



COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

SMART SCALE Round 3 Overview

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Overview



- Round Three Recap
- Project Readiness/Project Descriptions
- Round 3 feedback
- Round 4 - Submission process under consideration
- Next Steps

SMART SCALE



Round 1

Round 2

Round 3

% Change from RD1 / from RD2

Total #
Submitted

321

436

468

46% / 7%

Requested
Funding

7.2B

9.7B

7B

-2.7% / -28%

Available
Funding

1.4B

1B

780M

-44% / -22%

Allocating 5 years
of funding

Allocating 2 years
of funding - \$300M
bonus in SHP from
I-66 OSB

Allocating 2 years
of funding

Round Three Screening Decisions



District	# of Apps	Screened Out	Reason to Screen Out			
			VTrans Need*	Project Eligibility*	Project Readiness*	Withdrawn
Bristol	50	6	4	0	1	2
Culpeper	43	1	0	0	0	1
Fredericksburg	35	3	0	0	0	3
Hampton Roads	58	4	0	0	2	2
Lynchburg	30	2	2	0	0	0
Northern Virginia	47	8	1	0	5	2
Richmond	85	6	1	3	4	0
Salem	49	4	1	1	2	0
Staunton	71	1	0	0	0	1
Grand Total	468	35	9	4	15	11

* Some projects screened out for multiple reasons

Round 3 Observations

Project Readiness



- **Round 3 project readiness policy**
 - Major widening and new location projects
 - Demonstrate alternatives to improve existing network considered
 - New interchanges and traffic signals
 - Interchange Justification Request (IJR) or signal warrant/justification completed
- 43% of project screened out because of project readiness concerns
- Project readiness is critical to minimize risks for major project changes and cost overruns

Round 3 Observations

Project Description/Scope



- Ability to evaluate and score a project is dependent on clear and concise scope of work
- Key points scope should address
 - **What** - what is being proposed
 - **Where** - location of each improvement
 - **How much** - measurement (length, width, #)
- Many scopes lacked adequate detail
- Coordination to resolve details = time/resources

Round 3 Observations

Congestion, Safety and Land Use



- **Congestion**
 - Scaling throughput - working on methods and approaches to better scale the throughput measure
 - Long-term - evaluating the use of mesoscopic models for congestion analysis
- **Safety**
 - Crash rate measure (S2) does not scale - smaller projects actually have advantage - looking at current weight distribution of 50/50 between S1 and S2
 - More specific CMFs for targeted crash types - example edge line rumble strips
- **Land Use**
 - Driver of scores for lower cost projects in Area Types A and B
 - Investigating ways to improve measures and better scale points to scope of improvements

Round 3 Observations

Validation - Econ Dev Sites



- Round 3 - consultant assisted with independent evaluation - direction was to:
 - Review all sites listed as detailed site plan to determine it meets criteria for detailed site plan. Confirm adequacy of approval documentation.
 - Review all zoned only sites and confirm the site is adjacent to or would get direct access from the proposed transportation improvement.
 - Review all sites with building square footage over 500K. Confirm if sq footage is reasonable.
 - Review all sites with calculated FAR over 5. Confirm square footage is reasonable and allowed.

Weighting Sites based on Readiness



Round 3 Observations

Validation - Econ Dev Sites



- Floor Area Ratio (FAR) assumptions for zoned-only properties can be problematic
- Example - Large industrial tract (1000+ acres) with assumed FARs of 1.0 - 1000 ac = 43,560,000 sqft
 - **Boeing Everett Factory - 4.28M sqft**
- Suburban commercial tracts with assumed FARs of 5.0 or higher
- Applicants provided documentation of local ordinances that allow up to FAR of X - just because it is allowed does not mean it is likely
- **Consideration for Round 4 - default FAR assumptions for conceptual and zoned only properties (example 0.3)**
- Looking at VEDP's business ready sites dataset

Feedback To-Date

- Perception process favors low cost projects - particularly low cost and bicycle and pedestrian projects
- Mega projects skew the results
- General recognition that limited funding is major issue

Assessment of Low Cost Bias



- **62 of 98 (63%) project recommend for funding have total cost less than or equal to \$5M**
 - Funding requests total \$129M - about 17% of Round 3 pot
- **29 of 98 projects are bike/ped improvements (about 30%)**
 - Funding requests total \$88.6M - about 11% of Round 3 pot
- **30 projects have total cost between \$5M and \$20M**
 - Funding requests total \$208M - about 28% of Round 3 pot
- **6 projects greater than or equal to \$20M**
 - These 6 projects total over \$4.4B (approx \$4B leveraged)
 - Funding requests total \$420M - about 54% of the Round 3 pot

Assessment of Low Cost Bias



District	Project Rec for Funding	Average SMART SCALE Award
Bristol	3	\$6,687,105
Culpeper	4	\$5,202,316
Fredericksburg	10	\$3,982,646
Hampton Roads	26	\$10,965,345
Lynchburg	8	\$6,517,076
Northern Virginia	11	\$18,166,005
Richmond	14	\$4,576,887
Salem	6	\$5,229,487
Staunton	16	\$1,784,022

Are Smaller Projects Less Beneficial?



- **4 project recommended for funding**
 - John Marshall Hwy./Rte. 55 East Safety Improvement Project
 - Intersection Improvements US-211/340 Big Oak Rd
 - Hot Springs - US 220 & VA 615 Intersection Improvements
 - RT 254 - RT 640 Intersection Safety Project
- **Combined Benefit score of 12.29**
- **Total Fatal and Injury Crashes Reduced = 27.87**
- **Total cost of \$6.7M**

Are Smaller Projects Less Beneficial?



- **1 project not recommended for funding**
 - I-81 NB Truck Climbing Lane Extension from 191 to 195
- **Benefit score of 4.77**
- **Total Fatal and Injury Crashes Reduced = 6 (vs 27.87)**
- **Total cost of \$70M**

Assessment of Low Cost Bias Bike/Ped Improvements



District	# Apps Scored	Total \$	Total Bike/Ped \$	Percent of Total
Bristol	44	\$ 20,061,316	\$ -	0.0%
Culpeper	42	\$ 20,809,265	\$ 2,009,265	9.7%
Fredericksburg	32	\$ 39,826,465	\$ 10,800,000	27.1%
Hampton Roads	54	\$ 285,098,978	\$ 24,125,817	8.5%
Lynchburg	28	\$ 52,136,609	\$ -	0.0%
Northern Virginia	39	\$ 199,826,065	\$ 15,127,084	7.6%
Richmond	79	\$ 64,076,418	\$ 21,955,481	34.3%
Salem	45	\$ 31,376,924	\$ 1,662,220	5.3%
Staunton	70	\$ 28,544,355	\$ 12,997,245	45.5%
Statewide	433	\$ 741,756,385	\$ 88,677,112	11.9%

Concerns of Low Cost Bias



- Concern raised - Nearly 50% of improvements in staff recommended funding scenario are for bike/ped in two Districts
- Both Districts - each submitted over 70 apps - resulted in higher percentage of \$ recommended to smaller more cost effective projects
- Project title often does not fully convey scope of improvements

Example

3430 - City of Richmond - Bike/Ped - G US 33 Leigh Street Streetscape improvement

On surface project above would appear to just be a streetscaping project

Project Description - This project will accommodate people who bike, walk, and use transit on Leigh St between 4th St and the MLK Bridge through **access management (medians, lane balance, consolidating entrances)**, shared use path, sidewalks, and other streetscape amenities.

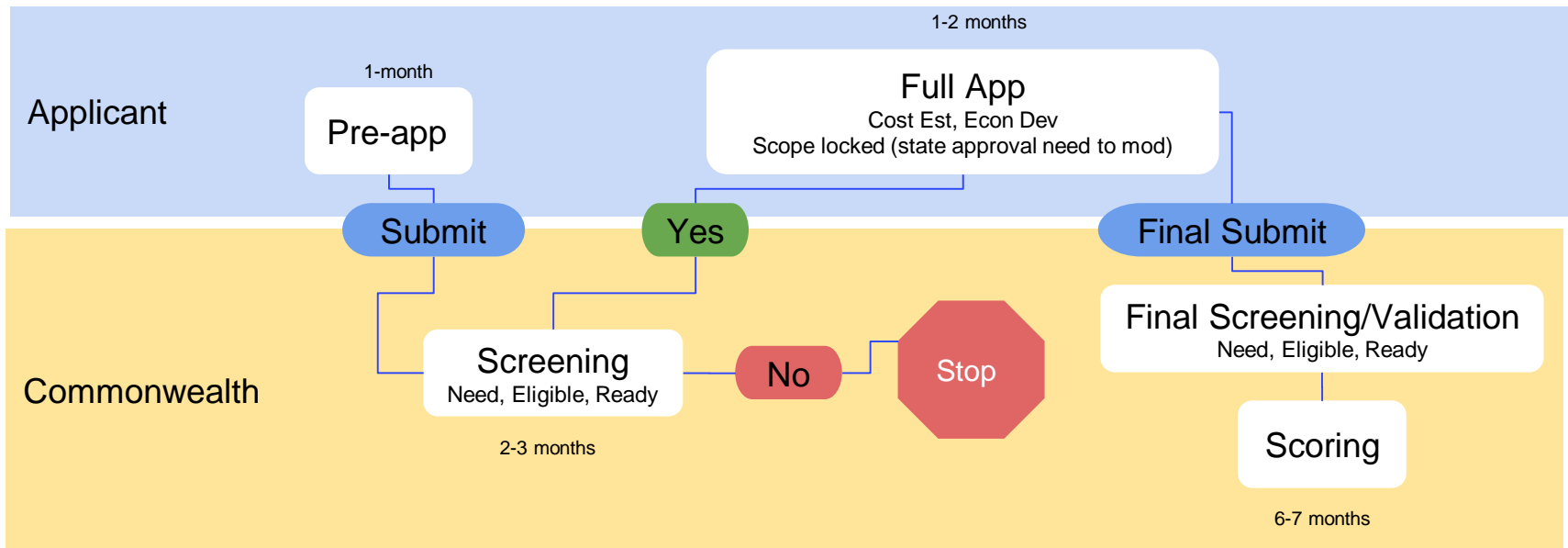
General Survey Findings



- SMART SCALE team conducted external survey
- Approximately 70 responses
- Desire to understand the scoring process in more detail
 - **Will develop and host statewide training session this summer**
- Scoring results could be improved
 - **Working on recommendations to improve the scoring process**
- Inadequate financial and staff resources to plan/develop projects and complete applications
- Portal needs some improvements
- Application process should be simplified

Change under consideration for Round 4

- Pre-App/Application submission



Next steps



- **June CTB Meeting:** Adoption of SYIP
- **July CTB Meeting:** Discussion of possible modifications to SMART SCALE policies and methods with Board
- **Late Summer:** Detailing training\videos on scoring process
- **Now - March 2020:** Begin developing and refining projects for Round 4