ROUTE 29 STAKEHOLDERS WORKSHOP
Agenda

• Introductions
• Brief History
• Opportunities for collaboration
• Overview and discussion
  • Zan Road
  • Hydraulic Road & Route 29
  • Angus Road & Route 29
• Next Steps
• As part of the 29 Solutions funding package, $20 million was set aside for improvements to the Hydraulic Road – Route 29 – Hillsdale Drive – Route 250 area

• In 2017, following construction of the initial 4 projects of the Route 29 Solutions program, the Hydraulic Planning Advisory Panel (HPAP), a panel of residents, public officials and business owners was established to develop recommendations for improvements to the Hydraulic/Route 29 area

• The result of this study was a Small Area Development Plan and an associated Transportation Plan to address the area needs through the 2045 horizon year.
In 2017 three solutions were identified and developed into SMART SCALE applications for funding:

- Hydraulic - Route 29 partial grade separation with roundabouts at District Avenue and Hillsdale Drive
- Zan Road overpass, Hillsdale Drive Extended to Holiday Drive, relocated 250 WB off-ramp to Holiday Drive and an overpass from Angus Road to Holiday Drive
- Both scenarios combined with all projects included

None of the SMART SCALE applications scored well due to the estimated costs of the proposed projects and none were selected for funding.
Brief History (cont.)

Previous Projects

Diagram
Opportunities

• There remains $18 million that can be used to support another SMART SCALE application.

• The next SMART SCALE application period opens March 5th with pre-applications due by April 2nd and full applications due August 3rd.

• We are looking for this group to provide input on alternative concepts that have been scaled down to be more competitive for funding in SMART SCALE.
Overview and Discussion

Zan Road Overpass

- The Zan Road overpass was identified by the localities and the panel as a top priority.
- Zan Road overpass would provide a direct connection between the Seminole Square and Stonefield developments for all modes and future transit.
- The VTRANS need would qualify under UDA/Regional Network.
- The cost of the Zan Road overpass is estimated at $35-40 million in today’s costs.
- This project is not fundable on the current competitive system without significant local funding match.
- Options:
  - Looked at other crossing locations: Very limited other viable locations have been identified
  - Reduce to a grade-separated bicycle and pedestrian-only facility. This option would significantly reduce the cost and may be built with minimal right of way impacts.
Zan Road Overpass

Previously submitted SMART SCALE Concept
Zan Road Concept

Bicycle and pedestrian-only alternative

Significantly less cost and impact

Flexible configuration

Transit stops with pull offs on both sides of Route 29

Estimated Cost $12 – $14 million
Overview and Discussion

Hydraulic/29 (including District Avenue and Hillsdale Drive intersections)

- Five different options were considered with either roundabouts or signal improvements at District and Hillsdale.
  - Option A: Relocate the NB and SB Left turn movements on Route 29.
  - Option B: Relocate the EB and WB left turn movements on Hydraulic Rd.
  - Option C: Relocate the EB and WB left turn movements on Hydraulic Rd. and the NB left turn on Route 29.
  - Option D: Build a continuous flow left turn for the SB Route 29 movement and relocate the NB left-turn movement on Route 29.
  - Option E: Build a continuous flow left turn for the SB Route 29 movement and relocate the EB and WB left turn movements on Hydraulic Rd and relocate the NB left turn movement on Route 29
- The options relocated some of the left turning traffic at Route 29/Hydraulic, routing them through roundabouts or U-turns for improved flow on Route 29
- Of these options internal review identified two options as possible solutions to bring to the group for consideration and feedback
Route 29 / Hydraulic Rd.

Existing Conditions
Route 29 / Hydraulic Rd.

Option B –
No lefts from Hydraulic Road Signal or roundabout at Hillsdale

- More green time for Route 29 through movement by removing Hydraulic Road left turns, but less than removing left turns from Route 29.
- U-turns could be made at Route 29 & Seminole Court intersection in lieu of roundabout at District Avenue
- Displaces 73 and 71 left turns in the AM peak and 141 and 134 in the PM peak from Hydraulic Road
- Roundabout may be necessary at Hillsdale due to U-turn volumes.
Option B – Concept
• No lefts from Hydraulic Road
• Signal or roundabout at Hillsdale concept

Estimated Cost
$1 – 1.2 million

Hillsdale Roundabout
Estimated Cost
$10 – 12 million
Route 29 / Hydraulic Rd.

Option E – (Partial CFI)
SB Route 29 displaced left turns
No left turns from NB Route 29
No left turns from Hydraulic
Signal or roundabout at Hillsdale Drive

- Partial displaced left turn intersection concept displaces the Route 29 SB left turns to a cross-over intersection at India Road
- Improved throughput along Route 29 by displacing the Route 29 SB left turns and removing the Route 29 NB and Hydraulic Road left turns
- Route 29 NB and Hydraulic Road EB left turns would U-turn at Hillsdale Road roundabout
- Hydraulic Road WB left turns would use Route 29 & Seminole Court intersection for U-turns.
- Signal at Route 29 & Hydraulic Road would be a 2-phase signal.
- Roundabout may be necessary at Hillsdale due to U-turn volumes.
US 29 / Hydraulic Rd.

Option E – Concept
- SB Route 29 displaced left turns
- No left turns from NB Route 29
- No left turns from Hydraulic Rd.
- Signal or roundabout at Hillsdale Drive

Estimated Cost
$7.3 – $8 million

Hillsdale Roundabout
Estimated Cost
$10 – 12 million
Summary of Intersection Delay & LOS – Route 29 & Hydraulic Rd. Improvement Options

### US 29 & Hydraulic Rd.

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Overview and Discussion

Route 29 / Angus Rd.

- Consider 2 different options for this location
- The options relocated some of the traffic movements from routing them through U-turns to improve flow of traffic on Route 29
Route 29 / Angus Rd.

Existing Conditions
Option A – Continuous Green - T

- Continuous Green-T concept would allow better flow of Route 29 NB traffic. Traffic to/from hotel would be limited to right-in / right-out. Off-ramp from Route 250 may need to remain signalized.

- Through and left-turning traffic from the hotels could U-turn near Holiday Inn crossover on Route 29.

- Through traffic from Angus Road would U-turn at Route 29 & Morton Drive intersection.
Option A – Concept

• Continuous Green – T

Estimated Cost

$1.2 - $1.4 million
Option B –
Right turns only from side streets

- Only right turns would be allowed from Angus Road and the hotel entrance. The right turns would proceed at the same time as Route 29 left turns. This provides more green time for Route 29 through movements by eliminating the side-street phases.

- Movements from Route 29 would remain unchanged.

- Throughs and left turns from Angus Road would U-turn at Route 29 / Morton Drive intersection.

- Throughs and left turns from the hotel entrance would U-turn at the Holiday Inn crossover on Route 29.
US 29 & Angus Rd.

Option B – Concept
Right turns only from side streets

Estimated Cost
$725,000 - $800,000
## Summary of Intersection Delay & LOS – Route 29 & Angus Rd. Improvement Options

### EXISTING

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### US 29 & US 250 WB

#### Off-Ramp

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### LOS Legend

- A
- B
- C
- D
- E
- F
Next Steps

• Take your comments back and revise/refine the options to include your thoughts
• Plan to come back in two weeks with revised alternatives
• We will also present this material to the MPO committees for their comments
• The hope is to have a preliminary preferred solution for the MPO Policy Board to consider at its March meeting