House Bill 2 Implementation
Stakeholder District Forums

February and March 2015
Agenda

• Welcome and Session Purpose
• Overview of Feedback from January Outreach Session
• Draft Measures – Discussion and Feedback
• Weighting Factor Areas – Discussion and Feedback
• Next Steps
Session Purpose

• To engage local and regional government agency staff on the House Bill 2 (HB2) requirements and issues
• To gather input on draft prioritization measures
• To discuss progress to date and where we are going next

Your input is important!
January Outreach Session

- Project Solicitation
- Weighting of Factor Areas
- Draft Measure Concepts
- Process Issues
Feedback from January Outreach Session

Solicitation

• Concerns over amount of effort and analysis needed to submit project for consideration

• Concerns over eligibility to submit a project – specifically the inability of local governments to submit for the CoSS

• Role of State in project solicitation

Weighting

• Would like more input on weighting frameworks

• Fairness between Rural and Urban
Measure Concepts

• Concerns over amount of effort and analysis needed to submit project for consideration
• Equal application across modes
• How to handle new facilities
• Double counting

Process

• Cost-benefit – input was split on whether state portion or total project costs should be used
• Sliding scale to address changes in project cost after selection through HB2
HB2 Guiding Principles

- Analyze what matters to people and has a meaningful impact
- Ensure fair and accurate benefit-cost analysis
- Transparent and understandable
- Must work for both urban and rural areas
- Must work for all modes of transportation
- Minimize overlap in measures
Factor Areas

- Safety
- Congestion mitigation
- Accessibility
- Environmental quality
- Economic development
- Land use and transportation coordination (areas with over 200,000 people)
Safety Factor

• Recommend two measures
  – 50% of score – Reduction in the number of fatalities and severe injuries
  – 50% of score – Reduction in the rate of fatalities and severe injuries per 100 million vehicle miles traveled
Reduction in Number of Fatalities and Severe Injuries

• **What** – Measure the expected change of fatalities and severe injuries due to project

• **When** – Analyze change from existing conditions

• **Where** – Expected change would be analyzed along a specific facility

• **How** – FHWA and state crash modification factors will be used to determine the expected change due to project

• **Impact** – A number of treatments such as medians, turn lanes, sidewalks, roundabouts, and other improvements
Example 1
Urban Two Way Stop to Roundabout Control (0.2 mi)

Before

Expected reduction in fatalities and severe injuries of 78% based on FHWA and state crash modification factors

After

Credit: FHWA
Example 2
Urban Corridor Adaptive Traffic Signal Control at Eight Intersections (2.5 mi)

Expected reduction in fatalities and severe injuries of 8% based on FHWA and state crash modification factors

Credit: Charlottesville Stock Photography.
Reduction in the rate of fatalities and severe injuries per 100M VMT

- **What** – Measure the expected change in the rate of fatalities and severe injuries per 100 million vehicle miles traveled due to project
- **When** – Analyze change from existing conditions
- **Where** – Facility level analysis
- **How** – FHWA and state crash modification factors will be used to determine the expected change due to project
- **Impact** – Can be influenced with a number of treatments such as medians, turn lanes, sidewalks, roundabouts

Enclosure 11
BREAKEOUT GROUP DISCUSSION

– Safety
  - Do the proposed measures work for projects in your region?
  - How much should a measure be weighted in a factor areas?
  - Are there measures that you believe should be re-considered?
• **Recommend two measures**
  – 50% of score – decrease in the person hours of delay in the corridor
  – 50% of score – increase in peak-period person throughput in the corridor
Person Hours of Delay

- **What** – Decrease in the number of person hours of delay in the corridor based on level of service E
- **When** – Analyze change between build and no-build in 2025
- **Where** – Corridor-level analysis
- **How** – Highway capacity manual and regional models will be used to determine expected changes
- **Impact** – Capacity expansion, operational improvements, transit service, intersection improvements, and other improvements
Peak Period Person Throughput in Corridor

- **What** – Increase in the number of people expected to move through the corridor during the peak period
- **When** – Analyze change between build and no-build in 2025
- **Where** – Corridor-level analysis – facility and related parallel facilities
- **How** – Regional models and statewide planning system would be used to determine expected change
- **Impact** – Capacity expansion, operational improvements, transit service, intersection improvements, and other improvements
BREAKOUT GROUP DISCUSSION

– Congestion mitigation

- Do the proposed measures work for projects in your region?
- How much should a measure be weighted in a factor areas?
- Are there measures that you believe should be reconsidered?
Accessibility Factor

Recommend three measures

- 60% of score – Increase in the cumulative access to jobs accessible within 45 minutes in a region
- 20% of score – Increase in the cumulative access to essential destinations accessible within 30 minutes in a region
- 20% of score – Increase in the access to travel options in a corridor
Increase Access to Jobs

• **What** – Increase in the cumulative access to jobs that can be reached within 45 minutes in a region

• **When** – Analyze change between build and no-build in 2025

• **Where** – Regional level of analysis – aggregated from “zone” level information

• **How** – GIS tool developed by consultant with information from regional models and statewide planning system would analyze impact of projects

• **Impact** – Increase travel speeds and/or reduce distance between home and work
Increase in Access to Essential Destinations

- **What** – Increase in the cumulative access to essential destinations that can be reached within 30 minutes in a region
  - Education, health care and recreational facilities
- **When** – Analyze change between build and no-build in 2025
- **Where** – Regional level analysis
- **How** – GIS tool with information from regional models and statewide planning system
- **Impact** – Increase travel speeds and/or reduce distance between home and essential destinations
Cumulative Access to Employment Opportunities

by mode

Auto Accessibility

Transit Accessibility

Walk Accessibility

Example: Accessibility by Mode for Rockville Pike in Maryland
Increase Access to Travel Options

• **What** – Degree to which project includes components to improve travel options

• **When** – Change compared to existing conditions

• **Where** – Corridor level analysis

• **How** – Project sponsors would include information to support award of points
  
  – GIS tools, regional models, the statewide planning system, and other tools may be used to verify sponsor information
Increase Access to Travel Options

• Project receives points based on whether it
  – Provides connections between modes of transportation
  – Accommodates other modes of transportation
  – Provides real-time traveler information regarding use of alternative routes or other modes of transportation
  – Enhances transportation demand management options

• Project points will be scaled based on the projected number of users
BREAKOUT GROUP DISCUSSION

– Accessibility

- Do the proposed measures work for projects in your region?
- How much should a measure be weighted in a factor areas?
- Are there measures that you believe should be reconsidered?
Environmental Factor

• Focus on social and natural factors
• Three recommended measures
  – 50% of score – Degree to which a project is likely to improve air quality and reduce greenhouse gas emissions
  – 40% of score – Change in number of jobs accessible within 45 minutes for disadvantaged populations
  – 10% of score – Change in the number of essential destinations accessible within 30 minutes for disadvantaged populations
Air Quality and Greenhouse Gas Emissions

- **What** – Degree to which a project includes components that reduces emissions of PM, NOX, CO and CO2
- **When** – Change compared to existing conditions
- **Where** – Corridor level analysis
- **How** – Project sponsors would include information to support award of points
  - Regional models, the statewide planning system, and other tools may be used to verify sponsor information
Air Quality and Greenhouse Gas Emissions

- Project receives points based on whether it
  - Increases rail transit and/or passenger rail use
  - Encourages more pedestrian and/or bicycle activity
  - Encourages ridesharing and bus transit
  - Reduces delay at bottlenecks with above average truck traffic
  - Encourages shift of goods movement to rail from truck
- Project points will be scaled based on the number of users
Non-Auto Access to Jobs for Disadvantaged Populations

- **What** – Increase in the cumulative access to jobs that can be reached by disadvantaged populations within 45 minutes in a region

- **When** – Analyze change between build and no-build in 2025

- **Where** – Regional level analysis – aggregated from “zone” level information

- **How** – GIS tool with information from regional models and statewide planning system

- **Impact** – Increase travel speeds and/or reduce distance between home and work
Non-Auto Access to Essential Destinations for Disadvantaged Populations

• **What** – Increase in the cumulative access to essential destinations that can be reached by disadvantaged populations within 30 minutes in a region

• **When** – Analyze change between build and no-build in 2025

• **Where** – Regional level analysis

• **How** – GIS tool with information from regional models and statewide planning system

• **Impact** – Increase travel speeds and/or reduce distance between home and essential destinations
BREAKOUT GROUP DISCUSSION

– Environmental Quality

- Do the proposed measures work for projects in your region?
- How much should a measure be weighted in a factor areas?
- Are there measures that you believe should be re-considered?
Economic Development Factor

- Recommend two measures
  - 70% based on support for new economic activity within project area
  - 30% based on freight efficiency and intermodal access

- First measures focus on new growth

- Second measures supports maintaining and enhancing existing economic growth
Support for New Economic Activity

- **What** – Degree to which project supports local economic development strategies and projects

- **When** – Changes compared to existing conditions

- **Where** – Corridor level analysis

- **How** – Project sponsor would provide information regarding steps taken toward specific economic development actions
  - Documentation would be required to verify information provided by sponsor
Support for New Economic Activity

• Project receives points based on whether it
  – Supports Department of Housing and Community Development Enterprise Zones
  – PDC has passed resolution demonstrating that project supports adopted Comprehensive Economic Development Strategy
  – Whether development plans have been submitted for review
  – Whether development plans have been approved
  – Whether utilities have been extended/are in place/are programmed for development

• Project points would be scaled using a criteria to be determined – square footage, value, etc.
Freight Efficiency and Intermodal Access

• **What** – Degree to which project improves freight efficiency and intermodal access

• **When** – Changes compared to existing conditions

• **Where** – Facility-level analysis

• **How** – Variable – sponsor provided information and GIS verification
• Project receives points based on
  – Degree to which it enhances access to existing/planned distribution/intermodal/manufacturing facilities
  – Degree to which it improves a primary truck freight route designated in the “National Network”
  – Degree to which it enhances access or reduces congestion at or adjacent to a Virginia port or air carrier airport

• Project points are scaled based on tonnage and value of freight impacted
BREAKOUT GROUP DISCUSSION

Economic Development

- Do the proposed measures work for projects in your region?
- How much should a measure be weighted in a factor areas?
- Are there measures that you believe should be re-considered?
Land Use Coordination Factor

- Required in areas over 200,000
  - NoVA, Hampton Roads, Richmond, Fredericksburg, Roanoke-Salem

  - Job-to-housing balance
  - Job and housing access to transit and pedestrian facilities
  - Transit and HOV usage
  - Per capita vehicle miles traveled
Land Use Coordination Factor

• Recommend two measures
  – 50% of score – Degree to which project will support transportation efficient land use patterns and local policies
  – 50% of score – Degree to which the regionally adopted long-range transportation plan reduces or minimizes growth in per capita vehicle miles traveled
Transportation Efficient Land Use Plans and Policies

• **What** – Degree to which project supports local plans and policies on transportation efficient land use

• **When** – Compared to existing conditions

• **Where** – Regional or corridor level of analysis

• **How** – Project sponsor would provide information regarding project’s impact on local plans and policies
  
  – Documentation would be required to verify information provided by sponsor
Transportation Efficient Land Use Plans and Policies

• Project receives points based on whether it
  – Promotes walkable, mixed-use development
  – Promotes in-fill development
  – Supports development that will improve job-to-housing balance
  – Promotes urban development areas
  – Supports VDOT access management policies, where applicable

• Points would not be scaled
Decreased per capita VMT in Regional Plans

• **What** – Degree to which the adopted constrained long-range plan is projected to reduce or minimize growth in per capita vehicle miles traveled

• **When** – Year of analysis would vary from region to region based on most recently adopted plan

• **Where** – Regional level analysis
  – VMT attributable to pass-through trips would be excluded

• **How** – Regional model would analyze projects and land use patterns to determine projected change in per capita vehicle miles traveled
BREAKOUT GROUP DISCUSSION

– Regional Transportation and Land Use (areas over 200k)

- Do the proposed measures work for projects in your region?
- How much should a measure be weighted in a factor areas?
- Are there measures that you believe should be re-considered?
## Weighting Factor Areas – Example

<table>
<thead>
<tr>
<th>Factor</th>
<th>Congestion Mitigation</th>
<th>Economic Development</th>
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<th>Safety</th>
<th>Environmental Quality</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>High**</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Low*</td>
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<tr>
<td>Category B</td>
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<td>Medium</td>
<td>Low</td>
<td>Medium*</td>
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<tr>
<td>Category C</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td></td>
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<tr>
<td>Category D</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

Low ≤ 15% < Medium < 25% ≤ High

**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.
Weighting Factor Areas – Example

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<tbody>
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<td>35%**</td>
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<td>10%</td>
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<td>10%*</td>
</tr>
<tr>
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<td>15%</td>
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Note** – For Northern Virginia and Hampton Roads construction districts, congestion mitigation is weighted highest among the factors in the prioritization process.
BREAKOUT GROUP DISCUSSION

– Drafting Weighting Frameworks
  ▪ Of the proposed weighting frameworks, does one work for your region?
  ▪ Why? Why not?
Annual HB2 Cycle

Anticipated HB2 Yearly Cycle

- **April**
  - Release Draft SYIP

- **February to April**
  - CTB Considers Evaluated Projects for Inclusion in the Six Year Improvement Program (SYIP)

- **April to May**
  - Hold SYIP Public Hearings to Gather Input

- **May**
  - Release Revised SYIP

- **June**
  - CTB Considers Final SYIP

- **August**
  - Solicit Candidate Projects from Local Governments and Regional Entities

- **October**
  - Project Applications Due

- **November-January**
  - Screen and Evaluate Projects per HB2 Process
Next Steps

• Schedule moving forward
  – Meetings in each district over next 3 weeks
  – March Draft process presented to Board
  – March/April Public Comment
  – May Revised process provided to Board
  – June Final process considered by Board

To submit comments on HB2 process or measures,
please send an e-mail to –
Transportation1@governor.virginia.gov

Or submit comments online at VirginiaHB2.org