



Rt 29 Solutions Hydraulic Planning Advisory Panel

March 22, 2018



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Agenda Item 1: Introductions

Hydraulic Planning Advisory Panel members

Technical Team members



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Agenda item 2: Public Interaction and Feedback

YouTube Views (Previous Meeting)

Feb. 22, 2018

- YouTube Views: 64



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Agenda item 2: Public Interaction and Feedback (continued)

For the period February 22 – March 21, 2018

Inbox and Phone

- 1 asked if there is an estimated time-line for when the construction for this phase will start and when it will be finished and if there is a target start date for the construction
- 1 asked about the northern limits of the study area



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Agenda item 2: Public Interaction and Feedback (continued)

For the period February 22 – March 21, 2018

Website input

- None



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Agenda item 2: Public Interaction and Feedback (continued)

Progress since last meeting:

- Conducted Community Meeting on March 8th
- Review of Public Feedback from Community Meeting
- Received Additional Feedback from Transit Consultant for CAT



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Agenda Item 2: Public Interaction and Feedback – Community Meeting

Public's Preference:

Scenario 1

24

Scenario 2

4

Scenario 3

4

- Support for Scenario 1 centered around throughput on US 29, ease of use, overall safety and bicycle and pedestrian accommodations. (18 replies mentioned at least one of these positives)
- Scenario 2 received mixed reviews. Some thought it was confusing and didn't provide adequate bicycle and pedestrian accommodations. Others thought it was cost effective and liked the bicycle and pedestrian accommodations. (8 replies mentioned Scenario 2)
- Respondents in favor of Scenario 3 thought it was the best design, would be better for the future and would be the most aesthetically pleasing. One person didn't think it would be cost effective. (5 replies mentioned Scenario 3)



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Agenda Item 2: Public Interaction and Feedback – Community Meeting

Additional Public Comments :

- Numerous comments centered around the intersections of Michie Dr. and Brandywine Dr.
 - Particularly Accessing Hydraulic Rd. and how increased traffic and continuous flow caused by the Hillsdale roundabout may impact them
- Concerns that the relocation of the US 250 WB ramps to Hillsdale Dr. Extended would force more cars to Hydraulic instead of less
- Multiple comments expressing the importance of the Zan Rd. and Angus Rd. crossings. One reply expressed concerns that funding isn't available for both
- Considerable interest in the bicycle and pedestrian access in other parts of the study area. Namely near the US 250 & Hydraulic Rd. intersection and how connections would be made with the US 250 commuter trail
 - Also mentioned the importance of North / South connections along US 29



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Agenda Item 2: Public Interaction and Feedback – Transit

Feedback from Transit Consultant for CAT

“The proposed route alignments work under all three intersection scenarios with a few possible modifications. For example, in Scenario 1, US 29 is grade-separated at Hydraulic, so buses would not be able to turn left from Hydraulic onto US 29 as our proposal shows Route 7 doing. However, this turn could be done a bit further north at Seminole Court and 29. If good pedestrian infrastructure is built into the grade-separated intersection, people could still access the Kroger and former Kmart sites from stops along US 29. Also, Scenario 1 includes a bridge over US 29 at Zan Road. Our proposed Route 9 could use this bridge to provide better access between Seminole Square and the Shops at Stonefield.”

The other two intersection scenarios would mostly affect stop-placement for our proposed alignments, as stops would have to be placed relatively far back on Hydraulic Road from the intersection with US 29 to accommodate various dedicated turning lanes at the intersection. I don’t think this would be a huge issue for riders though, since access points to the various retail centers along Hydraulic Road are also pretty far back from the actual intersection.”



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Agenda item 3: Transportation Progress Update

Progress since last meeting:

- Consideration of Potential Improvements for Michie Drive, Brandywine Drive, and US 250 & Hydraulic Road
- Review of Potential Scenario 1 Modification



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Agenda item 3: Transportation Progress Update

Discussion of Potential Improvements for:

- **Michie Drive**
- **Brandywine Drive**
- **US 250 and Hydraulic Road**



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Agenda item 3: Transportation Progress Update

Potential Scenario 1 Modification



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Agenda item 3: Transportation Progress Update – Potential Mod. Scenario 1





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Agenda item 3: Transportation Progress Update – Preferred Scenario

Discussion of Preferred Scenario for Recommendation



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Agenda item 3: Transportation Progress Update – Preferred Scenario

Project Scenarios	Criteria							
	Total US 29 Travel Time AM / PM (Min) ¹	Potential R/W & Utility Needs	High Level Project Construction Cost	Business Access Impacts	Vehicle Safety Benefit ²	Initial Driver Familiarity	Bike / Ped Accomodations	Land-Use Interactions
2045 "No-Build"	11.0 / 12.7	None	N/A	None	None	N/A	N/A	N/A
Scenario 1 "Grade-Sep Intersection"	5.0 / 5.3 -55% / -58%	Some R/W & High Utility Impacts	\$63M To \$80M	Panel Ranking	Up to 42% reduction in all crashes.	Includes Most Familiar Concepts	Panel Ranking	Panel Ranking
Scenario 2 "CFI"	7.5 / 6.9 -32% / -46%	Some R/W but Lower Utility Impacts	\$44M To \$57M	Panel Ranking	25% decrease in all crashes. 19% for serious crashes.	No CFIs Currently Exist in VA (1 Under Const.)	Panel Ranking	Panel Ranking
Scenario 3 "Grade-Sep Roundabout"	5.3 / 5.5 -52% / -57%	Highest R/W & High Utility Impacts	\$74M To \$93M	Panel Ranking	Increase in crashes but decrease in injury crashes.	Roundabouts Becoming More Prevalent	Panel Ranking	Panel Ranking

■ Positive Impact (Varying Degrees)
■ Negative Impact

■ Both Positive & Negative or Limited in Positive / Negative Impact

- 1) Total of an avg. NB & SB US 29 trip through study area
- 2) Exclusive to the Intersection Improvements at US 29 & Hydraulic

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Agenda item 3: Transportation Progress Update – Preferred Scenario

Project Scenarios	Opinion of Costs		
	Us 29 & Hydraulic Rd. Intersection Construction ^{1 & 2}	Us 29 & Hydraulic Rd. Intersection Utilities	Us 29 & Hydraulic Rd. Intersection Right-of-Way
Scenario 1 "Grade-Separated Intersection"	\$29M - \$35M	\$5.2M ³ for underground utilities. May impact 4 wood and 2 concrete utility poles.	Lowest pavement area outside of R/W
Scenario 2 "CFI"	\$9.5M - \$12M	Underground impact expected to be limited. May impact 2 wood and 3 concrete utility poles.	Lowest pavement area outside of R/W
Scenario 3 "Grade-Separated Roundabout"	\$40M - \$48M	\$5.2M ³ for underground utilities. May impact 3 wood and 2 concrete utility poles.	Most pavement area outside of R/W

Lower cost
 Middle cost but still significant
 Higher cost

- 1) Costs are only for work at US 29 & Hydraulic Rd. (Not inclusive of any variants discussed in the presentation)
- 2) Not inclusive of bike and pedestrian elements shown previously.
- 3) Equal to the utility relocation required for the Rio Rd. project. Price may change upon further investigation.

Additional Project Elements Common to All Scenarios	Opinion of Costs
	Construction Only
Roundabout at Hydraulic Rd. & District Ave.	\$4M - \$6M
Roundabout at Hydraulic Rd. & Hillsdale Dr.	\$4M - \$6M
Zan Rd. Grade Separation	\$8M - \$10M
US 29 & Angus Rd. Grade Separation	\$11M - \$13M
Hillsdale Dr. Extension to Holiday Dr.	\$4M - \$6M
Relocation of WB US 250 Ramps to Hillsdale Extension	\$3M - \$4M
Extend EB US 250 Left-Turn Lane	<\$250K
TOTAL	\$34M - \$45M



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Agenda item 4: Review of Upcoming Phase 2 Tasks

Next Steps:

- **Develop Michie Drive and Brandywine Drive Concepts**
- **Develop US 250 and Hydraulic Road Concepts**
- **Update Project Scheduling & Packaging with Preferred Scenario**



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Agenda Item 4: Phase 2 Upcoming Tasks & Combined Schedule

To be complete by:

- | | |
|--|---------------|
| 1) Joint City Council/Planning Commission Meeting | March 22 |
| 2) Determine Preferred Recommendation | March 23 |
| 3) MPO Policy Board Meeting | March 28 |
| 4) Charlottesville & Albemarle PC Recommendation for CPA | April 10 & 17 |
| 5) Submit Initial List of Projects to SMART SCALE | April 26 |
| A) Identify the Needs Met by Submitted Projects | |
| B) Initiate Evaluation of SMART SCALE Criteria | |
| 6) City / County CPA Adoption/SMART SCALE Endorsement | May 14 & 9 |
| 7) MPO resolution to support and LRTP Amendment (if req'd) | May 23 |
| 8) SMART SCALE Application Creation Deadline | June 1 |
| 9) Complete SMART SCALE Applications | July 1 |
| 10) SMART SCALE Submission Deadline | August 1 |



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Agenda Item 5: Panel Open Discussion and Requests for Future Items

Agenda Item 6: New business and wrap up

Agenda item 7: Adjourn



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