Proposed Changes to SMART SCALE Policies and Methods - Round 4

January 2019
Office of the SECRETARY of TRANSPORTATION
Summary of Proposed Policy Changes

- **Timeline and schedule**
  - 1 month pre-app intake
  - Pre app caps - 4+1 and 10+2

- **Project eligibility**
  - Transit maintenance facility must include capacity/service expansion
  - Prohibit systemwide projects

- **Project Readiness**
  - Adaptive signal control projects must include corridor study or operational analysis
  - Major Transit Investments - BRT/Light Rail
    - require planning study that shows alternatives considered
    - inclusion in agency’s Transit Strategic/Development Plan
Fall Meeting Public Feedback

• Concerns raised by stakeholders and at two previous Board meetings about proposed changes to Land Use (setting L1 to 0% of the score and adjusting the Land Use weight in Area Type A from 20% to 15%) - recommendation to split weighing 50/50 and not reduce Land Use factor weight

• Several comments not in support of proposed change in Safety factor to adjust S1 (# reduction) from 50% to 70% and S2 (rate reduction) from 50% to 30%

• Several comments regarding the complexity of SMART SCALE and asking us to look for ways to simplify the application and scoring processes and extend submission timeline

• We will provide full summary of comments to the Board related to proposed changes in February
Project Evaluation and Scoring
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%
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
- During December Board meeting we committed to providing more details on this modified approach (next 3 slides)

Congestion- Recommendation for Round 4
1) Implement method to better account for peak period congestion throughout entire week (weekdays and weekends)
Common traffic analysis methods are based on peak hour analysis.

Since peak congestion can extend beyond peak hour, SMART SCALE policy requires congestion benefits to be calculated for peak period.

Peak Period Expansion Factor (PPEF) is a value used by the SMART SCALE team to convert estimated peak hour delay and throughput benefits to peak period benefits.

*PPEF can be thought of as average congestion duration*- a value of 1.75 would mean the facility is congested for 1 hour and 45 minutes.
Congestion
Current Peak Period Expansion Factor

- INRIX is datasource used by Commonwealth for various purposes:
  - Travel time Variable Message Signs on Interstates
  - VTrans congestion and reliability needs
  - Calculation of PPEF for SMART SCALE
- Travel Time Index (TTI) is used to calculate PPEF
- TTI is the ratio of the congested travel time to the free flow travel time
- Using 15-minute increments the TTI data is averaged Mon-Fri from 6AM to 9PM

MONDAY - FRIDAY (Typical Work Week)
Congestion
Proposed Peak Period Expansion Factor

- Proposed method nearly identical to previous method
- **Main difference** - Base calculation on *Mon-Sun (include Sat and Sun) from 6AM to 9PM* is calculated
- PPEF for facilities that experience weekend congestion would likely increase
- Anticipate this change will result in following:
  - Congested during work week and weekend - PPEF increase/decrease
  - Congested only on weekend - PPEF increase
  - Congested during work week but no congestion on weekend - PPEF decrease
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 severe injury crashes and policy changes related to HSIP program

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%

Change since 12/10/19
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
2) Incorporate VEDP Business Ready Sites into site weighting process
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
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**
  - 1 point for redevelopment of existing site (existing building vacant or abandoned) **PLUS**
    - 0.25 points for VEDP Tier 3 sites
    - 0.5 points for VEDP Tier 4 site, or
    - 1 point for VEDP Tier 5 site
Land Use

- 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.

- Current weighting has L1 at 70% and L2 at 30% - recommend even weight for both measures (50/50).

Land Use - Recommendations for Round 4

1) Drop L1 measure and give 100% of weight to L2
2) Modify current weighting of L1 and L2 from 70/30 to 50/50
3) Area Type A - Land Use weight changed from 20% to 15%
4) Area Type A - Safety weight changed from 5% to 10%

Change since 12/10/19
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 February will clean up and clarify existing policy - example: formalize policy for project cancellation
Interstate Projects and SMART SCALE

- Dedicated funding sources for operational and capacity improvements for Interstates exists now from the 81 legislation
- Staff recommended policy:
  - No change to SMART SCALE policy - per current Board policy fully funded projects not eligible for SMART SCALE
  - Any project included in a Board adopted interstate corridor plan/program would be considered fully funded and would not compete in SMART SCALE
  - Projects not included in a Board adopted interstate plan/program that meet VTrans need can be submitted and compete for SMART SCALE funding
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Thank you