House Bill 2 Update

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Deputy Secretary of Transportation
March 18, 2015
Agenda

• Introduction and General Feedback
• Project Eligibility and Application Process
• Evaluation Measures
• Project Evaluation and Scoring
• CTB Prioritization and Programming
House Bill 2 Update

• Late February/Early March – Held meetings in each district to get feedback on measures/process
• Today: Overview of complete HB2 process
• March/April – Public Comment on draft
• May CTB – Revised process presented
• June CTB – Final process considered by the Board
Stakeholder Outreach and Feedback

District Meeting Feedback included:

- Stakeholders showed overall/general agreement with measure concepts but expressed:
  - Concerns over rural/urban and highway/transit fairness in methodologies
  - Concern over the number of weighting frameworks
  - Highlighted need for further definition of terminology such as “corridor” “essential destination” …“Devils are in the details”
  - Suggestions and concerns related to the definition of “essential destinations”
  - Suggestion that land use factor be applied more broadly
House Bill 1887 Requirements

• Amends and reenacts § 33.2-358 which established the highway allocation formula for the $500 million CTB annual allocation

• Revises allocation with funds available for high priority projects and PPTA before 7/1/2020:
  – 50% for the high-priority projects and
  – 50% for the highway construction district grant programs.

• For FY beginning on/after 7/1/2020, the new allocation for remaining funds:
  – 45% state of good repair purposes
  – 27.5% high-priority projects program
  – 27.5% highway construction district grant program
Draft HB2 Process - Timeline for implementation

**Anticipated HB2 Yearly Cycle**

- **FEBRUARY–APRIL**: CTB Considers Evaluated Project for Inclusion in the Six Year Improvement Program (SYIP)
- **APRIL–MAY**: Hold SYIP Public Hearings to gather input
- **APRIL**: Release Draft SYIP
- **MAY**: Release Revised SYIP
- **JUNE**: CTB Considers Final SYIP
- **JULY**: Early Coordination with VDOT/DRPT on Candidate Projects
- **AUGUST–SEPTEMBER**: Solicit Candidate Projects from Local Governments and Regional Entities
- **OCTOBER–JANUARY**: Screen and Evaluate Projects per HB2 Process
- **OCTOBER**: Project Applications Due
- **JANUARY**: Release Evaluation of Projects
Project Eligibility and Application Process

- Eligibility to submit projects
- Screening for VTrans2040 needs
- Application process
## Eligibility to Submit Projects

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Regional Entity (MPOs, PDCs)</th>
<th>Locality (Counties, Cities, Towns)</th>
<th>Public Transit Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor of Statewide Significance</td>
<td>Yes</td>
<td>Yes, with a resolution of support from relevant regional entity</td>
<td>Yes, with resolution of support from relevant entity</td>
</tr>
<tr>
<td>Regional Network</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, with resolution of support from relevant entity</td>
</tr>
<tr>
<td>Urban Development Area</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

*Yes, with a resolution of support from relevant entity*
Screening for Vtrans2040 Needs

- HB2 requires that every project address a transportation need identified in VTrans2040 Multimodal Transportation Plan for one of the three travel markets analyzed:
  - Corridor of Statewide Significance (COSS) - Intercity travel market
  - Regional Networks - Intraregional travel market
  - Urban Development Areas (UDA) - Local activity center market
Application Submittal

- Simple and straightforward
- Does not require applicants to invest significant time and resources or require the use of consultants
- VDOT and DRPT staff will be available to provide support and tools for applicants in compiling data and information needed for application
- The application process will be electronic and map-based to facilitate automated population of key data elements
Application Process – Project Preparation

Project sponsors are strongly encouraged to coordinate early in the process with VDOT/DRPT to ensure scope, schedule and cost are adequate for HB2 evaluation

- **Scope** - The scope should define the limits of the project, its physical and operational characteristics, and physical and/or operational footprint

- **Schedule** - The schedule should clearly define the expected process for further project development including key milestones, work activities, related activities, approvals/approval timelines

- **Cost** - Cost estimate should be consistent with the level of development of the project, project type, and project scale and complexity
Stakeholder Feedback on Measures

Safety:
- Limiting crashes to fatalities and severe injuries only
- Accounting for safety benefits of transit projects
- Sources and rules for application of crash modification factors (CMFs)

Congestion:
- Focus on LOS E conditions may exclude many areas
- Multimodal project approach and data requirements
- Consistent definition of project corridor required
- Incorporate benefits of non-recurring congestion
Stakeholder Feedback on Measures

Accessibility:
- Fairness of applying 45 minute threshold for access to jobs consistently statewide
- Definition and location of essential destinations
- Rural concern over minimal existing access to alternative modes (providing access to an alternative route is critical)

Environmental Quality:
- Consider projects that do create surface environmental benefits
- Consideration of mobility services/ridesharing modes for disadvantaged population
- Careful definition of disadvantaged populations is required
Stakeholder Feedback on Measures

Economic Development:
- Issue with using DHCD Enterprise Zones as part of assigning points
- Should expand to include all regionally or locally adopted economic development strategies
- Awarding points based on development progress (access is needed before a development opportunity becomes real)
- Approach to scaling – total private investment, square footage, jobs, wages, property value, taxes – all of these were mentioned as a possible option

Transportation and Land Use Coordination:
- To date, the following regions have expressed interest in including this factor on a voluntary basis – Charlottesville-Albemarle, Lynchburg, Danville, Winchester-Frederick-Stephens City
HB2 Project Evaluation Process

- Screened HB2 Project
- Calculation of HB2 Measures values
- Internal/External Review for QA/QC
- Input: Factor Weights
- Input: Project Costs
- Project Score
- Advance Projects to CTB Prioritization
- Input: Measure Values and Weights
Measure Value Calculation and Review

Technical Evaluation Team
- Screen submitted projects
- Evaluate project preparation and provide assistance to sponsors
- Calculate measure values for submitted/screened projects

External Peer Review Group
- Representatives from groups such VACO and VML
- Review calculated measures values
- Serve QA/QC function
Factor Weighting Frameworks

<table>
<thead>
<tr>
<th>Factor</th>
<th>Congestion Mitigation</th>
<th>Economic Development</th>
<th>Accessibility</th>
<th>Safety</th>
<th>Environmental Quality</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>35%**</td>
<td>10%</td>
<td>25%</td>
<td>10%</td>
<td>10%</td>
<td>10%*</td>
</tr>
<tr>
<td>Category B</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
<td>15%</td>
<td>10%</td>
<td>15%*</td>
</tr>
<tr>
<td>Category C</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>30%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Category D</td>
<td>10%</td>
<td>30%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Note* – For metropolitan planning areas with a population over 200,000 (TPB, HRTPO, RRTPO, FAMPO, RVTPO), the prioritization process shall also include a factor based on the quantifiable and achievable goals in VTrans (referred to as the Transportation-Land Use Coordination factor).

Note** – For Northern Virginia and Hampton Roads construction districts, congestion mitigation is weighted highest among the factors in the prioritization process.
Stakeholder Feedback on Factor Weighting

- Concern about rural/urban fairness
- Questions as to whether the land use factor will help or hurt scores (non-required areas considering use)
- Desire for clarity on measure detail prior to selection weighting framework
- Some areas would like to be able to weight measures higher/lower (would like less than 10% weighting permitted)
Project Scoring
Step 1 – Normalization of the Measure Values

- **Measure Value** – Data calculated for the project that describes the characteristics of the project
- **Highest measure value** will be given a score of 100 percent
- **Measure values** will be compared to the highest value, and the value - as a percentage of the highest value - will be used as the measure score

<table>
<thead>
<tr>
<th>Congestion Mitigation: C.2: Reduction in Person Hours of Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure Value</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>10 Hrs</td>
</tr>
<tr>
<td><strong>Measure Score</strong></td>
</tr>
</tbody>
</table>
Project Scoring
Step 2 – Apply Measure Weights

- Factor Score – Sum of the measures scores within a factor area multiplied by their measure weights.

<table>
<thead>
<tr>
<th>Measure Weight</th>
<th>C.1: Person Throughput</th>
<th>C.2: Reduction in Person Hours of Delay</th>
<th>Total Factor Score - Congestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Score</td>
<td>Value</td>
<td>Score</td>
</tr>
<tr>
<td>Project 1</td>
<td>1,200</td>
<td>8.0</td>
<td>10</td>
</tr>
<tr>
<td>Project 2</td>
<td>6,000</td>
<td>40.0</td>
<td>500</td>
</tr>
<tr>
<td>Project 3</td>
<td>15,000</td>
<td>100.0</td>
<td>900</td>
</tr>
</tbody>
</table>
Project Scoring
Step 3 – Apply Factor Weights

- Factor score is then multiplied by the weighting percentage for the area type category where the project is located

<table>
<thead>
<tr>
<th>Project 2 (Category B Weights)</th>
<th>Congestion Mitigation</th>
<th>Economic Development</th>
<th>Accessibility</th>
<th>Safety</th>
<th>Environmental Quality</th>
<th>Land Use</th>
<th>Final Project Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
<td>15%</td>
<td>10%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Factor Score</td>
<td>47.8</td>
<td>76.4</td>
<td>49.1</td>
<td>58.9</td>
<td>81.9</td>
<td>68.3</td>
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<tr>
<td>Weighted Score</td>
<td>7.17</td>
<td>15.28</td>
<td>12.27</td>
<td>8.83</td>
<td>8.19</td>
<td>10.24</td>
<td>62.00</td>
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</tbody>
</table>
Project Scoring
Step 4 – Calculate Cost-Effectiveness

- Project score is then divided by the HB2-funded cost of the project to determine the value of score for every dollar invested

- Project Example:
  - Total cost of project: $30 million
  - HB2-funded portion of cost: $15 million
  - Project score: 62.0
  - Cost-Effectiveness Index Based on HB2 Cost: 4.1 per $million

  - As a comparison, Cost-Effectiveness Index Based on Total Cost will be provided: 2.1 per $million
Project Scoring
Cost-Effectiveness

Cost-Effectiveness: Total Cost vs. HB2-Only Costs

Project Score per Total Cost ($ million)

Project Score per HB2 Cost ($ million)
CTB Prioritization & Programming Process

- HB2 Scoring Results
- Present Screening/Scoring Results to CTB and Public
- CTB Guidance on Program Development
- Funding Decisions for Draft SYIP
- Public Comment Period
- Revise and Adopt Final SYIP
CTB Prioritization & Programming Process – Funding Decisions

- Board will need process to move from list of evaluated projects to program of selected projects
- Staff will develop recommendations over the coming months for the Board’s consideration
- Recommendations will take into account:
  - HB2 process
  - HB1887 grant programs
  - Other programs not subject to HB2
  - Frequency of project solicitation
Annual Process Issues – Changes in Project Scope / Schedule / Cost

Project selected for funding must be re-scored if any of the following apply:

- Change in the scope of the project that is significant enough to impact the anticipated benefits
- Change in cost exceeds thresholds:
  - Total Cost <$5 million: 20% increase prior to award of the construction contract requires re-scoring
  - Total Cost >$5 million: 10% increase prior to the award of the construction contract requires re-scoring
  - $5 million maximum increase prior to the award of the construction contract regardless of total cost
Outstanding Issues to beResolved

- Changes to measures and weighting based on stakeholder input
- CTB Process for developing programs under the HB2 process
- Normalization of scores and scaling of measures

*HB2 will continue to evolve and improve based on advances in technology, data collection, and reporting tools*
Next Steps

• March/April –
  – Public comment on draft will be solicited
  – Six-Year Improvement Program hearings
• May CTB – Revised process presented
• June CTB – Final process considered by Board