



**Safety Improvement
Feasibility Study**

WELCOME

OPEN HOUSE

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project is being, or has been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.



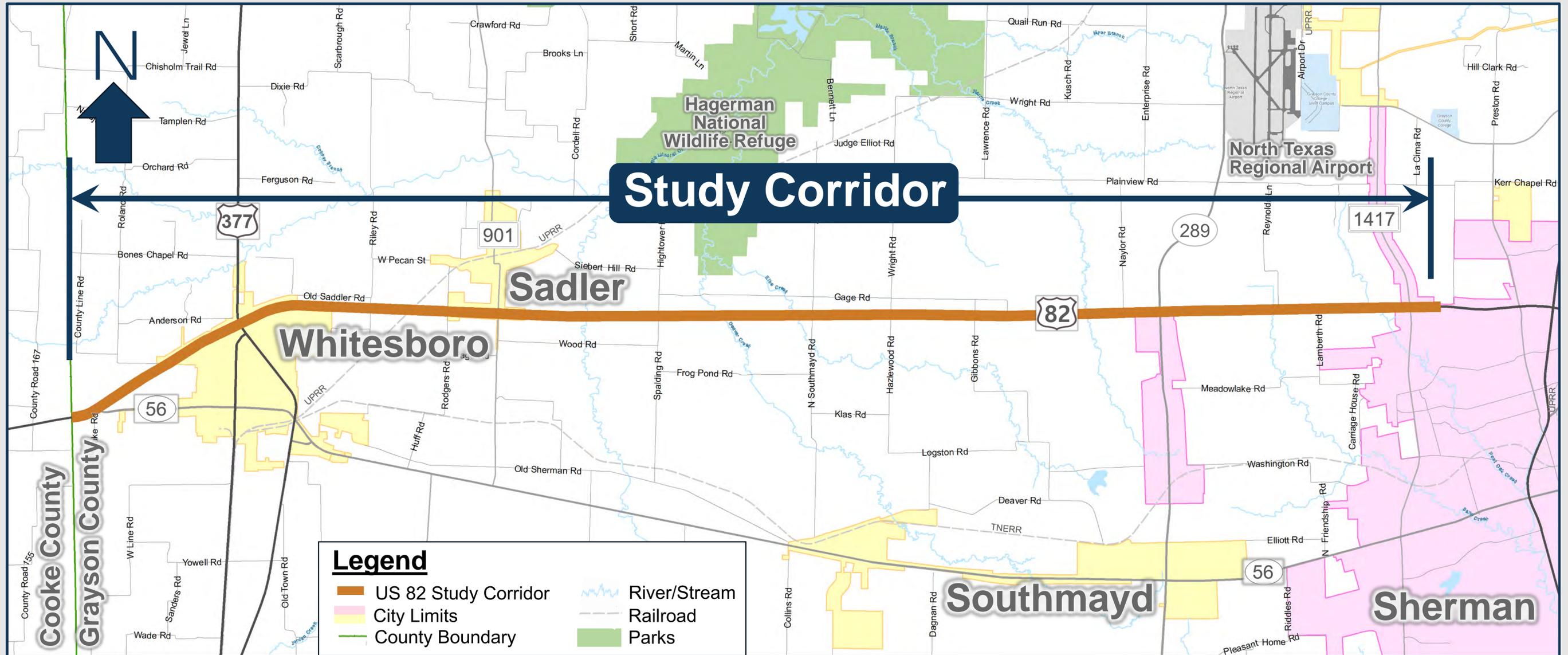
TxDOT Public Involvement Policy*

TxDOT commits to purposefully involve the public in planning and project implementation by providing for early, continuous, transparent and effective access to information and decision-making processes. TxDOT will regularly update public involvement methods to include best practices in public involvement and incorporate a range of strategies to encourage broad participation reflective of the needs of the state's population.

** As adopted by the Texas Transportation Commission on January 27, 2011*



US 82 Study Corridor



Safety Needs

- There were 445 crashes between 2014-2018; 22 percent were severe crashes, which exceeded the statewide severe crash average for rural areas
- The frequency and severity of crashes is widespread and not limited to a localized area within the study corridor
- High posted speed limits combined with numerous driveways, intersecting roadways, median crossovers, and high percentage of truck traffic increase vehicle maneuvering and differential in travel speed, which can impact driver reaction time and contribute to driver error
- Short left-turn bays and insufficient sight distance at median crossovers and intersections don't meet current design standards, which are contributing safety issues

Capacity and Mobility Needs

- The signalized intersection at US 377 and the stop-controlled intersection at SH 289 are forecasted to operate poorly by 2045
- There are multiple closely spaced driveways that do not meet the TxDOT access management recommended guidelines
- Insufficient acceleration and deceleration lane lengths at many intersections, interchange ramps and median crossovers impede corridor mobility

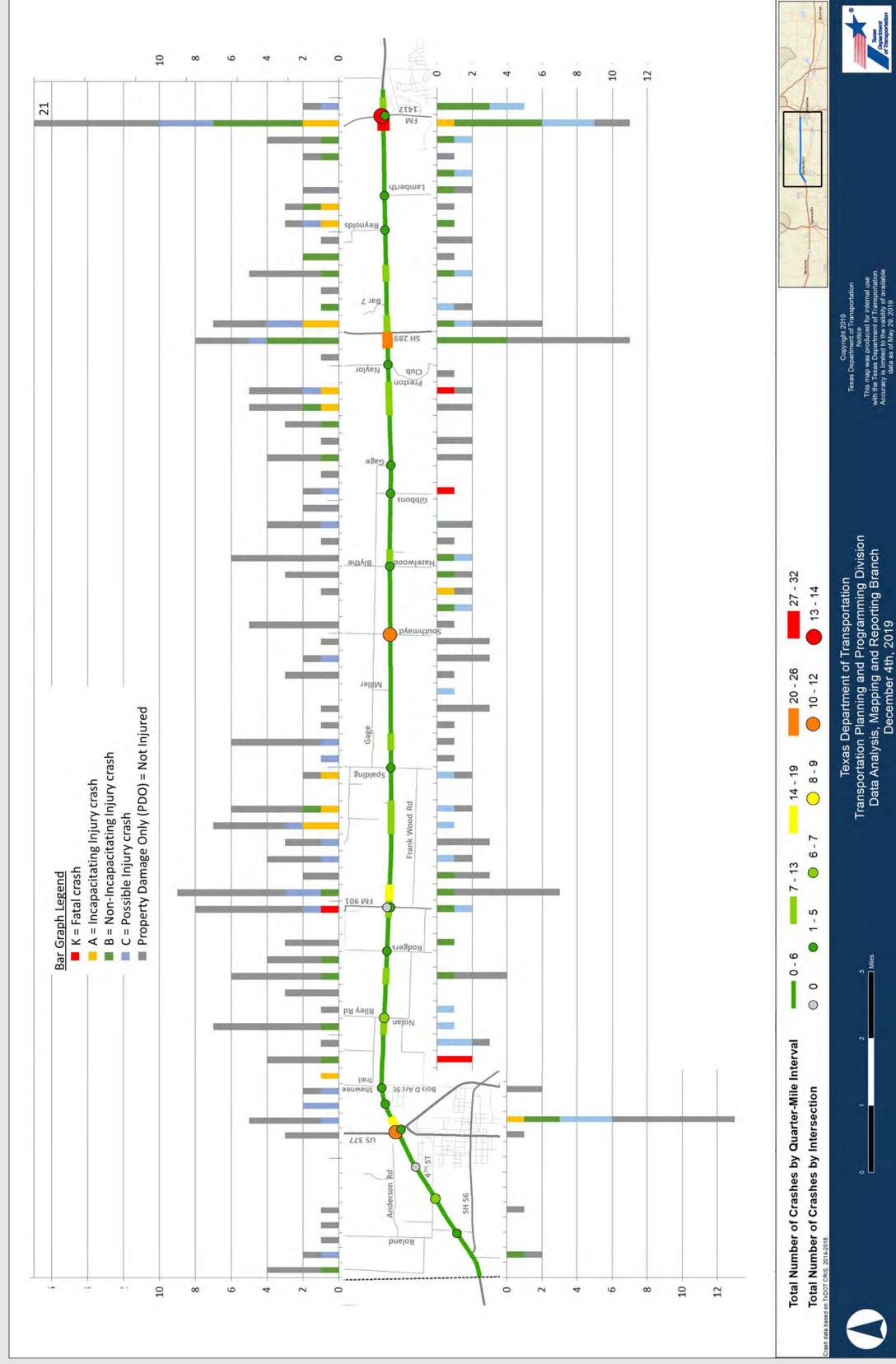
Project Purpose

Based on the identified safety, capacity and mobility needs along US 82, the purpose for developing and advancing US 82 improvement projects would be to:

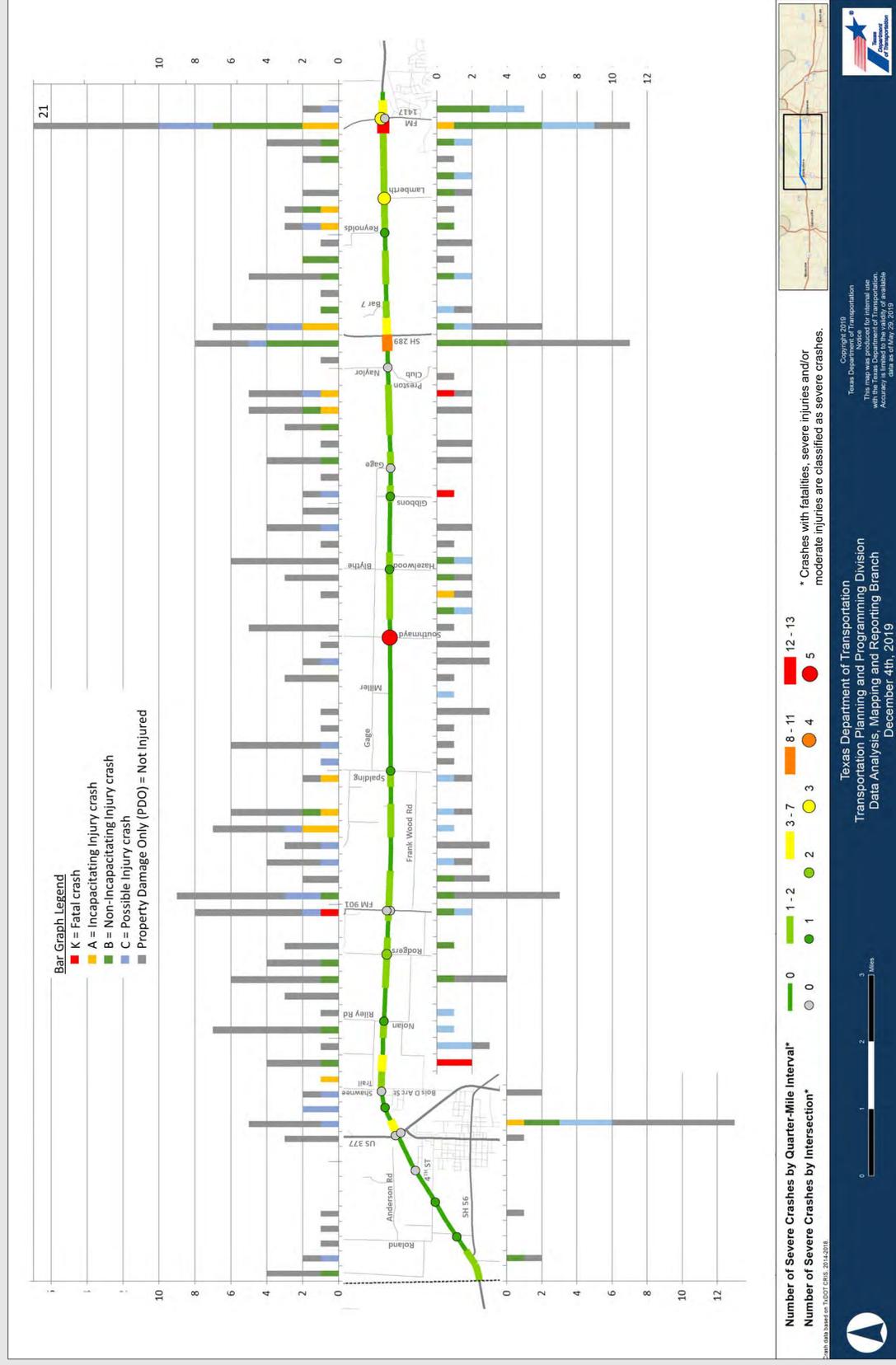
- Enhance corridor safety by making geometric and operational improvements to decrease the likelihood of crashes and increase the opportunity for motorists to recover from driver error and react to unforeseen hazards
- Improve localized intersection and interchange safety, capacity and operations to enhance US 82 corridor access and mobility
- Provide consistency with the Texas Freight Mobility Plan 2018 as this section of US 82 is identified as part of the Texas Highway Freight Network



Total Crash Frequency



Severe Crash Frequency

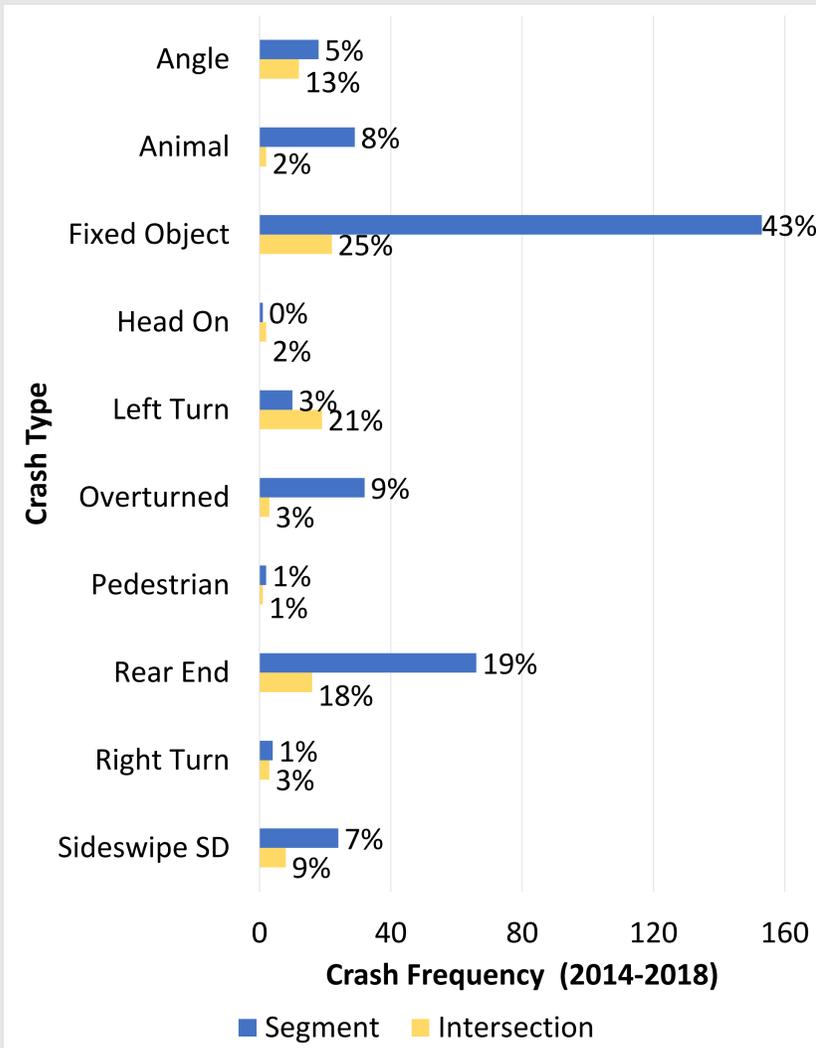


Data based on quarter mile intervals

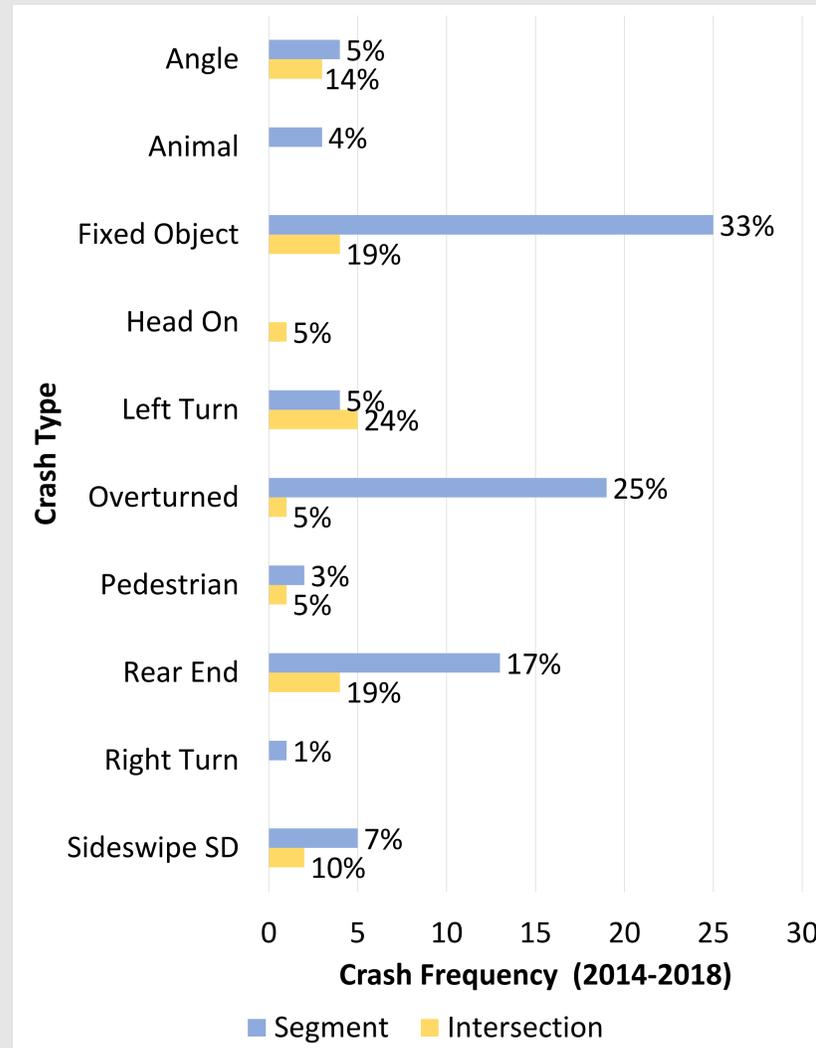


US 82 Study Corridor Crash Analysis Results

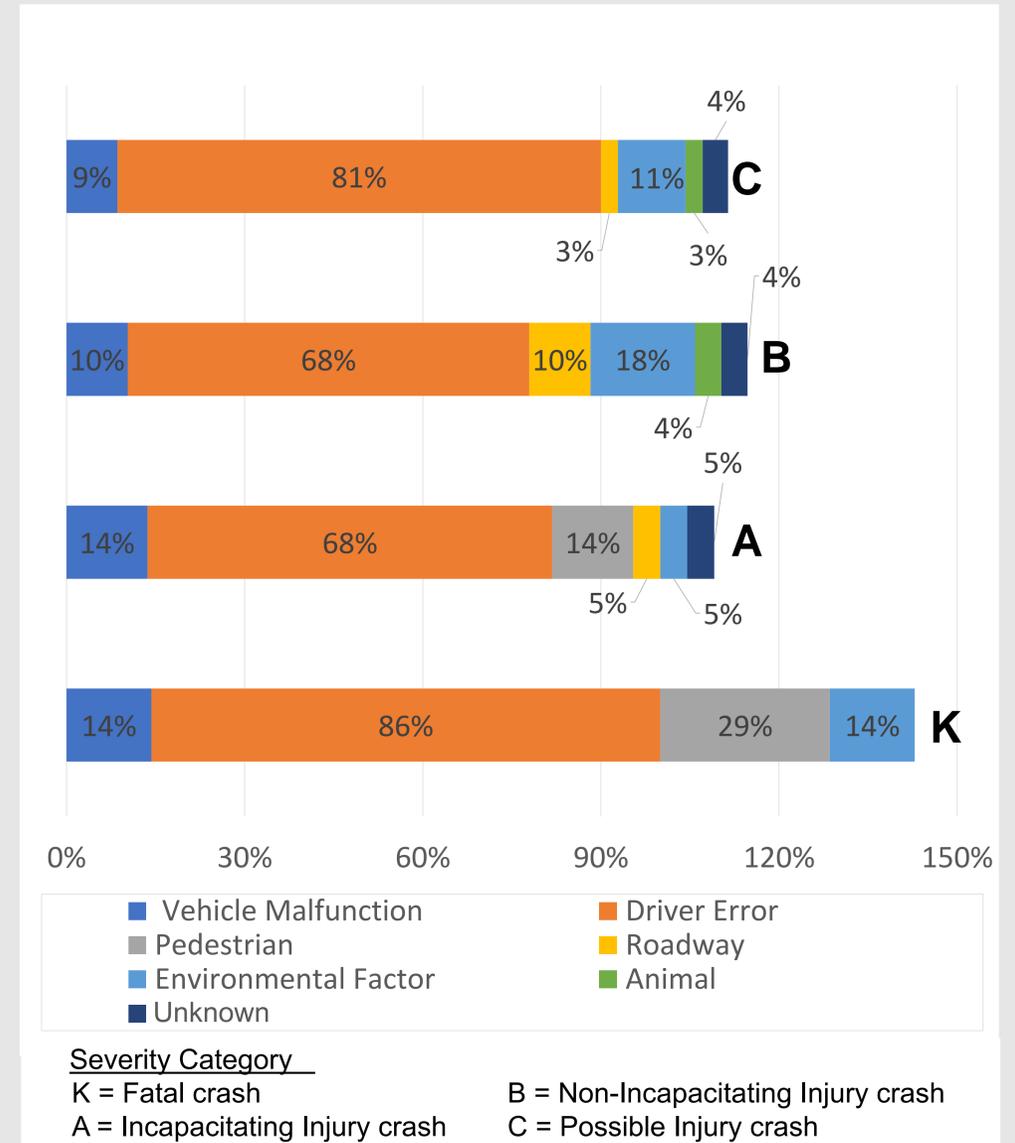
Total Crash Frequency by Crash Type



Severe Crash Frequency by Crash Type



Police Report Crash Contributing Factor % by Severity Category*

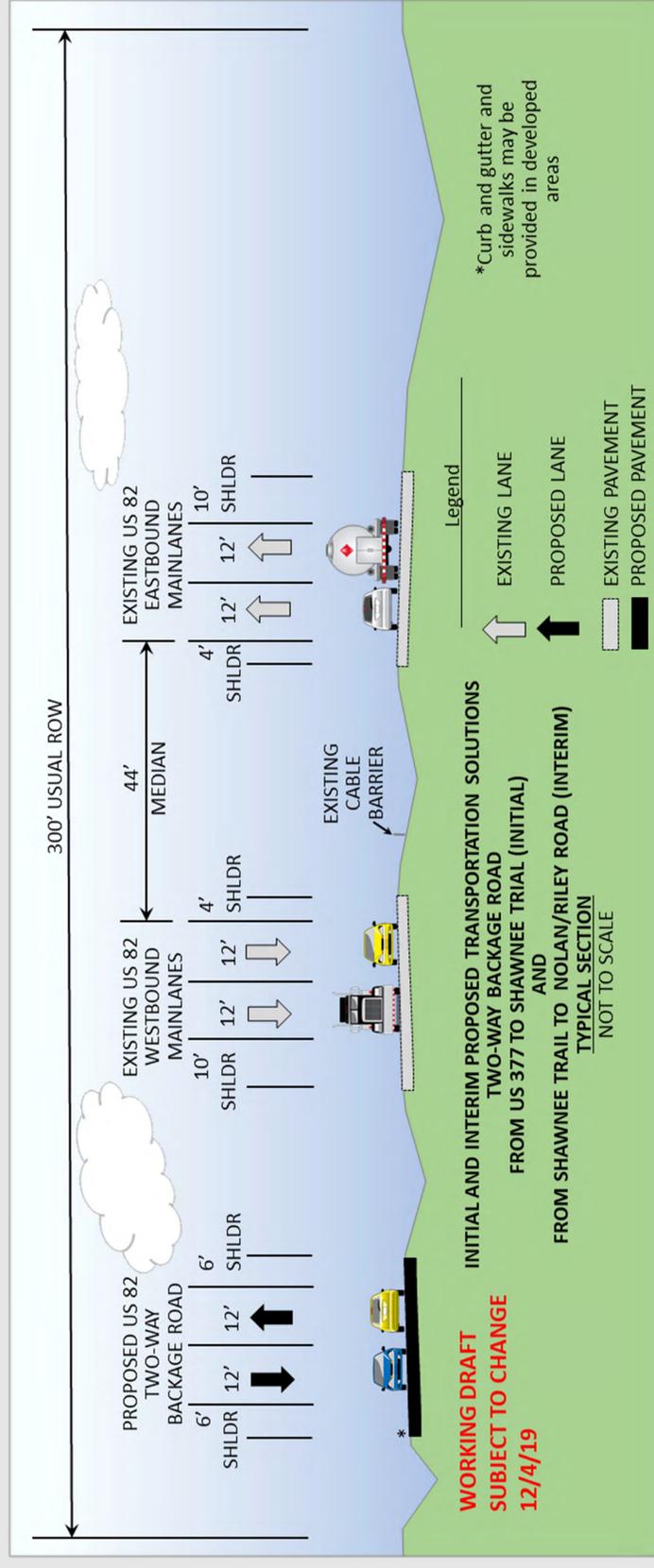
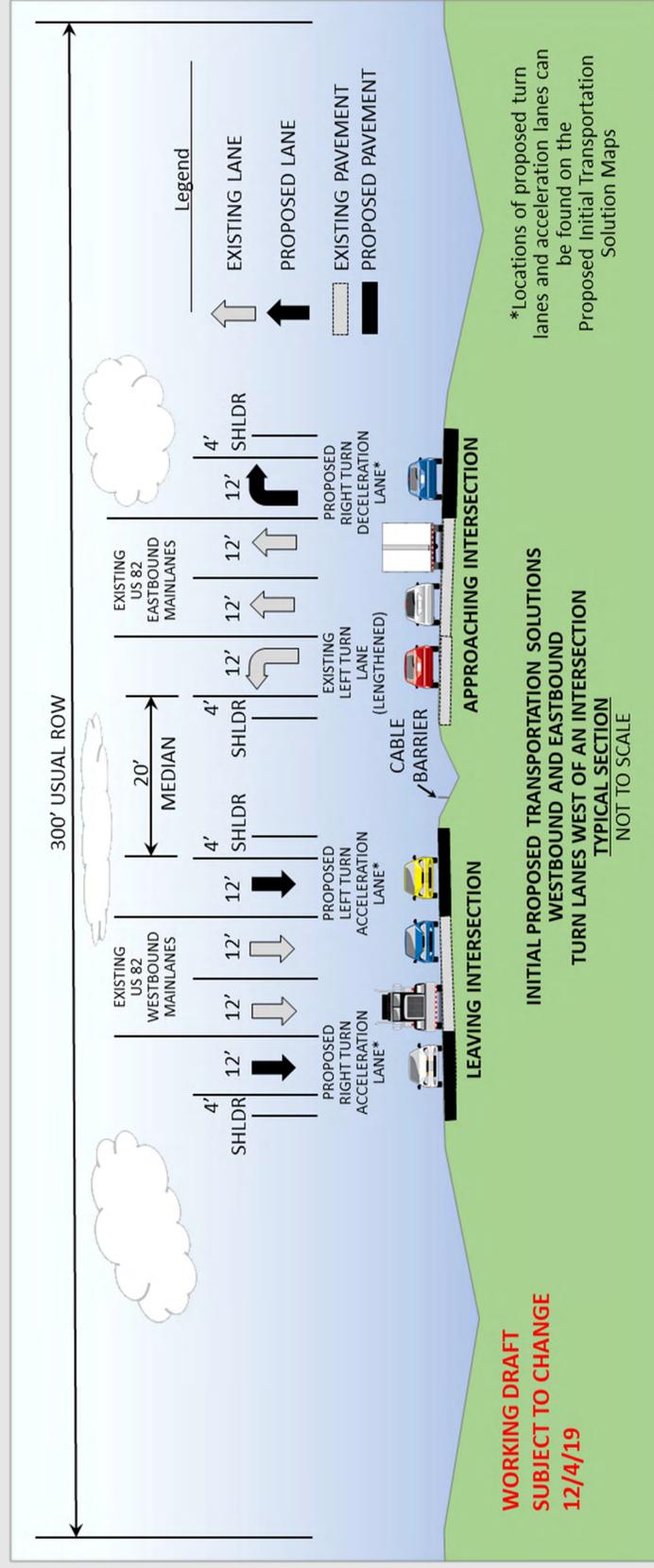
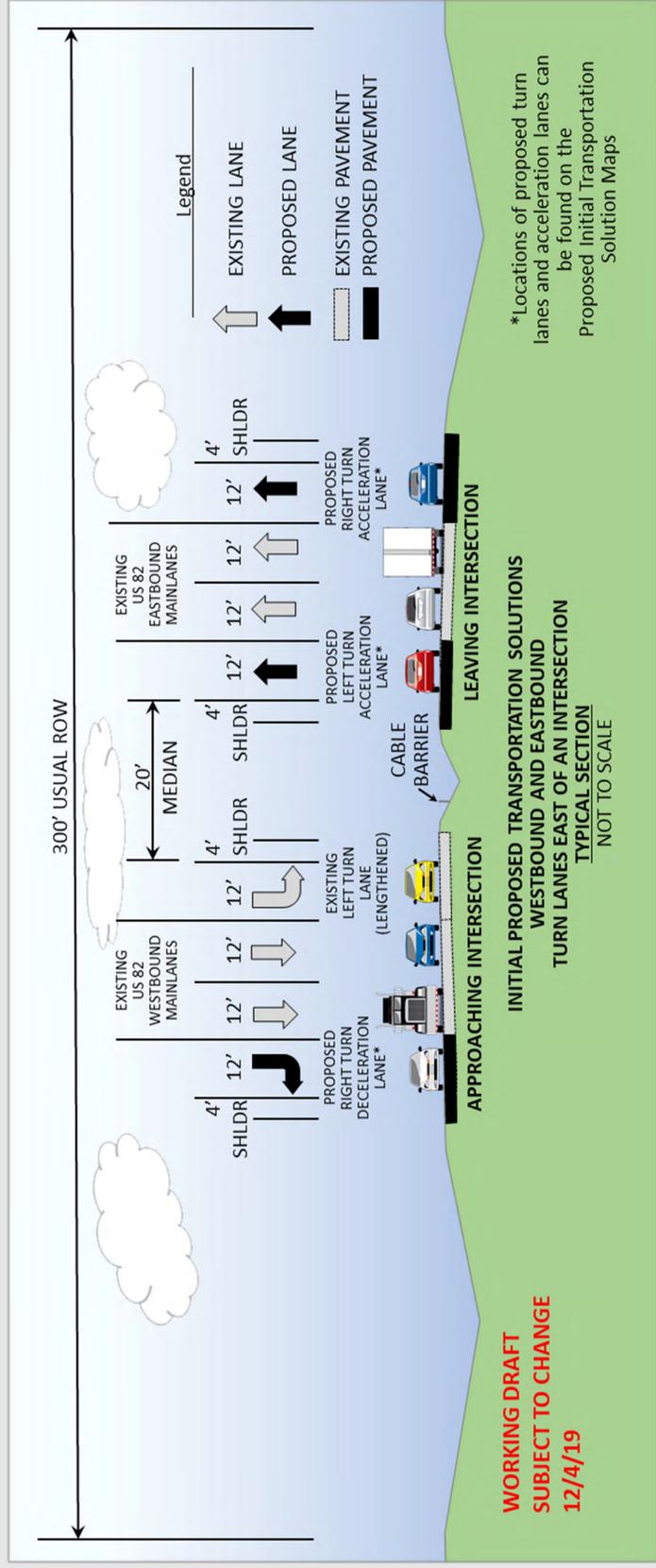


Based on 2014 to 2018 Crash Data

* Percentages do not total 100% as crashes can have more than one contributing factor



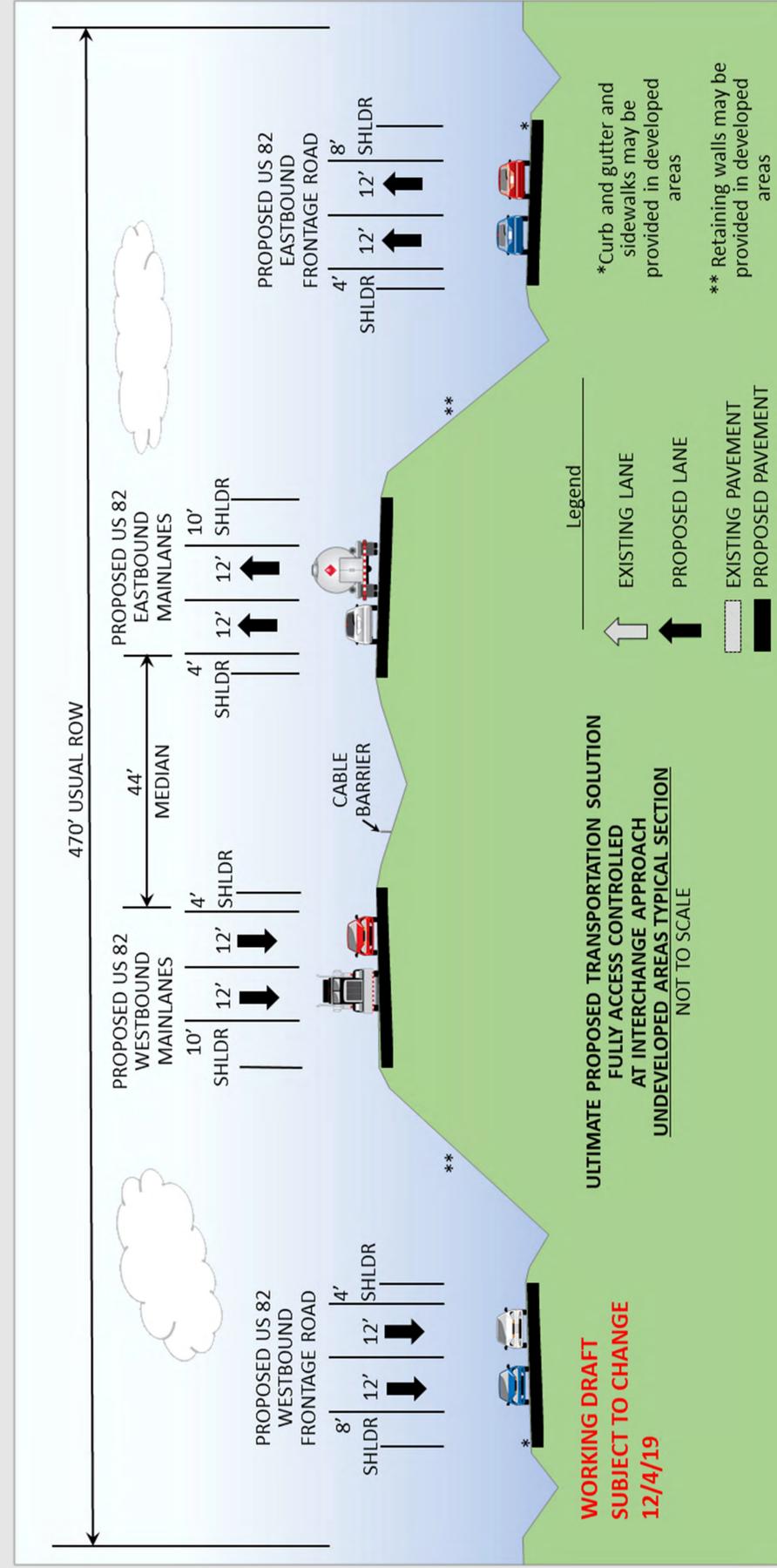
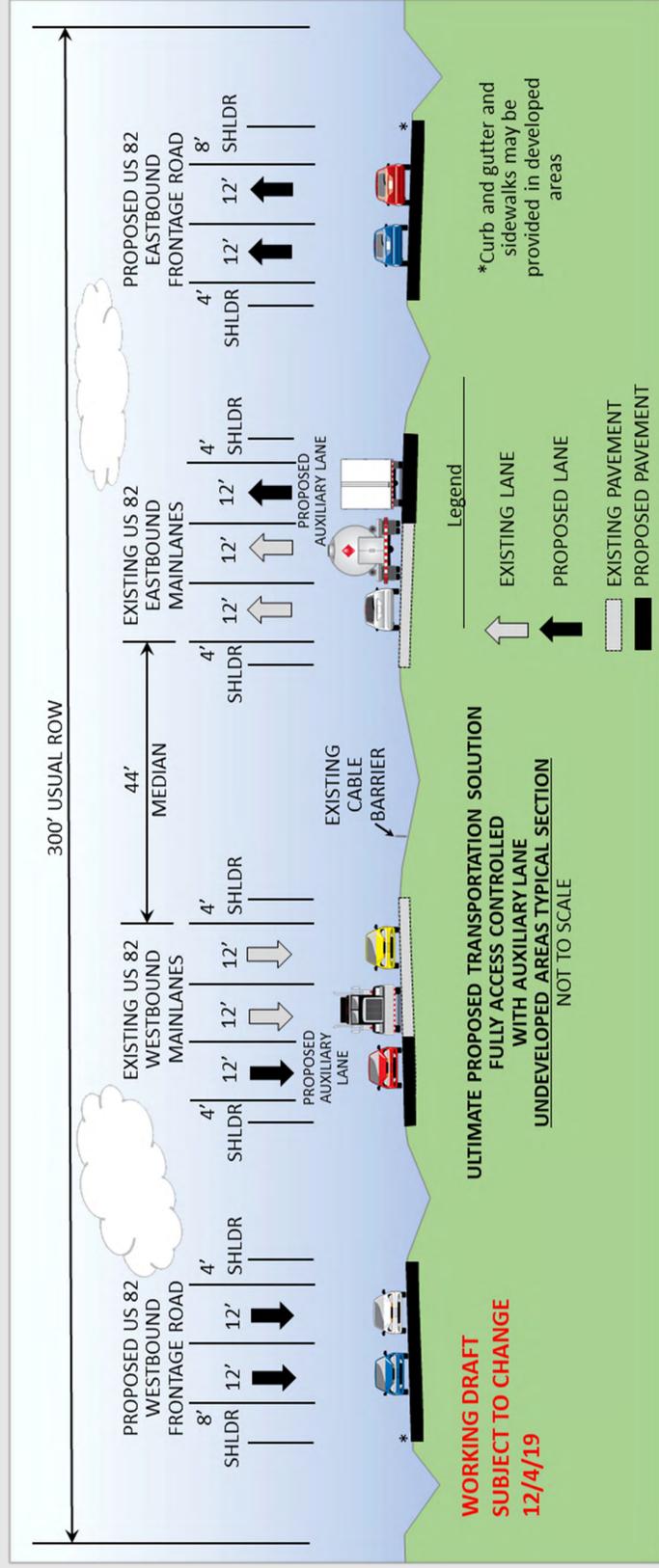
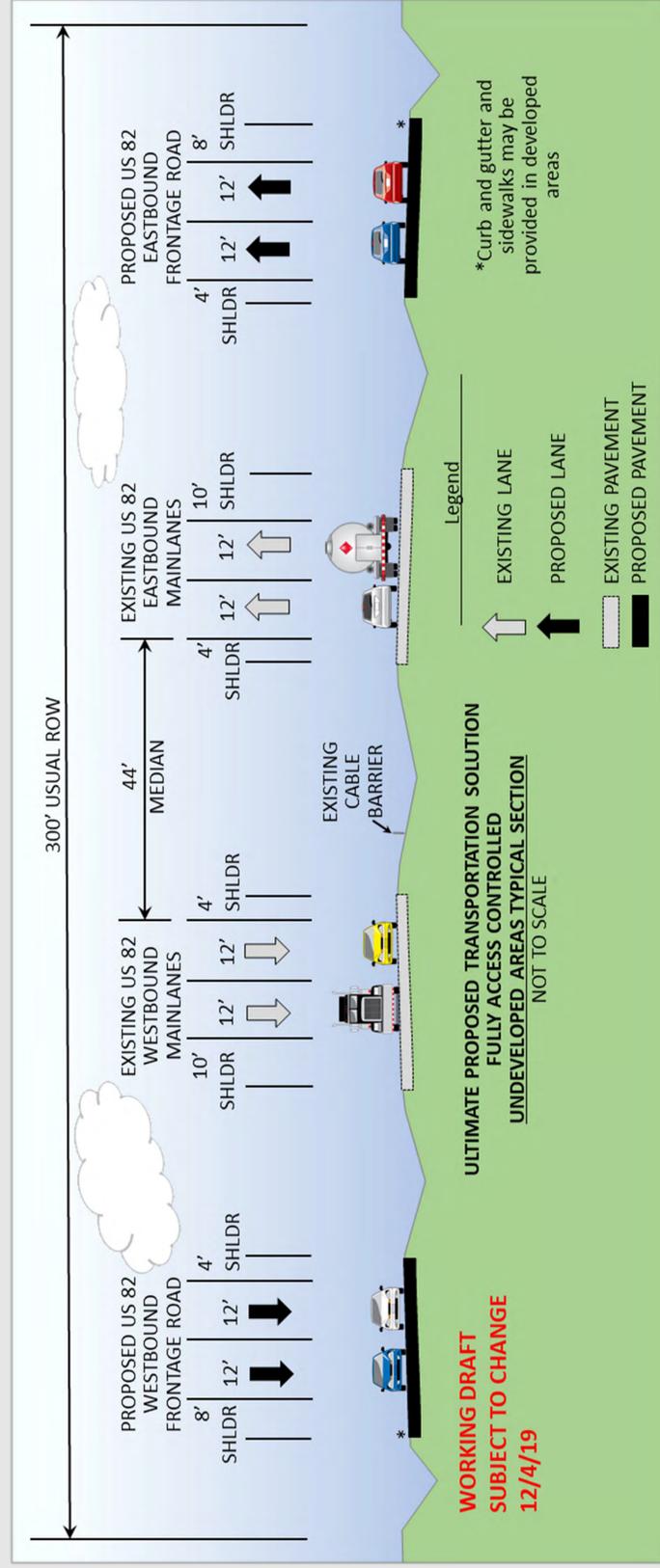
Proposed Typical Sections





Ultimate Proposed Transportation Solutions

Proposed Typical Sections





Initial Proposed Transportation Solutions

May be advanced in the short-term over the next ten years (e.g. lower cost, short duration construction)

- Add safety signage, adjust signal timing, add flashing beacons and safety lighting
- Re-stripe study corridor with 6" reflective pavement markings
- Mill, seal and overlay mainlanes from Cooke County line to FM 901
- Apply high friction surfacing to improve traction from FM 901 to east of Gibbons Road
- Replace bridge guardrail
- Implement roadway safety improvements:
 - Add acceleration, deceleration and auxiliary lanes, and extend left-turn lanes
 - Reconfigure ramps
 - Adjust median crossovers
 - Expand turn-around areas at certain median crossovers
 - Restrict intersecting roadway and driveway access to the US 82 mainlanes
 - Increase intersecting roadway turn radii
 - Extend two-way frontage road from US 377 to Shawnee Trail



Interim Proposed Transportation Solutions

May be advanced in the mid-term, potentially 10 to 20 years from now (e.g. transitional phase between initial and ultimate solutions)

- Extend two-way frontage road from Shawnee Trail to Riley Road
- Reconstruct ramps at FM 901 and convert two-way frontage roads to one-way
- Add grade-separated interchange at Southmayd Road
- Apply high friction surfacing to improve traction from the Cooke County line to FM 901 and from Gibbons Road to FM 1417



Ultimate Proposed Transportation Solutions

May be advanced in the long-term, potentially 20 or more years

- Convert to an access-controlled freeway with grade-separated interchanges:
 - Improve existing grade-separated interchanges at SH 56, US 377, FM 901, SH 289 and FM 1417
 - Add new grade-separated interchanges at Noland/Riley Road, Spalding Road, Blythe/Hazelwood Road, Gibbons Road and Lamberth Road
- Convert two-way frontage roads to one-way and add other one-way frontage roads



Potential Impacts & Estimated Costs

Feature (1) (2)	Initial Phase Solutions	Interim Phase Solutions	Ultimate Phase Solutions
Potential Displacements			
Residential (count)	0	0	1
Commercial (count)	0	0	20
Environmental Resources			
National Wetlands Inventory (NWI) (acres) *Does not include Riverine habitat	0	0	0.1
100-Year Floodplain (acres)	0	0.5	0
Perennial Streams (feet)	0	42	0
Intermittent Streams (Feet)	0	220	571
Prime Farmlands Soils (acres)	0	0	2.7
Utilities			
Public Water Wells (count)	0	0	1
Water Storage Tank	0	0	1
High Voltage Electrical Transmission lines (feet)	0	420	0
Pipelines (feet)	6,750	260	6,230
Oil & Gas Wells - Abandoned or Plugged within ROW (count)	1	0	1
Engineering			
Total Cost	\$68M	\$38M	\$240M
Proposed New ROW (acres)	0	7.7	35.2

Notes:

- (1) Quantities are approximate and based on measures using identified features on aerial mapping
- (2) Other resources not potentially impacted are not listed in the table



US 82 Study Corridor Transportation Solution Evaluation Results

Safety Benefits

