FM 691 CORRIDOR STUDY

Sherman-Denison MPO
Transportation Policy Board
Meeting
August 13, 2008



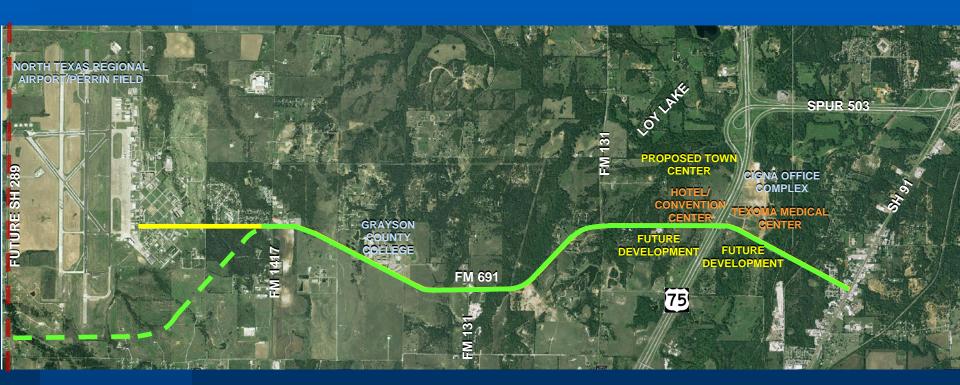


Agenda

- Project Overview
- US 75/FM 691 Interchange
- US 75 Ramping Alternatives
- FM 691 Corridor Typical Sections
- Extension to SH 289
- Access Management
- Schedule



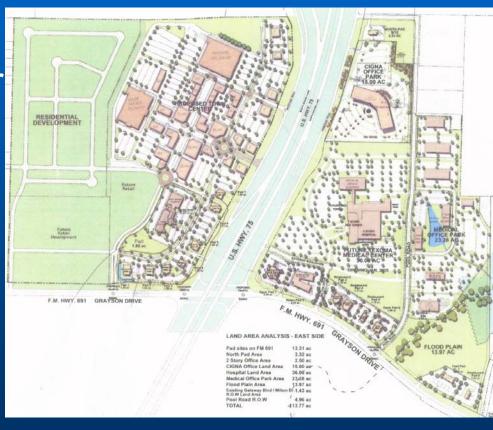
Study Area





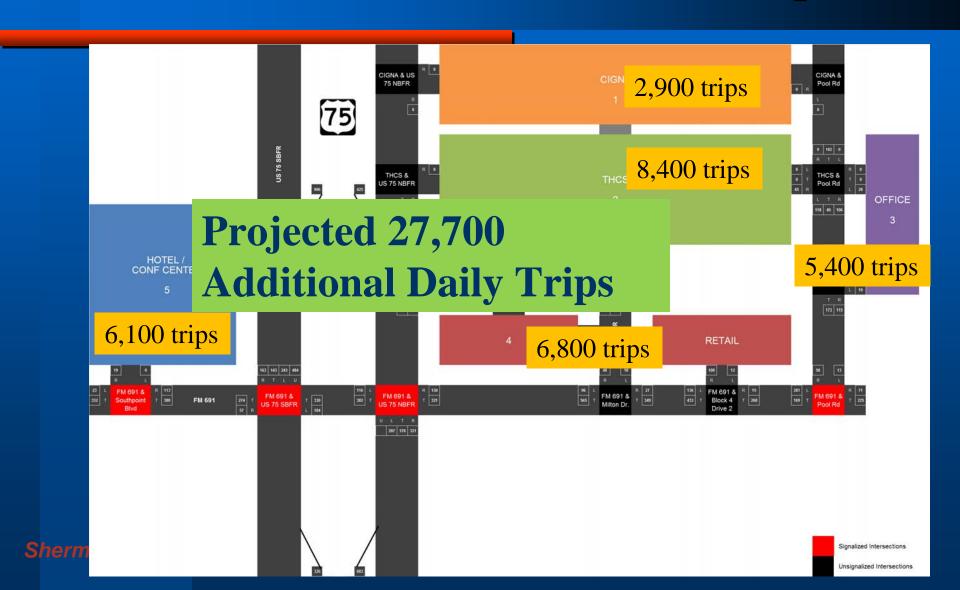
Proposed Developments near US 75/FM 691

- Cigna Office Complex
- Texoma Medical Center (2010)
- Hotel/Convention Center (2010)
- Proposed Town Center (2015)

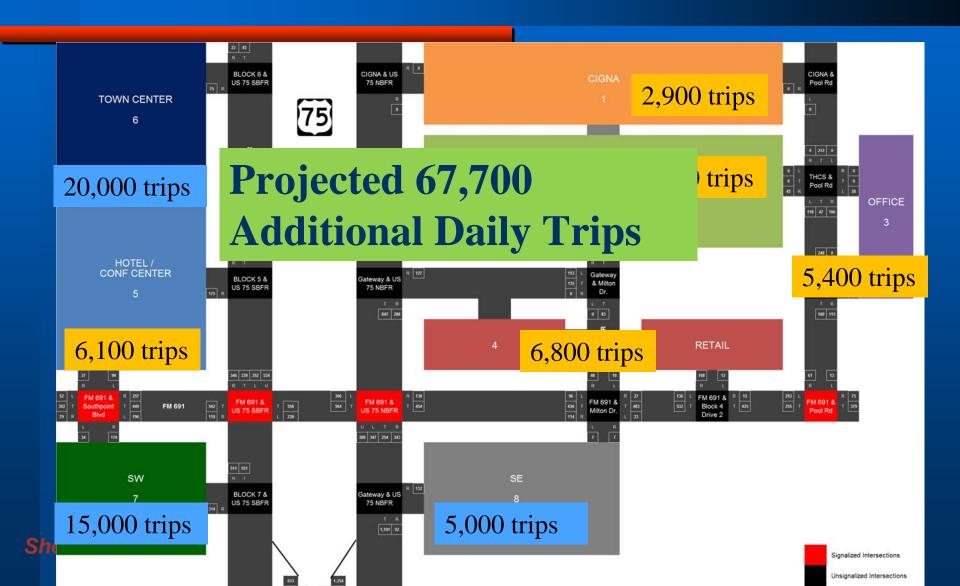




Short-Term Site Generated Trips

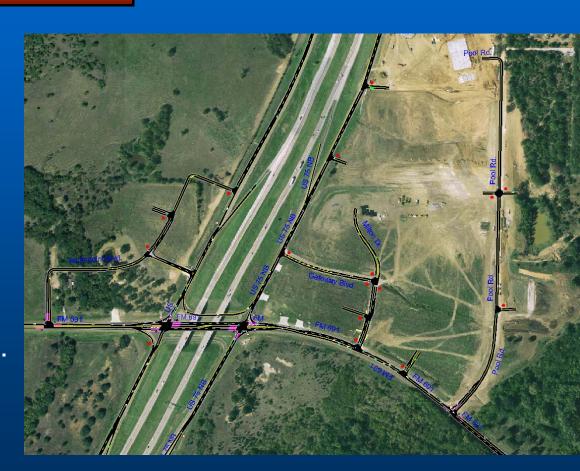


Long-Term Site Generated Trips



US 75/FM 691 in Short-Term

- Close Proximity of SB Exit Ramp to Driveway
- Heavy U-turn traffic to TMC and from Hotel/Convention Center
- NB access to US 75 from TMC, CIGNA, and Office limited
- Signalize interchange, Pool Road and Town Center Blvd.
- Operates acceptably with existing geometry





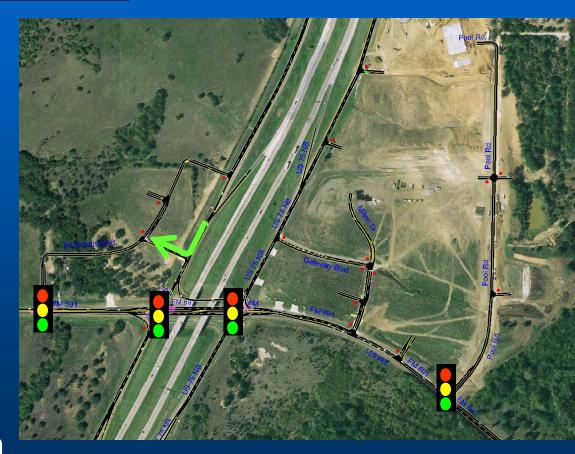
US 75/FM 691 in Long-Term

- Increases total trips from 30,000 to 70,000
- SB Exit Ramp results in poor operation and potential safety issues
- NB Entrance Ramp over capacity
- NB access to US 75 from TMC, CIGNA, and Office limited
- Gateway Blvd over capacity
- U-turn traffic to TMC and from Hotel/Convention Center & Town Center



Recommended Short-Term Improvements for US 75/FM 691

- Limited access for planned driveway (inbound only)
- Signalize major intersections once warranted
- Existing configuration projected to operate acceptable in short-term





Recommended Long-Term Improvements for US 75/FM 691

- Four through lanes along FM 691 with exclusive turn lanes for major access points
- US 75 ramp alternatives



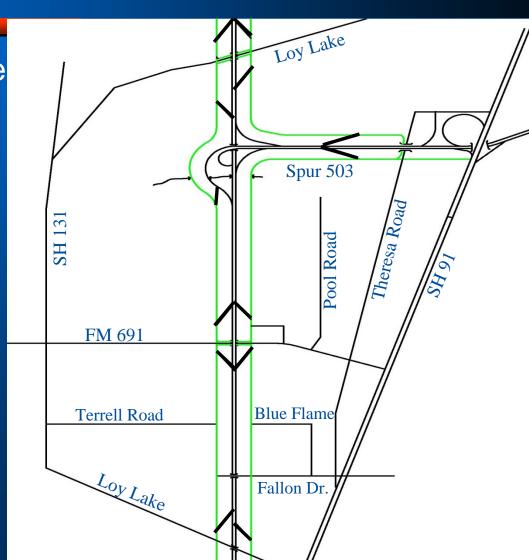
Benefit for US 75 Ramp Alternatives

- Improve local access to proposed developments
- Minimize safety and operational impacts to the interchange and local roadways
- Improve regional movement



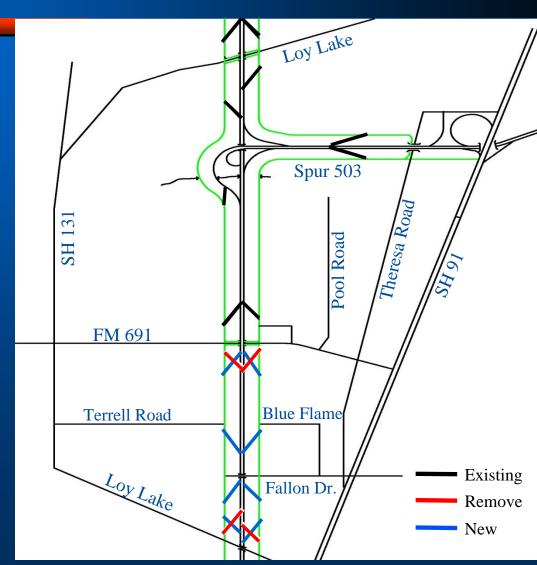
US 75 Ramp Option Methodology

- Provide necessary distance between ramp and access
- Proper weaving distances
- Maximize interchange operation
- Maintain access



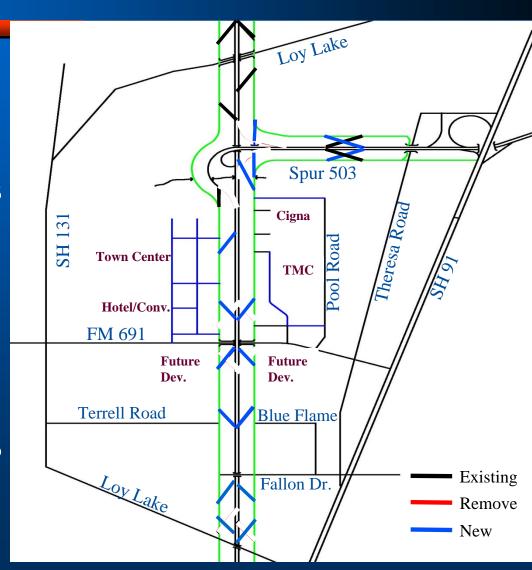
TxDOT's Planned Ultimate US 75 Ramp Configuration

- Provide full ramp access to Fallon Drive for improved Midway Mall access
- Maintain full ramp access to FM 691



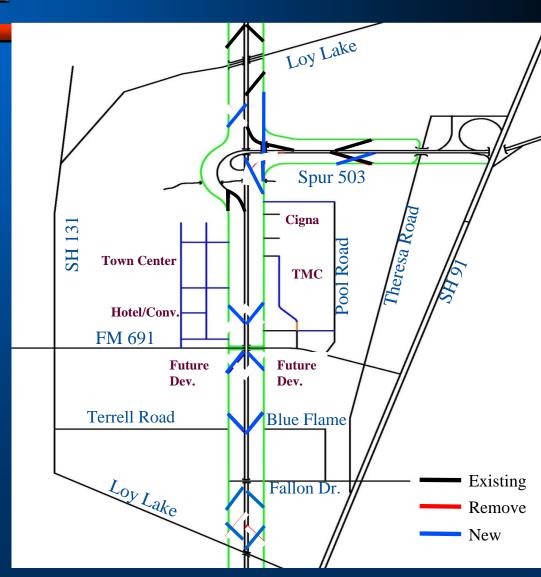
US 75 Ramp Option 1

- Flip FM 691 ramps to provide frontage road access
- Eliminate direct connectors to/from Spur 503
- Move NB Entrance from FM 691 and SB Exit to FM 691
- Continuous NB FrontageRoad goes under Spur 503



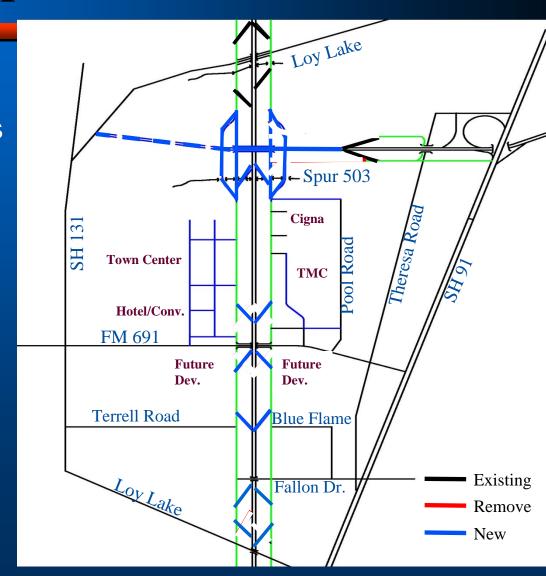
US 75 Ramp Option 2

- Flip SB Entrance ramp from Loy Lake
- Flip FM 691 ramps
- NB Frontage Road spans over Spur 503 and WB to NB DC
- Eliminate NB to EB DC in order to provide NB Entrance ramp from FM 691



US 75 Ramp Option 3

- Rural diamond interchange for Spur 503 with uninterrupted frontage roads
- Flip FM 691 ramps
- New ramps between Loy Lake and FM 691

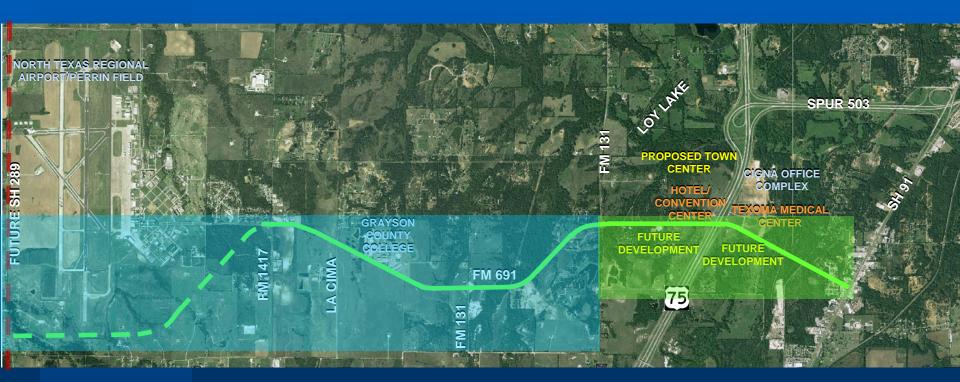


FM 691 Corridor Goals

- Improve east-west movement and provide connection to future SH 289
- Sub-regional alternate to US 82
- Outline an access plan for future development

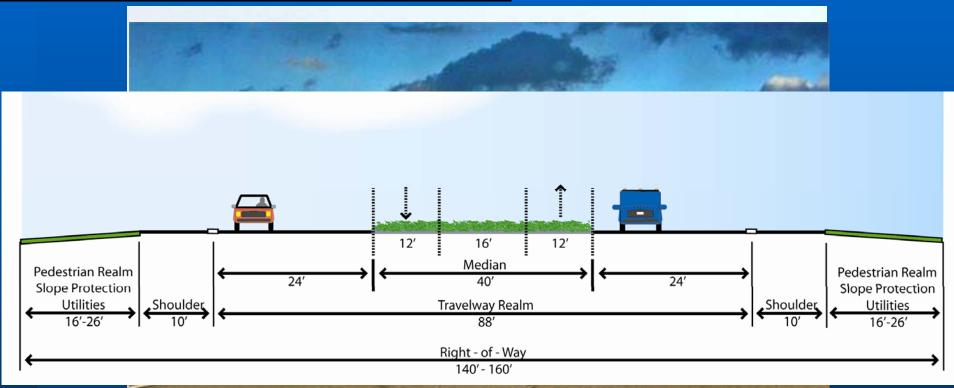


FM 691 Corridor Typical Section





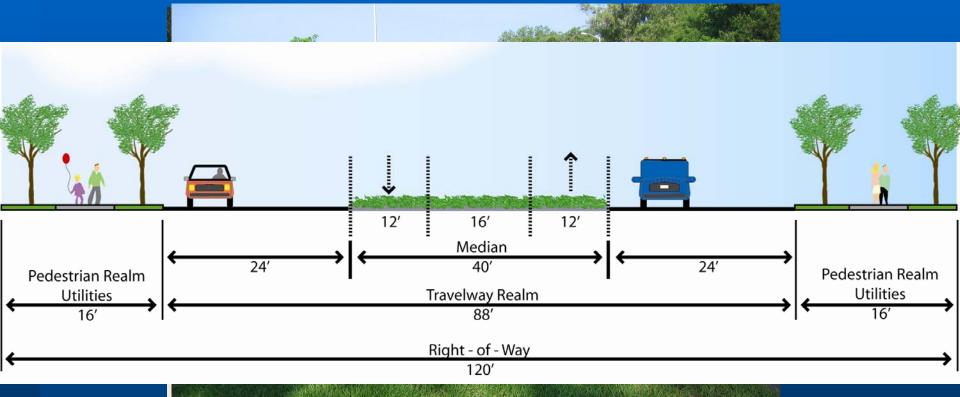
FM 691 Corridor Typical Section (Future SH 289 to FM 131)



Rural four-lane with potential expansion to six lanes



FM 691 Corridor Typical Section (FM 131 to Texoma Parkway)



Urban four-lane with potential expansion to six lanes



FM 691 Corridor Evaluation (Future SH 289 to FM 131)



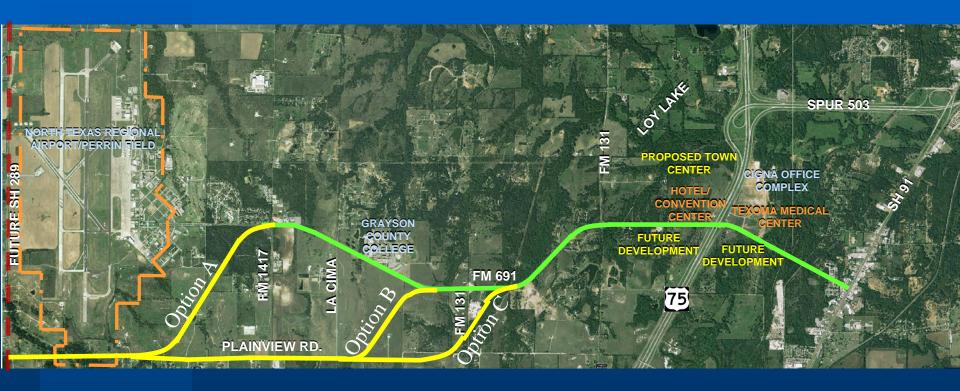


Need for FM 691 Extension

- Future SH 289 extension
- Future industrial development along SH 289
- Intermodal development at the Airport
- Sub-regional alternative to US 82



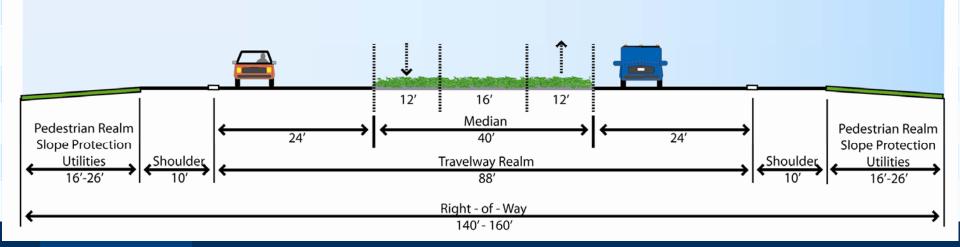
FM 691 Corridor Evaluation (Future SH 289 to FM 131)



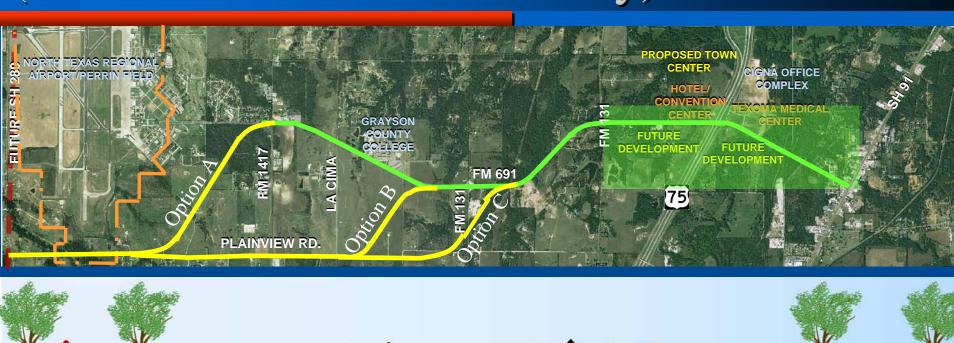


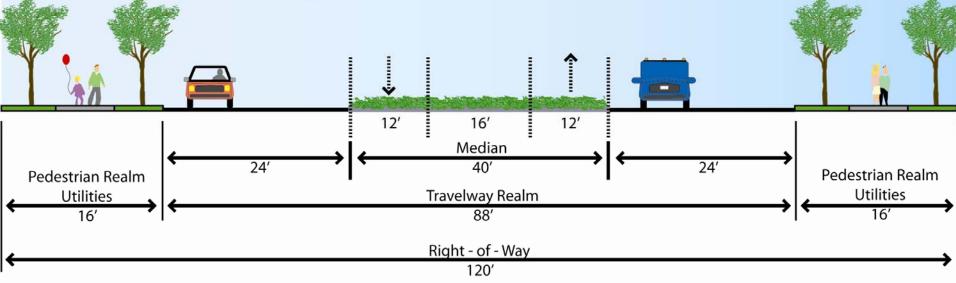
Comparison of New FM 691 Alignments (Future SH 289 to FM 131)



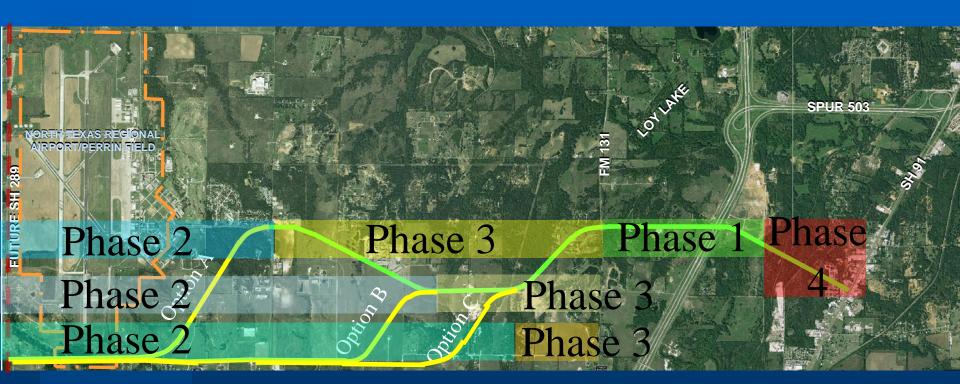


Evaluation of FM 691 Corridor (FM 131 to Texoma Parkway)





FM 691 Corridor Phased Implementation





Access Management

- Driveway management
- Median design and control
- Signal spacing
- Interchange design and layout
- Coordinated land uses



Example of relatively poor access management





Example of relatively good access management





Bad Cross Access



Good Shared Access









Supporting Street Circulation



Access Management Policy

- FM 691 Corridor Access Management Plan developed through MPO
 - Driveway spacing
 - Median openings
 - Corner clips
 - Acceleration/deceleration lanes
- Assist TxDOT and Cities with access for future development



Schedule

- Evaluation of Existing Conditions June 2008
- Develop Conceptual Alternatives June 2008
- Technical Steering Committee June 25, 2008
- Evaluate Conceptual Alternatives July 2008
- Transportation Policy Board Meeting August 13, 2008
- Public Meeting August 20, 2008
- Completion of Alternatives Comparison August 2008
- Finalize FM 691 Corridor Study Report October 2008



FM 691 CORRIDOR STUDY

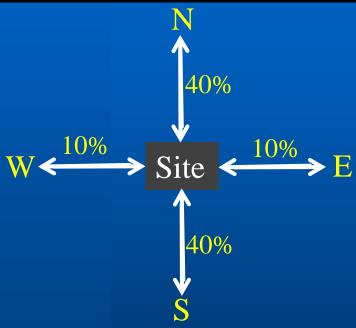
Sherman-Denison MPO
Transportation Policy Board Meeting
August 13, 2008



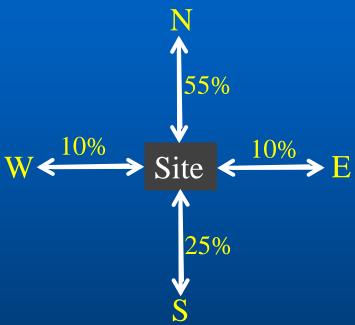


Kimley-Horn and Associates, Inc.

Trip Distribution



Cigna Office Complex (Existing)
Hotel/Convention Center (2010)
Proposed Town Center (2015)
Future Development on Southern Quadrants (2015)



Texoma Medical Center (2010) Medical / Dental Office (2010)

