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**Cascade Road / I-285
Interchange Modification Study**
Public Meeting #2 – October 13, 2015



Agenda – Public Meeting



- Introduction
- Overview of work since last public meeting
- Review of recommended alternatives
- Next steps – Interchange Modification Report
- Closing remarks





Introductions



- Fulton County staff
 - Antonio Valenzuela, Assistant Director
 - Roussan Francois, Public Involvement Coordinator
- Ayres Associates staff
 - John Davis, P.E., PTOE
 - Dori Sabeh, P.E.
 - Kevin Kuhlow, P.E.

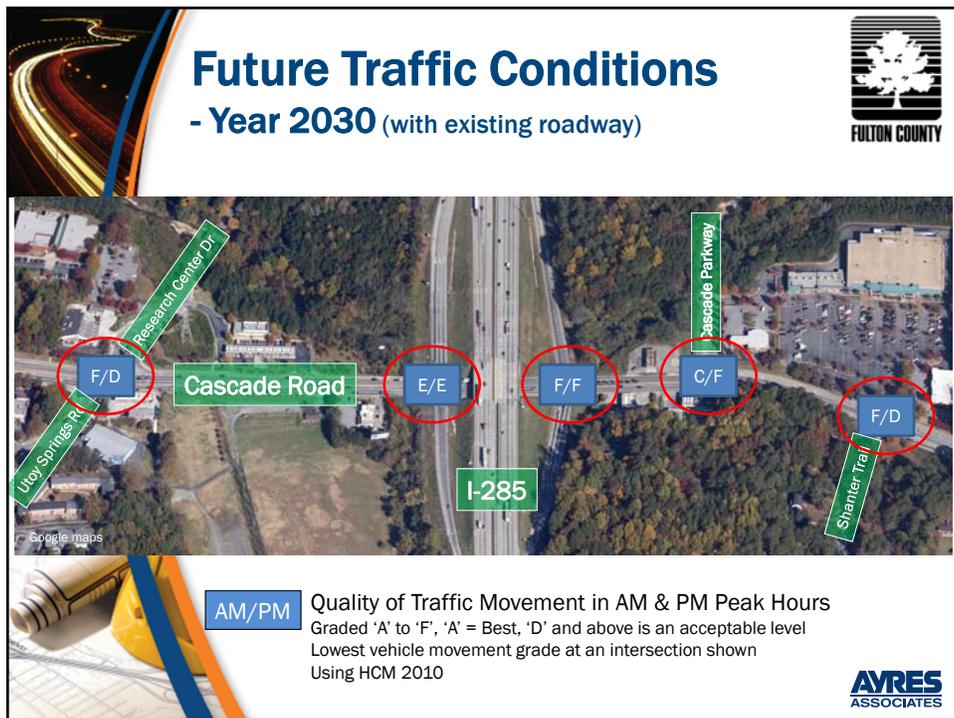
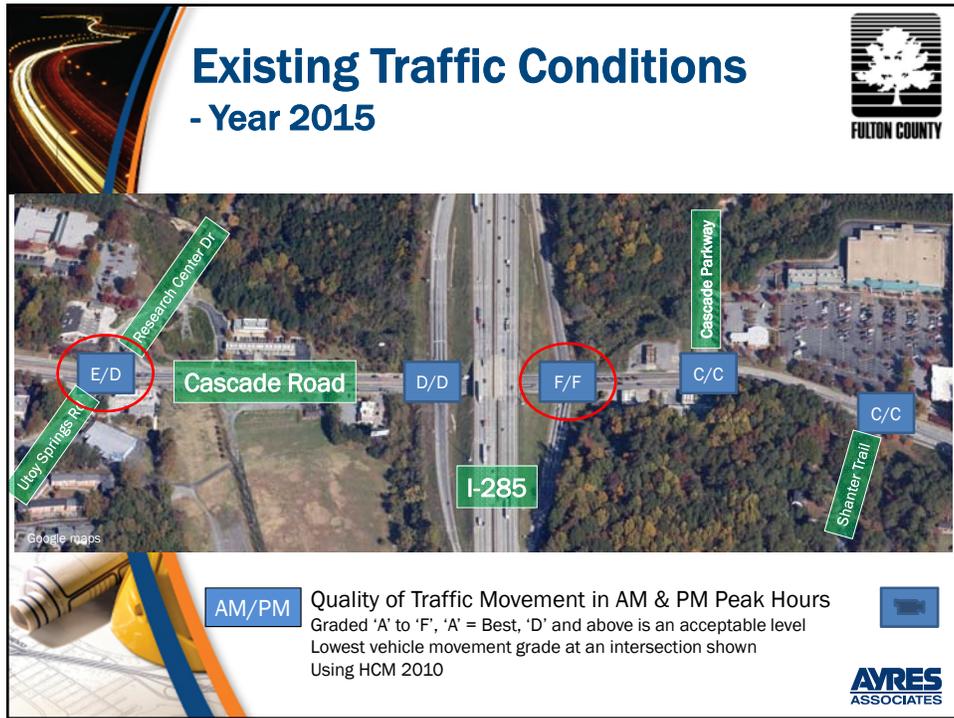


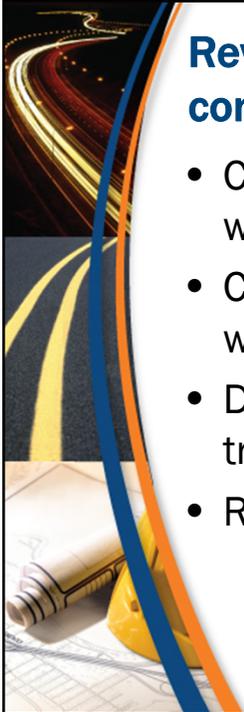
Work since last public meeting



- Reviewed public comments
- Met with GDOT staff
 - Anticipated GDOT bridge replacement at interchange
 - Implications of FHWA and GDOT requirement on proposed alternatives
- Refined traffic forecasts based on capacity constraints of adjacent roadway
 - 0.5% growth over next 15 years - 2030
- Revised geometry for each alternative based on revised traffic forecasts







Review alternatives being considered

- Conventional diamond interchange with traffic signals
- Conventional diamond interchange with roundabouts
- Diverging diamond interchange with traffic signals
- Roundabout vs. Signal at Utoy Springs

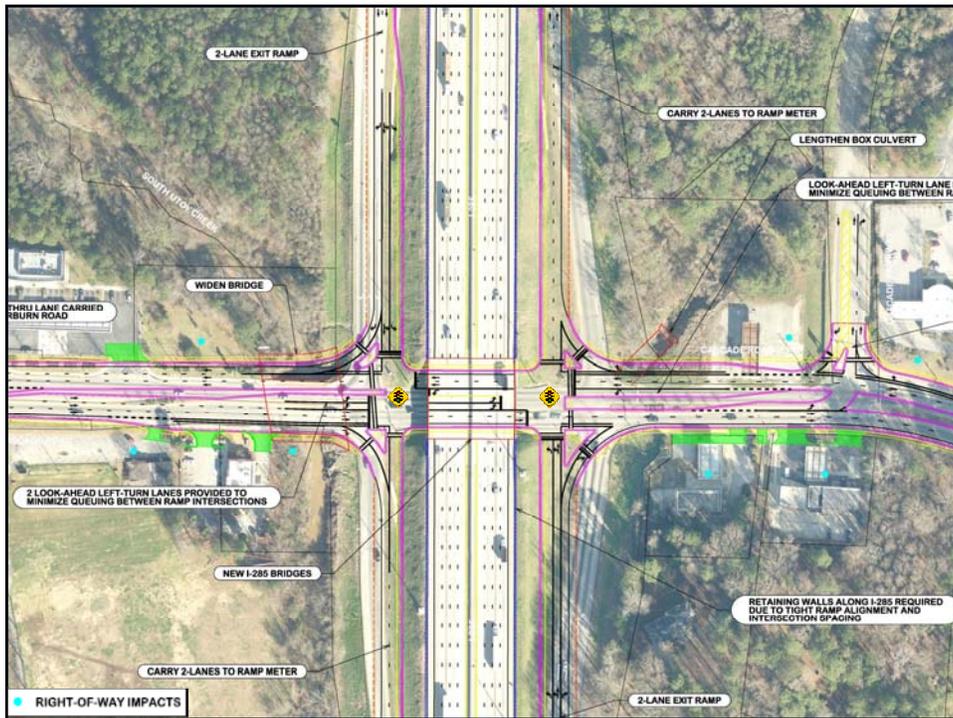
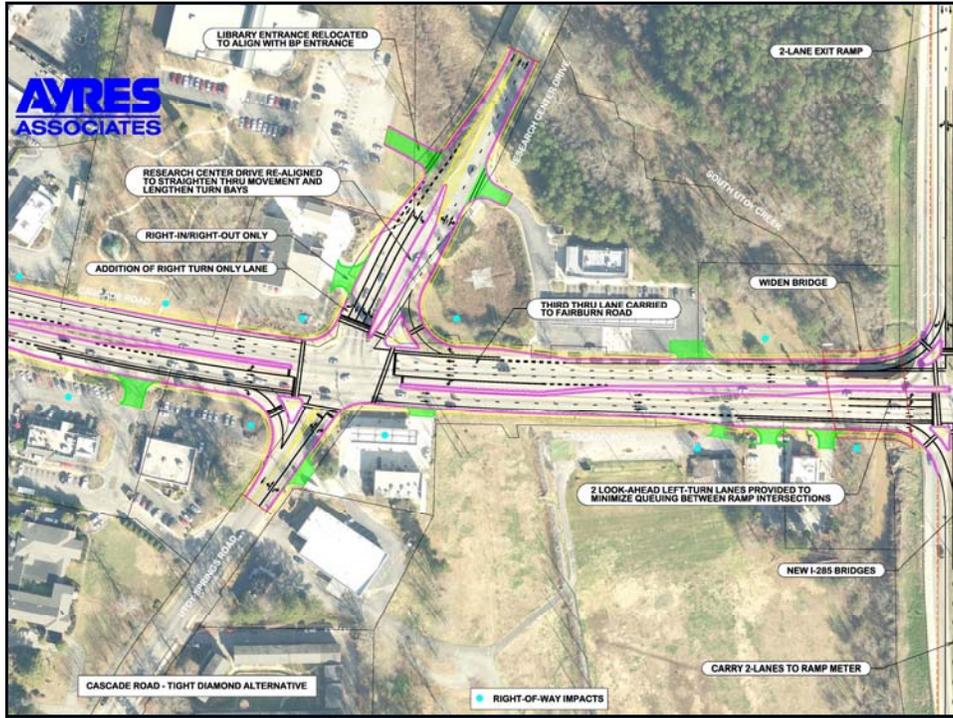


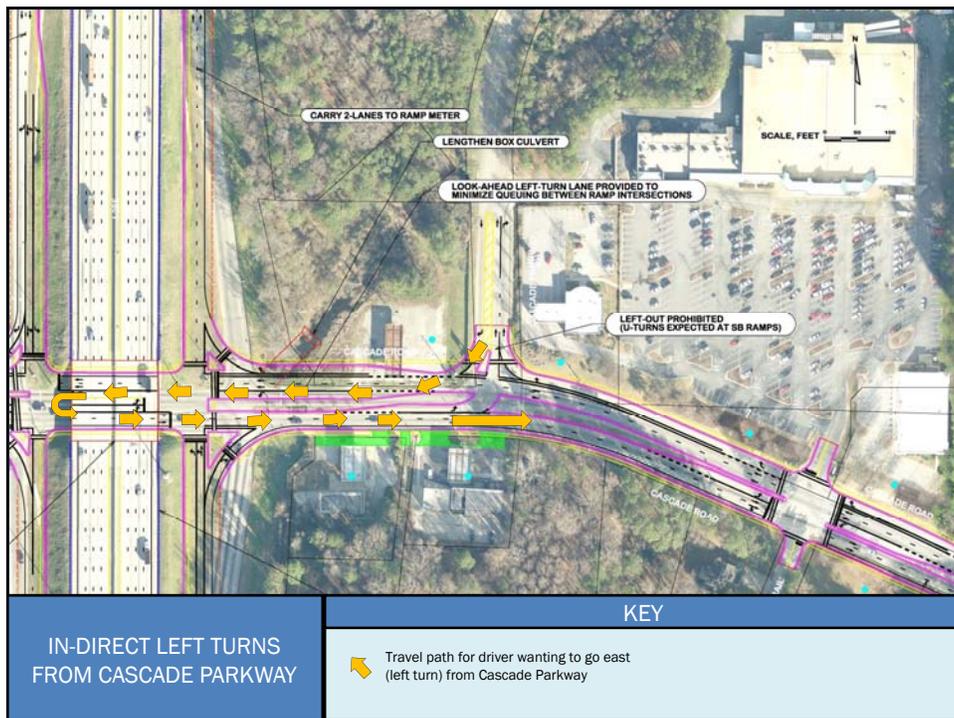
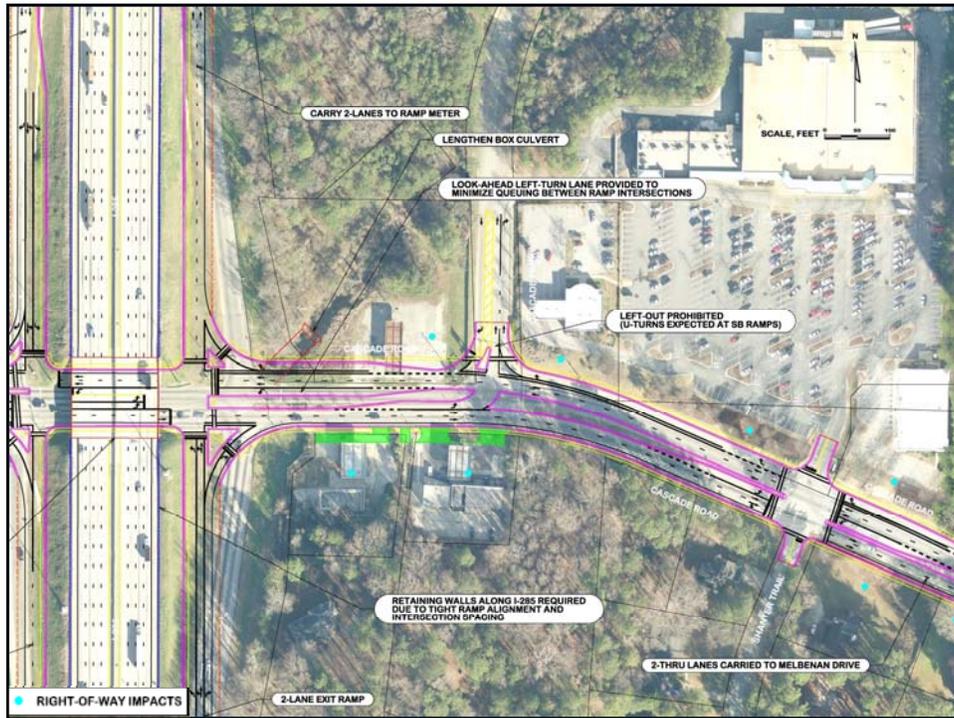
Conventional diamond interchange with traffic signals



Tight diamond with 235 feet between I-285 ramp intersections









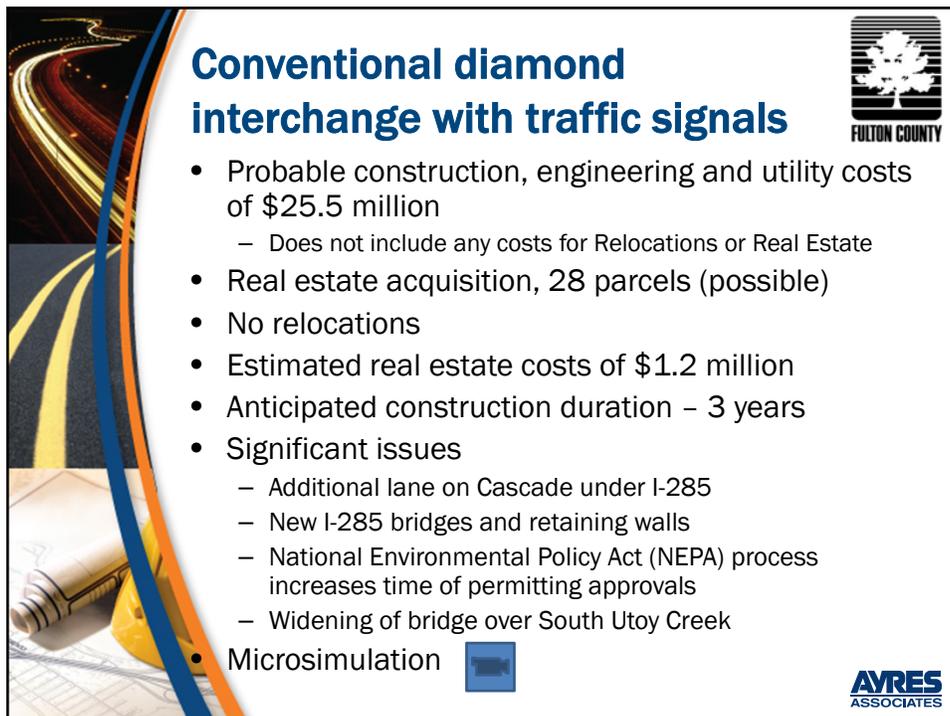
Future Traffic Conditions
- Year 2030 (with Tight Diamond)

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AM/PM Quality of Traffic Movement in AM & PM Peak Hours
Graded 'A' to 'F', 'A' = Best, 'D' and above is an acceptable level
Lowest vehicle movement grade at an intersection shown

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Conventional diamond interchange with traffic signals

FULTON COUNTY

- Probable construction, engineering and utility costs of \$25.5 million
 - Does not include any costs for Relocations or Real Estate
- Real estate acquisition, 28 parcels (possible)
- No relocations
- Estimated real estate costs of \$1.2 million
- Anticipated construction duration – 3 years
- Significant issues
 - Additional lane on Cascade under I-285
 - New I-285 bridges and retaining walls
 - National Environmental Policy Act (NEPA) process increases time of permitting approvals
 - Widening of bridge over South Utoy Creek
- Microsimulation 

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Conventional diamond interchange with roundabouts

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Roundabouts with 465 feet between I-285 ramp intersections

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LIBRARY ENTRANCE RELOCATED TO ALIGN WITH BP ENTRANCE

RESEARCH CENTER DRIVE RE-ALIGNED TO STRAIGHTEN THRU MOVEMENT AND LENGTHEN TURN BAYS

RIGHT-IN/RIGHT-OUT ONLY

ADDITION OF RIGHT TURN ONLY LANE

RELOCATE DRIVEWAY DUE TO PROXIMITY TO RIGHT TURN BYPASS LANE

RELOCATION OF KFC REQUIRED

SIDEWALK ON SOUTH SIDE ONLY TO FIT UNDER EXISTING BRIDGES

CARRY 2-LANES TO RAMP METER

EXISTING I-285 BRIDGES TO REMAIN

NEW BOX CULVERT

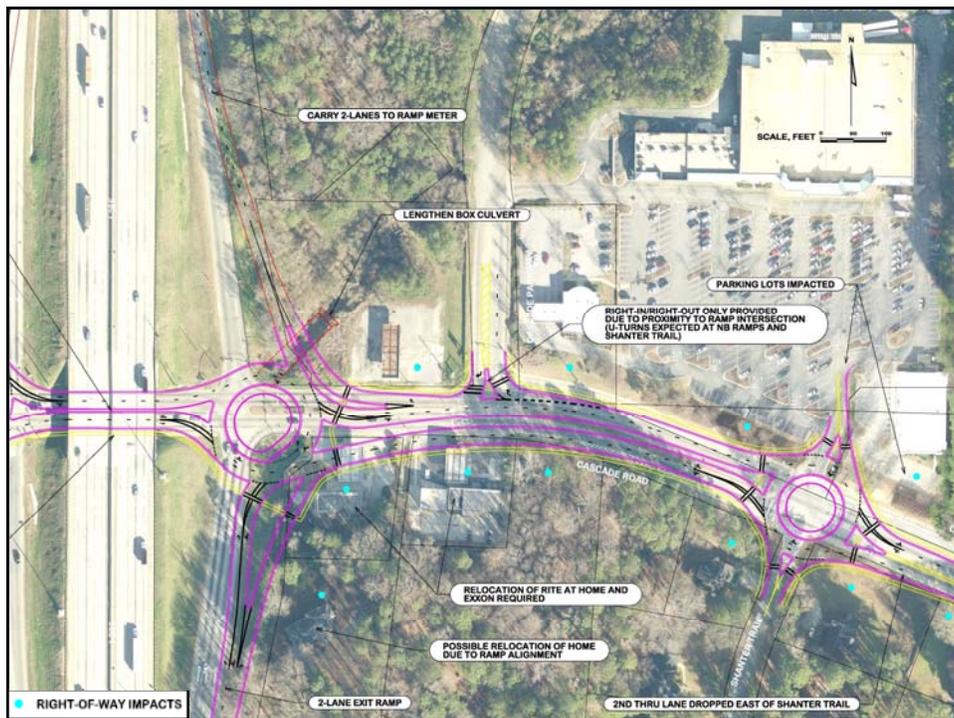
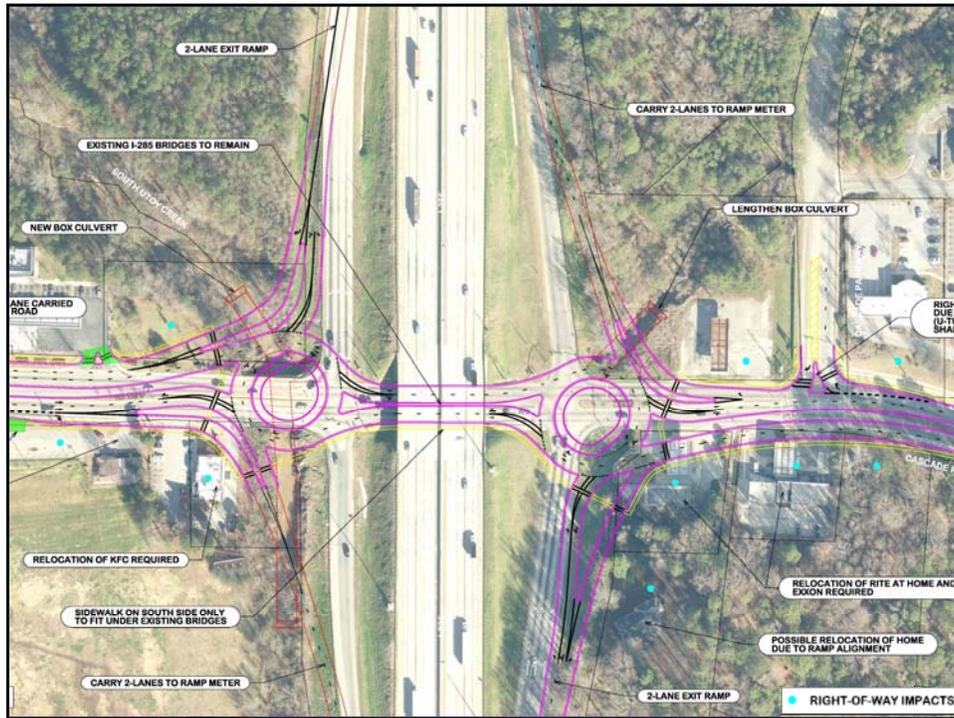
THIRD THRU LANE CARRIED TO FAIRBURN ROAD

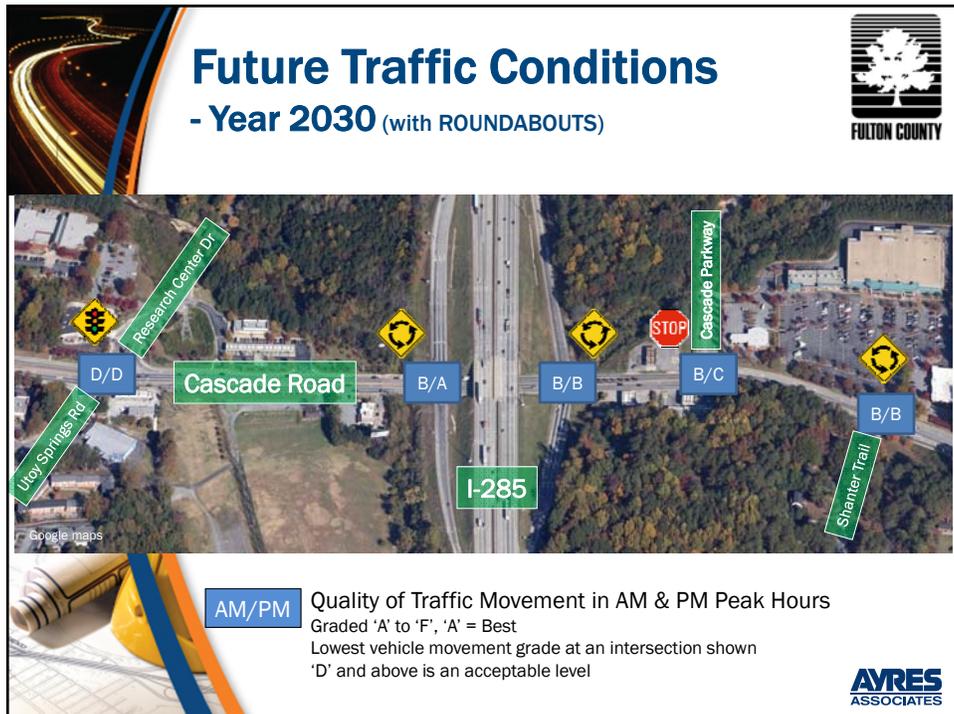
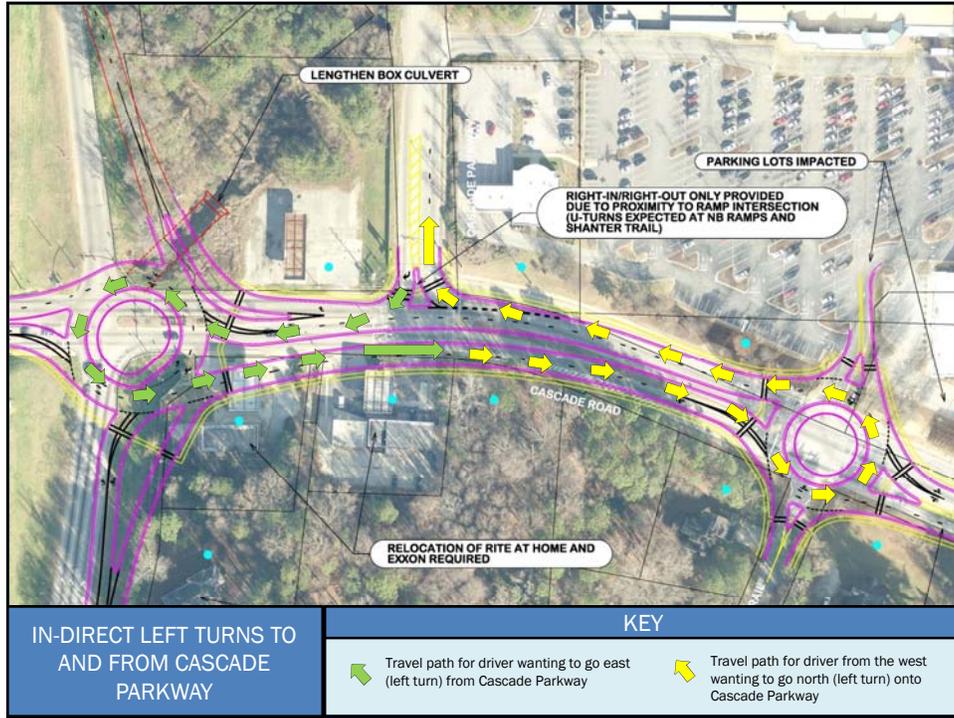
2-LANE EXIT RAMP

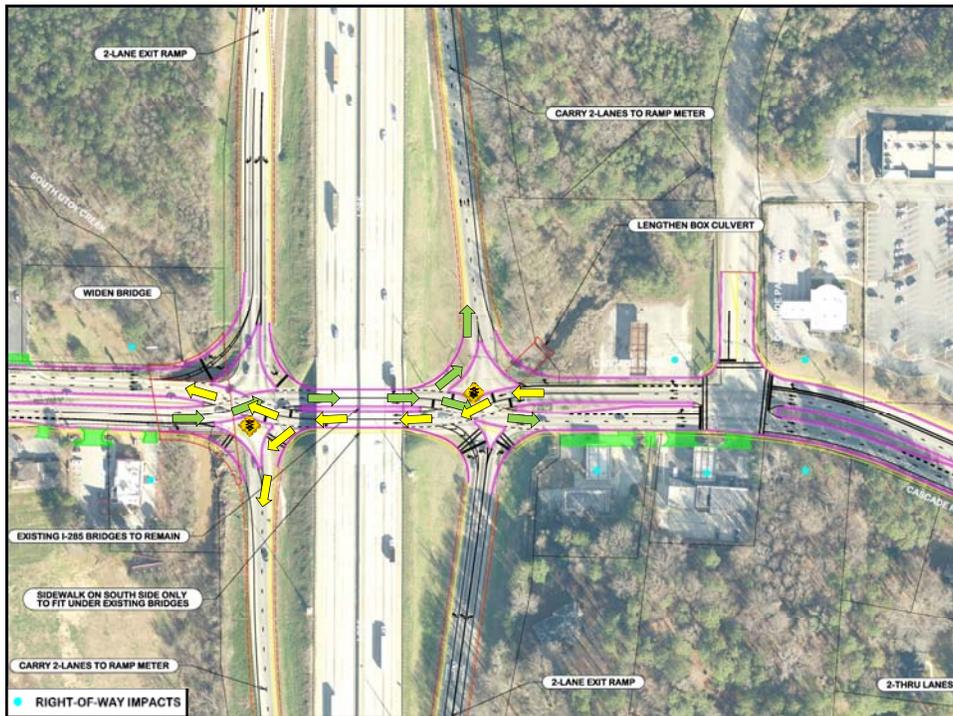
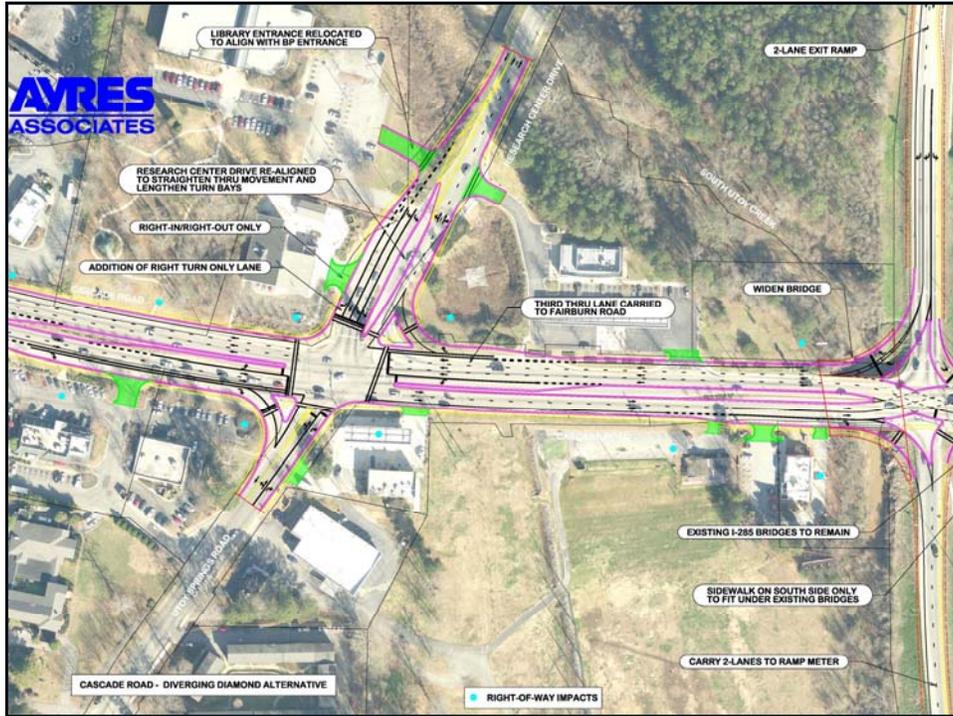
SOUTH SIDE CULVERT

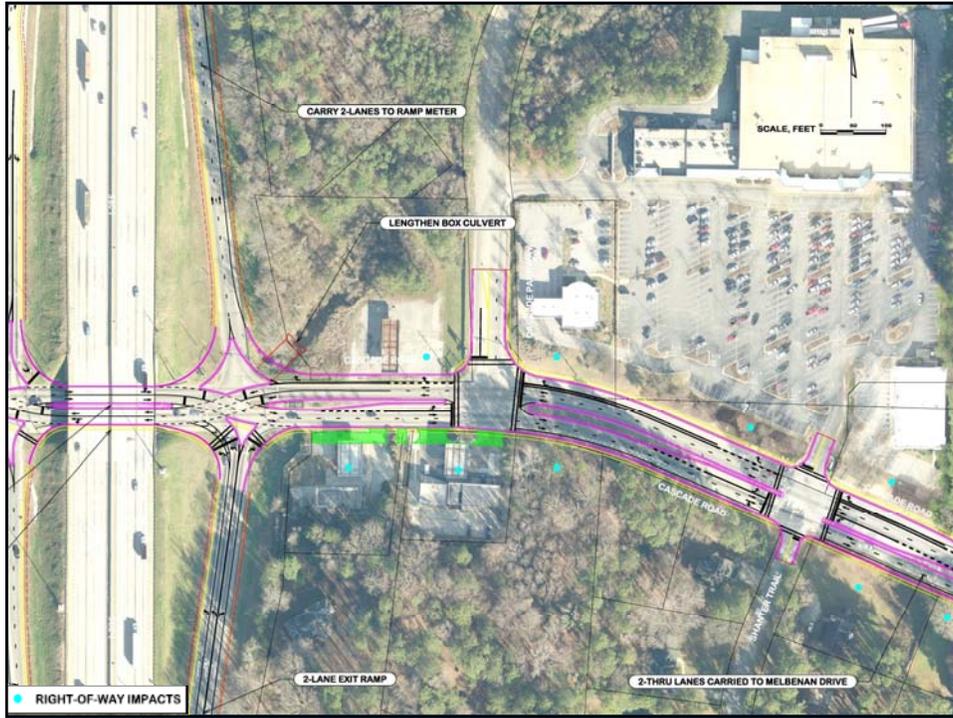
CASCADIA ROAD - ROUNDABOUT ALTERNATIVE

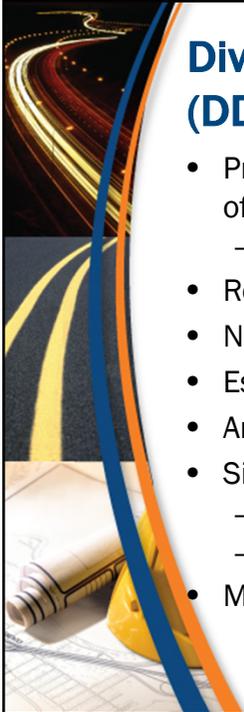
RIGHT-OF-WAY IMPACTS











Diverging diamond interchange (DDI) with traffic signals

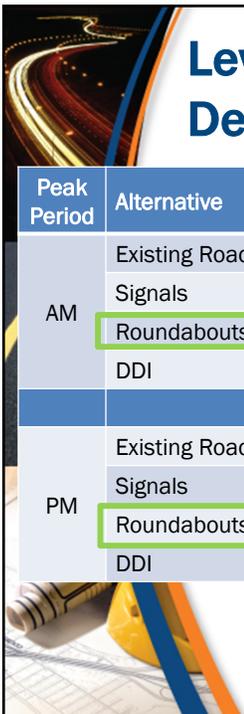


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- Probable construction, engineering and utility costs of \$16.7 million
 - Does not include any costs for Relocations or Real Estate
- Real estate acquisition, 28 parcels (possible)
- No relocations
- Estimated real estate costs of \$1.1 million
- Anticipated construction duration – 2 years
- Significant issues
 - Maintains existing I-285 bridges
 - Widening of bridge over South Utoy Creek
- Microsimulation 



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Level of Service Comparison Design Year 2030



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| Peak Period | Alternative | Utoy Springs | I-285 SB Ramp | I-285 NB Ramp | Cascade Parkway | Shanter Trail |
|-------------|------------------|--------------|---------------|---------------|-----------------|---------------|
| AM | Existing Roadway | F | E | F | C | F |
| | Signals | D | D | D | D | D |
| | Roundabouts | D | B | B | B | B |
| | DDI | D | C | C | D | D |
| PM | Existing Roadway | D | E | F | F | D |
| | Signals | D | D | D | D | D |
| | Roundabouts | D | A | B | C | B |
| | DDI | D | D | C | D | D |

Quality of Traffic Movement in AM & PM Peak Hours
 Graded 'A' to 'F', 'A' = Best, 'D' and above is an acceptable level
 Lowest vehicle movement grade at an intersection shown



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| SUMMARY | #1 - Signals | | | | #2 - Roundabouts | | | | #3 - DDI | | | |
|-----------------------------------|------------------------------------|----------------|----------------------|----------------|------------------------------------|----------------|----------------------|----------------|-------------------------------|----------------|----------------------|----------------|
| | Total | Utoy Springs | I-285 & Cascade Pkwy | Shanter Trail | Total | Utoy Springs | I-285 & Cascade Pkwy | Shanter Trail | Total | Utoy Springs | I-285 & Cascade Pkwy | Shanter Trail |
| ESTIMATED TOTAL COST | \$26.7 million | \$5.55 million | \$18.1 million | \$3.05 million | \$21.4 million | \$5.55 million | \$13.4 million | \$2.45 million | \$17.8 million | \$5.55 million | \$9.2 million | \$3.05 million |
| Construction Cost | \$20.9 million | \$3.9 million | \$14.7 million | \$2.3 million | \$15.7 million | \$3.9 million | \$10.0 million | \$1.8 million | \$13.6 million | \$3.9 million | \$7.4 million | \$2.3 million |
| Engineering | \$4.3 million | \$0.8 million | \$3.0 million | \$0.5 million | \$3.3 million | \$0.8 million | \$2.1 million | \$0.4 million | \$2.8 million | \$0.8 million | \$1.5 million | \$0.5 million |
| Utility | \$0.3 million | \$0.15 million | \$0.10 million | \$0.05 million | \$0.3 million | \$0.15 million | \$0.10 million | \$0.05 million | \$0.3 million | \$0.15 million | \$0.1 million | \$0.05 million |
| Right of Way | \$1.2 million | \$0.7 million | \$0.3 million | \$0.2 million | \$2.1 million | \$0.7 million | \$1.2 million | \$0.2 million | \$1.1 million | \$0.7 million | \$0.2 million | \$0.2 million |
| R/W Impacts | 28 parcels | | | | 25 parcels | | | | 28 parcels | | | |
| Relocations | None | | | | 3 to 4 parcels | | | | None | | | |
| Operations Level of Service | D | | | | A/B | | | | C/D | | | |
| I-285 Bridge Impacts | New bridges; requires NEPA process | | | | No change to existing bridges | | | | No change to existing bridges | | | |
| South Utoy Creek Crossing Impacts | Minor bridge widening | | | | Significant multi-cell box culvert | | | | Minor bridge widening | | | |
| Construction Duration | 3 years | | | | 2.5 years | | | | 2 years | | | |

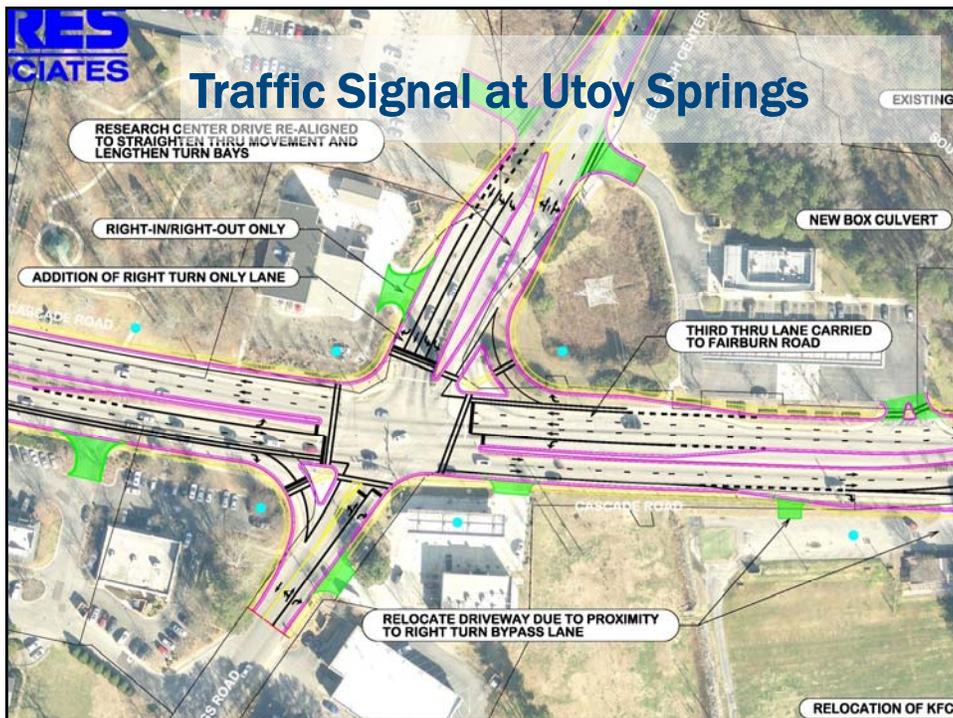
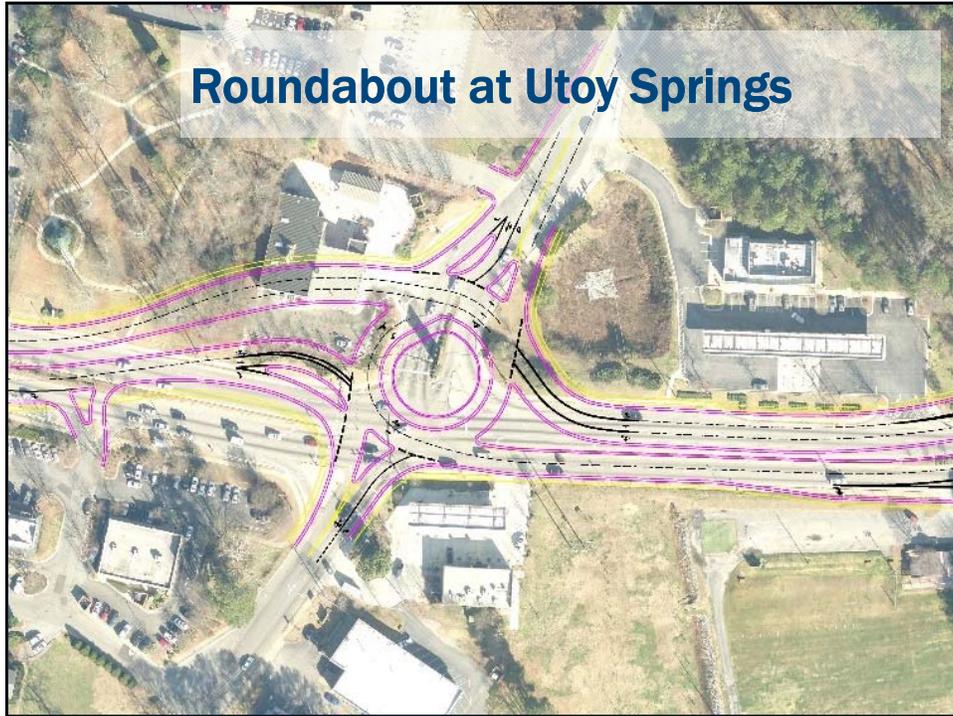


Roundabout at Utoy Springs



- Initially concept was discarded due to concerns over geometry, topography and right of way takings
- Question raised at Stakeholder Meeting #2 about feasibility





Utoy Springs Intersection Roundabout vs. Signal



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| | Roundabout | Signal |
|--|---------------|----------------|
| Operations Level of Service AM/PM Peak Periods | B/C | D/D |
| Probable construction, engineering and utility costs | \$4.4 million | \$4.85 million |
| R/W Impacts (Number of parcels) | 9 | 11 |
| Anticipated R/W cost (Does not include relocation and demolition costs) | \$1.0 million | \$0.7 million |
| Relocations | 1 | 0 |

AM/PM Quality of Traffic Movement in AM & PM Peak Hours
 Graded 'A' to 'F', 'A' = Best, 'D' and above is an acceptable level
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Next Steps - Project Schedule



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I-285 Cascade Road Interchange Modification Report

| Task | 2015 | | | | | | | | | |
|--|------|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | |
| Contract award | ● | | | | | | | | | |
| Data collection | ■ | ■ | | | | | | | | |
| Analysis of Traffic Data | | ■ | ■ | ■ | | | | | | |
| Conceptual Lay-outs and Report | | | | ■ | ■ | | | | | |
| Public Information and Stakeholders meetings | | | ■ | ■ | | ■ | ■ | | | |
| Interchange Modification Report | | | | | ■ | ■ | ■ | ■ | ■ | ● |



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Closing Remarks

- Please return comment forms
- Contact Information

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