



COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

**Proposed Changes to SMART SCALE
Policies and Methods - Round 4**

December 10, 2019





Summary



- Recap of Proposed Changes
 - Timeline and schedule
 - Project eligibility
 - Project Readiness
 - Analytical methods and weights
 - Other minor changes



SMART SCALE

*Funding the Right
Transportation Projects
in Virginia*

Changes to Timeline

- Pre-App intake window reduced from **3 months to 1 month**
- NEW - Pre-apps that can be submitted will be based on cap limits
 - **Cap limit of 10: will be allowed to submit 12 pre-apps (10+2)**
 - **Cap limit of 4: will be allowed to submit 5 pre-apps (4+1)**
- Pre-application cap limits prevent VDOT/DRPT staff from reviewing applications that will not be submitted while providing cushion in case a project screens out
- Two full months to complete final application - refine cost estimate, enter econ dev sites, upload supporting documents, etc

Localities	MPOs/PDCs/Transit Agencies	Pre-Application Cap	Final Application Cap
Less than 200K	Less than 500K	5	4
Greater than 200K	Greater than 500K	12	10

Project Eligibility



- Two areas to clarify/limit eligibility:
 - Transit Maintenance Facilities - propose that stand-alone maintenance facilities not be eligible - must include capacity expansion of transit system
 - Systemwide Investments - improvements that do not have a typical from/to and often cover a larger geographic area
 - **Examples**
 - Jurisdiction-wide implementation of adaptive signal controllers
 - Countywide bus stop upgrades
 - Prohibit project applications that include improvements that are jurisdiction-wide
 - Expansive scope and multi-faceted nature of improvements present considerable challenges for scoring and validation

Project Readiness



- Board has strengthened project readiness requirements each round
- Strengthened policies to-date have focused on highway expansion investments - requiring alternative analysis and planning studies
- Recommend similar policy provisions for corridor level adaptive signal controller upgrades and major transit capital investments such as Bus Rapid Transit (BRT) and light rail
 - Corridor level adaptive signal controllers
 - require detailed corridor study/plan
 - BRT/Light Rail
 - require planning study that shows alternatives considered
 - inclusion in agency's Transit Strategic/Development Plan



**SMART
SCALE**

*Funding the Right
Transportation Projects
in Virginia*

Project Evaluation and Scoring

Congestion



- Feedback - concern that current methods do not account for congestion on both weekdays and weekends
- Implement method to better account for peak period congestion throughout entire week (weekdays and weekends)
- Datasource: INRIX dataset
- OIPI will present more detail on proposed approach in January

Congestion- Recommendation for Round 4

- 1) Implement method to better account for peak period congestion throughout entire week (weekdays and weekends)

- **SMART SCALE team has been working on the following areas related to safety**
 - **Targeted Crash Modification Factors (CMFs)**
 - **Weighting of S1 (crash frequency) versus S2 (crash rate) - currently 50/50**
 - Recommend changing weight to 70/30
 - Supports Board targets to reduce fatal and injury crashes and pending policy changes related to HSIP program
 - **Increase weight for Safety factor in Area Type A from 5% to 10%**

Safety - Recommendations for Round 4

- 1) For certain project types a targeted CMF will be used
- 2) 70/30 split in weighting - more weight to reduction in crash frequency
- 3) Area Type A - Increase safety weight from 5% to 10%

Economic Development Sites



- Policies adopted by the Board for Round 3 improved the reasonableness of economic development results
- Zoned only properties has to be adjacent to the proposed transportation improvement
- In validating zoned properties and conceptual site plans we noticed several examples of high floor area ratios (FAR) - values in range of 5 were not uncommon
- Applicants uploaded zoning ordinances showing that larger FAR are allowed, but that does not mean they are likely

Weighting Sites based on Readiness

Highest



Lowest

Approved Detailed Site Plan
Submitted Detailed Site Plan
Approved Conceptual Site Plan
Submitted Conceptual Site Plan
Zoned Only

Economic Development Sites



- Floor Area Ratio (FAR) assumptions for zoned-only properties can be problematic
- Large industrial tracks (250+ acres) with assumed FARs of 1 250 acre would equate to 10,890,000 sq ft building
 - **Boeing Everett Factory - 4.28M sqft**
- Several tracts with assumed FARs of 5.0 or higher
- Applicants provided documentation of local ordinances allowing FAR value used - just because it is allowed does not mean it is likely

Economic Development - Recommendation for Round 4

- 1) FAR for zoned only properties capped at 0.3 unless applicant can prove average FAR around project is higher or minimum FAR in local zoning ordinance is higher than 0.3

Economic Development Sites: VEDP Business Ready Sites



- Virginia Economic Development Partnership (VEDP) Business Ready Sites proposed to be recognized within Urban Development Area need category
- In recognition of this change we proposed change in weighting process used to scale ED1 measure - Project Support for Economic Development
- Proposed changes will not affect eligibility or site identification practices
- Changes would provide additional weight to VEDP Business Ready Sites and additional weight to redevelopment projects

Economic Development Sites: VEDP Business Ready Sites



Current weighting process

- Development square footage scaled by up to 5 points:
 - 0.5 points if proposed project is specifically referenced in comprehensive or development plan, and
 - Up to 0.5 points based on level of economic distress**PLUS**
 - .5 points for Conceptual Site Plan Submitted, or
 - 1 point for Conceptual Site Plan Approved, or
 - 2 points for Detailed Site Plan Submitted, or
 - 4 points for Detailed Site Plan Approved

Economic Development Sites: VEDP Business Ready Sites



Proposed weighting process (changes in orange)

- Development square footage scaled by up to 5 points:
 - 0.5 point if proposed project is specifically referenced in comprehensive or development plan, and
 - Up to 0.5 point based on level of economic distress
PLUS
 - **.5 points** for Conceptual Site Plan Submitted, or
 - **0.5 point** for Conceptual Site Plan Approved, or
 - **1 points** for Detailed Site Plan Submitted, or
 - **2 points** for Detailed Site Plan Approved
PLUS
 - **0.5 points** for VEDP Tier 4 (“infrastructure ready”), or
 - **1 points** for Tier 5 (“shovel ready”) Business Ready sites, and
 - **1 points** for redevelopment of existing site

Environment

Resource Impact Measure



- Problem: treating measure as a benefit
- Significant potential impact = 0 and No impact = 100
- After lessons of Round 1 - potential impact was then scaled by points in all other measures
- Results can be counter intuitive - if you do not consider \$
- Example - HRBT, which had the second-highest total impact to sensitive resources received the greatest number of points for this measure due to high benefit score

Environment - Recommendation for Round 4

- 1) Convert E1 to subtractive measure (subtracting up to 5 points at end of scoring)
- 2) E2 (Air Quality Energy) measure weight changed to 100%

Environment Resource Impact Measure



Proposed method would be subtractive, taking away up to five benefit points based on potential sensitive acres impacted

Project	Description	Impacted Acres	E1 Weighted Score	Benefit Score Before E1	Benefit Score After E1	Requested Amount	SS Score
W	High score, high cost, large footprint	900	-5.00	59.00	54.00	\$ 80,000,000.00	6.75
X	High score, moderate cost, moderate footprint	300	-1.67	26.00	24.33	\$ 15,000,000.00	16.22
Y	Moderate score, moderate cost, large footprint	450	-2.5	6.00	3.5	\$ 40,000,000.00	0.85

Land Use

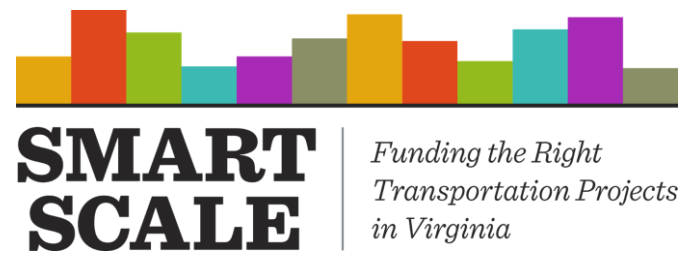


- For Round 3, the Board adopted a new method objective metric to replace subjective metric to measure a project's support for transportation efficiency of development
- L1 multiplies non-work accessibility by future density; existing dense areas do well in this measure but emerging areas may not due to lack of current non-work destinations
- L2 multiplies non-work accessibility by the *change* in population and employment; areas that do well in L1 also tend to perform well in L2;

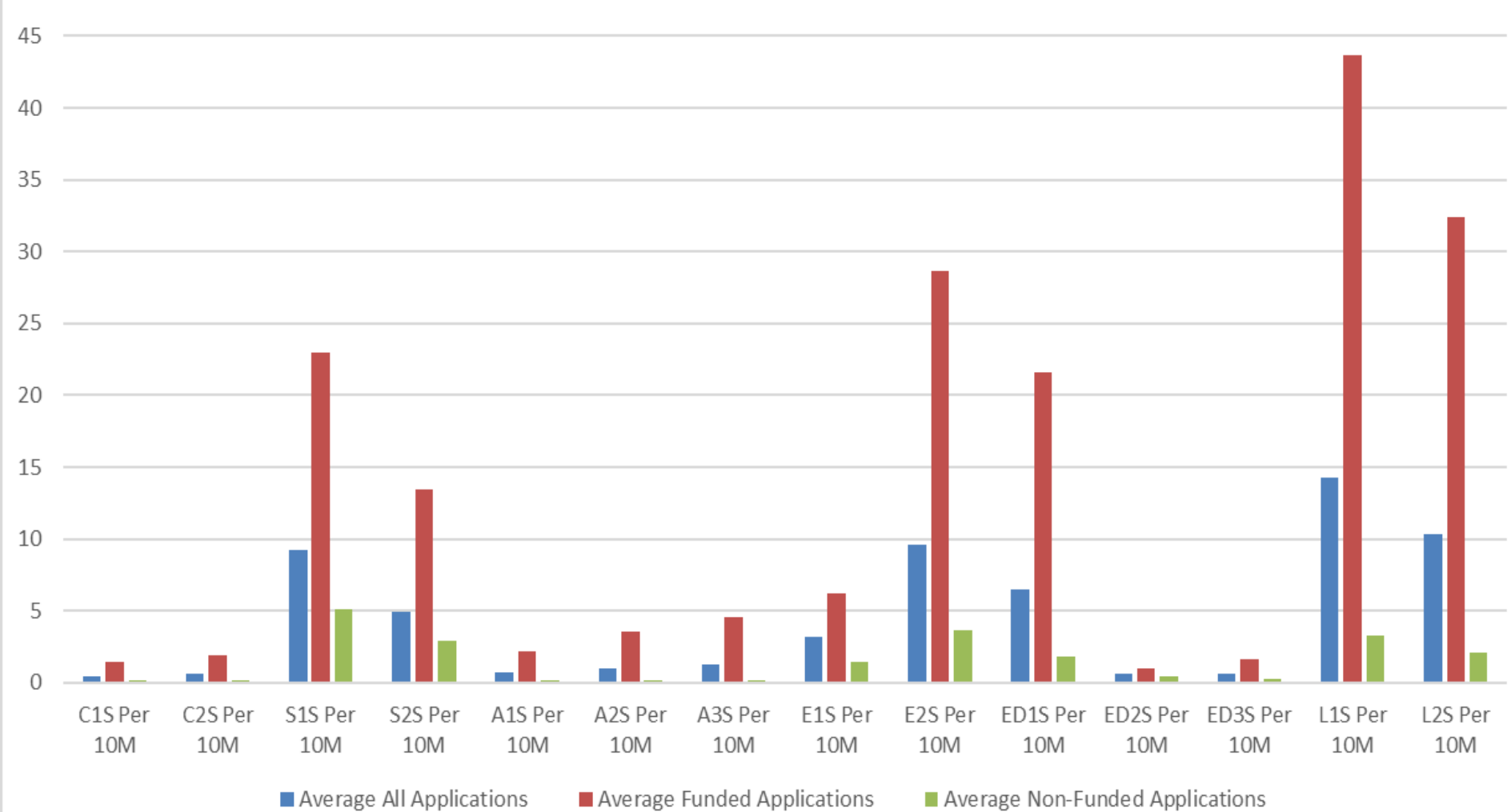
Land Use - Recommendations for Round 4

- 1) Drop L1 measure and give 100% of weight to L2
- 2) Area Type A - Land Use weight changed from 20% to 15%
- 3) Area Type A = Safety weight changed from 5% to 10%

Avg Normalized Scores Per \$10M Requested



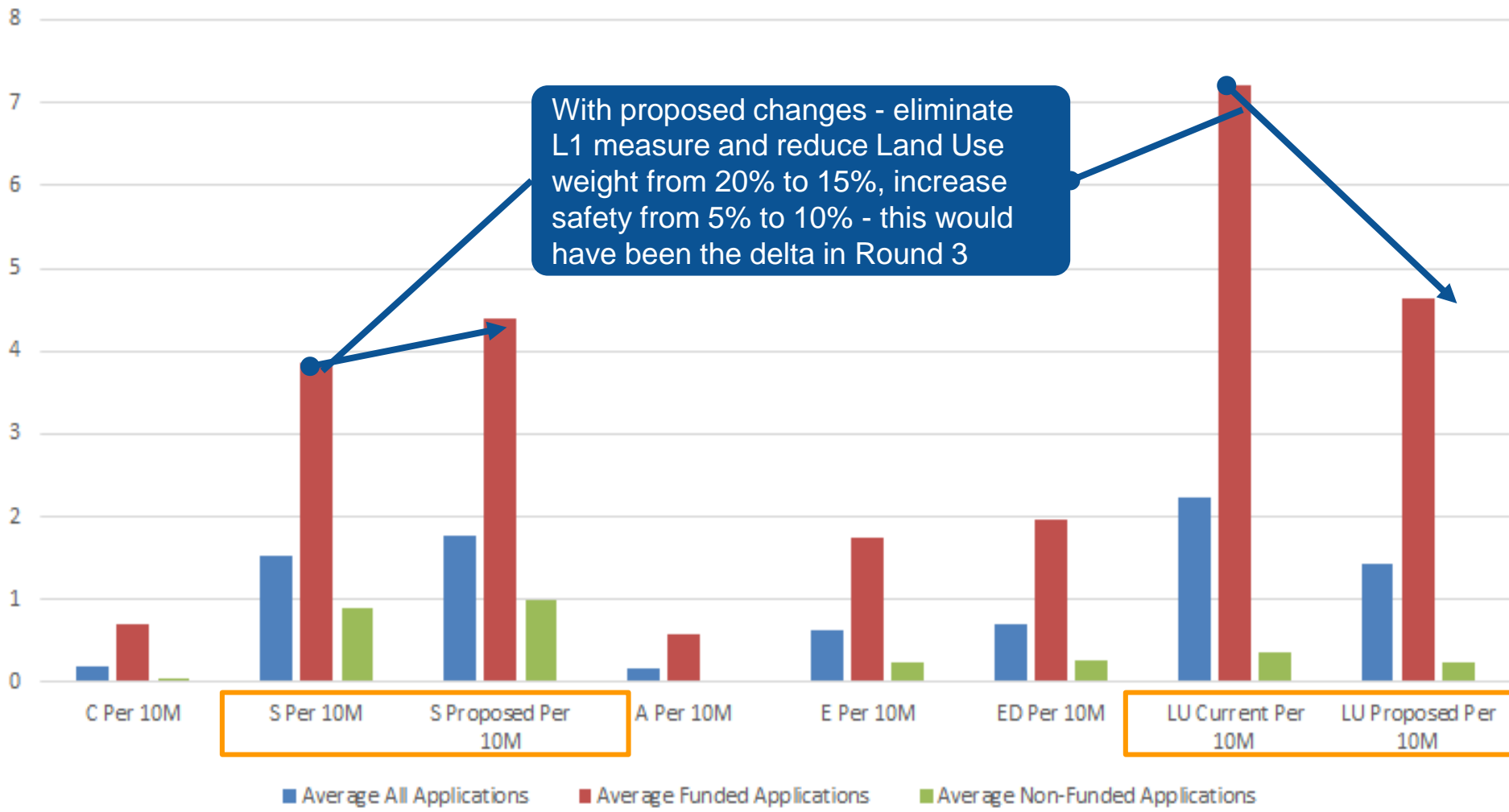
Normalized Scores Per \$10M Requested



Final Weighted Scores Per \$10M Requested



Final Weighted Scores Per \$10M Requested



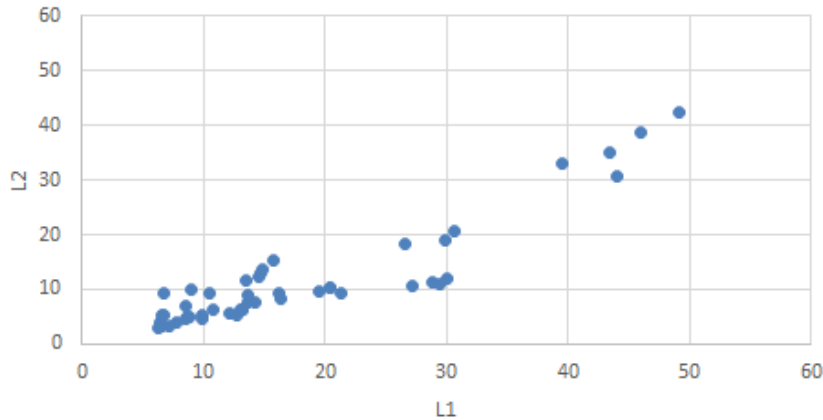
Land Use



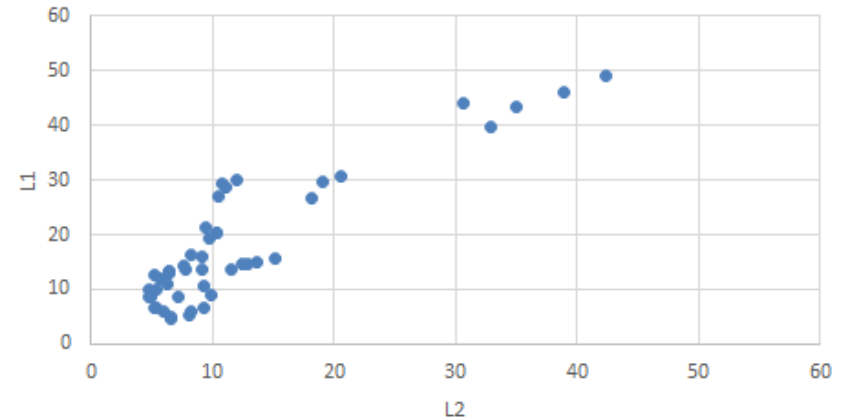
- **Top 50 L1 scores vs L2:** Areas with high population and employment density highly correlate with areas with higher density of non-work destinations
 - Projects in these areas do well in both the L1 and L2 measures
- **Top 50 L2 scores vs L1:** Emerging growth areas that need to improve walkability may not have current density of non-work destinations
 - Projects in these areas do well in L2, but do not necessarily do as well in L1

Land Use

Top 50 L1 vs L2 (top 2 not shown)



Top 50 L2 vs L1 (top 2 not shown)



- Intent and outcome of proposal to eliminate L1 is not to hurt projects that currently score well in L1 - instead we are trying to give boost to emerging/growth areas that need to invest in walkability
- All other measures look at change or delta - L2 is most consistent with this approach as it looks at anticipated growth

Other Minor Changes

- Area Types
 - Fredericksburg Area Metropolitan Planning Organization (FAMPO) has formally passed resolution to request change in Area Type from A to B
 - New River Valley Regional Commission (NRVRC) has expressed desire to change Area Type from C to D - formal resolution has not been received to-date
- Policy resolution in January will clean up and clarify existing policy - example: formalize policy for project cancellation

Treatment of Interstate Projects



- Interstate projects have been outlier projects that have suppressed benefits scores for other investments
- Dedicated funding sources for operational and capacity improvements for Interstates exists now from the 81 legislation
- Intent is to develop Interstate Corridor Plans for each Interstate

- I-81 Complete
- I-95 Underway
- I-64 Next



- Unresolved policy question - How should Interstate projects be handled in SMART SCALE?



COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

Thank you.

