Agenda Item 1: Introductions

Hydraulic Planning Advisory Panel members

Technical Team members
Agenda item 2: Public Interaction and Feedback

YouTube Views (Previous Meeting)

March 22, 2018

• YouTube Views: 37
Agenda item 2: Public Interaction and Feedback (continued)

For the period March 22 – April 11, 2018  Inbox and Phone

• Several brief emails expressing support for Scenario 2. Many of the emails referenced concerns over the current K-Mart site.

• One detailed email of support for Scenario 2 detailing its functionality and lower cost. Also referenced concerns of Scenario 1’s business impact.

• Single email from a business owner adjacent to the US 29 & Hydraulic Rd. intersection expressing support for Scenario 1
Agenda item 2: Public Interaction and Feedback (continued)

For the period March 22 – April 11, 2018  Website input

• None
Agenda item 2: Public Interaction and Feedback (continued)

Actions by City Planning Commission (meeting on April 10, 2018)

- Charlottesville City PC unanimously recommended that City Council approve the Hydraulic Small Area Plan as a Comprehensive Plan Amendment
- Unanimously recommended approval of designation of the included area as an Urban Development Area (as defined by VA Code 15.2-2223.1)
- Unanimously recommended approval of the Hydraulic Rd/US 29 Transportation Improvement Plan (Scenario 1) to the City Council
- No public comments (speakers) during public hearing period
Agenda item 3: Response to Panel feedback

- Transportation Plan graphics discussion (Zan Road crossing, roadway on Kroger site, Roundabout at District Ave. & Hydraulic Rd.)
- Additional operational analyses (Agenda Item 4a)
- RW impacts of a Scenario 1 Modification (Agenda Item 4a)
- Further discussion on Bike / Pedestrian concepts with Scenario 1 (Agenda Item 4d)
- Scheduling for SMART SCALE packages (Agenda Item 5)
Agenda item 3: Transportation Progress Update

Progress since last meeting:

• Further development of Potential Improvements for Michie Drive & Brandywine Drive
• Additional ideas for US 250 & Hydraulic Road Intersection
• Further development of Potential Scenario 1 refinements
• Bike / Pedestrian concepts with Scenario 1
• Potential Project Scheduling for SMART SCALE packages
Agenda item 4: Transportation Progress Update

Hydraulic Road/Michie Drive/Brandywine Drive Project Ideas
Agenda item 4a: Transportation Progress Update – Current Scenario 1
Agenda item 4a: Transportation Progress Update – Scenario 1 w/2 WB Lanes

Variant 1 an additional $2M - $3M in construction costs.
Agenda item 4a: Current Scenario 1 Pavement Limits Estimate
Agenda item 4a: Scenario 1 Pavement Limits Estimate w/2 WB Lanes
Agenda item 4a: WB Hydraulic Modification between US 250 & Hillsdale Dr.
### Agenda item 4a: Scenario 1 vs. Scenario 1 Variant 1

#### Intersection Delay Comparison

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM</th>
<th>PM</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2045 Scenario 1</td>
<td>2045 Scenario 1 Variant 1</td>
<td>2045 Scenario 1</td>
<td>2045 Scenario 1 Variant 1</td>
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<tr>
<td>US 29 &amp; Greenbrier</td>
<td>25.1</td>
<td>25.2</td>
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<td>US 29 &amp; Lenox</td>
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<td>21.2</td>
<td>20.9</td>
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<tr>
<td>US 29 &amp; Hydraulic</td>
<td>11.7</td>
<td>10.8</td>
<td>16.6</td>
<td>12.8</td>
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<tr>
<td>US 29 &amp; Angus</td>
<td>4.6</td>
<td>4.5</td>
<td>4.9</td>
<td>3.9</td>
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<tr>
<td>Hydraulic &amp; US 250</td>
<td>25.5</td>
<td>37.6</td>
<td>43.2</td>
<td>39.9</td>
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<tr>
<td>Hydraulic &amp; Hillsdale (K-Mart)</td>
<td>35.2</td>
<td>47.9</td>
<td>58.5</td>
<td>30.7</td>
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<tr>
<td>Hydraulic &amp; District</td>
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<td>28.9</td>
<td>16.0</td>
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<tr>
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<td>18.9</td>
<td>17.7</td>
<td>16.9</td>
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<tr>
<td>Hydraulic &amp; Georgetown</td>
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<td>27.3</td>
<td>34.1</td>
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<tr>
<td>Commonwealth &amp; Greenbrier</td>
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<td>37.6</td>
<td>16.0</td>
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<td><strong>Average Vehicle Delay</strong></td>
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<td><strong>60.4</strong></td>
<td><strong>72.3</strong></td>
<td><strong>64.9</strong></td>
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<td><strong>Through Network</strong></td>
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#### Level of Service

- **A**: ≤10
- **B**: 11-20
- **C**: 21-35
- **D**: 36-55
- **E**: 56-80
- **F**: >80

*Source: CalTrans*
Agenda item 4a: Scenario 1 vs. Scenario 1 Variant 1

**Travel Time Comparison**

<table>
<thead>
<tr>
<th>Route</th>
<th>AM Peak</th>
<th></th>
<th>PM Peak</th>
<th></th>
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<tr>
<td></td>
<td>2045</td>
<td>2045</td>
<td>2045</td>
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<tr>
<td></td>
<td>Scenario 1 Travel Time (min)</td>
<td>Scenario 1 Variant 1 Travel Time (min)</td>
<td>Scenario 1 Travel Time (min)</td>
<td>Scenario 1 Variant 1 Travel Time (min)</td>
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<tr>
<td>A to C</td>
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<td>4.8</td>
<td>4.6</td>
<td><strong>4.2</strong></td>
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<tr>
<td>A to E</td>
<td>4.3</td>
<td>5.5</td>
<td>6.3</td>
<td><strong>4.7</strong></td>
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<tr>
<td>B to C</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>3.8</td>
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<tr>
<td>B to E</td>
<td>4.5</td>
<td>4.7</td>
<td>6.2</td>
<td><strong>4.9</strong></td>
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<tr>
<td>C to A</td>
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<tr>
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<tr>
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<td>D to C</td>
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<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
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<td>D to E</td>
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<td>Avg. Travel Time of ALL Trips</td>
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<td><strong>2.8</strong></td>
<td><strong>3.0</strong></td>
<td><strong>2.9</strong></td>
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</table>
Agenda item 4a: Transportation Update: 2045 Scenario 1 Variant PM Peak
Agenda item 4c: Transportation Progress Update

Long Term Michie Drive & Brandywine Drive Concept
Agenda item 4c: Transportation Progress Update

Potential Bridge
Potential 2-lane road

Bike/Ped to be discussed at a later time.

Proposed Roundabout
Agenda item 4c: Transportation Progress Update

Potential Bridge
Potential 2-lane road

Bike/Ped to be discussed at a later time.
 Agenda item 4c: Transportation Progress Update

Possible Urban 2-Lane Typical

Potential 2-lane road

Bike/Ped to be discussed at a later time.

Approximately 45’ of space between the properties. (Between privacy fence and private walkway).
Agenda item 4d: Transportation Progress Update

Scenario 1 Bicycle & Pedestrian Options
Agenda item 4d: Transportation Update – Bike/Ped Accommodations

Scenario 1 – Option 1

Legend
- Shared-Use Path / Sidewalk
- Aerial Ped Crossing
- Unsignalized At-Grade Ped. Crossing
- Barrier Separating Vehicle and Ped.

Considerations
- Popularity of a pedestrian overpass.
- Connects all four quadrants of intersection.
- Crossing of right-turn lanes are at-grade and unsignalized.
Agenda item 4d: Transportation Update – Bike/Ped Accommodations

Scenario 1 – Option 2

Legend
- Shared-Use Path / Sidewalk
- Pedestrian crossing below US 29 and at-grade with Hydraulic Rd.

Considerations
- No crossing of Hydraulic Rd.
- Only one crossing of US 29.
- Only vehicle conflict is signalized (US 29 SB left turn).
- Getting grades to the pedestrian underpasses may be difficult.
Agenda item 4d: Transportation Update – Bike/Ped Accommodations

Scenario 1 – Option 3

Legend
- Shared-Use Path / Sidewalk
- Pedestrian crossing below US 29 and at-grade with Hydraulic Rd.
- Unsignalized At-Grade Ped. Crossing
- Barrier Separating Vehicle and Ped.
- Ramp System from US 29 to Hydraulic Rd.

Considerations
- Connects all four quadrants of intersection.
- One vehicle conflict is signalized (US 29 SB left turn).
- Ramp system may not be inviting for bikes.
- Crossing of right-turn lanes are at-grade and unsignalized.
Agenda item 4d: Transportation Update – Bike/Ped Accommodations

Scenario 1 – Option 4

Legend
- Shared-Use Path / Sidewalk
- Ramps to Pedestrian Underpass
- Pedestrian crossing below US 29 and at-grade with Hydraulic Rd.
- Unsignalized At-Grade Ped. Crossing
- Barrier Separating Vehicle and Ped.

Considerations
- Connects all four quadrants of intersection.
- One vehicle conflict is signalized (US 29 SB left turn).
- Ramp system may not be inviting for bikes.
- Crossing of right-turn lanes are at-grade and unsignalized.
Agenda item 4d: Transportation Update – Bike/Ped Accommodations

Scenario 1 Bike / Ped Public Comments:

• Many comments during the Citizen Information Meeting (CIM) on providing connections across Hydraulic but saw crossing US 29 as a priority.

• Most support from written comments were for Options 2 and 3. Option 3 had the most support but there were limited comments on the subject compared to the total number of comments.

• The bike component of Options 2 and 3 were popular with a few CIM attendees.

• Option 4 is a by-product of input from CIM attendee.
Agenda item 4e: Transportation Progress Update

US 250 & Hydraulic Road Project Idea
Continuous Green-T
Agenda item 4e: Transportation Update – Continuous Green T
Agenda item 4e: Transportation Update – Continuous Green T
SMART SCALE Project Scheduling & Packaging
Agenda item 5: SMART SCALE Project Scheduling & Packaging
Agenda Item 6: Phase 2 Upcoming Tasks & Combined Schedule

Next Steps:

• Refinement of Scenario 1 Based on Panel Feedback
• Finalize Bike/Pedestrian Options for Scenario 1
• Continued Development of Other Long Term Project Ideas
• Initiate Material Creation for June 1st SMART SCALE Applications
Agenda Item 6: Phase 2 Upcoming Tasks & Combined Schedule

To be complete by:

1) Albemarle PC Recommendation for CPA                        April 17
2) City Council CPA Adoption/SMART SCALE Endorsement            May 7
3) County BOS CPA Adoption/SMART SCALE Endorsement              May 9
4) MPO resolution to support and LRTP Amendment (if req’d)     May 23
5) SMART SCALE Application Creation Deadline                    June 1
6) Complete SMART SCALE Applications                            July 1
7) SMART SCALE Submission Deadline                              August 1
Agenda Item 7: Panel Open Discussion and Requests for Future Items

Agenda Item 8: New business and wrap up

Agenda item 9: Adjourn