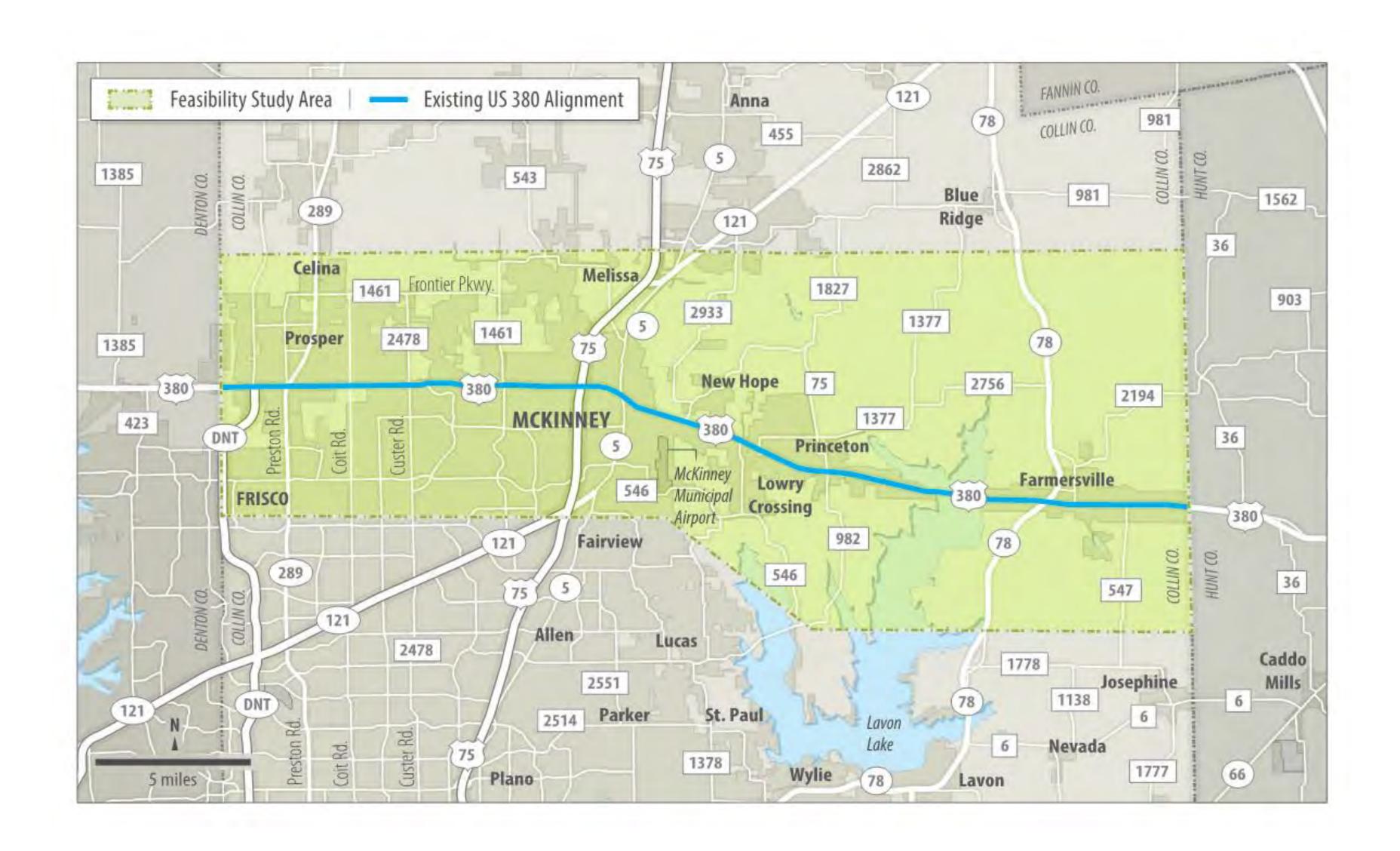


# WELCOME

US 380 COLLIN COUNTY FEASIBILITY STUDY



#### DALLAS DISTRICT

PUBLIC MEETING

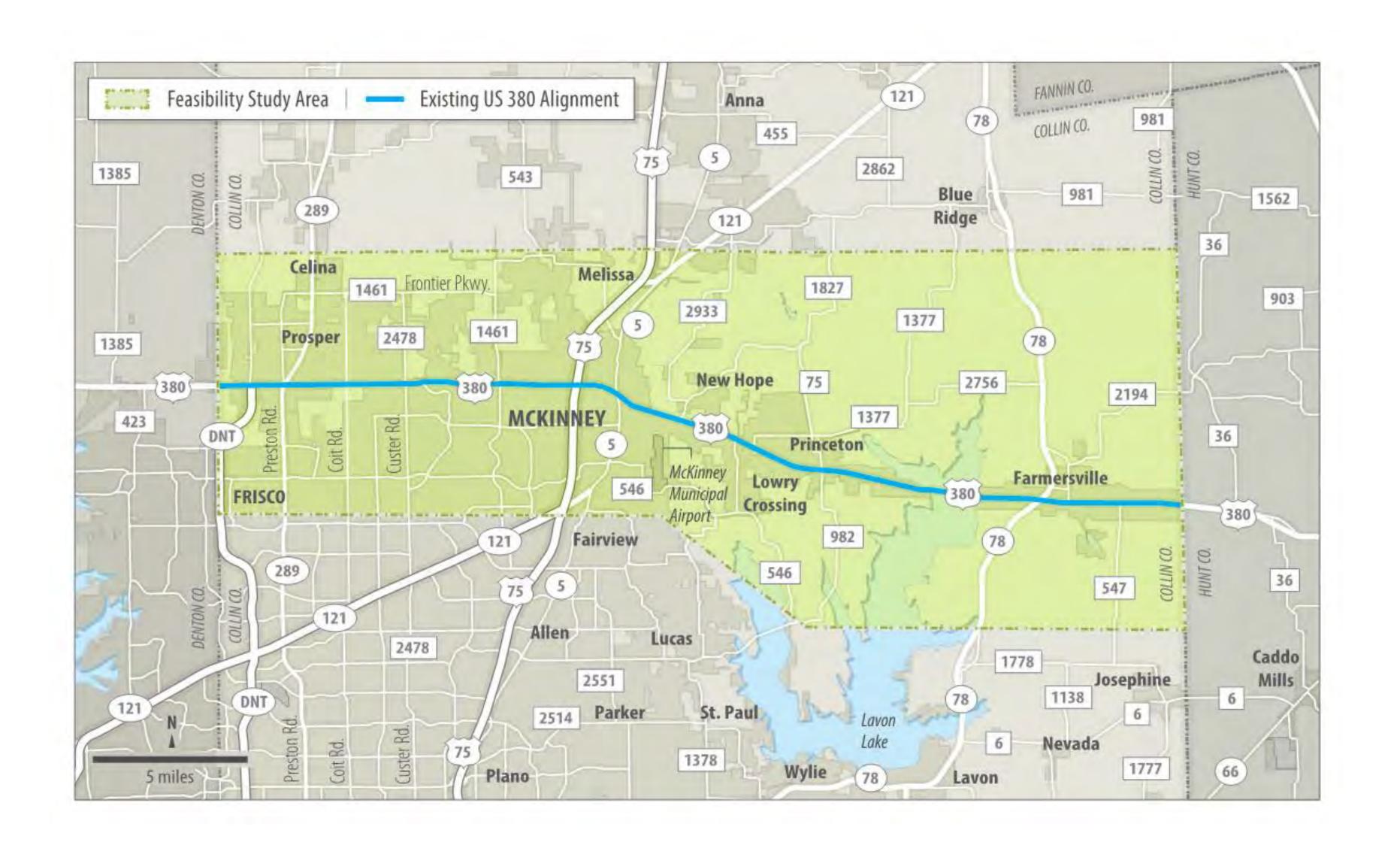
#### MAY 6, 2019

6:00 TO 8:00 P.M. PRESENTATION AT 6:00 P.M.



# WELCOME

US 380 COLLIN COUNTY FEASIBILITY STUDY



#### DALLAS DISTRICT

PUBLIC MEETING

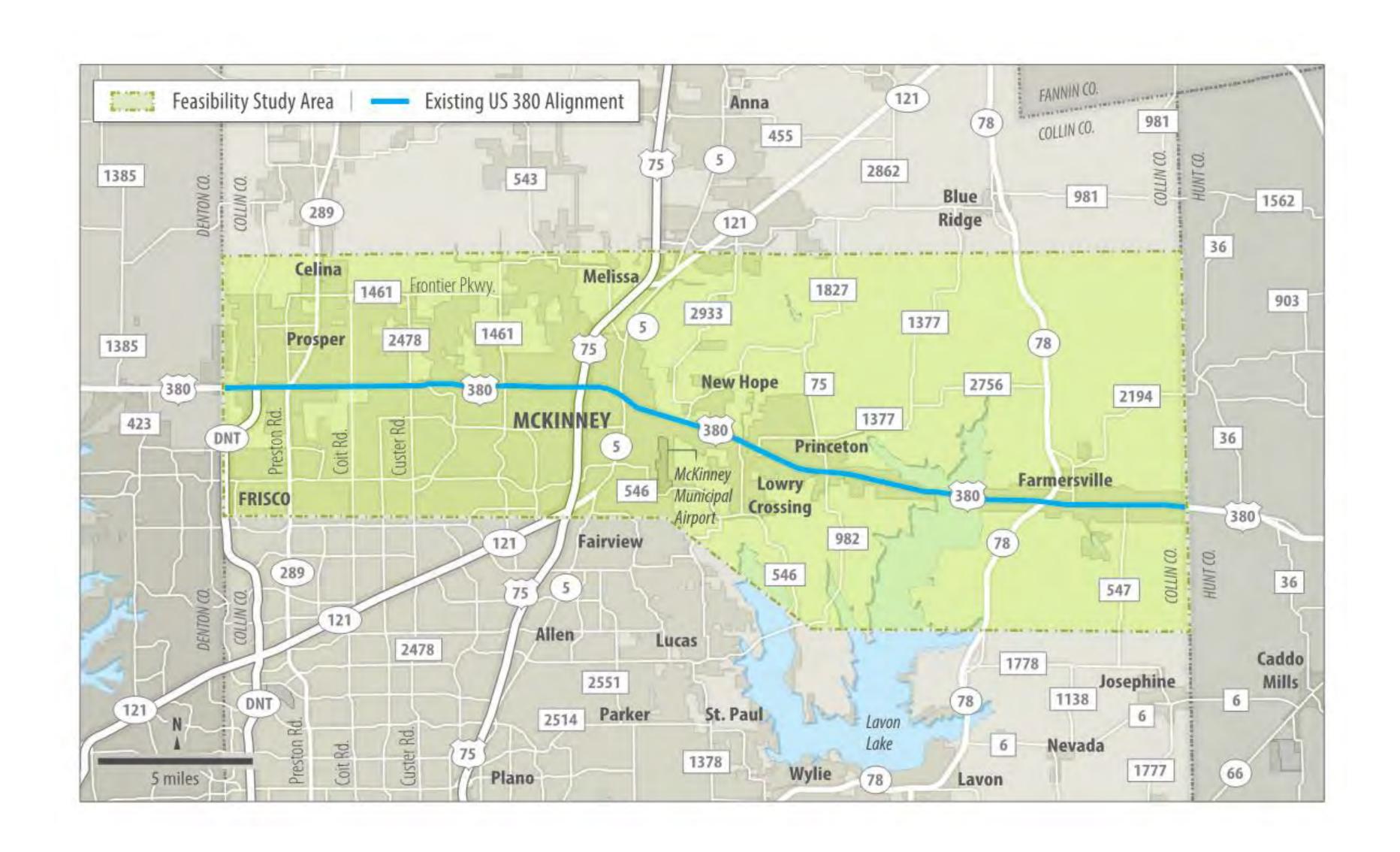
#### MAY 7, 2019

6:00 TO 8:00 P.M. PRESENTATION AT 6:00 P.M.



# WELCOME

US 380 COLLIN COUNTY FEASIBILITY STUDY



#### DALLAS DISTRICT

PUBLIC MEETING

MAY 9, 2019

6:00 TO 8:00 P.M. PRESENTATION AT 6:00 P.M.



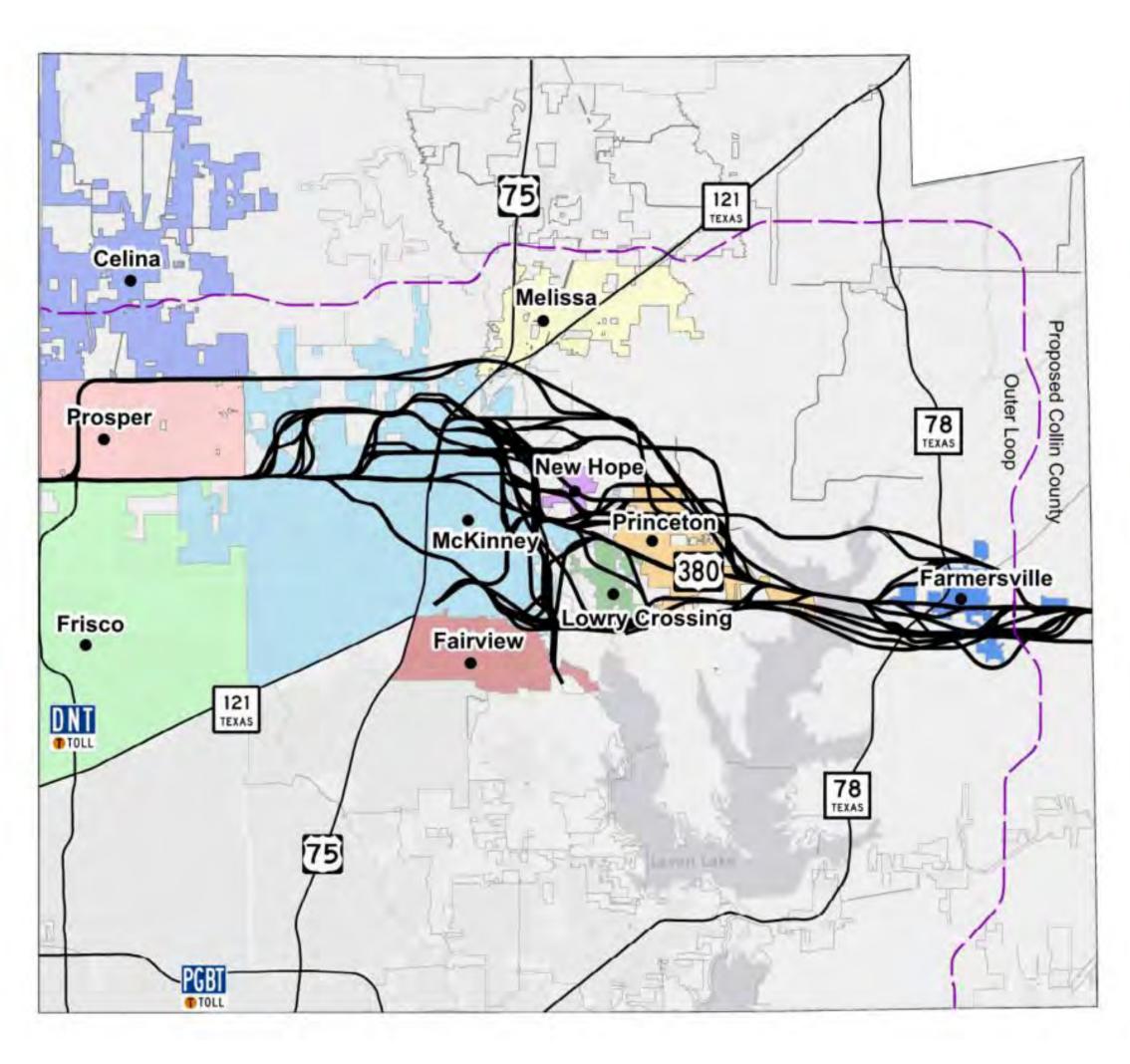


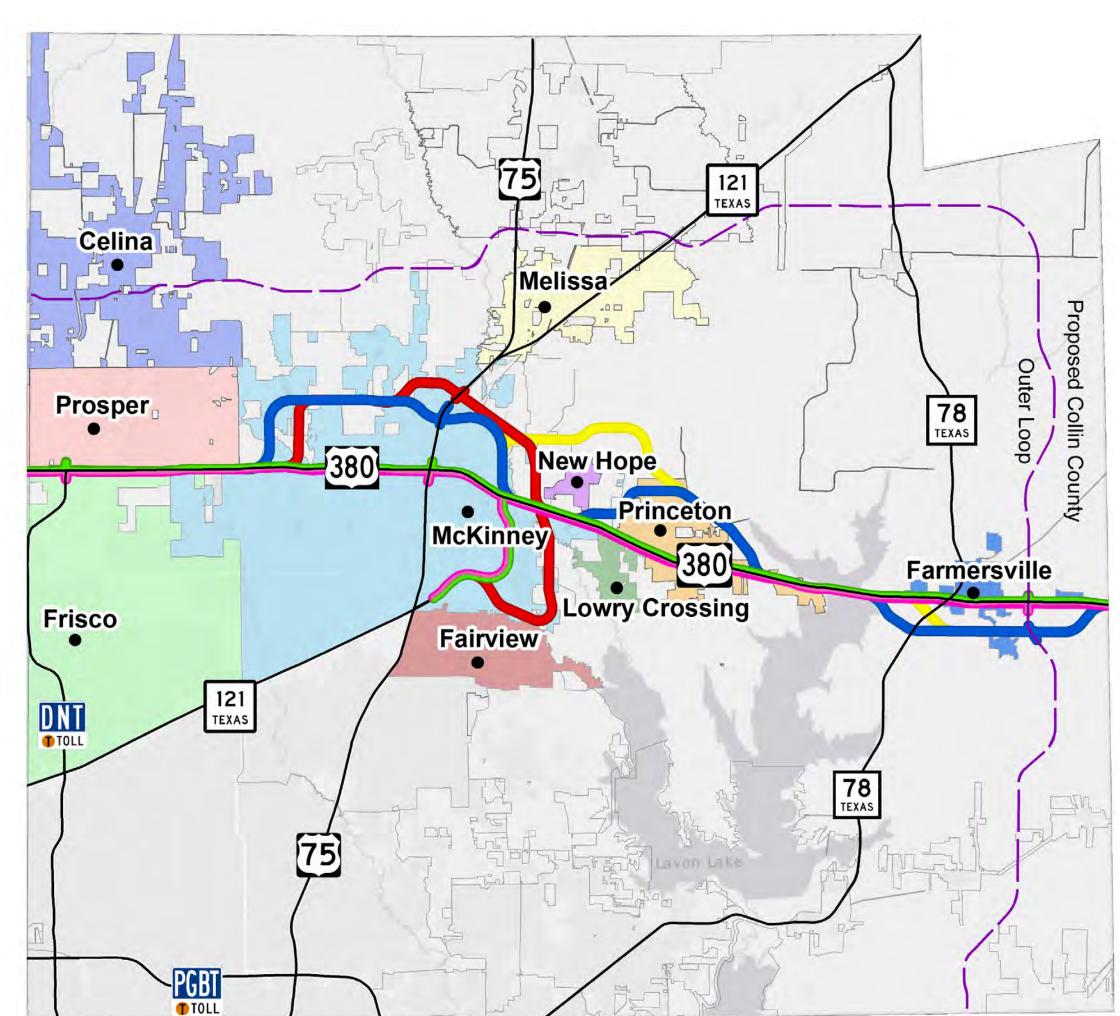
# PRESENTATION IS AT 6:00 P.M.

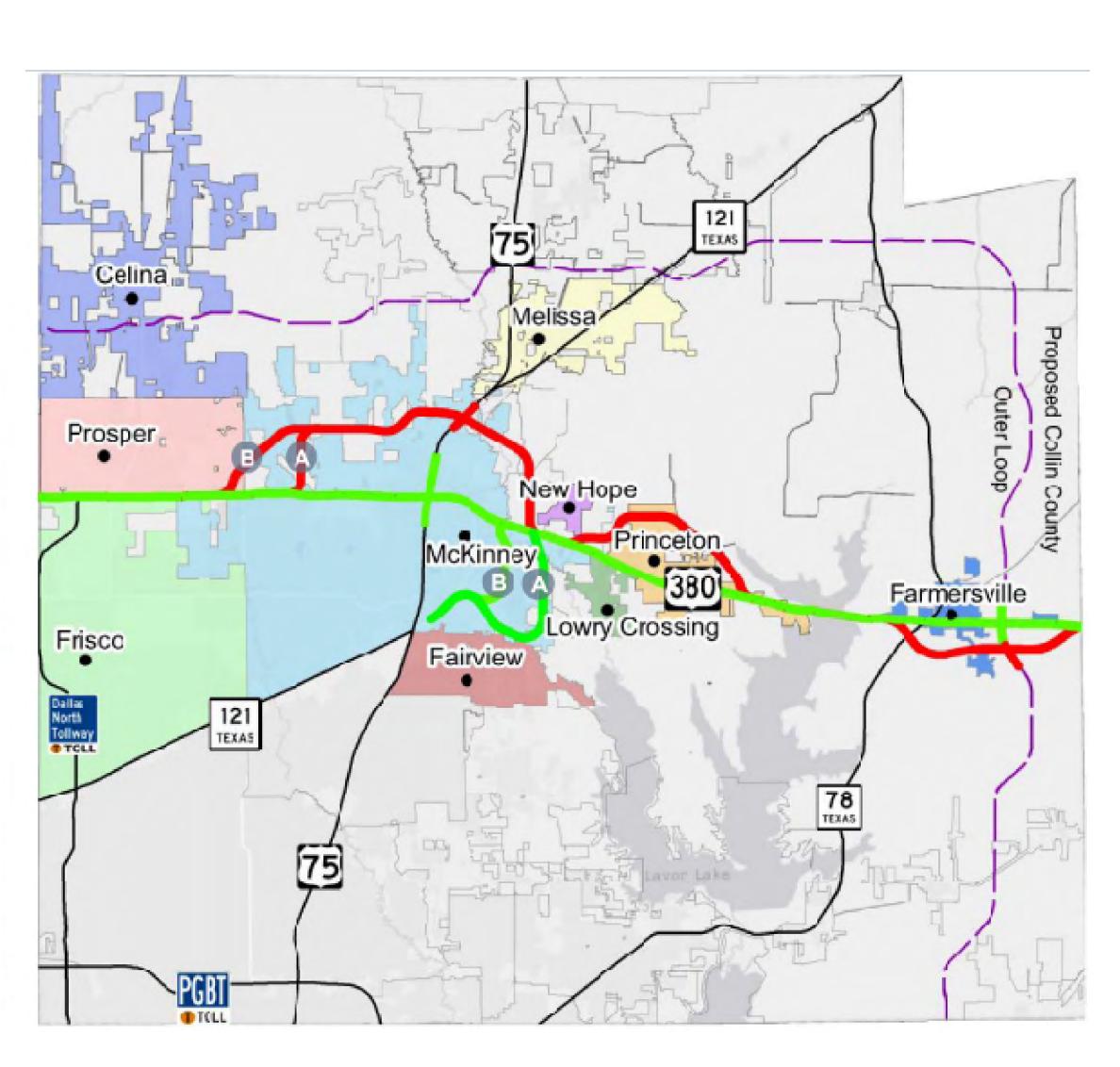
#### **SUMMER 2017**

#### SPRING 2018

#### FALL 2018







#### POTENTIAL ALIGNMENTS PREVIOUSLY DISPLAYED



# FEASIBILITY STUDY PROGRESS

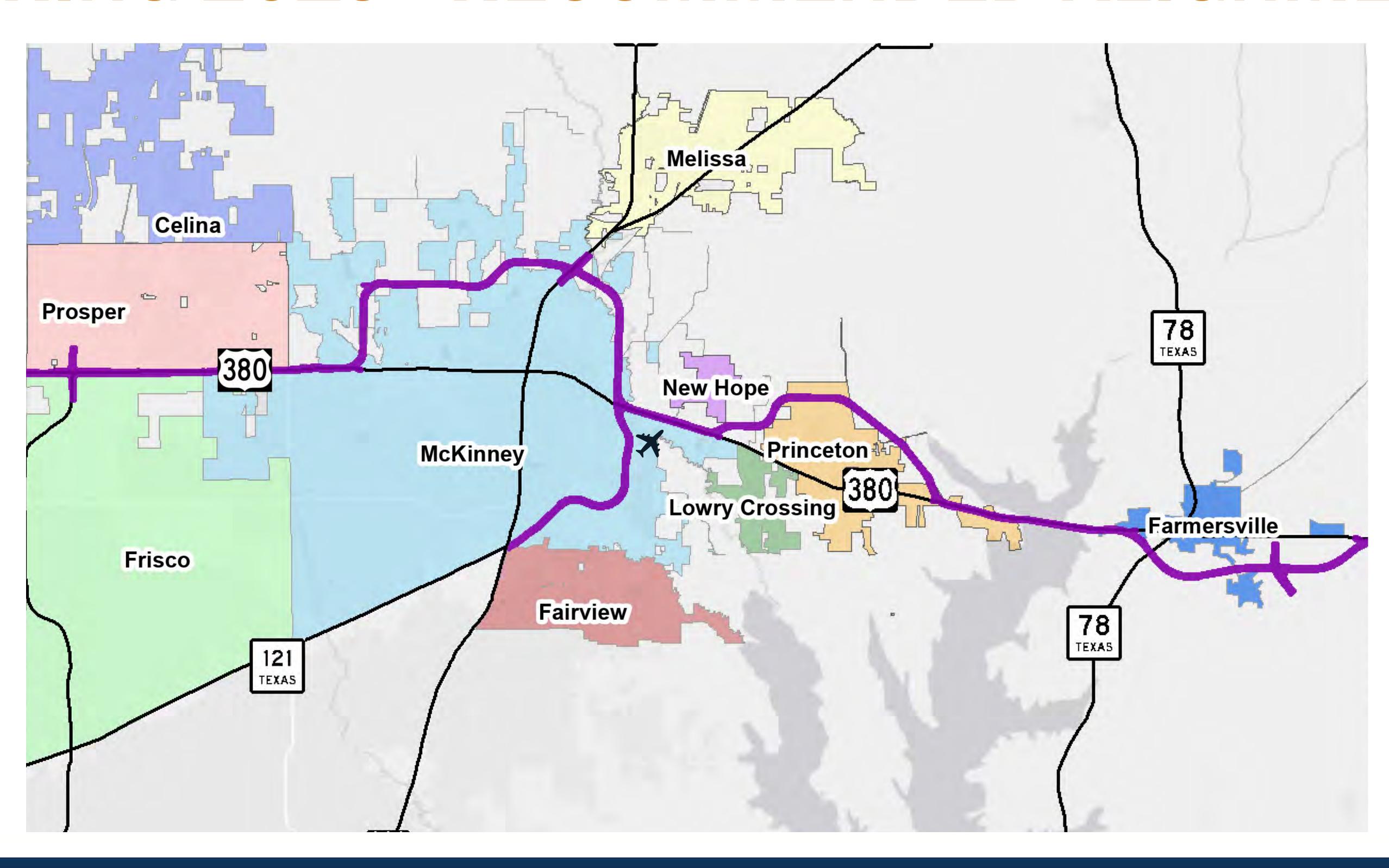
Alignment trends	5 alignment options		5 alignment options  2 alignments with options		recommended alignment	
<ul> <li>• One-on-one meetings with partners</li> <li>• Technical work sessions</li> </ul>	<ul> <li>• Public meeting and comment period</li> <li>• Elected leader outreach and council presentations</li> <li>• Stakeholder work groups</li> </ul>	<ul> <li>Input analyzed</li> <li>TxDOT selects alignments for the study</li> </ul>	<ul> <li>• Public meeting and comment period</li> <li>• Key stakeholder and elected leader outreach</li> </ul>	<ul> <li>Public comments analyzed</li> <li>Complete additional and more in-depth analysis*</li> </ul>	<ul> <li>• Public meetings and comment period</li> <li>• Elected leader outreach and council presentations</li> </ul> TxDOT selects	• Recommend long and short term improvements as well as regional action items
JUNE 2017 - MARCH 2018  Initial Data	APRIL - MAY 2018  Stakeholder Input & Public	SUMMER 2018 Process Data/Input	FALL 2018 Stakeholder Input & Public	WINTER 2018- EARLY SPRING 2019  Process Data/Input	LATE SPRING/ SUMMER 2019  Stakeholder Input & Public	LATE SUMMER/EARLY FALL 2019  Project Implementation

#### \*ADDITIONAL ANALYSIS

- Economic impacts by alignments.
- More specific input from potentially affected property owners & stakeholders.
- Travel demand modeling including full build out model and demographics.
- Preliminary noise analysis.



# SPRING 2019 - RECOMMENDED ALIGNMENT





### CONTINUED ANALYSIS - NOISE

Noise measurements and preliminary traffic noise modeling were performed for select areas along the recommended alignment. The noise model was used to predict noise impacts for future build and future no-build scenarios. Noise abatement in the form of 12' and 20' barriers were analyzed for these areas. These areas will be re-evaluated and analyzed for noise abatement during the next phase of the study.

#### TXDOT REQUIRES THAT A NOISE WALL MEET FEASIBILITY AND REASONABLENESS CRITERIA IN ORDER TO BE BUILT. THESE CRITERIA ARE AS FOLLOWS:

#### **FEASIBILITY**

- Acoustical criteria
  - 5 dBA or greater reduction of sound at more than 50% of first-row, impacted receptors

#### AND

- Benefits<sup>b</sup> a minimum of two impacted receptors
- Engineering consideration
  - Topography and drainage
  - Access, safety, and maintenance

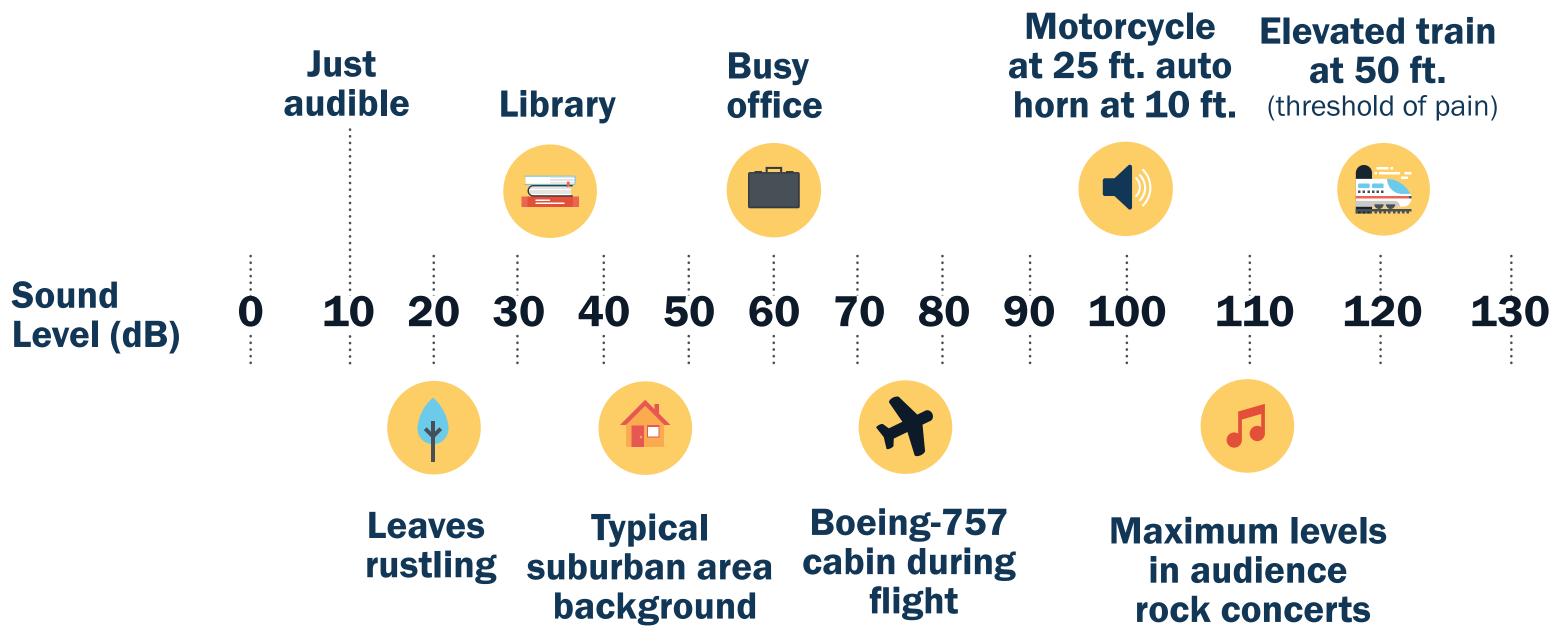
#### REASONABLENESS

- Noise reduction design goal: 7 dBA or more for at least one benefited receptor
- Cost criterion: surface area of the barrier wall does not exceed 1,500 square feet per benefited receptor
- Viewpoint of benefited receptors and non-benefited receptors that border or are adjacent to the noise wall will be solicited.
   The majority of the responses must be in favor of barrier construction.

a. An impacted receptor is one where the future noise levels approach or exceed the Noise Abatement Criteria Level listed in 23 CFR 772 (66 dBA for residential receptors) OR when the predicted future sound level exceeds the existing level by more than 10 dB(A)

b. A benefitted receptor is a receptor that experiences at least 5 dB(A) of sound reduction from an abatement option

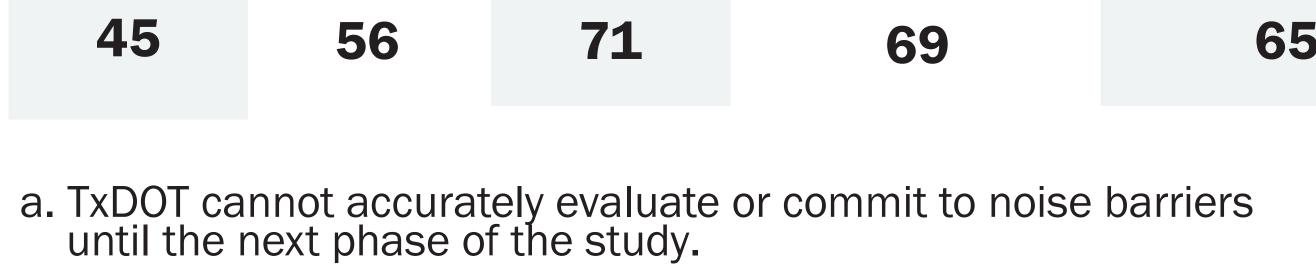
# COMMON SOUNDS AND CORRESPONDING SOUND LEVELS (DECIBELS) Motorcycle Elevated train



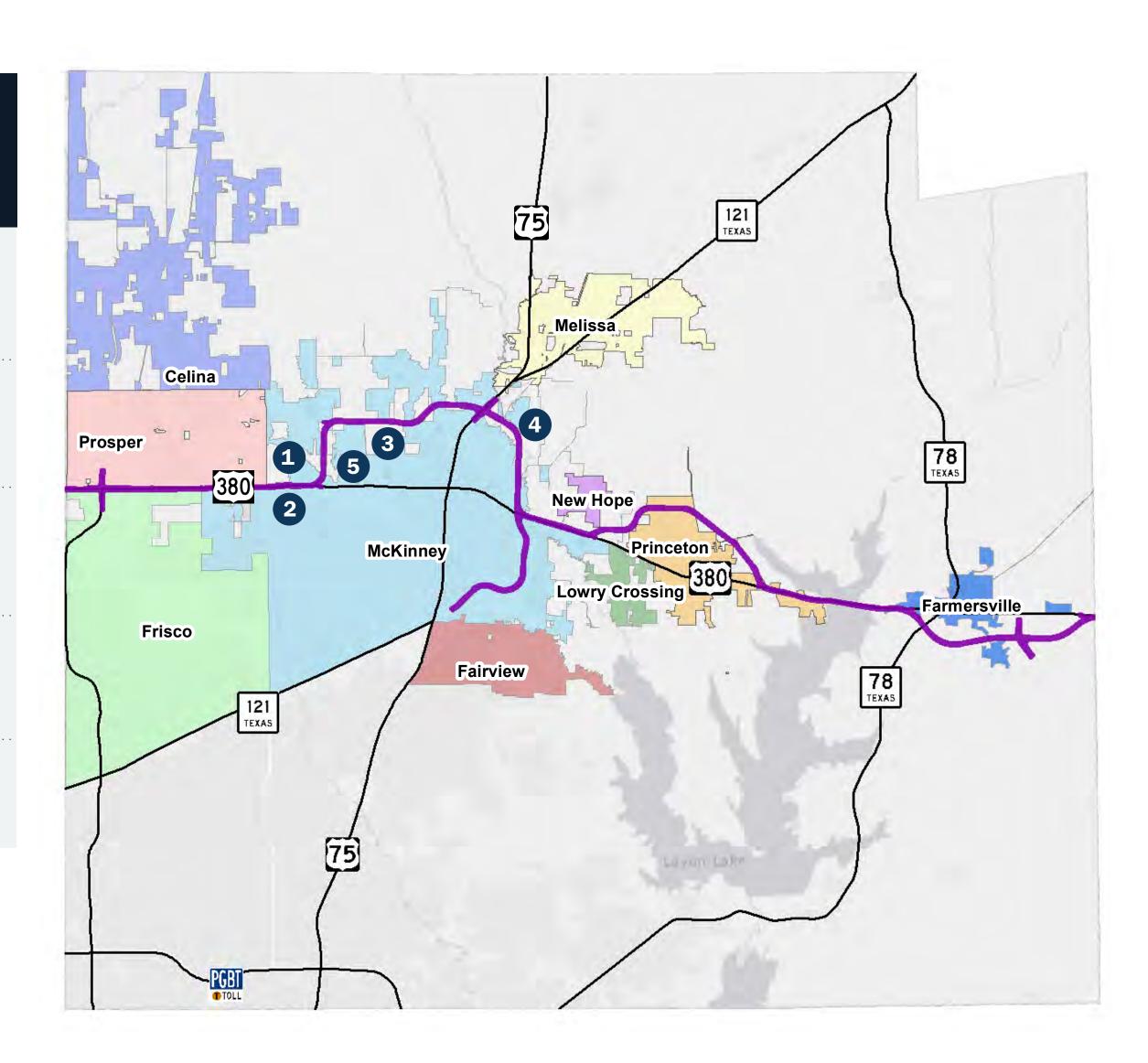


# CONTINUED ANALYSIS - NOISE

·······	PROJECT TYPE	EXISTING dB(A) <sup>b</sup>	FUTURE NO-BUILD dB(A)	FUTURE BUILD dB(A)	FUTURE BUILD W/ 12 FOOT BARRIER <sup>a</sup> dB(A)	FUTURE BUILD W/ 20 FOOT BARRIER <sup>a</sup> dB(A)
	1. Tucker Hill - Tremont Blvd. and near US 380	61	69	69	65	63
NO	2. Stonebridge - Camberton Dr. and near US 380	56	74	<b>76</b>	69	66
CATIC	3. Heatherwood - Grove Cove and Alder Dr.	<b>57</b>	<b>72</b>	72	67	65
<b>7</b>	4. Willow Wood	55	<b>49</b> °	69	66	61
	5. Triple Creek Baseball Academy	45	56	71	69	65

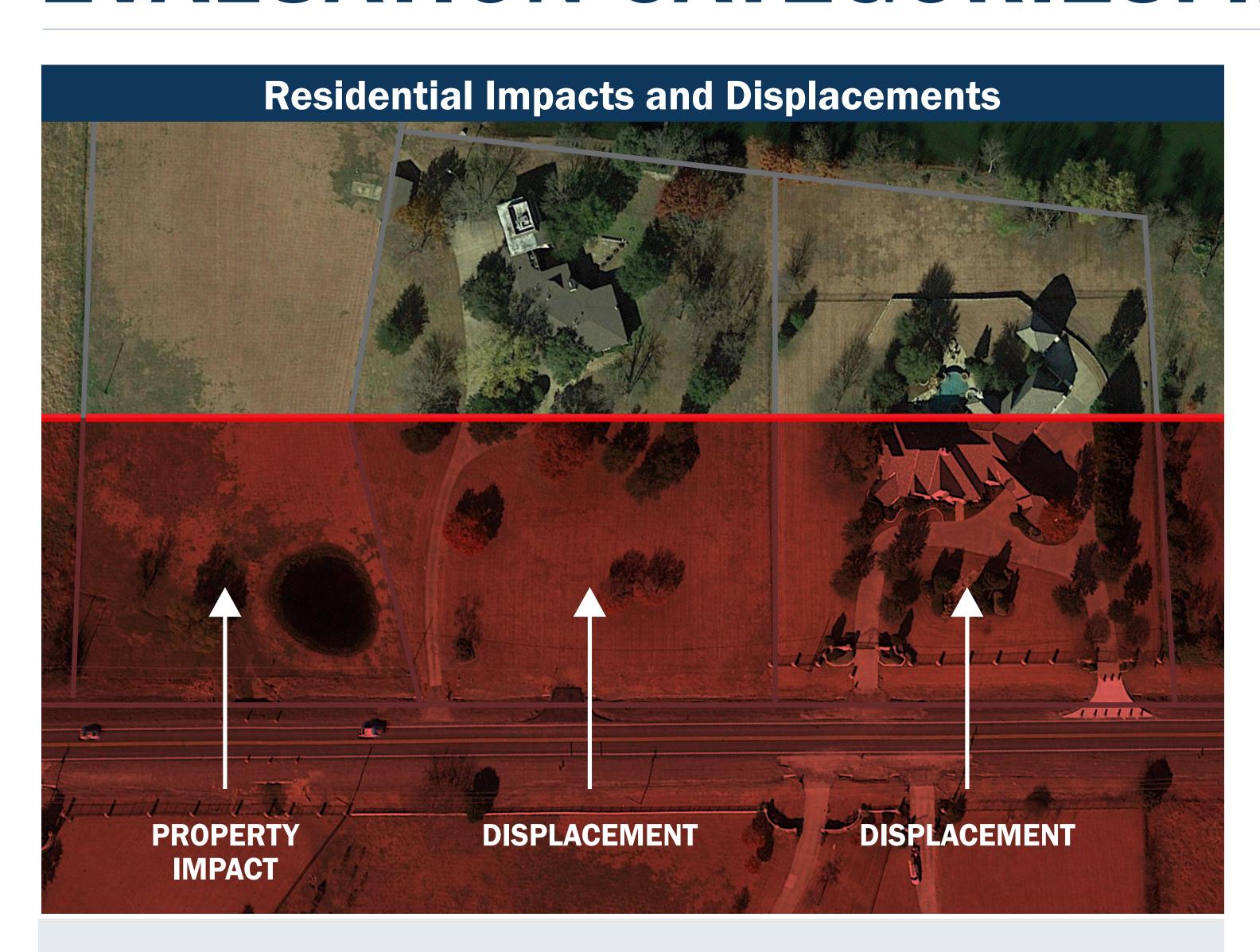


- b. This is a measured value.
- c. Ambient noise measurements also associated with new residential construction in the area.



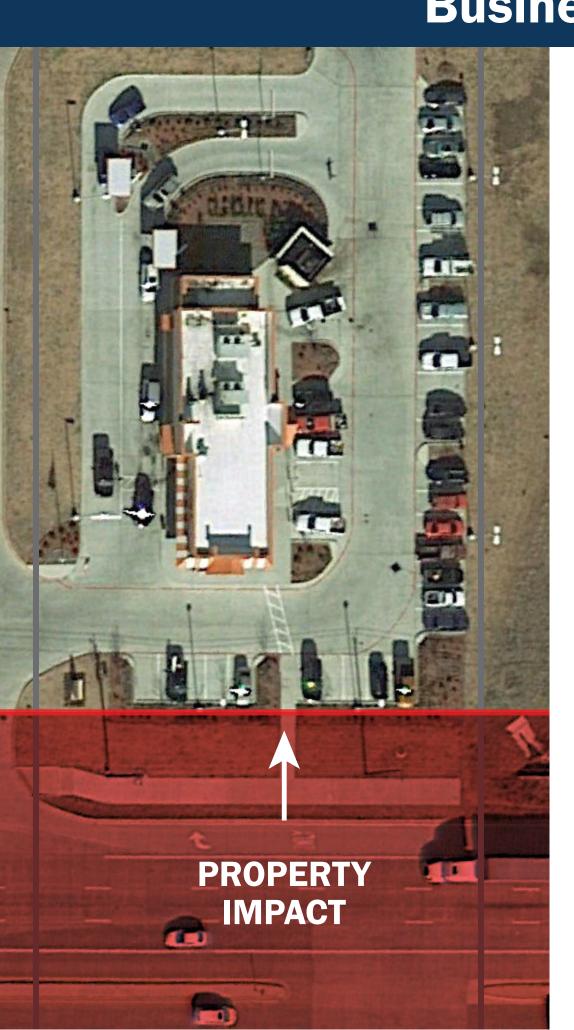


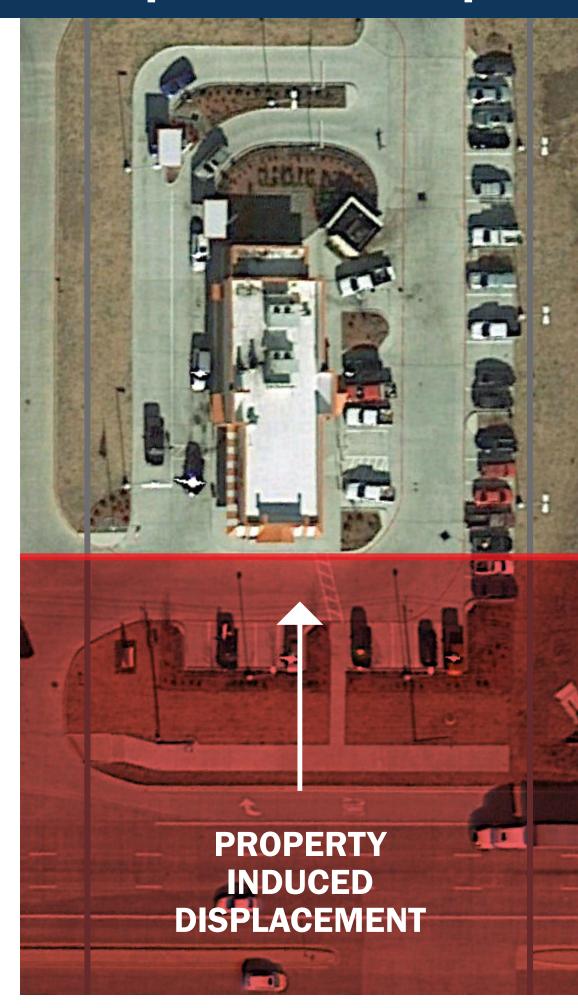
#### **EVALUATION CATEGORIES: IMPACTS AND DISPLACEMENTS**

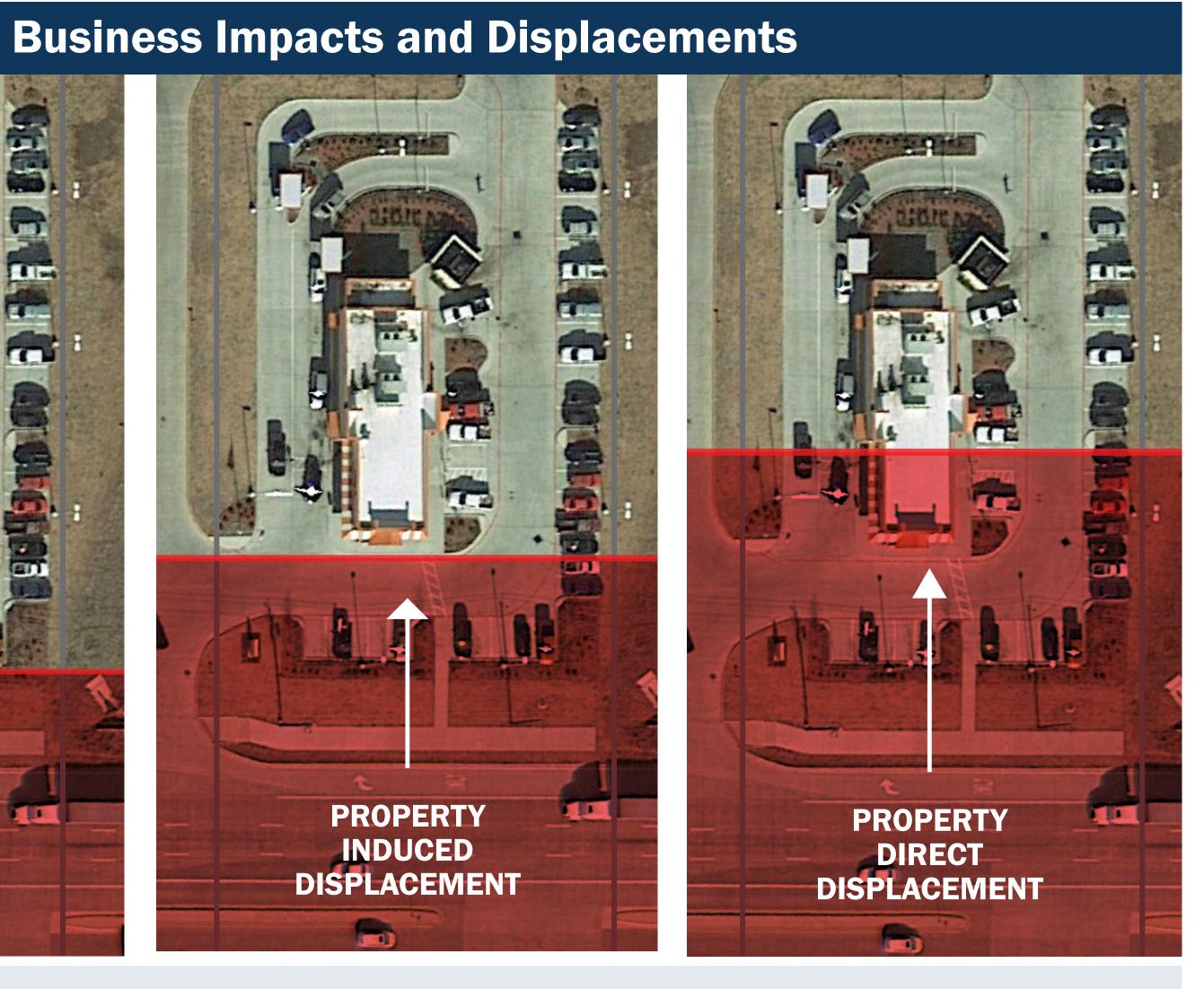


**IMPACT** – Encroachment on a property

**DISPLACEMENT** – Proposed ROW physically impacts a structure or proximity would not meet distance requirements of new building codes







**IMPACT** – Encroachment on a property

**INDUCED DISPLACEMENT – Proposed ROW would functionally impair business** or proximity would not meet fire codes or new building codes.

**DIRECT DISPLACEMENT - Proposed ROW physically impacts a structure** 



### EVALUATION CATEGORIES

#### FUTURE PLANNED DEVELOPMENT IMPACT

- TXDOT MAPPED SIGNIFICANT FUTURE DEVELOPMENTS
  TO INDICATE AREAS WHERE DEVELOPMENT
  IS IMPENDING
- LAND USE WAS PROVIDED BY LOCALS
- INCLUDES FUTURE COMMERCIAL
- INCLUDES FUTURE RESIDENTIAL

#### COST

#### COSTS FOR EACH ALIGNMENT AND ALIGNMENT SEGMENT INCLUDES:

- Roadway construction
- Right-of-way costs (in today's \$)
- Market cost of displaced structures
- Market cost of land
- Relocation assistance
- Cost to cure
- Relocation for impacted utilities
- Engineering
- Contingencies



### TRAFFIC TRAVEL DEMAND MODEL EVALUATION

2045 ESTIMATES

#### **NO BUILD**

AVG. DAILY VOLUME 46,200

LEVEL OF SERVICE F

VEHICLE MILES TRAVELED DAILY 1.49M

VEHICLE HOURS OF TRAVEL DAILY 10,139,000

COLLIN COUNTY
HOURS OF
DELAY DAILY
582,000

#### RED A

**AVG. DAILY VOLUME** 

75,800

LEVEL OF SERVICE

VEHICLE HOURS OF DELAY DAILY 10,073,000 VEHICLE MILES TRAVELED DAILY

2.99M

COLLIN COUNTY
HOURS OF
DELAY DAILY
536,000



#### RED B

**AVG. DAILY VOLUME** 

74,700

LEVEL OF SERVICE

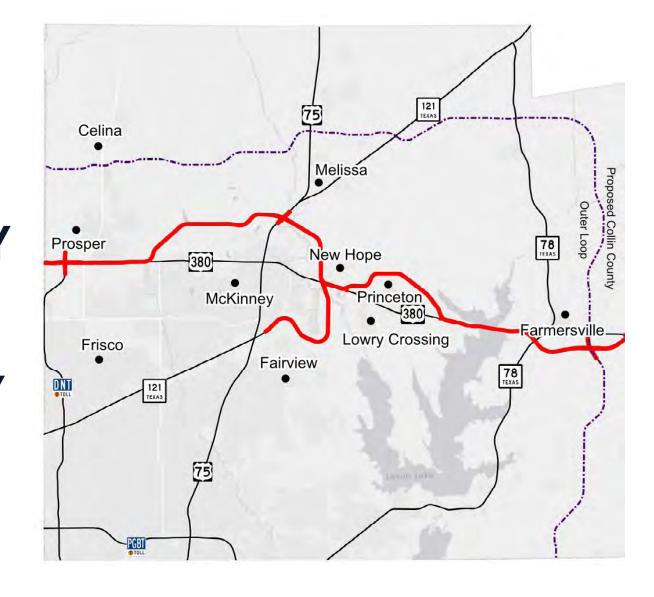
B

VEHICLE
HOURS OF
DELAY DAILY
10,073,000

VEHICLE MILES TRAVELED DAILY

2.92M

COLLIN COUNTY
HOURS OF
DELAY DAILY
536,000



#### GREEN A

**AVG. DAILY VOLUME** 

86,300

LEVEL OF SERVICE

B

VEHICLE
HOURS OF
DELAY DAILY
10,089,000

VEHICLE MILES
TRAVELED DAILY
Prosper

**2.80M** 

COLLIN COUNTY
HOURS OF
DELAY DAILY
542,000



#### GREEN B

**AVG. DAILY VOLUME** 

90,200

LEVEL OF SERVICE

B

VEHICLE
HOURS OF
DELAY DAILY
10,089,000

VEHICLE MILES
TRAVELED DAILY

2.93M

COLLIN COUNTY HOURS OF DELAY DAILY 542,000





# SHORT-TERM ECONOMIC IMPACT OVERVIEW

	2019 MUNICI	IPAL FORECASTS	2019 PROPERTY & SA			ALES TAX REDUCTION*			
	PROPERTY & SALES TAXES	TOTAL REVENUE		GREEN		RECOM	MENDED RE	D	
MUNICIPALITY	(PST)	(TR)	AMOUNT	% PST	% TR	AMOUNT	% PST	% TR	
City of Frisco	\$129,324,000	\$172,972,000	\$134,000	0.10%	0.08%	\$134,000	0.10%	0.00%	
Frisco ISD	N/A	N/A	<b>\$0</b>	0.00%	0.00%	<b>\$0</b>	0.00%	0.00%	
City of Prosper	\$18,370,000	\$25,397,000	\$137,000	0.75%	0.54%	\$137,000	0.75%	0.54%	
Prosper ISD	\$94,500,000	\$126,000,000	\$287,000	0.30%	0.23%	\$287,000	0.30%	0.23%	
City of McKinney	\$146,019,000	\$468,388,000	\$2,740,000	1.88%	0.58%	\$281,000	0.19%	0.06%	
McKinney ISD	\$173,217,000	\$218,422,000	\$4,622,000	2.67%	2.12%	\$833,000	0.48%	0.38%	
City of Princeton	\$3,349,000	\$8,120,000	\$407,000	12.15%	5.01%	\$43,000	1.28%	0.53%	
Princeton ISD	\$10,803,000	\$35,599,000	\$894,000	8.28%	2.26%	\$111,000	1.03%	0.28%	
City of Farmersville	\$1,300,000	\$3,474,000	\$88,000	6.77%	2.53%	<b>\$0</b>	0.00%	0.00%	
Farmersville ISD	\$6,925,999	\$15,776,000	\$139,000	2.01%	0.88%	\$4,000	0.06%	0.03%	
TOTALS	\$583,807,000	\$1,078,148,000	\$9,448,000	1.62%	0.88%	\$1,830,000	0.31%	0.17%	

\*IMPACTS IF ALL NEEDED ROW WAS ACQUIRED DURING 2019



### EVALUATION CATEGORIES

#### ENVIRONMENTAL

- Researched and mapped environmental features at a desktop level.
- Conducted limited windshield surveys to verify mapped data. Includes land uses, potential historic properties, streams/other bodies of water, natural habitats, public facilities, cemeteries, and hazardous material sites.

#### WATERSHED

• Mapped FEMA 100-year floodplain and regulatory floodways, and water impoundments.

#### PARK LAND

- Researched and mapped current and planned park areas based on available online data and review of community's park and development plans.
- Consulted with city staff and officials with jurisdiction regarding ownership, public access, and use of existing and planned park properties.
- Reviewed sources of funding used for acquisition and development.
- Assessed whether properties met the formal definition of a public park or recreational area under Section 4(f) of the DOT Act of 1966.



### EVALUATION MATRIX

Criteria Rating Scale							
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria			

#### DENTON COUNTY LINE TO HUNT COUNTY LINE

Evaluation Category	No Build	Green Alignment	Green Alignment - North Shift	Red A + Red D Alignments	Red B + Red D Alignments	Red E + Red D Alignments
Number of Residential Property Impacts	0	42	42	53	53	57
Number of Residential Displacements	0	71	101	28	27	30
Number of Business Impacts	0	118	113	25	13	16
Number of Business Induced Displacements	0	27	34	2	1	2
Number of Business Direct Displacements	0	326	356	40	28	32
Number of Business Displacements	0	353	390	42	29	34
Planned Future Development Impacts (acres)	0	92	96	215	272	236
Environmental, Watershed, and Park Land Impacts (acres)	0	205	205	494	481	474
Cost - includes construction, ROW, utility relocation	0	\$3.7B	\$2.8B	\$2.5B	\$2.3B	\$2.4B
Enhances Regional Mobility		•	•			
Satisfies Travel Demand	0			•	•	•
Enhances Safety						
Supports Future Regional Economic Growth	0					

#### DENTON COUNTY LINE TO COIT ROAD

Evaluation Category	No Build	Green Alignment
Number of Residential Property Impacts	0	0
Number of Residential Displacements	O	O
Number of Business Impacts	O	3
Number of Business Induced Displacements	0	1
Number of Business Direct Displacements	0	1
Number of Business Displacements	O	2
Planned Future Development Impacts (acres)	0	12
Environmental, Watershed, and Park Land Impacts (acres)	0	6
Cost - includes construction, ROW, utility relocation	0	\$311M
Enhances Regional Mobility		
Satisfies Travel Demand		
Enhances Safety		
Supports Future Regional Economic Growth		



### EVALUATION MATRIX

Criteria Rating Scale							
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria			

#### COIT ROAD TO FM 1827

Evaluation Category	No Build	Green Alignment	Green Alignment - North Shift	Red A + Red D Alignments	Red B + Red D Alignments	Red E + Red D Alignments
Number of Residential Property Impacts	0	16	16	30	30	34
Number of Residential Displacements	0	18	48	15	14	17
Number of Business Impacts	0	85	80	16	4	7
Number of Business Induced Displacements	0	20	27	1	0	1
Number of Business Direct Displacements	0	181	211	18	6	10
Number of Business Displacements	0	201	238	19	6	11
Planned Future Development Impacts (acres)	0	33	37	95	152	116
Environmental, Watershed, and Park Land Impacts (acres)	0	80	80	340	327	319
Cost - includes construction, ROW, utility relocation	0	\$2-2.2B	\$1.2B	\$969M	\$830M	\$878M
Reduces Collin County Traffic Congestion		On 380 380 + Bloomdale	On 380 + Bloomdale	On 380 New 380 + Old 380	On 380 New 380 + Old 380	On 380 New 380 + Old 380
reduces commodulity frame congestion						
Satisfies Travel Demand						
Enhances Safety						
Supports Future Regional Economic Growth						



### EVALUATION MATRIX

#### SPUR 399 EXTENSION NORTHERN CONNECTIONS

Evaluation Category	No Build	Red C + Green A Alignment	Red D + Green B Alignment
Number of Residential Property Impacts	0	25	7
Number of Current Residential Displacements	0	12	6
Number of Business Impacts	0	7	9
Number of Business Induced Displacements	0	1	0
Number of Business Direct Displacements	0	1	3
Number of Business Displacements	0	2	3
Planned Future Development Impacts (acres)	0	16	8
Environmental, Watershed, and Park Land Impacts (acres)	0	221	236
Cost - includes construction, ROW, utility relocation	0	\$618M	\$560M
Enhances Regional Mobility			
Satisfies Travel Demand			
Enhances Safety			
Supports Future Regional Economic Growth			

Criteria Rating Scale							
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria			

#### SPUR 399 EXTENSION

Evaluation Category	No Build	Green A Alignment	Green B Alignment
Number of Residential Property Impacts	0	14	4
Number of Current Residential Displacements	0	6	0
Number of Business Impacts	0	10	4
Number of Business Induced Displacements	0	0	0
Number of Business Direct Displacements	0	1	1
Number of Business Displacements	0	1	1
Planned Future Development Impacts (acres)	0	19	4
Environmental, Watershed, and Park Land Impacts (acres)	0	198	68
Cost - includes construction, ROW, utility relocation	0	\$391M	\$424M
Enhances Regional Mobility			
Satisfies Travel Demand			
Enhances Safety			
Supports Future Regional Economic Growth			



# EVALUATION MATRIX

#### FM 1827 TO CR 559

Evaluation Category	No Build	Green Alignment	Red Alignment
Number of Residential Property Impacts	0	10	12
Number of Residential Displacements	0	14	10
Number of Business Impacts	0	22	0
Number of Business Induced Displacements	0	6	0
Number of Business Direct Displacements	0	116	19
Number of Business Displacements	0	122	19
Planned Future Development Impacts (acres)	0	42	105
Environmental, Watershed, and Park Land Impacts (acres)	0	16	29
Cost - includes construction, ROW, utility relocation	0	\$452M	\$353M
Enhances Regional Mobility			
Satisfies Travel Demand	0		
Enhances Safety			
Supports Future Regional Economic Growth	0		

Criteria Rating Scale							
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria			

#### CR 559 TO HUNT COUNTY LINE

Evaluation Category	No Build	Green Alignment	Red Alignment
Number of Residential Property Impacts	0	12	7
Number of Residential Displacements	0	39	3
Number of Business Impacts	0	4	2
Number of Business Induced Displacements	0	0	0
Number of Business Direct Displacements	0	27	1
Number of Business Displacements	0	27	1
Planned Future Development Impacts (acres)	0	0	0
Environmental, Watershed, and Park Land Impacts (acres)	0	35	44
Cost - includes construction, ROW, utility relocation	0	\$435M	\$404M
Enhances Regional Mobility			
Satisfies Travel Demand			
Enhances Safety			
Supports Future Regional Economic Growth			

#### **TUCKER HILL AND STONEBRIDGE - LOOKING WEST**

These illustrative renderings are conceptual and subject to change. Sound walls will only be considered if they are determined reasonable and feasible in an environmental study.







#### **HEATHERWOOD - LOOKING WEST**

These illustrative renderings are conceptual and subject to change. Sound walls will only be considered if they are determined reasonable and feasible in an environmental study.







#### WILLOW WOOD- LOOKING EAST

These illustrative renderings are conceptual and subject to change. Sound walls will only be considered if they are determined reasonable and feasible in an environmental study.









# HOW TO PROVIDE INPUT

Please fill out a survey about the freeway options for US 380 in Collin County.

#### YOU CAN PROVIDE INPUT BY:



USING YOUR PHONE
Visit www.Drive380.com



USING A COMPUTER

Computers are available here, or you can fill out the comment form at home.



FILLING OUT a comment form.

COMMENTS MUST BE MADE BY MAY 24, 2019





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# MICHELLE RAGLON TXDOT PUBLIC INFORMATION OFFICER

MICHELLE.RAGLON@TXDOT.GOV

(214) 320-4480







# THANKYOU!

PLEASE VISIT

WWW.DRIVE380.COM

FOR MORE INFORMATION





# COMMENT STATION





# RIGHT OF WAY





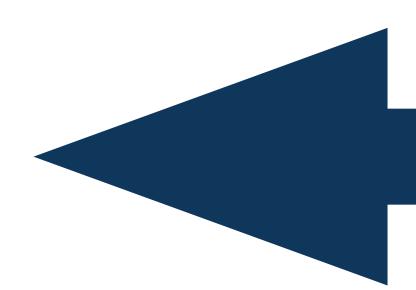
# THIS WAY TO PRESENTATION

BOARDS AND EXHIBITS WILL BE AVAILABLE FOR VIEWING AFTER THE PRESENTATION





# THIS WAY TO PRESENTATION



BOARDS AND EXHIBITS WILL BE AVAILABLE FOR VIEWING AFTER THE PRESENTATION





# REGISTRATION