

## Memorandum

**To:** MPO-Policy Board  
**From:** Lucinda Shannon, Transportation Planning Manager  
**Date:** January 22, 2020  
**Reference:** Smart Scale Policy and Methods Updates for Round 4

**Purpose:** Review the changes to VDOT's upcoming fourth round of the Smart Scale funding application process.

**Background:** The changes to this round include:

- Reducing the length of time that applications can be submitted for pre-screening from 3 months to 1 month
- Limiting the amount of pre-applications that can be submitted
- Changing the types of transit projects that are eligible (System-wide changes and maintenance facilities would no longer be eligible)

The evaluation criteria for scoring projects is also proposed to be modified, impacting all five categories of measurement: Congestion, Economic Development, Environment, Land Use and Safety. For more information on the proposed changes, view the [PowerPoint presentation from the last CTB meeting](#) and [CTB's analysis](#) of how the proposed changes would affect scoring based on last year's projects.

**Action Item:** No action needs to be taken; this is an information item.

If there are any questions or comments, please contact Lucinda Shannon at [lshannon@tjpd.org](mailto:lshannon@tjpd.org) or (434) 979-7310 Ext.113.



# SMART SCALE ROUND 4

Charlottesville-Albemarle MPO January 2020 Meeting

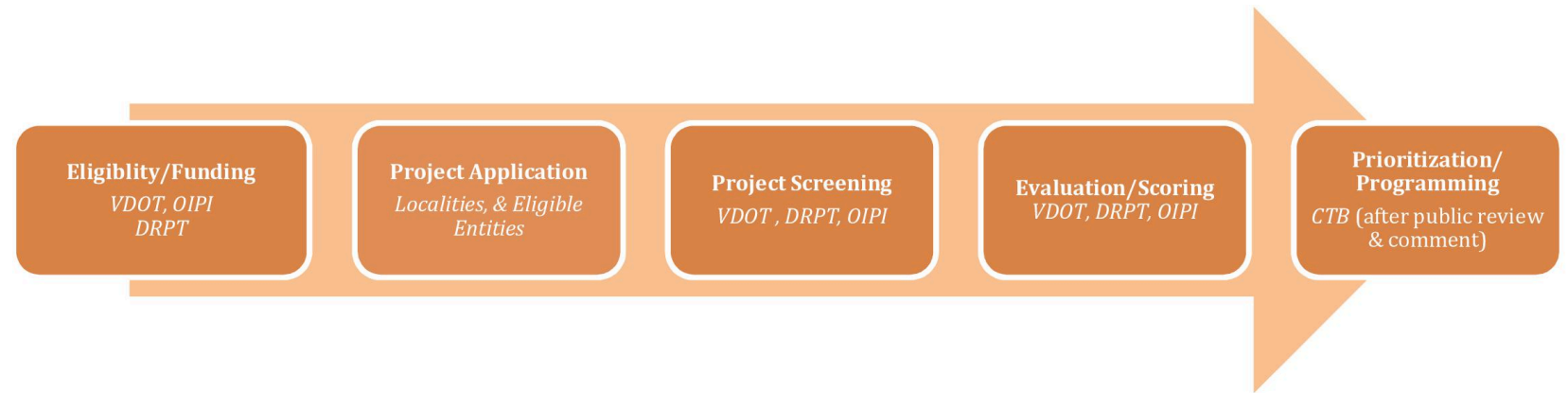
 Charles Proctor

# Meeting Agenda

1. Overview
2. Schedule
3. Potential Applications
  - Albemarle County
  - City of Charlottesville
4. Next Steps

# Smart Scale

## Potential Project



### A. Eligibility

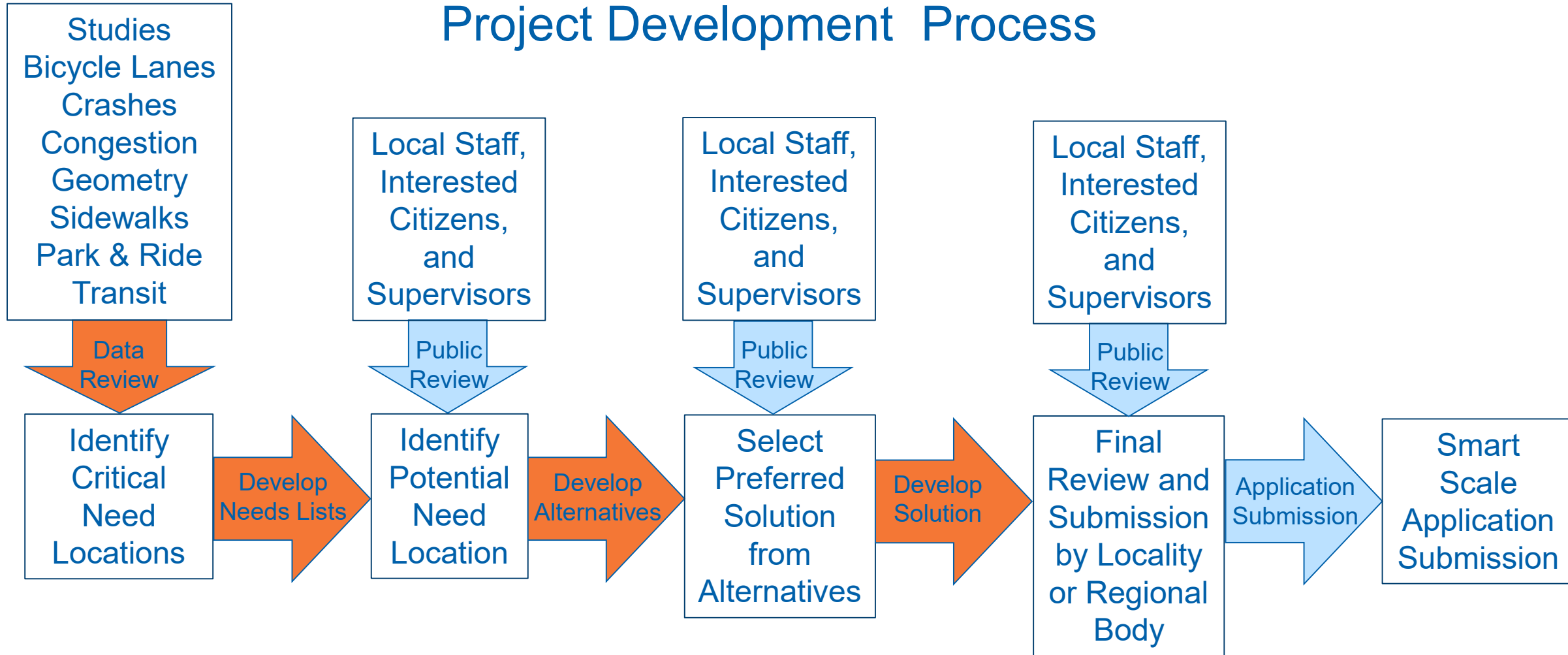
1. Must meet a VTRANS Need
  - a. Corridor of Statewide Significance (COSS – Rte. 29, 28, 17, 250, I64 & I66)
  - b. Regional Network (RN - Multimodal Network within the Urbanized Area)
  - c. In a designated Urban Development Area (UDA)
  - d. Identified Safety Need Locations
2. Need to be submit by and eligible entity (Locality, MPO, PDC, or Transit Agency)

### B. Readiness

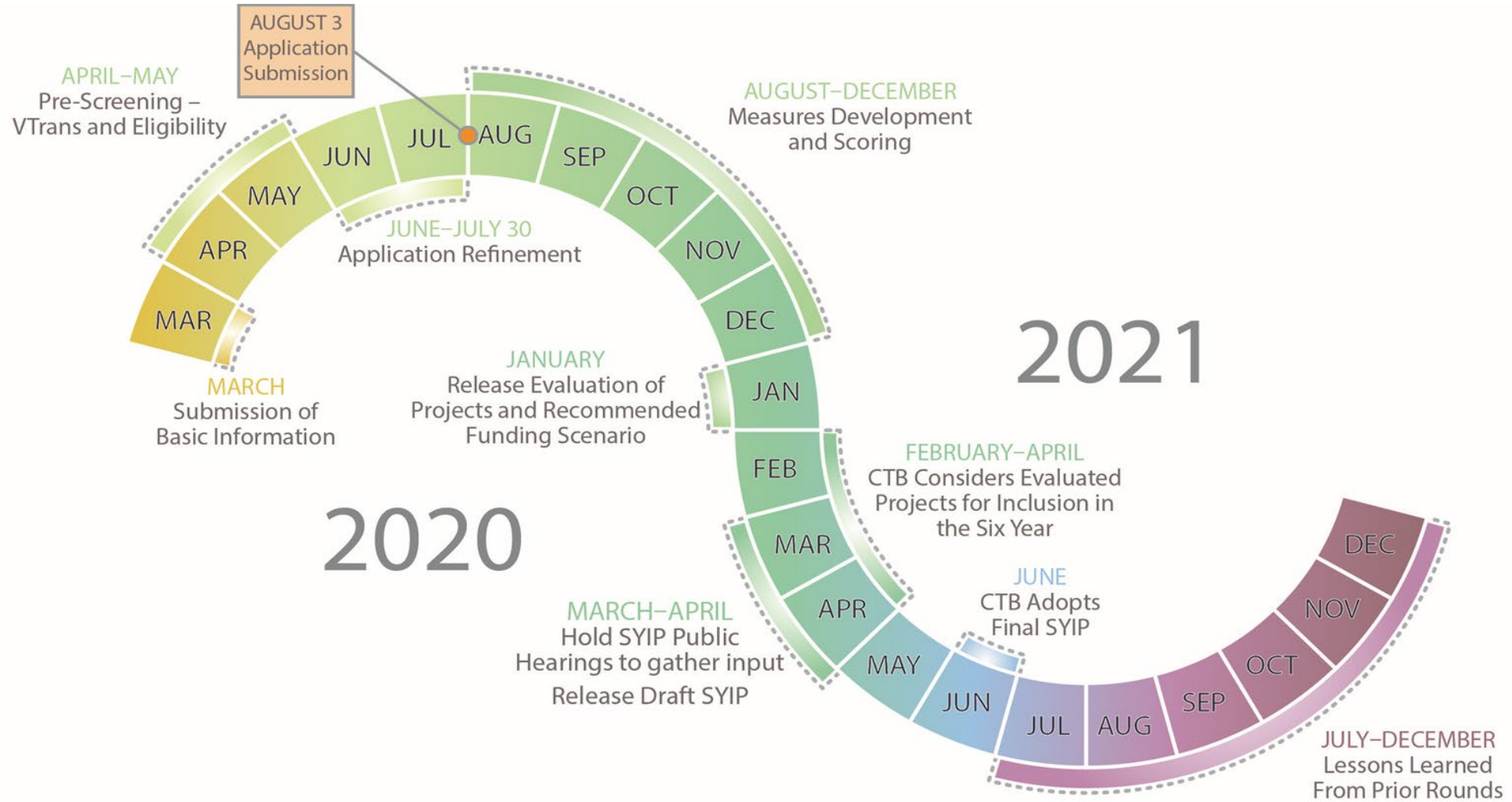
1. Clearly define sketch, project description, and cost estimate
2. Completed study (Traffic, Crash, NEPA, SJR, IJR, etc.)

# Smart Scale

## Project Development Process



# Smart Scale Schedule Timeline



# Albemarle County - Recommended App. Locations

- Access Management on US 250 East from VA 20 (Stoney Point Rd) east to Hanson Rd. (Seg # 10, 32)
- Old Lynchburg Rd. / 5<sup>th</sup> St. Ext. /County Office Bldg. Intersection Improvements (Int. #80, 92, Seg. #16, 112, 171)
- Belvedere / Rio Rd Intersection Improvements **(Not a PSI)**
- VA 20 / VA 53 Intersection Improvements – Revise/Resubmit (# 47)
  
- US 29 / Hydraulic Rd Intersection Improvements – Revise/Resubmit (CA-MPO) (Int #5, Seg # 2, 8, 24 & 26 & TSN)
- Zan Rd Overpass – Revise/Resubmit (CA-MPO) **(VTRANS Need Question)**
- Fontaine Ave/29 Bypass Interchange – Revise/Resubmit (CA-MPO) **(Not a PSI)**
  
- US 29 / Frays Mill / Burnley Station Intersection Improvements – Revise/Resubmit (TJPDC) (# 12)
- Exit 107 Park & Ride lot – Revise/Resubmit (TJPDC)
- US 29 Shared Use Path from Carrsbrook to Seminole Lane – Revise/Resubmit (TJPDC)



# City of Charlottesville- Recommended App. Locations

- **Preston / Grady Intersection Improvements – Revise/Resubmit**
- **US 250 / Hydraulic Intersection Improvements – (Revenue Share?) Revise/Resubmit**
- **West Main St (section 3 and 4) Revise/Resubmit**
- **5th Street Multi-modal Improvements (Ridge to Cherry St)**
- **Emmett Street Multi-Modal Improvements (Arlington Blvd to Barracks Rd)**
  
- **US 29 / Hydraulic Rd Intersection Improvements – Revise/Resubmission (CA-MPO)**
- **Zan Rd Overpass – Revise/Resubmit (CA-MPO)**

# Next Steps

## Select projects to present to the Localities

- **Develop alternatives for the proposed location**
  - Return to Localities in February with alternative solutions and preferred recommendations to address the needs at each of the identified locations
  - Request concurrence on the preferred solution for each identified location.
- **Develop Pre-Application Materials**
  - Develop a Preliminary Sketch, Project Description, and Cost Estimate of the preferred alternative.
  - Assists applicant with pre application submission.



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**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
<b>Less than 200K</b>	<b>Less than 500K</b>	<b>5</b>	<b>4</b>
<b>Greater than 200K</b>	<b>Greater than 500K</b>	<b>12</b>	<b>10</b>

# 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





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# 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;

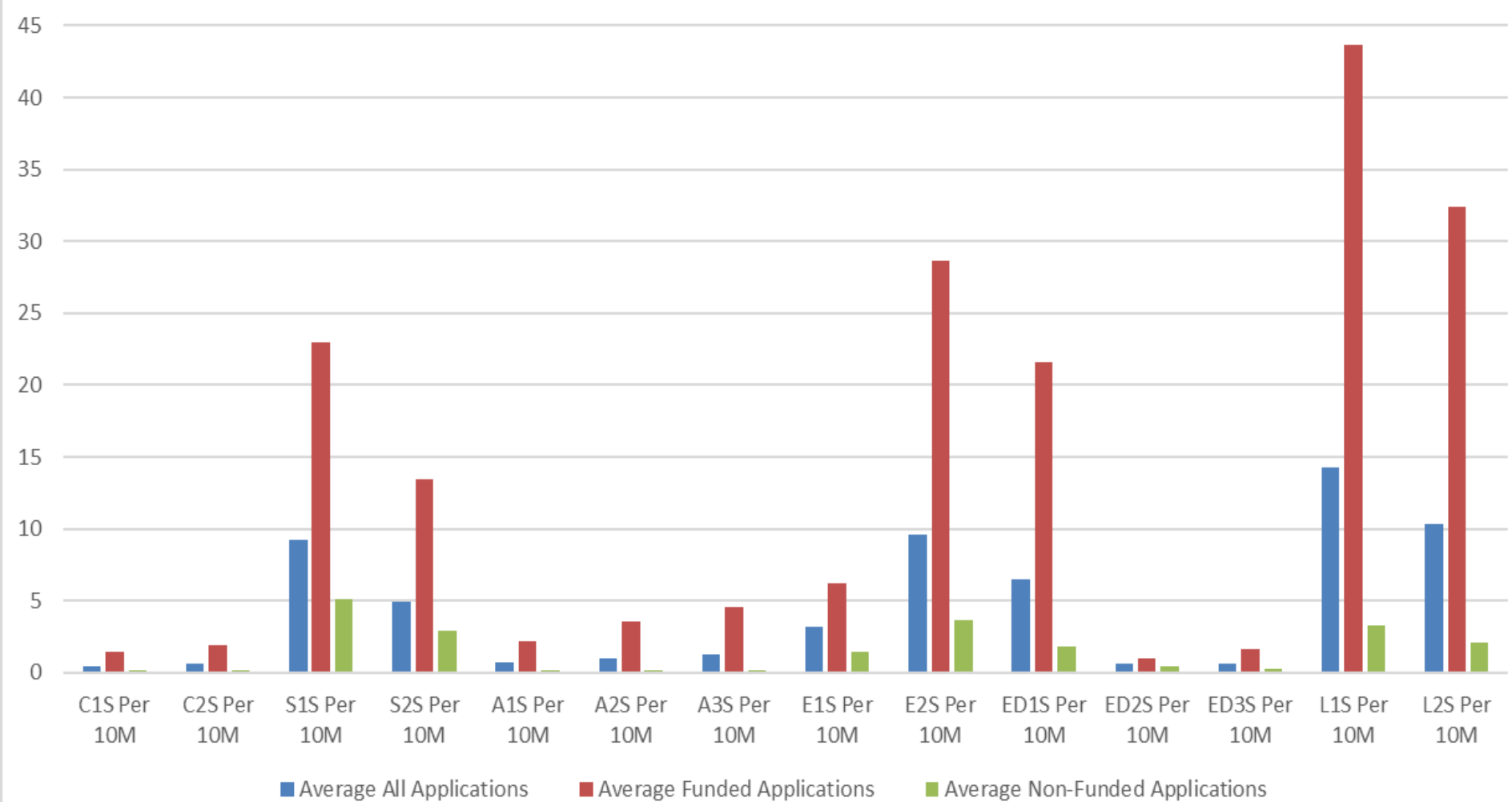
## Land Use - Recommendations for Round 4

- 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



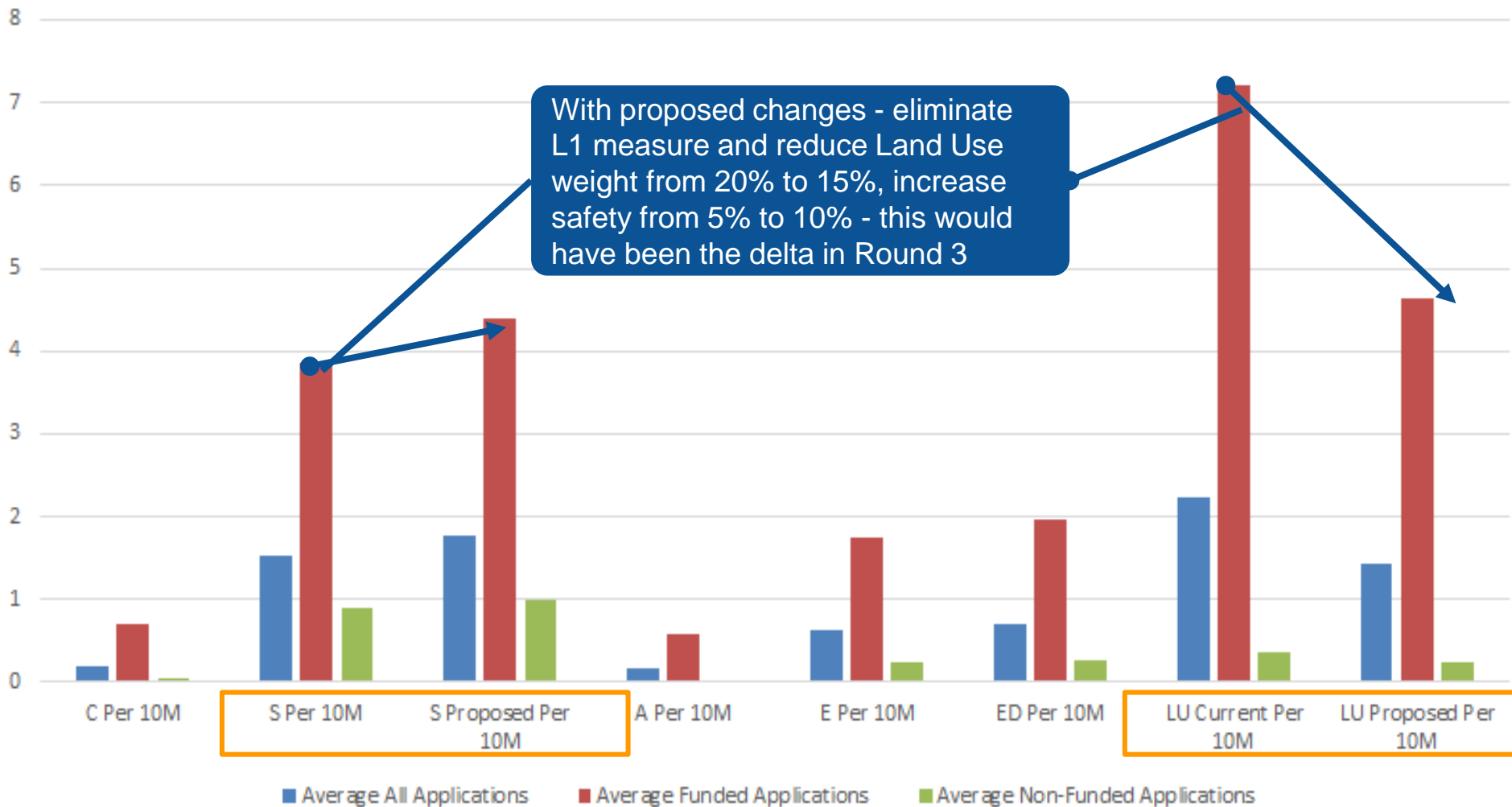
Normalized Scores Per \$10M Requested



# Final Weighted Scores Per \$10M Requested



Final Weighted Scores Per \$10M Requested



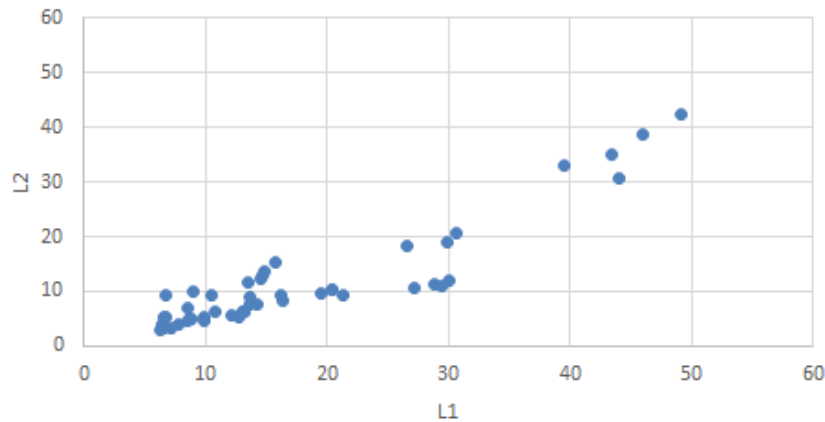
# Land Use



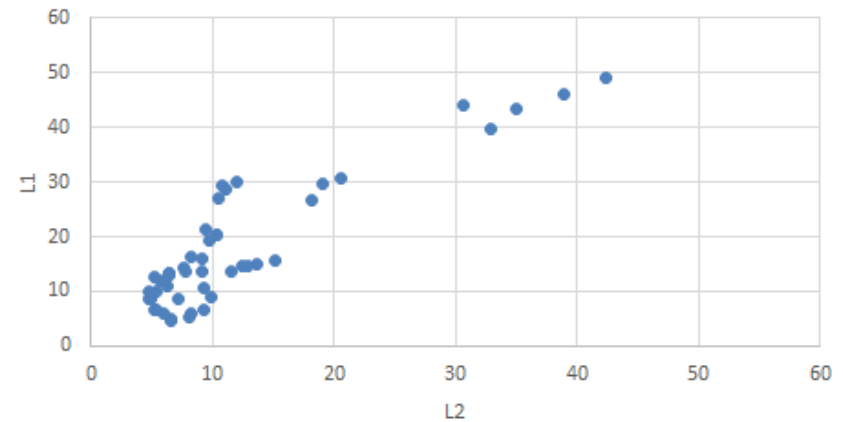
- **Top 50 L1 scores vs L2:** Areas with high population and employment density highly correlate with areas with higher density of non-work destinations
  - Projects in these areas do well in both the L1 and L2 measures
- **Top 50 L2 scores vs L1:** Emerging growth areas that need to improve walkability 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?



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Thank you.

