

# Final Report

# June 2018







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## 1.0 INTRODUCTION

Between January 2017 and May 2018, the Killeen-Temple Metropolitan Planning Organization (KTMPO), in partnership with the Texas Department of Transportation (TxDOT), contracted with a consultant to conduct a study to evaluate the feasibility of upgrading and possibly relocating a portion of U.S. Highway (US) 190 in Bell County, Texas. The portion of US 190 studied extends from Farm-to-Market Road (FM) 1670, west of Interstate 35 (I-35), to the northern limit of the planned Rogers Relief Route in the eastern portion of the county. Figure 1 shows the US 190 study area, as originally established, in relation to Bell County and the cities of Belton, Temple, Little River-Academy and Rogers. This report serves to document the purpose, process, findings, and recommendations of the US 190 Feasibility Study.

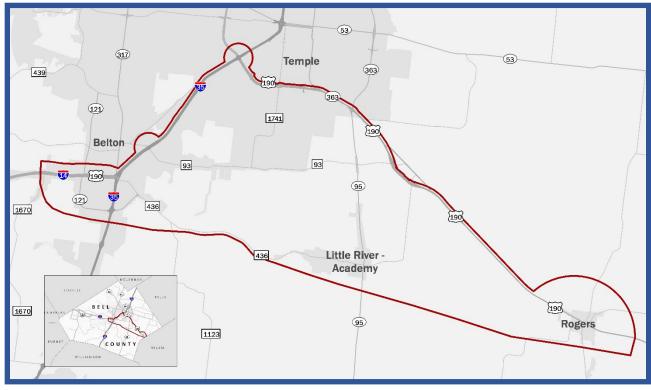


Figure 1 • Initial Study Area



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## 2.0 PROPOSED FACILITY AND DESIGN ASSUMPTIONS

The feasibility study included the evaluation of proposed route options that would begin at FM 1670, west of I-35, and end at the intersection of the Rogers Relief Route north of the City of Rogers. Within these limits, US 190 would be upgraded to a controlled access freeway. Consistent with TxDOT policy, it was assumed that frontage roads would be provided in those areas where an existing roadway would be upgraded. In new location ("greenfield") areas, it was assumed that frontage roads would not be provided.

For purposes of this feasibility study, major design assumptions included:

- two main lanes in each direction (except under one scenario along I-35);
- two to three lane frontage roads, where provided;
- 70 mile per hour (mph) main lane design speed;
- frontage roads to be constructed, as noted above, in accordance with TxDOT's frontage road policy;
- overpass vertical clearance not less than 18'-6";
- direct connectors to/from I-35; and,
- 400-foot right-of-way (typical) width.

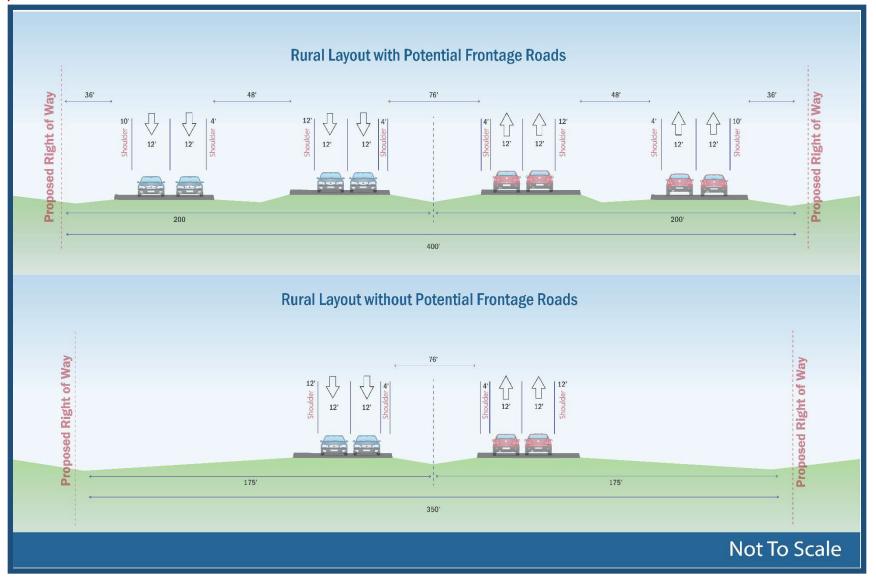
Additional right-of-way would not be required along existing I-14, I-35 or US 190 west of 5<sup>th</sup> Street in Temple (approximately 2.6 miles east of I-35) as these roadways are already built to interstate highway standards and would require little or no improvement.

Four distinct conceptual layouts of the roadway were developed. Depending upon site conditions, various combinations of these configurations were assumed along each of the route options. These configurations are shown in Figures 2 and 3, below. It is important to note that although a barrier-separated section with a reduced right-of-way requirement (350 feet) was developed for use in highly constrained areas, as was a reduced-width rural section without frontage roads, for cost estimating and engineering/environmental analysis purposes, a right-of-way width of 400 feet was assumed (consistently) for all areas where additional right-of-way would be required.



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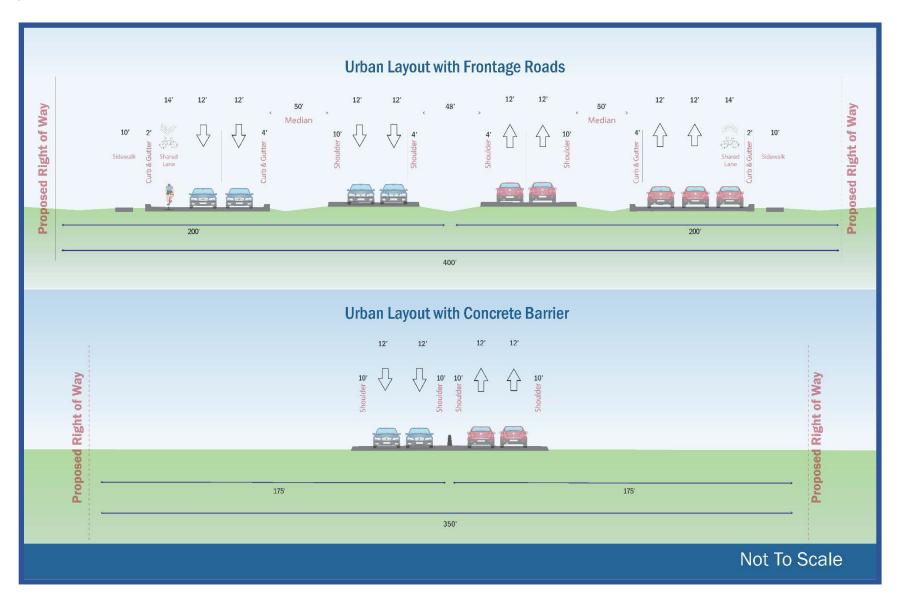






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Figure 3 • Conceptual Configurations (cont.)



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## 3.0 PROCESS OVERVIEW

An iterative and interactive process was used throughout the feasibility study to identify, evaluate and vet route options. To facilitate community and stakeholder involvement and validate study findings, a working group was formed, project goals and objectives were established, and a public open house was held.

#### 3.1 US 190 WORKING GROUP

Although sponsored by KTMPO, the overarching goal was for the US 190 Feasibility Study to be community-driven. To that end, KTMPO established a working group to guide the study and provide input. KTMPO selected the working group by identifying and reaching out to key organizations and stakeholders throughout the project study area. Each organization was asked to recommend two representatives to join the working group, including a primary representative and a back-up if the first person was unable to attend. Working group membership included elected officials, city/county representatives, other stakeholders (such as the Farm Bureau) and the public. Although the organizations represented in the working group did not change at each meeting, original members occasionally sent substitutes. Others who were not part of the working group were permitted to be observers during meetings and leave comment forms.

The goals and objectives, route options, and evaluation criteria presented in this report were developed with input from and the concurrence of the working group.

The working group met four times throughout the course of the study:

- April 28, 2017 (Identified goals and objectives; identified "conceptual route options");
- July 14, 2017 (Narrowed the range of conceptual route options to identify "preliminary route options"; established evaluation criteria);
- September 22, 2017 (Reviewed/discussed the preliminary route option evaluation findings; identified "primary route options"); and,
- April 4, 2018 (Reviewed open house input and primary route option evaluation findings, and discussed the group's recommendations).

At Working Group Meeting #4, a representative from U.S. Rep. John Carter's office attended, along with Texas Rep. Hugh Shine. Rep. Shine delivered a comment in support of the Pink +2 Route. A representative from U.S. Rep. John Carter's office also attended WG #2.

A complete list of US 190 working group members is found in Appendix A. Also included in Appendix A are summaries of each working group meeting.

#### 3.2 GOALS AND OBJECTIVES

The study goals and objectives, as identified by the working group are shown in Table 1. These goals and objectives served as the basis for development of the evaluation criteria used to screen the field of preliminary options and, subsequently, identify the primary route options and recommended route options.



#### Table 1 • Study Goals & Objectives

#### Enhance east/west connectivity

- Improve access to Little River- Academy and Rogers
- Utilize existing roadways as much as possible
- Provide more reliable travel times
- Enhance access to schools, hospitals, and emergency services

Accommodate existing and projected traffic volumes

- Relieve existing congestion
- Accommodate traffic resulting from ongoing growth
- Plan for and mitigate future traffic congestion

#### Enhance safety

- Route large trucks away from populated areas
- Enhance access and reliability for first responders (EMS, firefighters, police)

#### Support growth and economic development

- Positively impact businesses (especially small businesses)
- Promote economic development
- Minimize construction-phase impacts

Provide cost-effective and environmentally-efficient options

Minimize effects on private property

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## 4.0 IDENTIFICATION OF ROUTE OPTIONS

A multi-stepped process was utilized to identify, refine and evaluate US 190 route options. The process began with identification of "conceptual route options." The full set of conceptual route options was then evaluated in order to identify "preliminary route options" and, subsequently, "primary route options." Each step in the process is described below.

Step 1 – Identify Conceptual Route Options – Conceptual route options were identified through a facilitated group exercise at the April 28, 2017 working group meeting. At that meeting, the working group was divided into three smaller groups. Each group was provided with a map of the study area showing constraints such as existing development, floodplains, and waterways. Each group was provided with markers and was asked to identify, discuss, and draw possible routes for US 190. Although a pre-determined study area – identified by KTMPO and TxDOT in advance of the working group meeting – was shown on the maps, the groups were given the latitude to draw routes extending outside the study area.

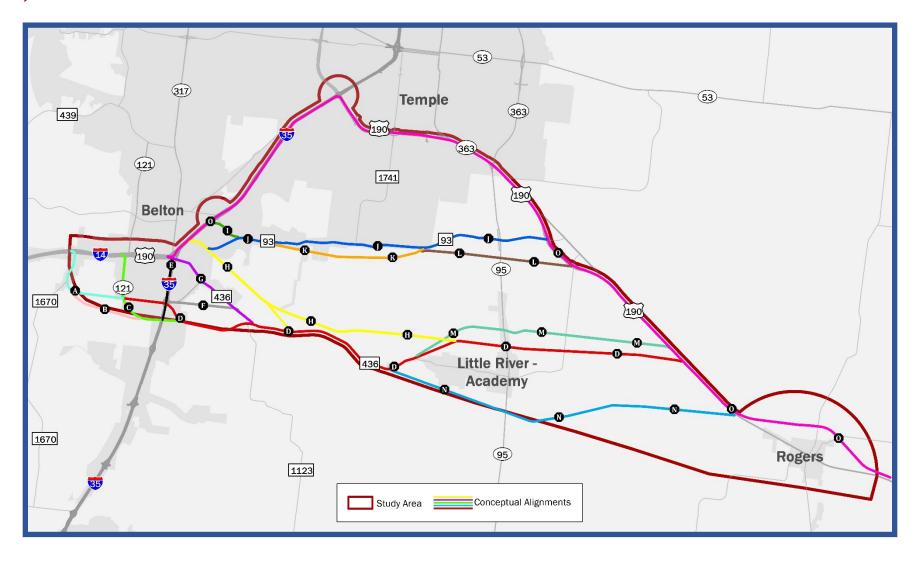
After the small group work sessions, each group "reported out" to the larger group. Although routes differed from table to table, commonalities were apparent between the three groups. Each small group identified a route that followed existing US 190, a central route (either following existing FM 93 or generally paralleling it), and a southern route utilizing a combination of existing FM 436 and new location around Little River-Academy.

Step 2 – Compile and Map Options – The next step in the process was for the project team to compile the conceptual route options and develop a (draft) conceptual route options map. Similar options were combined to minimize redundancy, with all concepts identified by the working group captured on the map. Figure 4 shows the conceptual routes as identified by the working group.



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Figure 4 • Conceptual Route Options





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Step 3 (*Narrow the Range of Route Options*) – The various conceptual route options identified by the working group (denoted by letter identifiers on Figure 4) combined to create a total of 40 unique "end-to-end" route options. At the second working group meeting (July 14th), the group was again asked to consider route options. This time the goal was to reduce the number of route options based on the goals and objectives to a more manageable sub-group that would later be evaluated in more detail. A facilitator from the project team led the working group (working in three smaller groups) through a discussion of the pros/cons of each conceptual route option. For purposes of this discussion, the options were organized by those in 1) the western portion of the study area (those generally in the vicinity of I-35), 2) the northern portion (including the existing US 190 alignment and those in the vicinity of FM 93), and 3) the southern portion of the study area (including FM 436 and routes around Little River-Academy). After the facilitator's presentation, each of the three smaller groups discussed the route options, reached consensus regarding options recommended for elimination, and then reported out to the larger group.

Discussions during this group exercise led to several modifications to the route options:

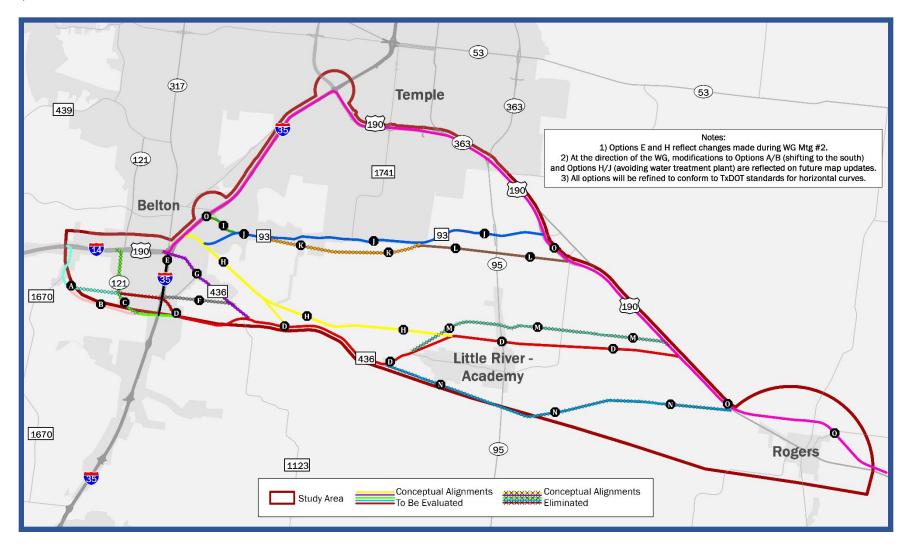
- Option E was extended to the south to intersect with Options B and C.
- A connection from Option H to Option D was added.
- Option J was modified to avoid impacting the expansion site for an existing water treatment plant.
- In addition, the project team was directed to explore shifting Options B and C further to the south (possibly along Shanklin Road – south of the Bell County Exposition Center and outside of the study area).

The route options endorsed by the working group are shown in Figure 5. This figure reflects the changes to Options E and H discussed above. The possible modifications to Options B, C, and J required more in-depth exploration which occurred in conjunction with Step 4.



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Figure 5 • Modified Conceptual Route Options





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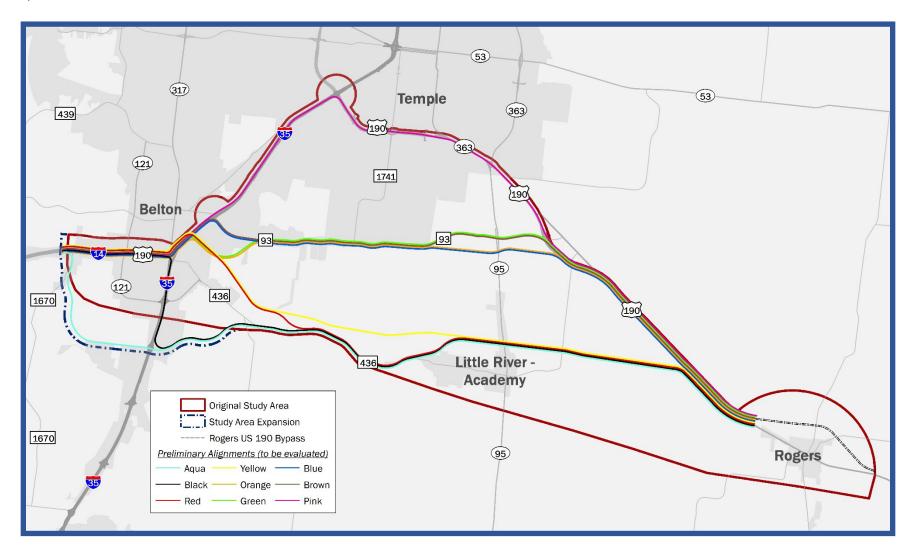
Step 4 (Refine the Route Options and Identify Preliminary Options) – During Step 4, the project team shifted Options B, C, and J per the direction of the working group. Shifting Options B and C resulted in an expansion to the southwest corner of the US 190 study area. Additionally, during Step 4, the team identified the various combinations of options remaining after Step 3 in order to establish the full range of end-to-end route options. In total, nine unique, end-to-end route options were identified. Up to this point in the route options development process, options had been identified without consideration of engineering and geometric requirements. Applicable design standards were applied during Step 4, particularly those pertaining to horizontal curve radii. The route options were refined accordingly.

The nine end-to-end route options, as refined and adjusted during Step 4, constituted the set of preliminary route options evaluated during the course of the US 190 Feasibility Study. The nine preliminary route options and the associated expanded study area are shown in Figure 6.



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Figure 6 • Preliminary Route Options and Expanded Study Area





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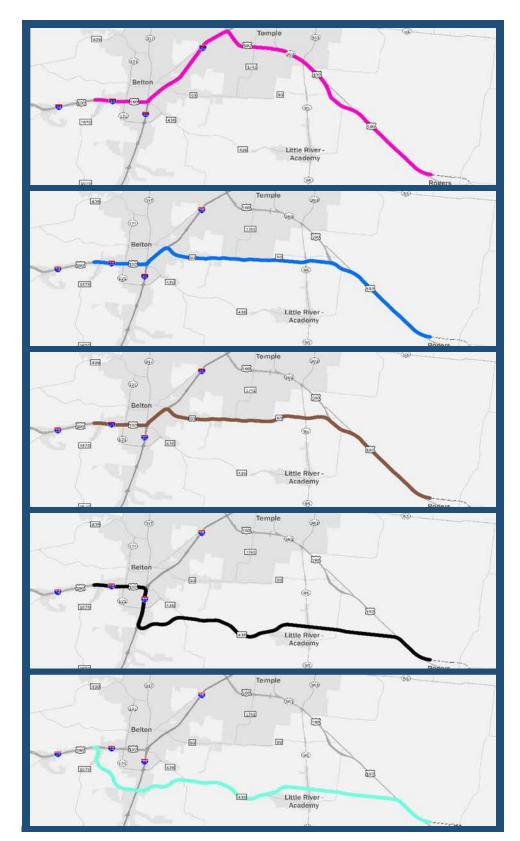
Step 5 (Preliminary Route Options Evaluation) – The project team screened the nine preliminary route options between working group meetings 2 and 3 using the evaluation criteria approved by the working group. The team concluded that the results of the screening process were inconclusive (the results were too similar when comparing one option to another to be used for the intended purpose). The screening results were presented at the third working group meeting (September 22, 2017); the working group concurred with the team's assessment.

Step 6 (Identification of Primary Route Options) – In the absence of meaningful screening results, during its September meeting the working group participated in a facilitated exercise to review the preliminary route options and identify the primary route options (those options to be studied further). During this exercise, the working group was divided into smaller groups by table.

Each table discussed the various route options and identified those which they recommended to carry forward. Table discussions focused on the goals and objectives of the feasibility study, as well as potential effects – both positive and negative – of the various route options. Each group reported their recommendations to the larger group. A member of the project team then led the entire working group in a discussion of the results which led to consensus and identification of five primary route options. The five primary route options, which are designated by color (pink, blue, brown, black, and aqua), are shown in Figure 7. Additional information about the process that led to identification of the route options can be found in the Preliminary Route Options Technical Memorandum (Appendix B) and the Primary Route Options Technical Memorandum (Appendix C).









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## 5.0 PRIMARY ROUTE OPTIONS EVALUATION

The five primary route options were presented for public review and comment at an open house on November 30, 2017. Subsequent to the open house, the options were screened using a more refined set of criteria, detailed cost estimates were developed, and travel demand modeling was performed. While the evaluation criteria used during this second screening were more refined (intended to yield more meaningful information than was obtained from the screening of the preliminary route options – see Section 4.0, Step 5), the criteria remained true to the goals and objectives established by the working group.

It should be noted that two scenarios were evaluated for the pink route. The first scenario, herein referred to as the "Pink Route," assumed that no reconstruction would be required along existing I-14, I-35 or US 190 west of 5<sup>th</sup> Street in Temple. The second scenario assumed the addition of one main lane in each direction on I-35. This scenario is herein referred to as the "Pink+2 Route" and is consistent with KTMPO's Metropolitan Transportation Plan. Because the right-of-way footprint is the same for the Pink Route and the Pink+2 Route, for most evaluation factors there is no difference between the two scenarios. However, notable differences are realized when evaluating cost and travel demand.

The input received from the public at the open house, results of the travel demand modeling, and the findings from the ongoing goals/objectives screening are summarized below. Construction cost estimates for each of the route options are also presented.

#### 5.1 PUBLIC INPUT

An open house was held from 5:00 – 7:30 PM on Thursday, November 30, 2017. The open house was held in the Assembly Hall of the Bell County Expo Center. The purpose of the open house was to solicit public input on the proposed project and the five primary route options. It should be noted that the two scenarios for the Pink Route were presented as a single option. A total of 207 people registered their attendance at the open house by signing in. In conjunction with the open house, an online survey was available as an additional means of providing public input. The complete Open House Summary is included in Appendix D.

In total, 428 online surveys were completed and 75 written comments were submitted either at the public meeting or by the December 15, 2017, deadline for submission of comments. Overall, the Pink Route received the most support from the public. The Black Route was the most opposed.

To objectively evaluate the comments and the level of public support/opposition, the team reviewed each public comment and determined whether it expressed support, opposition or was neutral with regard to a specific route option. Typically, those comments that were classified as neutral either asked specific questions or made a general/specific comment about a route option without expressing either support or opposition.

The next step was to tally the total number of comments in support/opposition by route option (neutral comments were not factored into the evaluation process). Each route option was then ranked from 1 to 5 for "most support" and "most opposition." For support, the option with the most support was given a ranking of 1, the option with the second highest number of supportive comments was ranked as 2, etc. Inversely, for opposition, the option with the least amount of opposition was ranked as 1, the option with the second lowest number of negative





comments was ranked as 2, etc. For each option, the rankings for support and opposition were then combined to create an overall score. Table 2 depicts the rankings/score for each primary route option.

#### Table 2 • Public Outreach Rankings

Route Option	Support Ranking	Opposition Ranking	Overall Score
Pink	1	1	2
Brown	3	2	5
Blue	4	2	6
Aqua	2	4	6
Black	5	5	10

Using this ranking/evaluation methodology, those options with a combination of the most support/least opposition received the lowest (best) overall score. These scores were considered by the working group and study team when determining which options to recommend for further development.

This methodology was effective for purposes of quantitatively ranking the route options. Nonetheless, it should be noted that it exaggerates the differences in public opinion regarding the route options since, with the exception of the Pink Route (which had considerable support and the least opposition by a wide margin) the raw numbers (total number of people in support/opposition) for each route option were very close. It should also be noted that comments received at the open house expressed greater opposition to the Brown and Blue Routes than to the Aqua and Black Routes. However, the online survey indicated more support for the Brown and Blue Routes. The methodology used to establish the rankings in Table 2 blended the input received at the open house and the input received through the online survey. Overall, the methodology accurately identifies the Pink Route as being the most supported/least opposed and the Black Route as being the least supported/most opposed.

#### 5.2 TRAVEL DEMAND MODELING

Travel demand modeling was a key aspect of the US 190 Feasibility Study. In total, seven scenarios were modeled: Pink, Pink+2, the other four primary route options (Black, Brown, Blue and Aqua) and the no-build (existing layout of US 190) scenario. The modeling served to forecast future traffic conditions along US 190 and other roadways within the study area. The process focused on two primary measures of transportation system performance: Vehicle Miles of Travel (VMT) and Vehicle Hours of Travel (VHT).

VMT is a measure of cumulative distance traveled by all of the trips within the study area. It provides a measure of the total magnitude of travel and provides an indication of air quality and other quality-of-life measures. VHT is a measure of the cumulative duration of all trips within the study area. It provides an indication of system delay, speed, and congestion impacts. In addition to the two performance measures described above, the ratio of roundtrip free-flow travel time to peak-period congested travel time was compared between the cities of Belton and Rogers (in the east-west direction) and along I-35 between the cities of Temple and Belton (in the north-south direction). The results of travel demand modeling conducted in conjunction with the US 190 Feasibility Study are documented in Appendix E. Compared to the no-build



scenario, the results indicate that the Pink+2 and Aqua Routes have the greatest reduction on travel time in the study area, and the Aqua Route provides the least congested route between Belton and Rogers.

#### 5.3 COST ESTIMATES

The total estimated costs of the route options are presented in Table 3 in 2018 dollars. The total estimated cost of the route options varies from a low of approximately \$361 million (Pink) to a high of \$534 million (Brown).

Table 3	•	Estimated	Cost of	Route	Options
					• • • • • • • •

Route Option	Total Miles	Roadway	Structures (Bridges)	Structures(DC)	*Misc.	ROW Acquisition	**Contingency	Total
Pink	21.9	\$104,328,053	\$38,119,424	\$120,000,000	\$5,362,533	\$39,809,019	\$93,733,504	\$361,200,000
Pink+2	21.9	\$115,518,631	\$35,995,124	\$120,000,000	\$5,362,533	\$39,809,019	\$98,391,506	\$377,200,000
Blue	19.1	\$144,884,318	\$39,263,887	\$180,000,000	\$1,500,000	\$75,034,659	\$127,976,872	\$513,900,000
Brown	19.3	\$150,379,780	\$39,263,887	\$180,000,000	\$1,500,000	\$88,604,646	\$129,900,283	\$534,000,000
Black	20.5	\$114,170,344	\$40,573,837	\$180,000,000	\$600,000	\$24,605,073	\$117,370,463	\$427,100,000
Aqua	19.6	\$138,952,935	\$41,281,137	\$150,000,000	\$300,000	\$57,926,558	\$115,686,925	\$454,600,000

\* Includes the cost of traffic signals and sidewalk improvements. \*\* To allow for inflation and other unknowns, a 10 percent mobilization contingency, a 10 percent traffic control contingency, and a 15 percent utility relocation contingency was assumed.

As reflected in Table 3, the Pink, Pink+2, and Black routes are the least expensive routes overall, mainly due to utilization of existing I-35 and US 190 infrastructure (that would require little or no improvement) and existing direct connectors that could be utilized. Because the Aqua route mostly avoids the use of existing facilities, it has higher roadway and right-of-way costs. The Blue and Brown routes are similar in cost, as they are identical until the split at the BNSF railroad (the Temple city limits). The Blue and Brown Routes are the most expensive to build because of estimated right-of-way costs and the lack of existing direct connectors to/from I-35 that could be utilized.

Additional detail pertaining to the cost estimates is provided in the Construction Cost Estimate Technical Memorandum located in Appendix F.

#### 5.4 GOALS AND OBJECTIVES SCREENING/EVALUATION MATRIX

As discussed in Section 4.0 (Step 5), the initial goals and objectives screening conducted for the preliminary options proved to be inconclusive. Thus, prior to screening the primary route options, the project team refined the evaluation criteria providing more sensitivity in the ranking thresholds. Results of the travel demand modeling and open house input were also





factored into the evaluation process and the estimated construction costs were considered. A matrix was prepared to present the findings of the evaluation process (Table 4). For ease of reference and clarity, the matrix was color coded using red, yellow and green. If a route scored favorably for a specific criteria, it was colored green; unfavorable results were colored red; and neutral or mid-range results were colored yellow. So, the more green shown on the matrix, the better a route performed.



Table 4 • Evaluation Matrix

	PINK	PINK+2	BLUE	BROWN	BLACK	AQUA
ENHANCE EAST/ WEST CONNECTIVITY						
Results in improved access to Little River-Academy and Rogers						
Maximize use of existing roadways	100%	100%	82%	100%	51.20%	33.20%
Reduce AM peak roundtrip travel time between FM 1670 at I-14 to north of Rogers	79.4	76.6	69.5	69.3	66.3	59.2
(minutes)						
Provides reliable travel times	0.64	0.59	0.62	0.60	0.66	0.71
Results in enhanced access to schools, hospitals, and emergency services						
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES						
Provides additional capacity						
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levels ("Build" alternative compared to "No-Build" alternative)	-0.10%	-2.90%	-1.50%	-1.60%	-1%	-3.70%
ENHANCE SAFETY						
Route avoids populated areas	2.3	2.3	1.9	2	0.7	0.4
Enhance access and reliability for first responders						
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT						
Promote economic development						
Minimizes use of existing roadways	100%	100%	82%	100%	51.20%	33.20%
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS						
Maximizes use of existing ROW (thereby, minimizing ROW required)	100%	100%	82.20%	100%	51.20%	33.20%
Minimizes number of divided parcels	0	0	2	0	25	36
Minimizes potential for residential displacements	16	16	27	32	32	69
Minimizes potential for noise and neighborhood impacts	83	83	90	95	54	111
Minimizes potential for non-residential displacements	12	12	17	18	11	17
Minimizes potential impacts to floodplains (Acres)	31.7	31.7	56.7	58.7	56.9	66.5
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)	12	12	18	17	20	25
Minimizes potential impacts to wetlands (Acres)	10.1	10.1	16.9	16.5	10.6	12.9
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)	41.7	41.7	83.6	82.5	179.8	246.5
Demonstrated Public Support	2	2	6	5	10	6
ESTIMATED CONSTRUCTION COST						



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As can be seen in Table 4, the matrix highlights the differences between the various route options; however, the similarities between the options are too great to use the matrix as the definitive (sole) tool for identifying the recommended option(s). Instead, the information presented in the completed matrix was considered by the study team and working group when formulating study findings and recommendations.

### 6.0 STUDY FINDINGS

The US 190 Feasibility Study, conducted between January 2017 and May 2018, led to the identification of several key findings. This report serves to document the findings, listed below, so that they may be considered by future project planners and decision-makers:

- The Pink Route is most supported/least opposed by the public.
- At this time, the general public does not see the need to relocate US 190.
- The Pink+2 Route option confirms regional planning efforts calling for the addition of a travel lane in each direction on I-35. With the additional lanes, I-35 traffic can be accommodated through the 2040 planning horizon.
- Future US 190 improvements are compatible with and complement the Rogers Relief Route.

If, in the future, it becomes necessary to relocate US 190, a fresh look at the primary route options identified in this report is recommended to assess land use and environmental conditions at that time.

### 7.0 WORKING GROUP RECOMMENDATIONS

When formulating its recommendations, the working group considered the results of the open house, the goals and objectives screening/evaluation documented in Table 4, and other factors (specifically, professional judgement and preferences of the group as a whole). At its April 4, 2018, meeting the working group recommended that only the Pink+2 Route be carried forward into future studies/phases of project development. Incorporated within the group's recommendation is a recommendation to modify KTMPO's 2040 Metropolitan Transportation Plan by adding other improvements as necessary to upgrade US 190 to interstate standards between I-35 and the Rogers Relief Route.

### 8.0 NEXT STEPS

The US 190 Feasibility Study was conducted at the request of KTMPO and local officials to gauge the level of public support for the concept and identify potential route options. The working group was created to guide the study and provide input. This report serves to document the findings of the study as well as the recommendation of the US 190 Working Group. The information contained in this report will be considered by KTMPO and its Transportation Planning Policy Board as transportation funding decisions are made and the regional transportation plan (2040 Metropolitan Transportation Plan) is updated in the future.



# **Appendix A – Working Group Materials**

- Working Group Membership List
- Summary of Working Group Meeting #1
- Summary of Working Group Meeting #2
- Summary of Working Group Meeting #3
- Summary of Working Group Meeting #4

US 190 Feasibility Study Working Gro	oup Membership
--------------------------------------	----------------

Member's Name	Representing
Jon H. Burrows	Bell County
Sam A. Listi	City of Belton
Brynn Myers	City of Temple
Tammy Cockrum	City of Rogers
David Olson, PE	City of Killeen
David Blackburn	Temple Economic Development Corporation
Joe Craig	Rogers Independent School District
Michael Harmon	Bell County Office of Emergency Management
John Crutchfield III	Greater Killeen Chamber of Commerce
Kevin Sprinkles	Academy Independent School District
John Kiella	Belton Independent School District
Michael Moon	Texas Farm Bureau
Lynette Batts	Environmental Justice Community
Kirk Thomas	Killeen Independent School District
Robin Battershell	Temple Independent School District
Bob Browder	Temple Chamber of Commerce
Cynthia Hernandez	Belton Economic Development Corporation
Drew Lanham	City of Little River-Academy
Nicole Stairs	Belton Chamber of Commerce

# **Meeting Summary**



# U.S. 190 Working Group Meeting #1

April 28, 2017, 9:00 - 11:00 AM

# Opening Remarks and Introductions Cheryl Maxwell, Director • KTMPO

Cheryl Maxwell welcomed attendees and asked all participants to introduce themselves. Maxwell explained that the purpose of the Working Group (WG) is to obtain feedback from members of the community who represent a variety of community interests (elected officials, school districts, economic development representatives, and the general public). She asked the WG to apply their knowledge and expertise to avoid any potential issues as we work through the US 190 Feasibility Study. She stated that the WG will help identify preliminary route options for the relocation of US 190 and, later in the process, will help to refine those route options and identify a set of recommended route options.

Copies of the meeting agenda and sign-in sheets are found in the **Appendices A** and **B**, respectively. WG members were provided a copy of the study Fact Sheet (**Appendix C**) and Frequently Asked Questions (FAQs) (**Appendix D**).

#### Project Overview

Andy Atlas, Project Manager • CP&Y

Andy Atlas provided an overview of the project. He thanked the WG for their time and explained that later in the meeting there would be a participatory exercise where the project team was counting on their expertise.

**Purpose of Study**: United States Highway (US) 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO) is conducting a feasibility study to explore options for upgrading or relocating US 190 between Farm to Market Road (FM) 1670 and FM 437. The study will investigate creating a more efficient connection to serve the community and improve local mobility.

**Timeline:** The study began February 2017 and is anticipated to take approximately oneyear to complete. Since February, the team has initiated data collection, identified a study area, developed a constraints map, and conducted field investigations to ground-truth the constraints map.

**Study Area:** Atlas described the study area (see **Appendix E**). He explained that the study area was originally identified by KTMPO, but had been expanded slightly by the current study team. He noted that later in the meeting the WG will be asked to begin identifying

possible route options. He stated that those routes can follow existing roads, create new roads, or be a combination of the two. An alignment using existing roads would require the addition of frontage roads, which would require additional right-of-way (ROW). Mr. Atlas emphasized that no route options have currently been identified. He stated that the study area included the potential Rogers bypass due to the possibility of it becoming a terminus for the project.

Anticipated Outcome: Over the course of the study, a range of possible route options will be identified. Later, criteria will be developed/applied to those options in order to narrow the range of options to a subset of refined options. The refined options will then be presented for public comment at an open house. Public input and input from the WG will be used to identify a set of recommended route options. The recommended route options will be the end-product of the current feasibility study.

Should KTMPO and its partners decide to advance the project further in the future, the recommended route options would become the starting point for National Environmental Policy Act (NEPA) studies and subsequent efforts. During the NEPA process, additional public involvement and coordination with state and federal resource agencies would occur.

#### Issues and Opportunities

Group Discussion Facilitated by Lynda Rife • Rifeline

Lynda Rife led the WG through a facilitated discussion about issues and opportunities pertaining to the US 190 corridor. She explained that there were comment forms for observers and encouraged them to write down their comments (See **Appendix F**). She stated there was a comment box at the back of the room to place the forms.

Rife asked the WG to identify transportation problems and issues in the area. The participants expressed the following concerns with US 190:

- Interstate 35 (I-35) backs up all the time
- there is a lot of north-south connectivity, but not much east-west connectivity;
- construction slowdowns;
- dangers from large trucks;
- traffic on FM 93 (FM 93 needs relief);
- lack of access to cities and towns; and
- negative impacts to the economy.

Rife asked if there was a need for bike and pedestrian accommodations; the WG indicated that there was not.

Rife also asked the WG what kinds of improvements they would like to see for US 190. The following goals were identified:

- Congestion management (associated with future traffic projections/demand);
- east-west connectivity;
- safety;
- growth management;
- cost-effective options;
- environmentally efficient option;
- minimize effects on private property (The WG asked how wide would the highway need to be to accommodate the improvements. The project team stated that the typical ROW width would vary between 350-450 feet);
- minimize negative effects on other roads;
- positively impact businesses (especially small businesses); and

• minimize impact on schools, fire, and police services by not cutting off local access.

Rife asked participants to provide real-time responses to live-poll questions to get a sense for what was important to them. The top ranked considerations for the US 190 project were safety (81% strongly agreed), economic development (53% strongly agreed), direct route options (50% strongly agreed) and congestion mitigation (47% strongly agreed). Environmental protection (only 1% strongly agreed) and minimizing impacts to property (only 12% strongly agreed) were not seen as crucial considerations for this project.

#### Review Constraints Map

Stacey Benningfield • CP&Y

Stacey Benningfield explained that the planning process generally begins with identification of constraints. She then reviewed a constraints map of the study area with the attendees.

She stated that the study area contains a diverse range of resources. Some have regulatory protection; others do not. She noted that often those resources that are not protected by regulations, such as churches, are very important to communities so it is important to consider and weigh the impact on all resources. She then discussed key resources in the study area.

**Floodplains:** There are extensive floodplains in the study area. Floodplains are regulated and can be impacted only if the project doesn't have a significant encroachment into the floodplain. For this reason, it is best to cross floodplains where they are narrow (which is also more cost-effective). During the NEPA process, planners must demonstrate that floodplain impacts have been taken into consideration.

**Places of Worship and Cemeteries:** Numerous churches and cemeteries are found within the study area. Benningfield explained that while churches are not necessarily protected (unless historic), they are valued by communities and therefore are avoided, whenever possible, during the route planning and selection process. Cemeteries, however, are protected and are typically considered a "fatal flaw" with regard to route planning and selection.

**Section 4(f) Resources:** Section 4(f) resources include publicly-owned parks, recreation areas, and wildlife refuges as well as properties listed on or eligible for the National Register of Historic Places whether publicly or privately owned. Section 4(f) resources are found in the study area. Section 4(f) resources are regulated and project planners must demonstrate that there are no reasonable and feasible alternatives. It is usually best to avoid these resources, if possible.

**Waters of the U.S. and Wetlands:** Jurisdictional waters of the U.S. and their associated wetlands are regulated under Section 404 of the Clean Water Act. Impacts to these resources require permitting from the U.S. Army Corps of Engineers. During the route planning and selection process, efforts must be made to avoid and/or minimize impacts.

**Community Facilities:** Community facilities such as schools, hospitals, law enforcement and emergency service facilities are not protected (unless historic), but are important to the community. Care is taken during the planning process to avoid impacting these facilities, when possible.

**Hazardous Materials:** Hazardous material sites are considered a constraint because impacting them can result in public health concerns and can be expensive. One site in the study area has been designed by the U.S. Environmental Protection Agency as a "Superfund site" which means it is included on the National Priorities List for clean-up. The site straddles FM 93; clean-up of the site has been initiated and is on-going.

#### Identify Preliminary Routes

Small Group Exercise Facilitated by Lynda Rife

The WG was divided into small groups to identify potential route options. Groups were encouraged to "free think" as they identified possible route options. Even though a study area had been identified, the groups were informed that they were not constrained by the study area. Route options outside the study area could also be identified and would be considered.

WG members were assigned to each group in order to balance between geographic areas. Each group was provided with constraints maps, markers, Post-it notes and fact sheets. Each group was facilitated by a member of the project team. An additional group was established of meeting observers.

Each group was first asked to identify any constraints that may have been missed during the initial review of the area. Then they were asked to develop as many route options as possible. Rife explained that they should brainstorm possibilities. She stated that routes do not need to be perfect – just get them on paper. The study team will take the WG's ideas and apply engineering criteria to make sure they work.

After approximately 40 minutes working independently, each group selected a spokesperson to report their findings to the larger group.

Although the groups worked independently, the recommendations of the groups were quite similar. Each group identified one or more northern, central and southern route options. None of the groups identified route options outside of the study area.

The northern route options generally focused on utilization of existing US 190. The central route options generally utilized FM 93 or a combination of new location (to avoid existing development along FM 93) and existing FM 93. The southern route options focused on upgrading existing FM 436 and potentially Loop 121.

Several groups developed off-shoots or spurs from the existing routes to avoid impacting the Little River-Academy area and providing better connection across I-35. All of the groups expressed the need to minimize floodplain impacts. One of the groups emphasized that the project needs to provide congestion relief for both Temple and Belton. The need to ensure access to local businesses was brought up by several groups in their explanation of route options and spurs.

After the group session, Rife asked two additional live poll questions of the WG. When attendees were asked which issue was most important to them, the top ranked responses were more direct routes (47%), economic development (29%), and safety (18%). Congestion relief (6%) and environmental protection (0%) were not seen as crucial considerations for this project.

The WG was then asked, "As routes are developed, what would your preference for the route be?" Eighty-eight percent (88%) of the WG selected a combination of the two options (i.e. Greenfield is OK, and follow an existing corridor with frontage roads).

#### Evaluation Criteria Survey

Andy Atlas, Project Manager • CP&Y

Atlas explained that a survey is being developed and will be emailed to the WG. The purpose of the survey is to obtain their input with regard to criteria that will be developed and subsequently used to evaluate route options.

#### Future Meetings & Wrap-up

Andy Atlas, Project Manager • CP&Y

- ✓ Working Group Meeting 2: Identify Refined Routes
- ✓ Open House: Solicit Comments on Refined Routes and Evaluation Criteria
- ✓ Working Group Meeting 3: Identify Recommended Routes
   ✓ Working Group Meeting 4: Review of
  - Study Findings and Recommendations

Atlas reviewed the goals for the upcoming WG meetings. The second WG meeting will focus on refined route options and on the criteria to be used to evaluate the refined route options. Following the second WG meeting, the project team will hold an open house to solicit public comments on the refined route options. <sup>1</sup> The third WG meeting will focus on identification of the recommended route options. The fourth WG meeting (possibly via WebEx) will review study findings and recommendations.

When asked by the project team if there were any stakeholders missing from the WG who should be invited to the next meeting, various suggestions were made and noted (i.e. Brazos River Authority, Blacklands Research Center, Clearwater). Places for future meetings were also recommended (i.e. schools, Rogers Community Center). When asked if there was any additional information that attendees wanted from the project team, the following items were requested: a briefing on the 1990s study; typical section renderings that would display the width of the road; population and employment projections; major traffic generators; and community thoroughfare plans. The project team will bring this information to the next WG meeting.

<sup>&</sup>lt;sup>1</sup>NOTE: Since WG meeting #1, the plan for future WG meetings has changed. WG meeting #2 will focus on evaluation criteria and WG meeting #3 will focus on identification of the refined route options (to be presented at the open house); thus, the current plan is to hold the open house after WG meeting #3.

Appendices

- Appendix A Agenda
- Appendix B Sign-In Sheets
- Appendix C Fact Sheet
- Appendix D FAQs
- Appendix E Study Area Map
- Appendix F Comment Form

Appendix A - Agenda

# **US 190 Feasibility Study**

Agenda



#### US 190 Working Group

April 28, 2017, 9:00 - 11:00 AM

 Opening Remarks and Introductions Cheryl Maxwell, Director • KTMPO

# Project Overview Andy Atlas, Project Manager • CP&Y

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- ✓ Purpose of Study
   ✓ Study Area
- Anticipated Outcome

Issues and Opportunities Group Discussion Facilitated by Lynda Rife • Rifeline

Review Constraints Map Stacey Benningfield • CP&Y

Identify Preliminary Routes Small Group Exercise Facilitated by Lynda Rife

Future Meetings

Andy Atlas

- Working Group Meeting 2: Identify Refined Routes
- Open House: Solicit Comments on Refined Routes and Evaluation Criteria
- Working Group Meeting 3: Identify Recommended Routes
- Working Group Meeting 4: Review of Study Findings and Recommendations

 Evaluation Criteria Survey Andy Atlas

Wrap-up Andy Atlas

# Appendix B - Sign-in Sheets





## PARTICIPANT SIGN IN SHEET

US 190 Feasibility Study – Working Group #1 April 28, 2017 9:00 am – 11:00 am – KTMPO Office, 2810 North Main St, Belton

Judge Jon H. Burrows	Bell County	the state of the second se
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Brynn Myers	City of Temple	
Mayor Tammy Cockrum		15H/
anayor ranning cockrain	City of Rogers	190
David Olson P.E. CFM	City of Killeen	DØ (
	City of Rineen	
David Blackburn	Temple Economic Development Corporation	Rev .
		DB
Joe Craig	Rogers Independent School District	0.0
Mark Arrazola		Ac
mark Alfazola	Belton Chamber of Commerce	10/1
Michael Harmon	Poll County Office of F	NOT
	Bell County Office of Emergency Management	The
John Crutchfield III	Greater Killeen Chamber of Commerce	1000
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Kevin Sprinkles	Academy Independent School District	
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Lynette Batts Lynette Poatto	Environmental Justice Representative	





# PARTICIPANT SIGN IN SHEET

US 190 Feasibility Study – Working Group #1 April 28, 2017 9:00 am – 11:00 am – KTMPO Office, 2810 North Main St, Belton

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	Brynn Myers	City of Temple	124
	Mayor Tammy Cockrum	04	)SFIN
		City of Rogers	194
	David Olson P.E, CFM	City of Killeen	1001
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	David Blackburn	Temple Economic Development Corporation	
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	Mark Arrazola	Belton Chamber of Commerce	
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	Michael Harmon	Bell County Office of Emergency Management	PUL
	John Crutchfield III		The
		Greater Killeen Chamber of Commerce	
	Kevin Sprinkles	Academy Independent Salard Dividit	
	KO	Academy Independent School District	1(5
	Lynette Batts	Environmental Justice Representative	(- <b>)</b>
l	Lynette Poatto		





#### SIGN IN SHEET

US 190 Feasibility Study – Working Group #1 April 28, 2017 9:00 am – 11:00 am – KTMPO Office, 2810 North Main St., Belton

	NAME	ORGANIZATION
1	augellia Points	City of Belton
2	Augellia Points Russell Schneider	City of Belfon Bell County Buton EDC
3	Cynthia Hernandez	Buton EDC.
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## STAFF SIGN IN SHEET

US 190 Feasibility Study - Working Group #1

April 28, 2017 9:00 am - 11:00 am - KTMPO Office, 2810 North Main St, Belton

	Cheryl Maxwell, AICP	ктмро	cm
	John Weber	ктмро	JW
	Kendra Coufal	ктмро	
	Jason Deckman	ктмро	275
	Jim Reed	ктмро	
	Susan Chavez	TxDOT	Sue
	Andy Atlas, AICP	CP&Y	107
3	Roger Beall, P.E.	TxDOT	KAB
,	Michael Bolin, P.E.	TxDOT	kan s
10	Stacey Benningfield	CP&Y	cB
1	Jaime Aguilar, P.E.	CP&Y	
12	Angela Gillmeister	CP&Y	ACFI
3	Lynda Rife	Rifeline	XA.
4	Michelle Neeley	Rifeline	M
5	Andy Adams	CP&Y	
6	Susan Howard	TxDOT	



# Fact Sheet



#### PURPOSE OF THE FEASIBILITY STUDY

KTMPO will identify project goals and objectives, develop an environmental constraints map, provide travel demand modeling and identify several preliminary route alternatives. Working with the community, the project team will narrow the preliminary route alternatives.

These route alternatives would be the starting point for any future phases of project development, including an environmental study, should the project advance. A final alternative will not be chosen at the end of this process.

#### ABOUT THE STUDY

US 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT) is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers.

KTMPO will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in February 2017 and is anticipated to take approximately one year to complete.

#### COMMUNITY DRIVEN EFFORT

KTMPO is forming a working group specifically for the US 190 Feasibility Study.



The working group includes local county and city elected officials and agency representatives.

The working group will meet throughout the duration of the project and will help the project team identify problems and opportunities for transportation improvements. The working group will provide input on the study as it progresses, assisting the project team in narrowing the alternatives.



A community open house will also be held to encourage additional input from the community.



# Appendix D - FAQs

# US 190 Feasibility Study Frequently Asked Questions



#### About the US 190 Feasibility Study

US 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT), is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers. The study will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in February 2017 and is anticipated to take approximately one year to complete.

#### What is the purpose of the feasibility study?

The purpose of the study is to identify alternative route options that could be advanced into further environmental study and design.

#### Who is on the working group and what is their role?

KTMPO is forming a working group specifically for the US 190 Feasibility Study that includes local county and city elected officials and agency representatives from Bell County, Belton, Temple, Killeen, Little River-Academy and Rogers. The working group will meet throughout the duration of the project and will help the project team identify problems and opportunities for transportation improvements. The working group will provide input on the study as it progresses, assisting the project team in narrowing the alternatives.

#### How will the routes be developed and selected?

Once the preliminary route alternatives are identified, the community will be invited to a public meeting to provide additional input on the route alternatives and the criteria to be used to evaluate the alternatives. Public feedback will then be considered, along with the technical and engineering feasibility, to identify three primary route alternatives. The three route alternatives would be the starting point for any future phases of project development, including an environmental study, should the project advance.

#### Who is the lead?

KTMPO is leading the study with support from TxDOT and CP&Y (a planning and engineering consultant). KTMPO will host the project web page.

#### What is the project timeline?

The study began in February 2017 and will take approximately one year to complete.

#### How are the improvements funded? Would US 190 be tolled?

TxDOT is funding the US 190 Feasibility Study. It is not known at this time how future environmental studies or construction would be funded. Currently, it is not anticipated that US 190 would be a toll road, but that decision will be made at a later date.

Last Updated: March 13, 2017

#### How does this relate to the I-14 Study?

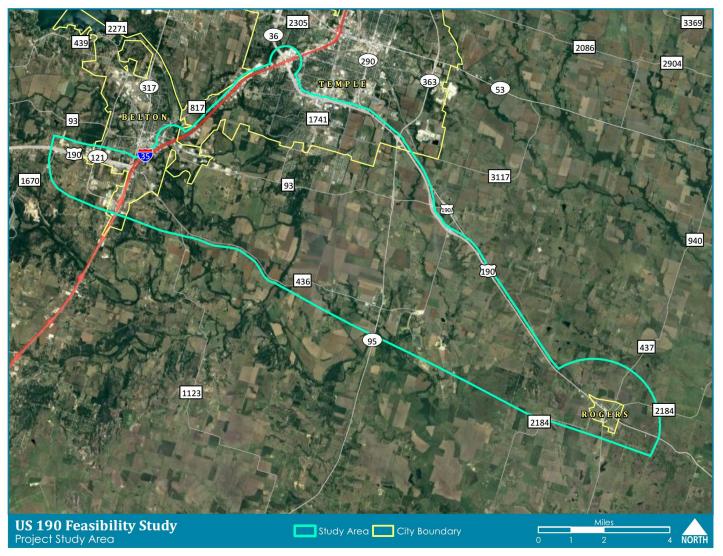
The US 190 Feasibility Study is completely independent from the I-14 study and is designed to serve regional priorities and initiatives. The community has asked TxDOT to prioritize bringing US 190 up to current interstate highway standards. In the future, this section may become part of the I-14 project or may remain a distinct regional project.

#### How can I participate?

A community open house will be held later in the process to encourage additional input from the community. Go to <a href="https://www.KTMPO.org">www.KTMPO.org</a> for the most up to date information.

Last Updated: March 13, 2017

Appendix E – Study Area Map



Appendix F - Comment Form

# US 190 Feasibility Study



# **Comment Form**

Working Group Meeting #1 April 28, 2017 9:00 am - 11:00 am

Name (Please Print): Comment: 		NOTE: Work group members were provided a comment form and asked provide additional feedback, but no completed comment forms were received.		
				ľ

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDQT □ I do business with TxDQT
- I could benefit monetarily from the project or other item about which I am commenting

# US 190 Feasibility Study



# **Meeting Summary**

# U.S. 190 Working Group Meeting #2

July 14, 2017, 10:00 a.m. – 12:00 p.m.

 Opening Remarks, Introductions & Project Overview Cheryl Maxwell, Director • KTMPO

Cheryl Maxwell welcomed attendees and asked all participants to introduce themselves. Maxwell explained that the purpose of Working Group (WG) Meeting #2 is to 1) walk through US 190 Feasibility Study goals and objectives, which were developed from input received from WG Meeting #1; 2) address the questions that came out of WG Meeting #1 by reviewing traffic data, employment and population data, thoroughfare plans and the planning process as well as by hearing a brief overview on the 1999 US 190 Study; 3) review and narrow down the route options developed from WG Meeting #1 discussions (presented on constraints maps developed by the project team); and 4) review and provide feedback on the preliminary evaluation criteria developed from the 22 survey responses received from WG members in May 2017.

Copies of the meeting agenda and sign-in sheets are found in **Appendices A** and **J**, respectively. WG members were provided a copy of the agenda, study Fact Sheet (**Appendix B**), Goals and Objectives (**Appendix C**), Evaluation Survey Summary (**Appendix D**), Conceptual Alignments (**Appendix E**), Demographic Summary (**Appendix F**), Traffic Counts and Special Generators (**Appendix G**), Planned Thoroughfares (**Appendix H**), Initial Screening Criteria (See tables under "Overview of Evaluation Criteria") and a comment form (**Appendix I**). Note: No comment forms were received from WG members or observers.

# Summary of 1999 US 190 Study

Michael Bolin, P.E., Director of Transportation Planning & Development • TxDOT

Michael Bolin provided an overview of the US 190 Extension Major Investment Study, which was published in 1999 by Texas Department of Transportation (TxDOT). Bolin explained that the 1999 study was primarily focused on Farm to Market 93 (FM 93) and Farm to Market 436 (FM 436) corridors.

The 1999 study recommended working on FM 93 in the short-term and deferring work on FM 436 to the future. The investment study also recommended acquiring ROW within the next five years (i.e. 2000 - 2005). Very little came of this study, however, due to lack of funding available.

After receiving a request from KTMPO, TxDOT initiated the current US 190 Feasibility Study. The current feasibility study is exploring options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers. . However, the same challenge exists: there is no money currently attached to this project. Bolin opened the floor for questions; no questions were asked.

# Overview of Traffic Data/Population & Employment Data Andy Atlas, AICP, Project Manager, CP8X

Andy Atlas, AICP, Project Manager • CP&Y

Andy Atlas transitioned the discussion to provide an overview of traffic data, population data and employment data. Atlas referred to hand-outs provided to WG members (See Demographic Summary (**Appendix F**), Traffic Counts and Special Generators (**Appendix G**), and Planned Thoroughfares (**Appendix H**).

# Demographic and Employment Data:

The data shows that population within the study area is expected to increase from 43,559 people to 67,413 from 2010 to 2040 – a 55% increase. Employment is projected to increase from 28,435 jobs in 2010 to 45,128 jobs in 2040 – a 59% increase.

# Planned Thoroughfares:

Thoroughfare plans were provided to the project team by the City of Belton and the City of Temple. Major projects from the plans were mapped and laid over the study area to show planned roadway development (See Planned Thoroughfares – **Appendix H**). No other thoroughfare plans were available at the time of the WG meeting.

# Project Goals and Objectives

Lynda Rife • Rifeline

Lynda Rife led an overview of the results from the Evaluation Survey. A survey of WG members was conducted the week of May 12 – 22, 2017. Participants were asked to rank potential evaluation criteria on a scale of one through five, with five being extremely important and one being not at all important. Twenty-two responses were received (See Evaluation Survey Summary -- **Appendix D**). In combination with the study goals and objectives, the survey results have been used to inform the development of criteria which will be used to evaluate preliminary route options.

Of the 22 responses received:

- 90% ranked <u>safety</u> as extremely important or very important
- 86% ranked minimizing social/community impacts as extremely important or very important
- 86% ranked providing good access for first responders as extremely important or very important
- 81% ranked ensuring good local access as extremely important or very important
- 77% ranked <u>utilizing existing roadways</u> as extremely important or very important
- 76% ranked <u>re-routing truck traffic</u> (18-wheelers) away from residential areas as extremely important or very important
- 76% ranked <u>reducing impacts to the natural environment</u> as extremely important or very important

There was discussion regarding conflicting feedback from the WG of utilizing existing roadways and avoiding use of I-35. The WG indicated that although I-35 is an existing roadway, some use of I-35 may be acceptable depending on the distance.

Rife then referred WG members to their Goals and Objectives handout (See **Appendix C**) and reminded members that these are the goals and objectives that were captured from WG Meeting #1. Rife then asked WG members if the project team is still heading in the right direction. The WG indicated that they are in agreement with the goals and objectives as presented.

Rife reported that there were a total of 40 different routes identified by the WG at the previous meeting. The project team mapped all 40 routes (making routes as close to scale as possible so WG members and observers could see any potential impacts or conflicts). The WG reviewed these 40 routes and went through an exercise to narrow them down to a more manageable number. Observers attending the meeting were invited to get a closer look at the maps at the observer table.

Preliminary Route Options Walk-Through Andy Atlas, AICP, Project Manager • CP&Y

Andy Atlas led a review of the 40 preliminary route options based on suggestions provided by WG members during the first WG meeting. Atlas explained that the project team would be providing recommendations for eliminating some routes, as well as recommendations for routes they believe should move forward. Small group discussion was facilitated for each route following Atlas' route presentation per study area section (i.e. West, South, North) to determine which route options would proceed for further analysis.

## Overview of Evaluation Criteria

Stacey Benningfield, Environmental Task Lead • CP&Y

Stacey Benningfield began her presentation by reminding WG members that their survey results in conjunction with the study goals and objectives informed the development of the project team's Initial Screening Criteria. Benningfield then led a review of the Initial Screening Criteria, stopping after each section to get WG member feedback through Clicker Questions. All criteria are measured using low/medium/high or pass/fail. Metrics are also color-coded (i.e. green = good, red = bad) because sometimes having a low score is a good thing, but sometimes it is a bad thing. Refined evaluation criteria will be used to help the project team narrow down the remaining route options, which will be presented at WG Meeting #3.

## Next Steps

Andy Atlas, AICP, Project Manager • CP&Y

Andy Atlas concluded the meeting. Atlas explained that the project team will conduct further analysis on the potential route options and return to the next WG meeting (to be held in late August/early September) with the results. The goal for WG Meeting #3 will be to evaluate the options using the agreed on Evaluation Criteria, and further narrow down the options to a reasonable number that could move forward for more detailed analysis. It was discussed that an Open House will be held (tentatively in October\*) in order to present the study to the public and get input on the refined route options. Following the Open House, a more in-depth analysis will be conducted in order to narrow down the list to two to three route option recommendations. Those recommendations will be included in the final study report.

- Working Group Meeting 3: Identify Refined Routes
- Open House: Solicit Comments on Refined Route Options & Evaluation
- Working Group Meeting 4: Review of Study Findings & Recommendations

Lynda Rife asked WG members to think about who the project team should invite to the Open House.\*\*

\*Following this meeting, dates in early November are being considered for the Open House.

\*\*Following this meeting, the project team decided to develop a survey asking WG members for feedback on the planning process for the Open House. This survey will be emailed to WG members prior to WG Meeting #3 and results will be reported at that meeting and included in the WG #3 Meeting Summary.

Appendices

- Appendix A Agenda
- Appendix B Fact Sheet
- Appendix C Goals and Objectives
- Appendix D Evaluation Survey Summary
- Appendix E Conceptual Alignments
- Appendix F Demographic Summary
- Appendix G Traffic Counts and Special Generators
- Appendix H Planned Thoroughfares
- Appendix I Comment Form
- Appendix J Sign-in Sheets

# **US 190 Feasibility Study**

# Agenda



## U.S. 190 Working Group Meeting #2

July 14, 2017, 10:00 a.m. - 12:00 p.m.

 Opening Remarks, Introductions & Project Overview Cheryl Maxwell, Director • KTMPO

Summary of 1999 US 190 Study Michael Bolin, P.E., Director of Transportation Planning & Development • TxDOT

- Overview of Traffic Data/Population & Employment Data Andy Atlas, AICP, Project Manager • CP&Y
- Project Goals and Objectives Lynda Rife • Rifeline

 Preliminary Route Options Walk-Through Andy Atlas, AICP, Project Manager • CP&Y Lynda Rife • Rifeline

 Overview of Evaluation Criteria Stacey Benningfield, Environmental Task Lead • CP&Y Lynda Rife • Rifeline

#### Next Steps

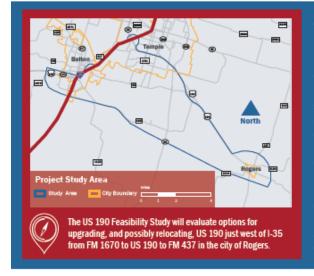
Andy Atlas, AICP, Project Manager • CP&Y

- Working Group Meeting 3: Identify Recommended Routes
- Open House: Solicit Comments on Refined Routes & Evaluation
- Working Group Meeting 4: Review of Study Findings & Recommendations

# US 190 Feasibility Study

Fact Sheet





# PURPOSE OF THE FEASIBILITY STUDY

KTMPO will identify project goals and objectives, develop an environmental constraints map, provide travel demand modeling and identify several preliminary route alternatives. Working with the community, the project team will narrow the preliminary route alternatives.

These route alternatives would be the starting point for any future phases of project development, including an environmental study, should the project advance. A final alternative will not be chosen at the end of this process.

## ABOUT THE STUDY

US 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT) is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers.

KTMPO will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in February 2017 and is anticipated to take approximately one year to complete.

# COMMUNITY DRIVEN EFFORT

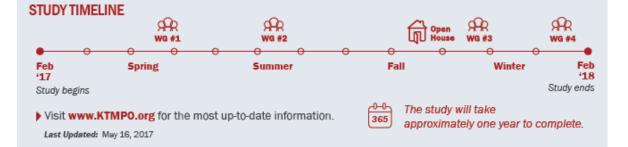
KTMPO is forming a working group specifically for the US 190 Feasibility Study.



The working group includes local county and city elected officials and agency representatives.

The working group will meet throughout the duration of the project and will help the project team identify problems and opportunities for transportation improvements. The Working Group will provide input on the study as it progresses, assisting the project team in narrowing the alternatives.

A community open house will also be held to encourage additional input from the community.





Appendix C- Goals and Objectives

r Study	ummary
easibility	Survey S
US 190 F	Evaluation

A survey of the US 190 Feasibility Study Working Group members was conducted the week of May 12-22, 2017. Twenty-two members of the working group participated in the survey. Participants were asked to rank the following criteria on a scale of one through five, with five being extremely important and 1 being not at all important. Below are the rankings of each criteria.

Answer Options	Topics	Extremely Important (5)	Very Important (4)	Moderately	Slightly Immortant (2)	Not at all
Utilizing existing roadways as much as possible.	Existing roadways	48%	29%	24%	%0	%0
Minimizing social/community impacts to neighborhoods, schools, and activity centers.	Social/community impacts	29%	57%	5%	10%	%0
Reducing impacts to the natural environment including streams and creeks, flood plains, and trees.	Natural environment	24%	52%	14%	10%	%0
Minimizing project cost.	Cost	48%	24%	24%	5%	%0
Developing the most direct route, resulting in shorter travel times.	Direct route	14%	19%	38%	10%	19%
Reducing travel impacts during construction.	Construction	10%	24%	38%	29%	%0
Routing large truck traffic (18-wheelers) away from residential areas.	Truck traffic	24%	52%	19%	5%	%0
Spurring economic development along the corridor and its surroundings.	Economic development	29%	29%	10%	24%	10%
Providing more reliable travel times.	Travel times	14%	57%	14%	14%	%0
Improving bike and pedestrian facilities.	Bike/ped	%0	%61	14%	24%	43%
Providing good access and reliability for first responders such as EMS, firefighters and police.	EMS	24%	62%	14%	%0	%0
Ensuring good local access.	Local access	14%	67%	19%	0%	0%
Improving safety.	Safety	52%	38%	5%	5%	0%

# As improvements are being considered for the US 190 corridor, how important are the following criteria:



Here is a more graphic view of the survey results:

When looking only at criteria ranked as extremely important, the Working Group ranked improving safety first, followed by using existing roadways and minimizing costs. When looking at criteria ranked as either extremely important or very important, the criteria ranks as follows:

- 90% of participants rank improving safety as extremely or very important
- 86% of participants rank minimizing social/community impacts to neighborhoods, schools, and activity centers as extremely or very important
- 86% of participants rank providing good access and reliability for first responders such as EMS, firefighters and police minimizing as extremely or very important
  - 81% of participants rank ensuring good local access as extremely or very important
- 76% of participants rank utilizing existing roadways as much as possible as extremely or very important
- 76% of participants rank routing large truck traffic (18-wheelers) away from residential areas as extremely or very important
  - 76% of participants rank reducing impacts to the natural environment including streams and creeks. flood plains, and trees. as extremely or very important
- 71% of participants rank minimizing project cost as extremely or very important
- 71% of participants rank providing more reliable travel times as extremely or very important
- 57 % of participants rank spurring economic development along the corridor and its surroundings.as extremely or very important
- 33% of participants rank developing the most direct route, resulting in shorter travel times as extremely or very important
- 33% of participants rank reducing travel impacts during construction as extremely or very important
- 19% of participants rank improving bike and pedestrian facilities as extremely or very important

When looking at only at criteria ranked as not important at all, the criteria ranks as follows:

- 43% of participants rank improving bike and pedestrian facilities as not important at all
- 19% of participants rank developing the most direct route, resulting in shorter travel times, as not important at all
- 10% of participants rank spurring economic development along the corridor and its surroundings as not important as all

When the Working Group respondents were asked for any additional comments about the rankings, below are there comments:

"I think utilizing the existing roadways and rights of ways makes the most sense, from an environmental, cost and political perspective. It will be the most logical and reasonable path toward actually getting the second segment of IH-14 done within the next 50 years. Decreased costs and decreased duration of project could both be achieved if existing US 190 route was utilized and merely widened where necessary.

"Complete I-14 through Bell County as quickly as possible and in the most cost-effective manner."

"Utilize the "existing route" to allow for the completion of the project without the issue of "property rights" and taking of land that has been in family for generations. Loop in Temple is Congressional approved. Let's move forward

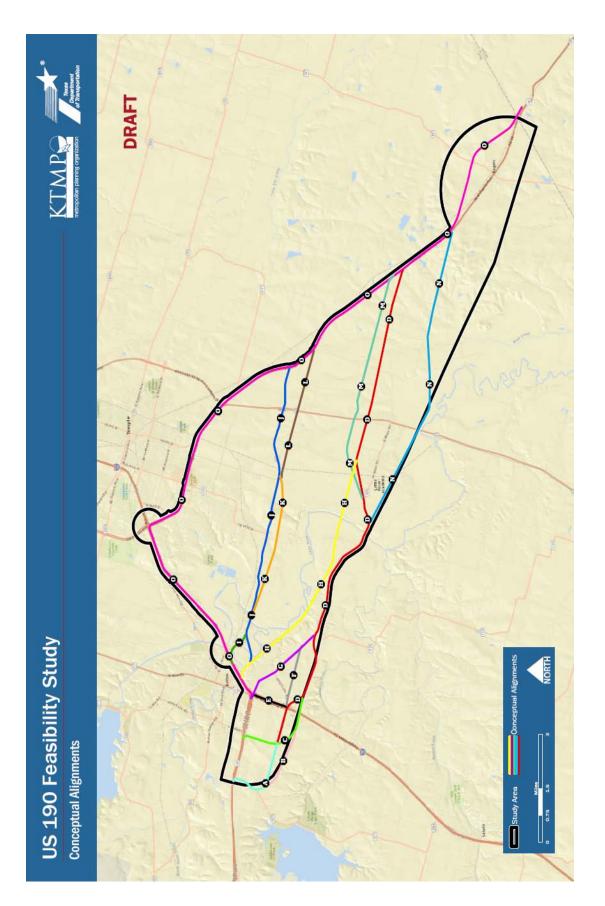
Utilizing existing roadways as much as possible will reduce the time and cost of project delivery thereby improving safety.

"While hike/bike facilities are extremely important overall. I don't believe that an interstate highway is the appropriate place to address them. When the Working Group respondents were asked if there are there any criteria not listed above that should be considered by the project team. they responded with the following: "Amount of time each alternate route would take to complete the project based on right-of-way acquisition, bridges, environmental and other issues. Time is money, so time to complete project should be considered as important."

Time and cost to construct is very important since this project will have a difficult time getting funding."

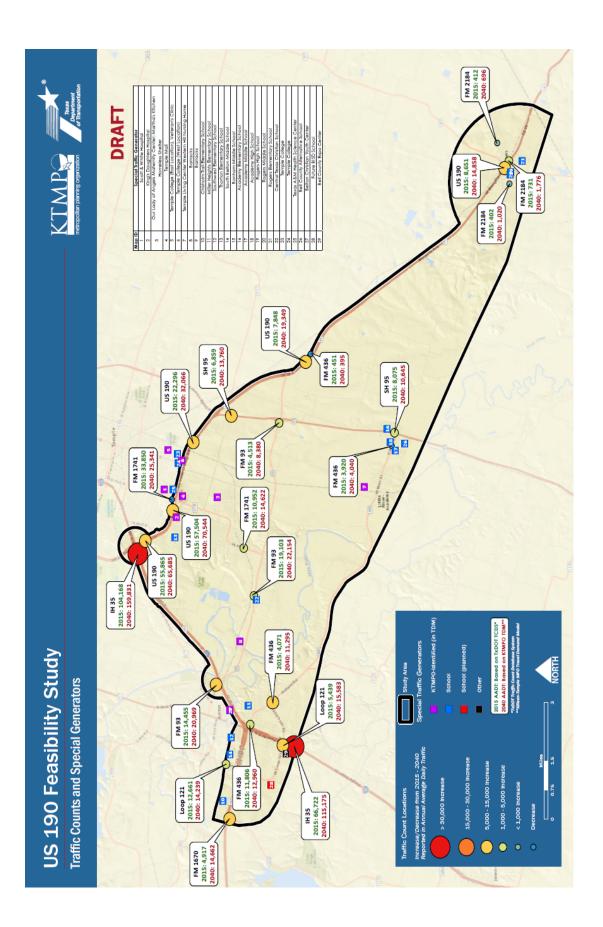
Wendell Williams, Rod Henry, Brynn Myers, Cynthia Hernandez, Michael D. Moon, Mayor Michael Harmon, Brian Chandler, Kirk Thomas, Sam A. The following individuals participated in the survey: Dietri Batts, John Kiella, David Blackburn, Randy Ramsey, Robin Battershell, Bob Browder, Listi, Joe Craig, Phyllis Cogue, Kevin Sprinkles and Tammy Cockrum.

# Appendix E – Conceptual Alignments





Appendix F - Demographic Summary



KTMR Recordian perreg organization	
US 190 Feasibility Study Planned Thoroughfares	

# Appendix H - Planned Thoroughfares

# Appendix I - Comment Form

# US 190 Feasibility Study



# **Comment Form**

## Working Group Meeting #2 July 14, 2017 10:00 am - 12:00 pm

Name (Please Print):	
Comment:	NOTE- Work group members
	NOTE: Work group members were provided a comment form and asked to provide additional feedback, but no completed comment forms were received.
	<u>_</u>

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Appendix J – Sign-in Sheets





# PARTICIPANT SIGN IN SHEET

US 190 Feasibility Study - Working Group #2 July 14, 2017 10:00 am - 12:00 pm

	NAME	ORGANIZATION	INITIALS
1	Jon H. Burrows	Bell County	ONS
2	Sam A. Listi	City of Belton	
3	Brynn Myers	City of Temple	BUN
.	Tammy Cockrum	City of Rogers	AC
;	David Olson P.E, CFM	City of Killeen	<u>s</u>
3	David Blackburn	Temple Economic Development Corporation	- OR
7	Joe Craig	Rogers Independent School District	QL.
3	Mark Arrazola	Belton Chamber of Commerce	NM
9	Michael Harmon	Bell County Office of Emergency Management	MIL
10	John Crutchfield III	Greater Killeen Chamber of Commerce	"/0()
11	Kevin Sprinkles	Academy Independent School District	15t





# PARTICIPANT SIGN IN SHEET

US 190 Feasibility Study – Working Group #2 July 14, 2017 10:00 am – 12:00 pm

	NAME	ORGANIZATION	INITIALS
12	John Kiella	Belton ISD Rep (Temple TIRZ)	
13	Michael Moon	Texas Farm Bureau	
14	Kirk Thomas	Killeen Independent School District	
15	Brian Chandler Lynn Barrett	City of Temple	YRA
16	Erin Smith Tur Smith	City of Belton	
17	Marion Grayson	City of Belton	
18	Phyllis Gogue	Greater Killeen Chamber of Commerce (GKCC)	
19	Randy Ramsey Kandy Kamsey	Temple Chamber of Commerce (First State Bank)	-
20	Drew Lanham	Little River-Academy, TX	
21	Rod Henry CCE, 10M	Temple Chamber of Commerce	
22	Rod Henry CCE, 10M Kor Itangen Dr. Susan Kincannon Phi) Hagger thy Chris Hill	Belton Independent School District	
23	Chris Hill	City of Rogers	Cla

	NAME	ORGANIZATION	INITIALS
24	Dr. Robin Battershell	Temple Independent School District	RB
25	Bob Browder	Temple Chamber of Commerce	1010
26	Cynthia Hernandez	Belton Economic Development Corporation (BEDC)	CH
27	Russell Schneider	Bell County	Rt
28	Marion Grayson	Belton, TX	/ 0
29	Lynette Batts	Environmental Justice Representative	R
30	Marilyn Krumnow	Temple Independent School District	
31	Commissioner Tim Brown		TB
32	ELME Williams	Little River A.	Re
33	ELME Williams Bucketumann	Little River A. BELL GOWING GAMMISSIORER	URS
34	Chery Hassmann	Congressman John P. Carles	CX
35			





# SIGN IN SHEET

US 190 Feasibility Study – Working Group #2 July 14, 2017 10:00 am – 12:00 pm

NAME	ORGANIZATION
1 Dyana Beadneed	
2 Pay A Hill	
3 Runell Jel	
· Lou Dow Fichned Hight	
5 Chit Walk H	
· ANDY Galier	
" Jul Cr	
8 David Calor	
" Ala A Mon	TFB
10 Troy mode	
11 when I look	





# SIGN IN SHEET

US 190 Feasibility Study – Working Group #2 July 14, 2017 10:00 am – 12:00 pm

12	Kevin Schnider	Oblastle materials
13	Dustin Faglie	Oldcasthe Materials
14	Dustin Fastie William murad	
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16		
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Media 1. Cody weems Organization Tempe Daily Telegram 2. 3. 4. 5. 6.





#### STAFF SIGN IN SHEET US 190 Feasibility Study – Working Group #2 July 14, 2017 10:00 am – 12:00 pm

	NAME	ORGANIZATION	INITIAL
1	Cheryl Maxwell, AICP	ктмро	em
2	John Weber	ктмро	Jul
3	Kendra Coufal	ктмро	XCI
4	Jason Deckman	ктмро	ap
5	Jim Reed	ктмро	12
6	Susan Chavez	TxDOT	Suc
7	Andy Atlas, AICP	CP&Y	AA
8	Roger Beall, P.E.	TxDOT	
9	Michael Bolin, P.E.	TxDOT	Mh
10	Stacey Benningfield	CP&Y	SR
11	Jaime Aguilar, P.E.	CP&Y	- CF
12	Angela Gillmeister	CP&Y	AG
13	Lynda Rife	Rifeline	1.12
14	Michelle Neeley	Rifeline	han
15	Andy Adams	CP&Y	AA
16	Susan Howard	TxDOT	CA
17	Lyndsi Lambert	Rifeline	IML

# US 190 Feasibility Study

# **Meeting Summary**



# U.S. 190 Working Group Meeting #3

September 22, 2017, 10:00 a.m. - 12:00 p.m.

Opening Remarks, Introductions & Project Overview Cheryl Maxwell, Director • KTMPO

Cheryl Maxwell welcomed attendees and asked all participants to introduce themselves. Maxwell explained that the purpose of Working Group (WG) Meeting #3 is to 1) walk through the nine preliminary route options that were refined at the last meeting; 2) review and discuss the latest evaluation matrix; and 3) identify the route options that will be presented to the public at the November 30<sup>th</sup> Open House.

Copies of the meeting agenda and sign-in sheets are found in **Appendices A** and **E**, respectively. WG members were provided a copy of the agenda, study Fact Sheet (**Appendix B**), Open House WG Survey Results (**Appendix C**), and a comment form. Four comment forms were received from WG members (**Appendix D**).

## Overview of Preliminary Alignment Options and Adjustments

Andy Atlas, AICP, Project Manager • CP&Y Lynda Rife • Rifeline

Andy Atlas provided an overview of the work that has been completed since WG Meeting #1. Atlas' presentation began with a map of the original study area, followed by a map of the 40 route combinations that WG members proposed, which included options along existing United States Highway (US) 190, Farm to Market Road (FM) 93, FM 436, Loop 121, FM 1670 and a new location. At WG Meeting #2, WG members narrowed down those 40 route options to 9 route options. Per the request of WG members, the project team also extended the US 190 Feasibility Study area to accommodate a route along Shanklin Road. Atlas then presented the 9 remaining route options, which have been refined by the project team to meet TxDOT standards and to accommodate 70 miles per hour (MPH) design speed.

Lynda Rife explained that WG members are now tasked with the goal to narrow down these 9 route options to approximately 4 – 6 options, which can then be presented to the public at the November 30<sup>th</sup> Open House. Rife asked WG members to discuss which top three routes they think should move forward based on their knowledge of the local area. WG member table discussions were facilitated by members of the project team.

After discussions, facilitators reported out results. The following color-coded route options were identified by WG members as the options that should be presented to the public:

- Black, which runs south down I-35 and follows FM 436 to existing US 190;
- Brown, which runs along FM 93 to existing US 190;
- Pink, which widens existing US 190 from just west of I-35 to Rogers; and
- Aqua, which takes a greenfield route from I-14 at FM 1670 and cuts across I-35 to connect to FM 436, following FM 436 to US 190.

Evaluation Matrix of Refined Routes and Facilitated Discussion Stacey Benningfield, Environmental Task Lead • CP&Y Lynda Rife • Rifeline

Stacey Benningfield presented the refined evaluation criteria that WG members agreed upon at the previous meeting. Benningfield explained that the project team used this evaluation matrix to evaluate the remaining 9 route options.

## Enhance East/West Connectivity

When using the evaluation matrix to measure routes' potential for enhancing east/west connectivity, no routes were clearly favored.

## Accommodate Existing and Projected Traffic Volumes

When using the evaluation matrix to measure routes' potential to provide additional capacity, all 9 routes passed.

## **Enhance Safety**

When using the evaluation matrix to measure routes' potential for enhancing safety, new location roadways were favored.

## Support Growth and Economic Development

When using the evaluation matrix to measure routes' potential to promote economic development, all 9 routes passed. When evaluating for options that minimize the use of existing roadways, new location roadways were favored.

## Provide Cost-Effective and Environmentally-Efficient Options

When using the evaluation matrix to measure routes' potential to provide environmentally-efficient options, many route options do not pass due to potential impacts to floodplains.

Benningfield explained that the current evaluation matrix does not result in a lot of differentiation among routes because many of the alignments are located in the same areas and are variations of the same concept. In addition, there is not a lot of differentiation in the study area itself. Therefore, the project team is looking to WG members for direction.

Following Benningfield's presentation, Lynda Rife asked WG members if they had any questions or concerns. One WG member asked if the alignments presented were already set or if they can still be adjusted. The project team answered that the alignments are not already set and can still be adjusted as needed. Another WG member expressed concerns about counting the number of rooftops in a given area to weigh potential impacts to existing communities. He was worried that homeowners or businesses along green field routes would also be significantly impacted even if there were fewer of them along that route option. The project team stated that since the evaluation matrix did not provide any clear direction that it would not be shown at the open house.

Rife then asked WG members which route options they thought should be presented to the public at the November 30<sup>th</sup> Open House. Rife also asked WG members to write down the names and contact info of stakeholders the project team should talk with before the Open House. WG member table discussions were facilitated again by members of the project team. After discussions, facilitators reported out results. The following color-coded route options were identified

by WG members as the options that should be presented to the public:

- Black, which runs south down I-35 and follows FM 436 to existing US 190;
- Brown, which runs along FM 93 to existing US 190;
- Pink, which widens existing US 190 from just west of I-35 to Rogers;
- Aqua, which takes a greenfield route from I-14 at FM 1670 and cuts across I-35 to connect to FM 436, following FM 436 to US 190; and
- Blue, which runs along FM 93 and follows the 93 Spur, then turns north and runs parallel to FM 93 to existing US 190.

## Open House Discussion

Lynda Rife • Rifeline

Following the evaluation matrix presentation and discussion, Lynda Rife then led an overview of the results from the WG Open House Survey. A survey of WG members was conducted in August 2017. Participants were asked to provide feedback on the project team's plans for the November Open House. Twenty-two responses were received (see **Appendix C**). In combination with WG Meeting #3 discussions, the survey results will be used to inform planning and stakeholder outreach for the November 30<sup>th</sup> Open House.

Of the 22 responses received:

- 90.9% said the Expo Center was the right venue to host the Open House
- 40.5% said the Open House should be held on a Thursday
- 81.8% said the Open House should be held between 4:30 p.m. 8:00 p.m.
- 42.9% anticipate 45 60 attendees
- 63.6% identified organizations that could potentially circulate an Open House announcement
- 42.9% said they would be willing to help answer questions at the Open House

WG Members also identified local events in November that the project team needed to be aware of while scheduling the Open House as well as identified local newspapers where the Open House can be advertised.

WG Members were also asked to identify property owners, stakeholder and interest groups that need to be made aware of the upcoming Open House (see completed comment forms in **Appendix D**).

## Next Steps

Andy Atlas, AICP, Project Manager • CP&Y

Andy Atlas concluded the meeting by thanking everyone for their comments. Atlas then outlined the next steps for the project team, including meeting with stakeholders that have been identified as high priority, sending out invitations and advertisements for the Open House, and holding an Open House on Thursday, November 30<sup>th</sup>, where public comments will be collected on the 5 remaining route options. Following the Open House, a more in-depth analysis will be conducted in order to narrow down the list to 2 -3 route option recommendations. Those results will be shared with

this WG in 2018 and final route recommendations will be included in the US 190 Feasibility Study Report. If funding becomes available, then a more in-depth environmental study will be conducted on the remaining route options.

- **Open House:** Solicit Comments on Refined Route Options & Evaluation
- Working Group Meeting 4: Review of Study Findings & Recommendations

# Appendices

- Appendix A Agenda
- Appendix B Fact Sheet
- Appendix C Open House WG Survey Results
- Appendix D Comment Forms Received (4)
- Appendix E Sign-in Sheets

Appendix A - Agenda

# **US 190 Feasibility Study**

# Agenda



# U.S. 190 Working Group Meeting #3

September 22, 2017, 10:00 a.m. - 12:00 p.m.

 Opening Remarks & Introductions Cheryl Maxwell, Director • KTMPO

- Overview of Preliminary Alignment Options and Adjustments Andy Atlas, AICP, Project Manager • CP&Y
- Evaluation Matrix of Refined Routes and Facilitated Discussion Stacey Benningfield, Environmental Task Lead • CP&Y
- Open House Discussion Lynda Rife • Bifelige

#### Next Steps

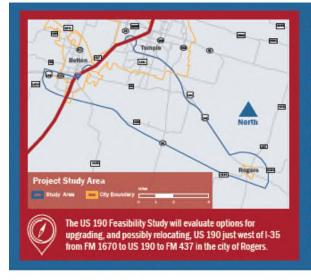
Andy Atlas, AICP, Project Manager • CP&Y

- Open House: Solicit Comments on Refined Routes & Evaluation
- Working Group Meeting 4: Review of Study Findings & Recommendations

# US 190 Feasibility Study

Fact Sheet





# PURPOSE OF THE FEASIBILITY STUDY

KTMPO will identify project goals and objectives, develop an environmental constraints map, provide travel demand modeling and identify several preliminary route alternatives. Working with the community, the project team will narrow the preliminary route alternatives.

These route alternatives would be the starting point for any future phases of project development, including an environmental study, should the project advance. A final alternative will not be chosen at the end of this process.

# ABOUT THE STUDY

US 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT) is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers.

KTMPO will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in February 2017 and is anticipated to take approximately one year to complete.

# COMMUNITY DRIVEN EFFORT

KTMPO is forming a working group specifically for the US 190 Feasibility Study.

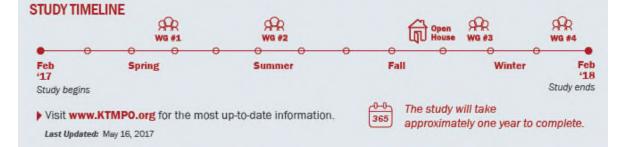


The working group includes local county and city elected officials and agency representatives.

The working group will meet throughout the duration of the project and will help the project team identify problems and opportunities for transportation improvements. The Working Group will provide input on the study as it progresses, assisting the project team in narrowing the alternatives.

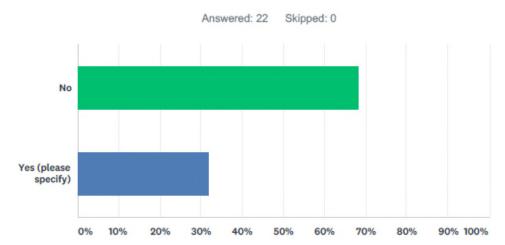


A community open house will also be held to encourage additional input from the community.



# US 190 Feasibility Study Open House Survey

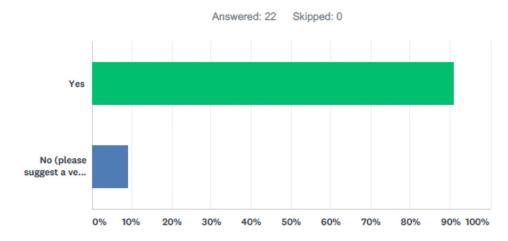
# Q1 We are considering holding the US 190 Feasibility Study Open House in early November. Are there any events that we need to avoid that you are aware of at this time?



ANSWER CHOICES	RESPONSES	
No	68.18%	15
Yes (please specify)	31.82%	7
TOTAL		22

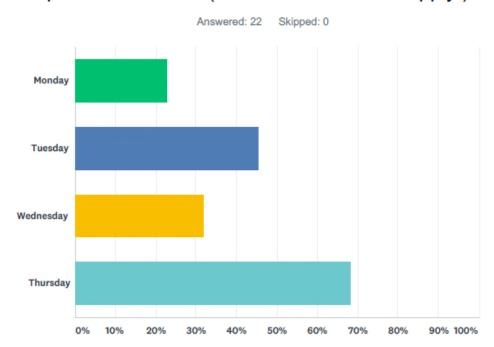
#	YES (PLEASE SPECIFY)	DATE
1	November 1-3 is the APA conference	8/25/2017 4:33 PM
2	TX APA Nov 1-3	8/24/2017 8:36 AM
3	the obvious T-Day, stay away from thursday-sunday Football	8/22/2017 2:50 PM
4	Third Thursday and any other chamber of commerce mixer dates	8/21/2017 8:05 AM
5	Veterans Day (Nov 10)	8/18/2017 5:05 PM
6	November 2 luncheon in Temple,	8/18/2017 2:05 PM
7	Temple Business League noon on 3rd; Vet Day on 10th; Workforce 9:30 on 16th; Urban Counties noon on 16th in Austin; TAC Boardon 30th in Austin	8/10/2017 5:08 PM

#### Q2 The Expo Center is currently being considered to host the Open House. Is this the right venue?



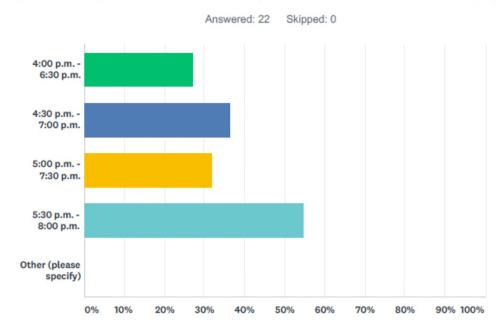
ANSWER	ANSWER CHOICES RESPONSES		NSES	
Yes	Yes 90.91%			20
No (please suggest a venue within the study area) 9.09%			2	
TOTAL				22
#	NO (PLEASE SUGGEST A VENUE WITHIN THE STUDY AREA)	[	DATE	
1	Harris Comunity Center, Belton	8	8/23/2017 3:57 PM	
2	CTCOG	8	8/21/2017 8:05 AM	

# Q3 What day should we hold the Open House to help ensure the greatest possible turnout? (Please check all that apply.)



ANSWER CHOICES	RESPONSES	
Monday	22.73%	5
Tuesday	45.45%	10
Wednesday	31.82%	7
Thursday	68.18%	15
Total Respondents: 22		

# Q4 What time should we hold the Open House to help ensure the greatest possible turnout? (Please check all that apply.)



ANSWER C	HOICES	RESPONSES		
4:00 p.m 6	:30 p.m.	27.27%		6
4:30 p.m 7:00 p.m.		36.36%		8
5:00 p.m 7	:30 p.m.	31.82%		7
5:30 p.m 8	:00 p.m.	54.55%		12
Other (please specify)		0.00%		0
Total Respo	ndents: 22			
#	OTHER (PLEASE SPECIFY)		DATE	

There are no responses.

# Q5 How many people do you think we should expect to attend the Open House?

Answered: 21 Skipped: 1 30 - 45 45 - 60 60 - 75 75 - 100 100+ Other (please specify) 20% 10% 30% 40% 50% 60% 70% 80% 90% 100% 0%

ANSWER CHOICES	RESPONSES	
30 - 45	9.52%	2
45 - 60	42.86%	9
60 - 75	4.76%	1
75 - 100	23.81%	5
100+	14.29%	3
Other (please specify)	4.76%	1
TOTAL		21

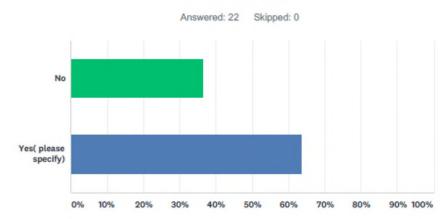
#	OTHER (PLEASE SPECIFY)	DATE
1	I have no idea	8/18/2017 2:08 PM

### Q6 In which newspapers should we advertise the Open House?

Answered: 20 Skipped: 2

#	RESPONSES	DATE
1	Temple Daily Telegram and Belton Journal	8/25/2017 4:33 PM
2	Belton Journal, Temple Daily Telegram, Killeen Daily Herald	8/24/2017 8:36 AM
3	Belton Journal, Temple Daily Telegram	8/23/2017 6:51 PM
4	Belton Journal, Temple Daily Telegram	8/23/2017 3:57 PM
5	Temple & Killeen papers	8/22/2017 3:37 PM
6	Temple and Belton	8/22/2017 12:50 PM
7	Temple, Belton, and any other's that cover the rural communities.	8/21/2017 12:55 PM
8	Top 3 by circulation in Bell County	8/18/2017 5:05 PM
9	Killeen, Temple, Belton. SOCIAL MEDIA	8/18/2017 2:08 PM
10	Temple Daily Telegram, Belton Journal, Killeen Daily Herald	8/18/2017 2:05 PM
11	Temple and Belton	8/18/2017 12:24 PM
12	KDH, Temple Daily Telegram	8/17/2017 10:19 AM
13	Telegram, Journal, Salado	8/11/2017 3:58 PM
14	TDT , killeen	8/10/2017 6:03 PM
15	ALL	8/10/2017 5:12 PM
16	Temple Telegram, Killeen Daily Herald, Belton Journal	8/10/2017 5:08 PM
17	Temple Daily Telegram Salado Village Voice Killeen Daily Herald Belton Journal	8/10/2017 4:32 PM
18	Temple, Belton and Killeen	8/10/2017 3:47 PM
19	Temple Daily Telegram	8/10/2017 3:42 PM
20	Killeen Daily Herald Temple Daily Telegram Salado Village Voice Rogers Weekly News Tribune Progress The Belton Journal	8/10/2017 3:36 PM

#### Q7 Are there any organizations you know that might be willing to include our Open House announcement in their newsletter, email listserv and/or social media?



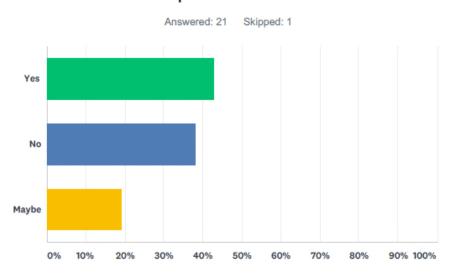
ANSWE	R CHOICES	RESPONSES	
No		36.36%	8
Yes( plea	ase specify)	63.64%	14
TOTAL			22
#	YES( PLEASE SPECIFY)		DATE
1	Belton Chamber of Commerce		8/25/2017 4:33 PM
2	City of Belton		8/24/2017 8:36 AM
3	Belton Area Chamber of Commerce, Belton Young Pr Heights Baptist Church	ofessionals, Leadership Belton, Miller	8/23/2017 6:51 PM
4	BISD, TISD, TEDC, RZ#1, Temple Business Legaue		8/22/2017 2:50 PM
5	Temple and Belton Chambers		8/22/2017 12:50 PM
6	Rotary, Chambers of Commerce, Belton young profes	sionals	8/21/2017 12:55 PM
7	chamber of commerce and economic development eN	lewsletters	8/21/2017 8:05 AM
8	Chambers of Commerce, EDC's, Cities, County		8/18/2017 5:05 PM
9	You might check with various media sources to see if	it could be put on their social media sites.	8/18/2017 2:08 PM
10	Temple Chamber of Commerce		8/18/2017 2:05 PM
11	All cities in the region, KTMPO		8/17/2017 10:19 AM
12	City facebook pages, Twitter etc		8/10/2017 5:12 PM
13	Chamber Publications-Temple, Killeen, HH, & Belton; Belton & Killeen Economic Development Corporations		8/10/2017 5:08 PM
14	All Chambers, EDC's, school districts, government off	ices	8/10/2017 4:32 PM

# Q8 As we consider additional ways to advertise this Open House, please tell us how your community usually finds out about events.

Answered: 16 Skipped: 6

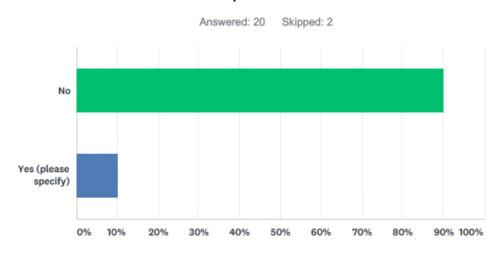
#	RESPONSES	DATE
1	Newspaper, social media, flyers, television, radio	8/25/2017 4:33 PM
2	Social media, paper, radio, TV	8/24/2017 8:36 AM
3	City of Belton website and facebook	8/23/2017 6:51 PM
4	Numerous ways. Newspaper, Discover Temple, Radio, TV. Facebook, Instagram, City websites, Chamber of Commerce.	8/22/2017 12:50 PM
5	Website postings and social media. School Districts are sometimes a good method of reaching the parents (sending info home in backpacks).	8/21/2017 12:55 PM
6	Same as answer above	8/21/2017 8:05 AM
7	Newspaper, social media	8/18/2017 5:05 PM
8	Social media	8/18/2017 2:05 PM
9	Email	8/18/2017 12:24 PM
10	social media	8/17/2017 10:19 AM
11	News paper, local radio temple, Waco , killeen	8/10/2017 6:03 PM
12	Television, News, social.media	8/10/2017 5:12 PM
13	Emails, Newspapers & TV	8/10/2017 5:08 PM
14	Newspaper or social media	8/10/2017 4:32 PM
15	Newspaper	8/10/2017 3:42 PM
16	n/a	8/10/2017 3:36 PM

# Q9 Would you be willing to help answer questions from attendees at the Open House?



ANSWER CHOICES	RESPONSES	
Yes	42.86%	9
No	38.10%	8
Maybe	19.05%	4
TOTAL		21

# Q10 Is there anything else we should be aware of as we begin planning this Open House?



ANSWER	CHOICES	RESPONSES		
No		90.00%		18
Yes (please specify) 10.00%		10.00%		2
TOTAL				20
#	YES (PLEASE SPECIFY)		DATE	
1	Potential opposition to farm land being disturbed? Maybe some outr supports the local farmers and ranchers?	each to an association that	8/21/2017 12:55 PM	
2	KTMPO Technical Advisory Committee Meeting on November 1 and Policy Board Meeting on 8/10/2017 3:36 PM November 15; Daylight Savings Time Change			

Appendix D - Comment Forms Received (4)

### **US 190 Feasibility Study**



#### **Comment Form**

Working Group Meeting #3 September 22, 2017 10:00 am - 12:00 pm
Name (Please Print): Erin Smith
K East of Shanklin; right next of I-35-Ellen
Morris
* INTRE OPERS, DOD FMILE 10-> Whitis
Storage of FMILED
betw auction Bain & mee Creek
KEM9301-35 - McDonald's development yet
* Ke-align Aqua portion to not intersect white property which have 4 pre-limplats approved to northan & eastern property boundary
(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting





#### **Comment Form**

Working Group Meeting #3 September 22, 2017 10:00 am – 12:00 pm
Name (Please Print): Jon Burrows
O Need to talk to:
1) Little River/Actodemy -1971 436 - Former County Commissioner Richard Cortese
2) FM 93 - TAylark Valley Baptist Church - Centrul Texas Christian School
(2) MIL not be able to attend Nov 30 Open House due to Basped Meeting in Bustin of Texas Association of Countries

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting





#### **Comment Form**

Working Group Meeting #3 September 22, 2017 10:00 am - 12:00 pm

Name (Please Print): GARY BUSHELL Comment: TOP ROUTES mes

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- 1 do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

**US 190 Feasibility Study** 



#### **Comment Form**

item about which I am commenting

Working Group Meeting #3 September 22, 2017 10:00 am - 12:00 pm

Name (Please Print): Comment: ARE Dr aptist louse Whi two × Druce Horag Taylor woter animal mm term (Ardy Adams) Table 3 (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you: I am employed by TxDOT I do business with TxDOT I could benefit monetarily from the project or other

#### Appendix E – Sign-in Sheets





#### **PARTICIPANT SIGN IN SHEET**

	NAME	ORGANIZATION	INITIALS
1	Jon H. Burrows	Bell County	(AB-
2	Sam A. Listi	City of Belton	
3	Brynn Myers	City of Temple	BHIM
4	Tammy Cockrum	City of Rogers	20
5	David Olson P.E, CFM	City of Killeen	
6	David Blackburn	Temple Economic Development Corporation	de
7	Joe Craig	Rogers Independent School District	TC.
8	Mark Arrazola	Belton Chamber of Commerce	
9	Nicole Stairs	Belton Chamber of Commerce	
10	Michael Harmon	Bell County Office of Emergency Management	
11	John Crutchfield III	Greater Killeen Chamber of Commerce	
12	Kevin Sprinkles	Academy Independent School District	





#### PARTICIPANT SIGN IN SHEET

US 190 Feasibility Study – Working Group #3

September 22, 2017 10:00 am - 12:00 pm - KTMPO, 2180 N. Main St, Belton, TX 76513

	NAME	ORGANIZATION	INITIALS
13	John Kiella	Belton ISD Rep (Temple TIRZ)	tt
14	Michael Moon	Texas Farm Bureau	
15	Kirk Thomas	Killeen Independent School District	IL
16	Brian Chandler	City of Temple	Lyngenet
17	Erin Smith	City of Belton	es
18	Marion Grayson	Mayor, City of Belton	
19	Phyllis Gogue	Greater Killeen Chamber of Commerce (GKCC)	
20	Randy Ramsey	Temple Chamber of Commerce (First State Bank)	RR
21	Drew Lanham	Little River-Academy, TX	
22	Rod Henry CCE, IOM	Temple Chamber of Commerce	RHF
23	Dr. Susan Kincannon	Belton Independent School District	





#### PARTICIPANT SIGN IN SHEET

	NAME	ORGANIZATION	INITIALS
24	Chris Hill	City of Rogers	
25	Tim Brown	Bell County	TB
26	Dr. Robin Battershell	Temple ISD	
27	Bob Browder Bob Browder	Temple Chamber of Commerce	
28	Cynthia Hernandez Ang Borchardt	Belton Economic Development Corporation	AB-
29	Russell Schneider	Commissioner, Bell County	
30	Gloria Ramos	Bell County	
31	Jim Reed	CTCOG	
32	Marilyn Krumnow	Temple ISD	
33	Lynette Batts Lynette Batts MHN FISHER	Environmental Justice Representative	
34	JOHN FISHER	BELL CO. Compulssioner	





#### **OBSERVER SIGN IN SHEET**

	NAME	ORGANIZATION
1	GARY BUSHELL gebushell a	Ful Coast Highy Jun Co Dety I 14
2	Heather Bater	Khate @ Kmpletk-gov
3		
4		
5		
6		
7		
8		
9		
10		
11		





#### STAFF SIGN IN SHEET

	NAME	ORGANIZATION	INITIAL
1	Cheryl Maxwell, AICP	КТМРО	CM
2	John Weber	КТМРО	JW
3	Kendra Coufal	КТМРО	VU VU
4	Jason Deckman	КТМРО	
5	Jim Reed	КТМРО	
6	Susan Chavez	TxDOT	Suc
7	Andy Atlas, AICP	CP&Y	A A
8	Roger Beall, P.E.	TxDOT	RAB
9	Michael Bolin, P.E.	TxDOT	MB
10	Stacey Benningfield	CP&Y	SB
11	Angela Gillmeister	CP&Y	AG
12	Kenneth Roberts	TxDOT	
13	Lynda Rife	Rifeline	LR
14	Andy Adams	CP&Y	1 0
15	Susan Howard	Тхрот	FIT
16	Carter Thompson	СТСОБ	OT





#### STAFF SIGN IN SHEET

	NAME	ORGANIZATION	INITIAL
17	Michelle Neeley	Rifeline	MN
18	Lyndsi Lambert	Rifeline	
19	Jaime Aguilar, P.E.	CP&Y	
20			
21			
22			
23			
24			

# US 190 Feasibility Study

### **Meeting Minutes**



#### U.S. 190 Working Group Meeting #4

April 4, 2018, 2:00 p.m. – 4:00 p.m.

Opening Remarks & Introductions
 Roger Beall • TxDOT

Roger Beall opened the meeting by thanking working group members for attending and KTMPO for leading the US 190 Feasibility Study effort. He explained that the purpose of the purpose of Working Group Meeting #4 would be to 1) review comments and survey results received from the public at the Nov. 30<sup>th</sup> Open House; 2) present the results of the technical and engineering study findings; and 3) gather feedback from the working group regarding the study findings.

He took a moment to remind the working group members that the purpose of the US 190 Feasibility Study Working Group was to be proactive and prepared for future growth in the area and to include the community in the planning process.

Copies of the meeting agenda and sign-in sheets are found in **Appendices A** and **H**, respectively. Working group members were provided a copy of the agenda, study fact sheet (**Appendix B**), and a comment form (**Appendix I**). The working group was shown a PowerPoint presentation, of which the slides can be found in **Appendix C**. Four boards were also set up around the room, copies of the boards can be found in **Appendix D**. Note: No comment forms were received from working group members or observers.

#### Recap of Primary Alignment Options Presented to Public at Open House Andy Atlas, AICP, Project Manager • CP&Y

Andy Atlas first thanked the working group for their participation in the Nov. 30<sup>th</sup> Open House and said that there were more than 200 attendees.

He reviewed the primary route options that were shown to the public at the Open House, the figures discussed can be found in **Appendix C**. The following were discussed:

#### PINK ROUTE

- The Pink Route encompasses the existing US 190/Loop 363 route.
- There are two options associated with the Pink Route, "Pink" and "Pink +2". The only difference between the Pink and Pink + 2 scenarios is that the Pink +2 includes four lanes in each direction on I-35 from I-14 to Loop 363 while the Pink scenario includes three lanes in each direction.

#### BLUE ROUTE

• Runs along I-14, then turns north on I-35 before turning east along FM 93. It breaks off onto new location just east of the City of Temple jurisdictional boundaries until it joins existing US 190.

#### **BROWN ROUTE**

• Runs along FM 93 to existing US 190.

#### BLACK ROUTE

 Runs south down I-35 to Shanklin Road, then travels on new location to FM 436, which it follows until just east of the Leon River, where it follows new location around Little River-Academy to the north before joining existing US 190.

#### AQUA ROUTE

• Takes a greenfield route from I-14 at FM 1670 and cuts across I-35 at Shanklin Rd before connecting to FM 436, which it follows until just east of the Leon River, where it follows new location around Little River-Academy to the north before joining existing US 190.

Atlas then gave an overview of the public comments that were received. He listed the following highlights:

- 207 Open House attendees
- 75 comment forms/emailed comments
- 428 MetroQuest Survey's completed, with 750 visits to the site

Atlas then transitioned the discussion over to Lynda Rife for a more in-depth look at the survey and comment results.

#### Overview of Public Comments & MetroQuest Survey Responses

Lynda Rife • Rifeline

Rife began by thanking the working group for encouraging the community to participate in the Open House. She then went over the results from the MetroQuest survey, as well as the comments and emails received from the open house.

The following are the data discussed, corresponding figures can be found in **Appendix C**:

- Priorities
- Travel Patterns
- Travel Frequency
- Travel Purpose
- Other Comments

Rife explained that according to the data received from the online survey, a majority of participants reported travelling between Belton and Rogers rarely and mostly for recreation. She said that according to the MetroQuest survey results, the community does not seem to see the project as something important for the community.

Rife then went over the data about the community's preferred routes.

The following is the data shown to working group participants, corresponding figures can be found in Appendix C:

- Open House Comment Forms and Emails
- Option Rankings
- Total In Favor and Opposed

Based on this data, Rife explained that the Pink Route was the most popular route option on the online survey and on the Open House comment forms and emails. The Black Route was the least favorable. She noted that while those who attended the Open House strongly opposed the blue and brown routes, Open House attendees only made up 26% of the survey respondents. She said that 74% of the survey respondents did not attend the Open House.

She pointed out that the Brown, Aqua, Blue and Black Routes were pretty close together in levels of support and opposition.

She then transitioned the discussion back to Atlas.

#### Review of Technical & Engineering Study Findings

Andy Atlas, AICP, Project Manager • CP&Y

Atlas began by reviewing the goals and objectives identified in Working Group 2 and how those helped to the evaluate routes. He also noted that due to feedback from the working group, the width of the area evaluated for each route option was reduced from 600 feet to 400 feet. Copies of the Goals and Objectives and Evaluation Criteria charts can be found in **Appendices E** and **F**, respectively. The Evaluation Summary is included in **Appendix G**.

He then discussed the results of the goals and objectives screenings for each route.

The following are the results, corresponding figures can be found in Appendix C:

#### ENHANCE EAST/WEST CONNECTIVITY

• Atlas explained that routes that provided a new east-west route were ranked more favorably in the analysis. The Pink and Pink +2 routes were not ranked as well because they didn't provide a new route for east-west travel.

#### ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES

• Atlas explained all of the routes add extra capacity, though the Pink route adds the least since it does not add extra capacity on I-35. He stated that Pink +2 and Aqua reduce travel time the most overall.

#### ENHANCE SAFETY

• Atlas explained that the ranking for "Route avoids populated areas" was determined by the number of people who live around the route rea.

#### SUPPORT GROWTH AND ECONOMIC DEVELOPMENT

• Atlas pointed out that the goal stating "Minimizes use of existing roadways" is the opposite of the goal of "Maximizing use of existing roadways" identified under the ENHANCE EAST/WEST CONNECTIVITY goal.

#### PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY EFFICIENT OPTIONS

• Atlas explained that the Pink and Pink +2 routes outscore all other route options because they stay in the same right-of-way as existing US 190.

Atlas showed the working group members the Evaluation Summary (**Appendix G**) and said that the costs for each route are as follows:

- Pink: \$356.1 million
- Pink +2: \$372.1 million
- Blue: \$513.9 million
- Brown: \$534 million
- Black: \$427.1 million
- Aqua: \$454.6 million

He then went over the Study Findings, which are as follows:

- Pink Route is the most supported and least opposed.
- General public does not see the need to relocate US 190.
- Pink+2 Route confirms regional planning efforts to add a lane in each direction of I-35. These improvements are capable of accommodating traffic projected through the 2040 planning horizon on I-35.
- The study confirms that future US 190 improvements are compatible with, and complement, the Rogers Relief Route.
- If, in the future, it becomes necessary to relocate US 190, a fresh look at the primary route options identified in this feasibility study is recommended to assess land use and environmental conditions at that time.

He then passed the discussion over to Rife, to facilitate a discussion about the Study Findings.

#### Working Group Facilitated Discussion & Recommendations Lynda Rife • Rifeline

Rife started the discussion by asking the working group is any of the information surprised them or if they had any questions.

The following are the questions and comments from the working group members, as well as responses from the project team, if necessary:

- What are the costs of each route?
  - o Pink: \$356.1 million
  - o Pink +2: \$372.1 million
  - o Blue: \$513.9 million
  - o Brown: \$534 million
  - o Black: \$427.1 million
  - o Aqua: \$454.6 million
- Where did the cost estimates come from (TxDOT data or project team estimates)?
  - The project team generated the numbers.

- A member of the group said that the Primary Route Options Screening Results slide a lot of information to digest in such a short amount of time, and requested a second look at them.
  - A member of the group asked if anything had changed since the last time the working group met. Atlas explained that the traffic data and cost estimates were added.
- What is going to happen next?
  - Beall explained that the findings are telling the team that the existing route is working okay as it is now and an extension is not an immediate need. He said that in the future, what was learned in this feasibility study should be considered.
- A member of the working group asked Beall to clarify what he meant when he said that US 190 is working okay as it is now.
  - Beall said that operationally, without any other future improvements taken into consideration, the road is working well today. He also said that it is important to consider if the community is ready for another construction project in the area.
- A working group member said that they think it's important to identify a preferred route for planning purposes.
  - Beall said that for planning purposes, based on public comment, the Pink +2 route is noted as the most publically supported route.
- A working group member asked if the study would have any results other than the findings.
  - Atlas explained that the study is not yet finalized and that the information that the working group is providing is relevant to the finalization of the study.
- Texas State Representative Hugh Shine, on behalf of US Congressman John Carter, explained that in conversations with the community, they looked at the situation through the lens that there is no funding yet, but that the Pink Route is what they are looking to support moving forward. If funding becomes available, they plan to move forward with the Pink Route. He said that the I-14 portion of the road has a military and federal impact that they have been trying to move forward on.
- A working group member said it looks like the pink route is most favorable overall.
- Rife asked the group if they want to make a recommendation based on the findings, working group members said yes
- A working group member asked where the extra lanes for the Pink +2 would be going.
  - Atlas showed the map of the Pink +2 route and explained that the road already had capacity for the extra lanes.
- A working group member asked if the working group could provide a set of recommendations.
  - Beall said yes. Beall also explained the Project Development Process board, included in Appendix D. He said that since the public is not yet "feeling the pain" as far as east-west connectivity in the area, the project will likely not progress in the immediate future. He noted that if funding was to become available, the Pink +2 Route would likely move forward to the Environmental Study and Schematic Design Phase.

Rife broke the working group members into two group to discuss if they wanted to give recommendations.

Rife reconvened the discussion after the groups were given an opportunity to discuss their preferences. The following are the recommendations from each group:

#### GROUP 1

TxDOT should submit any additional portions of the Pink +2 route to be introduced in the KTMPO 2045 master planning document in July 2018. A member said that some projects are already on the NTP, and that all should be included.

The following activities should be added:

- Raising bridges
- Upgrading the roadway to interstate standards
- Adding 2 additional lanes to IH 35

#### GROUP 2

Agreed with Group 1, with the addition that Pink +2 is the Working Group's recommendation and that they move forward as funding becomes available. They recommended is that all other options except for the Pink +2 route be closed for consideration.

Following the group presentations, Atlas explained that if something unexpected happens, it could be important to consider other options, but based on the Working Group input they can focus in on the Pink +2 route moving forward. A working group member explained that they have already done the feasibility study once before, and they don't want to have to do it again. They think it's very important to make a decision.

A working group member said that it is important to consider that the community doesn't see it as necessary to relocate US 190, but it is important to update US 190, rather than relocate it.

The working group also recommended that the last bullet ("If, in the future, it becomes necessary to relocate US 190, a fresh look at the primary route options identified in this feasibility study is recommended to assess land use and environmental conditions at that time.") be removed from the study findings.

A working group member asked what happens next and Beall

#### Next Steps

Roger Beall • TxDOT

Beall closed the meeting by giving the working group an overview of what would happen next. He explained that the feasibility study would be prepared and by the project team and a final report with recommendations would be given to TxDOT and KTMPO. They would then determine what to do next.

Beall thanked the working group for their participation in the feasibility study.

#### Appendices

- Appendix A Agenda
- Appendix B Fact Sheet
- Appendix C PowerPoint presentation
- Appendix D Boards
- Appendix E Goals and Objectives
- Appendix F Evaluation Criteria
- Appendix G Evaluation Summary
- Appendix H Sign-in Sheets
- Appendix I Comment Forms

Appendix A – Agenda

### **US 190 Feasibility Study**

Agenda



#### U.S. 190 Working Group Meeting #4

April 4, 2018, 2:00 p.m. - 4:00 p.m.

- Opening Remarks & Introductions Roger Beall • TxDOT
- Recap of Primary Alignment Options Presented to Public at Open House Andy Atlas, AICP, Project Manager • CP&Y
- Overview of Public Comments & MetroQuest Survey Responses Lynda Rife • Rifeline
- Review of Technical & Engineering Study Findings Andy Atlas, AICP, Project Manager • CP&Y
- Working Group Facilitated Discussion Lynda Rife • Rifeline
- Next Steps Roger Beall • TxDOT

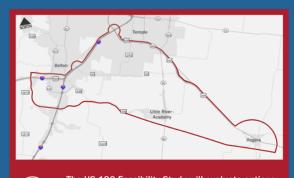
#### Appendix B – Fact Sheet

### US 190 Feasibility Study

**Fact Sheet** 







The US 190 Feasibility Study will evaluate options for upgrading, and possibly relocating, US 190 between FM 1670 and the Rogers Relief Route north of the city of Rogers in Bell County.

#### ABOUT THE STUDY

US 190 is a major east-west highway that serves Belton, Temple, and Rogers. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT), is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and the Rogers Relief Route north of the city of Rogers in Bell County.

KTMPO will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in Spring 2017 and is anticipated to take approximately one year to complete.

#### COMMUNITY DRIVEN EFFORT

KTMPO has formed a working group specifically for the US 190 FeasibilityStudy.



The working group includes local county and city elected officials and agency representatives.

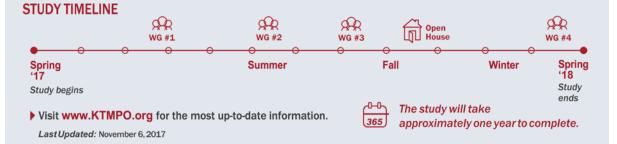
The working group has met throughout the duration of the project and has helped the project team identify problems and opportunities for transportation improvements. The working group has provided input on the study as it progressed, assisting the project team in narrowing the options.

A community open house is being held on November 30, 2017, and an online survey is available to encourage additional input from the community.

#### STATUS OF THE FEASIBILITY STUDY

With input from the working group, project goals and objectives have been established, an environmental constraints map has been developed, and 40 route options have been narrowed down to the five primary route options that will be presented at the November 30th open house.

Public feedback gathered from the Open House will be considered, along with technical and engineering studies, to identify route options recommended for further study. These route options will be the starting point for any future phases of project development, including an environmental study, should the project advance.



#### Frequently Asked Questions (FAQs)

#### What environmental factors will be considered in this study?

As part of this study, several factors are being considered including water resources, social and community impacts, land use and parkland, archaeological and historic resources, right of way (ROW) analysis and land cost, threatened and endangered species, vegetation and wildlife, hazardous materials, engineering analysis, and public input.

#### What happens after this Open House?

Public feedback gathered from the Open House will be considered, along with technical and engineering studies, to identify route options recommended for further study. Recommended route options will be the starting point for any future phases of project development, including an environmental study, should the project advance. The US 190 Feasibility Study is expected to be completed in Spring 2018.

#### After the US 190 Feasibility Study is completed, what's next?

The diagram below provides an overview of the steps required following the completion of the US 190 Feasibility Study and prior to the start of any future construction. There is currently no funding identified for an environmental study, which would be the next step. Each step will be dependent on available funding.



#### How does the US 190 Feasibility Study relate to the I-14 Study?

The purpose of the US 190 Feasibility Study is to investigate creating a more efficient connection to serve the community and improve local mobility. The I-14 study is a separate, independent study focused on serving regional priorities and initiatives. In the future, this section may become part of the I-14 project or may remain a distinct regional project.

#### How can I provide feedback on this project?

Your feedback will help the Killeen-Temple Metropolitan Planning Organization (KTMPO) identify project goals and objectives, environmental constraints, and route options to recommend for further study. A final route will not be chosen at the end of this process.

Please share your thoughts by completing our online community survey, which can be found here: https://www.txdot.gov/inside-txdot/projects/studies/waco/us-190-feasibility-study.html.

You can also provide general comments by completing a comment form.

#### How can I stay informed?

Please check the Killeen-Temple Metropolitan Planning Organization (KTMPO) website for project updates: <u>https://ktmpo.org/roadway/us-190-feasibility-study/</u>.

Appendix C – PowerPoint presentation

# US 190 Feasibility Study

### US 190 Working Group Meeting #4

April 4, 2018 2:00 p.m.- 4:00 p.m.

# Welcome

# Primary Route Options Review

## **Pink Route**



## **Blue Route**



## **Brown Route**



## **Black Route**



Aqua Route



## Public Open House Highlights

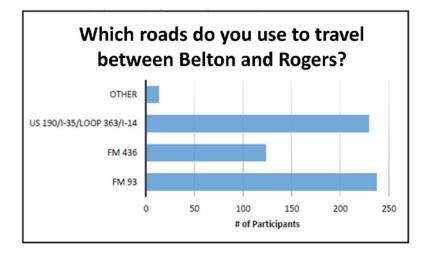
- Attendees 207
- Comment forms/emails 75
- MetroQuest Surveys 428 received (750 visits)

# **Public Comments**

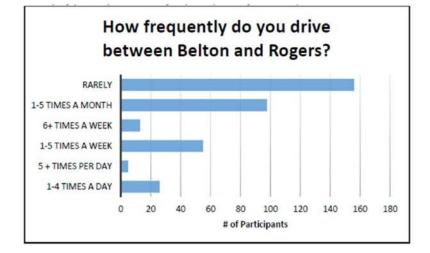
## MetroQuest Survey Priorities

Priority	# of times ranked in Top 3	Percent of Total
Reduces community impacts	211	20.5%
Uses existing roadways	153	14.9%
Protects farmland	155	15.1%
Most direct route	100	9.7%
Reliable travel times	109	10.6%
Ensures good local access	114	11.1%
Spurs development	68	6.6%
Protects the environment	117	11.4%
Total	1027	100%

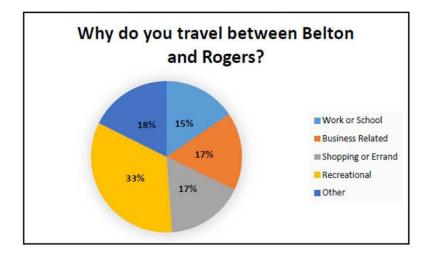
### MetroQuest Survey Travel Patterns



## MetroQuest Survey Travel Frequency



## MetroQuest Survey Travel Purpose



### MetroQuest Survey Other Comments

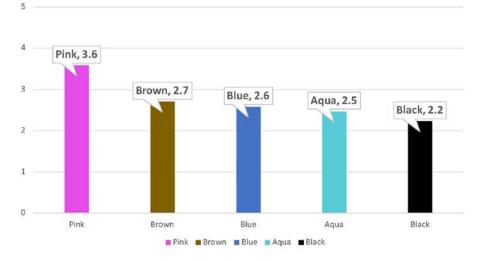
Comment General Category	# of comments	Percent
Not important/Unnecessary:	154	57.5%
Widen or utilize existing roadways	25	9.3%
Important	72	26.9%
Neutral	7	2.6%
Minimal to Somewhat Important	9	3.4%
Other	1	0.4%
Total	268	100%

### **Comment Forms & Emails**

Primary Route Options	Total # of Comments in	Total # of Comments
	Favor	Opposed
Pink Route	47	0
Blue Route	0	19
Brown Route	0	13
Black Route	4	6
Aqua Route	7	6

### MetroQuest Survey Option Rankings

Route Average Ranking



### Total In Favor and Opposed

Fa	vor		Орр	osed	
Pink	62%	275	Black	47%	208
Brown	25%	110	Aqua	46%	205
Aqua	23%	102	Blue	43%	191
Blue	20%	88	Brown	43%	189
Black	20%	87	Pink	24%	108

### Technical & Engineering Study Findings

### Primary Route Options Screening Goals & Objectives

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
ENHANCE EAST/ WEST CONNECTIVITY						
Results in improved access to Little River-Academy and Rogers						
Maximize use of existing roadways						
Reduce AM peak roundtrip travel time between FM 1670 at I-14 to north of Rogers						
(minutes)						
Provides reliable travel times						
Results in enhanced access to schools, hospitals, and emergency services						
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUM	IES					
Provides additional capacity						
Reduces network vehicle hours traveled (VHT) across the subarea under future year						
(2040) volume levels ("Build" alternative compared to "No-Build" alternative)	1					
ENHANCE SAFETY						
Route avoids populated areas						
Enhance access and reliability for first responders						
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT						
Promote economic development						
Minimizes use of existing roadways						
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIEN	IT OPTIONS					
Maximizes use of existing ROW (thereby, minimizing ROW required)						
Minimizes number of divided parcels						
Minimizes potential for residential displacements						
Minimizes potential for noise and neighborhood impacts						
Minimizes potential for non-residential displacements						
Minimizes potential impacts to floodplains (Acres)						
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)						
Minimizes potential impacts to wetlands (Acres)						
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)						
Demonstrated Public Support						
ESTIMATED CONSTRUCTION COST						
Construction cost including ROW and DCs (\$ Millions)						
	1					

### Primary Route Options Screening Evaluation Criteria

	Green	Yellow	Red
ENHANCE EAST/ WEST CONNECTIVITY			
tesuits in improved access to Little River-Academy and Rogers	High - South Routes	Medium - Central Routes	Low - Existing Route
Maximize use of existing roadways	High - Utilize existing roadways 75 percent or more	Medium - Utilizes existing roadways 25 - 74 percent	Utilizes existing roadways less than 25 percent
Reduce travel time between FM 1570 at 1-34 to north of Rogers	Low - Average AM & PM peak round trip travel times average less than G0 minutes	Medium - Average AM & PM peak round trip travel times average between 60 and 70 minutes	High - Average AM & PM peak round trip travel times average more than 70 minutes
Provides reliable travel times	Low - Ratio of round-trip peak period travel time to free flow travel time along proposed route greater than 0.75	Medium - Ratio of round-trip peak period travel time to free flow travel time along proposed route between 0.66 and 0.75	High - Ratio of round-trip peak period travel time to fre flow travel time along proposed route less than 0.65
lesuits in enhanced access to schools, hospitals, and emergency services	High - Enhances access primarily by providing new location options and/ or upgrading existing roadways to a higher speed/higher functioning facility	Medium - Enhances access primarily by improving existing Nigher speed, Nigher functioning roadways	Low - Does not enhance access
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES			
Provides additional capacity	Pass		Fail
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levels ("Build" alternative compared to "No Build" alternative)	Decreases VHT by more than 2 percent	Decieases VHT by 1 to 2 percent	Decreases VHT by less than 1 percent
ENHANCE SAFETY			
Loute avoids populated areas	Low - TA2s adjacent to route have a projected (2040) population density of less than one person per acre	Medium - TA2s adjacent to route have a projected [2040] population density between one and two people per acre	High - TAZs adjacent to route have a projected (2040 population density greater than two people per acre
inhance access and reliability for first responders	Pass		Aul .
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT			
romote economic development	Pass		Fail
rinimizes use of existing roadways	Low - Utilizes existing roadways less than 25 percent	Medium - Utilizes existing roadways 25 - 74 percent	High - Utilizes existing roadways 75 percent or more
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OF	TIONS		
faximizes use of existing ROW (thereby, minimizing ROW required)	High - Route utilizes mixing roadways for 75 percent (or more) of overall length	Medium - Roste utilizes existing roadways for 25 - 74 percent of length	Low - Route utilizes existing roadways for less than 2 percent of overall length
finimizes number of divided parcels	Low - Route divides less than 10 parcels	Medium - Route divides between 10-20 parcels	High - Route divides more than 20 parcels
tinknizes potential for residential displacements	Low – Fewer than 25 residences located within 400' ROW consider	Medium – Between 25 and 50 residences located within 400' ROW corridor	High - More than 50 residences located within 460' RC conidor
fininities potential for noise and neighborhood impacts	Low – Fewer than 75 residences located within 100' of ROW corrider	Medium – Between 75 and 200 residences located within 500° of ROW consider	High - More than 100 residences located within 100's ROW consider
finimizes potential for non-residential displacements	Low – Fewer than 10 non-residences located within 400' ROW corridor	Medium – Between 19 and 15 non-residences located within 400" ROW conidor	High – More than 15 non-residences located within 40 ROW corridor
finimizes potential impacts to floodplains (Acres)	Low - Less than 50 acres of floodplain within 400' (buffered) consider	Medium – Between 50 and 75 acres of floodplain within 300' (suffered) confdor	High – Greater than 75 acres of floodplain within 400 (buffered) corrider
finimizes potential impacts to creeks, rivers, and waterways (if of crossings)	Less than 15 creek/river crossings	Medium - Between 15 and 20 creek/river crossings	High - Greater than 20 creek/river crossings
Inimites potential impacts to wetlands (Acres)	Low - Lets than 10 acres of wetlands within 400' ROW consider	Medium – Between 10 and 15 acres of wetlands within 400' ROW conider	High – Greater than 15 acres of wetlands within 400' R confidor
finitelises impacts to natural (non-suban, non-cubivated) vegetation (Acres)	Low - Less than 100 acres of natural vegetation within 400' ROW consider	Medium – Retween 100 and 200 acres of natural vegetation within 400' RDW conider	High – Greater than 200 acres of natural vegetation wit 400' ROW corridor
temonstraced Public Support	High - Generally supported by public	Medium - Generally public neutral	Low - Generally opposed by public
ESTIMATED CONSTRUCTION COST			
onstruction cost including ROW and DC's (\$ Millions)			

### Primary Route Options Screening Enhance East/West Connectivity

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
Results in improved access to Little River-Academy and Rogers						
Maximize use of existing roadways	100%	100%	82%	100%	51.20%	33.20%
Reduce travel time between FM 1670 at I-14 to north of Rogers (2040 AM peak)	79.4 minutes	76.6 minutes	69.5 minutes	69.3 minutes	66.3 minutes	59.2 minutes
Provides reliable travel times (2040)	0.7	0.65	0.67	0.67	0.70	0.76
Results in enhanced access to schools, hospitals, and emergency services						

### Primary Route Options Screening Accommodate Existing and Projected Traffic Volumes

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
Provides additional capacity						
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levels ("Build" alternative compared to "No-Build" alternative)	-0.10%	-2.90%	-1.50%	-1.60%	-1%	-3.70%

### Primary Route Options Screening Enhance Safety

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
Route avoids populated areas	2.3	2.3	1.9	2	0.7	0.4
Enhance access and reliabilityfor first responders						

### Primary Route Options Screening Support Growth and Economic Development

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
Promote economic development						
Minimizes use of existing roadways	100%	100%	82%	100%	51.20%	33.20%

### Primary Route Options Screening Provide Cost-Effective & Environmentally-Efficient Options

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
Maximizes use of existing ROW (thereby, minimizing ROW required)	100%	100%	82.20%	100%	51.20%	33.20%
Minimizes number of divided parcels	0	0	2	0	25	36
Minimizes potential for residential displacements	16	16	27	32	32	69
Minimizes potential for noise and neighborhood impacts	83	83	90	95	54	111
Minimizes potential for non-residential displacements	12	12	17	18	11	17
Minimizes potential impacts to floodplains (Acres)	31.7	31.7	56.7	58.7	56.9	66.5
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)	12	12	18	17	20	25
Minimizes potential impacts to wetlands (Acres)	10.1	10.1	16.9	16.5	10.6	12.9
Minimizes impacts to natural (non- urban, non-cultivated) vegetation (Acres)	41.7	41.7	83.6	82.5	179.8	246.5
Demonstrated Public Support	2	2	6	5	10	6

### Primary Route Options Screening Results

	PINK	PINK+2	BLUE	BROWN	BLACK	AQUA
ENHANCE EAST/ WEST CONNECTIVITY						
issuits in improved access to title River-Academy and Rogers						
facinics use of existing readways	530%	100%	82%	530%	\$1.20%	\$3.20N
ted.cor AM peak roundhip travel time between FM 15RI at F18 to north of Riggers minutes)			60.5	60.3	65.3	59.Z
rovides reliable travel times	0.7	0.65	0.67	3.0	0.70	0.75
tes oftein enhanced accessito schools, hores tals, and emergency services						
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES						
rovices additional capacity						
tadios nebeck which have taxeled (VMT) acros the subares under briev year (2014) volume levels ("Aulid" alternative explained to "No de Ur" alternative)	-0.10%	-2.90%	1.50%	-1.60N	-3%	3.2%
ENHANCE SAFETY						
toute weldspepulated areas			1.5	2	0.7	0.4
shance access and reliability for first responders						
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT						
romate economic development						
civimizes use of existing stadways	550%	100%	82%	550%	51.20%	33.20%
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS						
Faximizes use of existing KOW (Pereby, minimizing KOW required)	\$90%	100%	82.20%	190%	51,20%	33.20%
Enimices number of divided parents	0	0	2	0		
civimizes potential for residential displacements	16	16	υ	32	12	
rinimizes potential for noise and neighborhood impacts	#3	83	90	55	54	
rininges patential for non-residentials/segments	12	12		18	11	9
rinimizes potential impacts to floodylains (Acres)	81.7	81.7	56.7	807	56.9	66.5
rinimizes potential impacts to creeks, rivers, and water ways (it of crossings)	12	12	15	17	20	25
rivinices potential impacts to vetlands (Acres)	10.1	19.1	16.9	16.5	13.6	12.9
Primites Impacts to natural (non-urban, non-cul Swated) wagetation (Acres)	41.7	41.7	63.6	82.5	175.8	245.5
bewandraded Public Support	2	2	4	5	10	6
ESTIMATED CONSTRUCTION COST						

### Primary Route Options Screening Study Findings

- Pink Route is the most supported and least opposed.
- General public does not see the need to relocate US 190.
- Pink+2 Route confirms regional planning efforts to add a lane in each direction of I-35. These improvements are capable of accommodating traffic projected through the 2040 planning horizon on I-35.
- The study confirms that future US 190 improvements are compatible with, and complement, the Rogers Relief Route.
- If, in the future, it becomes necessary to relocate US 190, a fresh look at the primary route options identified in this feasibility study is recommended to assess land use and environmental conditions at that time.

### **Group Discussion**

### US 190 Feasibility Study Next Steps



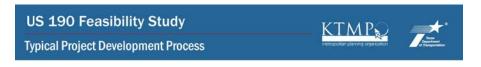
\* Each step is dependent on available funding.

### Thank you!





### Appendix D - Boards





US 190 Feasibility Study



### **Thank you to our Working Group Members!**

### WORKING GROUP REPRESENTATION

Academy Independent School District **Bell County** Bell County Office of Emergency Management **Belton Chamber of Commerce Belton Economic Development Corporation Belton Independent School District City of Belton City of Killeen City of Little River-Academy City of Rogers** 

**City of Temple Environmental Justice Community** Greater Killeen Chamber of Commerce **Killeen Independent School District Rogers Independent School District Temple Chamber of Commerce** Temple Economic Development Corporation Temple Independent School District **Texas Farm Bureau** 

KTMP



US 190 Feasibility Study		KTMP
Primary Route Options		metropolitan planning orga
Northern Route Option		-/
PINK ROUTE	21.9 Miles	Carlopa .
About the Route: Utilizes existing 1-14 and 1-35; up-grades existing Loop 363 and US 190 between 1-35 and Rogers     Beartier, Maximizes use of existing road-says (including 1-14, Loop 363, and US 190)     Gencemis: Loops; Isaat Crief curve and may impact bounisesse and apartments along US 190/Loop 363		. /
Central Route Options		
BLUE ROUTE	19.1 Miles	5-1-6 m
About the Route: Follows existing 1-14 north on 1-35 to FM 93. Follows FM 93 and continues straight on an undeveloped existing (\$1.90)     Benefic One of the most direct routes     Categorie: Undeveloped land sections may increase potential for impacts to natural resources and may impact adjacent		-
BROWN ROUTE	19.3 Miles	-
About the Route: Follows existing I 14 to north on I-35 to FM 93, Follows FM 93 from I-35 to existing US 190     Readit: One of the most direct routes     Cancerne: May impact adjacent neighborhoods		CT I
Southern Route Options		-
BLACK ROUTE	20.5 Miles	
About the Raute: Follows existing 1:34 to south on 1:35. Briefly continues on an undeveloped land route to FM 4:36, and e undeveloped land route north of Little River-Academy to existing US 190     Benefit: Avoids heavily oppulated areas     Conterme: Undeveloped land sections may increase potential for impacts to natural resources	continués on an	F
AQUA ROUTE	19.6 Miles	-
About the Route: Takes an undeveloped land route from 134 at FM 1570 to existing Sharkkin Road, crosses 135 to come Continues on an undeveloped land route north of UIB River Academy to existing US 199     Reartist Anois have have populated rearies; under safet at 196 have populated rearies; under safet and the route populated rearies; under safet at 196 have populated rearies;     Contemm: Undeveloped land sections may increase potential for impacts to natural resources.	ect to FM 436,	- F

### **Environmental Thresholds**

Primary Route Options Screening Criteria						
Diviance EAST/ WEST CONNECTIVITY Red						
ENHANCE EAST/ WEST CONNECTIVITY						
Results in Improved access to Little River-Academy and Rogers	High - South Routes	Medium - Central Routes	Low - Existing Route			
Maximize use of existing roodways	High - Utilize existing roadways 75 percent or more	Medium - Utilizes existing roadways 25 - 74 percent	Utilizes existing roadways less than 25 percent			
Reduce travel time between FM 3670 at I-34 to north of Rogers	Low - Average AM & PM peak round trip travel times average less than 60 minutes	Medium - Average AM & PM peak round trip travel times average between 60 and 70 minutes	High - Average AM & PM peak round trip travel times average more than 20 minutes			
Provides reliable travel times	Low - Ratio of round-trip peak period travel time to free flow travel time along proposed route greater than 0.75	Medium - Ratio of round-trip peak period travel time to free flow travel time along proposed route between 0.66 and 0.75	High - Ratio of round-trip peak period travel time to free flow travel time along proposed route less than 0.56			
Results in enhanced access to schools, hospitals, and emergency services	High - Enhances access primarily by providing new location options and/ or upgrading existing roadways to a higher speed/higher functioning facility	Medium - Enhances access primarily by improving existing higher speed, higher functioning readways	Low - Does not enhance access			
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES	•					
Provides additional capacity	Pass		Fall			
Reduces network vehicle hours traveled [VHT] across the subarea under future year (2040) volume levels ("Build" alternative compared to "No-Build" alternative)	Decreases VHT by more than 2 percent.	Decreases VHT by 1 to 2 percent	Decreases VHT by less than 1 percent			
Double even (suid attended compared is notice) to the standard of the standard						
Route avoids populated areas	Low - TA2s adjacent to route have a projected (2040) population density of less than one person per acre	Medium - TA2s adjacent to route have a projected (2048) population density between one and two people per acre	High - TA2s adjacent to route have a projected (2040) population density greater than two people per acre			
Enhance access and reliability for first responders	Pass		Fall			
[Chlore excess and reliability for find responders Pass Pass Pass Pass Pass Pass Pass Pa						
Promote economic development	Pass		fail			
Minimizes use of existing roadways	Low - Utilizes existing roadways less than 25 percent	Medium - Utilizes existing roadways 25 - 74 percent	High - Utilizes existing roadways 75 percent or more			
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS						
Maximizes use of existing ROW (thereby, minimizing ROW required)	High - Route utilizes existing roadways for 75 percent (or more) of overall length	Medium - Route utilizes existing roadways for 25 - 74 percent of length	Low - Route utilizes existing roadways for less than 25 percent of overall length			
Minimizes number of divided parcels	Low - Route divides less than 10 parcels	Medium - Route divides between 10-20 parcels	High - Route divides more than 20 parcels			
Minimizes potential for residential displacements	Low - Fewer than 25 residences located within 400' ROW corridor	Medium – Between 25 and 50 residences located within 400° ROW corridor	High - More than 50 residences located within 400' ROW corridor			
Minimizes potential for noise and neighborhood impacts	Low - Fewer than 75 residences located within 100' of ROW corridor	Medium - Between 75 and 100 residences located within 100° of ROW corridor	High - More than 100 residences located within 100' of ROW corridor			
Minimioes potential for non-residential displacements	Low - Fewer than 10 non-residences located within 400' ROW corridor	Medium - Between 30 and 15 non-residences located within 400° ROW corridor	High - More than 15 non-residences located within 400" ROW corridor			
Minimizes potential impacts to floodplains (Acres)	Low - Less than 50 acres of floodplain within 400' (buffered) corridor	Medium – Between 50 and 75 acres of floodplain within 400' (buffered) consider	High - Greater than 75 acres of floodplain within 400' (buffered) conidor			
Minimizes potential impacts to creeks, rivers, and waterways (if of crossings)	Less than 15 creek/river crossings	Medium – Between 15 and 20 creek/river crossings	High – Greater than 20 creek/river crossings			
Minimizes potential impacts to wetlands (Acres)	Low - Less than 30 acres of wetlands within 400' ROW corridor	Medium - Between 10 and 15 acres of wetlands within 400' ROW corridor	High - Greater than 15 acres of wetlands within 400' ROW corridor			
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)	Low - Less than 100 acres of natural vegetation within 400° ROW corridor	Medium – Between 100 and 200 acres of natural vegetation within 400" ROW conider	High – Greater than 200 acres of natural vegetation within 400' ROW corridor			
Demonstrated Public Support	High - Generally supported by public	Medium - Generally public neutral	Low - Generally opposed by public			
ESTIMATED CONSTRUCTION COST						
Construction cost including ROW and DC's (5 Millions)						

	PINK	PINK +2	BLUE	BROWN	BLACK	AQUA
ENHANCE EAST/ WEST CONNECTIVITY						
Results in improved access to Little River-Academy and Rogers						
Maximize use of existing roadways						
Reduce AM peak roundtrip travel time between FM 1670 at I-14 to north of Rogers (minutes)						
Provides reliable travel times						
Results in enhanced access to schools, hospitals, and emergency services						
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES	S					
Provides additional capacity						
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levels ("Build" alternative compared to "No-Build" alternative)						
ENHANCE SAFELT						
Route avoids populated areas						
Enhance access and reliability for first responders						
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT						
Promote economic development						
Minimizes use of existing roadways						
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS	T OPTIONS					
Maximizes use of existing ROW (thereby, minimizing ROW required)						
Minimizes number of divided parcels						
Minimizes potential for residential displacements						
Minimizes potential for noise and neighborhood impacts						
Minimizes potential for non-residential displacements						
Minimizes potential impacts to floodplains (Acres)						
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)						
Minimizes potential impacts to wetlands (Acres)						
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)						
Demonstrated Public Support						
ESTIMATED CONSTRUCTION COST						
Construction cost including ROW and DCs (\$ Millions)						

### Appendix E – Goals and Objectives

	Green	Yellow	Red
ENHANCE EAST/ WEST CONNECTIVITY			
Results in improved access to Little River-Academy and Rogers	High - South Routes	Medium - Central Routes	Low - Existing Route
Maximize use of existing road ways	High - Utilize existing roadways 75 percent or more	Medium - Utilizes existing roadways 25 - 74 percent	Utilizes existing roadways less than 25 percent
Reduce travel time between FM 1670 at I-14 to north of Rogers	Low - Average AM & PM peak round trip travel times average less than 60 minutes	Medium - Average AM & PM peak round trip travel times average between 60 and 70 minutes	High - Average AM & PM peak round trip travel times average more than 70 minutes
Provides reliable travel times	Low- Ratio of round-trip peak period travel time to free flow travel time abing proposed route greater than 0.75	Medium - Ratb of round-trip peak period travel time to free flow travel time abng proposed route between 0.66 and 0.75	High - Ratio of round-trip peak period travel time to free flow travel time along proposed route less than 0.66
Results in enhanced access to schools, hospitals, and emergency services	High - Enhances access primarly by providing new location options and/or upgrading existing road ways to a higher speed/higher functioning facility	Medium - Enhances access primarily by improving existing higher speed, higher functioning roadways	Low - Does not enhance access
ACCOMIMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES			
Provides additional capacity	Pass		Fail
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levek ("Build" alternative compared to "No-Build" alternative)	Decreases VHT by more than 2 percent	Decreases VHT by 1 to 2 percent	Decreases VHT by less than 1 percent
ENHANCE SAFETY			
Route avoids populated areas	Low - TAZs adjacent to route have a projected (2040) population density of less than one person per acre	Medium - TAZs adjacent to route have a projected (2040) population density between one and two people per acre	High - TAZs adjacent to route have a projected (2040) population density greater than two people per acre
Enhance access and reliability for first responders	Pass		Fail
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT			
Promote economic development	Pass		Fail
Minimizes use of existing road ways	Low - Utilizes existing roadways less than 25 percent	Medium - Utilizes existing road ways 25 - 74 percent	High - Utilizes existing road ways 75 percent or more
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS	PTIONS		
Maximizes use of existing ROW (thereby, minimizing ROW required)	High - Route utilizes existing road ways for 75 percent (or more) of overall length	Medium - Route utifizes existing road ways for 25 - 74 percent of length	Low - Route utilizes existing roadways for less than 25 percent of overall length
Minimizes number of divided parcels	Low – Route divides less than 10 parcels	Medium – Route divides between 10-20 parcels	High – Route divides more than 20 parcels
Minimizes potential for residential displacements	Low – Fewer than 25 residences located within 400' ROW corridor	Medium – Between 25 and 50 resklences located within 400' ROW corridor	High – More than 50 residences located within 400' ROW corridor
Minimizes potential for noise and neighborhood impacts	Low – Fewerthan 75 residences located within 100° of ROW corridor	Medium – Between 75 and 100 residences located within 100' of ROW corridor	High – More than 100 residences located within 100° of ROW corridor
Minimizes potential for non-residential displacements	Low-Fewer than 10 non-residences located within 400' ROW corridor	Medium – Between 10 and 15 non-residences located within 400° ROW corridor	High – More than 15 non-residences located with in 400' ROW corridor
Minimizes potential impacts to flood plains (Acres)	Low – Less than 50 acres of floodplain within 400' (buffered) corridor	Medium – Between 50 and 75 acres of floodplain within 400' (buffered) corridor	High – Greater than 75 acres of floodplain within 400' (buffered) corridor
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)	Less than 15 creek/river crossings	Medium – Between 15 and 20 creek/river crossings	High – Greater than 20 creek/river crossings
Minimizes potential impacts to wetlands (Acres)	Low – Less than 10 acres of wetlands within 400' ROW corridor	Medium – Between 10 and 15 acres of wetlands with in 400' ROW corridor	High – Greater than 15 acres of wetlands within 400° ROW corridor
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)	Low – Less than 100 acres of natural vegetation within 400' ROW corridor	Medium – Between 100 and 200 acres of natural vegetation within 400' ROW corridor	High – Greater than 200 acres of natural vegetation within 400' ROW corridor
Demonstrated Public Support	High - Generally supported by public	Medium - Generally public neutral	Low - Generally opposed by public
ESTIMATED CONSTRUCTION COST			
Construction cost including ROW and DC's (\$ Millions)			

### Appendix F – Evaluation Criteria

	PINK	PINK +2	BLUE	BROWN	BLACK	AOUA
ENHANCE EAST/ WEST CONNECTIVITY						
Results in improved access to Little River-Academy and Rogers						
Maximize use of existing roadways	100%	100%	82%	100%	51.20%	33.20%
Reduce AM peak roundtrip travel time between FM 1670 at I-14 to north of Rogers (minutes)	79.4	76.6	69.5	69.3	66.3	59.2
Provides reliable travel times	0.7	0.65	0.67	0.67	0.70	0.76
Results in enhanced access to schools, hospitals, and emergency services						
ACCOMMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES						
Provides additional capacity						
Reduces network vehicle hours traveled (VHT) across the subarea under future year (2040) volume levels ("Build" alternative compared to "No-Build" alternative)	-0.10%	-2.90%	-1.50%	-1.60%	-1%	-3.70%
ENHANCE SAFETY						
Route avoids populated areas	23	2.3	1.9	2	0.7	0.4
Enhance access and reliability for first responders						
SUPPORT GROWTH AND ECONOMIC DEVELOPMENT						
Promote economic development						
Minimizes use of existing roadways	100%	100%	82%	100%	51.20%	33.20%
PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS						
Maximizes use of existing ROW (thereby, minimizing ROW required)	100%	100%	82.20%	100%	51.20%	33.20%
Minimizes number of divided parcels	0	0	2	0	25	36
Minimizes potential for residential displacements	16	16	27	32	32	69
Minimizes potential for noise and neighborhood impacts	83	83	90	95	54	111
Minimizes potential for non-residential displacements	12	12	17	18	11	17
Minimizes potential impacts to floodplains (Acres)	31.7	31.7	56.7	58.7	56.9	66.5
Minimizes potential impacts to creeks, rivers, and waterways (# of crossings)	12	12	18	17	20	25
Minimizes potential impacts to wetlands (Acres)	10.1	10.1	16.9	16.5	10.6	12.9
Minimizes impacts to natural (non-urban, non-cultivated) vegetation (Acres)	41.7	41.7	83.6	82.5	179.8	246.5
Demonstrated Public Support	2	2	6	5	10	6
ESTIMATED CONSTRUCTION COST						
Construction cost including ROW and DCs (\$ Millions)	\$356.10	\$372.1*	\$513.9	\$534	\$427.1	\$454.6
<ul> <li>This cost estimate includes 4 main-lanes in each direction on IH 35</li> </ul>						

### Appendix G – Evaluation Summary

KTMP

## WORKING GROUP MEMBER SIGN IN SHEET

US 190 Feasibility Study - Working Group #4 April 4, 2018 2:00 pm - 4:00 pm - KTMPO, 2180 N. Main St, Belton, TX 76513

	NAME	ORGANIZATION	INITIALS
۲	Dr. Robin Battershell	Temple ISD	A Jul
2	Lynette Batts	Environmental Justice Representative	
m	David Blackburn	Temple Economic Development Corporation	De
4	Bob Browder	Temple Chamber of Commerce	R3
ß	Tim Brown	Bell County	10.
9	Jon H. Burrows	Bell County	
2	Brian Chandler	City of Temple	
00	Tammy Cockrum	Mayor, City of Rogers	S
6	Joe Craig	Rogers Independent School District	st
10	John Crutchfield III	Greater Killeen Chamber of Commerce	1
#	Phyllis Gogue	Greater Killeen Chamber of Commerce	
1	Marion Grayson	Mayor, City of Belton	Zel



### Appendix H – Sign-in Sheets





# WORKING GROUP MEMBER SIGN IN SHEET

	NAME	ORGANIZATION	INITIALS
13	Michael Harmon	Bell County Office of Emergency Management	
14	Cynthia Hernandez	Belton Economic Development Corporation	C.F.
15	Rod Henry CCE, IOM	Temple Chamber of Commerce	¢
16	Chris Hill	City of Rogers	,
17	John Kiella	Belton ISD Rep (Temple TIRZ)	a
81	Dr. Susan Kincannon	Belton Independent School District	
19	Marilyn Krumnow	Temple ISD	
20	Drew Lanham	Little River-Academy, TX	
21	Sam A. Listi	City of Belton	
22	Michael Moon	Texas Farm Bureau	
23	Brynn Myers	City of Temple	BHM





## WORKING GROUP MEMBER SIGN IN SHEET

US 190 Feasibility Study – Working Group #4 April 4, 2018 2:00 pm – 4:00 pm – KTMPO, 2180 N. Main St, Belton, TX 76513 INITIALS Ø ¥ Temple Chamber of Commerce (First State Bank) **Belton Economic Development Corporation** ORGANIZATION Academy Independent School District Killeen Independent School District 60/404 **Belton Chamber of Commerce Commissioner, Bell County** Commissioner, Bell County to City of Round Rock **City of Killeen** いた Bell County Jremy HILamon NAME David Olson P.E, CFM **Russell Schneider** Kevin Sprinkles Randy Ramsey Ana Borchardt **Gloria Ramos** Nicole Stairs Kirk Thomas John Fisher **Erin Smith** 34 29 30 31 32 33 24 25 26 27 28





### **STAFF SIGN IN SHEET**

	NAME	ORGANIZATION	INITIAL
н	John Weber	KTMPO	JW
2	Kendra Coufal	KTMPO	kr
ñ	Jim Reed	KTMPO	
4	Susan Chavez	TxDOT	Sue
Ś	Roger Beall, P.E.	TxDOT	ENS
9	Michael Bolin, P.E.	TxDOT	
2	Susan Howard	TxDOT	1 A
æ	Kenneth Roberts	TxDOT	
6	Andy Atlas, AICP	CP&Y	AA
10	Stacey Benningfield	CP&Y	
11	Angela Gillmeister	CP&Y	AG
12	Jaime Aguilar, P.E.	CP&Y	
13	Andy Adams	CP&Y	AA
14	Michelle Neeley	CP&Y	NW
15	Lynda Rife	Rifeline	r B





### **STAFF SIGN IN SHEET**

	NAME	ORGANIZATION	INITIAL
16	Katy Nail	Rifeline	KN
17	Solomon Thomas	TxDot	PA -
18	HATOR COORDO	Trout	-7/1
19	STAN	TX DOT	SUNS
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## **ELECTED OFFICIALS SIGN IN SHEET**

EMAIL									2		
PHONE	22012601922	933 57 W	933,5102	yregrycer 254 533	254-718. Nr.R	254-534-4317					
TITLE	Ere Count PS 2547607922	Bell ( Surty	Co Comminione	60	Sug	Environmentel Justice Rep					
NAME	1 BILL SCHJMANN	2 TON PURDOW	" Tim Dronk	· Cheril Hossina win	MARION ORAYSON	· Lunte Bats	2	8	0	10	11





### **OBSERVER SIGN IN SHEET**

	NAME	ORGANIZATION
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7	GARY RINSHELL	I-14/GOSH
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Appendix I – Comment Form

### **US 190 Feasibility Study**



### **Comment Form**

	US 190 Feasibility Study Working Group Meeting #4 April 4, 2018 2:00 p.m. – 4:00 p.m.	
Name (Please Print):		
Comment:		
		 5
		c
		6

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

I am employed by TxDOT

□ I do business with TxDOT □ I could benefit monetarily from the project or other

item about which I am commenting

**Final Report** 



### Appendix B – Preliminary Route Options Memorandum



### Preliminary Route Options Technical Memorandum

October 2, 2017

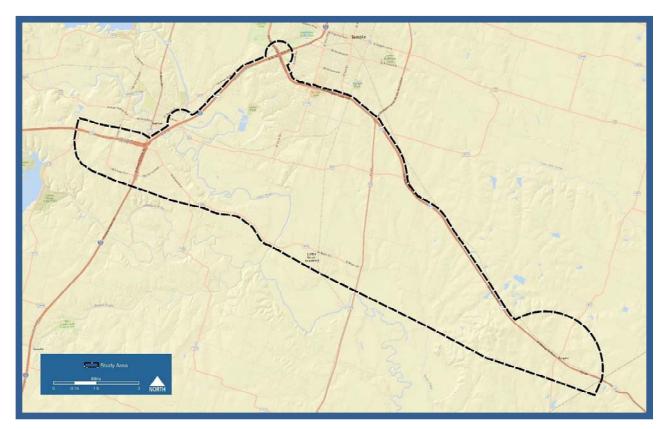






### **Preliminary Route Options Technical Memorandum**

The Killeen-Temple Metropolitan Planning Organization (KTMPO), in partnership with the Texas Department of Transportation (TxDOT), is conducting a study to evaluate the feasibility of upgrading and possibly relocating a portion of US 190 in Bell County, Texas. The portion of US 190 being studied extends from Farm-to-Market Road (FM) 1670, west of Interstate 35 (I-35), to the northern limit of the planned Rogers relief route in the eastern portion of the county. Figure 1 shows the US 190 study area, as originally established, in relation to Bell County and the cities of Belton, Temple, Little River-Academy and Rogers.



### Figure 1 • Study Area

Although sponsored by KTMPO, the overarching goal is for the US 190 feasibility study to be community-driven. To that end, KTMPO established a working group to guide the study and provide input. Working group membership includes elected officials, city/county representatives, special interest groups and the public. A complete list of US 190 working group members is found in Appendix A. The goals and objectives, preliminary route options, and evaluation criteria presented in this technical memorandum were developed with input from and the concurrence of the working group.

To date, the working group has met twice. At the first meeting (April 28, 2017) the working group identified goals and objectives for the feasibility study and participated in a facilitated group exercise



### **Preliminary Route Options Technical Memorandum**

to identify conceptual route options. At the second meeting (July 14, 2017), the goals and objectives were reviewed, the group worked to narrow the field of conceptual route options to be considered in the study, and evaluation criteria were agreed upon.

### GOALS AND OBJECTIVES

A facilitated brain-storming session at the first (April) meeting of the US 190 working group led to the identification of the goals and objectives identified in Table 1.

### Table 1 • Goals & Objectives

Enhance east/west connectivity

- Improve access to Little River- Academy and Rogers
- Utilize existing roadways as much as possible
- Provide more reliable travel times
- Enhance access to schools, hospitals, and emergency services

### Accommodate existing and projected traffic volumes

- Relieve existing congestion
- Accommodate traffic resulting from on-going growth
- Plan for and mitigate future traffic congestion

### Enhance safety

- Route large trucks away from populated areas
- Enhance access and reliability for first responders (EMS, firefighters, police)

Support growth and economic development

- Positively impact businesses (especially small businesses)
- Promote economic development
- Minimize construction-phase impacts

Provide cost-effective and environmentally-efficient options

Minimize effects on private property



### **Preliminary Route Options Technical Memorandum**

The goals and objectives were confirmed and refined at the second (July) meeting of the working group. These goals and objectives served as the basis for development of the evaluation criteria to be used to screen the field of preliminary options and, subsequently, identify a subset of "primary routes".

### PRELIMINARY ROUTE OPTIONS

A multi-stepped process was utilized to identify the field of preliminary route options to be considered during the US 190 feasibility study. Each step in the process is described below.

Step 1 (Identify Options) - The first step was a facilitated group exercise at the April 28, 2017 meeting of the working group. At that meeting, the working group was divided into three smaller groups. Each group was provided with a map of the study area showing constraints such as existing development, floodplains, and waterways. Each group was provided with markers and was asked to identify, discuss, and draw possible ("conceptual") routes for US 190. Although the study area – previously identified by KTMPO and TxDOT – was shown on the maps, the groups were given the latitude to draw routes extending outside the study area.

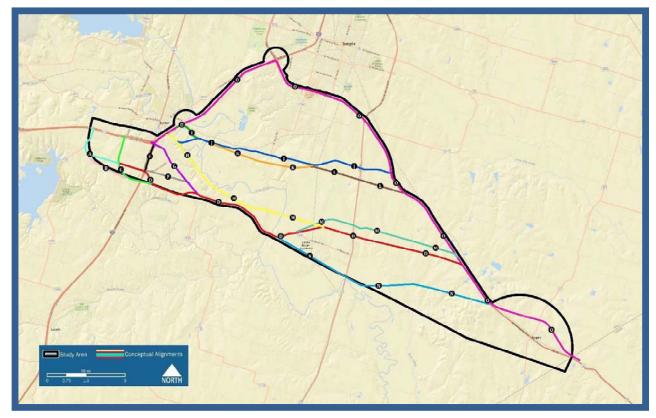
After the small group work sessions, each group "reported-out" to the larger group. Although routes differed from table-to-table, commonalities were apparent between the three groups. Each small group identified a route that followed existing US 190, a central route (either following existing FM 93 or generally paralleling it), and a southern route utilizing a combination of existing FM 436 and new location around Little River-Academy.

Step 2 (Compile and Map Options) - The next step in the process was for the project team to compile the conceptual route options and develop a (draft) conceptual route options map. Similar options were combined to minimize redundancy, with all concepts identified by the working group captured on the map. Figure 2 shows the conceptual routes as identified by the working group.



### **Preliminary Route Options Technical Memorandum**





Step 3 (Narrow the Range of Route Options) – The various route options identified by the working group (Figure 2) combine to create a total of 40 unique "end-to-end" route options. At the second (July 14<sup>th</sup>) meeting of the working group, the group was again asked to consider route options. This time the goal was to reduce the number of route options based on the goals and objectives to a more manageable sub-group that would later be evaluated in more detail.

A facilitator from the project team led the working group (working in three smaller groups) through a discussion of the pros/cons of each route option. For purposes of this discussion, the options were sorted by those in the western portion of the study area (those generally in the vicinity of I-35), the northern portion of the study area (including the existing US 190 alignment and those in the vicinity of FM 93), and the southern portion of the study area (including FM 436 and routes around Little River-Academy). After the facilitator's presentation, each of the three smaller groups discussed the route options, reached consensus regarding options recommended for elimination, and then reported-out to the larger group.

Discussions during this group exercise led to several modifications to the route options. Option E was extended to the south to intersect with Options B and C, and a connection from Option H to Option D was added. In addition, the project team was directed to explore shifting Options B and C further to the south (possibly along Shanklin Road – south of the Bell County Exposition Center and



### **Preliminary Route Options Technical Memorandum**

outside of the current study area) and modifying Option J to avoid impacting the expansion site for an existing water treatment plant. The route options endorsed by the working group are shown in Figure 3. Figure 3 reflects the changes to Options E and H discussed above. The possible modifications to Options B, C, and J required more in-depth exploration which occurred in conjunction with Step 4.

# Image: constraint of the second constraint of th

### Figure 3 • Modified Conceptual Route Options

Step 4 (Refine the Route Options and Identify Preliminary Options) – During Step 4, the project team shifted Options B, C, and J per the direction of the working group. Shifting Options B and C resulted in an expansion of the US 190 study area. Additionally, during Step 4, the team identified the various combinations of options (remaining after Step 3) in order to establish the full range of end-to-end route options. In total, nine unique, end-to-end route options were identified.

Up to this point in the route options development process, options had been identified without consideration of engineering and geometric requirements. During Step 4, applicable design standards, particularly those pertaining to horizontal curve radii, were applied and, when necessary, the route options were "refined" accordingly.



### **Preliminary Route Options Technical Memorandum**

The nine end-to-end route options, as refined and adjusted during Step 4, constitute the set of "preliminary options" to be evaluated during the course of the US 190 Feasibility Study. The nine preliminary options and the associated expanded study area are shown in Figure 4.

### 

### Figure 4 • Preliminary Route Options and Expanded Study Area

**EVALUTION CRITERIA** 

The goals and objectives for the feasibility study, as identified by the working group, served as the basis for establishing the evaluation criteria by which the nine preliminary route options will be screened. Input from the working group obtained through a survey sent to members following the group's April meeting was also considered as the (draft) evaluation criteria were developed. For each goal and objective, the project team identified evaluation criteria that could be measured or otherwise gauged at this first-phase in the screening process. In most cases, the evaluation criteria are measurable/quantifiable. In a few cases, the evaluation criteria will be assessed in terms of "pass/fail."



### **Preliminary Route Options Technical Memorandum**

It should be noted that resource-specific, on-site data collection was not included in the scope of the current study; however, a windshield survey was conducted to confirm land use in the study area. Additionally, the best previously-published, publicly-available data (obtained either on-line or from KTMPO) was used during the options evaluation process. For example, because the acreage of waterways to be impacted could not be site verified for each option, the best available data was the number of waterways crossed by each option. In that example, the number of water crossings served as a reasonable proxy. If it was determined that a specific goal/objective could not be effectively evaluated during the initial screening due to a lack of specifically-needed data (and no reasonable proxy was available), the analysis was deferred to a future phase of the process.

It should also be noted that with regard to use of existing roadways as possible routes for US 190, input received from the working group during its first meeting conflicted with input received in response to the post-meeting survey. Clarification was sought from the working group at its second (July) meeting. The evaluation criteria included in this memorandum reflect the clarification provided by the working group.

In addition to evaluation criteria and units of measurement for each criterion, the team also identified "thresholds" (or level-cutters) by which each criterion can be ranked as either high, medium, or low. Because high and low are not uniformly either positive or negative, the rankings were also color- coded. In some instances, a high ranking is positive. In those cases, it is coded as green. In other instances, a high ranking is negative. In those cases, it is coded as red. Color-coding allows the results, which will ultimately be recorded in a screening matrix, to be more readily comprehensible.

The evaluation criteria, as approved by the working group at its July 14, 2017, meeting are included in Appendix B.

### NEXT STEP

The next step in the feasibility study process will be to apply the evaluation criteria to the nine preliminary options in order to identify "primary options" – the subset of preliminary options which best meet the goals and objectives of the US 190 feasibility study. The results of that process will be documented in a future technical memorandum.



Preliminary Route Options Technical Memorandum

### Appendix A – US 190 Feasibility Study Working Group Membership



Preliminary Route Options Technical Memorandum

### US 190 Feasibility Study Working Group Membership

Member's Name	Representing
Jon H. Burrows	Bell County
Sam A. Listi	City of Belton
Brynn Myers	City of Temple
Tammy Cockrum	City of Rogers
David Olson, PE	City of Killeen
David Blackburn	Temple Economic Development Corporation
Joe Craig	Rogers Independent School District
Michael Harmon	Bell County Office of Emergency Management
John Crutchfield III	Greater Killeen Chamber of Commerce
Kevin Sprinkles	Academy Independent School District
John Kiella	Belton Independent School District
Michael Moon	Texas Farm Bureau
Lynette Batts	Environmental Justice Community
Kirk Thomas	Killeen Independent School District
Robin Battershell	Temple Independent School District
Bob Browder	Temple Chamber of Commerce
Cynthia Hernandez	Belton Economic Development Corporation
Drew Lanham	City of Little River-Academy
Nicole Stairs	Belton Chamber of Commerce



Preliminary Route Options Technical Memorandum

### Appendix B – Initial Screening Criteria



Preliminary Route Options Technical Memorandum

WG Goals and Objectives	Evaluation Criteria	Units of Measure	Thresholds	
Enhance east/west connectivity				
Improve access to Little River- Academy and Rogers	Results in improved access to Little River-Academy and Rogers	Low (R), Medium (Y), High (G)	Low – Existing Route Medium – Central Routes High – South Routes	
Utilize existing roadways as much as possible	Maximize use of existing roadways	Low (R), Medium (Y), High (G),	Low – Utilizes existing roadways less than 25 percent Medium – Utilizes existing roadways 25 - 74 percent High – Utilizes existing roadways 75 percent or more	
Provide more reliable travel times	Length of alternative (assumes same travel speed on all alternatives)	Low (G), Medium (Y), High (R)	Low – Less than 19 miles* Medium – 19 to 21 miles* High – Over 21 miles*	
Enhance access to schools, hospitals, and emergency services	Results in enhanced access to schools, hospitals, and emergency services	Low (R), Medium (Y), High (G)	Low – Does not enhance access Medium – Enhances access primarily by improving existing higher speed, higher functioning roadways High – Enhances access primarily by providing new location options and/or upgrading existing roadways to a higher speed/higher functioning facility	



Preliminary Route Options Technical Memorandum

WG Goals and Objectives	Evaluation Criteria	Units of Measure	Thresholds	
Accommodate existing and projected traffic volumes				
Relieve existing congestion	(Requires traffic modeling; not applicable at current level of screening)	(Requires traffic modeling; not applicable at current level of screening)	(Requires traffic modeling; not applicable at current level of screening)	
<ul> <li>Accommodate traffic resulting from on-going growth</li> </ul>	Provides additional capacity	Pass (G)/Fail (R)	(NOTE: At current level of screening, all alternatives will "pass")	
Plan for and mitigate future traffic congestion	(Requires traffic modeling; not applicable at current level of screening)	(Requires traffic modeling; not applicable at current level of screening)	(Requires traffic modeling; not applicable at current level of screening)	



Preliminary Route Options Technical Memorandum

WG Goals and Objectives	Evaluation Criteria	Units of Measure	Thresholds
Enhance safety			
<ul> <li>Route large trucks away from populated areas</li> <li>Enhance access and reliability for first responders (EMS, firefighters, police)</li> </ul>	Route avoids populated areas	Low (G), Medium (Y), High (R) Pass (G)/Fail (R)	Low – TAZs adjacent to route have a projected (2040) population density of less than one person per acre Medium – TAZs adjacent to route have a projected (2040) population density between one and two people per acre High – TAZs adjacent to route have a projected (2040) population density greater than two people per acre (NOTE: At current level of screening, all alternatives will "pass")



Preliminary Route Options Technical Memorandum

WG Goals and Objectives	Evaluation Criteria	Units of Measure	Thresholds						
Support growth and economic development									
<ul> <li>Positively impact businesses (especially small businesses)</li> <li>Promote economic development</li> </ul>	(NEPA level analysis; not feasible at current level of screening) Promote economic development	(NEPA level analysis; not feasible at current level of screening) Pass (G)/Fail (R)	(NEPA level analysis; not feasible at current level of screening) (Note: At current level of screening, all alternatives will						
Minimize construction-phase impacts	Minimizes use of existing roadways	Low (G), Medium (Y), High (R)	"pass") Low – Utilizes existing roadways less than 25 percent Medium – Utilizes existing roadways 25 – 74 percent High – Utilizes existing roadways 75 percent or more						



Preliminary Route Options Technical Memorandum

WG Goals and Objectives	Evaluation Criteria	Units of Measure	Thresholds					
Provide cost-effective and environmentally-efficient options								
Minimize effects on private property	Maximizes use of existing ROW (thereby, minimizing ROW required)	High (G), Medium (Y), Low (R)	High – Route utilizes existing roadways for 75 percent (or more) of overall length Medium – Route utilizes existing roadways for 25-74 percent of length Low – Route utilizes existing roadways for less than 25 percent of overall length.					
	Minimizes number of divided parcels	Low (G), Medium (Y), High (R)	Low – Route divides less than 10 parcels Medium – Route divides between 10-20 parcels High – Route divides more than 20 parcels					
	Minimizes potential for displacements, neighborhood impacts and noise impacts	Low (G), Medium (Y), High (R)	Low – Fewer than 75 residences located within 600' (buffered) corridor Medium – Between 75 and 125 residences located within 600' (buffered) corridor High – More than 125 residences located within 600' (buffered) corridor					



Preliminary Route Options Technical Memorandum

Minimizes impacts to floodplains	Low (G), Medium (Y), High (R)	Low – Less than 50 acres of floodplain within 600' (buffered) corridor Medium – Between 50 and 75 acres of floodplain within 600 (buffered) corridor High – Greater than 75 acres of floodplain within 600' (buffered) corridor
Minimizes impacts to waterbodies	Low (G), Medium (Y), High (R)	Low – Less than 5 creek/river crossings Medium – Between 5 and 10 creek/river crossings High – Greater than 10 creek/river crossings
Minimizes impacts to natural (non-urban, non-cultivated) vegetation	Low (G), Medium (Y), High (R)	Low – Less than 200 acres of natural vegetation within 600' (buffered) corridor Medium – Between 200 and 400 acres of natural vegetation within 600' (buffered) corridor High – Greater than 400 acres of natural vegetation within 600' (buffered) corridor

\*Note: Lengths adjusted after WG Meeting to correct a measurement error.

**Final Report** 



# Appendix C – Primary Route Options Memorandum



# Primary Route Options Technical Memorandum

# November 15, 2017

(Revised May 2018)







# **BACKGROUND**

The Killeen-Temple Metropolitan Planning Organization (KTMPO), in partnership with the Texas Department of Transportation, is conducting a study to evaluate the feasibility of upgrading and possibly relocating a portion of US 190 in Bell County, Texas. The portion of US 190 being studied extends from Farm-to-Market Road (FM) 1670, west of Interstate 35 (I-35), to the northern limit of the planned Rogers relief route in the eastern portion of the county. Figure 1 shows the US 190 study area in relation to Bell County and the cities of Belton, Temple, Little River-Academy and Rogers.



### Figure 1 • Initial Study Area

Although sponsored by KTMPO, the overarching goal is for the US 190 feasibility study to be community-driven. To that end, KTMPO established a working group to guide the study and provide input. The working group, which includes elected officials, city/county representatives, special interest groups and the public, established goals and objectives for the feasibility study, identified the initial group of conceptual route options and subsequently narrowed the range of options to nine preliminary route options. The goals and objectives and the process leading to identification of the preliminary options is documented in the Preliminary Route Options Technical Memorandum dated October 2, 2017.



# Primary Route Options Technical Memorandum

# IDENTIFICATION OF PRIMARY ROUTE OPTIONS

Between working group Meeting 2 and 3, the project team screened the nine preliminary route options using the evaluation criteria approved by the working group. Table 1 shows the evaluation matrix. The team concluded that the results of the screening process were inconclusive (the results were too similar when comparing one option to another to be used for the intended purpose). The screening results were presented to the working group at its third (September 22, 2017) meeting; the working group concurred with the team's assessment.

So, in the absence of meaningful screening results, during its September meeting the working group participated in a facilitated exercise to review the preliminary route options and identify "primary route options" (those options to be studied further). During this exercise, the working group was divided into smaller groups (by table). Each table discussed the various route options and identified those which they recommended be carried forward. Table discussions focused on the goals and objectives of the feasibility study as well as potential effects – both positive and negative – of the various route options. After the table discussions, each group reported their recommendations to the larger group. A member of the project team then led the entire working group in a discussion of the results which led to consensus and identification of five primary route options. The five primary route options are shown in Figures 2 – 6.

Primary Route Options Technical Memorandum



# Table 1 • Evaluation Matrix

		AQUA	BLACK	RED	YELLOW	ORANGE	GREEN	BLUE	BROWN	PINK	
	PRELIMINARY ROUTE CONCLUSION 🛛 🗸 🗶										
	ENHANCE EAST/WEST CONNECTIVITY										
	Results in improved access to Little River-Academy and Rogers										
	Maximize use of existing roadways										
	Length of alternative (assumes same travel speed on all alternatives)										
_	Results in enhanced access to schools, hospitals, and emergency services										
Criteria	ACCOMODATE EXISTING AND PROJECTED TRAFFIC VOLUMES										
rite	Provides additional capacity										
	ENHANCE SAFETY										
Evaluation	Route avoids populated areas										
alua	Enhance access and reliability for first responders										
E	SUPPORT GROWTH AND ECONOMIC DEVELOPMENT										
	Promote economic development										
	Minimizes use of existing roadways										
	PROVIDE COST-EFFECTIVE AND ENVIRONMENTALLY-EFFICIENT OPTIONS										
	Maximizes use of existing ROW (thereby, minimizing ROW required)										
	Minimizes number of divided parcels										
	Minimizes potential for displacements, neighborhood impacts & noise impacts										
	Minimizes impacts to floodplains										
	Minimizes impacts to waterbodies										
	Minimizes impacts to natural (non-urban, non-cultivated) vegetation										





Figure 2 • Primary Route Alternative (Aqua)



# Figure 3 • Primary Route Alternative (Black)







Figure 4 • Primary Route Alternative (Brown)



# Figure 5 • Primary Route Alternative (Blue)







Figure 6 • Primary Route Alternative (Pink)





# ► NEXT STEPS

The five primary route options will be presented for public review and comment at an open house on November 30, 2017. In addition, travel demand modeling of the five options has been initiated.

Input from the public, the results of the travel demand modeling, and findings from on-going environmental evaluations will be considered to further refine route options to move forward in the project development process. Identification of the further refined route options will be the end product of the current feasibility study and will be documented in a US 190 Feasibility Study Report. Completion of the Study Report will conclude the current study effort. **Final Report** 



Appendix D – Open House Summary Report

# **Open House Summary**



# U.S. 190 Open House

Project Location: Bell County US 190

Project Limits FM 1670 (west of I-35) to FM 437

# Open House Location

Bell County Expo Center Assembly Hall 301 W. Loop 121 Belton, TX 76513

#### Meeting Date and Time

November 30, 2017 5:00 to 7:30 p.m.

Total Number of Elected Officials One (1)

Total Number of Public Attendees Two hundred seven (207)

> Total Number of Media Two (2)

Total Number of Staff Twenty-two (22)

**Total Number of MetroQuest Surveys** Four hundred twenty-eight (428)

> Total Number of Comments Seventy-five (75)

#### Contents

- Appendix A Advertisements
- Appendix B Boards & Constraints Maps
- Appendix C Handout
- Appendix D MetroQuest Survey Summary
- Appendix E Comment Response Summary
- Appendix F Comment Forms
- Appendix G Constraints Map Comments
- Appendix H Sign-in Sheets
- Appendix I Photos
- Appendix J Press Release
- Appendix K News Coverage

#### Project Overview

US 190 is a major east-west highway that serves Belton, Temple, Rogers and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO) is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and FM 437 in the city of Rogers.

KTMPO is investigating the possibility of creating a more efficient connection to serve the community and improve local mobility. The study began in February 2017.

### Notices and Public Outreach

E-Blast to Stakeholders – Email is available in Appendix A. Flyer to Stakeholders – Flyer is available in Appendix A. Spanish Outreach Flyer – Flyer is available in Appendix A. Newspaper Advertisements – Advertisements are available in Appendix A. Bell County Expo Center Marquee – Photo is available in Appendix A.

#### Open House Meeting Information

#### Open House Date, Location, and Format

On November 30, 2017, the Killeen-Temple Metropolitan Planning Organization hosted an Open House in the Bell County Expo Center Assembly Hall, located at 301 W. Loop 121 in Belton, from 5:00 p.m. to 7:30 p.m. The purpose of the Open House was to provide community members with an opportunity to review materials and provide input on the US 190 Feasibility Study.

Twenty-seven informational boards were displayed arounds the room for public viewing, including a board describing the typical project development process, a board explaining the purpose of the working group and a board providing information about the primary route options.

There were also two constraints maps of the southern route options and two constraints maps of the north/central route options. Attendees were invited to use Post-It Notes to attach their comments on the map. Attendees were also invited to share their questions and concerns with project team members. Copies of the boards and constraints maps are included in **Appendix B.** 

#### Handout

Stakeholders were provided with a fact sheet and frequently asked questions sheet that outlined the problem being addressed as well as the goal and history of the feasibility study. The fact sheet featured a picture of the constraints map. Attendees were also offered a comment form to provide additional feedback on the project. Copies of the Handouts are included in **Appendix C**.

#### MetroQuest Survey Summary

Of the 207 people that attended the US 190 Open House on November 30, 2017, 83 people participated in the MetroQuest Survey while at the Open House. An additional 345 people participated in the survey from other locations, bringing the total number of participants to 428 people. The participants were most concerned with reducing community impacts in regards to effects from the proposed project, and were least concerned with spurring development. The pink route was the highest rated route at 3.6 stars, and the black route was rated the lowest at 2.2 stars. Of the open ended questions relating to opinions on the route, the majority of the responses were expressing the participants' negative opinions of the individual routes. This trend was also true

for the open-ended question asking for the participants' opinions of a direct route. Images of the surveys, as well as survey results, are included in **Appendix D.** 

# Comment Form and Online Comment Summary

Fifty-two comment forms were collected at the meeting and 23 online comments were submitted. Feedback included:

- You should follow the pink route. Keep the road as it is.
- We are STRONGLY against running I-14 anywhere other than down the existing 363 Loop!
- The "hub" of Central Texas is Temple, use existing routes.
- Use 190 the least impact, good for business, probably cheaper. Don't use 93 too much residential, school, congestion, safety.
- We are hoping for the pink route to be chosen as it utilizes more of the existing road, and causes less disturbance to the nearby land.
- Farmland is extremely valuable for food production. Don't ruin the farmland. We aren't going to be able to feed our people. We've got to protect our farmland.
- Please do NOT bring an interstate through our beautiful residential areas along FM93.
- 436 is the most direct route and would allow military convoys & make a move cheaper and quicker.

The full comment response summary and a copy of the comment form are included in Appendix E.

#### Constraints Map Comment Summary

Attendees were invited to use Post-It Notes to attach their comments on constraints maps. Photos of the maps and a summary of the comments left on the maps are included in **Appendix F.** Southern Map Comments:

- No to 93
- Not 436!
- The Aqua route is the largest destroyer of private property
- Aqua crosses 11 waterways bridges (would be expensive). Even more expensive with 3 flood plains
- Wants Pink route
- Some comments like black route, some do not (majority wants pink route)
- Why does the committee not consist of citizens?
- FM 436 & Hartrick Bluff Spur Site of Fort Griffin remain + artifacts and the road would go over the Fort Site
- Potential Historic Property Large Live Oaks saw Fort Griffin and Buffalo Herds on FM 436 & Hartrick Spur
- Does not want Farmland destroyed
- Likely terrible environmental cost to rivers
- Area being developed as residential where the southern routes would cut through

#### North/Central Comments:

- Pink route, not 93
- Pink route doesn't disrupt wetlands
- Rockwool contaminated hazard and water treatment expanding now
- 93 = death trap, 2016 traffic count 16,756 West and 16,756 East per day
- Use existing, 190/36 already there!
- Use current road
- Hell no to Blue or Brown
- No through traffic from I14 to Hwy 190
- Blue and Brown are worst options

- Large Oak Trees
- North route @ Rogers already land bought so use existing road and North route.
- Use A9 land. Save I-35 Loop Businesses
- Majority of comments thinks Pink route makes most sense
- One comment says pink route makes least sense
- One comment said Blue is okay, Brown is best, Pink takes too much \$ and businesses

Appendix A - Advertisements

# **E-Blast to Stakeholders**

Subject: US 190 Feasibility Study Open House Thursday November 30th

Good Morning,

You are cordially invited to attend a US 190 Feasibility Study informational Open House on **Thursday, November 30**<sup>th</sup>. The Open House will be held from **5:00 p.m. – 7:30 p.m.** at the **Expo Center Assembly Hall**, located on <u>301 West</u> <u>Loop 121, Belton, TX 76513</u>.

Please share the attached flyer with any of your contacts or networks who may be interested in attending. Community members are invited to come and go at their convenience to review materials and provide input on the US 190 Feasibility Study. Project team members will be on hand to answer questions. There will be no formal presentation.

At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT), is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM <u>1670 (west of I-35</u>) and the Rogers Relief Route north of the city of Rogers in Bell County.

The study began in the Spring of 2017 and is anticipated to take approximately one year to complete. The US 190 Feasibility Study Working Group, which includes agency representatives and local, county, and city elected officials, has met throughout the study and has helped the study team identify problems and opportunities for transportation improvements.

With input from the Working Group, project goals and objectives have been established, an environmental constraints map has been developed, and 40 conceptual route options have been narrowed down to the 5 primary route options that will be presented at the November 30th Open House.

Input from the Open House will be used to further narrow the range of route options down to a set of final route options. Identification of the final route options will be the end product of the US 190 Feasibility Study. The final route options will be the starting point for any future phases of project development, including an environmental study, should the project advance beyond the feasibility study phase.

**Can't make the Open House?** Take our quick interactive online survey, which will be made available <u>here</u> on Thursday, November 30<sup>th</sup>. <u>Surveys must be received by Friday, December 15<sup>th</sup>.</u>

For more information, please do not hesitate to contact me.

Sincerely,

Lynda Rife On behalf of the US 190 Feasibility Study <u>512-797-9019</u> (cell)

# **WE WANT TO HEAR FROM YOU**

# YOU ARE INVITED TO ATTEND AN Informational open house about The US 190 Feasibility Study.

Come and go at your convenience to review materials and provide valuable input about the US 190 Feasibility Study.





# WHEN:

Thursday, Nov. 30, 2017 5:00 p.m. to 7:30 p.m.

# WHERE:

Bell County Expo Center Assembly Hall 301 W. Loop 121 Belton, TX 76513

# **ABOUT THE STUDY**

The Killeen-Temple Metropolitan Planning Organization, with support from the Texas Department of Transportation, is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 and the Rogers Relief Route north of the city of Rogers in Bell County.

For more information, visit www.KTMPO.org, or email Cheryl Maxwell at cheryl.maxwell@ctcog.org.

# Queremos conocer su opinión

# Le invitamos a asistir a una jornada de puertas abiertas informativa sobre el Estudio de Viabilidad de la Ruta US 190.

Asista de acuerdo a su disponibilidad y conveniencia para revisar los materiales y recibir información valiosa sobre el Estudio de Viabilidad de la Ruta US 190.







# CUÁNDO:

Jueves 30 de Nov. 2017 de 5:00 p.m. a 7:30 p.m.

# DÓNDE:

Salón de Asambleas del Expo Center del Condado de Bell, 301 W. Loop 121 Belton, TX 76513

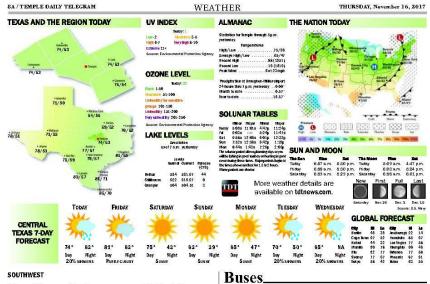
# ACERCA DEL ESTUDIO

La Organización de Planificación Metropolitana Killeen-Temple con el apoyo del Departamento de Transporte de Texas, está llevando a cabo un estudio de viabilidad para explorar opciones para modernizar, y posiblemente reubicar la Ruta US 190 entre FM 1670 y la Ruta de Socorro de Rogers al norte de la ciudad en el Condado de Bell.

Para obtener más información, visite www.KTMPO.org, o correo a Cheryl Maxwell cheryl.maxwell@ctcog.org.

# Newspaper Advertisements

# **Temple Daily Telegram**



## Parties pledge new thinking to solve interstate water fight

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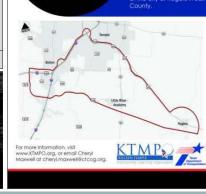
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ABOUT THE STUDY



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# WE WANT TO HEAR FROM YOU

YOU ARE INVITED to attend an informational open house about the US 190 Feasibility Study. Come and go at your convenience to review materials and provide valuable input about the US 190 Feasibility Study.

BAR-B-Q

STEAKHOUSE

nin SL | 254-

#### KILLEENDAKY HERALD | SUNDAY, NOVEMBER 19, 2017

# **Frustrated foreign leaders bypass Washington**

BY MICHAEL BIRNBAUM AND GREG JAFFE THE WISHINGTON POST

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Tuesday, was just the latest in a growing transat-lantic back and forth that bypesses the Trumpera White House. In July, New York Mayor Bill de Blasio headlined a pro-test in Hamburg against the Group of 20. Several European countries have ambassadors in Silloon ambassadors in Silicon Valley to boost trade ties

Meanwhile, state and the total actors thus a state of the total actors are expanding or building wor offices to help them mere wor forces to help them mere wor forces to help them mere to a state of the total state. This year, to A rage les Mayor Eric Carcetti, a demostrat, created the position of deputy meyor framer and constant affairs to the formal president and Armenian defense with the Israell president and briefly described his country's ongoing dispute break may be a state of the president and briefly described his country's ongoing dispute break may be a state of the president and briefly described his country's ongoing dispute break may be a state of the president and briefly described his country's ongoing dispute break may be a state of the president and break of the country's ongoing dispute break may be a state of the break may be a break of the break



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European leaders said they are frustrated by the Trump administration

In meetings with Trump to present their creden-tials, European ambas-sadors said the president was laser focused on two subjects. He wanted to know how much their

lower level than the White House or State Depart-

Schools adept at shoring up security at any hint of danger

> open house about the US 190 Feasibility Study. Come and go at your convenience to review materials and provide valuable input about the US 190 Feasibility Study.





Security of a control of the second s

learning and some safety. On the same day as the California rampage, across the country in up-state New York, a heavily armed gunman fired shots On the same day as the California rangeo, "Any time schools start across the country in up-tacross the school takes. The country school issued to construct the school takes. The country school issued To clockut, "with students in on a full Dickdown,

GO BIG

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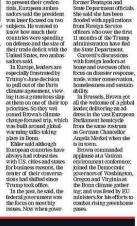
wires was found in the locker of a student who had talked about making bombs. The district issued a lockdown, kaping to its highest level of security until sheriff "sdeputies with K & determined there was no threat, ad-winteremprescid. School Resource Officers, It's unknown how frequently the plans are actually implemented in schools in response to perceived dangers in or outside the building.

mene was no threat, ad-ministrators said. "The disruption is secondary. The safety is primary." Superinten-dent Adam Stoltman said Friday.

DAILY HERALD



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# The Belton Journal

Thursday, November 16, 2017

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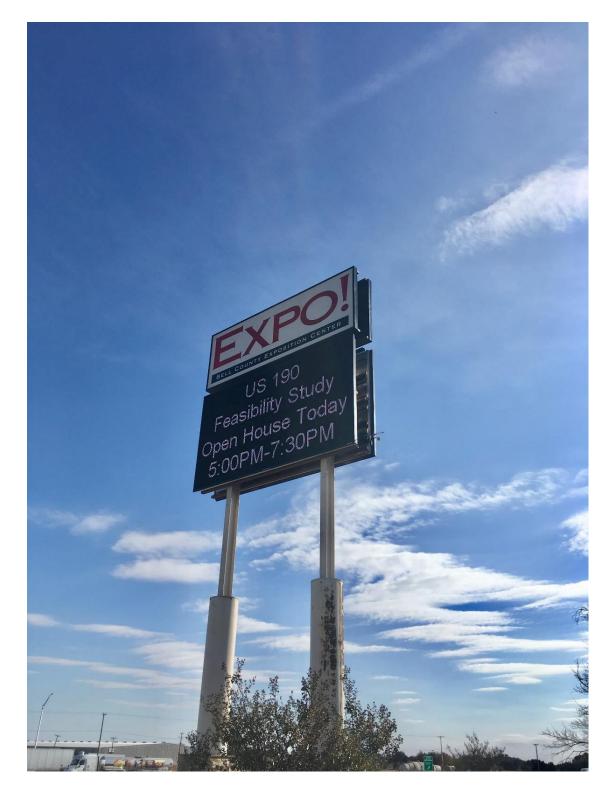
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A5



A-6

# Bell County Expo Center Marquee



Appendix B- Boards & Constraints Maps

# KTMP

#### Purpose of the Study

**The Killeen-Temple Metropolitan Planning Organization (KTMPO)**, with support from the **Texas Department of Transportation (TxDOT)**, is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and the Rogers Relief Route north of the City of Rogers.

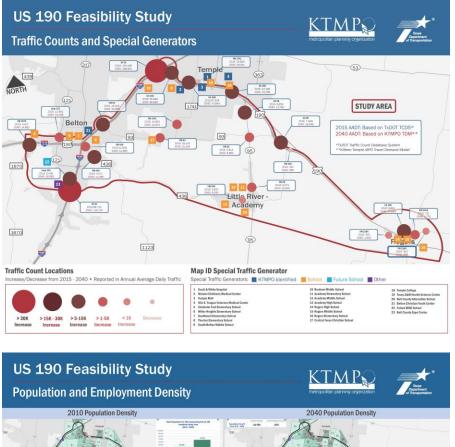


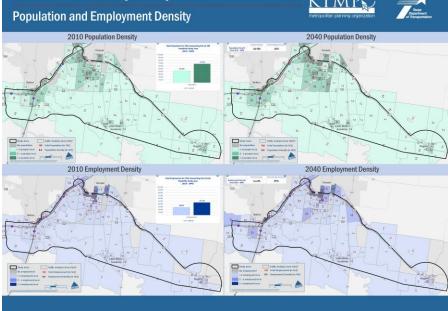
Goals and objectives for the study were identified by the US 190 Feasibility Study Working Group.

US 190 Feasibility Study Typical Project Development Process









**Demographic Summary** 





#### Population within the study area is projected to increase from 43,559 people to 67,413 from 2010 to 2040, a 55% increase (23,854 people).

- Almost 11,000 more people (45% of the total growth) are projected for areas west of I-35 and south of FM 93. • Approximately 18% of the growth (4,284 people) is projected for the area between S. 31st and Old Hwy 95 in and
- near Temple.
- · Most of the remaining growth is projected along existing US 190.



#### Employment is projected to increase from 28,435 jobs in 2010 to 45,128 jobs in 2040, a 59% increase (16,693 jobs).

- Approximately 43% of the new jobs (over 7,000) is expected to be west of or along I-35, south of FM 93.
- · Almost 30% of the new jobs (almost 5,000) is projected for areas along FM 93.



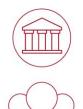
#### There is a wide range of traffic growth projected between 2015 and 2040. Many of the areas of highest growth are near existing areas of heavy traffic.

- Much of the growth in traffic in the study area is projected to occur on I-35 between 2015 and 2040. Traffic
  on I-35 is projected to increase between 48,000 and 56,000 vehicles per day (VPD) or from 53% to 73%.
- Other areas of high traffic growth are projected for high growth areas on FM 1670 and Loop 121. • Traffic is not expected to grow very much on FM 436, except in the area near the intersection with Loop 121
- (186.5%).
  - Projected traffic increases on FM 93 range from 16% west of S 31<sup>st</sup> to 85.7% west of SH 95.

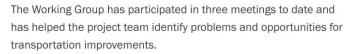
# **US 190 Feasibility Study**



**Purpose of the Working Group** 



A Stakeholder Working Group was formed to represent the municipalities, businesses, and other stakeholder interests in Belton, Temple, Little River-Academy, Rogers, Killeen, and around Bell County.





The Working Group has provided input on the study as it has progressed and has assisted the project team in narrowing the route alternatives.

Working Group Membership



## **Thank you to our Working Group Members!**

#### WORKING GROUP REPRESENTATION

Academy Independent School District Bell County Bell County Office of Emergency Management Belton Chamber of Commerce Belton Economic Development Corporation Belton Independent School District City of Belton City of Killeen City of Killeen City of Little River-Academy City of Rogers

City of Temple Environmental Justice Community Greater Killeen Chamber of Commerce Killeen Independent School District Rogers Independent School District Temple Chamber of Commerce Temple Economic Development Corporation Temple Independent School District Texas Farm Bureau

<u>ktmp</u>



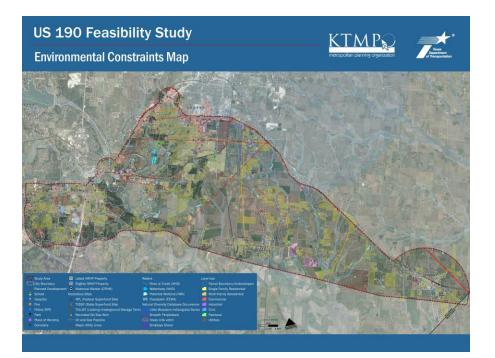
US 190 Feasibility Study Working Group Meeting #1 • April 2017

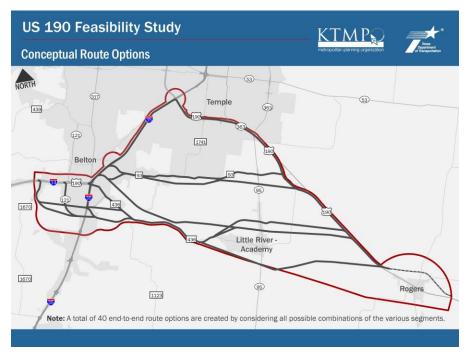
#### What Did We Accomplish?

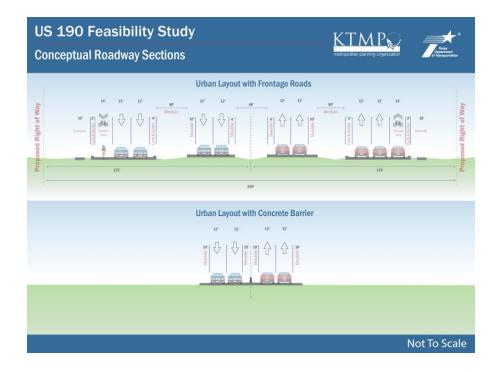
- Identified concerns about current conditions and potential benefits of proposed improvements
- Identified environmental constraints
- Identified 40 end-to-end potential route options

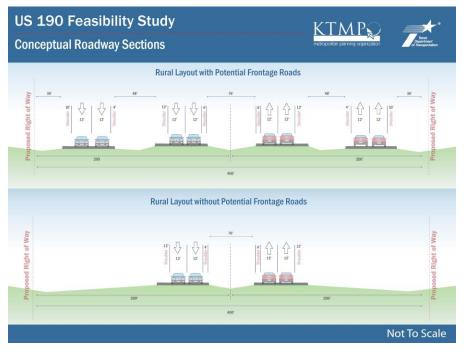
Homework: Completed evaluation criteria survey.











**Goals and Objectives** 

Enhance East/West Connectivity Avoid routes that utilize already-congested I-35 Minimize negative effects on other roadways Improve access to Little River-Academy and Rogers

Enhance access to chools, hospitals, and emergency services



Accommodate Existing and Projected Traffic Volumes Relieve existing congestion on FM 93 Accommodate traffic resulting from ongoing growth

KTMP



Enhance Safety Route large trucks away from populated areas

Plan for and mitigate future traffic congestion



Support Growth and Economic Development Positively impact businesses (especially small businesses) Minimize construction-phase impacts

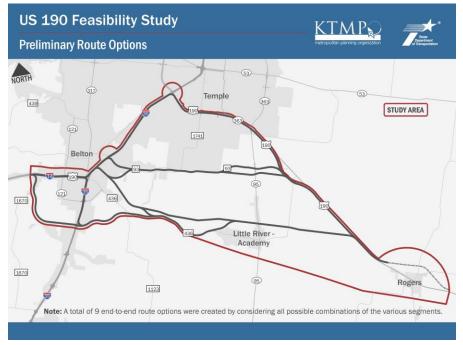


Provide Cost-Effective and Environmentally-Efficient Options Minimize effects on private property

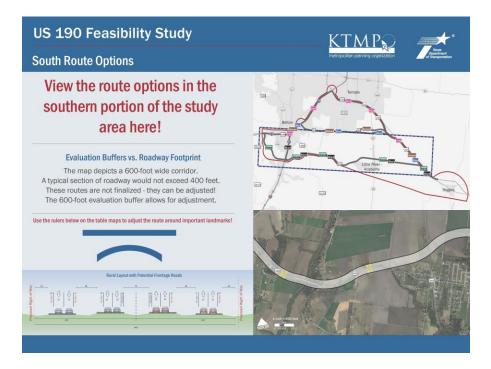
The Goals and Objectives were developed during Working Group Meeting #1 and approved in Working Group Meeting #2

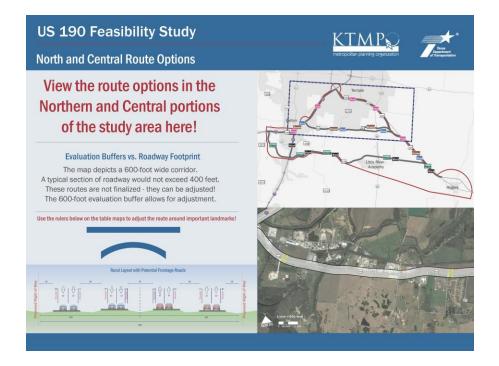
# US 190 Feasibility Study Working Group Meeting #2 • July 2017 What Did We Accomplish? Approved Goals and Objectives Approved Evaluation Criteria Identified 9 Viable Route Options for Further Evaluation Mote: After Working Group Meeting #2, remaining route options criteria.











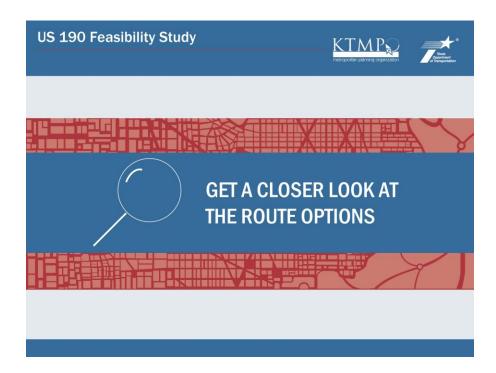


# **OPEN HOUSE**

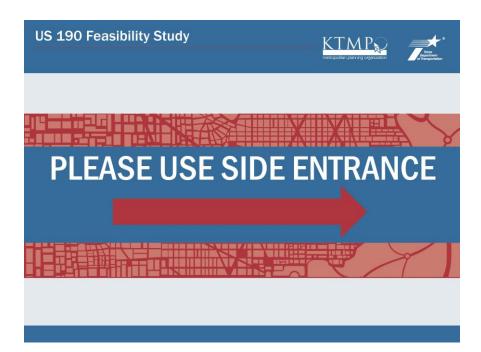
## US 190 Feasibility Study

- Sign in so we can keep you updated on the study
- **Share** your comments by December 15<sup>th</sup>
- Fill out a community survey by December 15<sup>th</sup>









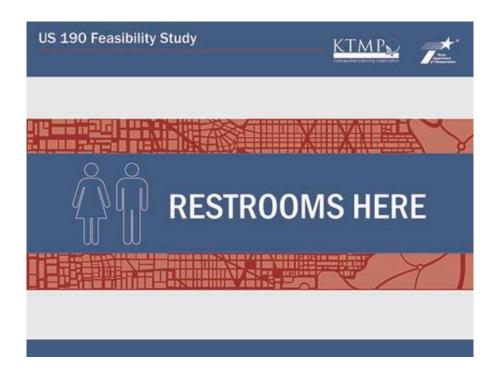


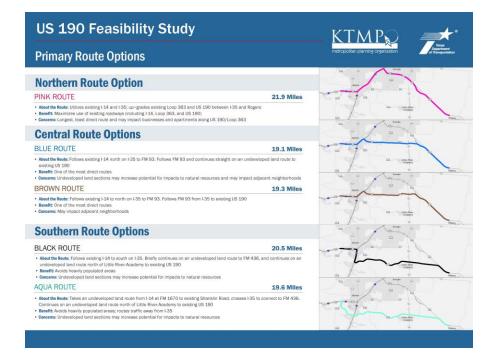
# HOW CAN I STAY INFORMED?

# For questions or comments, please...

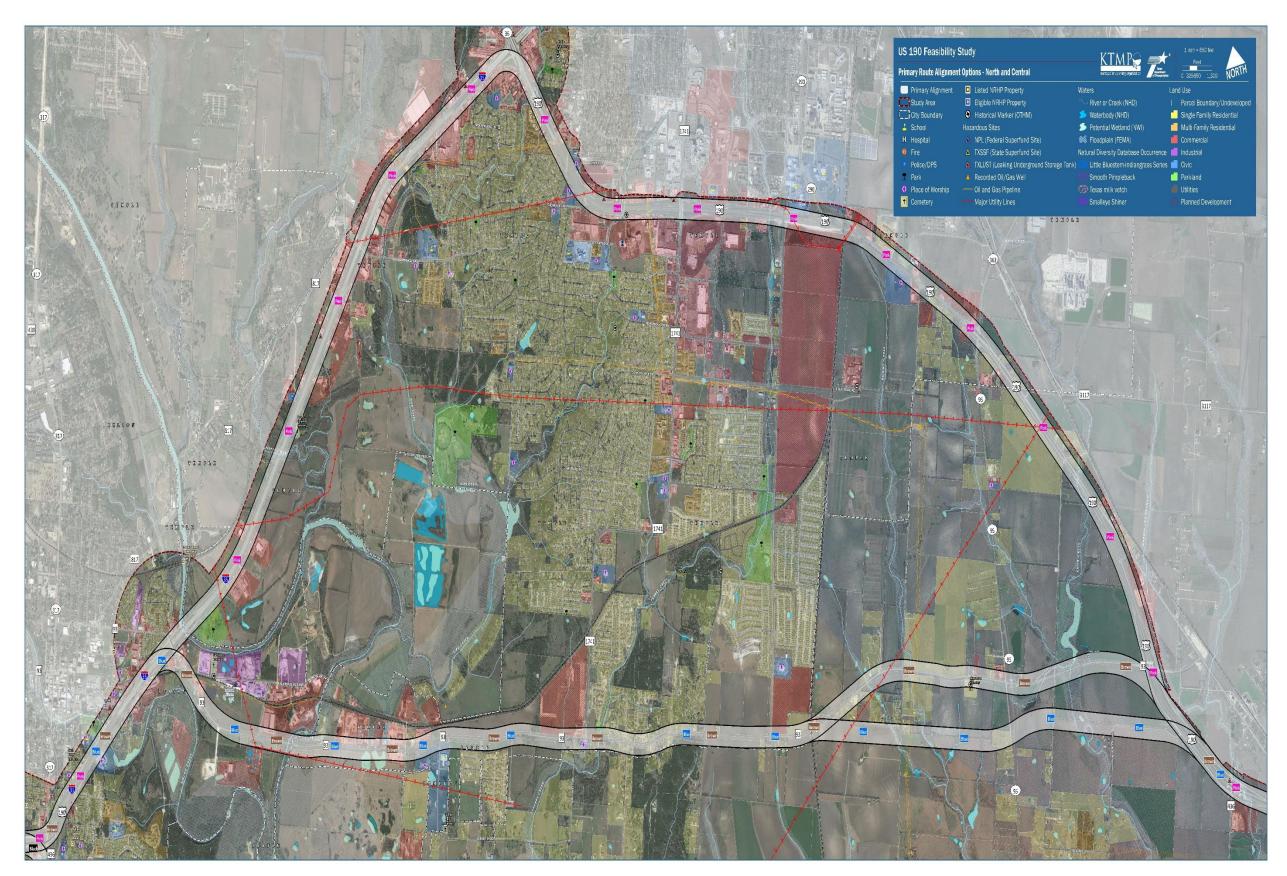
- 🗄 Visit the project website at https://ktmpo.org/roadway/us-190-feasibility-study
- S Call the project team at 254-770-2379
- Send email to <a href="https://www.ktmpo@ctcog.org">ktmpo@ctcog.org</a>







# Constraints Maps North Alignments



South Alignments



Appendix C - Handout

# **US 190 Feasibility Study**

# **Fact Sheet**







The US 190 Feasibility Study will evaluate options for upgrading, and possibly relocating, US 190 between FM 1670 and the Rogers Relief Route north of the city of Rogers in Bell County.

#### **ABOUT THE STUDY**

US 190 is a major east-west highway that serves Belton, Temple, Rogers, and Little River-Academy. At the request of local officials, the Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT) is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and the Rogers Relief Route north of the city of Rogers in Bell County.

KTMPO will investigate creating a more efficient connection to serve the community and improve local mobility. The study began in Spring 2017 and is anticipated to take approximately one year to complete.

#### **COMMUNITY DRIVEN EFFORT**

KTMPO has formed a working group specifically for the US 190 Feasibility Study.



The working group includes local county and city elected officials and agency representatives.

The working group has met throughout the duration of the project and has helped the project team identify problems and opportunities for transportation improvements. The working group has provided input on the study as it progressed, assisting the project team in narrowing the options.

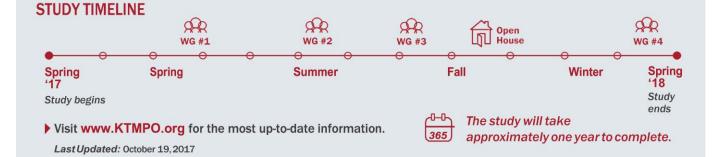


A community open house is being held on November 30, 2017, and an online survey is available to encourage additional input from the community.

#### STATUS OF THE FEASIBILITY STUDY

With input from the working group, project goals and objectives have been established, an environmental constraints map has been developed, and 40 route options have been narrowed down to the five primary route options presented at the November 30th open house.

These route options will be the starting point for any future phases of project development, including an environmental study, should the project advance. A final option will not be chosen at the end of this process.



### Frequently Asked Questions (FAQs)

#### What environmental factors will be considered in this study?

As part of this study, several factors will be considered including water resources, social and community impacts, land use and parkland, archaeological and historic resources, right of way (ROW) analysis and land cost, threatened and endangered species, vegetation and wildlife, hazardous materials, engineering analysis, and public input.

#### What happens after this Open House?

Public feedback gathered from the Open House will be considered, along with technical and engineering studies, to identify route options recommended for further study. Recommended route options will be the starting point for any future phases of project development, including an environmental study, should the project advance. The US 190 Feasibility Study is expected to be completed in Spring 2018.

#### After the US 190 Feasibility Study is completed, what's next?

The diagram below provides an overview of the steps required following the completion of the US 190 Feasibility Study and prior to the start of any future construction. There is currently no funding identified for an environmental study, which would be the next step. Each step will be dependent on available funding.



#### How does the US 190 Feasibility Study relate to the I-14 Study?

The purpose of the US 190 Feasibility Study is to investigate creating a more efficient connection to serve the community and improve local mobility. The community has asked TxDOT to prioritize bringing US 190 up to current interstate highway standards. The I-14 study is a separate, independent study focused on serving regional priorities and initiatives. In the future, this section may become part of the I-14 project or may remain a distinct regional project.

#### How can I provide feedback on this project?

Your feedback will help the Killeen-Temple Metropolitan Planning Organization (KTMPO) identify project goals and objectives, develop an environmental constraints map, provide travel demand modeling and identify route options recommended for further study. A final route will not be chosen at the end of this process.

Please share your thoughts by completing our on-line community survey, which can be found here: [insert web link].

You can also provide general comments by completing a comment form.

#### How can I stay informed?

Please check the Killeen-Temple Metropolitan Planning Organization (KTMPO) website for project updates: https://ktmpo.org/roadway/us-190-feasibility-study/.

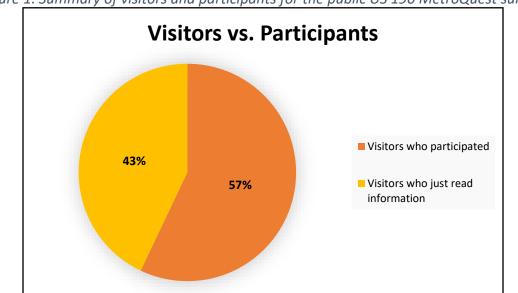
Appendix D – MetroQuest Survey Summary

## MetroQuest Survey Summary

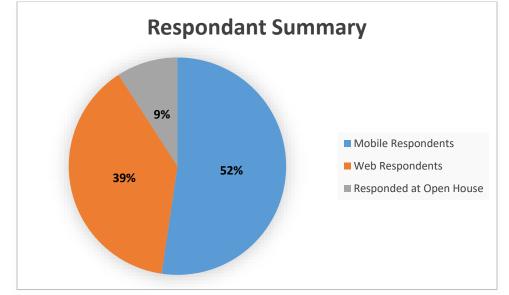
## Introduction:

TxDOT utilized MetroQuest from November 20, 2017 to December 18, 2017 to gather public input to be considered during the US 190 Feasibility Study. MetroQuest is a public engagement software that allows the collection of quantifiable data across a wide demographic. Proposed corridor alternative options and corridor specific information was available for review in the survey. Computers were set up at the open house that was held on November 30, 2017 to allow the general public the opportunity to take the survey there. Participants also had the option of completing it on their own time. Emails were sent out on December 5 and 13 as reminders to complete the survey before it was taken offline on December 18. A link to the MetroQuest survey remained active on the KTMPO informational webpage for the project throughout the duration of the survey period.

There were 750 visits to the MetroQuest survey and 428 survey participants. A visitor represents every time the link for the survey was clicked. A participant represents a visitor who added some kind of input by taking part in at least one question. Nine percent (%) of the participants who took part in the survey completed it while at the Open House. An additional 224 participants (39%) completed the survey on a computer, and the remaining 224 participants (52%) completed the survey using a mobile device. **Figure 1-2** below summarizes participant activity for the MetroQuest survey.



*Figure 1. Summary of visitors and participants for the public US 190 MetroQuest survey.* 



*Figure 2. Summary of when data was received for the public US 190 MetroQuest survey.* 

There was a total of 26 possible responses per participant if they completed every question throughout the survey. Each check of a box within the survey resulted in the site recording a data point. A total of 5,681 data points were taken, averaging 13.3 data points (or responses) per participant. Questions asked during the survey can be found in **Attachment A**, and are summarized below. Answers to free response questions are on file and available for review at TxDOT.

## **Question 1: Priorities**

Participants were given a choice of eight planning priorities and were asked to rank their top three. The summary of these ranks can be seen in **Tables 1-2**.

Table 1. Top three priority data collected through the public US 190 MetroQuest survey.								
Rank	Priorities		# of Participants	Percent				
	Reduces Community impacts		91	25.9%				
	Uses existing roadways		59	16.8%				
	Protects farmland		57	16.2%				
	The most direct route		40	11.4%				
1	Reliable travel times		33	9.4%				
	Ensures good local access		28	8.0%				
	Spurs development		18	5.1%				
	Protects the environment		26	7.4%				
	Тс	otal	352	100%				
	Reduces Community impacts		61	17.8%				
	Uses existing roadways		49	14.3%				
	Protects farmland		55	16.1%				
	The most direct route		26	7.6%				
2	Reliable travel times		44	12.9%				
	Ensures good local access		43	12.6%				
	Spurs development		20	5.8%				
	Protects the environment		44	12.9%				
	Тс	59         16.8%           57         16.2%           40         11.4%           33         9.4%           28         8.0%           18         5.1%           26         7.4%           Total         352           100%         14.3%           55         16.1%           26         7.6%           49         14.3%           55         16.1%           26         7.6%           44         12.9%           44         12.9%           44         12.9%           700         5.8%           44         12.9%           700         5.8%           700         5.8%						
	Reduces Community impacts		59	17.7%				
	Uses existing roadways		45	13.5%				
	Protects farmland		43	12.9%				
	The most direct route		34	10.2%				
3	Reliable travel times		32	9.6%				
	Ensures good local access		43	12.9%				
	Spurs development		30	9.0%				
	Protects the environment		47	14.1%				
	Тс	otal	333	100%				

Table 1. Top three priority data collected through the public US 190 MetroQuest survey.

Priority	Priority						
Reduces community impacts		211	20.5%				
Uses existing roadways		153	14.9%				
Protects farmland		155	15.1%				
Most direct route	100	9.7%					
Reliable travel times	109	10.6%					
Ensures good local access	114	11.1%					
Spurs development	68	6.6%					
Protects the environment	117	11.4%					
	Total	1027	100%				

Table 2 Cummary of ranked	priorities from the public LIC 10	10 Matra Quart curvey
Table 2. Summary of fankea	priorities from the public US 19	<i>yo wetroquest survey.</i>

Of the possible priorities, "Reduces Community Impacts" was rated within the top three 211 times (20.5%) of the 1,027 responses. "Spurs development" was the lowest priority of the participants, being rated in the top three only 68 times (6.6%). There was an "in your own words" response option for users to suggest another item that should be considered a priority. Seven participants chose to fill out this section. Two of these comments were requesting that FM 93 be avoided all together, two participants suggested cost efficiency be the main focus, one participant suggested that the route be placed between Temple and Belton where the majority of the traffic is, one participant wanted safety to be considered a priority, and the final comment requested that the tranquility of the existing community be protected.

## **Question 2: Roadway Options**

There were five routes presented for public opinion: blue, brown, black, aqua, and pink. Participants were asked to rate the routes from 1 star to 5 stars, with 5 being the best. Of the 1,501 total ratings entered, the pink route rated the highest, averaging 3.6 stars, with 172 out of 363 people rating it 5 stars. The black route was rated a total of 278 times and had the lowest average (2.2 stars). **Table 3** shows rankings of each route from all of the participants. **Figures 3 and 4** summarize the data.

Route	Rating <sup>a</sup>	# of Participants	Percent	Average Rating
	5 Stars	25	9%	- Hating
	4 Stars	47	17%	
	3 Stars	32	12%	
Black	2 Stars	38	14%	2.234
	1 Star	136	49%	
	Total	278	100%	
	5 Stars	64	23%	
	4 Stars	19	7%	
A 6140	3 Stars	27	10%	2.469
Aqua	2 Stars	40	14%	2.469
	1 Star	127	46%	
	Total	277	100%	
	5 Stars	50	18%	
	4 Stars	37	13%	
Dive	3 Stars	52	18%	2 5 8 2
Blue	2 Stars	36	13%	2.582
	1 Star	110	39%	
	Total	285	100%	
	5 Stars	59	20%	
	4 Stars	48	16%	
	3 Stars	48	16%	2 700
Brown	2 Stars	33	11%	2.708
	1 Star	110	37%	
	Total	298	100%	
	5 Stars	172	47%	
	4 Stars	34	9%	
Diale	3 Stars	58	16%	2 5 0 7
Pink –	2 Stars	33	9%	3.587
	1 Star	66	18%	
	Total	363	100%	

Table 3. Summary of route rating from the public US 190 MetroQuest survey.

<sup>a</sup>A rating of 5 stars is the highest.

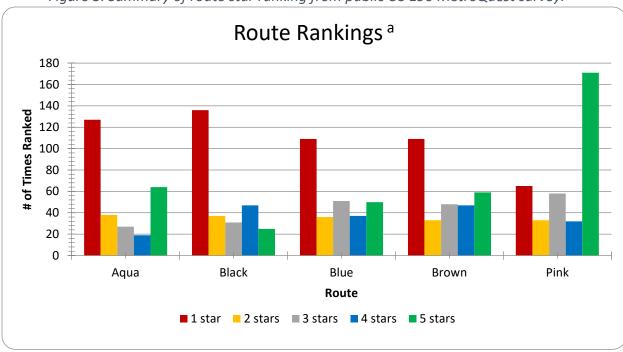


Figure 3. Summary of route star ranking from public US 190 MetroQuest survey.

<sup>a</sup> Five stars is the highest possible ranking.



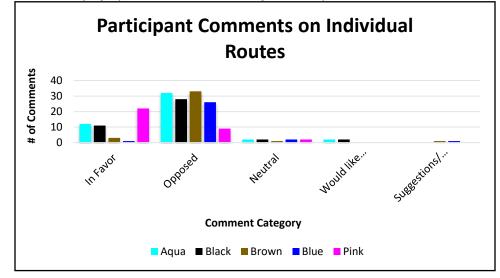
Figure 4. Summary of average route star rankings per alternative. Five stars is the highest possible rating.

Participants were given the opportunity to add in-your-own-words-responses about each route. These responses were categorized into five general response types. Eleven of these comments were errors that occurred when a participant started to leave a response, switched to another page, then came back to continue the response. Every time the participant clicked on another tab, data was saved. Repeat comments were confirmed to be errors by checking the time stamp and IP addresses of the comments in question. There was a total of 192 in-your-own-words-response answers recorded by MetroQuest. These responses are summarized below in **Table 4** and **Figure 5**.

Table 4. Summary of categorized open-ended responses from the public US 190 MetroQuest data.

Comment Category		Route				
Comment Category	Aqua	Black	Brown	Blue	Pink	
In Favor	12	11	3	1	22	
Opposed	32	28	33	26	9	
Neutral	2	2	1	2	2	
Would like more information	2	2	0	0	0	
Suggestions/Other	0	0	1	1	0	
Total	48	43	38	30	33	

Figure 5. Summary of open-ended comments from the public US 190 MetroQuest survey.



The Aqua route had the largest number of comments (48), and the blue route had the fewest number (30). Comments were considered to be "In favor" of the specified route if there was only an expression of approval within the comment. Comments were considered "Opposed" to the specified route if they only expressed disapproval. "Neutral" comments were those that expressed either no opinion, or discussed pros and cons of a route. Four comments were received that specifically stated there was not enough information on the routes for an opinion to be formed or that they would like to see more impact information before endorsing a route. Two comments suggested an improvement of the specified route. Actual responses are on file with TxDOT.

## **Question 3: In Your Own Words**

For this page, participants were asked general questions about the roads they commonly used to travel between Rogers and Belton, the frequency with which they take that route, and why they might take that route. **Figures 6-8** and **Table 5** below summarize the participant response data for these questions.

*Figure 6. Summary of travel preferences from the public US 190 MetroQuest survey.* 

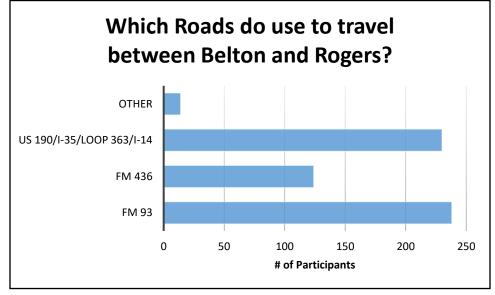


Figure 7. Summary of participant travel frequency data from the public US 190 MetroQuest survey.

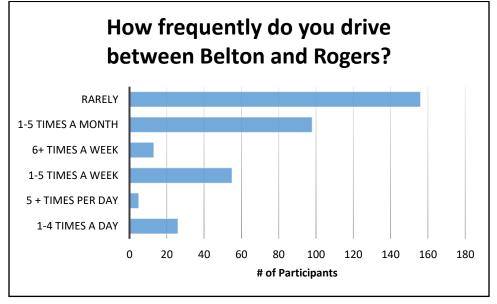
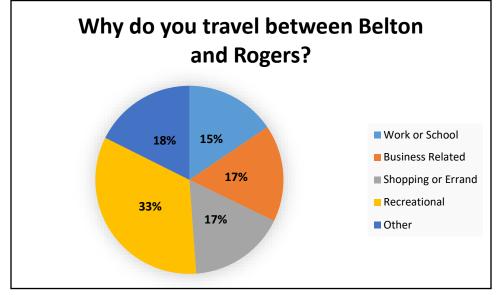


Table 5. Summary of travel reasons from US 190 MetroQuest survey.

Purpose of Travel	# of Participants	Percent
Work/ School Commute	81	16%
Business Travel	87	17%
Shopping/ Errand	87	17%
Recreational Travel	175	34%
Other	92	18%
Total	522	100%



Participants were then asked to comment on how they felt about the importance of a direct route. This open-ended question had a total of 285 recorded answers. Sixteen of these comments were errors that occurred through the MetroQuest system from users jumping pages, as previously described. These repeat error comments were removed from the data summarized below in **Table 6**. The comment "s,ndklsfn" was also removed from the summary below as it appeared to be a mistake and could not be classified. This brought the total number of removed comments to 17. TxDOT has all responses available for viewing.

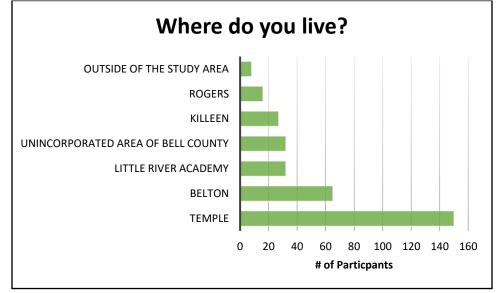
Comment General Category	# of comments	Percent
Not important/Unnecessary:	154	57.5%
Widen or utilize existing roadways	25	9.3%
Important	72	26.9%
Neutral	7	2.6%
Minimal to Somewhat Important	9	3.4%
Other	1	0.4%
Total	268	100%

Of the 268 comments that could be classified, over half (57.5%) said they believed a new route from Belton to Rogers is not important and/or unnecessary. Approximately a quarter (26.9%) of the participants felt that a direct route was important, and another 3.4% thought the project was minimally to somewhat important. Twenty-five comments (9.3%) suggested that existing roadways be utilized or widened instead of constructing a new route.

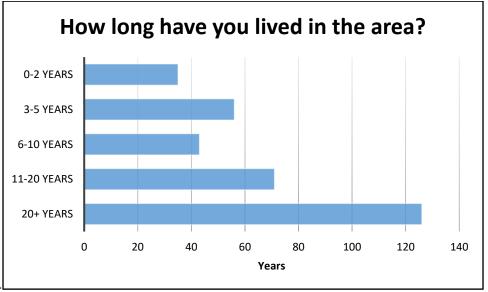
## **Question 4: Stay Involved**

Multiple general demographic questions were asked as a part of the final question of the MetroQuest survey. These are summarized in **Figures 9-13**. The majority of the survey participants lived within Temple (45.5%), were between the ages of 35-44 (25.2%), and have lived in the area for 20+ years (38.1%). Of the 324 participants who answered this question, only 83 (25.6%) attended the open house. The majority of participants (26.2%) were aware of the open house by hearing about it from another person.

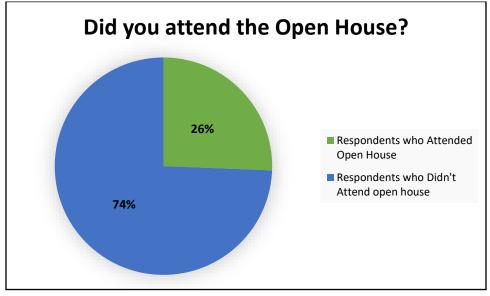
*Figure 9. Summary of respondent residency from the public US 190 MetroQuest survey.* 



*Figure 10. Summary of respondant length of residency from the public US 190 MetroQuest survey.* 



*Figure 11. Summary of respondent open house attendance from the public US 190 MetroQuest survey.* 



*Figure 12. General participant question summary of the public US 190 MetroQuest survey.* 

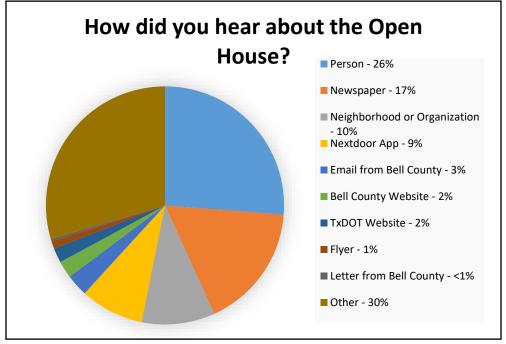
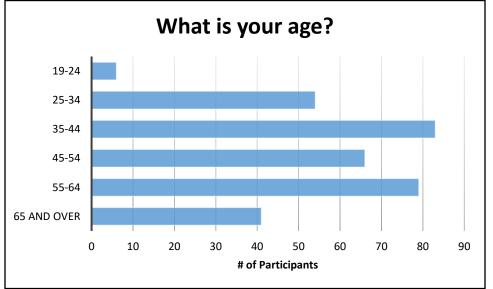


Figure 13. Summary of demographic age from the public US 190 MetroQuest survey.



### **Conclusion:**

Of the 207 people that attended the US 190 Open House on November 30, 2017, 83 people participated in the MetroQuest Survey while at the Open House. An additional 345 people participated in the survey from other locations, bringing the total number of participants to 428 people. The participants were most concerned with reducing community impacts in regards to effects from the proposed project, and were least concerned with spurring development. The pink route was the highest rated route at 3.6 stars, and the black route was rated the lowest at 2.2 stars. Of the open ended questions relating to opinions on the route, the majority of the responses were expressing the participants' negative opinions of the individual routes. This trend was also true for the open-ended question asking for the participants' opinions of a direct route.

## **MetroQuest Survey Questions**

#### Welcome Screen Text

#### We Want to Hear From You!

The Texas Department of Transportation (TxDOT) and the Killeen-Temple Metropolitan Planning Organization (KTMPO) are conducting a feasibility study to evaluate options for upgrading, and possibly relocating, US 190 just west of I-35 from FM 1670 eastward to FM 437 in the City of Rogers.

US 190 is a major east/west highway that serves Belton, Temple, and Rogers.

Your input will help us clarify project goals and objectives, identify environmental constraints, and confirm route options for further study.

These route options will be the starting point for any future phases of project development, including an environmental study, should the project advance. A final alternative will not be chosen at the end of this process.

The US 190 Feasibility Study is expected to be completed in Spring 2018.

**Did you know**: You can forward this survey site to your friends and neighbors and post on social media. TxDOT needs as much feedback as possible. Please Help Spread the Word! Deadline for comments is Dec. 15, 2017!

#### Important to You Screen/Priorities

- Protects the environment The proposed route should minimize impacts to floodplains, bodies
  of water and natural vegetation.
- Uses existing roadways The proposed route should use existing roads as much as possible.
- Ensures good local access The proposed route should encourage local access to and from neighborhoods, schools, and workplaces.
- Reliable travel times The proposed route should reduce congestion throughout the area.
- The most direct route Study area map: The proposed route should connect FM 1670 and FM 437 in the most efficient way possible.
- Spurs development The proposed route should create better connections to the area and reduce traffic delays, resulting in more jobs and business opportunities for residents.
- Protects farm land The proposed route should minimize disruption to agriculture production in the area.
- Reduces community impacts The proposed route should minimize disruptions to the places people live, learn and play.

#### Roadway Options/Explore the Alternatives:

We have narrowed the route options from forty to five based on available data, local knowledge, and study goals. We want to hear what you like or don't like. Please give a 1-5 star rating for each scenario and provide your comments.

## Pink

Uses existing I-14 and I-35; upgrades existing Loop 363 and US 190 (from I-35 in Belton to Rogers)

**Benefit**: Maximizes use of existing roadways (including I-14, I-35, Loop 363 and US 190) **Concerns:** Longest, least direct route; may impact businesses and residences along US 190/Loop 363

#### Brown

Follows existing I-14 to north on I-35 to FM 93. Follows FM 93 from I-35 to existing US 190.

**Benefit:** One of the most direct routes **Concern**: May impact adjacent neighborhoods

## Blue

Follows existing I-14 to north on I-35 to FM 93. Follows FM 93 and continues straight on undeveloped land to existing US 190.

**Benefit**: One of the most direct routes **Concern**: May impact adjacent neighborhoods

## Black

Follows existing I-14 to south on I-35. Briefly continues on undeveloped land to FM 436 and continues on undeveloped land north of Little River-Academy to existing US 190.

**Benefit**: Avoids heavily populated areas **Concern**: May increase potential for environmental impacts to natural resources.

## Aqua

Runs through undeveloped land from I-14 at FM 1670 to existing Shanklin Road, crosses I-35 to connect to FM 436. Continues on undeveloped land north of Little River- Academy to existing US 190.

**Benefits**: Avoids heavily populated areas; routes traffic away from I-35 **Concern**: May increase potential for environmental impacts to natural resources.

#### Survey Questions/In Your Own Words Screen

Tell us about which roads you already use and how often you use them. Your responses are anonymous and without attribution. Please answer the following survey questions.

Roads you use
Which roads do you use traveling east/west across the community from Belton to Rogers? (Check all that apply)
FM 93 FM 436 US 190/I-35/Loop 363/I-14 Other
If you chose 'other' please specify.
Туре
Frequency
How frequently do you drive between Belton and Rogers?
1-4 times a day
5+ times per day
1-5 times a week
6+ times a week
1-5 times month
Rarely
Travel reasons
Why do you travel between Belton and Rogers? Check all that apply.
Work/school commute Business travel Recreational travel Shopping/errands Other
If you chose 'other' please specify
mportance
In your own words, how important is a more direct route connecting Belton and Rogers? Why?

#### Stay Involved/Thank You Screen

Where do you live? Belton Temple Little River Academy Rogers Killeen Unincorporated Area Outside study area

How long have you lived in this area?

0-2 years 3-5 years 6-10 years 11- 20 years 20+ years Did you attend the open house? - yes/no

How did you hear about the open house?

Newspaper

Flyer

Letter from Bell County

Email from Bell County

Friend/Neighbor/Relative/Co Worker

Nextdoor app

Neighborhood or Organization

Bell County website

TxDOT website

Other

What is your age?

18 and under 19-24 25-34 35 - 44 45-54 55-64 65+ Appendix E – Comment Response Summary

Comment Number	Name	Address/Contact Information	Email	Comment	Responses	Manner Received	Date Received
1	David Posey			Is there enough traffic to justify this type of road? In my travels on this East/West Route I do not observe high volumes of traffic except the area that takes people back and forth from Killeen/Ft Hood/Cove to Belton/Temple. An Interstate type already exists there. You don't move military equipment on roads this distance. Ft Hood has rail that connects east to west. Gray Army Air Field is as good as it gets moving troops. You should follow the pink route. (On a separate comment sheet) Keep the road as it is.	Thank you for your comment. It will be considered as the project is developed further. A traffic study is currently underway. This project has been identified as a regional priority in the Killeen-Temple Metropolitan Planning Organization's (KTMPO) long range plan and is being studied in anticipation of potential future implementation.	Received Comment at Open House	
2	Adele Posey			Has a traffic study for I-14 been conducted? Is there enough traffic to justify this type of road? It has been our observation that the existing travel route Is adequate for the volume of traffic. Construction would be disruptive to several communities and many families. I urge you to follow the pink route. (On a separate comment sheet) Leave it as it is.	Thank you for your comment. It will be considered as the project is developed further. A traffic study is currently underway. This US 190 feasibility study is independent of any studies associated with I-14. This project has been identified as a regional priority in the Killeen-Temple Metropolitan Planning Organization's (KTMPO) long range plan and is being studied in anticipation of potential future implementation.		November 30th 2017
	Tim & Marla Truitt			We are STRONGLY against running I-14 anywhere other than down the existing 363 Loop! Makes no sense to not use already existing right of way where it is mostly all commericial property and it has been recently expanded to 4 lanes each way already! L. River/Temple/Belton DO NOT NEED 2 major Interstates running through them! Please consider how much this would change the face of our community in a negative way!	Thank you for your comment. It will be considered as the project is developed further. It should be noted that the US 190 feasibility study is independent of any studies associated with I-14. The project has been identified as a regional priority in the Killeen-Temple Metropolitan Planning Organization's (KTMPO) long range plan and is being studied in anticipation of potential future implementation.	Received Comment at Open	November 30th 2017
4	Margaret Kaelin			We just moved here to Belton, TX from Wyoming. We purchased a home with acreage on the path. Why wouldn't you use existing paths such as I-35 that is already unde construction and tie into 190 where it does not have much traffic already. My vote is for the PINK ROUTE!	r Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
5	Richard Cortese			The preferred route should be the current alignment on Pink Route. We have interstate qualily roads in place and with 4 lanes on 363 and potential 4 lane on FM 93 we have adequate lane East & West. It would not be financially responsible to add 4 more East & West all within 6-8 mile corridor. To evaluate traffic and understanding where it is going would greatly enhance decision making.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
6	Matt Mathieson			I feel the best route is outlined on sheet 1.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
	Agnes Kvoges			Use Pink Route Only	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
8	Margaret Green			Use Option - PINK* Obviously, sensibly - use existing. Road 190/36 enlarge - cheaper & condemns less new farmland. Northern bypass land already bought so stay north around towns, but stay on 190/36 as CLOSE AS POSSIBLE.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
9	Bruce Walker			Save money. Take Temple's loop 363.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	2017
10	Lee Hubbard			93 is a Death Trap. Likes Pink route. Check the # of daily traffic on 93. 93 - East (16,756) & West (16,756 cars/day). 33,000/+ cars per day	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
11	George "Rod" Henry			I am President of Temple Chamber of Commerce with 1,100 members. We believe you need to select based on what makes the best sense economically and environmentally. Utilizing the existing route I-35 to 190/363 in Temple going east makes good common sense. It will be difficult to get this funded anyway so selecting anything but the most cost effective route just does not make sense. The existing route*exists*! Furthed designation as I-14 from I-35 to Rodgers would be appropriate.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
12	Teresa Lange			*#1 Pink* #2 Brown #3 Black <concerns &="" expense="" flood="" plain="">. Would like to see the impact of phase 2 study in the above options.</concerns>	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
13	Roy Gates			Leave it like it is.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	
14	Bill DiGaetano			It is prudent to use existing infrastructure of HWY 190 if this plan proceeds. Too many environmental issues exist with the brown and blue options. Fryers creek, leon river and rockwool site.	, Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
15	Charles Kohl			Prefer Pink or Aqua Route. Do not use FM-93. Too much traffic already and lots of utilities in the ground would definitely be cost effective to go this route. Aqua route moves all traffic off IH-35 which is also already overloaded.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
16	Steven Costa			The "hub" of Central Texas is Temple. Use existing routes. (Pink)"Improve Emergency Services" by using I-35 - 363 with overpass. (Pink) -Should review with Central Texas EMS Services Keep Central Texas what it is. Stav off of our farm land.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th,
17	David Skrabanek			Pink Route	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	2011
18	Sandra Blankenship			I recommend using the existing route and mixing the Black and Aqua southern routes. Using existing infrastructure is economically reasonable. The Pink route or the Brown are the best options at this time and for the forseeable future.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	2011
18	Dan Maresh			#1 The "Pink" route is the best of the proposed routes. The only problem is at LP 363 & T.C 5th St. Would need to bypass the controlled intersection currently under construction & elevated non stop just south of that interexchange & a Tractor Supply overpass would be needed to bypass light. Then you're home free from there, almost all R.O.W. is there. #2 The Aqua route is the second best, but lots of acerage will need to be purchased.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
20	Peter Brumleve			First, Thank you for doing this process. It's well organized and worthwhile. Worst by far is Blue & Brown. Next worst is aqua & black. Pink is by far the best option. Thank you!	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
21	Susan Long	Temple City Council Dist. 3		Do not use 93, stay on existing route.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
22	Charles Verheychen			#1 Pink route ~ Existing Row, likely cheapest (except maybe #4-Black). Less disruption of people, business, environment. #2 & #3 Blue & Brown: Most distruption of people, business, environment. Part of it would be through flood plain & existing water treatment plant. Contaminated soil around Rockwool. #4 & #5 Black & Aqua: Least people, business. Cheapest ROW acquisition except for #1.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
23	Kenneth Cosyer			Pink Route 363. Infrasture in place.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
24	Ernie Degenhardt			Use 190 - the least impact, good for business, probably cheaper. Don't use 93 - too much residential, school, congestion, safety.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
25	Suma Pokala			Use the existing roads. Minimize the cost. Minimize interruption to residential areas. PINK IS THE BEST OPTION. Other options take businesses away from Temple Downtown. Since we moved to Temple, it lost airport. Now let us not take away more of Temple.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
26	Sandra Oliver			1. Maintain 190 option - 190 can be modified to handle any increase in traffic - Temple worked hard to get the option for economic advantages - DO NOT interfere with, or choose, or consider any southern options - 93-95-436 LEAVE THEM ALONE. 2. Modify the graphics -Oliver cemetary has TX historical cemetery recognition. Oliver farm is a TX historical farm.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
27	Paul Ryan			Larger route away from existing cities. Stay out of River Bottoms and concentration of feeder tributaries. Give cities affected by route location [the option to] move away from city boundaries to allow more growth to the cities adjacent to R.O.W. More info [needed] from this group's status if not monthly at least quarterly.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
28	Richard Voigtel			A flyover from I-35 to the loop in Temple is the only plan that makes sense. Any other route would be exorbitantly expensive and result in a tidal wave of opposition.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
29	John Kiella			I like the Pink Route, it is the most cost effective and environmentally sound. Existing route!	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
30	Gina Williams			Please choose the PINK route. The road is mostly four lane already so not only would it cost less, it would affect less land. Rather than cutting through neighborhoods, demolishing a church, homes and businesses, possibly affecting a cemetery, and taking large parcels of farm and ranch land, it seems the most logical choice is to stay on the route already designated as 190. My husband and I bought our dream home just over a year ago and if this road comes down 93, we will be one house away from an interstate. We certainly would have never bought this home if we thought that would ever be the case. It will not only lower the value of our prooperty, it will affect our access to anywhere we need to go not to mention the noise factor and loss of peace and tranquility that we have right now. Choose PINK!!!	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 5th, 2017
31	Mary			Pink Route 363	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open	November 30th
32	Ashley Goolsby			Pink route	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 7th, 2017
33	Sydney Eary			Please vote pink. It is the cheapest route for tax payers, already in place, and will affect the least number of families.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	2017 December 8th, 2017
34	Melissa Ingriola			My vote is to use the pink route. The road structure is already in existence. The other two routes would completely demolish a community. We chose to live in Academy because we are out of the main city. Putting this new road [in] the community would be a travesty. I don't agree with the benefit being unused land. The land is used for farming. There are many benefits to leaving the Academy community in tact. Stick with the route that is already in existence and enhance that route.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 8th, 2017
35	Kristina			Choose the pink route	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 8th, 2017
36	Bradley Harrison			Please choose pink path Do not [route] a huge highway through our nice country area taking away our land and buildings, church, and cemetary	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 7th, 2017

Comment Number	Name	Address/Contact Information	Email	Comment	Responses	Manner Received	Date Received
37	Harry Macey			After reviewing the maps at last night's Open House held at the Bell County Expo, I only see one option that makes sense. Keeping the current US 190 route, merging onto I-35, Loop 363 and onto Hwy 36 supports the most infrastructure and probably requires the least right-of-way acquisition. Regardless of which route is chosen, a new intersection will have to be constructed. That makes a "fly-over" at I-35 and Loop 363 a neutral factor.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 1st, 2017
38	Jennifer McDonald			In regards to the US-190 Feasibility Study, I would like to see TXDOT go with the pink route in order to keep as much of the development and associated hazards out of Little River-Academy and the surrounding areas. While the effect of a major highway in or around town may seem insignificant from a numbers standpoint or a shorter route, it would have a drastic negative effect in such a small town by relocating homes and businesses (that may not reopen there) and the safety of the children going to/from school	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 10th, 2017
39	Bruce J McAtee			I live right on the Blue route proposal. I am quite concerned that the proposed realignment will facilitate the removal of my home of the past 35 years. And if you go with the Pink route, there will not be a need to widen a bridge over a river (Leon), two churches (CLC & TVBC), a high school (CTCS), a 4-5 percent grade (Taylors Valley at Boutwell), a railroad (Katy), a cemetery (Greathouse) an underpass (Hwy 95) several new and very expensive subdivisions and a major water line to the Panda Plant to negotiate. And priceless farmland. Use the existing HWY 190/36/Loop 363 roadway. A simple little flyover should fix everything.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 11th, 2017
40	Dan & Linda Case			With the recent/ongoing investments in I-35, South Loop 363 and Highway 36 east of 363/95, it would seem to make more sense to utilize the existing corridor vs. alternative routes, ESPECIALLY FM 436. While the 436 routes are slightly north of Little River/Academy, the impact to local traffic, traffic going north to Temple as well as overall impact to private property and property values would be significant and adverse. I spent 15 years on the Academy ISD Board of Trustees and was on the board when one of our school buses was hit at the 93/Old 95 intersection resulting in many injuries and the loss of the life of our bus driver. Bringing a high traffic volume highway into the district will create more opportunities for accidents. Following the existing corridor routing avoids this potential. We STRONGLY are AGAINST either of the 436 alternatives and are STRONGLY in FAVOR of utilizing the existing route. Thank You.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 2nd, 2017
41	Kelly Chaffer			Keep it on the pink [route] it would take too much land & homes away going through Little River Academy. Not to mention there are several schools right off of FM 436. Let's keep this small town small & quiet like it is. Less traffic	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 8th, 2017
42	Rebecca Marek			The ONLY route I am in agreement with is the pink option that keeps the highway going through Temple. I think it is the only option that will have the least negative impact on neighborhoods, the town of Little River Academy, schools, homes and land. I am begging everyone who has the power to make this decision, NOT to destroy our town, land, and homes with this highway. Please feel free to contact me for further discussion.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 8th, 2017
43	Bailey Dent			We are hoping for the pink route to be chosen as it utilizes more of the existing road, and causes less disturbance to the nearby land. We bought property in Academy in the hopes of enjoying a little piece of country with the nearby town, and want to raise our kids here. We do not want to have a major influx of traffic or construction.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 13th 2017
44	Mike Dent			The PINK route needs to be the route they stick with. We just bought land in Knob Hill and will be building in the next year. The other routes will take out what will be our new home.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 13th 2017
45	Sara Dent			We just bought land in Knob Hill and plan on building our house in the next year. We need the Pink route to be the one they go forward with.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 13th 2017
46	Julia Riffle			I strongly suggest after living in the area my whole life that the best plan would be the pink one	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 7th, 2017
47	Jessica Walker			I would like the pink route. Less expensive. Would not disrupte farm and ranch.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th
48	Gale Verheyden			If using 93, would be complicated from 190 west from Killeen, is still on I-35, the most congested area of 190/I35 (at fly over, merging I-35). Rockwool: contaminated. 93 has significant high end homes that would need to be taken out. Noise pollution on 93 - is now a quiet neighborhood. (Written on a separate comment sheet) Latest flood plain maps are very inaccurate! Because of the growth of South Temple, the drainage into Fryers creek is damaging the entire creek. Friars creet (it is spelled both ways) floods every time there is a 2-3 inch rain (up to 25 FEET at our property and at crossing at 93 near 31st St. Our property is eroding away. We are at the END of Friars creek at Leon.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
49	Nell Brindley			Please do not use Highway 93 to connect Belton & Rogers (ie I-14). It will negatively impact million dollar homes, apartments, schools, churches, farmland & a railroad track! I am also opposed to using Highway 436 through downtown Little River Academy. It will be detrimental to that tiny town - its schools, homes, churches & farmland. The current route is finel!!	Thank you for your comment. It will be considered as the project is developed further. Please note that the US 190 Feasibility Study is independent of any studies associated with I-14.	Received Comment at Open House	November 30th, 2017
50	Beth Hubbard			Please no Brown or Blue. Black or Aqua OK, go with the least traffic problems now. HWY 93 is a death trap!! Way too much traffic NOW. Flooding is also a BIG Problem now. Can't take any more water. The study on traffic on 93 is totally incorrect - As of today approx 33,000 per day.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
51	Robert Prohe			Best long term would be one of the 436 Options. In the shorter term 365 may be best because of reduced cost. 93 is congested already and would not tolerate the expansion.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
52	Charles Verheychen			(Pink) 1. Existing Row, likely cheapest (except maybe #4-black). Less disruption of people, business, environment. (Blue & Brown) 2. & 3. Most distruption of people, business, environment. Part [of it] would be through flood plain & existing water treatment plant. Contaminated soil around Rockwool. (Black & Aqua) 4. & 5. Least people, business. Cheapest ROW acquisition except for #1.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
53	Leroy Meyer			I am against the FM93 Route. Too much traffic, not enough roadway.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
54	Gagan Prakash, MD			1. I am absolutely against and strongly oppose the FM 93 and the 436 route 2. Area around FM 93 all the way from 31st street to railway tracks is becoming highly residential and trying to make a highway there will effect a lot of residents/schools and communities. 3. Please consider the 190 option. 4. FM93, 436 -> NO!!! 190 -> Ok	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online & at Open House	December 3rd, 2017 & November 30th 2017
55	Gene Linn			Farmland is extremely valuable for food production. Don't ruin the farmland. We aren't going to be able to feed our people. We've got to protect our farmland. Use current road. Stay on road that is existing. Do not veer off on open fields/farmland. Invites the project team to the Little River Bottom area to take us on a tour, starting at Three Forks.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th 2017
56	Steve Hoeft			Please do NOT bring an interstate through our beautiful residential areas along FM93 (Blue or Brown routes)! There are children loading onto buses, steep hills and blind driveways along this route. It would be hazardous to hundreds of our families, and detrimental to our livelihoods, home values, and way of life. Please do not choose Blue or Brown routes. Thank you.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	November 27th, 2017

Comment Number	Name	Address/Contact Information	Email	Comment	Responses	Manner Received	Date Received
	Brian Vanicek			Beil County residents and area officials flocked Thursday evening to the Beil County Expo Center in Betton to weigh in on the proposed realignment of U.S. Highway 190. While there are several routes proposed, one sentiment was common among attendees: Dori use FM 93. – Temple Daily Telegram, November 30, 2017 President Abraham Lincoln once sald, "The legitimate object of government is to do for a community of people, whatever they need to have done, but cannot do, at all, or cannot, so well do, for themselves – in their separate, and individual capacities." Transportation is one of those things we can't do on our own. We can't built orads to all of the places we have to go by ourselves so we have to do this together. That includes providing our studied input into where the roads should go — and where they shouldn't. In the 1950s, President Elsenhower launched our Interstate Highway program and the federal government started funding up to 90 percent of project costs in order to build a nationwide highway system. What started out as eight miles of roadway in the middle of Kansas greew to become one of the most expansive and impressive road networks that the work has ever seen. In the haste to get things done, many of the freeways were routed through neighborhoods, effectively ensuring their degradation and demise. If you have ever lived near an Interstate Highway or a major roadway that gets rerouted through neighborhoods, setting a done on the state of Texas, clites and small towns are paring the price for projects that failed to take quality of If is esses into consideration before building of highways. Arguaby, part of that price is that we now have inherited entire areas of clites where the infrastructure that was supposed to benefit and connect people is dividing them. In the works of past U.S. Transportation Secretary Anthony Foxx, "We built highways and railways and airports that literally carved up communities, leaving buildozed homes, broken dreams, and, in fact, sapping many families of the one	Thank you for your comment. It will be considered as the project is developed further. Please note that the US 190 Feasibility Study is independent of any studies associated with I-14.	Received Comment Online	December 6th, 2017
58	John Bowling			I am very opposed to the idea of running US 190 along the FM 93 route. The traffic onto side roads including the South 31st Street is already dangerous, and adding the US 190 traffic would be disastrous.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 1st, 2017
59	Tara Battershell			After attending the public information meeting on November 30, I believe that the proposed route along FM93 will be the least effective choice for the Hwy 190 project. It seems windening the current 190 route would be more cost-effective and less disruptive, taking advantage of current right-of-ways and infrastructure that is already in place. The route along FM436 might be less disruptive to existing development, though it would require more cost and time in acquiring right-of-way land and constructing infrastructure. The route along FM 93 would displace too many homes, churches, and other existing development to make it appealing or feasible. Frankly, the proposed 400' right of way required to widen the existing road to the desired capacity would destroy our neighborhood, and place the edge of the highway within 10' of my front door. For these primary reasons, I strongly oppose the proposal to re-route Hwy 190 along the existing FM93 corridor between 1-55 and Rogers.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 10th, 2017
60	Allen Nash			We support: Black or Southern Routes 1. Provide faster route to the east from IH-14/I-35 intersection, as compared to Pink route. 2. Future long term growth could reach below FM 93 and potentially provide the smaller populated Cities/communities opportunity for growth/development. 3. Future proofing long term modal transportation needs, by utilizing southern routes, can limit future major new infrastructure and associated ROW acquisitions. 4. High speed thoroughfares located in relatively close proximity (e.g. 2.8 miles) to an established highway (e.g. current SH 190 route or Pink route) will need additional evaluations to support any potential alteration to traffic patterns. We do not support: Central route Concerns: 1. Existing and future zoned residential development could create greater public opposition (i.e. sound levels, busy roadway, "not in my back yard" mentality, etc.) 2. Little to no "buffer" from highway to residential lots in the area along FM 93 from FM 1741 to Old Hwy 95. Ideal planning is to have commercially zoned lots buffer residential development.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 9th, 2017
61	Luther Voqel			I live on Hwy 93 and I don't believe this would be a good choice as there are too many subdivisions that feed into 93. Also the Taylor's Valley Church would have to be moved.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open	November 30th,
62	Susan Long		Temple City Council Dist. 3	Do not use 93, stay on existing route.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th,
63	Dan Corbin			436 is the most direct route and would allow military convoys & make a move cheapter and quicker.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th,
64	Kim Rogers			We are currently completing our house at 6565 W. FM 436. We specifically chose this location to move AWAY from highways and enjoy country living. Should the highway be developed through 436, all of the people who chose to move and live in the country would have a highway in their front yard! In addition the wildlife and environment would be uprooted which would create upset with the current food webs and food chains. Please reconsider using FM436.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
65	Nell Brindley			Please do not use Hwy 93 to connect Belton & Rogers (ie I-14). It will negatively impact million dollar homes, apartments, schools, churches, farmland & a railroad track! I am also opposed to using Highway 436 through downtown Little River Academy. It will be detrimental to that tiny town - its schools, homes, churches & farmland. The current route is finel!!	Thank you for your comment.It will be considered as the project is developed further. Please note that the US 190 Feasibility Study is independent of any studies associated with I-14.	Received Comment at Open House	November 30th, 2017
66	Todd Stowe			No to Black & Aqua Routes. Runs right through our property at the corner of 1123 & 436.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
67	Vicki Stowe			No to black and aqua routes. Cuts right through the middle of my property. 3420 FM 1123, Belton.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
68	Misty Leofsky			The 436 - elm Grove road will be taking land owners out of their homes. Land that has been passed down to us by my dad who just passed away in June. NOTE: My land on Elm Grove Road is impacted by the Black and Aqua routes.	Thank you for your comment. It will be considered as the project is developed further.	Received Comment Online	December 5th,
69	Tom Heard		-	In reviewing the FM 436 Route I noticed that the Fort Griffin Range Site and the two cemeteries, moreno Catholic and Fort Griffin are in the 190 row. The fort site and the two cemeteries are only 300' apart and the freeway row is 600' wide. This is not going to work. FM 436 runs between these two sites, but it's ROW is only 125' wide. Even if the freeway could somehow be shoe-horned between the two, this would gamer outrage by putting a freeway through the historic site that would not survive public scruitny. The cemetery contains over 50 Texas Rangers skilled in line of duty along with the grave of the first Texas Ranger Captain. The fort was built in 1836 and commissioned by Sam Houston. Plowing these sites under will not be popular.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
	Anaymous			Using the aqua route makes the most sense trying to get traffic away from already congested traffic routes!	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
70	Anaymous			Aqua route from 190 to 35 would require completely new construction with bridges across 4 waterways. From 35 to 436 the route requires crossing 7 additional	Thank you for your comment. It will be considered as the project is developed further.	Received Comment at Open	November 30th,
70 71	James Monroe			waterways. This makes no sense to build a new road across II waterways with associated bridge costs.	mank you for your commentat will be considered as the project is developed further.	House	2017
				waterways. This makes no sense to build a new road across II waterways with associated bridge costs. I think aqua route is good route. Looks ([ike it will] affect less people. Be [illegible] using some road that are in place. I live in curve of Shanklin and it would take my house	Thank you for your commentat will be considered as the project is developed further.	Received Comment at Open	November 30th, 2017
71 72	James Monroe			waterways. This makes no sense to build a new road across II waterways with associated bridge costs.	Thank you for your comment.It will be considered as the project is developed further.		November 30th, 2017 December 9th, 2017
71 72	James Monroe Joe Ware			waterways. This makes no sense to build a new road across II waterways with associated bridge costs. I think aqua route is good route. Looks ([ike it will] affect less people. Be [illegible] using some road that are in place. I live in curve of Shanklin and it would take my house out completely. I'm ok with that. I am commenting regarding the proposed aqua route cutting off of 1670 and running through I-35 and continuing through Rogers. I was born and raised on some land off	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	2017
71 72 73 74	James Monroe Joe Ware Brandon Potts Oscar			<ul> <li>waterways. This makes no sense to build a new road across II waterways with associated bridge costs.</li> <li>I think aqua route is good route. Looks ([ike it will] affect less people. Be (illegible] using some road that are in place. I live in curve of Shanklin and it would take my house out completely. I'mo k with that.</li> <li>I am commenting regarding the proposed aqua route cutting off of 1670 and running through I-35 and continuing through Rogers. I was born and raised on some land off of IFM 1670 that could be affected by this proposed route and so have many of my close friends. The route seems unnecessary and would be much smarter to start off of I-35.</li> <li>For the US 190 Feasibility Study, I support a new alignment with a limited-access freeway. The new alignment should be as straight and efficient as possible, and it should also avoid intermingling traffic on busy IH-35. This means the Aqua route is the best. Ideally the Aqua route should be refined to make it as straight as possible, particularly the section around IH-35 which appears to have a curvy alignment on the preliminary route options map.</li> <li>Absolutely terrible plan! I do NOT want a 6 lane hwy literally in my front yard. If I wanted that I would have purchased land and built my house on the access Rd of I-35 25</li> </ul>	Thank you for your comment.It will be considered as the project is developed further. Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House           Received Comment Online           Received Comment Online           Received Comment at Open	2017 December 9th, 2017 November 9th,
71 72 73 74	James Monroe Joe Ware Brandon Potts Oscar Slotboom			<ul> <li>waterways. This makes no sense to build a new road across II waterways with associated bridge costs.</li> <li>I think aqua route is good route. Looks ([ike it will] affect less people. Be [illegible] using some road that are in place. I live in curve of Shanklin and it would take my house out completely. If no k with that.</li> <li>I am commenting regarding the proposed aqua route cutting off of 1670 and running through I-35 and continuing through Rogers. I was born and raised on some land off of FM 1670 that could be affected by this proposed route and so have many of my close friends. The route seems unnecessary and would be much smarter to start off of I-35.</li> <li>For the US 190 Feasibility Study, I support a new alignment with a limited-access freeway. The new alignment should be as straight and efficient as possible, and it should also avoid intermingling traffic on busy IH-35. This means the Aqua route is the best. Ideally the Aqua route should be refined to make it as straight as possible, particularly the section around IH-35 which appears to have a curvy alignment on the preliminary route options map.</li> </ul>	Thank you for your comment.It will be considered as the project is developed further. Thank you for your comment.It will be considered as the project is developed further. Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House           Received Comment Online           Received Comment Online	2017 December 9th, 2017 November 9th, 2017 November 30th,

Comment Number	Name	Address/Contact Information	Email	Comment	Responses	Manner Received	Date Received
78	Lucas Wong, Lisa Go			*Wants to attend WG #4 as observer* *Add to WG Stakeholder email list.	Request noted.	Received Comment at Open House	November 30th, 2017
79	Jessica Respondek			Please be aware that Fort Griffin cemetary, at the intersection of FM 436 and Wilson Valley Rd is a very historic site with the first person recorded buried there in 1832. Thank you for avoiding it. (On a separate comment form) Across the road from the Fort Griffin Cemetary, the new road would go right over the site where Fort Griffin was located. 2 Large Oak trees at the front and back of Rose & Marcle Conde's house were originally used to climb into for safety when the large herds of buffalo came through the area. The former owner of the property, Hal Hartick, got tired of people digging in his yard for artifacts so he had the historical monument located across the street (Hartick Bluff Spur) from where Fort Griffin was located.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment at Open House	November 30th, 2017
80	Michelle Ciccariello			Please DO NOT rely on FEMA for flood information when looking at the Belton area, especially South Beltonthere are years and years of LOMAs that make it look, from FEMA perspective, like that area is just fine. We have flooding issues EVERY TIME IT RAINS. You need to send in geologists and do actual testing on soil infiltration, earth slump and flow erosiveness and erosion patterns, water flow and elevation, current and projected rainfall patterns, soil percolation data DO NOT CHEAT THE DATA OR CUT CORNERS. We are very wary of the phrase, "Engineers will sign off on it," since we have seen that happen over and over again on land that floods before during and even small road "improvements." The latest I-35 expansion in the vicinity of Shanklin Road and Mesquite Road has been a disaster for usour only road out of our neighborhood now floods to the point of being impassable ever since TXDOT paved over the shoulder and put in curbs, now all the water is unable to seep into the soil and disperse. The tiny openings for underground culverts right before openings in the curb for side roads cannot BEGIN to accommodate the same amount of water AND divert water away from the normal underground water flows that it used to follow. It's an engineering MESS!!!!! Somebody signed off on something without ever even testing what it was going to do to the side roads coming off the expansion. And who pays for the mess? Not the ones who keep saying," Don't worry engineers that all east every other week. There is never any indication that the truck is stopped dead until you almost crash into it. We don't want your poorty-engineered' roads coming catastrophic damage, and you don't pay for what you destroy. Stay away from Shanklin Road. We will fight this with every breath in our bodies. WE HAVE HAD ENOUGH ABUSE!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 2nd, 2017
81	Rod Henry			I feel the need to express my concern about the wording on the survey that I completed at the open house on the subject of the route that is already designated and utilizes I-35, Temple Loop (190/36). The wording left the impression that this route would impact existing businesses more than the others under consideration. This does not make sense in light that the existing route already exists. Also, it would appeaar the wording does not take into account that farm land is a business. I felt it was misleading.	Thank you for your comment.It will be considered as the project is developed further.	Received Comment Online	December 13th, 2017
82	Gary Bushell			Linda, it was my understanding that the next steps in this process is to narrow the possible routes for further study from the current six or so to three. Is that correct? Thanks, Gary	The study team, in conjunction with the US 190 Working Group, will evaluate public comments and will use them, along with more detailed environmental, engineering, and traffic data, to identify the route or routes to recommend for further study.	Received Comment at Open House	November 30th, 2017

Appendix F - Comment Forms

## **Online Comments**

Name:	Email:	Closest Intersection:	Phone:	Message:
Oscar Slotboom		US190 Feasibility Study		For the US 190 Feasibility Study, I support a new alignment with a limited-access freeway. The new alignment should be as straight and efficient as possible, and it should also avoid intermingling traffic on busy IH 35. This means the Aqua route is the best. Ideally the Aqua route should be refined to make it as straight as possible, particularly the section around IH35 which appears to have a curvy alignment on the preliminary route options map.
Gagan Prakash		FM 93 and 31st street		<ol> <li>I am absolutely against and strongly oppose the FM-93 and the 436 routes for the US 190 Feasibility Study</li> <li>Area around FM 93 all the way from the 31st street to the railway track is becoming highly residential., and trying to make a highway through this will effect a lot of residents, schools and communities.</li> <li>Please consider the 190 option.</li> <li>What FM 93 needs is reduction in the speed limit to about 45 and more traffic lights (specially at the junction of FM 93 and the Hatrick Bluff Road).</li> <li>FM93, 436&gt; NO! 190&gt; OK</li> <li>Thank you.</li> </ol>
Michelle Ciccariello		I-35 and Mesquite Road		Please DO NOT rely on FEMA for flood information when looking at

		the Belton area, especially South
		Beltonthere are years and years
		of LOMAs that make it look, from
		FEMA perspective, like that area is
		just fine. We have flooding issues
		EVERY TIME IT RAINS. You need to
		send in geologists and do actual
		testing on soil infiltration, earth
		slump and flow erosiveness and
		erosion patterns, water flow and
		elevation, current and projected
		rainfall patterns, soil percolation
		data DO NOT CHEAT THE DATA
		OR CUT CORNERS. We are very
		wary of the phrase, "Engineers will
		sign off on it," since we have seen
		that happen over and over again
		on land that floods before during
		and after even small road
		"improvements." The latest I-35
		expansion in the vicinity of
		Shanklin Road and Mesquite Road
		has been a disaster for us our
		only road out of our neighborhood
		now floods to the point of being
		impassable ever since TXDot paved
		over the shoulder and put in curbs,
		now all the water is unable to seep
		into the soil and disperse, the tiny
		openings for underground culverts
		right before openings in the curb
		for side roads cannot BEGIN to
		accommodate the same amount of
		water AND diverts water away
		from the normal underground
		water flows that it used to follow.
		It's an engineering MESS!!!!!!
		Somebody signed off on something
		without ever even testing what it
		was going to do to the side roads
		coming off the expansion. And who
		pays for the mess? Not the ones
		who keep saying, "Don't worry
		engineers will sign off on that"
		We are so tired of road builders
		recklessly destroying everything
		with no regard for damage. Also,
		who builds an Interstate access
	F-2	

		road with a curb so that when truckers have a flat, they just stop in the middle of the lane and "hope" traffic coming from behind can tell they are stopped dead in the middle of a lane? I see this at least every other week. There is never any indication that the truck is stopped dead until you almost crash into it. We don't want your poorly-"engineered" roads coming through our area. You don't bother to get real data, you get corrupt "engineers" to sign off on things they never actually tested, you don't care about causing catastrophic damage, and you don't pay for what you destroy. Stay away from Shanklin Road. We will fight this with every breath in our bodies. WE HAVE HAD ENOUGH ABUSE!!!!!!!!!! ENOUGH of people STEALING private property for profit. Eminent Domain specifically says you are not supposed to take land for economic development OR for "public use" that is just a pretense for economic development, but you do it anyway. The law says you are supposed to pay for what you destroy, but you never do. You literally DESTROY LIVES with these road projects. STOP IT!
John Bowling	FM 93 and South 31st Street	I am very opposed to the idea of running US 190 along the FM 93 route. The traffic onto side roads including South 31st Street is already dangerous, and adding the US 190 traffic would be disastrous.
Harry Macey	US 190 Feasibility Study	After reviewing the maps at last night's Open House held at the Bell County Expo, I only see one option that makes sense. Keeping the

		current US 190 route, merging onto I- 35, Loop 363 and on to Hwy 36 supports the most infrastructure and probably requires the least right-of- way acquisition. Regardless of which route is chosen, a new intersection will have to be constructed. That makes a "fly-over" at I-35 and Loop 363 a neutral factor.
Steve Hoeft	FM93 and 31st ST - Temple	Please do NOT bring an interstate through our beautiful residential areas along FM93 (Blue or Brown routes)! There are children loading onto buses, steep hills and blind driveways along this route. It would hazardous to hundreds of our families, and detrimental to our livelihoods, home values, and way of life. Please do not choose Blue or Brown routes. Thanks you.
Gina Williams	Hwy 93 and Boutwell Lane E	Please choose the PINK route. The road is mostly four lane already so not only would it cost less, it would affect less land. Rather than cutting through neighborhoods, demolishing a church, homes and businesses, possibly affecting a cemetery, and taking large parcels of farm and ranch land, it seems the most logical choice is to stay on the route already designated as 190. My husband and I bought our dream home just over a year ago and if this road comes down 93, we will be one house away from an interstate. We certainly would have never bought this home if we thought that would ever be the case. It will not only lower the value of our property, it will affect our access to anywhere we need to go not to mention the noise factor and loss of peace and tranquility that we have right now. Choose PINK!!!
Misty Leofsky	436	the 436- elm Grove road will be taking land owners out of their homes. Land that has been passed down to us be my dad who just passed away in June. (NOTE: Her land on Elm Grove Road is impacted by the Black and Aqua routes.)

Dan & Linda Case	FM 436 & Hwy 95	With the recent/ongoing investments in 135, South Loop 363 and Highway 36 east of 363/95, it would seem to make more sense to utilize the existing corridor vs. alternative routes, ESPECIALLY FM 436. While the 436 routes are slightly north of Little River/Academy, the impact to local traffic, traffic going north to Temple as well as overall impact to private property and property values would be significant and adverse. I spent 15 years on the Academy ISD Board of Trustees and was on the board when one of our school buses was hit at the 93/Old 95 intersection resulting in many injuries and the loss of the life of our bus driver. Bringing a high traffic volume highway into the district will create more opportunities for accidents. Following the existing corridor routing avoids this potential. We STRONGLY are AGAINST either of the 436 alternatives and are STRONGLY in FAVOR of utilizing the existing route. Thank You.
Brian Vanicek	Proposed rerouting of State Hwy 190	Bell County residents and area officials flocked Thursday evening to the Bell County Expo Center in Belton to weigh in on the proposed realignment of U.S. Highway 190. While there are several routes proposed, one sentiment was common among attendees: Don't use FM 93.
		Temple Daily Telegram, November 30, 2017 President Abraham Lincoln once said, "The legitimate object of government is to do for a community of people, whatever they need to have done, but cannot do, at all, or cannot, so well do, for themselves – in their separate, and individual capacities." Transportation is one of those things we can't do on our own. We can't build roads to all of the places we have to go by ourselves so we have to do this together. That includes providing our studied input into where the roads should go — and where they shouldn't. In the 1950's, President Eisenhower launched our Interstate Highway

		program and the federal government started funding up to 90 percent of project costs in order to build a nationwide highway system. What started out as eight miles of roadway in the middle of Kansas grew to become one of the most expansive and impressive road networks that the world has ever seen. In the haste to get things done, many of the freeways were routed through neighborhoods, effectively ensuring their degradation and demise.
		If you have ever lived near an Interstate Highway or a major roadway that gets rerouted through an existing residential community, then you know what can happen: A new more convenient, high speed thoroughfare is built and — in the name of progress — a community and its quality of life are destroyed. All across the United States of America and throughout the state of Texas, cities and small towns are paying the price for projects that failed to take quality of life issues into consideration before building of highways. Arguably, part of that price is that we now have inherited entire areas of cities where the infrastructure that was supposed to benefit and connect people is dividing them.
		In the words of past U.S. Transportation Secretary Anthony Foxx, "We built highways and railways and airports that literally carved up communities, leaving bulldozed homes, broken dreams, and, in fact, sapping many families of the one asset they had: their home."
		The project is currently being being referred to by the Killeen-Temple Metropolitan Planning Organization (KTMPO) and in the media as "a realignment of Highway 190." It is easy to infer that "a realignment of Highway 190" may be a precursor advisory to "laying the groundwork for Interstate 14." It is my understanding that the Interstate 14 concept became a reality when House Transportation Committee members District 27 Congressman Blake Farenthold of Corpus Christi and District 36 Congressman Brian

		Babin of Woodville authored and introduced the amendment to the 2015 Fixing America's Surface Transportation Act (FAST) Act which created the "I-14 Central Texas Corridor," a far-reaching interstate highway project from El Paso, Texas to Augusta, Georgia that generally follows US 190 in Texas. Senator John Cornyn sponsored the amendment in the Senate. Also, I believe that the official Future I-14 designation was approved when the FAST Act was signed into law on December 4, 2015 by President Obama.
		One of the KTMPO routing options parallels that of State Highway 93 which runs through the middle of one of Bell County and Central Texas' most historic and picturesque residential areas — Taylor's Valley. If this option is selected, it could weigh a tremendous and negative impact on the City of Temple and many of its residents. Taylor's Valley and its immediate vicinity comprises one of the City of Temple's most family- friendly residential areas, including the neighborhoods of Valley Ranch, Hidden Meadow, Deefield Estates, d'Antoni's Crossing, Misty Creek, Springwood Court, Las Colinas, Hartrick's Bluff, Wyndam Hill and Alta Vista with more on the way.
		The good news — as it relates to Temple, Texas — is that the decision makers in this process have access to the clarity that comes with more than a half century of hindsight. KTMPO authorities — and everyone else involved — have the opportunity to learn from the past — what has worked and what hasn't worked — and to do it in a way that complements the city and its residents.
		It was encouraging to see District Five State Represent Hugh Shine and Temple City Councilwoman Susan Long in attendance at the Bell County Expo Center during the open house meeting hosted by KTMPO on December 1 to discuss the possible realignment of U.S. Highway 190 and to hear both them speak out in

		opposition to the Highway 190 route which parallels State Highway 93. The assurance of a Highway 190/Interstate 14 route that parallels the existing Interstate 35/Loop 363 path would be a wonderful Christmas gift for generations to come! History would record that we did our homework, accepted our civic responsibility and worked together to preserve the sanctity and quality of life for hundreds of Temple area residents. Thank you for the opportunity to offer my comments.
Melissa Ingriola	Hwy 93 and Hwy 36 and 436 and Hwy 36	My vote is to use the pink route. The road structure is already in existence. The other two routes would completely demolish a community. We chose to live in Academy because we are out of the main city. Putting this new road they the community would be a travesty. I don't agree with the benefit being unused land. The land is used for farming. There are many benefits to leaving the Academy community in tact. Stick with the route that is already in existence and enhance that route.
Sydney Eary	Pink	Please vote pink it is the cheapest route for tax payers, already in place, and will affect the least number of families.
Kristina	Hwy 95 and FM 436	Choose the pink route
Bradley Harrison	95 and 436	Please choose path pink do nor rub a huge highway through our nice country area taking away our land and buildings, church, and cemetary
Ashley Goolsby	5th street and Pullman place	Pink route

Julia Riffle	93/190	I strongly suggest after living in the area my her life that the best plan would be the pink one
Jennifer McDonald	Assuming home address - Westchester Ct. and Fair Hill Dr.	In regards to the US-190 Feasibility Study, I would like to see TXDOT go with the pink route in order to keep as much of the development and associated hazards out of Little River-Academy and the surrounding areas. While the effect of a major highway in or around town may seem insignificant from a numbers standpoint or a shorter route it would have a drastic negative effect in such a small town by relocating homes and businesses (that may not reopen there) and the safety of the children going to/from school
Bruce J McAtee	Hwy 93 and Tanglewood	I live right on the Blue route proposal. I am quite concerned that the proposed realignment will facilitate the removal of my home of the past 35 years. And if you go with the Pink route, there will not be a need to widen a bridge over a river (Leon), two churches (CLC & TVBC), a high school (CTCS), a 4-5 percent grade (Taylors Valley at Boutwell), a railroad (Katy), a cemetery (Greathouse) an underpass (Hwy 95) several new and very expensive subdivisions and a major water line to the Panda Plant to negotiate. And priceless farmland. Use the existing HWY 190/36/Loop 363 roadway. A simple little flyover should fix everything.

Tara Battershell	31st St @ FM93	After attending the public
	in Temple	information meeting on November 30, I believe that the proposed route along FM93 will be the least effective choice for the Hwy 190 project. It seems the windening the current 190 route would be more cost- effective and less disruptive, taking advantage of current right-of-ways and infrastructure that is already in place. The route along FM436 might be less disruptive to existing development, though it would require more cost and time in acquiring right-of-way land and
		constructing infrastructure. The route along FM 93 would displace too many homes, churches, and other existing development to make it appealing or feasible. Frankly, the proposed 400' right of way required to widen the existing road to the desired capacity would destroy our neighborhood, and place the edge of the highway within 10' of my front door. For these primary reasons, I strongly oppose the proposal to re-route Hwy 190 along the existing FM93 corridor between I-35 and Rogers.
Brandon Potts	Auction barn rd/FM 1670	I am commenting regarding the proposed aqua route cutting off of 1670 and running through I- 35 and continuing through Rogers. I was born and raised on some land off of FM 1670 that could be affected by this proposed route and so have many of my close friends. The route seems unnecessary and would be much smarter to start off of I-35.

Kelly Chaffer	FM 436 & Old Hwy 95	Keep it on the pink it would take too much land & homes away going through Little River Academy. Not to mention there are several schools right off of FM 436. Let's keep this small town small & quiet like it is. Less traffic
Rebecca Marek	FM 436 and HWY 95 in Academy	The ONLY route I am in agreement with is the pink option that keeps the highway going through Temple. I think it is the only option that will have the least negative impact on neighborhoods, the town of Little River Academy, schools, peoples homes and land. I am begging everyone who has the power to make this decision, NOT to destroy our town, land, and homes with this highway. Please feel free to contact me for further discussion.
Allen Nash	FM93 & Hatrick Bluff	We support: Black or Southern Routes 1. Provide faster route to the east from IH 14/I35 intersection, as compared to Pink route.
		2. Future long term growth could reach below FM93 and potentially provide the smaller populated City's/communities opportunity for growth/development.
		3. Future proofing long term modal transportation needs, by utilizing southern routes, can limit future major new infrastructure and associated ROW acquisitions.
		4. High speed thoroughfares located in relatively close

		<ul> <li>evaluations to support any potential alteration to traffic patterns.</li> <li>We do not support: Central route</li> <li>Concerns: <ol> <li>Existing and future zoned residential development could create greater public opposition (i.e. sound levels, busy roadway, "not in my back yard" mentality, etc.)</li> <li>Z. Little to no "buffer" from highway to residential lots in the area along FM 93 from FM1741 to Old Hwy 95. Ideal planning is to have commercially zoned lots buffer residential development.</li> </ol> </li> </ul>
Bailey Dent	Reeds lake & knob Hill	We are hoping for the pink route to be chosen as it utilizes more of the existing road, and causes less disturbance to the nearby land. We bought property in Academy in hopes of enjoying a little piece of country with the nearby town, and want to raise our kids here. We do not want to have a major influx of traffic or construction.
Sara Dent	Reed Lake and Knob Hill	We just bought land in Knob Hill and plan on building our house in the next year. We need to Pink route to be the one they go forward with.
Mike Dent	Reed Lake and KnobHill	The PINK route needs to be the route they stick with. We just bought land in Knob Hill and will be building in the next year. They other routes will take out what will be our new home.

Rod Henry	US 190 Take the Survey	I feel the need to express my concern about the wording on the survey that I completed at the open house on the subject of the route that is already designated and utilizes I-35, Temple Loop (190/36). The wording left the impression that this route would impact
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### **Total: 27 Online Comments**

### Written Comments

# **US 190 Feasibility Study**





Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

OM HEARL Name (Please Print):

Comment:

REVIEWERG THE FM436 ROUTE I NOTICED RANGER GRIFFINI SITE An N THE TWO EN, MIGREH MA 301 20 3 1 6 (0) n 0 2 4 0 OVER

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.

OVER SO TEXAS RANGERS KELLED EN THE LINE OF PUTY ALOND WITH THE GRAVE OF THE FORST TEXAS RANGER CAPTAIN. THE FORT WAS BUILT IN 1836 AND COMMESSEDUED BY SAM HOUSTON. PLOWERD THESE SETES UNDER WELL WOT BE POPULAR.





### Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): <u>Gale Verheyden</u>
Comment:
If using 93, would be complicated from 190 west from
-killion, is still on I35, the most congested
area of 190/I35 (at fly over, mergin I3r)
Rockwool - contaminated
'93 has significant high and homes that world need
to be taken out
· Noise pollution on 93 - is now a quiet neighborh.

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print):

Comment:

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6 0 OC m d 0 Fime 0 15 QX VC a 0 Nay ) e are C 01 en eon Idis CIQO al 7 Comments must be received by Friday, December 15th to be included in the Open House record. (Texas Transportation Code, §201.811(a)(5)):

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I could benefit monetarily from the project or other item about which I am commenting

https://ktmpo.org/public-comment-2/.

Comments can also be submitted online at





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

NO Name (Please Print):

Comment:

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Follow the 0 hould Ù 5 DIN route

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): \_

David Posey

Comment:

Keep the road as it is,

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
- □ I could benefit monetarily from the project or other item about which I am commenting

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# Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Adele Name (Please Print): \_\_\_\_ 0

Comment:

ne 10 20

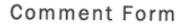
(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
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US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): Adele Posey

Comment:

Leave it as Ls.

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

an Corbin Name (Please Print):

Comment:

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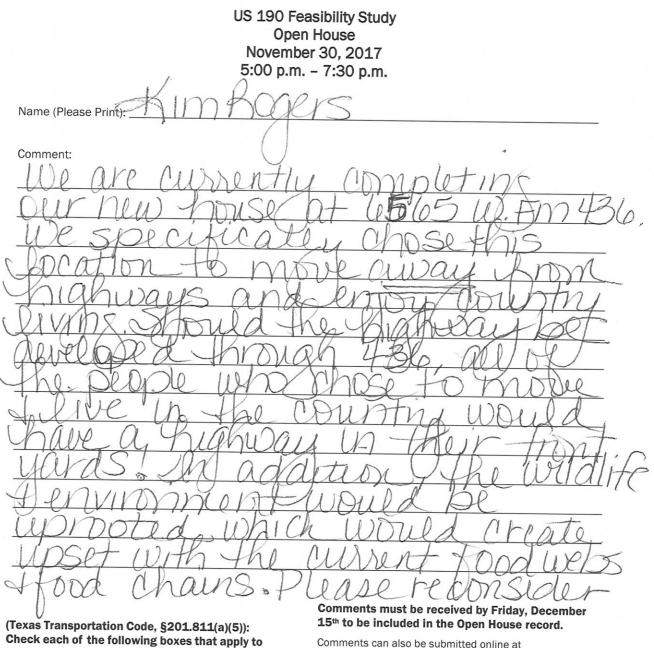
(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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https://ktmpo.org/public-comment-2/.





# Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Nell Brindley
Comment:
Please do not use Highway 93 To connect Belton + Rogers ( ic) I14), It will
neptively impact million dollar homes, yartments, behoods, churches, farm
andrements behoods churches farm
Pand + a railroad track!
1
Tamalso opposed to using Highway 436
through downtown little River
Academy. It will be detrimental
to that ting town - its schools,
homes, churches+formland
D
The burrent route is fine !!!

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): Comment: Ο day.

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Tim + Maria Truitt
Comment: <u>ML are strongly against running I-14 anywhere</u> <u>other than down the existing 363 Loop!</u> <u>Makes No sense to not use already existing</u> <u>right of way where it is mostly all commercial</u> <u>property and it has been recently expanded</u> <u>to 4 caris ea. way already!</u> <u>L.Rivel / Temple   Belton Do not need 2 mijor Interstates</u> <u>funning through them! Please consider how</u> <u>much this would change the face of our community</u> <u>in a negative way!</u>

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print):

Comment:

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- I could benefit monetarily from the project or other item about which I am commenting

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Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): \_\_\_\_

Comment:

ilsing the aqua rouk	makes the most sense trying	
to get traffic away	from already congested traffic	
routes !	, , , , , , , , , , , , , , , , , , ,	

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): P

Comment:

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(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): MATY MARST 1E SON

Comment:

I feel the best white is OUTLINED ON SHEET 1.

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Mat Mathewson Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m.

Name (Please Print):

Comment:

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

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US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

unce Name (Please Print): ames

Comment: Aqua coute from 190 to 35 world require completely new construction with bridges across i waterways, from 35 to 136 the route (equires crossing 7 additional waterways. This makes no sense to build a new road across II waterway with associated bridge costs.

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

□ I am employed by TxDOT

□ I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Margaret Green Comment: USE Option FRINK Opviously sensibly-use existing
poad 190/36 - onlage - cheeper +
Condemns less new farm land,
Northern bypass land already bought or
stay north around towns but stay on
190 36 as close as possible.

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I could benefit monetarily from the project or other item about which I am commenting

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### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): BRUCE WALKER

Comment:

EMONEY

EMPLE

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

200 WARE Name (Please Print): Comment: GOAD 1

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

I am employed by TxDOT

I do business with TxDOT

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US 190 Feasibility Study **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m.

Name (Please Print):

Comment:

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## **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Stor Name (Please Print):

Comment: R TON

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- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





## Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Lee. Aubbord
Comment: 93 is Death trap
Cheak the # of daily traffic on 93
93- GAST + WOST 33,000/+ 16752 16,756 CWS/day

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

FARC Name (Please Print):

Comment: HAMBER OF Comment Am ESTOEAT OF IFMPLE ( WE believe you need to ما د Se pared ally Sense economically and environue 190 existinc 135 2 3 900d seuse. Common C thu an Nos make once ne 5

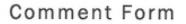
UU

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): Teresa Lange
Comment: # #1 Pink #
# 3 Black < concerns flood plain # 3 Black < concerns flood plain & expense 7
would like to see the unipact of phase 2 study in the above options.

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

□ I am employed by TxDOT

□ I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.

GU





**Comment Form** 

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

5

Name (Please Print):

Comment: is e Curi 0

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

BILL DIGAETANO Name (Please Print):

Comment: PRUDENT 15 IT I EXISTING TO RASTRUCTUER OF NWUL 700 ENV TRONMEN SSUE 60 WOOL 5

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Jessica alkerenge. Name (Please Print):

Comment:

420 0

ihnc A m

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

□ I am employed by TxDOT

□ I do business with TxDOT

□ I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

0

orte Name (Please Print):

Comment: Veter nk 0/

C

FM-93 se NO Ó nusel e a la ( 2e (9+5)4 Ut:1 weid Na b. Cost chive 160 5 vosta

20 trell all 143 D. mores 0 which alvery overloaded a ( < 50

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): Comment: Kal USP. il 11 Mergene MD NO us 2 P 0 Service Q. 2 ha d 0 a m

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m 7:30 p.m. Name (Please Print):
Comment: Divk Raute

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House
November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Sandra Blan, Konship
Comment:
Naute and mixing the block and
Aqua Sautheir raites, Dang acioting
The prink naute on the Brown one
for the poreable buture
the first of the product

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Luther 00 Name (Please Print):

Comment:

ON HW Ve THis Would ARE 10 He e :0 93 Geed TURCH AV/D. 100/0 MOSP 20 12

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Cheryl Voigtel
Comment:
Absolutely terrible plan! I do NOT
want a le lane huy in literally my
- front yard. If I wanted that I would
have purchased land and built my
house on the access Rd of I-35
25 years ago! whoever thought this
up is a complete movon!

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

□ I am employed by TxDOT

□ I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): # Comment: AA

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:



I am employed by TxDOT
 I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Peter Brumleve
Comment: first, Thank you for doing this process It's well organized & worthwhile
Worst by far is BLUE & BROWN
Next worst is Aquar & BLACK
PINK is by four the best uption.
Thank you
Mith Barmley

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



**Comment Form** 

US 190 Feasibility Study **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m.

Der Name (Please Print)

Comment:

Z 10

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

	Open Novembe	asibility Study House er 30, 2017 – 7:30 p.m.	/		
Name (Please Print):	Long	TEnpla	City	Conner]	Ast. 3
Comment: Jo NUT EKISTING NONT	USE	93		S-	tay on
EKisting rout	5		-		0

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

## Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



### **Comment Form**

US 190 Feasibility Study **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m. 47-105 Name (Please Print): Comment: le Chezpe P busi ennonme 5 BINS Dur z an mis? QUINTON ond ood Tin FOC 100001 around Blac Eavy Au June 55 hea

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



Comment Form

US 190 Feasibility Study **Open House** November 30, 2017 5:00, p.m. - 7:30 p.m. Name (Please Print): Comme

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





Comment Form

US 190 Feasibility Study **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m. Name (Please Print): Comment:

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

□ I am employed by TxDOT

A

- I do business with TxDOT
- □ I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print):
- TINR ROUTE
inhastriere in place

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): <u>ERVIE Degenhard</u>
- USE 190 7 The heast import
- A Coodfor Buxiness - Moofg Dopon
PON'T USE 93-9 TO much Repetetal 7 school
-> Cargislon -> Sofetg

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

HARA Name (Please Print):

Comment: 0,201 Our 100 0 101 posit

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

I am employed by TxDOT

□ I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m. Name (Please Print):
Comment: <u>Use the existing roads</u> .
Mininge Reduce the cost Mininge interruption To residentiat greas.
PINK IS JHE BEST OPTION. Other options Take exposure & businesses away from Temple Downtown:
Since we noved to Temple, it lost air-port. Now let us not take away more of Temple.

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

#### Comments must be received by Friday, December 15th to be included in the Open House record.





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Jandra () UPY Name (Please Print):

Comment:

nai 100 anc inc 0 17 on SIP or pon I de err 3 D 70 Day P hvercer graphics

POOR

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TO

### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

# Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.

a co

D





### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): C

Comment:

65 10 A 78 VOW ath MOTE

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

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### **Comment Form**

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print)

Comment:

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

## Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.

**Comment Form** 





US 190 Feasibility Study Open House November 30, 2017 5:00 p.m 7:30 p.m.
Comment: I Like the Pink Route it is the Most Cost effective and environtally sound Existing Route!

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

## Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



lab



US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print):

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Comment:

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Genera ai va

(900d a

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

I am employed by TxDOT

I do business with TxDOT

I could benefit monetarily from the project or other item about which I am commenting Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

Name (Please Print): LERBY MEYER

Comment:

T	AM	AGAILST	- THE	FM 93	Rout	E.	VOO	Much	
TRA	FFIC	- LOUT	ENDUGH	Roadu	UAY,	,000			

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



**Comment Form** 

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Nod Send Book
David Skrabanek (Skrabanek)
Holland, Tx Zossy

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

## Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

PAVID PATRICIC Name (Please Print):

Comment:

nda Send me all fire alignments the Citres of planning a.th Belton and THANK you

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- □ I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.

US 190 Feasibility Study KTM to WG Stakeholder emuil Comment Form (as observer) **Open House** November 30, 2017 5:00 p.m. - 7:30 p.m. UCAS WONG Name (Please Print) 60 Comment:

(Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.

RALASM GAGAN mD Name (Please Print): Comment: absolutel oppor agant and stro 136 and You 93 al 2. 2 m A round Wa m railway Ver 0. 5 Se com Yar to G wa P connu rei 90 3 side the 436 FM 93 90 OK -50 18:00 / , 11 30/17

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

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- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.





### Comment Form

US 190 Feasibility Study Open House November 30, 2017 5:00 p.m. – 7:30 p.m.
Name (Please Print): Bene Linn -
Comment: 25
tarmland is extremely valuable for
food production - don't rain the 0
U tarmland. We aren't going to be
able to feed our people - We've get to
protect our farmland.
Use curren ROW. Stay on ROW that is
existing. Do not veer off on open fields/farmland,
Invites us to the Little River Bottom
area to take us on a tour starting
at Three Forks.

#### (Texas Transportation Code, §201.811(a)(5)): Check each of the following boxes that apply to you:

- □ I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

## Comments must be received by Friday, December 15<sup>th</sup> to be included in the Open House record.



December 13, 2017

To: Killeen-Temple MPO

#### PUBLIC COMMENT: US 190 Feasibility Study - PRIMARY ROUTE OPTIONS

The Gulf Coast Strategic Highway Coalition/I-14 is a non-profit organization formed to advocate for improved highway linkage between military facilities in Texas and Louisiana and their strategic deployment ports on the Texas Gulf Coast.

As part of our effort we have followed the US 190 Feasibility Study in Bell County with great interest. One of our consultants attended and participated in the Nov. 30 Open House at which the public was invited to comment on five Primary Route Options. As a result of that participation, we suggest the following three routes for further study:

NORTH ROUTE OPTION (Pink route) - This route uses existing highway infrastructure, taking advantage of previous TxDOT investments. It contains most of the necessary right of way to allow upgrading to interstate standard. It serves existing commercial enterprises and populations.

CENTRAL ROUTE OPTION (Blue route) - This route uses existing highway infrastructure but would require significant investment to bring it to interstate standard. It would support existing and future industrial and commercial activity in the southern part of Temple. Most of the necessary right of way is currently undeveloped. It would provide the most direct East-West route for through traffic crossing Central Texas. The route has open land for an interstate standard interchange where it would intersect with the existing US 190 (future I-14) at Heidenheimer.

SOUTHERN ROUTE OPTION (Black route) - This route uses existing highway infrastructure but would require significant investment to bring it to interstate standard. Based on public comments at the Nov. 30 open house, it would have a negative impact on existing farming activities and residential areas in the vicinity of Little River Academy.

We appreciate the opportunity to offer these comments and urge continued study of these options to determine a preferred route. That route should serve existing traffic demand and long-term future growth while recognizing that the decision will influence the subsequent selection of a route for Interstate 14 east of Belton.

Respectfully yours,

Recupsan 0

John P. Thompson Chairman, Gulf Coast Strategic Highway Coalition Former County Judge, Polk County (936) 327-6813

Celebrating America's Newest Interstate Highway

Gary Bushell, Executive Director • (512) 478-6661 • E-mail: <u>gebushell@aol.com</u> • <u>www.gulfcoaststrategichighway.org</u> 800 West 38th Street, Suite 9305, Austin, Texas 78705

Appendix G - Constraints Map Comments

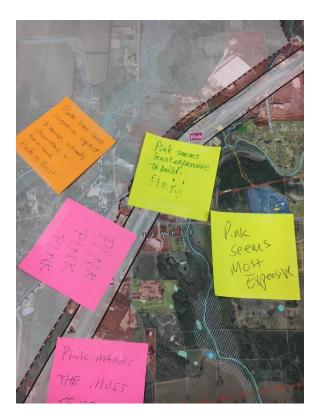
## Northern/Central Map Comment Photos

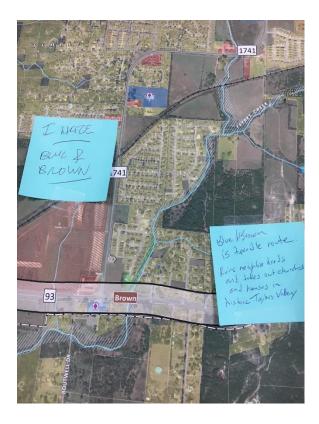
Map 1

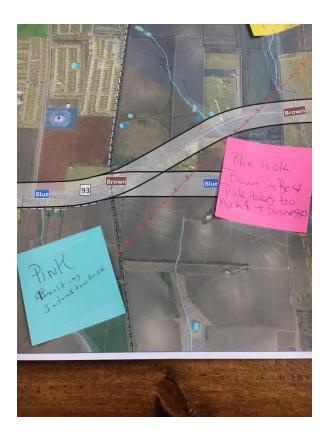


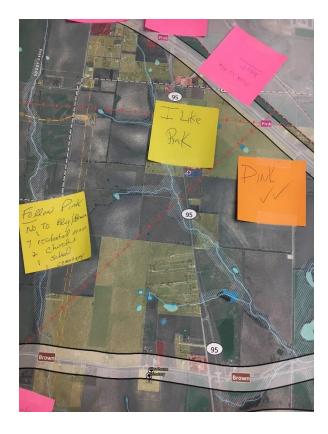


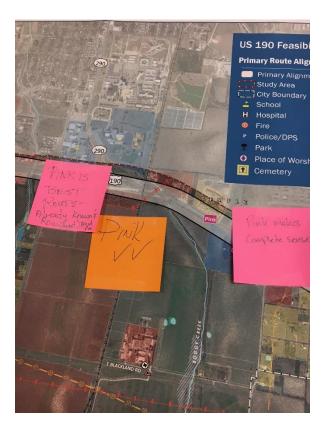


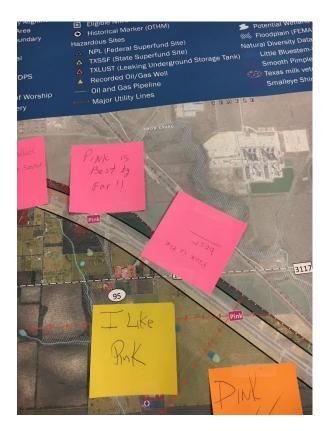






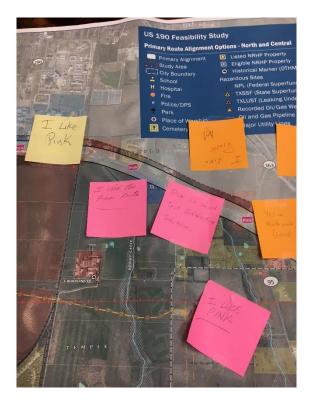


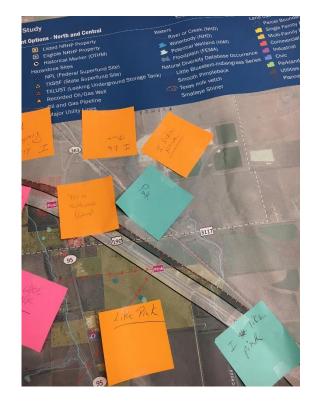




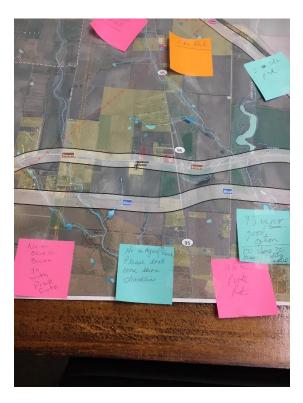
Map 2





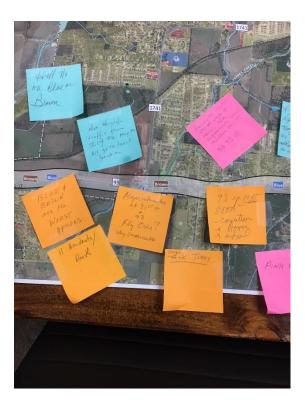




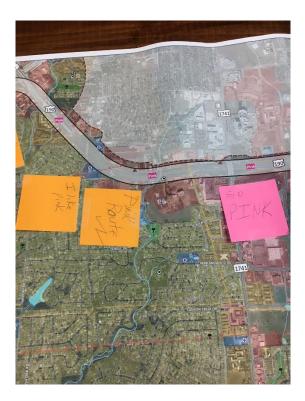


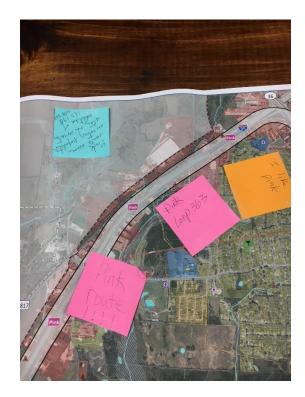


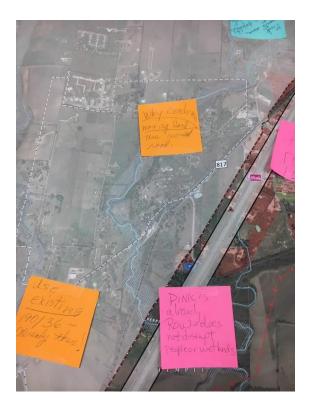
















# Southern Map Comment Photos

Map 1



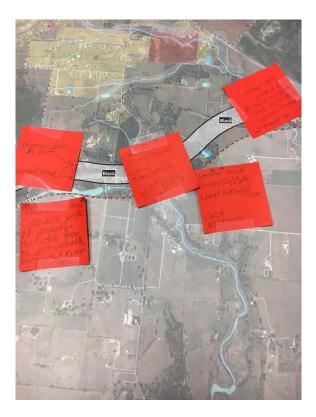


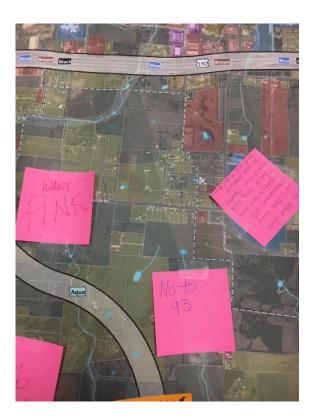


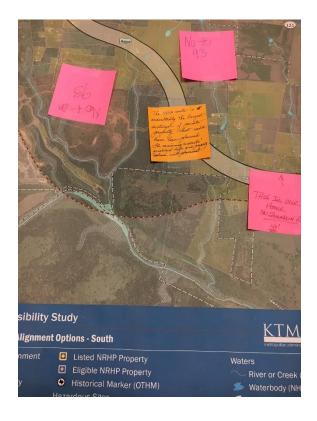


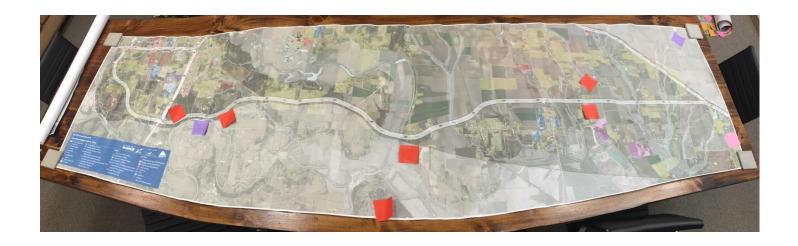








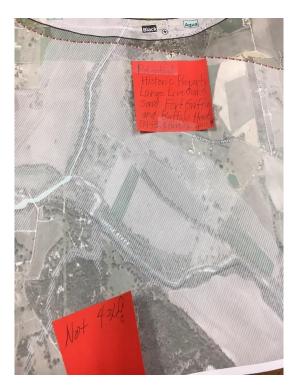














Appendix H - Sign-in Sheets

Staff Sign In





#### **STAFF SIGN IN SHEET**

	NAME	ORGANIZATION	INITIAL
1	Cheryl Maxwell	КТМРО	C.hn
2	John Weber	КТМРО	Tu
3	Kendra Coufal	КТМРО	150
4	Jason Deckman	КТМРО	-ti)
5	Carter Thompson	CTCOG	
6	Susan Chavez	TxDOT	Suc
7	Andy Atlas	CP&Y	AA
8	Roger Beall	TxDOT	
9	Michael Bolin	TxDOT	7.16
10	Stacey Benningfield	CP&Y	SB
11	Angela Gillmeister	CP&Y	AG
12	Andy Adams	CP&Y	AA
13	Susan Howard	TxDOT	SA
14	Lynette Batts	WG Member	IR
15	Erin Smith	WG Member	ES.





# **STAFF SIGN IN SHEET**

	NAME	ORGANIZATION	INITIAL
17	Michelle Neeley	Rifeline	hr
18	Lyndsi Lambert	Rifeline	
19	Lynda Rife	Rifeline	LR
20	Pam Grooms	Rifeline	PG
21	Alex Bonelli	CP&Y	AB
22	Debbie Cano	Rifeline	DC
	Solomon Thomas	TXDOT	GM1
	Xx Bullace	TXDOT	XB
	Which Rode	TEDOT	MR
	KILLING SHARE	HErghbore	AA.
	5		1

Public Sign In





# **PUBLIC SIGN IN SHEET**

	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	Rod HEARY	Chamber of Connerce	76502
2	DAVIA L. ROGERS	KOH	76513
3	JAWET MEZYNSILI	TEANDLE TELEGRAM	76502
4	L.N. Vogel		76502
5	Shelia Jeyner	Email	76502
6	Kelly Trietsch	COB	76513
7	Joe WARE	City	74513
8	Spelyny Dard	citz	76513
9 (			76502
10	MARTY JANCZAR	CITY OFTEMPLE	76502
11	SHAROW BARFIELD	Paper , E. Mail	76501





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
No.	- Judy Millegan Cross canyon white tails & Xu	neighbor	76513
13	Cross Canyon white tails & Xa	hoo com	
14	Misty, Leofsky & Aus	tion. UTexas, edy	
15	1-00 1200 all	1	
16	LARRY & CAROL BRAZZ: 1	PAA-1 CAROL-254-718-2966	
17		Newspaper	76504
18	Ricci Wilson Douglas		76313
19	Robert + Sandra Atma	5 receptor	7653
20	Richard's Marily Shine	Newspaper	76554
21	Cynthia Hernandez	Enail	TUSB
22	Christyle Herrandez	B mail	76513





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	Jonis Lepera	Wike	76569
2	Bahara B. Beener		76513
3	Buce Kochle	E-mail	76502
4	DAN MARESH	Temple Telegram	76504
5	Usa Hood	husband	76520
6	Ed & Florence Reisner		76502
7	Shawn Rhodra	FB	76502
8	Nerry Heitman	New 1	76520
9	R. Wave Wattheurs	Temple Telegram	76513
10	Sandra Oliver	Veniple Sele Fram	7657 3
11	Harry Macey	e-mail	76502





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	Dans Ryan	Newspaper	76554
24	Sim Manroe	Facebook	76513
25	Todd Stowe	facebook / Telegram	76513
26	DAVID PANY	TELECRAM	76502
27	Dell + Kaven Morey	Facebook	26569
28	Bruce meater	Temple CofC - Telesram	76502
29	Lynn Barrett	Work	76502
30	Jessica Walker	Chamber Meeting	74504
31	Julia m. Laughlin	É neus spaper	
32	Frinc Walter	TEMPLE CHAMBER	76504
33	Garrett Prain	Bartlett Flectric Coop	76511





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	Kyle Gillmeister		76502
2	Degnis Kerley		76509
3	JORDAN OVERFUT	KTMPO Friebook	76502
4	Kim Rogers	Word of mouth	76513
5	Allen Nash	Temple Daily Telegram	76502
6	Beth Weller	Neighbor	76502
7	Le Hickhard	neighbu	76502
8	Ken Getes	<i>l '</i>	L (
9	DURW IN SPEJDEL	NEWS PAPEV	76502
10	CANDYCE SPEIDEL		76502
11	SINNIE MCAM	WORD OF MOUTH	76513





and the state	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
12	Ponschar Clauder	Neighbor	74569
13	Jimmy R Wargan	EMIL	76520
14	Tex BURROWS		76502
15	Timfleiscler	Soldo Village Voire	7657(
16	NOHN Hughling MACK PARKER	NEWS PAPET	76502
17	MACK PARKER	News Proper	76513
18	Juneth Caster	Slus	76502
19	Maryhandoffer	news	76513
20	Bill Getwinawa	E-MAIL	76579
21	Karen Taylor	Newspaper	76569
22	Lestie Allen Barkis, A		76502.





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	Dorothy Mathieson	Felegram	76501
24	Matt Mathieson		per 76501
25	BILL DIGAETANO	Temple Telegram newspage CONCENNES NEIGNBORS	76502
26	LAMAR Leurs		76502
27	Teresa Lange	Jodi (TXDOT emaile)	76503
28	Harry Adams	Newspaper Temple Telegre	im 76502
29	Dan Corkin	Newspeper (KDH)	76543
30	Christi Lucks mgor	Email	76502
31	Ron Lucksinger	Email	76502
32	diana Beadnell	EMAIL	76569
33	Seamell	EMAIL	76569





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	WAITER MEZYNSKI	VEUSPAPER	Nesez
2	Did Belcham		76502
3			76502
4	Ricky Goodwin Steve RHODES		76502
5	MIKEEMMONS		76502
6	RUSSEU TSCHWEIDEN	BELL Co Romm	76573
7	Steven Cost	Fretos.	76513
8	Postin Deaver	Friends	76554
9	Susan Worth		16513
10	home Baugh	MAIL	76513
11	Michael Varisco		76507





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
12	Margaret KaliN	peighbor	76573
13	Dorth 7ft	Newspaper	76569
14	Marla Truitt	neighbor	76502
15	Sorcha Man D	Paper	76547
16	Debra H Shine		76502
17	Michelle Ciccariello	EmpowerBellCounty FaceBook	76513
18	PRASANNA K. NAIR	FROM NEWSPAPER (TDT) & MAIL OUT	76502
19	APTARY E Willows	Davs	76513
20	SumA POKALA	HOA	76502
21	Wenny Trans	email	10613
22	Gha Williams	fb	76502





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	Aques X 1/0 ges	email- Mayor Cocheum- Rojan	11es69
24	Letle Johnson	facebook	76501
25	Charlie Aleffield	PADER	76562
26	Cheve LINN	Paper	76534
27	Sally Tietje	internet thew spaper	76502
28	Christy Monroe	involved citizen	76513
29	Brandon Bell	Church member	76513
30	JohnKiella	TASK Fare C Membor	76562
31	Augellia Parts	City	76513
32	THOMAG A. POWES	CITY	76513
33	GAGAN PRAMASH	INVOLVES CITIZEN	76502





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	Nell Brindley	afriend + neighbor	76502
2	Adele Poseny	newspaper	76554
3	Daved Pory	Newspape	7653 9
4	Keith Sliedd	Email	76528
5	Carol Fleck	peuspaper	76513
6	ROYE MELL LOVE	WEB/EMAIC	76513
7	KENNY LOVE	WEB/EMAIL	76513
8	DAVID PATRICIL	Wess lemail	76501
9	Ellen Breaux Morris	email	76513
10	ERIC MARGARET KAELIN	neighbors	76513
11	Tim Stephens	@ The EXPO	76513





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
12	DAVID BLACKBURN	SERVE ON ADUISORY COMMITTEE	76501
13	BRIAN VANICEK	NEIGHBOR	76502
14	Nicole Towalva	Cety	76502
15	Misty Leofsky	Nleighbor	76513
16	Jack Northam	h ()	76513
17	Walter Bosse	11 17	76513
18	John Simaik	TXDOT STAFF	76534
19	SHELLA MILLS	LOCHNER ENGINEERING	78633
20	Peter d Debbie Brumleve	neighbor	76502
21	Steve Streft	neighbor	76502
22	Lauid Skabanet	Friend	76534





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	Pat Duffield	spouse	76513
24	Nige / Vargas	Newspaper	76569
25	Standy Suttow	Newspaper	76502
26	Jessica Respondek	newspaper	76554
27	Niwy Stairs	email	74571
28	Robert Probe	email	76502
29	Dennis Lynch	И	76502
30 <	Richard Cortese	News paper	76554
31			
32			
33			





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	Cheryl Voigtel	pap-er	76513
2	Glenn Gregory	website	78664
3	Russ Nelson	Next Doon Application	76554
4	marin Grayson	KTILPO"	76513
5	MARNIN Bell	wond of North	76513
6	CANOLYN A. BEII	CHURCH	26513
7	Richard PERKINS	Letten left on Dock	76569
8	Joskuhl Dockichord	Mew Payer	76513
9	RIGHARD Voictel	papo	76513
10	Gale Verhoyden	Paper	76502
11	Charles Verheyden	Paper	76502





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
12	NOUDY THYLOR	# Telegrom	76502
13	GADREY Pris	Toleyon.	76569
14	Chales Koul	E-war(	76502
15	Fin Brown		76571
16	Karen Scott	email	76513
17	Kathy Tommy Lovelace	email	76513
18	Dendellhaltums	-omini	76502
19	Steve Krewit	emint	76513
20	Jim Brooks	Friend	76513
21	Christina Demirs	Frierd	76502
22	Kyle Loftin	Better Journal	76513





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	HUGH D. SHINE		76502
24	JoeBurrett	F_3	76571
25	Dattie Brooks	TDT	76513
26	REFIT Cloud	Entail	76502
27	Thomas Cloud		76502
28	Bill Cloux		76502
29	DON BOND	work for C. of Temple	76571
30	LUCAS WONB	word us mouze	76502
31	LISA GO	NEWSPAPE	76502
32	Enne Degenhordt Linda Breaux	Ewal	76502
33	Linda Breauf	paper	76513





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
1	DARRELL Whanon	PAPER	76513
2	Randy Ramsey	PAPER Chairman - Temple of Commerce	76501
3	LERGY MEYER	NEGGBOR	76502
4	GARY BUSHELL	NOTICE	78645
5	Tara Battershell	Neighbor	76502
6	Travis Respondele	Piper	76554
7	Namy Miller	Paper	76502
8		9	
9			
10			
11			





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
12 (	Thomas Baird	muched citizen	7650Z
13	Cindy Baird	neighbor	76502
14	Susan Long	District 3 City Council TSig	76502
15	Nagaprasadrao Pokala	involved citize	76502
16	Tom HEARD	C:+: ZEW	76554
17	Sam Luste	Co Belton	76513
18	Margaret Green	neighbor	76518
19	Scatt Kiella	Online	76513
20	Oscar Arauco	Email	76548
21	Carla Fisher	Email	76502
22	Dou 6 Fister	C1	76502





	NAME	HOW DID YOU HEAR ABOUT THE OPEN HOUSE?	ZIP CODE
23	Rita Wharton	Newspaper	76513
24	Jay Bathashell	News	76502
25	Jay Bathashell Gary Southerland		76504
26	Steve Smith	newspaper Face book	76554
27	Manuela Smith	Spanse	76554
28	Patrick Lowry	Spanse Face book	76513
29	,		
30			
31			
32			
33			

Media Sign In





# **MEDIA SIGN IN SHEET**

	NAME	ORGANIZATION	PHONE	EMAIL
1	Hunder Davis	K++V	2599-717-3881	hdavise KXXV.com
2	Cody Weems	TEMPIC TELEGRAM	254-774-5224	CWEEMSD+d+news, COM
3	Matshall Varisco			,
4	(B)			
5				
6				
7				
8				
9				
10				
11				

Elected Officials Sign In





# **ELECTED OFFICIALS SIGN IN SHEET**

	NAME	TITLE	CANDYCE SPEIDEL DISTRICT REPRESENTATIVE SENATOR DAWN BUCKINGHAM
1	CANDPLE SPEIDEL	District Rep	
2		1	410 N. MAIN ST. BELTON, TX 76513 CELL: (713) 861-2132 E-MAIL: candyce.speidel@senate.texas.gov
3			E-MAL, CaldyCe.apticuleConditional.gov
4			
5			
6			
7			
8			
9			
10			
11			

Appendix I - Photos







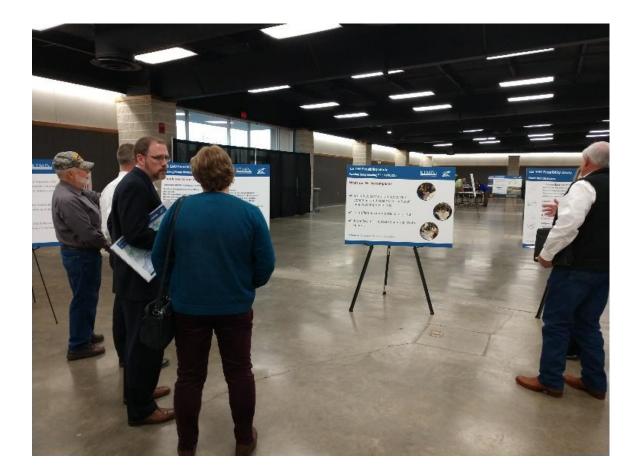


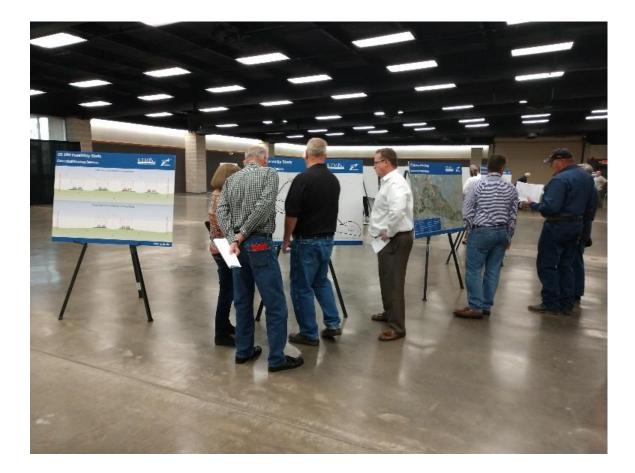




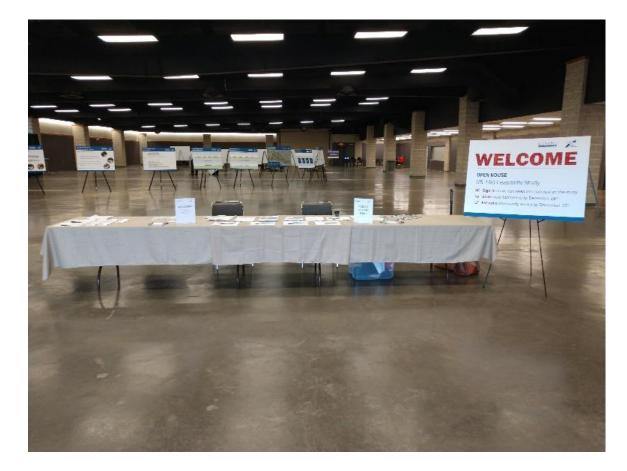












Appendix J - Press Release



## **MEDIA ADVISORY**

WACO DISTRICT Ken Roberts (254) 867-2705 Kenneth.Roberts@txdot.gov

#### US 190 Feasibility Study Open House

Where:

Bell County Expo Center Assembly Hall 301 W. Loop 121 Belton, TX 76513 (Map)

When: Thursday, Nov. 30, 2017 5 p.m. - 7:30 p.m.

#### **Purpose:**

The purpose of the Open House is to gather public input on the proposed improvements to US 190 in Bell County. The meeting will be an open house format so the public may come and go at their convenience, and staff will be available to answer questions.

#### **Description:**

TxDOT and the Killeen-Temple Metropolitan Planning Organization (KTMPO) are conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 and the Rogers Relief Route north of the City of Rogers in Bell County.

Additional information can be found at:

https://ktmpo.org/roadway/us-190-feasibility-study/

## The following link to an online survey, tailored specifically for this US 190 east of I-35 Feasibility Study, will be open for public input from Nov. 30 (day of open house) to Dec. 15.

• https://us190.metroquest.com/

###

The Texas Department of Transportation is responsible for maintaining 80,000 miles of road and for supporting aviation, rail, and public transportation across the state. Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods. Find out more at <a href="https://www.icitation.com">txdot.gov.</a>. Our Values: People • Accountability • Trust • Honesty

An Equal Opportunity Employer

www.txdot.gov | TxDOT on Facebook | TxDOT on Twitter

Appendix K - Media Coverage

## **Temple Daily Telegram**

http://www.tdtnews.com/news/article\_44116948-d657-11e7-ba4f-53721eb2e8a1.html

FEATURED

**Central Texas** 

## PATH OF LEAST RESISTANCE

Bell County residents weigh in on possible US 190 realignment

BY CODY WEEMS | TELEGRAM STAFF Nov 30, 2017



Residents examine a map Thursday at the Bell County Expo Center during an open house meeting to discuss the possible realignment of U.S. Highway 190. Cody Weems/Telegram

BELTON – Bell County residents and area officials flocked Thursday evening to the Bell County Expo Center in Belton to weigh in on the proposed realignment of U.S. Highway 190. While there are several routes proposed, one sentiment was common among attendees: Don't use FM 93.

The event was organized by the Killeen-Temple Metropolitan Planning Organization as part of a yearlong process to study potential realignment routes. Currently, there is no imminent plan - or funding - to realign the roadway, but KTMPO planning director Cheryl Maxwell said the department requested the study as a pro-active measure.

http://www.tdtnews.com/news/article\_44116948-d657-11e7-ba4f-53721eb2e8a1.html

#### 12/18/2017

#### Bell County residents weigh in on possible US 190 realignment | News | tdtnews.com

"We asked TxDOT (Texas Department of Transportation) to do a study to look at the current route between Belton and Rogers, and see if there is a more direct route between the two," Maxwell said. "Nothing has been decided. Nothing is set in stone. These are just options that we're throwing out and we want to get feedback from the public."

Currently, U.S. 190 meets Interstate 35 in Belton before following Loop 363 in Temple and continuing southeast along State Highway 36 to Rogers.

The planning organization has narrowed the study to focus on five routes: One uses the existing configuration, two utilize FM 93 and two use FM 436.

At Thursday's meeting, residents had the chance to examine dozens of posters and maps while speaking with TxDOT and KTMPO officials.

Temple City Councilwoman Susan Long said she is in favor of keeping the current configuration, but she is vehemently opposed to using FM 93.

"We don't want it on FM 93. Period," said Long, whose district encompasses South Temple. "It would make it even more dangerous. FM 93 is dangerous enough as it is right now and there are more developments that are going to open onto it."

Temple resident Peter Brumleve agreed.

"I think the most negative route would be the FM 93 route. The one that seems to make the most sense is the (current) route," Brumleve said. "Although it's a slight diversion, it would cause the least amount of disruption and would cost the least because the infrastructure is already there."

Brian Vanicek, president of the Temple SPJST, pointed out that portions of U.S. 190 may be designated as Interstate 14 in the future. I-14 designation currently begins in Belton and runs west through Killeen.

Vanicek said routing a major highway or interstate through residential areas - such as along FM 93 - could be detrimental.

"There's no good to be gained from it. If you have a neighborhood or a development and set an interstate highway on top of it, it would devastate the neighborhood," Vanicek said.

Belton City Manager Sam Listi said there currently isn't one route that he prefers. He does, however, want to ensure the study will consider how residents will be impacted by the realignment.

"We want to ensure that Belton is served by the route, but not harmed by the route," Listi said. "The corridor is significant. It's wide, so we want to make sure that whatever route is chosen is sensitive to the property owners and the future planning."

He also emphasized the importance of making sure all voices are heard throughout the process.

"This is a long process. It's something that really requires a lot of input from the public," Listi said. "It's a long-term project going forward, so we have to have consensus and buy-in from folks."

Residents who weren't able to attend the open house can still submit comments to the KTMPO website at ktmpo.org. Comments will be accepted through Dec. 15.

#### cweems@tdtnews.com

Cody Weems

#### **KCEN-TV**

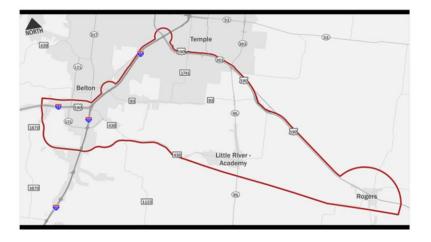
## You can help decide what happens with US-190. Here's I

Stephen Adams, KCEN 11:10 AM. CST November 27, 2017



BELL COUNTY -- The Texas Department of Transportation will hold an Open House Thursday to hear public input on proposed improvements to U.S. 190 in Bell County.

TxDOT and the Killeen-Temple Metropolitan Planning Organization (KTMPO) are currently exploring options for upgrading and maybe even relocating U.S. 190 between FM 1670 and the Rogers Relief Route north of Rogers.



A feasibility study began in February to identify alternative route options that will be narrowed down to three primary possibilities. The study was expected to be completed in early 2018.

According to TxDOT, the were no immediate plans to make U.S. 190 a toll road. But, a final decision was expected at a later date.

<u>Click here to learn more about the feasibility study. (https://ktmpo.org/roadway/us-190-feasibility-study/)</u>

The Nov. 30 Open House will be held from 5 to 7:30 p.m. on Thursday, Nov. 30 at the Bell County Expo Center Assembly Hall, which is located at 301 W. Loop 121 in Belton. <u>Click here for directions</u>

(https://www.google.com/maps/dir/31.0986026,-97.3408924/Bell+County+Expo+Center.+301+W+Loop+121.+Belton.+TX+76513/@3 97.4788399!4m8!1m1!4e1!1m5!1m1!1s0x86453f9e7a23812f:0xac1dd39eb87c8985!2m2!1d-97.4788399!2d31.0307637).

To submit feedback online, <u>click here (https://us190.metroquest.com/)</u>. The link will be working between Nov. 30 and Dec. 15.

© 2017 KCEN-TV

**Final Report** 



Appendix E – Traffic Memorandum







## 

## Traffic Technical Memorandum

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**Traffic Technical Memorandum** 

#### 1.0 INTRODUCTION

US 190 is a major east-west highway that serves Belton, Temple, and Rogers in Central Texas. The Texas Department of Transportation (TxDOT) is conducting a feasibility study to explore options for upgrading—and possibly relocating—US 190 between Farm-to-Market 1670 (FM 1670), west of Interstate Highway 35 (IH 35), to the future Rogers Relief Route, north of the city of Rogers, in Bell County, Texas. This technical memorandum summarizes the evaluation of five route options to improve US 190. The Killeen-Temple Metropolitan Planning Organization (KTMPO) regional travel demand model (TDM) was utilized as a basis for the evaluation.

#### 2.0 STUDY AREA

The US 190 Feasibility Study area encompasses approximately 22 miles along existing US 190, from FM 1670, west of IH 35 in Belton, to existing US 190 in Rogers, in the KTMPO area. Other highways included in the study area are IH 35, SH 95, and FM 1670 in the north-south direction, and FM 436 and FM 93 in the east-west direction. A map of the study area is presented in Figure 1.

Five route options for US 190 and the No-Build option were modeled to forecast future traffic conditions along study area roadways. KTMPO's 2040 Metropolitan Transportation Plan Project Listing lists widening of the IH 35 mainline from six lanes to eight lanes between IH 14 and Loop 363/US 190 as an unfunded proposed roadway project. Because the Pink route follows that entire segment of IH 35 between IH 14 and Loop 363/US 190, two Pink route scenarios were evaluated:

- Pink Option (assumes 6-lane IH 35 mainline between IH 14 and Loop 363/US 190)
- Pink+2 Option (assumes 8-lane IH 35 mainline between IH 14 and Loop 363/US 190)

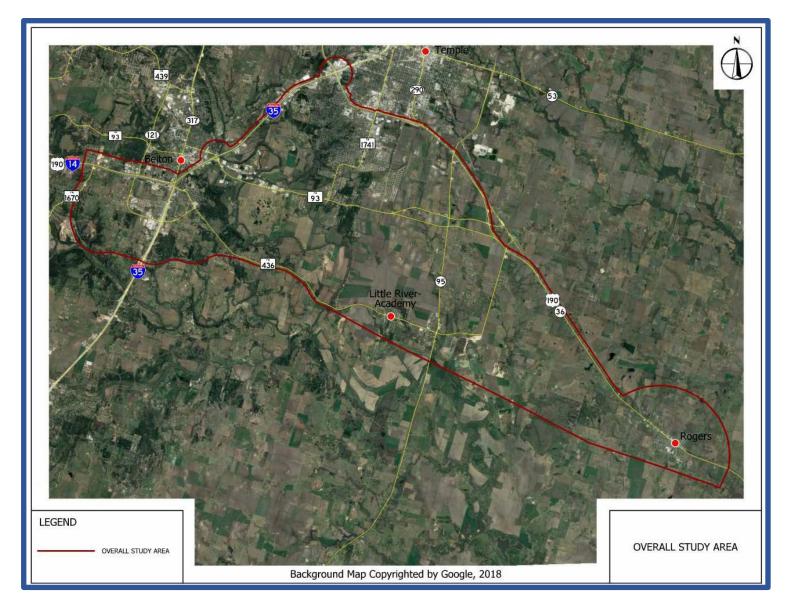
In total, seven scenarios were modeled:

- No-Build
- Pink Option
- Pink+2 Option
- Blue Option
- Brown Option
- Black Option
- Aqua Option

The Rogers Relief Route, which was already programmed by TxDOT and is planned, was assumed in all seven scenarios of the model, helping to provide a more accurate simulation for future traffic conditions.









**Traffic Technical Memorandum** 

#### 3.0 DATA

The primary data source used in this study was KTMPO's regional TDM demographic, land use, and transportation network. The 2040 demographic and land use forecasts, as well as the long-range transportation improvements embedded in the KTMPO model, were considered to project travel patterns in the future options.

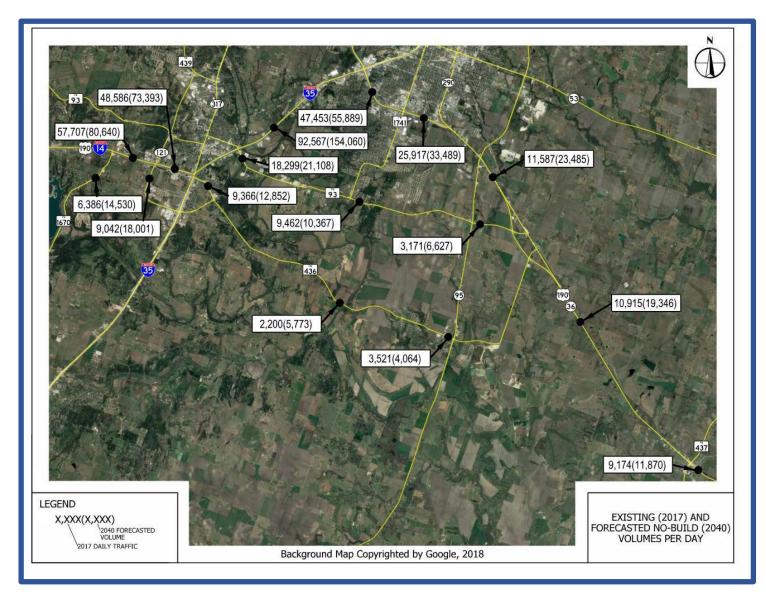
Layouts of the proposed US 190 facility were used to model the proposed facility in the alternative options. In general, frontage roads were modeled where proposed US 190 follows an existing roadway. For instance, in the eastern portion of the Blue and Black route options, US 190 is proposed along a rural area as new construction where there is no existing roadway, so no frontage roads were assumed along those sections. Along the main lanes of the proposed US 190 facility, a 70-miles-per-hour (mph) speed was assumed as the design speed, and a 50-mph design speed was assumed along the proposed frontage roads.

24-hour weekday traffic counts were collected in May 2017 at locations along several highways, namely IH 35, US 190, FM 93, FM 436, FM 1670, and Loop 121 in the study area. The collected traffic volume data were compared to the KTMPO TDM's Year 2040 traffic volume projections to verify their validity. Existing (2017) and forecasted (2040) daily traffic counts are presented in Figure 2.



#### **Traffic Technical Memorandum**

#### Figure 2 • Existing (2017) and Forecasted (2040) Daily Traffic Volumes





**Traffic Technical Memorandum** 

## 4.0 METHODOLOGY

The traffic forecasting for the five route options and a No-Build option were considered in the US 190 Feasibility Study. The KTMPO model simulates travel on the entire highway network in Lampasas, Coryell, and Bell Counties in Texas. The roadway network embedded in the model includes most of the different types of roadways in the area, such as freeways, major arterials, minor arterials, collector roads, and some local street. Outputs from the model runs contain detailed information about the transportation system, including traffic volume forecasts, projected travel speeds, vehicle miles traveled in the study area, and average travel times.

The KTMPO model is a trip-based model that uses the traditional Four-Step sequential process, including:

- TRIP GENERATION: Trips are produced as a function of land use (e.g., commercial, residential).
- TRIP DISTRIBUTION: What are the origins and destinations of the trips?
- MODE CHOICE: How are the trips made (e.g., car, transit)?
- TRIP ASSIGNMENT: What routes do travelers choose to get between origins and destinations?

This Four-Step process is used to estimate average traffic volumes based on the best available population and employment forecasts, projected highway travel conditions, and projected transit service (if any).

#### 5.0 PERFORMANCE MEASURES

The travel demand modeling process focused on several measures of transportation system performance, including:

- VEHICLE MILES OF TRAVEL: Vehicle miles of travel (VMT) is a measure of cumulative distance traveled by all of the trips within the study area. It provides a measure of the total magnitude of travel and provides an indication of air quality and other quality-oflife measures.
- VEHICLE HOURS OF TRAVEL: Vehicle hours of travel (VHT) is a measure of cumulative duration of all the trips within the study area and provides an indication of travel speed and congestion in the network.

In addition to the system performance, the ratios of round-trip free-flow travel times to congested travel times between Belton and Rogers in the east-west direction, and along the IH 35 corridor between Temple and Belton in the north-south direction, were compared among the route options. This provides an indication of the degree of east-west and north-south congestion through the study area.



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## 6.0 MODEL APPLICATION

The KTMPO regional TDM was utilized as a basis for the evaluation. The demographic and socioeconomic conditions forecasted in the KTMPO model for year 2040 were assumed in all modeled options. Each option incorporates a specific alignment of the new US 190 facility at interstate design standards within the study area. Several performance measures pertaining to projected travel demand were summarized from the outputs of the travel demand model.

PINK OPTION: The Pink route option of US 190 is located in the northern part of the study area and utilizes existing IH 14 and IH 35. This proposed layout upgrades existing Loop 363/US 190 between IH 35 and Rogers. Two configurations were considered for the Pink route option. In one configuration—Pink Option—the mainline of the IH 35 corridor between IH 14 and Loop 363 was not improved, and the existing six-lane section was assumed to remain. In another configuration—Pink+2 Option—enhancements along existing IH 35 mainline between IH 14 and existing Loop 363 were assumed. The enhanced IH 35 section has four lanes in each direction. The proposed location of the Pink route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 3.

BLUE OPTION: The Blue route option of US 190 is located in the central part of the study area and follows existing IH 14 north on IH 35 to FM 93. East of IH 35, it follows FM 93 and continues on undeveloped land to existing US 190. The Blue route provides one of the more direct routes from Belton to Rogers. The proposed location of the Blue route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 4.

BROWN OPTION: The Brown route option of US 190 is also proposed in the central part of the study area and follows existing IH 14 to north on IH 35 to FM 93. East of IH 35, it follows FM 93 to existing US 190 and provides one of the more direct routes from Belton to Rogers. The proposed location of the Brown route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 5.

BLACK OPTION: The Black route option of US 190 is located in the southern part of the study area and follows existing IH 14 to south on IH 35. East of IH 35, it continues on undeveloped land to FM 436, then continues on undeveloped land north of Little River-Academy to existing US 190. The proposed location of the Black route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 6.

AQUA OPTION: The Aqua route option of US 190 is located in the southern part of the study area and takes an undeveloped land route from IH 14 at FM 1670 to existing Shanklin Road, then crosses IH 35 to connect to FM 436. It continues on an undeveloped land route north of Little River-Academy to existing US 190. The proposed location of the Aqua route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 7.



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proposed location of the Aqua route and the location of frontage roads along the proposed US 190 corridor are presented in Figure 7.

In addition to these five options, a No-Build option was modeled that considers the existing layout of US 190 between Belton and Rogers. The 2040 KTMPO transportation network was updated, including the Rogers Relief Route, in this option.







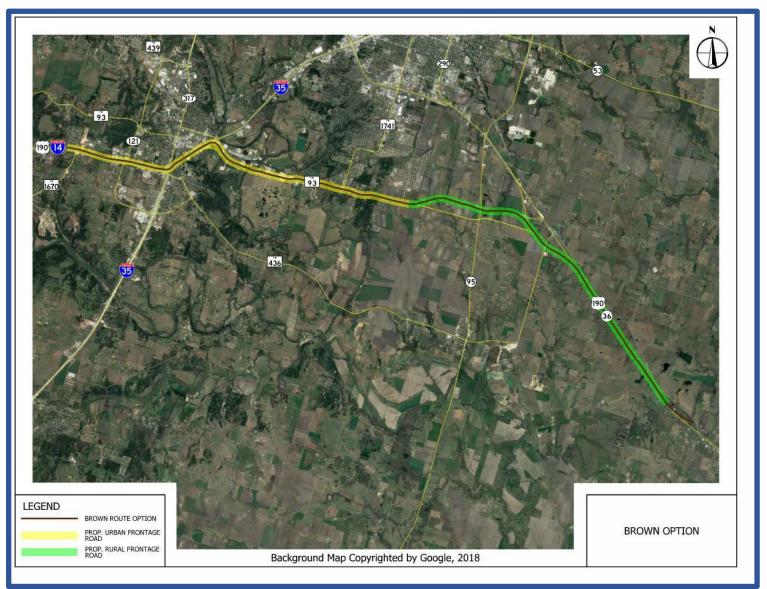






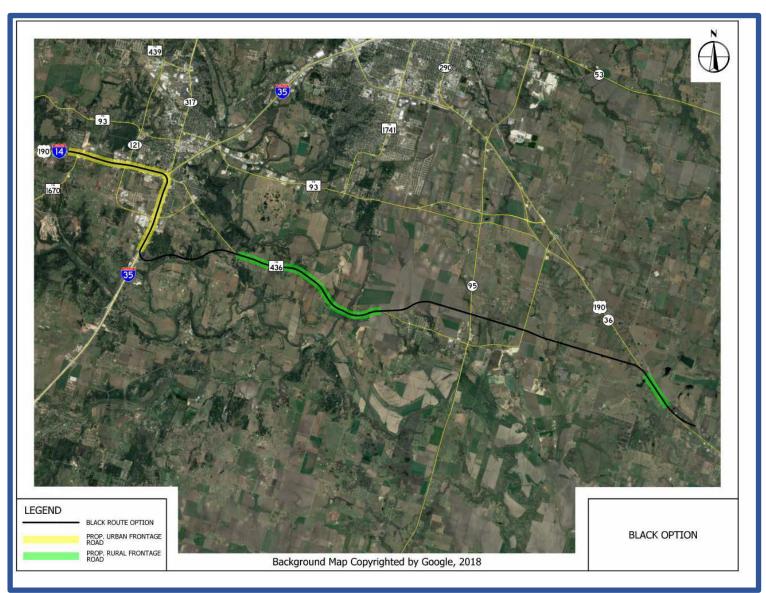








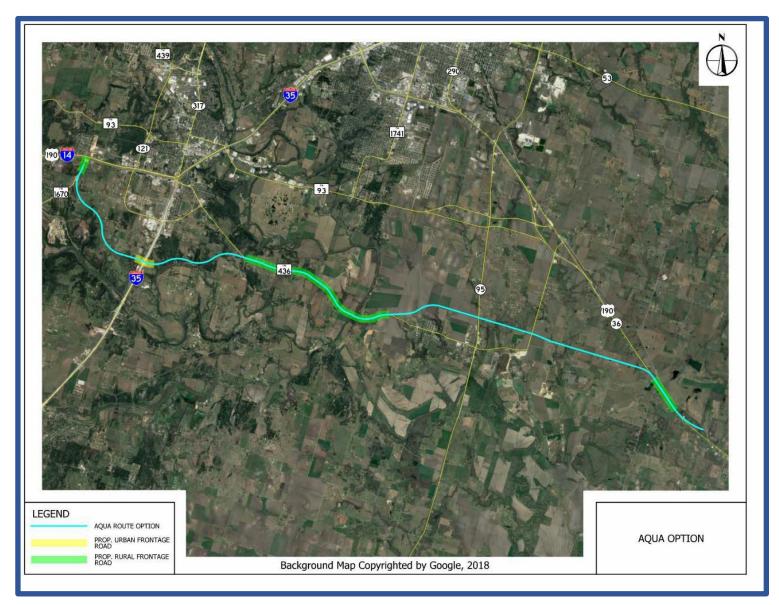






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Figure 7 • Aqua Route Option Location





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## 7.0 MODEL APPLICATION

Results obtained from the five route options and the No-Build option are presented below. Forecasted (2040) volumes for all options are presented in Figure 8 through Figure 14 at selected locations along IH 35, existing US 190, proposed US 190, FM 93, and FM 436.

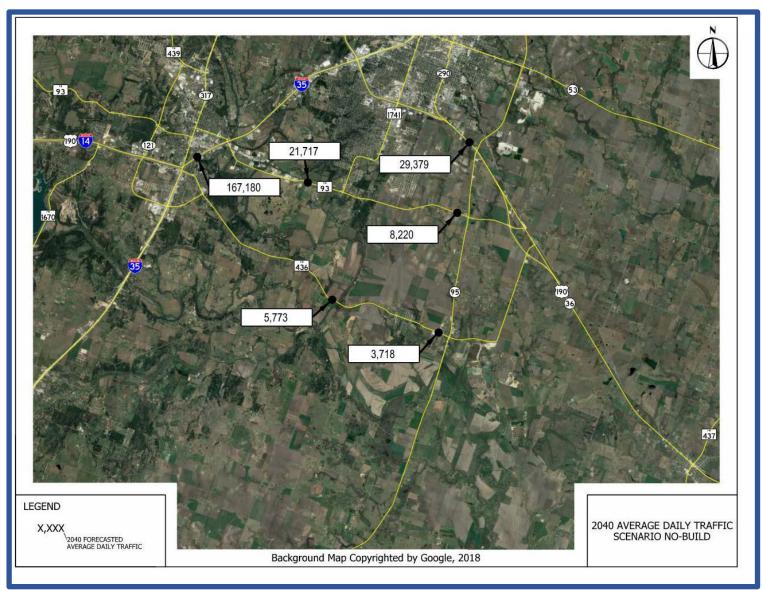
Compared to the No-Build option traffic volumes, average daily traffic volumes for the five route options illustrate the traffic diversion that is expected to occur due to the upgraded US 190 facility. Existing US 190, west of SH 95, experiences increases of approximately 10 percent and 12 percent under the two Pink options (Pink and Pink+2, respectively).

Upgrading existing FM 93 to the proposed US 190 (Blue and Brown route options) shows Year 2040 daily traffic volumes increasing by approximately 37 percent east of IH 35. Upgrading existing FM 436 to the proposed US 190 (Black and Aqua route options) shows Year 2040 daily traffic volumes increasing by 82 percent under the Black Route and more than doubling under the Aqua Route.



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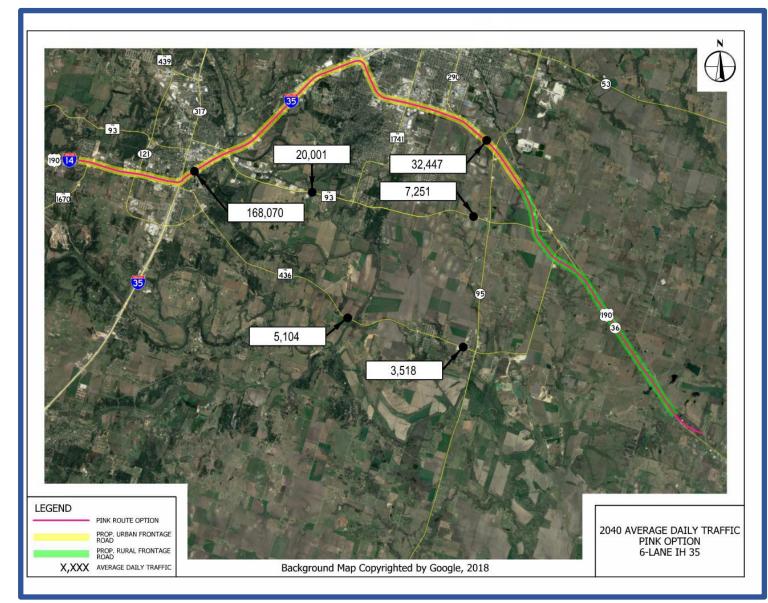
## Figure 8 • No-Build Option Daily Traffic Forecast for Year 2040





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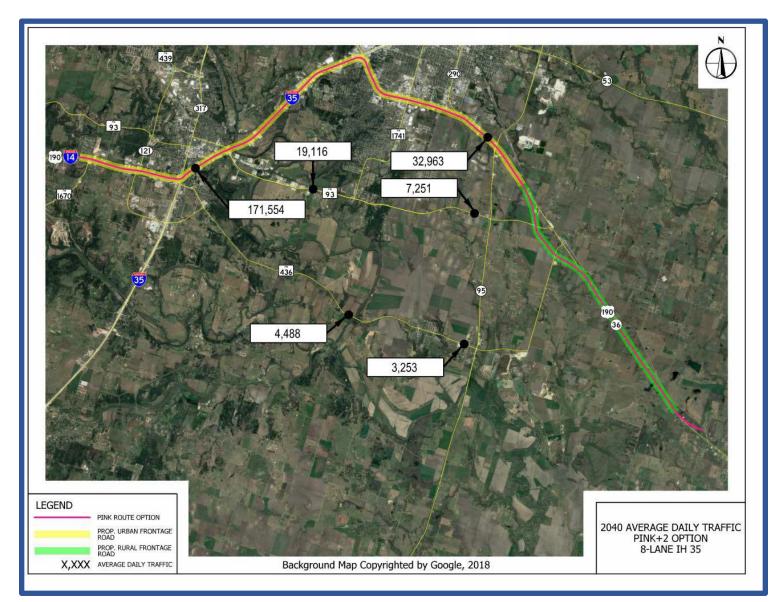
#### Figure 9 • Pink Option Daily Traffic Forecast for Year 2040





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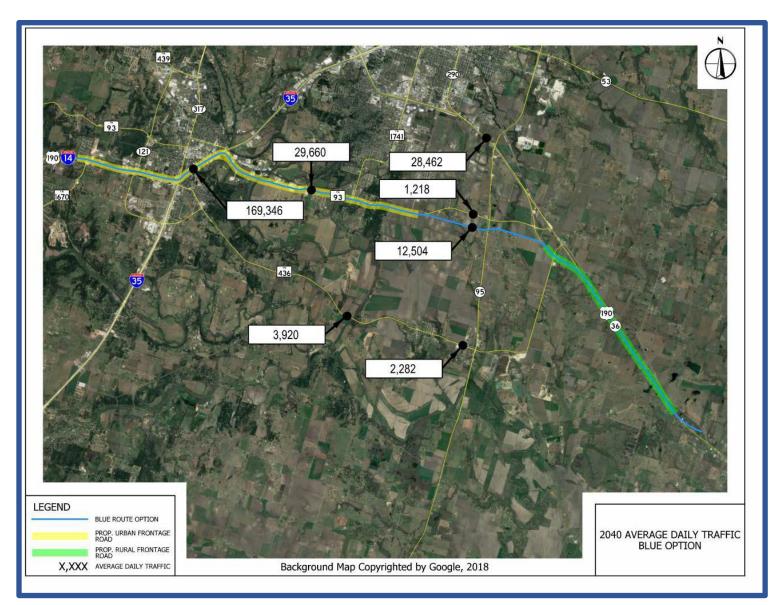
### Figure 10 • Pink+2 Option Daily Traffic Forecast for Year 2040





## **Traffic Technical Memorandum**

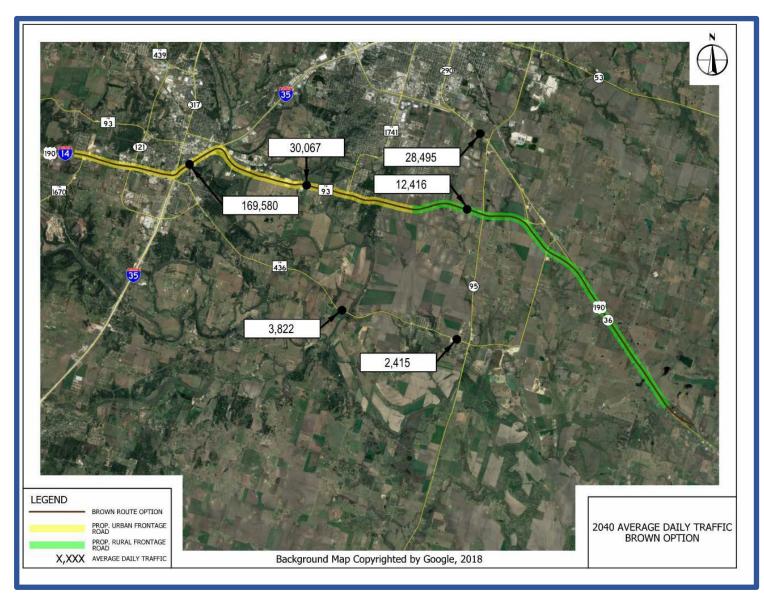
Figure 11 • Blue Option Daily Traffic Forecast for Year 2040





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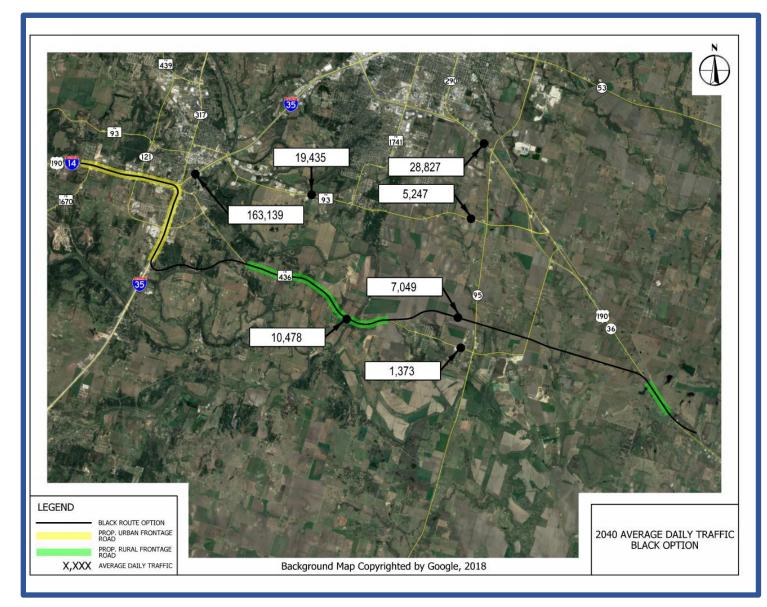
#### Figure 12 • Brown Option Daily Traffic Forecast for Year 2040





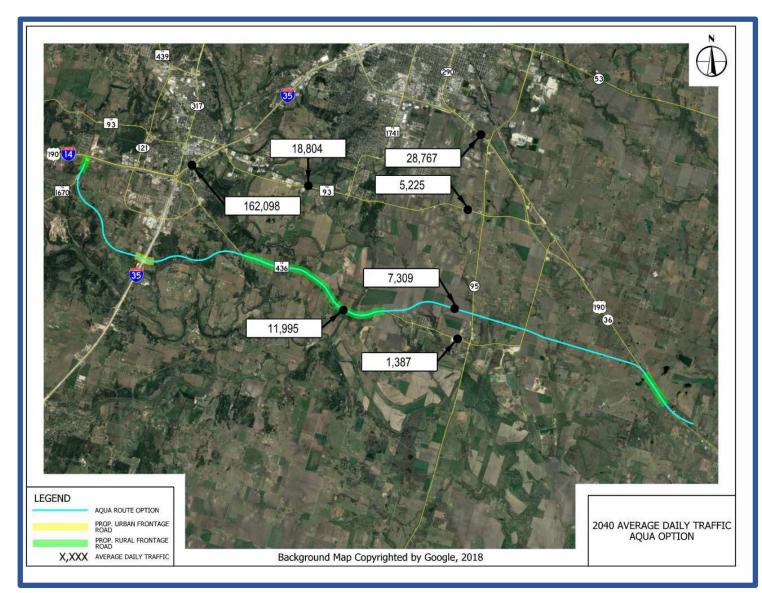
## **Traffic Technical Memorandum**

#### Figure 13 • Black Option Daily Traffic Forecast for Year 2040











#### Traffic Technical Memorandum

A summary of the performance measure results for each route option is provided in Table 1 and Table 2 below:

#### Table 1 • Summary of Performance Measure Results by Route Option

Option	Study Area VMT			Study Area VHT		
	AM	PM	Daily	AM	PM	Daily
No-Build	299,779	911,994	2,792,994	9,611	24,012	65,985
Pink	302,054	919,112	2,816,085	9,595	24,010	65,921
Pink+2	305,414	927,128	2,830,072	8,905	22,963	64,054
Blue	303,236	918,995	2,807,610	9,337	23,564	65,027
Brown	302,715	917,958	2,805,506	9,315	23,527	64,948
Black	303,589	919,563	2,806,491	9,415	23,742	65,318
Aqua	304,816	922,566	2,814,803	8,932	22,917	63,551

AM Peak Period in KTMPO Model: 7:00 AM - 8:00 AM

PM Peak Period in KTMPO Model: 2:30 PM - 6:30 PM

#### Table 2 • Percent Difference in VMT and VHT of Route Options and No-Build Option

Option		Percent Difference in VMT Compared to No-Build			Percent Difference in VHT Compared to No-Build		
	AM	PM	Daily	AM	PM	Daily	
No-Build	n/a	n/a	n/a	n/a	n/a	n/a	
Pink	0.8%	0.8%	0.8%	-0.2%	0.0%	-0.1%	
Pink+2	1.9%	1.7%	1.3%	-7.3%	-4.4%	-2.9%	
Blue	1.2%	0.8%	0.5%	-2.8%	-1.9%	-1.5%	
Brown	1.0%	0.7%	0.4%	-3.1%	-2.0%	-1.6%	
Black	1.3%	0.8%	0.5%	-2.0%	-1.1%	-1.0%	
Aqua	1.7%	1.2%	0.8%	-7.1%	-4.6%	-3.7%	



#### Traffic Technical Memorandum

The VMT results indicate the amount of use that a particular route option would experience. Routes that are more circuitous (and thus longer distances) but provide faster travel times become more attractive to travelers. Based on the network VMT results, upgrading the existing alignment of US 190 in the northern side of the study area (Pink+2) or constructing the Aqua route would provide the most useful options for travelers.

The VHT measure indicates that upgrading existing US 190 and IH 35 or relocating US 190 would help reduce the total duration of all network trips within the study area compared to the No-Build Option. Upgrading the existing alignment of US 190 in the northern side of the study area (Pink+2) would help reduce the duration of all trips by 7.3 percent and 4.4 percent during AM and PM peak periods, respectively, compared to the No-Build option.

Relocating the existing route in the southern side of the study area (Aqua Rpoute) would also help reduce the duration of all trips by 7.1 percent and 4.6 percent during AM and PM peak periods, respectively, compared to the No-Build Option.

To determine the route that would provide more reliable travel times between cities during peak periods, free-flow travel times were compared to the congested travel times estimated by the model. Ratios of free-flow travel times to congested travel times provide the measures to assess travel time reliability. A higher ratio indicates less variability between free-flow and congested peak period travel time, while a lower ratio indicates congested travel time that is significantly greater than the free-flow travel time. Two travel time segments were selected for comparison among the options:

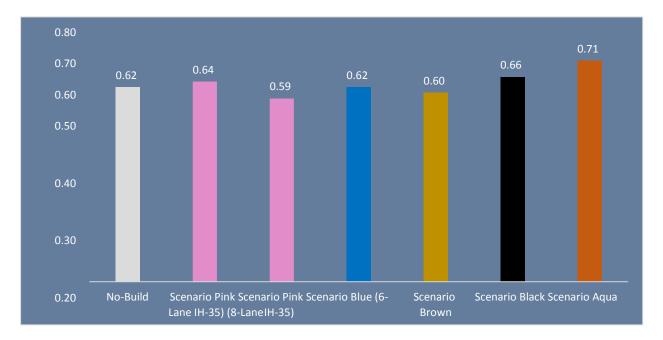
- 1. East-west direction: between George Wilson Road (near FM 1670) in Belton and Hunt Hill Road, north of Rogers
- 2. North-south direction: between Tahuaya Drive in Belton and Avenue H in Temple

The results are shown in Figure 15 through Figure 18. Relocating existing US 190 to the southern side of the study area (Black Option and Aqua Option) would help reduce east-west congestion between Belton and Rogers during both the AM and PM peak periods. On the other hand, enhancing the existing roadways, especially IH 35 and US 190 (Pink, Pink+2) would help reduce congestion between Belton and Temple in the north-south direction during both AM and PM peak periods.

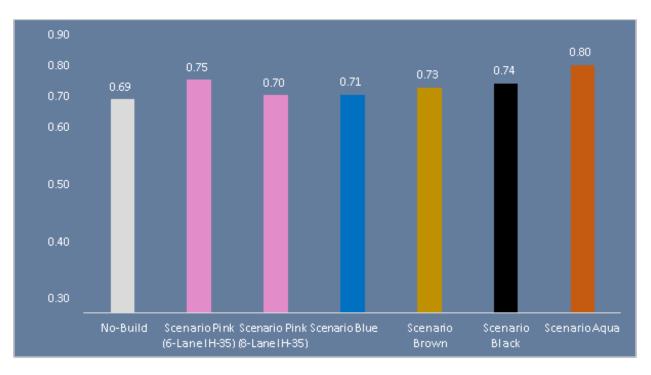


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#### Figure 15 • Ratio of Free-Flow Travel Time to Congested Travel Time During E-W AM Peak Period



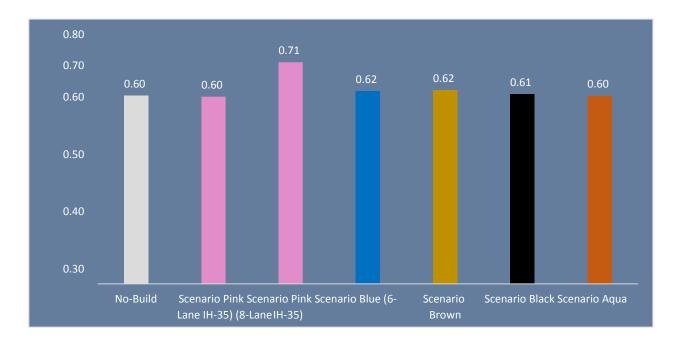
#### Figure 16 • Ratio of Free-Flow Travel Time to Congested Travel Time During E-W PM Peak Period



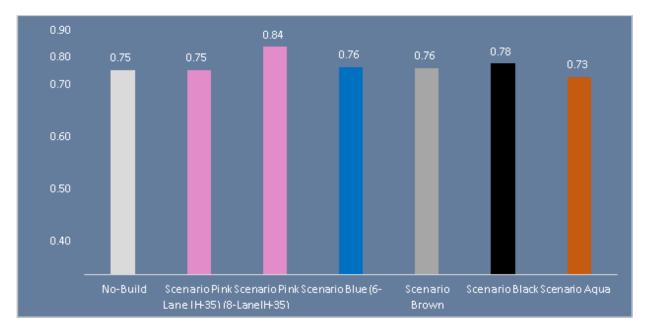


#### **Traffic Technical Memorandum**

#### Figure 17 • Ratio of Free-Flow Travel Time to Congested Travel Time During N-S AM Peak Period



#### Figure 18 • Ratio of Free-Flow Travel Time to Congested Travel Time During N-S PM Peak Period





#### **Traffic Technical Memorandum**

PINK: The Pink Route with the existing IH 35 cross section provides relatively small benefits on a network level. Compared to No-Build, network VMT increases by 0.8 percent during the AM and PM peak periods and throughout the day. Network VHT decreases by 0.2 percent and 0.1 percent during the AM peak and the entire day, respectively, but shows no change during the PM peak period. These are the smallest VHT decreases across all route options. The ratio of free-flow to congested travel time improves between Belton and Rogers, although the fastest route for travelers is not along US 190 between these two points. As expected, the north-south travel time ratios remain unchanged.

The Pink Route (with the existing IH 35 cross section) does attract trips away from alternate routes. For instance, west of SH 95, daily 2040 traffic volumes decrease by 12 percent along FM 93 as a result of the route construction.

PINK+2: Compared to No-Build, the Pink Route with the widened IH 35 cross section provides relatively significant benefits on a network level. On a peak period and daily basis, network VMT increases the most compared to the other route options. Network VHT decreases by 7.3 percent during the AM peak period—the greatest AM peak period decrease compared to other route options —and significant 4.4 percent and 2.9 percent decreases during the PM peak period and the entire day, respectively. The ratio of free-flow to congested travel time declines slightly between Belton and Rogers during the AM peak period, although the fastest route for travelers is now along US 190 between these two points. Further, while this east-west ratio may be lower with the Pink route option, its free- flow and congested travel times are lower than the No-Build's respective travel times. As expected, the expanded IH 35 mainline result in higher ratios of free-flow to congested travel time in the north-south direction compared to all other route options and to the No-Build.

The Pink Route (with the eight-lane IH 35 cross section) attracts trips away from alternate routes. For instance, west of SH 95, daily 2040 traffic volumes decrease by 12 percent along FM 93—the same amount as under the Pink route (with existing IH 35 cross section. Along FM 436, west of SH 95, however, daily 2040 volumes decrease by eight percent compared to the Pink route with the existing IH 35 cross section.

BLUE: The Blue Route provides moderate benefits on a network level compared to No-Build. Network VMT increases most during the AM peak period—1.2%. Similarly, network VHT decreases by 2.8 percent during the AM peak period but less so during the PM peak period and over the entire day. The ratio of east-west free-flow to congested travel time remains approximately the same as No-Build, although the Blue Route's free-flow and congested travel times are lower than the No-Build's respective travel times. As expected, the ratios of free-flow to congested travel time in the north-south direction are approximately the same as No-Build.



#### **Traffic Technical Memorandum**

The Blue Route option attracts a significant number of trips away from alternate routes. 2040 daily traffic volumes decrease along FM 436, west of SH 95, by 39 percent. Along existing FM 93, west of SH 95, 2040 daily traffic volumes drop by 85 percent.

BROWN: The Brown Route provides moderate benefits on a network level. During the PM peak period and the entire day, network VMT increases the least compared to the other route options— 0.7 percent and 0.4 percent, respectively, compared to No-Build.

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The Brown Route attracts a significant portion of trips away from alternate routes. 2040 daily volumes decrease by approximately 35 percent in spots along FM 436 between IH 35 and SH 95. West of SH 95, 2040 daily traffic decreases by three percent along existing US 190.

BLACK: The Black Route provides moderate benefits on a network level. Network VMT increases by 1.3 percent compared to No-Build, though increases during the PM peak period and daily are of less magnitude. Network VHT decreases most during the AM peak period—two percent—but less so during the PM peak period and over the entire day. The ratio of east-west free-flow to congested travel time increases during both peak periods compared to No-Build. The ratio of free-flow to congested travel time in the north- south direction is approximately the same as No-Build during the AM peak period but improves during the PM peak period.

The Black Route attracts a significant portion of trips away from alternate routes. 2040 daily volumes decrease by approximately 36 percent and 63 percent along FM 93 and FM 463, respectively, west of SH 95. Along IH 35, north of IH 14, 2040 daily volumes decrease by two percent.

AQUA: The Aqua Route provides significant benefits on a network level. Network VMT increases are second only to those under the Pink route (with widened IH 35) option. Network VHT decreases most compared to other route options during the PM peak and the entire day—by 4.6 percent and 3.7 percent, respectively. The decrease during the AM peak period—7.1 percent—is significant, too. The ratio of east-west free-flow to congested travel time increases during both peak periods with the Aqua Route. The ratios of free-flow to congested travel time in the north-south direction are approximately the same as No-Build.



#### **Traffic Technical Memorandum**

The Aqua Route attracts a similar portion of trips away from alternate routes as the Black route option. 2040 daily volumes decrease by approximately 36 percent and 63 percent along FM 93 and FM 463, respectively, west of SH 95. Along IH 35, north of IH 14, 2040 daily volumes decrease by three percent.

#### 8.0 SUMMARY

This memorandum summarizes findings of the five route options proposed for US 190 that serve Belton, Temple, and Rogers in Central Texas. The study compared VMT, VHT, and the ratio of freeflow to congested travel time among the route options. Performance measure results indicate that upgrading the existing US 190 highway and enhancing the IH 35 corridor between IH 14 and Loop 363 would help reduce the total duration of all daily network trips within the study area by 2.9 percent. Relocating the existing US 190 along FM 436, as modeled in the Aqua option, would also help to reduce the total duration of all daily network trips within the study area by 3.7 percent. Comparing the ratio of free-flow to congested travel time between route options indicates the Aqua route option would provide the least travel time variability in the east-west direction, while the Pink route option with an upgraded IH 35 would provide the least travel time variability in the northsouth direction.

#### 9.0 **REFERENCES**

Killeen – Temple MPO 2040 Model, Version 1.2, Killeen-Temple Metropolitan Planning Organization, Belton, Texas, November 17, 2014.

2040 Metropolitan Transportation Plan Project Listing, Killeen-Temple Metropolitan Planning Organization, Belton, Texas, December 21, 2017.

Plans of Proposed State Highway Improvement, US 190, CSJ 0185-01-030, etc., Texas Department of Transportation, Waco, Texas, August 11, 2014



Traffic Technical Memorandum



**Final Report** 



# Appendix F – Construction Cost Technical Memorandum



# **Construction Cost Estimate Technical Memorandum**

May 2018







# **INTRODUCTION**

The Killeen-Temple Metropolitan Planning Organization (KTMPO), with support from the Texas Department of Transportation (TxDOT), is conducting a feasibility study to explore options for upgrading, and possibly relocating, US 190 between FM 1670 (west of I-35) and the Rogers Relief Route north of the city of Rogers. A stakeholder working group was formed and five primary route options were identified by the working group for more detailed analysis, including development of cost estimates. The five primary route options, shown on page 2, were designated by color: Pink, Blue, Brown, Black, and Aqua.

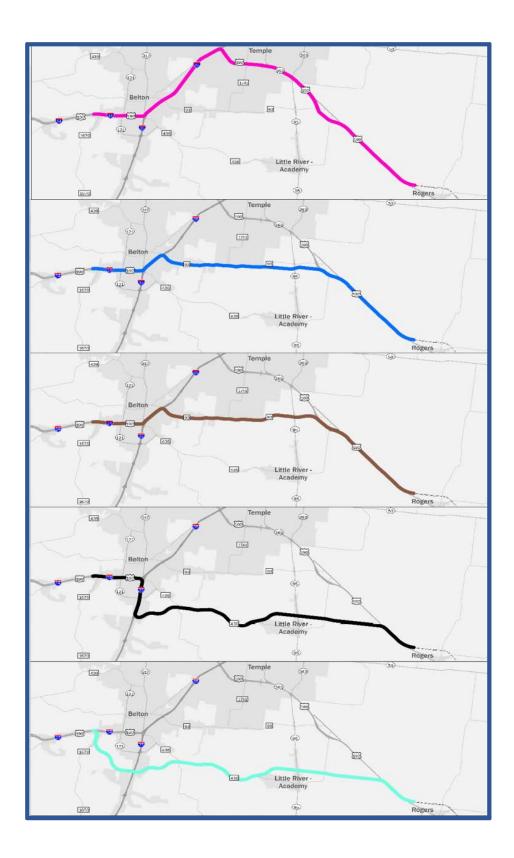
With the exception of the Pink Route, it is assumed that any part of a route that corresponds to existing I-14, I-35, or US 190 west of 5th Street (approximately 2.6 miles east of I-35) would not require major reconstruction or additional right-of-way, as those roadways are already built to interstate standards and would largely remain unchanged. For that reason, reconstruction of these roadways is not reflected in the cost estimates.

With regard to the Pink Route, two cost scenarios were considered. The first scenario (herein referred to as "the Pink Route") assumed that no reconstruction would be required along existing I-14, I-35 or US 190 west of 5<sup>th</sup> Street. The second scenario assumed the addition of one main lane in each direction on I-35. This scenario is herein referred to as "the Pink+2 Route" and is consistent with KTMPO's long range plan for the area.

For consistency, the cost and length for each route assumed the same starting point (FM 1670 west of I-35) and ending point (the intersection with the Rogers Relief Route north of the city of Rogers). For cost estimation purposes, major assumptions included a continuous proposed right-of-way width of 400 feet, 70 mph design speed, and minimization of environmental and cultural impacts. Estimates are provided in 2018 dollars. It is important to note that, to date, only feasibility study funding has been secured for the US 190 project. Funding has not been secured for any future phase of project development including, but not limited to, environmental studies, final design, right-of-way acquisition, and construction.



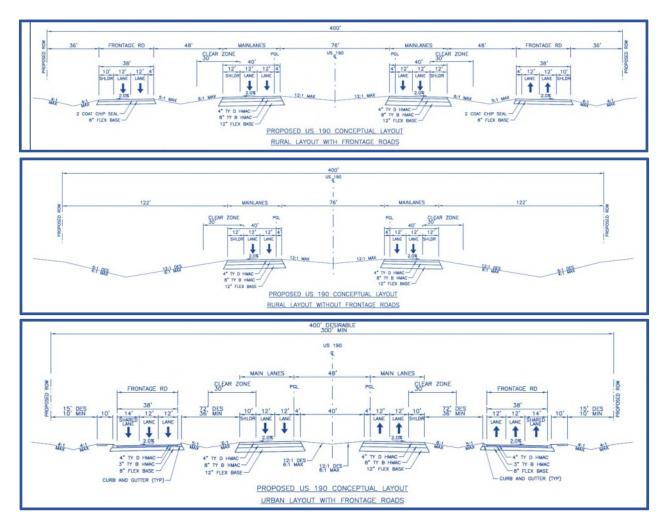
# **Construction Cost Estimate Technical Memorandum**



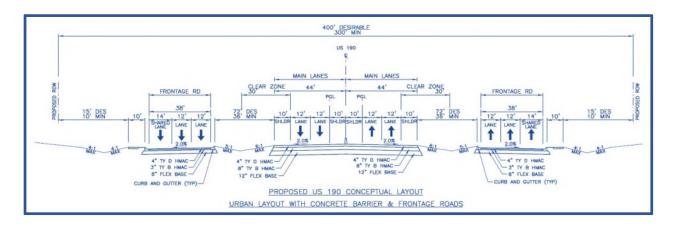


# METHODOLOGY

Cost estimates were developed to account for the various configurations of the controlled access roadway that would be implemented along each of the primary route options. These configurations included: 1) four-lane rural section without frontage roads; 2) four-lane rural section with frontage roads; 3) four-lane urban section with frontage roads; and 4) a four-lane urban section with a center concrete barrier in those areas where right-of-way constraints preclude the typical (400-foot) right-of-way. However, for cost estimating purposes, a right-of-way width of 400 feet was assumed consistently throughout the corridor, except in those areas where additional right-of-way was not required, such as along I-35.







For each of the cross sections, identified above, the following were included as a per station (100 linear feet) cost:

- Pavement/base section (including concrete curb and sidewalk);
- Preparing ROW, embankment and excavation;
- Seeding and watering;
- Storm water pollution prevention (SWP);
- Drainage; and
- Signing and striping.

# FRONTAGE ROAD LOCATIONS

When developing controlled access facilities (such as the proposed US 190 project) TxDOT's long-standing policy is to maintain access to/from adjacent properties by providing frontage roads in those areas where an existing roadway would be upgraded. In new location ("greenfield") areas, frontage roads are not typically provided. The primary route options are consistent with this policy:

- Pink: Both variations of this option (Pink and Pink+2) are urban (with frontage roads) throughout I-35/current US 190 and transition to rural (with frontage roads) at the existing Heidenheimer bypass frontage roads. The rural (with frontage roads) section continues to the eastern project limit.
- Blue: This route is urban (with frontage roads) throughout I-35 and along FM 93 to the Temple city limit. The route then transitions to rural (without frontage roads), from the city limits to US 190, where the route is on new location. The new location section intersects US 190 north of FM 93 – from that point south, a rural section



(with frontage roads) is proposed.

- Brown: This route option is urban I-35, and continuing on FM 93 to the Temple city limit. At the city limit, the route transitions to a rural section (with frontage roads) and continues as such for the remaining length of the project.
- Black: This route option is urban (with frontage roads) along the I-35 corridor. No frontage roads would be constructed along the new location section between I-35 and FM 436. A rural section (with frontage roads) would be constructed along FM 436 west of Little River-Academy. From Little River-Academy to the east, a rural section (without frontage roads) would be constructed on new location. The route connects to US 190 approximately 2 miles north of the Rogers Relief Route. It then continues as a rural section (with frontage roads) to the eastern project limit.
- Aqua: Beginning at the intersection of I-14 and continuing on new location to the intersection with I-35, this option would consist of a rural section (with frontage roads). A short urban (with frontage roads) section would be constructed at the I-35 interchange. The urban section would be transitioned to a rural section (with frontage roads) east to Little River-Academy. From Little River-Academy to the east, a rural section (without frontage roads) would be constructed on new location. The route connects to US 190 approximately 2 miles north of the Roger Relief Route. It then continues as a rural section (with frontage roads) to the eastern project limit.

# BRIDGES AND DIRECT CONNECTORS

A minimum vertical clearance requirement of 18-feet, 6-inches is assumed. To achieve this clearance some of the existing bridges would need to be raised. A cost of \$75 per square foot was used to account for levelling of abutting pavement and earthwork. The Pink Route has six existing crossings that would need to be raised; the Blue and Brown routes each have one; the Black Route has three; and the Aqua Route has two. Proposed bridge costs were differentiated by number of spans and type of crossings, and assumed to be TX46 standard bridges. Two-span bridges were estimated for the US 190 route options that would cross over smaller or rural streets. Three-span bridges were estimated over larger, arterial crossings. The estimated cost of ramps adjacent to each bridge was also calculated. These costs include adjoining embankment based on allowable grades, ramp pavement, and associated guard fence costs. The number of new bridges required for each route is as follows:



- Pink: Three new 3-span bridges and two new 2-span bridges
- Blue: Six new 3-span bridges and four new 2-span bridges
- Brown: Six new 3-span bridges and four new 2-span bridges
- Black: Two new 3-span bridges and eight new 2-span bridges
- Aqua: Two new 3-span bridges and ten new 2-span bridges

Channel crossing estimates were needed for creek crossings and those over the Leon River. Assuming no access ramps, the estimated cost included embankment and guard fence costs. The BNSF railroad crosses the study area. The estimate included embankment, guard fence, and riprap at each abutment of the railroad crossing. All frontage road crossings were assumed to be at grade.

Direct connectors were assumed where necessary to provide effective east-west connectivity. For estimating purposes, each direct connector was assumed to be 3,000 feet in length. Each was assumed to cost \$30 million (including structures, approach slab, barrier, embankment, and adjoining retaining walls). Construction of the Pink Route would require four direct connectors. The Blue, Brown, and Black routes would require six, and the Aqua Route would require five.

#### MISCELLANEOUS AND CONTINGENCIES

Each route was expected to need up to six traffic signals (at a cost of \$300K per intersection). While I-35 and US 190 travel lane improvements were not proposed along the Pink Route, sidewalks were added to close the gaps along the urban frontage roads. Contingencies were estimated as a percentage of the construction cost (mobilization -10%, traffic control - 10%, and utility relocation - 15%).



# **Construction Cost Estimate Technical Memorandum**

# **ROW**

The actual cost to acquire land for use as roadway right-of-way is dependent on several factors, most of which cannot be known prior to the negotiation process. Determining appropriate values for land that would be acquired for right-of-way during the early planning stages of a project, such as the current US 190 feasibility study, is thus reliant upon establishing educated assumptions.

For the current study, a 400-foot right-of-way width was assumed for the entire length of each route option. Four land use types were identified in the study area: single family residential; multi-family residential; commercial; and undeveloped. For each land use type, five sample properties were identified along each of the roadways that would require reconstruction (existing US 190 east of 5<sup>th</sup> Street, FM 93, and FM 436) and the new location portion of the Aqua Route west of I-35. The market value of the sampled properties, as reported by the Bell County Appraisal District, was used to calculate an average value per acre by property type and roadway/area. A multiplier of three was then applied to account for other factors, including: 1) the tax-appraised value is typically less than the market value of a property; 2) acquisition of a partial parcel typically has a higher cost per acre than acquisition of an entire parcel; and 3) other costs inherent in the acquisition. The post-multiplier (adjusted) costs were then used to establish an average cost per acre, by land use type, along each route option. These averages were then applied, by land use type, for the entire length of each option to estimate the cost of the right-of-way required for that option.

Route	SF Residential	MF Residential	Commercial	Undeveloped	Rounded Total	Rounded Total 3X
Pink	\$ 1,566,490	\$ 1,237,350	\$ 9,109,378	\$ 1,356,454	\$ 13,300,000	\$ 39,900,000
Blue	\$ 19,142,238	-	\$ 2,952,528	\$ 2,916,787	\$ 25,000,000	\$ 75,000,000
Brown	\$ 23,656,477	-	\$ 3,465,186	\$ 2,413,219	\$ 29,500,000	\$ 88,500,000
Black	\$ 6,444,660	-	-	\$ 1,757,032	\$ 8,200,000	\$ 24,600,000
Aqua	\$ 15,656,879	-	\$ 788,126	\$ 2,863,847	\$ 19,300,000	\$ 57,900,000

# ► APPROXIMATE ROW COST ESTIMATE PER ROUTE



	Total		Structures	Structures		ROW	*Total +	**Total
	Miles	Roadway	(Bridges)	(DC)	Misc.	Acquisition	Contingency	Without DCs
Pink	21.9	\$104,328,053	\$38,119,424	\$120,000,000	\$5,362,533	\$39,809,019	\$361,200,000	\$241,200,000
Pink +2	21.9	\$115,518,631	\$35,995,124	\$120,000,000	\$5,362,533	\$39,809,019	\$377,200,000	\$257,200,000
Blue	19.1	\$144,884,318	\$39,263,887	\$180,000,000	\$1,500,000	\$75,034,659	\$513,900,000	\$333,900,000
Brown	19.3	\$150,379,780	\$39,263,887	\$180,000,000	\$1,500,000	\$88,604,646	\$534,000,000	\$354,000,000
Black	20.5	\$114,170,344	\$40,573,837	\$180,000,000	\$600,000	\$24,605,073	\$427,100,000	\$247,100,000
Aqua	19.6	\$138,952,935	\$41,281,137	\$150,000,000	\$300,000	\$57,926,558	\$454,600,000	\$304,600,000

# TOTAL COST OF EACH ROUTE

\*35% contingency assumed

\*\*Total + Contingency minus Structures (DC) cost is provided for comparative purposes only

# **SUMMARY**

From this estimate the Pink, Pink +2, and Black routes are the least expensive routes overall, mainly due to utilization of existing I-35 and US 190 infrastructure (that would require little or no improvement) and existing direct connectors that could be utilized. Because the Aqua Route completely avoids the use of existing facilities, it has higher roadway and right-of-way costs. The Blue and Brown routes are similar in cost, as they are identical until the split at the BNSF railroad. They are the most expensive to build because they would require a significant amount of new right-of-way and there are no existing direct connectors that could be utilized.