Advisory Panel Meeting 3

April 24, 2014

Agenda
AGENDA

Rt. 29 Advisory Panel Meeting 3
April 24, 2014
1:00 pm

Virginia Center for Transportation Innovation and Research
530 Edgemont Road
Charlottesville, Virginia 22903

1. Introductions
   Advisory Panel Members
   5 minutes

2. Review Public Comments
   Philip Shucet
   5 minutes

3. Review Components of Four Concepts Under Review
   Philip Shucet
   Advisory Panel
   45 minutes

4. Solution(s) Carried Forward to Final Technical Review
   Advisory Panel
   45 minutes

5. Final Meeting May 8
   Philip Shucet
   15 minutes

6. Wrap up
   Advisory Panel
   Philip Shucet
   5 minutes
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April 24, 2014

Comparison of Concepts
April 22, 2014

To: Route 29 Advisory Panel Members  
From: Philip Shucet  
Subject: Important Information to Accompany Route 29 Solution Posters

Panel Members,

This memorandum accompanies four posters, each containing pertinent information for each of the four solution concepts currently under consideration: Median Throughway Low-Build, Median Throughway High-Build, Parallel Roads Low-Build and Parallel Roads High-Build.

Each poster contains written information and information depicted in graphic form.

The written information contains a list of the concept elements currently included in VDOT’s Six-Year Improvement Program (SYIP), the cost-to-complete the SYIP projects and the indicative cost range to fund additional concept components.

The graphics contain representative typical sections at various locations along Route 29, and each graphic indicates an existing view and a representative future view of typical sections at selected locations. Each typical section indicates existing right-of-way widths in addition to anticipated future right-of-way widths.

Because right-of-way widths are important, and because we did not have this information available for you on April 10, the technical team devoted considerable time to this effort over the past week. Note that for the four concept solutions under study, each future scenario is expected to remain within existing right-of-way, including areas where grade-separated intersections could be constructed.

**SPECIAL NOTE REGARDING GRADE-SEPARATED INTERSECTIONS:** The grade-separated intersections provide full movements in every direction. Also, please note that the depressed typical section for grade-separated intersections for both the Median Throughway High-Build and Parallel Roads High-Build only occur in the immediate vicinity of the grade-separated intersection. The roadway on either side of the grade-separated intersection would not be depressed and would return to same grade as existing Route 29, as indicated in the additional typical sections shown on each poster.

If you share the posters with your colleagues or constituents, I respectfully ask that you also share this memorandum to avoid or minimize misunderstandings.
Route 29 Solutions: Median Throughway Low-Build Concept

Existing Route 29 – North of River

Programmed Route 29 Widening – Polo Grounds Rd to Town Center Dr. (Add 1 Lane within Existing RW)

Existing Route 29 – South of River

Concept: Median Throughway Low-Build Concept

Concept Elements:
Under Construction
• McIntire Rd Interchange & John Warner Pkwy

Programmed Projects
• Best Buy Ramp
• Hillsdale Dr Extension
• Route 29 Widening, Polo Grounds to Town Center Dr
• Adaptive Signal Time Improvements

Additional Concept Components
• Eliminate Left Turns at Select Intersections
• Hydraulic Rd, Greenbrier Rd, Rio Rd, Hilton Heights: Quadrant Movement for Left Turns
• Express Bus Service with Park & Ride Lots
• Implement Access Management Treatments
• Bicycle & Pedestrian Improvements

LEGEND:

Best Buy Ramp
Evaluate/Construct Quadrant Intersections
Six-Year Improvement Plan (SYIP) Project

- **Costs**
  - $70 – $100 M to Fund
  - $43 M to Complete

- **Legend**
  - Best Buy Ramp
  - Evaluate/Construct Quadrant Intersections
  - Six-Year Improvement Plan (SYIP) Project
Route 29 Solutions: Median Throughway High-Build Concept

Northern Project Limit

Existing Route 29 – North of River

Programmed Route 29 Widening – Polo Grounds Rd to Town Center Dr. (Add 1 Lane within Existing RW)

Existing Route 29 – South of River

Concept: At-Grade Through Lanes Between Grade-Separated Intersections

Programmed Projects
- McIntire Rd Interchange & John Warner Pkwy
- Best Buy Ramp
- Hillsdale Dr Extension
- Route 29 Widening, Polo Grounds to Town Center Dr
- Adaptive Signal Time Improvements

Additional Concept Components
- Reconstruct Route 29/250 Interchange (Requires Changes to Best Buy Ramp Project)
- Reconfigure Route 29 to Four Separated Through Lanes (2 in Each Direction) and Four Local Lanes (2 in Each Direction); All within Current RW.
- Grade-Separate Hydraulic Rd, Greenbrier Rd, Rio Rd, Hilton Heights Intersections
- Express Bus Service with Park & Ride Lots
- Implement Access Management Treatments
- Bicycle & Pedestrian Improvements

LEGEND:
- Additional 29/250 Interchange Improvements
- Grade-Separated Intersections
- Six-Year Improvement Plan (SYIP) Project

Cost to Complete:
- $43M
- $250 – $350M

Cost to Fund:
- $250 – $350M

Route 29 Solutions:
Parallel Roads Low-Build Concept

**Existing Route 29 – North of River**

- Programmed Route 29 Widening – Polo Grounds Rd to Town Center Dr (Add 1 Lane within Existing RW)

**Existing Route 29 – South of River**

- Concept: Parallel Roads Low-Build (No Change from Existing)

**Programmed Projects**
- McIntire Rd Interchange & John Warner Pkwy
- Best Buy Ramp
- Hillsdale Dr Extension
- Route 29 Widening, Polo Grounds to Town Center Dr
- Adaptive Signal Time Improvements

**Additional Concept Components**
- Berkmar Dr Extension, from Hilton Heights to Town Center Dr
- Express Bus Service with Park & Ride Lots
- Implement Access Management Treatments
- Bicycle & Pedestrian Improvements

**Cost to Complete**
- $49 M

**Cost to Fund**
- $100 – $200 M

**Legend:**
- Best Buy Ramp
- Six-Year Improvement Plan (SYIP) Project
- Berkmar Dr. Extension
Route 29 Solutions: Parallel Roads High-Build Concept

Existing Route 29 – North of River

Programmed Route 29 Widening – Polo Grounds Rd to Town Center Dr. (Add 1 Lane within Existing RW)

Existing Route 29 – South of River

Concept: Parallel Roads High-Build (No Change from Existing)

Concept Elements:
Under Construction
- McIntire Rd Interchange & John Warner Pkwy

Programmed Projects
- Best Buy Ramp
- Hillsdale Dr Extension
- Route 29 Widening, Polo Grounds to Town Center Dr
- Adaptive Signal Time Improvements

Additional Concept Components
- Reconstruct Route 29/250 Interchange (Requires Changes to Best Buy Ramp Project)
- Grade-Separate Hydraulic Rd, Greenbrier Rd, Rio Rd, Hilton Heights Intersections
- Berkmar Extension, from Hilton Heights to Town Center Dr
- Express Bus Service with Park & Ride Lots
- Implement Access Management Treatments
- Bicycle & Pedestrian Improvements

LEGEND:
- Additional 29/250 Interchange Improvements
- Local Road Grade-Separated Intersection
- Six-Year Improvement Plan (SYIP) Project
- Berkmar Dr. Extension

Cost to Fund $250 – $350 M
Cost to Complete $43 M

Southern Project Limit

Northern Project Limit

Berkmar Drive Ext.
### Description

**Passenger Rail:**
(Increase Passenger rail service on the corridor).

**Six Year Improvement Plan Projects**

<table>
<thead>
<tr>
<th>Description</th>
<th>Current Allocations</th>
<th>Cost to complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>* McIntire Rd. Interchange and McIntire Rd. Ext. to John Warner Parkway;</td>
<td>$34</td>
<td>$0</td>
</tr>
<tr>
<td>* Hillsdale Dr. Ext.;</td>
<td>$14</td>
<td>$16</td>
</tr>
<tr>
<td>* 29 N. Widening from Polo Grounds Rd. to Town Center Dr.;</td>
<td>$33</td>
<td>$18</td>
</tr>
<tr>
<td>* Adaptive Signal Time Improvements;</td>
<td>$1</td>
<td>$3</td>
</tr>
<tr>
<td>* Route 29 / 250 Interchange improvements (Best Buy Project);</td>
<td>$11</td>
<td>$6</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>$93</strong></td>
<td><strong>$43</strong></td>
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</table>

**Concepts Components**

* Improve rail infrastructure along the corridor, adding another train (to accommodate up to 479 passengers) between Lynchburg and DC. Assumes annual operating cost of $2 M. (See Note)

**Cost:** $100-$125

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Note: This scenario can be combined with any of the other scenarios.
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Inventory of Concept Elements
## Route 29 Solutions:
### Inventory of Concept Elements

<table>
<thead>
<tr>
<th>Status</th>
<th>Concept Elements</th>
<th>Median Throughway Low-Build</th>
<th>Median Throughway High-Build</th>
<th>Parallel Roads Low-Build</th>
<th>Parallel Roads High-Build</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under Construction</strong></td>
<td>McIntire Rd. Interchange and McIntire Rd. Ext. to John Warner Parkway</td>
<td>●</td>
<td>●</td>
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<tr>
<td><strong>Programmed Projects</strong></td>
<td>Best Buy Ramp</td>
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<tr>
<td></td>
<td>Hillsdale Dr. Extension</td>
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<td></td>
<td>Route 29 N. Widening, Polo Grounds Rd. to Town Center Dr.</td>
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<tr>
<td></td>
<td>Adaptive Signal Time Improvements</td>
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<tr>
<td><strong>Additional Concept Components</strong></td>
<td>Eliminate left turns at select intersections</td>
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<td>Hydraulic Rd, Greenbrier Rd, Rio Rd, Hilton Heights: Quadrant Movement for Left Turns</td>
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<tr>
<td></td>
<td>Grade-Separate Hydraulic Rd., Greenbrier Rd., Rio Rd., and Hilton Heights Intersections</td>
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<tr>
<td></td>
<td>Reconstruct the Route 29/250 Interchange (Requires Changes to Best Buy Ramp Project)</td>
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<td>Berkmar Dr Extension, from Hilton Heights to Town Center Dr.</td>
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<td></td>
<td>Express Bus Services to Include Strategically Added Park and Ride Lots</td>
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<td></td>
<td>Implement Access Management Treatments</td>
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<td>Provide Bicycle and Pedestrian Improvements, Where Possible</td>
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Examples of Grade Separations
Existing Hydraulic Road Intersection

Grade-Separated Hydraulic Road Intersection Concept:
Grade-Separated Hydraulic Road Intersection Concept:
Grade-Separated Hydraulic Road Intersection Concept:
Grade-Separated Rio Road Intersection Concept: