Rt 29 Solutions Project Delivery Advisory Panel

February 16, 2017
Agenda item 1: Introductions:

Project Delivery Advisory Panel

VDOT Technical Team
Agenda item 2: Interaction and Feedback

Live Streaming

<table>
<thead>
<tr>
<th></th>
<th>Jan 19, 2017</th>
<th>Dec 15, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Viewers:</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>Streams:</td>
<td>52</td>
<td>18</td>
</tr>
<tr>
<td>Average Minutes per stream:</td>
<td>28</td>
<td>21</td>
</tr>
</tbody>
</table>
Agenda item 2: Interaction and Feedback (continued)

For the period Jan 17, 2017 - Feb 13, 2017

Inbox email and phone calls: 15 emails and phone calls

- 1 suggested adding bike lanes on existing Berkmar from Hilton Heights south.
- 3 commented about merging & pavement markings at Rio GSI (Monitored by camera and in the field. No sign or pavement marking changes anticipated.)
- 1 commented that time to cross Rio intersection is longer than before.
- 1 commented that signal timing requires adjustment.
- 1 asked if Ashwood would be extended to Berkmar. (Not part of the current project. Albemarle Co is exploring a Rio Mills Rd connector to Berkmar.)
- 1 developer requested general information regarding Berkmar Extension.
- 1 commented about construction vehicles on Rt. 29 widening. (Lane-Corman safety manager monitoring trucks on the project.)
Agenda item 2: Interaction and Feedback (continued)

For the period Jan 17, 2017 - Feb 13, 2017 (continued)

• 1 asked why Rt 29 / Ashwood intersection closed early. (Required to restore disrupted power service.)
• 1 requested information about bridge project that is not part of Rt. 29 Solutions Program.
• 1 asked if FHWA’s Record of Decision on former bypass encumbers former bypass right-of-way. (No. Any future federally-funded work for a new bypass project, or any project, requires compliance with NEPA.)
• 1 business owner inquired about removal of their TODS sign. (No TODs signs were removed; the signs have been updated since completion of the GSI. VDOT verified that this specific sign was not removed.)
• 1 commented about the new traffic pattern at Rt 29 and Ridgewood Mobile Homes. (Entrance to the mobile homes was constructed according to the design.)
• 1 asked if there were excepted delays on Rt 29 widening between 4-5am.
Agenda item 2: Interaction and Feedback (continued)

For the period Jan 17, 2017 - Feb 13, 2017 (continued)

Hillsdale Extension

- 3 comments regarding blocked traffic at Greenbrier and Hillsdale intersection. (Work was for ACSA sewer line. City issued a traffic alert. Workers out of the intersection before the end of this week.)
- 3 comments about signs that needed to be replaced.
- 1 request for the project landscaping plans.
- 1 request to repair fencing.

Hydraulic Area Planning Study

- 1 suggested Hillsdale South should connect to the Rt 250 bypass.
- 1 suggested a signalized pedestrian crossing at Hydraulic.
Agenda item 2: Interaction and Feedback (continued)

For the period Jan 17, 2017 - Feb 13, 2017 (continued)

Web Provide Input: No new postings

Project Hotline 844-220-5540: 2 emails and calls

- 1 inquired about type of fence to be installed. (Lane-Corman meeting with property owner to discuss.)
- 1 requested additional stone at driveway entrance.
- Various communications regarding work schedules
Agenda item 3: Report on Panel Feedback

Summarize injuries associated with accidents

• Included in agenda item 8

VDOT’s Access Management Policy

• To be included on March 16 PDAP agenda
Agenda item 4: Panel Feedback and Suggestions for Future Agenda Items

Open Discussion
### Agenda item 5: Construction Milestones

<table>
<thead>
<tr>
<th>As of 2/16/17</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>November</td>
<td>December</td>
</tr>
<tr>
<td><strong>29 Widening</strong></td>
<td>Waterline Relocation (50%) 65%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 4 Grading, Drainage, and Paving (40%) 60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 6 and 7 Grading, Drainage, and Paving (35%) 45%</td>
<td></td>
</tr>
<tr>
<td><strong>Berkmar</strong></td>
<td>Roadway Construction South of River (85%) 85%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roadway Construction North of River (90%) 90%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deck Construction 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parapets, Abutment Slabs, and Railing (20%) 30%</td>
<td></td>
</tr>
<tr>
<td><strong>Hillsdale</strong></td>
<td>Partial Building Demolition 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greenbriar Signal Infra 0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grading, Drainage, and Paving North of Greenbriar Drive (10%) 20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bridge Substructure (90%) 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bridge Superstructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retaining Wall-Pepsi (40%) 70%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grading, Drainage, and Paving between Greenbriar Drive and Seminole Ct. (10%) 40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roundabout and Roadwork between Zan Rd. and Whole Foods (30%) 35%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grading, Drainage, and Paving in Seminole Ct. (5%) 10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seminole Court Signal 0%</td>
<td></td>
</tr>
</tbody>
</table>

**Construction Complete**
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening

Work this week

- Erosion control maintenance
- Finalize structure 11-1 head and end walls
- Grading and curb backup installation
- Asphalt paving
- Steel plate preparation at Hollymead
- Roadway grading NBL
- Abandon existing storm sewers
- Storm sewer installations
- Phase 3 water main installation
- Phase 2 water main testing
- Jack and bore structure 9-2
- Ashwood signal pole and light pole foundation
- Temporary seeding
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening (continued)

Significant lane closures this week (nighttime)

- Overnight closures of North Hollymead and South Hollymead
- For N. Hollymead closure, traffic detoured to S. Hollymead
- For S. Hollymead closure, traffic detoured to N. Hollymead
Rt 29 Solutions

Agenda item 6: Rt 29 Solutions Project Updates (continued)
Rt 29 Widening (continued)

Work next two weeks

• Erosion control maintenance
• Fine grading NBL between Polo Grounds and Ashwood
• Ditch grading
• NBL grading north of Ashwood
• Storm sewer installation
• Begin phase 4 water main relocation
• Phase 3 water main testing
• Complete jack and bore structure 9-2
• Install junction boxes at Ashwood and Hollymead
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Rt 29 Widening (continued)

Anticipated significant upcoming lane closures (nighttime)
• Potential single lane nighttime closures on Route 29
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended

Work this week

- Erosion control maintenance
- Intermediate asphalt paving
- Abutment A and B grading
- Bridge parapet walls
- Temporary seeding
- Landscaping
- Pressure test water main (betterment)
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended (continued)

Significant lane closures this week
New traffic pattern at Berkmar and Hilton Heights
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended (continued)

Work next two weeks

- Erosion control maintenance
- Sidewalk grading
- Construct berm fills
- Parapet walls
- Landscaping
- Storm sewer installation at Hilton Heights
- Underdrain installation
- Install light pole foundations at Hilton Heights
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Berkmar Extended (continued)

Anticipated upcoming significant lane closures

- Potential nighttime lane closures at Hilton Heights
- New traffic pattern at Berkmar and Hilton Heights
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Hillsdale Extended

Work this week

- Retaining wall excavation/undercut, leveling pad, unit placement, backfill
- Undercut and fill at SWM basin
- Street lighting conduit at Homewood Suites
- Prep for sidewalk from Whole Foods to India Drive
- Rip Rap at Abutments A & B
- Select fill at Abutment A
- ACSA sanitary sewer (betterment)
- Business sign installation for upcoming detour

Significant lane closures this week

- Flagging operation along Greenbrier Drive
Agenda item 6: Rt 29 Solutions Project Updates (continued)

Hillsdale Extended (continued)

Work next two weeks

- Retaining wall excavation/undercut, unit placement, backfill
- Undercut and fill at SWM B
- ACSA sanitary sewer (betterment)
- Storm sewer installation 7-12 thru 6-5

Anticipated upcoming significant lane closures

- Flagging operation along Greenbrier Drive
- Upcoming closure of a section of Line Drive, but southern portion of Hillsdale Drive Extension to be opened to traffic
Agenda item 7: Budget Update

### Route 29 Solutions Budget Update as of February 16, 2017

<table>
<thead>
<tr>
<th>Construction Contracts</th>
<th>Original Construction Contract Value</th>
<th>Expended (Invoiced)</th>
<th>Approved Change Orders</th>
<th>Exposure (Anticipated COs)</th>
<th>Remaining CV</th>
<th>Total Anticipated Construction Expenditures at Completion</th>
<th>Total SYIP Allocations for Construction</th>
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<tbody>
<tr>
<td>Rt. 29 Solutions Design-Build (1)</td>
<td>$116,746,000</td>
<td>$109,355,392</td>
<td>$10,067,180</td>
<td>$1,300,000</td>
<td>$17,457,788</td>
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<td>($2,973,809)</td>
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<td>Rt. 29/250 Interchange (2)</td>
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<td>$12,117,184</td>
<td>$168,283</td>
<td>$800,320</td>
<td>($827,823)</td>
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<td>$0</td>
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<td>Adaptive Signals</td>
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<td>$2,349,605</td>
<td>$125,000</td>
<td>$50,000</td>
<td>$1,495,395</td>
<td>$3,895,000</td>
<td>$3,420,000</td>
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<td>$0</td>
<td>$0</td>
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<tr>
<td>Hillsdale Extended</td>
<td>$11,451,492</td>
<td>$3,264,075</td>
<td>$98,907</td>
<td>$474,093</td>
<td>$8,286,324</td>
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<tr>
<td>Change from Jan</td>
<td>$573,616</td>
<td>$98,907</td>
<td>($98,907)</td>
<td>($474,709)</td>
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<td><strong>Totals</strong></td>
<td><strong>$143,038,570</strong></td>
<td><strong>$127,086,256</strong></td>
<td><strong>$10,459,370</strong></td>
<td><strong>$2,624,413</strong></td>
<td><strong>$26,411,684</strong></td>
<td><strong>$156,149,856</strong></td>
<td><strong>$185,025,000</strong></td>
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<td>Change from Jan</td>
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<td><strong>$98,907</strong></td>
<td><strong>($98,907)</strong></td>
<td><strong>($3,448,518)</strong></td>
<td><strong>$0</strong></td>
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1. Rt. 29 Solutions Design-Build Exposure includes $1,300,000 potential incentive for overall DB program on-time completion.
2. Rt. 29/250 Interchange Exposure includes anticipated final payment.
### Agenda item 8: Accident Report Update (Post-Rio GSI opening period)

**Joel DeNunzio**

<table>
<thead>
<tr>
<th>Rio Road GSI crashes</th>
<th>Total Crashes</th>
<th>Total Injury Crashes</th>
<th>Severe Injuries</th>
<th>Minor Injuries</th>
<th>No Apparent Injury</th>
<th>No Injury</th>
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<td>10</td>
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<td>15</td>
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<td>July 19 – Nov 30, 2013</td>
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<td>15</td>
<td>1</td>
<td>18</td>
<td>5</td>
<td>92</td>
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<td>July 19 – Nov 30, 2014</td>
<td>40</td>
<td>9</td>
<td>0</td>
<td>12</td>
<td>3</td>
<td>81</td>
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<td>July 19 – Nov 30, 2015</td>
<td>41</td>
<td>10</td>
<td>0</td>
<td>15</td>
<td>6</td>
<td>78</td>
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<tr>
<td>July 19 – Nov 30, 2016</td>
<td>27</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>57</td>
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</tbody>
</table>
Rio Crashes July 19 - November 30, 2012
31 Total Crashes, 10 Injury Crashes

Collision Type
- Rear End
- Angle
- Sideswipe - Same Direction
- Sideswipe - Opposite Direction
- Deer
Rio Crashes July 19 - November 30, 2013

49 Total Crashes, 15 Injury Crashes

Collision Type
- Rear End
- Angle
- Sideswipe - Same Direction
- Ped
- Non-Collision
Rio Crashes July 19 - November 30, 2014
40 Total Crashes, 9 Injury Crashes

Collision Type

- Green: Rear End
- Blue: Angle
- Red: Sideswipe - Same Direction
- Cyan: Head On
- Purple: Fixed Object - Off Road
- Brown: Deer
- Yellow: Other

Route 29
Woodbrook Dr
Rio Road
29th Place
Rio Crashes July 19 - November 30, 2015
41 Total Crashes, 10 Injury Crashes
Collision Type
- Rear End
- Angle
- Sideswipe - Same Direction
Rio Crashes July 19 - November 30, 2016
27 Total Crashes, 5 Injury Crashes

Collision Type
- Rear End
- Angle
- Sideswipe - Same Direction
- Other
- Deer
Agenda Item 9: Communications Campaign Attitudes and Perceptions

Build overall awareness of the Route 29 Solutions corridor improvement projects: What Route 29 Solutions is all about

Increase familiarity with the Route 29 Solutions projects: When and where construction is taking place

Encourage desired actions by Route 29 travelers: Provide information so they can make informed choices to minimize the impact of the projects on their daily lives
Four of five (83%) respondents who were aware of VDOT communications had seen or heard an advertisement about “Route 29 Solutions”

Two thirds (67%) who were aware of the advertising campaign saw the ads on TV, 40% heard on radio

Three quarters (73%) rated the communications as “good” or “excellent”

“The entire town knew what was going on and how to go through this corridor during construction”
When asked to describe the ads, the most frequent response was “they mentioned businesses being open” or “to support the businesses”

The second most frequent response was that “construction is under way” and the location of the work zone

“The info was accessible, if I wanted to know it. VDOT funded ads for affected businesses.”

“They visited the business in which I worked and handed out maps to our customers.”
Almost three quarters of respondents who were aware of VDOT’s information took action based on it:

- 52% changed their route
- 33% changed the time they traveled
- 24% visited the Route 29 Solutions website
- 21% attended a public meeting
- 10% provided input to the project team

Four of five respondents (83%) aware of the improvements knew that the Rio intersection reopened to traffic more than a month ahead of schedule.
Post-Campaign vs. Baseline
Pre-Campaign Survey Scores

+13

Pre-campaign Survey

Current Post-campaign Survey

17%
VDOT’s lowest score: start of I-66 corridor improvements

48%
Route 29 Solutions Project, winter 2015 (benchmark)

59%
VDOT’s highest score: end of Richmond Bridge Restoration Project, fall 2012

61%
Route 29 Solutions Project, Fall 2016

10 20 30 40 50 60 70
Future Interest in VDOT Public Involvement Activities

110 respondents provided their email address and Zip Code so they could be considered for participation in a future VDOT panel, focus group or other public input opportunity.
Agenda item 10: Adaptive Signal Phase 2 Recommendation

Budget
- Adaptive signal budget: $3,720,000
- Expended: $2,398,320
- Balance: $1,321,680
- Cost estimate phase 2: $731,000
- Completion target: Sep 2017

Approach
- Based on research past 3 years, VDOT considering an optional approach that improves results and reduces cost.
- VDOT will be coordinating with County and City
- Recommended option will be reviewed with PDAP at March meeting
Agenda item 11: Hydraulic Area Planning Advisory Panel Members

Members:
Chip Boyles    Kurt Keesecker
Morgan Butler    Diantha McKeel
Vito Cetta    John O’Connor
Kathy Galvin    Chuck Rotgin
Mark Graham    Del Sanders
Alex Ikefuna    Alan Taylor

Alternates:
Peter Bergner (for John O’Connor)
David Mitchell (for Chuck Rotgin)

(contact information will be posted on route29solutions.org)
Agenda item 12: New Business and Wrap Up

Agenda item 13: Adjourn
Rt 29 Solutions Project Delivery Advisory Panel

February 16, 2017