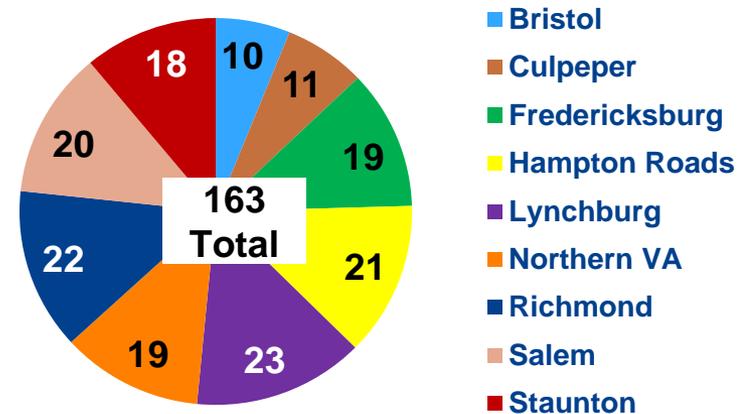
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# HB2 Round 1 Results

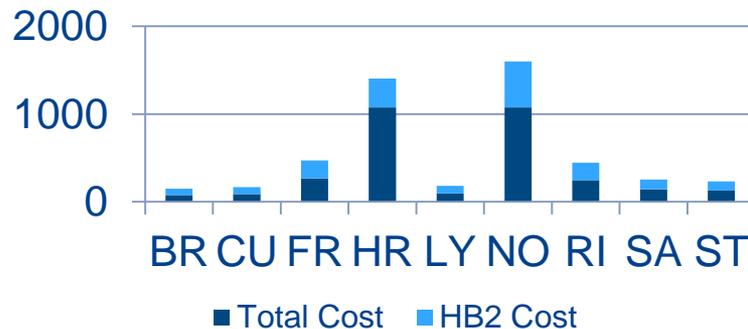
## HPP and DGP Funds



## Number of Projects By District



## HB2 \$ vs Total \$



Avg  
Score/HB2  
Cost **\$10.7**

**\$3.2 B**  
Total Cost  
all Projects



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# HB2 Round 1 Summary

District	Count	HP Allocated	DG Allocated	Total
Bristol	10	\$ 8,925,584	\$ 62,239,019	\$ 71,164,603
Culpeper	11	\$ 25,559,585	\$ 54,872,548	\$ 80,432,133
Fredericksburg	19	\$ 144,115,767	\$ 60,504,406	\$ 204,620,173
Hampton Roads	21	\$ 154,384,282	\$ 178,033,507	\$ 332,417,789
Lynchburg	23	\$ 22,668,708	\$ 63,096,890	\$ 85,765,598
NOVA	19	\$ 339,798,423	\$ 183,055,970	\$ 522,854,393
Richmond	22	\$ 72,351,951	\$ 127,411,522	\$ 199,763,473
Salem	20	\$ 28,572,777	\$ 84,868,412	\$ 113,441,188
Staunton	18	\$ 36,855,128	\$ 68,917,727	\$ 105,772,855
<b>Total</b>	<b>163</b>	<b>\$ 833,232,205</b>	<b>\$ 883,000,000</b>	<b>\$ 1,716,232,205</b>

- **Conducted Key Lessons Learned Activities**
- **External Review Group**
  - Review of measures development and scores
- **Internal and External Stakeholder Surveys**
  - Surveys focused on application in-take process, screening and validation
- **Regional Workshops (included OIPI, DRPT, VDOT staff)**
  - Workshops focused on all aspects of process



# Areas for Improvement Identified by External Review Group

- **Consider approach to scale cost to avoid bias of low cost projects**
- **Consider modifications to accessibility measure to include non-work accessibility**
- **Provide additional feedback to applicants to improve application quality in future rounds**
- **Process was transparent and a great deal of information was made available to facilitate understanding**



## HB2 Lessons Learned

- **Two stakeholder surveys were conducted in December 2015/January 2016, focusing on the application intake, screening and validation processes:**
  - External Survey, for Applicants and Sponsors, received 114 responses
  - Internal Survey, for VDOT and DRPT staff, received 84 responses
- **Internal workshop with VDPT/DRPT staff involved in HB2 process**
- **Feedback helps us improve the process and better understand what worked and what didn't work**
- **As a result of the lessons learned, identify possible changes to the process and policy**



# Survey Results - Challenges

- **Application Timing.** Insufficient time given to complete all the required collaboration, application preparation, and submission
- **Process Consistency.** Changing rules, process, and guidelines as the process evolved
- **Data & Documentation Collection.** Significant data collection requirements for the pre-application and application, including “information, documentation, site plans, etc.”
- **Time/Staffing Requirements.** Time required for applicants to collect data and prepare application, travel and attend training sessions, and understand all HB2 material on top of their daily work activities
- **Economic Development Factor.** Understanding the ED factor along with “trying to estimate future economic benefit”
- **Jurisdictional Equity.** Ability to compete against other jurisdictions that had other local funding sources



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## Survey Results - Successes

- **VDOT/DRPT Staff Assistance.** VDOT /DRPT staff praised for developing and implementing such a comprehensive process in such a short timeframe, and subsequent assistance and over-and-beyond helpfulness.
- **HB2 Outreach and Training.** VDOT/DRPT staff lauded by applicants for provision and helpfulness during HB2 outreach and training. Several District staff were specifically mentioned by applicants as being especially “easy to work with”, “helpful”, “reassuring”, and “quick responding.”
- **HB2 Online Application Tool.** HB2 Online Application Tool was “user-friendly,” “making use of technology for ease of use,” “easy-to-follow,” and “the ability to save work and resume at a later time without losing data or time.”
- **HB2’s Objectivity.** Best part of HB2 is its attempt to “level the playing field” in terms of transportation projects across the State.



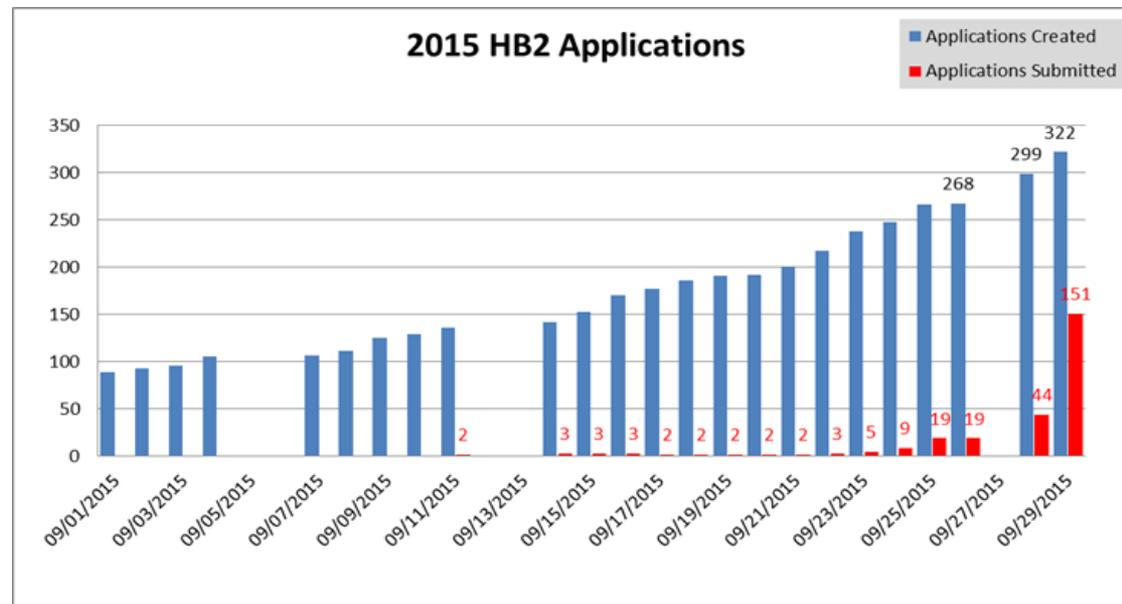
# Areas for Improvement Identified in Regional Workshops

- **Guidance and Information Sources**
  - Update and improve clarity of Policy Guide and FAQs
  - Add tutorials and include example projects
- **Pre-Application Training and Coordination**
  - Start coordination process now
  - Develop “Train the Trainer” materials on process to ensure consistent guidance statewide
  - Provide clear direction on application requirements, and ensure project readiness before proceeding with application
  - Require completion of the pre-application form
- **Validation/Screening**
  - Define criteria for meeting VTrans needs and project type eligibility
- **Evaluation and Scoring**
  - Provide better definitions of inputs such as mixed-use land use and economic development impacts
  - Potentially consider tiers of projects based on size – so that a turn lane project is not competing against a mega project

# Recommendations to Improve Application Process

- Update application tool to allow feedback during application submission (pre-screening and validation)
- Strongly encourage submission of Pre-Application
  - Advance knowledge of the number and types of applications
  - Submission required by August 15<sup>th</sup> to guarantee technical assistance from VDOT and DRPT

Over half the 321 submitted applications were created the final two weeks





# Recommendations to Improve Application Process

- **HB2 on-line application tool undergoing improvements based on feedback**
- **Online application tool will be expanded to include other funding programs:**
  - Revenue Sharing Program
  - Transportation Alternatives Program
  - Highway Safety Improvement Program
  - Bicycle-Pedestrian Safety Program

# Recommendations for Administrative Process

- **Project includes matching funds from other sources then documentation of availability of other funds will be required**
- **If project cost at advertisement or award exceeds thresholds in HB2 policy then project HB2 benefits / cost will be re-calculated**
  - **IF revised benefits/cost is higher than lowest scoring funded district project then project moves forward**
  - **IF revised benefits/cost is lower then funds will be de-allocated unless CTB takes action to retain funding on project and address shortfall**

# Recommendations for Factor Areas

- **Environmental Factor**
  - Projects receiving significant amount of points without providing any other benefits
- **Economic Development**
  - Types of projects evaluated do not influence growth over the same impact area
  - In many localities zoning took place 30+ years ago and does not necessarily have relationship to current growth patterns
  - Reliability – INRIX data does not provide statewide coverage
  - Intermodal Access - questionable results when comparing measure scores to project types, specifically with using mainline tonnage

# Recommendations for Factor Areas

- **Safety**
  - Focus on fatalities and severe injuries over 3-year period resulted in anomalies with regard to locations and times
  - Some fatal and severe injuries crashes are random and due to factors unrelated to roadway design
- **Land Use**
  - Measure provides points based on projected future density but does not consider whether there is any growth between today and the future
- **Transit**
  - Chicken/Egg problem – all VRE platforms must be extended to add new rail cars to all trains, but only final platform extension would receive benefits under current methodology

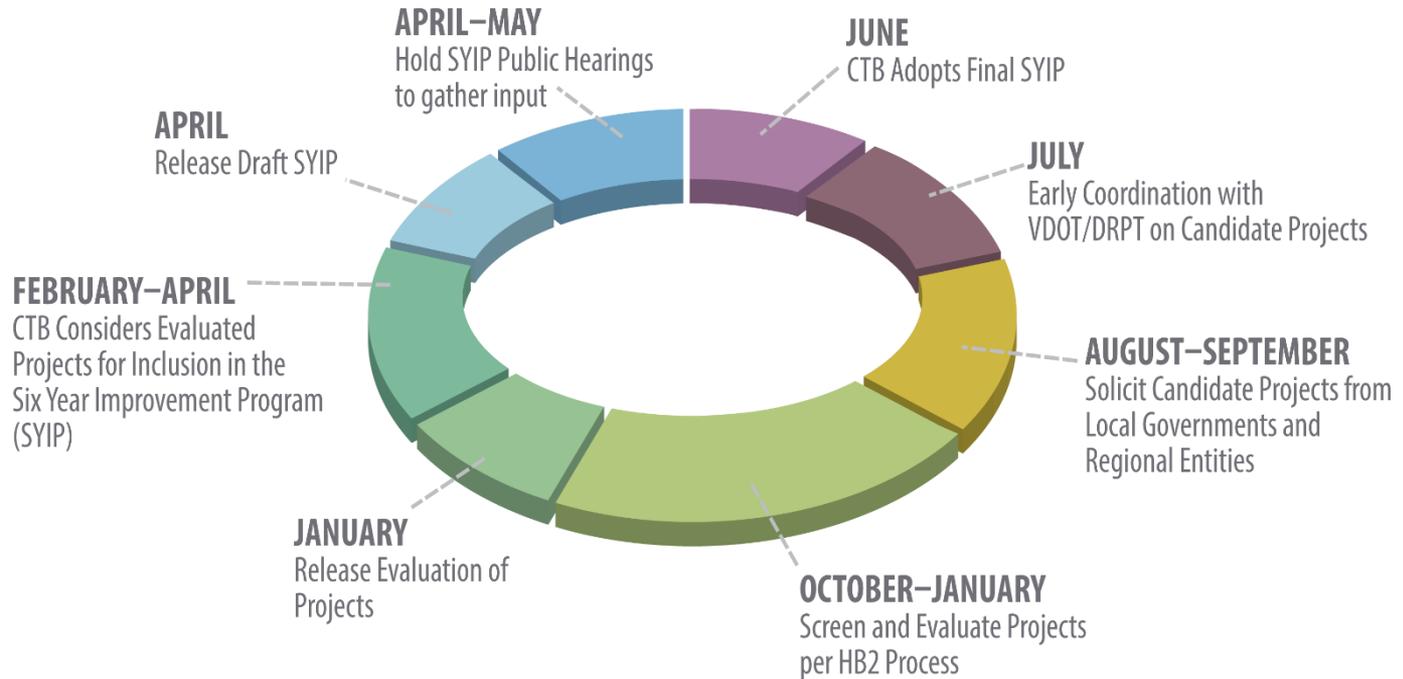


# Common Sense Engineering

- **VDOT will offer assistance to communities**
  - Evaluate whether identified need can be addressed through operational improvements or TDM
  - Evaluate current scope to determine if there are components that do not address identified need(s)
  - Evaluate current scope to determine whether design can be modified or design exceptions utilized to reduce costs

# Annual Cycle

## Anticipated HB2 Yearly Cycle





# Schedule and Next Steps

- **June**
  - CTB adopts FY2017-FY2022 SYIP
- **July**
  - CTB approves resolution for revisions to policy
  - Training and outreach for Round 2
- **August**
  - Round 2 application cycle opens
  - August 15<sup>th</sup> deadline to provide key information to guarantee technical assistance
- **September**
  - Provide CTB recommendations to funding scenario guidelines
  - September 30<sup>th</sup> deadline to submit Round 2 application
- **October 1<sup>st</sup> to January 1<sup>st</sup>**
  - Round 2 analysis and scoring
- **January to June**
  - Round 2 project selection and programming