US 75/Collin County Outer Loop Interchange

Preliminary Engineering Study

Commissioners Court Update
September 21, 2015
Project Goals and Objectives

- Improve mobility and safety
- Plan for future development needs
- Minimize environmental effects
- Provide uniform connectivity with adjacent projects (CCOL Segments and US 75 TxDOT Approved Schematic)
- Develop an Ultimate Conceptual Design

- Identify Proposed Interchange ROW footprint for future project development
Design Approach

- Data Collection
- Update Environmental Constraints Map
- Develop Geometric Design Criteria
- Develop Interchange Concepts
- Determine Technically Preferred Alternative
- Analyze Traffic Operations on Preferred Alternative
- Refine Preferred Alternative
Adjacent Projects

CCOL Segment 1 - US 75 to SH 121
- 2 lane access road open to traffic (2012)

CCOL Segment 3 – DNT to US 75
- Preferred Alignment Established (2006-2012)

Legend

Numbered Segments
1.
US 75 - SH 121
2.
FM 6 - Rockwall Co.
3.
DNT - US 75
4.
US 380 - FM 6
5.
SH 121 - US 380

Legend

- TxDOT Schematic Improvements (2008)
- Future US 75/CCOL Interchange

Source data compiled from GIS Database and the Engineering Department.

This map is a graphic representation of Collin County and the Outer Loop Study and should only be used for illustrative purposes. In no way should this map be used to settle any boundary disputes or locational conflict.

July 17, 2013
Project limits were from immediately south of SH 121 to the Grayson County line.

Foster’s Crossing was proposed as a conventional intersection.

Design did not accommodate a directional interchange.

- Ramping reconfigured from Melissa Road to immediately South of FM 455 to accommodate the future CCOL interchange.
Technically Preferred Alternative

- Fully Directional 5 level Interchange
- Frontage Road box system with U-turns to facilitate future development and local access
- All Direct Connector ramp bridges can accommodate 2 lanes
- Interchange Design accommodates Year 2035 projected traffic volumes with excess capacity
Approximately 14.05 Acres to be acquired from 8 property owners
Detailed Ground Control Parcel Survey under development