



# EVALUATION CRITERIA & PROCESS

## How we got to Alternatives A & C

Process required by the National Environmental Policy Act (NEPA)

Our iterative process involved

- **initial scoping discussions**
- collaboration regarding **mobility improvement concepts** to be evaluated and the project's purpose and need
- **evaluation of the concepts through a screening process**
- carrying forward for further study **the concepts which best met the project purpose and need**



## A COMMUNITY DRIVEN EFFORT



**From August 2012 to  
October 28, 2015:**

- **Over 54 Stakeholder meetings**
- **12 Citizen workshops**
- **5 Open Houses**
  - *5 Virtual Open Houses*
- **530 official public comments**



### **Community Outreach is our Priority**

We have expanded our efforts past the requirements of the National Environmental Policy Act (NEPA)



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## Mobility Concepts

- **Concept A** – US 290 Depressed Mainlanes
- **Concept B** – US 290 Mainlanes north of creek without Direct Connector ramps
- **Concept C** – US 290 Mainlanes north of creek with Direct Connector ramps
- **Concept D** – US 290 Express Lanes with frontage roads
- **Concept E-1** – Minimum improvements
- **Concept E-2** – Minimum improvements
- **Concept F** – Parkway Concept
- **2007 Alternative**– conventional highway with frontage roads and Direct Connector ramps at the Y
- **Transportation System Management (TSM)**
- **Transportation Demand Management (TDM)**
- **No-Build Alternative**



# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Process: Phase 1

### Phase 1

- Does the concept meet the Purpose & Need for the project? *Completed*



# EVALUATION CRITERIA & PROCESS

## Phase 1 Evaluation Screening

Purpose and Need Performance Criterion	Measure	Concept A	Concept B	Concept C	Concept D	Concept E-1	Concept E-2	Concept F	TSM Concept*	TDM Concept*	2007 Mediation Alt.	No-Build
<b>Improve mobility and operational efficiency</b>	Reduces conflict between local and through traffic in the corridor (barrier separation, control of access, grade separation, driveway improvements)	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
	Reduces travel times (Signal improvements, improve loss of service, improve intersection efficiency)	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No
<b>Increase multimodal travel options for people and goods</b>	Provides opportunity for multimodal travel options (transit, bicycle and pedestrian accommodations)	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
<b>Improve safety and emergency response</b>	Reduce crashes (Reduction in conflict points, grade separation, driveway improvements)	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
	Serves as a reliable route for emergency response organizations (Signal improvements, control of access, adequate shoulder widths)	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
<b>CARRY FORWARD TO SECONDARY SCREENING?</b>		Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes

\*TSM and TDM Concepts were eliminated as stand-alone concepts; however, elements of TSM and TDM can be included with any concept.



# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Decision: Phase 1

### **Phase 1: Concepts not meeting Purpose & Need**

- Concepts E-1, E-2, TSM and TDM are not moving forward.
- **All other concepts move forward to phase 2 screening.**



# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Process: Phase 2

### Phase 2

- Analyze the concepts using the Purpose & Need and other performance measures such as travel time, reliability for emergency response, and multimodal opportunities.

*Completed*



# EVALUATION CRITERIA & PROCESS

## Phase 2 Evaluation Screening

**LEGEND**

- Concept with highest score
- Concept with lowest score
- The No-Build Alternative must be carried forward in the Evaluation score

Performance Measures	Criterion	Evaluation Parameters	Evaluation Parameters (Units)	Concept A	Concept B	Concept C	Concept D	Concept F	2007 Mediation Alt.	No-Build
Improve mobility and operational efficiency	Improves US 290 operational efficiency - reduce travel time during peak hour for 2035 traffic	WESTBOUND MAIN LANES: Travel time along WB US 290 main lanes from Old Fredericksburg Rd to Circle Dr, PM Peak	Minutes	6.7	5.6	5.2	8.2	6.3	19.6	29.0
		WESTBOUND FRONTAGE ROADS: Travel time along WB US 290 FTG RD from Old Fredericksburg Rd to Circle Dr, PM Peak	Minutes	13.2	10.6	10.3	18.7	n/a*	12.7	29.1
		EASTBOUND MAIN LANES: Travel time along EB US 290 main lanes from Circle Dr to Old Fredericksburg Rd, AM Peak	Minutes	11.5	10.9	11.9	10.7	19.0	13.3	34.6
		EASTBOUND FRONTAGE ROAD: Travel time along EB US 290 FTG RD from Circle Dr to Old Fredericksburg Rd, AM Peak	Minutes	12.6	11.3	11.4	13.8	n/a*	18.5	35.8
	Improves SH 71 operational efficiency - reduce travel time during peak hour for 2035 traffic	WESTBOUND MAINLANES: Travel time along WB US 290 and SH 71 from Old Fredericksburg Rd to Silvermine Dr, PM Peak	Minutes	5.3	4.6	3.9	9.9	5.8	3.7	25.3
		WESTBOUND FRONTAGE ROADS: Travel time along WB US 290 and SH 71 from Old Fredericksburg Rd to Silvermine Dr, PM Peak	Minutes	9.4	6.8	6.8	9.5	n/a*	7.2	25.4
		EASTBOUND MAINLANES: Travel time along EB SH 71 and US 290 from Silvermine Dr to Old Fredericksburg Rd, AM Peak	Minutes	4.0	7.4	4.1	9.7	4.8	4.2	32.2
		EASTBOUND FRONTAGE ROAD: Travel time along EB SH 71 and US 290 from Silvermine Dr to Old Fredericksburg Rd, AM Peak	Minutes	10.0	8.8	7.6	11.1	n/a*	8.8	33.4
Increase multimodal travel options for people and goods	Provides opportunity for multimodal travel options	Adds sidewalk, bike/pedestrian elements as part of the project	Yes/No	YES	YES	YES	YES	YES	YES	NO
		Provides opportunity for high capacity transit to utilize the corridor	Yes/No	YES	YES	YES	YES	YES	YES	NO
		Provides opportunity for local bus service to utilize the corridor	Yes/No	YES	YES	YES	YES	YES	YES	NO
Improve safety and emergency response	Corrects geometric deficiencies within project limits	Adds shoulders, separates through traffic from local traffic making frequent turns onto collectors, and corrects sharp horizontal curves	Yes/No	YES	YES	YES	YES	YES	YES	NO
		Proposed design meets FHWA standards for National Highway System (23 CRF 625.4) and TxDOT's Roadway Design Manual and Bridge Design Manual, including associated references	Yes/No	YES	YES	YES	YES	YES	YES	NO
	Serves as a reliable route for emergency response organizations	Adequate ramps and detour route for emergency vehicles or alternate route due to accidents	Yes/No	YES	YES	YES	YES	NO	YES	NO
Potential displacements	Minimize residential displacements	Number of residential displacements	Each	0	0	0	0	0	0	0
	Minimize commercial displacements	Number of commercial displacements	Each	0	0	0	0	7	0	0
<b>CARRY FORWARD TO ALTERNATIVE DEVELOPMENT?</b>				<b>YES</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>

\*Concept F does not have continuous frontage roads





# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Decision: Phase 2

### Phase 2: Expanded Purpose & Need and Additional Performance Measures

- **Concepts A & C best meet the expanded Purpose & Need and additional performance measures and are moving forward.**
- Concept B and Concept C will advance as one concept with a provision for direct connector ramps at the US 290/SH 71 intersection to preserve additional capacity as traffic demand increases.



# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Decision: Phase 2

### Phase 2: Expanded Purpose & Need and Additional Performance Measures

- Concept D provides very limited mobility improvements and is not advancing.
- Concept F limits mobility improvements and does not satisfy the safety aspect of the expanded Purpose & Need, so it is not advancing. It does not provide a reliable route for emergency vehicles or an alternate route during times of accidents.
- The 2007 Alternative does not provide the desired travel time improvements and is not advancing.



OAK HILL  
P A R K W A Y

# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Process: Phase 3

### *Schematic and Environmental Process*

The study will include:

- **Engineering development of schematics of A & C**
- **Alternatives analysis**
  - Evaluate the alternatives for a wide variety of parameters
  - Include a No Build alternative in all analyses
- **Detailed description of the affected environment**
  - Natural resources
  - Human environment
- **Evaluation of potential impacts**
- **Recommend a preferred alternative**



# EVALUATION CRITERIA & PROCESS

## Evaluation Screening Process: Phase 3

### *Schematic and Environmental Process*

- At today's open house, we'll have a draft blank evaluation matrix for your review and comment.
- After the open house, the team will fill out the matrix according to the data collected, and it will indicate the preferred alternative.
- This matrix will be available for review and comment with the release of the Draft Environmental Impact Statement. We anticipate that occurring in mid 2016.