



# Air Quality

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## I-820/SH 121 Northeast Interchange

Tarrant County  
Fort Worth District

**Main CSJ:** 0008-13-124

**Associated CSJs:** 0008-13- 179, 202, 210, 221, 235, 236 & 237  
and 0363-03-051 & 054

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



# I-820 (East)

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## Air Quality Assessment

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley Ederville Road

CSJ: 0008-13-124, etc.

Fort Worth District  
September 2017

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

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## Introduction

This project is located within an area that has been designated by the U.S. Environmental Protection Agency (EPA) as a moderate nonattainment area for the 2008 ozone national ambient air quality standards (NAAQS); therefore, transportation conformity rules apply. A complete description of the proposed project can be found in Texas Department of Transportation's (TxDOT) Texas Environmental Compliance Oversight System (TXECOS) under the file name: Project Description (0008-13-124, etc.).pdf.

The proposed action is consistent with the financially constrained Mobility 2040 Metropolitan Transportation Plan (MTP) and the 2017-2020 Transportation Improvement Program (TIP), which were initially found to conform to the Texas Commission on Environmental Quality (TCEQ) State Implementation Plan (SIP) by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) on September 7, 2016, and December 19, 2016, respectively. All projects in the North Central Texas Council of Governments (NCTCOG) 2017-2020 TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR.

### 1 Hot Spot Analysis

The project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required.

### 2 CO Traffic Air Quality Analysis (TAQA)

Traffic for the estimated time of completion year (2027) and design year (2040) is estimated to be 301,480 vehicles per day (vpd) and 360,825 vpd, respectively; therefore, triggering the need for a traffic air quality analysis. Topography and meteorology of the area in which the proposed project is located would not seriously restrict dispersion of the air pollutants. The traffic data used in the analysis, **Table 1**, was obtained from the TxDOT Transportation Planning and Programming Division and is available in TXECOS under the filename: TxDOT TPP Traffic Data (0008-13-124, etc.).pdf.

*Table 1: Traffic Analysis Data for 2027 and 2040*

Section	Average Daily Traffic (ADT)		K Factor	Design Hour Volume (DHV)	
	2027	2040		2027	2040
<b>I-820</b> From North 1-820/SH 121 Interchange To South 1-820/SH 121 Interchange	301,480 vpd	360,825 vpd	11.1	33,464 vpd	40,052 vpd
<b>I-820</b> From South i-820/SH 121 Interchange To Randol Mill Rd.	155,525 vpd	206,825 vpd	11.1	19,256 vpd	22,958 vpd
<b>SH 121</b> From I-820 To Handley-Ederville Rd (Including Minnis Dr.)	162,920 vpd	196,200 vpd	7.9	12,871 vpd	15,500 vpd

Carbon monoxide concentrations for the proposed action were modeled using CALINE3 and MOVES2014, and factoring in adverse meteorological conditions and sensitive receptors at the ROW line in accordance with the Standard Operating Procedure (SOP) for Complying with CO TAQA Requirements. Local concentrations of carbon monoxide are not expected to exceed national standards at any time. The results of the TAQA are summarized in **Table 2**.

*Table 2: Project Carbon Monoxide Concentrations*

Year	1-hour CO Concentration	1-HR % NAAQS	8-hour CO Concentration	8-HR % NAAQS
2027	7.2	19.4	2.7	30.0
2040	6.6	18.9	2.6	28.9

Note: The NAAQS for CO is 35 ppm for 1-hour and 9 ppm for 8-hours. Analysis includes a one-hour background concentration of 6.1 ppm and an 8-hour background concentration of 2.3 ppm.

### 3 Mobile Source Air Toxics (MSAT) Assessment

#### Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (<http://www.epa.gov/iris/>). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA) (<https://www.epa.gov/national-air-toxics-assessment>). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority MSATS, the list is subject to change and may be adjusted in consideration of future EPA rules.

#### *Motor Vehicle Emissions Simulator (MOVES)*

According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010.

These new emissions data are for light - and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data. MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010.

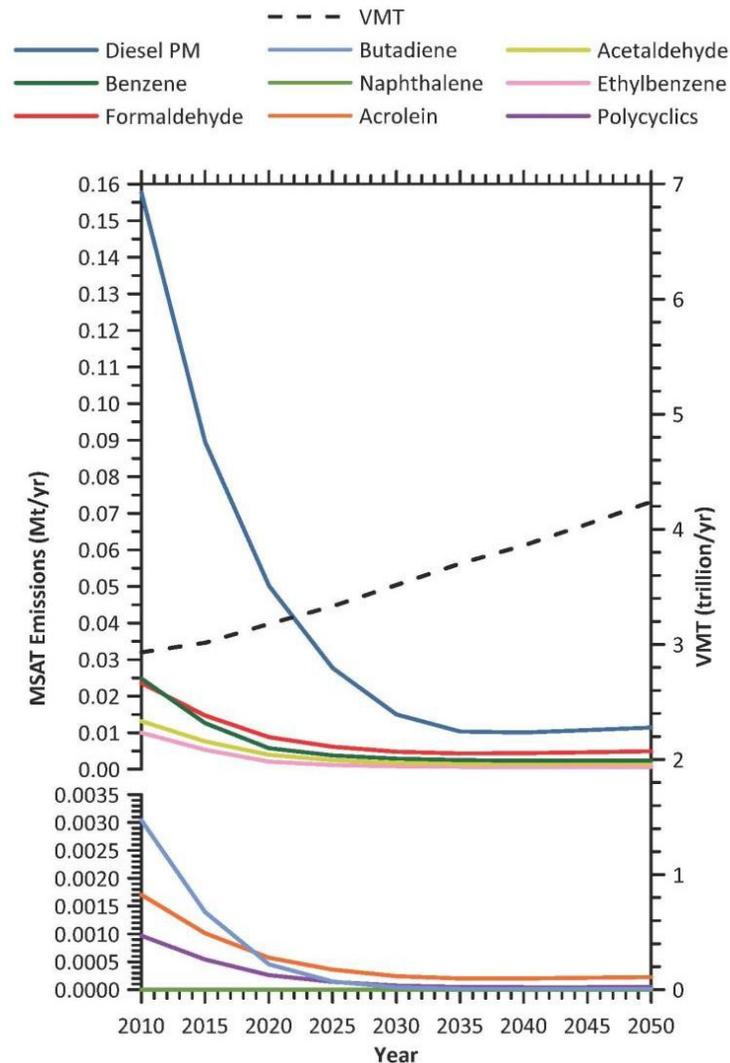
These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344).

Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide (<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100NNR0.txt>), EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

Using EPA's MOVES2014a model, as shown in **Exhibit 1**, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of

91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

**Exhibit 1: FHWA Projected National MSAT Emission Trends 2010 – 2050 for Vehicles Operating on Roadways Using EPA’s Moves2014a Model**



Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.  
 Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travel led, vehicle speeds, vehicle mix, fuels, emission control programs, meteorological, and other factors

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions forecasts are based on lower VMT projections than

MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

#### *MSAT Research*

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA. The FHWA, EPA, the Health Effects Institute (HEI), and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

#### *Project-Specific MSAT Information*

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives, found at:

[https://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/research\\_and\\_analysis/mobile\\_source\\_air\\_toxics/msatemiissions.cfm](https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemiissions.cfm)

For each alternative in this document, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, FHWA, October 12, 2016 – [http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/index.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)).

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore,

under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the I-820 and SH 121 interchange and in the following intersections: I-820 at Glenview Drive/W. Pipeline Road, I-820 at SH 10, I-820 at Trinity Boulevard, and I-820 at Randol Mill Road. However, the magnitude and the duration of these potential increases compared to the No Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region- wide MSAT levels to be significantly lower than today.

#### *Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis*

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act (CAA) and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, <http://www.epa.gov/iris/>). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the HEI. A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents ([http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/index.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)). Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupported assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C. [https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/subst/O642.htm#quainhal](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/O642.htm#quainhal)).”

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the CAA to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable ([https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD5985257800050C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD5985257800050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

#### **4 Congestion Management Process (CMP)**

The CMP is a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. The project was developed from the North Central Texas Council of Governments (NCTCOG) CMP, which meets all requirements of 23 United States Code of Federal Regulations (CFR) 450.320 and 500.109, as applicable. The CMP was adopted by NCTCOG on January 2014.

The region commits to operational improvements and travel demand reduction strategies at two levels of implementation: program level and project level. Program level commitments are inventoried in the regional CMP, which was adopted by NCTCOG; they are included in the financially constrained MTP, and future resources are reserved for their implementation.

The CMP element of the plan carries an inventory of all project commitments (including those resulting from major investment studies) that details type of strategy, implementing responsibilities, schedules, and expected costs. At the project's programming stage, travel demand reduction strategies and commitments will be added to the regional TIP or included in the construction plans. The regional TIP provides for programming of these projects at the appropriate time with respect to the single occupancy vehicle (SOV) facility implementation and project-specific elements.

Committed congestion reduction strategies and operational improvements within the study boundary will include:

- Addition of one managed lane in each direction along IH 820 from Trinity Boulevard to the North East Mall interchange, and one managed lane in each direction along SH 121 from Handley-Ederville Rd. to the south interchange with I-820. The managed lanes would tie into the existing North Tarrant Express managed lane facility.
- Provide access to/from the managed lane system to the Richland Hills TRE Station.
- Provide additional general purpose lanes on I-820 and SH 121.
- Access management through the addition of turn lanes at cross street intersections.
- Intersection improvements at all frontage road/cross street intersections with additional thru lanes and turning lanes.
- Pedestrian and bicycle accommodations along all frontage roads.

- Upgrades to the current ITS systems.
- Electronic toll collection along the managed lanes.
- Accelerated construction methods to be included in the PS&E to promote the safe and efficient passage of traffic and provide for a safer work zone.

Individual projects are listed in **Table 3**.

*Table 3: Congestion Management Process Strategies*

Location	Type	Implementation Date
Mobile Assistance Patrol (additional courtesy vehicles)	ITS	NL
SH 121 From Luella Street to Pipeline Road	ITS	NL
Handley-Ederville Road from SH 121 to SH 183	Addition of Lanes	NL
VA Handley-Ederville Rd centered on the TRE station.	Strategic Plan for Sustainable Development	NL
TRE/RailTran Project from Dallas County Line to Fort Worth CBD	Rail Transit	NL
TRE-Richland Hills Station sidewalk connections on Handley-Ederville Road from the northeast corner of SH 121 to the TRE Station to west side of Handley-Ederville Road from Midway Road to TRE Station, & Pine Park Road from Rosebud Lane to Handley-Ederville Road	Bike/Pedestrian	NL
SH 10 from I-820 to Bell Spur	Addition of Lanes	NL
Loop 820 NE NB FR from 500 feet S of Northeast Mall Boulevard To 1200 feet N of Northeast Mall Boulevard	Bottleneck Removal	NL

NL – Year not listed on Transportation Improvement Program Information System (TIPINS).  
Source: NCTCOG – TIPINS website, accessed December 2016.

In an effort to reduce congestion and the need for SOV lanes in the region, TxDOT and NCTCOG will continue to promote appropriate congestion reduction strategies through the Congestion Mitigation and Air Quality Improvement (CMAQ) program, the CMP, and the MTP.

The congestion reduction strategies considered for this project would help alleviate congestion in the SOV study boundary, but would not eliminate it.

Therefore, the proposed project is justified. The CMP analysis for added SOV capacity projects in the Transportation Management Area (TMA) is on file and available for review at NCTCOG.

In July 2013, the RTC also adopted a policy that requires the review and application of congestion mitigation strategies to correct corridor deficiencies identified in the CMP when performing corridor and environmental studies and report findings back to NCTCOG. Therefore, NCTCOG has developed a project level CMP analysis. The analysis requires completion of the Project Implementation Form, and, if warranted, the Roadway Corridor Deficiency Form and Corridor Analysis Fact Sheet.

## **5 Air Quality Construction Emissions Reduction Strategies**

During the construction phase of this project, temporary increases in PM and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel particulate matter from diesel powered construction equipment and vehicles.

The potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at:

<http://www.tceq.state.tx.us/implementation/air/terp/>.

However, considering the temporary and transient nature of construction-related emissions, the use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements; it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

# Attachments

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# Mobility 2040 Freeway/Tollway Recommendations

Corridor ID	Corridor	MTP ID	Facility	From	To	2017 *	2027 *	2037 *	2040 *	Description	YOE Corridor Cost
18	IH 35W (South)	FT1- 5.70.1	IH 35W	IH 30	Berry Street	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	Operational improvements at interchanges	\$724,048,067
	IH 35W (South)	FT1- 5.70.2	IH 35W	Berry Street	IH 20	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	8 (Frwy), 4/8 (Frtg-C)	Operational improvement at interchanges	
	IH 35W (South)	FT1- 5.80.1	IH 35W	IH 20	FM 1187	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	Widen 6 to 10 lanes	
	IH 35W (South)	FT1- 5.80.2	IH 35W	FM 1187	SH 174 (Johnson County Line)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	8 (Frwy), 4/6 (Frtg-C)	8 (Frwy), 4/6 (Frtg-C)	Widen 6 to 8 lanes	
	IH 35W (South)	FT1- 5.90.1	IH 35W	SH 174 (Tarrant County Line)	Hidden Creek Pkwy	4 (Frwy), 4/6 (Frtg-C)	4 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	Widen 4 to 6 lanes	
	IH 35W (South)	FT1- 5.90.2	IH 35W	Hidden Creek Pkwy	FM 917	4 (Frwy), 4 (Frtg-C)	4 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	Widen 4 to 6 lanes	
	IH 35W (South)	FT1- 5.100.1	IH 35W	FM 917	US 67	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	Widen 4 to 6 lanes	
19	IH 820 (East)	FT1- 151.10.1	IH 820 (East)	SH 121/SH 183 Interchange	Trinity Blvd	9 (Frwy), 4/6 (Frtg-D)	11 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	11 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	11 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	Widen 8 to 11 lanes & construct 2 concurrent Managed Lanes	\$475,000,000
	IH 820 (East)	FT1- 151.20.1	IH 820 (East)	Trinity Blvd	Randol Mill Rd	4 (Frwy)	10 (Frwy)	10 (Frwy)	10 (Frwy)	Widen 4 to 10 lanes	
	IH 820 (East)	FT1- 11.100.1	SH 121	IH 820	Handley-Ederville Rd	5/6 (Frwy), 4 (Frtg-C)	6 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	6 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	6 (Frwy) + 2 (ML/T-C), 2/6 (Frtg-C)	Widen 5/6 to 6 lanes & construct 2 concurrent Managed Lanes	
20	IH 820 (West)	FT1- 153.20.1	IH 820 (West)	Las Vegas Trail	IH 30	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	Cap/Main & safety improvements by 2027	\$32,600,000
21	LBJ (East)	FT1- 131.10.1	IH 635 (East)	US 75	Royal Ln/Miller Rd	8 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-C)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-C)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-C)	Widen 8 to 10 lanes & additional concurrent (tolled) Managed Lanes	\$1,600,000,000
	LBJ (East)	FT1- 131.10.2	IH 635 (East)	Royal Ln/Miller Rd	SH 78	8 (Frwy) + 2 (HOV/ExL-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ExL-C), 4/6 (Frtg-C)	10 (Frwy) + 4 (ExL-C), 4/6 (Frtg-C)	10 (Frwy) + 4 (ExL-C), 4/6 (Frtg-C)	Widen 8 to 10 lanes & additional concurrent (non-tolled) Express Lanes	
	LBJ (East)	FT1- 131.10.3	IH 635 (East)	SH 78	IH 30	8 (Frwy) + 2 (HOV/ExL-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ExL-C), 4/8 (Frtg-C)	10 (Frwy) + 4 (ExL-C), 4/8 (Frtg-C)	10 (Frwy) + 4 (ExL-C), 4/8 (Frtg-C)	Widen 8 to 10 lanes & additional concurrent (non-tolled) Express Lanes	
22	LBJ (West)	FT1- 7.40.1	IH 35E	IH 635	State Loop 12	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	Interchange improvements	\$1,070,572,901
	LBJ (West)	FT1- 7.50.1	IH 35E	State Loop 12	Spur 482/Storey Lane	6 (Frwy), 2 (ML/T-C), 4 (Frtg-D)	6 (Frwy), 2 (ML/T-C), 4 (Frtg-D)	8 (Frwy) + 2 (ML/T-C), 4/8 (Frtg-D)	8 (Frwy) + 2 (ML/T-C), 4/8 (Frtg-D)	Widen 6 to 8 lanes & extend concurrent Managed Lanes	
	LBJ (West)	FT1- 7.50.2	IH 35E	Spur 482/Storey Lane	SH 183	6 (Frwy), 4/6 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	8 (Frwy), 4/6 (Frtg-D)	8 (Frwy), 4/6 (Frtg-D)	Widen 6 to 8 lanes	
	LBJ (West)	FT1- 130.20.2	IH 635 (West)	Luna Rd	IH 35E	10 (Frwy), 4 (Frtg-C)	10 (Frwy), 4 (Frtg-C)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-C)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-C)	Widen & additional concurrent Managed Lanes	
23	State Loop 12	FT1- 17.10.1	State Loop 12	IH 35E	SH 183	6 (Frwy), 4/6 (Frtg-D)	6 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)	6 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)	8 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	Widen 6 to 8 lanes & construct 2 reversible Managed Lanes	\$900,000,000
	State Loop 12	FT1- 17.20.1	State Loop 12	SH 183	SH 356	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	8 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	Widen 6 to 8 lanes & construct 2 reversible Managed Lanes	
	State Loop 12	FT1- 17.20.2	State Loop 12	SH 356	IH 30	8 (Frwy), 4 (Frtg-D)	8 (Frwy), 4 (Frtg-D)	8 (Frwy), 4 (Frtg-D)	8 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	Construct 2 reversible Managed Lanes	
	State Loop 12	FT1- 17.30.1	State Loop 12	IH 30	Spur 408	8 (Frwy), 4 (Frtg-D)	8 (Frwy), 4 (Frtg-D)	8 (Frwy), 4 (Frtg-D)	8 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	Construct 2 reversible Managed Lanes	
	State Loop 12/Spur 408	FT1- 19.10.1	Spur 408	State Loop 12	IH 20	6 (Frwy)	6 (Frwy)	6 (Frwy)	6 (Frwy)	Cap/Main bottleneck & safety Improvements by 2027	

DALLAS-FORT WORTH MPO  
FY 2017-2020 TRANSPORTATION IMPROVEMENTS PROGRAM  
FORT WORTH DISTRICT PROJECTS  
APPENDIX D

ATTACHMENT 5

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	
FORT WORTH	TARRANT	0008-13-124	IH 820	C,E,R	VARIOUS	TXDOT-FORT WORTH	
LIMITS FROM:	NORTH INTERCHANGE AT SH 121					REV DATE:	05/2017
LIMITS TO:	RANDOL MILL ROAD					MPO PROJECT ID:	55009
DESCRIPTION:	FROM SH 121/183 INTERCHANGE TO TRINITY BLVD: RECONST 9 TO 11 MAIN LANES WITH 2 CONCURRENT MANAGED TOLL LANES AND 2/6 LANE CONT FRONTAGE RDS; FROM TRINITY BLVD TO RANDOL MILL RD: RECONST 4 TO 10 MAIN LANES (ULTIMATE)					MTP REFERENCE:	FT1-151.10.1, FT1-151.20.1
REMARKS:	REVISE SCOPE					<b>Project History:</b>	
FORT WORTH	TARRANT	0008-16-043	IH 20	C	FORT WORTH	TXDOT-FORT WORTH	
LIMITS FROM:	AT CHISHOLM TRAIL					REV DATE:	05/2017
LIMITS TO:						MPO PROJECT ID:	13019
DESCRIPTION:	ADD NB/SB DIRECT CONNECT RAMPS					MTP REFERENCE:	IN1-30.31.1, FT3-007
REMARKS:	ADD CONSTRUCTION PHASE TO APPENDIX D OF THE 2017-2020 TIP/STIP					<b>Project History:</b>	
						PART OF REGIONAL 10-YEAR PLAN	
FORT WORTH	TARRANT	0363-03-051	SH 121	E,R	RICHLAND HILLS	TXDOT-FORT WORTH	
LIMITS FROM:	IH 820					REV DATE:	05/2017
LIMITS TO:	HANDLEY-EDERVILLE					MPO PROJECT ID:	54133
DESCRIPTION:	RECONSTRUCT FROM 5/6 GP LANES TO 6 GP LANES; 4 LANE CONT FRONTAGE ROADS TO 2/6 LANE CONT FRONTAGE ROADS AND 2 CONCURRENT MANAGED TOLL LANES (ULTIMATE)					MTP REFERENCE:	FT1-11.100.1
REMARKS:	REVISE SCOPE; ADD PROJECT TO APPENDIX D OF THE 2017-2020 TIP/STIP					<b>Project History:</b>	
FORT WORTH	TARRANT	0902-90-046	CS	C	VARIOUS	FORT WORTH	
LIMITS FROM:	MEANDERING ROAD FROM SH 183 TO GILLHAM RD					REV DATE:	05/2017
LIMITS TO:	LTJG BARNETT ROAD FROM GILLHAM ROAD TO MILITARY PARKWAY					MPO PROJECT ID:	25013
DESCRIPTION:	REALIGN INTERSECTION AND ADD TRAFFIC SIGNAL AT ROBERTS CUT OFF, CONSTRUCT ROUNDABOUT AT LTJG BARNETT, RECONSTRUCT MEANDERING ROAD FROM 4 TO 3 LANES, AND ADD SIDEWALKS AND BICYCLE LANES					MTP REFERENCE:	MO3-001, MO3-002, TSM2-001, TSM2-002, BP2-002, TSMO2-001, TSMO2-002, NRSA1-FTW-60
REMARKS:	CONSTRUCTION PHASE FUNDING PLACEHOLDER					<b>Project History:</b>	





STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2017

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-210	IH 820	R,ACQ	FORT WORTH	\$ 432,640		
<b>LIMITS FROM</b> AT IH 820 NB OVER WEST FORK OF TRINITY						<b>PROJECT SPONSOR</b> TXDOT-FORT WORTH			
<b>LIMITS TO</b>						<b>REVISION DATE</b> 05/2017			
<b>PROJECT</b> REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L						<b>MPO PROJ NUM</b> 53101.1			
<b>DESCR</b> ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF THE IH 820 CORRIDOR IMPROVE						<b>FUNDING CAT(S)</b>			
<b>REMARKS</b> REVISE SCOPE						<b>PROJECT</b> RELATED TO 53101.2, 53101.3, 53101.4, 53101.5, 54062, 551			
<b>P7</b>						<b>HISTORY</b> 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 370,763	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 432,640		S102	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONSTR</b>	\$ 4,436,005		TOTAL	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONST ENG</b>	\$ 641,280								
<b>CONTING</b>	\$ 387,987								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 6,268,675								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-210	IH 820	C	FORT WORTH	\$ 4,436,005
<b>LIMITS FROM</b>		AT IH 820 NB OVER WEST FORK OF TRINITY		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH	
<b>LIMITS TO</b>				<b>REVISION DATE</b>		05/2017	
<b>PROJECT DESCR</b>		REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF THE IH 820 CORRIDOR IMPROVEMENTS		<b>MPO PROJ NUM</b>		53101.1	
<b>REMARKS</b>		REVISE SCOPE		<b>FUNDING CAT(S)</b>			
<b>P7</b>				<b>PROJECT RELATED TO</b>		53101.2, 53101.3, 53101.4, 53101.5, 54062, 551	
				<b>HISTORY</b>		71 (ALL INTERIM)	
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>			
<b>PREL ENG</b>	\$ 370,763	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>
<b>ROW PURCH</b>	\$ 432,640		\$ 3,548,804	\$ 887,201	\$ 0	\$ 0	\$ 0
<b>CONSTR</b>	\$ 4,436,005	<b>COST OF APPROVED PHASES</b>					
<b>CONST ENG</b>	\$ 641,280		\$ 3,548,804	\$ 887,201	\$ 0	\$ 0	\$ 0
<b>CONTING</b>	\$ 387,987	\$ 4,436,005					
<b>INDIRECT</b>	\$ 0						
<b>BOND FIN</b>	\$ 0						
<b>PT CHG ORD</b>	\$ 0						
<b>TOTAL CST</b>	\$ 6,268,675						

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2016

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-221	IH 820	E,ENV,ENG	FORT WORTH	\$ 600,000
<b>LIMITS FROM</b>		NORTH OF SH 121		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH	
<b>LIMITS TO</b>		RANDOL MILL ROAD		<b>REVISION DATE</b>		05/2016	
<b>PROJECT</b>		WIDEN 4 TO 6 MAIN LANES, REPLACE TRINITY RIVER BRIDGES, RE-BEAM IH 820 BRIDGES, ADD EASTBOUND SH 121 TO SOUTHBOUND IH 820 DIRECT CONNECTORS, AND ADD NORTHBOUND IH 820 TO WESTBOUND SH 121 DIRECT CONNECTORS				<b>MPO PROJ NUM</b>	
<b>DESCR</b>		GES, ADD EASTBOUND SH 121 TO SOUTHBOUND IH 820 DIRECT CONNECTORS, AND ADD NORTHBOUND IH 820 TO WESTBOUND SH 121 DIRECT CONNECTORS				<b>FUNDING CAT(S)</b>	
<b>REMARKS</b>		REVISE LIMITS; REVISE SCOPE; ADD ENVIRONMENTAL PHASE 7 E IN FY2016 AND ADVANCE ENGINEERING TO FY2016		<b>PROJECT HISTORY</b>			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>			
<b>PREL ENG</b>	\$ 600,000	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>
<b>ROW PURCH</b>	\$ 0	SBPE	\$ 480,000	\$ 120,000	\$ 0	\$ 0	\$ 0
<b>CONSTR</b>	\$ 147,800,000	<b>TOTAL</b>	\$ 480,000	\$ 120,000	\$ 0	\$ 0	\$ 0
<b>CONST ENG</b>	\$ 5,889,334	<b>COST OF APPROVED PHASES</b>					
<b>CONTING</b>	\$ 246,530	\$ 600,000					
<b>INDIRECT</b>	\$ 7,861,575						
<b>BOND FIN</b>	\$ 0						
<b>PT CHG ORD</b>	\$ 0						
<b>TOTAL CST</b>	\$ 162,397,439						

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-221	IH 820	C	FORT WORTH	\$ 132,935,000		
<b>LIMITS FROM</b>		SH 121/SH 183 INTERCHANGE		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH			
<b>LIMITS TO</b>		RANDOL MILL ROAD		<b>REVISION DATE</b>		05/2017			
<b>PROJECT</b>		INTERIM PROJECT TO CNST IH 820/SH 121 DIRECT CONNECTORS; FROM RANDOL MILL RD TO				<b>MPO PROJ NUM</b>			
<b>DESCR</b>		TRINITY BLVD: RECNST FROM 4 TO 6 LNS PLUS 2 AUX LNS; FROM TRINITY BLVD TO N INT				<b>FUNDING CAT(S)</b>			
		WITH SH 121/SH 183: WDN FROM 9 TO 11 LNS & 4/6 LN DISC FR RDS TO 2/6 LN DISC FR				RDS (INTERIM)			
<b>REMARKS</b>		REVISE SCOPE; REVISE FUNDING; TXDOT CONGESTION RELI		<b>PROJECT</b> CAT 11 AND CAT 12 ARE CONGESTION RELIEF PROGRAM FUNDING;					
<b>P7 EF PROGRAM</b>		<b>HISTORY</b> RELATED TO 53101.1, 53101.2, 53101.3, 53101.4, 53101.5, 5				5171 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 600,000	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 0		11	\$ 41,670,000	\$ 4,630,000	\$ 0	\$ 0	0	\$ 46,300,000
<b>CONSTR</b>	\$ 127,935,000		12	\$ 69,308,000	\$ 17,327,000	\$ 0	\$ 0	0	\$ 86,635,000
<b>CONST ENG</b>	\$ 5,000,000		TOTAL	\$ 110,978,000	\$ 21,957,000	\$ 0	\$ 0	0	\$ 132,935,000
<b>CONTING</b>	\$ 241,743								
<b>INDIRECT</b>	\$ 7,708,909								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 141,485,652								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2017

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-235	IH 820	R,ACQ	FORT WORTH	\$ 432,640		
<b>LIMITS FROM</b> AT SB IH 820 OVER WEST FORK TRINITY						<b>PROJECT SPONSOR</b> TXDOT-FORT WORTH			
<b>LIMITS TO</b>						<b>REVISION DATE</b> 05/2017			
<b>PROJECT</b> REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L						<b>MPO PROJ NUM</b> 53101.2			
<b>DESCR</b> ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT						<b>FUNDING CAT(S)</b>			
<b>REMARKS</b> REVISE SCOPE						<b>PROJECT</b> RELATED TO 53101.1, 53101.3, 53101.4, 53101.5, 54062, 551			
<b>P7</b>						<b>HISTORY</b> 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 370,763	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 432,640		S102	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONSTR</b>	\$ 6,238,653		TOTAL	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONST ENG</b>	\$ 489,161								
<b>CONTING</b>	\$ 0								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 7,531,217								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-235	IH 820	C	FORT WORTH	\$ 6,238,653		
<b>LIMITS FROM</b>		AT SB IH 820 OVER WEST FORK TRINITY		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH			
<b>LIMITS TO</b>				<b>REVISION DATE</b>		05/2017			
<b>PROJECT DESCR</b>		REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX LANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT S		<b>MPO PROJ NUM</b>		53101.2			
<b>REMARKS</b>		REVISE SCOPE; INCREASE CONSTRUCTION FUNDING P7		<b>PROJECT HISTORY</b>		RELATED TO 53101.1, 53101.3, 53101.4, 53101.5, 54062, 551 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG \$</b>	370,763	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH \$</b>	432,640		6	\$ 4,990,922	\$ 1,247,731	\$ 0	\$ 0	\$ 0	\$ 6,238,653
<b>CONSTR \$</b>	6,238,653		TOTAL	\$ 4,990,922	\$ 1,247,731	\$ 0	\$ 0	\$ 0	\$ 6,238,653
<b>CONST ENG \$</b>	489,161								
<b>CONTING \$</b>	0								
<b>INDIRECT \$</b>	0								
<b>BOND FIN \$</b>	0								
<b>PT CHG ORD \$</b>	0								
<b>TOTAL CST \$</b>	7,531,217								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2017

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-236	IH 820	R,ACQ	FORT WORTH	\$ 432,640		
<b>LIMITS FROM</b> AT SB IH 820 OVER WEST FORK TRINITY RELIEF						<b>PROJECT SPONSOR</b> TXDOT-FORT WORTH			
<b>LIMITS TO</b>						<b>REVISION DATE</b> 05/2017			
<b>PROJECT</b> REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L						<b>MPO PROJ NUM</b> 53101.3			
<b>DESCR</b> ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT						<b>FUNDING CAT(S)</b>			
<b>REMARKS</b> REVISE SCOPE						<b>PROJECT</b> RELATED TO 53101.1, 53101.2, 53101.4, 53101.5, 54062, 551			
<b>P7</b>						<b>HISTORY</b> 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 370,673	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 432,640		S102	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONSTR</b>	\$ 4,275,370		TOTAL	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONST ENG</b>	\$ 356,414								
<b>CONTING</b>	\$ 0								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 5,435,097								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-236	IH 820	C	FORT WORTH	\$ 4,275,370
<b>LIMITS FROM</b>		AT SB IH 820 OVER WEST FORK TRINITY RELIEF		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH	
<b>LIMITS TO</b>				<b>REVISION DATE</b>		05/2017	
<b>PROJECT DESCR</b>		REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX LANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT S		<b>MPO PROJ NUM</b>		53101.3	
<b>FUNDING CAT(S)</b>							
<b>REMARKS</b>		REVISE SCOPE; DECREASE CONSTRUCTION FUNDING P7		<b>PROJECT RELATED TO</b> 53101.1, 53101.2, 53101.4, 53101.5, 54062, 551 HISTORY 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>			
<b>PREL ENG</b>	\$ 370,673	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>
<b>ROW PURCH</b>	\$ 432,640		\$ 3,420,296	\$ 855,074	\$ 0	\$ 0	\$ 0
<b>CONSTR</b>	\$ 4,275,370	<b>COST OF APPROVED PHASES</b>					
<b>CONST ENG</b>	\$ 356,414		\$ 3,420,296	\$ 855,074	\$ 0	\$ 0	\$ 0
<b>CONTING</b>	\$ 0	\$ 4,275,370					
<b>INDIRECT</b>	\$ 0						
<b>BOND FIN</b>	\$ 0						
<b>PT CHG ORD</b>	\$ 0						
<b>TOTAL CST</b>	\$ 5,435,097						

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2017

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-237	IH 820	R,ACQ	FORT WORTH	\$ 432,640		
<b>LIMITS FROM</b> AT NB IH 820 OVER WEST FORK TRINITY RELIEF						<b>PROJECT SPONSOR</b> TXDOT-FORT WORTH			
<b>LIMITS TO</b>						<b>REVISION DATE</b> 05/2017			
<b>PROJECT</b> REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L						<b>MPO PROJ NUM</b> 53101.4			
<b>DESCR</b> ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT						<b>FUNDING CAT(S)</b>			
<b>REMARKS</b> REVISE SCOPE						<b>PROJECT</b> RELATED TO 53101.1, 53101.2, 53101.3, 53101.5, 54062, 551			
<b>P7</b>						<b>HISTORY</b> 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 370,763	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 432,640		S102	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONSTR</b>	\$ 4,279,621		TOTAL	\$ 0	\$ 432,640	\$ 0	\$ 0	\$ 0	\$ 432,640
<b>CONST ENG</b>	\$ 356,414								
<b>CONTING</b>	\$ 0								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 5,439,438								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0008-13-237	IH 820	C	FORT WORTH	\$ 4,279,621		
<b>LIMITS FROM</b>		AT NB IH 820 OVER WEST FORK TRINITY RELIEF		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH			
<b>LIMITS TO</b>				<b>REVISION DATE</b>		05/2017			
<b>PROJECT DESCR</b>		REPLACE&nbsp;2 LANE BRIDGE WITH ULTIMATE BRIDGE (STRIPED AS 3 LANES PLUS 1 AUX L ANE INTERIM; STRIPED AS 5 LANES ULTIMATE) AS PART OF IH 820 CORRIDOR IMPROVEMENT S		<b>MPO PROJ NUM</b>		53101.4			
<b>REMARKS</b>		REVISE SCOPE; DECREASE CONSTRUCTION FUNDING P7		<b>PROJECT HISTORY</b>		RELATED TO 53101.1, 53101.2, 53101.3, 53101.5, 54062, 551 71 (ALL INTERIM)			
<b>TOTAL PROJECT COST INFORMATION</b>				<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>					
<b>PREL ENG</b>	\$ 370,763	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 432,640		6	\$ 3,399,697	\$ 879,924	\$ 0	\$ 0	\$ 0	\$ 4,279,621
<b>CONSTR</b>	\$ 4,279,621		TOTAL	\$ 3,399,697	\$ 879,924	\$ 0	\$ 0	\$ 0	\$ 4,279,621
<b>CONST ENG</b>	\$ 356,414								
<b>CONTING</b>	\$ 0								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 5,439,438								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2017

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0363-03-054	SH 121	E,ENG	RICHLAND HILLS	\$ 1,000,000		
<b>LIMITS FROM</b>		HANDLEY-EDERVILLE ROAD		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH			
<b>LIMITS TO</b>		IH 820		<b>REVISION DATE</b>		05/2017			
<b>PROJECT</b>		INTERIM PROJECT TO CONSTRUCT RAMPS FOR DIRECT CONNECTORS FROM EASTBOUND SH 121 T				<b>MPO PROJ NUM</b>			
<b>DESCR</b>		O SOUTHBOUND IH 820 AND FROM NORTHBOUND IH 820 TO WESTBOUND SH 121; RECONSTRUCT				<b>FUNDING CAT(S)</b>			
		AND WIDEN FROM 5/6 GP LANES TO 6 GP LANES ON SH 121 FROM HANDLEY-EDERVILLE TO IH							
		820							
<b>REMARKS</b>			ADD PROJECT TO 2017-2020 TIP/STIP						
<b>P7</b>			<b>PROJECT</b> RELATED TO 53101.1, 53101.2, 53101.3, 53101.4, 53101.5, 5						
			<b>HISTORY</b> 4062 (ALL INTERIM)						
<b>TOTAL PROJECT COST INFORMATION</b>			<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>						
<b>PREL ENG</b>	\$ 1,000,000	<b>COST OF APPROVED PHASES</b>	<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 0		SBPE	\$ 0	\$ 1,000,000	\$ 0	\$ 0	\$ 0	\$ 1,000,000
<b>CONSTR</b>	\$ 43,365,000		TOTAL	\$ 0	\$ 1,000,000	\$ 0	\$ 0	\$ 0	\$ 1,000,000
<b>CONST ENG</b>	\$ 2,007,028								
<b>CONTING</b>	\$ 0								
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 46,372,028								

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
DALLAS-FORT WORTH MPO - HIGHWAY PROJECTS  
FY 2018

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST		
FORT WORTH	DALLAS-FORT WORTH	TARRANT	0363-03-054	SH 121	C	RICHLAND HILLS	\$ 43,365,000		
<b>LIMITS FROM</b>		HANDLEY-EDERVILLE ROAD		<b>PROJECT SPONSOR</b>		TXDOT-FORT WORTH			
<b>LIMITS TO</b>		IH 820		<b>REVISION DATE</b>		05/2017			
<b>PROJECT</b>		INTERIM PROJECT TO CONSTRUCT RAMPS FOR DIRECT CONNECTORS FROM EASTBOUND SH 121 T				<b>MPO PROJ NUM</b>		55171	
<b>DESCR</b>		O SOUTHBOUND IH 820 AND FROM NORTHBOUND IH 820 TO WESTBOUND SH 121; RECONSTRUCT AND WIDEN FROM 5/6 GP LANES TO 6 GP LANES ON SH 121 FROM HANDLEY-EDERVILLE TO IH 820				<b>FUNDING CAT(S)</b>			
<b>REMARKS</b>			ADD PROJECT TO 2017-2020 TIP/STIP						
<b>P7</b>			<b>PROJECT</b> RELATED TO 53101.1, 53101.2, 53101.3, 53101.4, 53101.5, 5						
			<b>HISTORY</b> 4062 (ALL INTERIM)						
<b>TOTAL PROJECT COST INFORMATION</b>			<b>AUTHORIZED FUNDING BY CATEGORY/SHARE</b>						
<b>PREL ENG</b>	\$ 1,000,000		<b>CATEGORY</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>REGIONAL</b>	<b>LOCAL</b>	<b>LC</b>	<b>TOTAL</b>
<b>ROW PURCH</b>	\$ 0	<b>COST OF</b>	12	\$ 34,692,000	\$ 8,673,000	\$ 0	\$ 0	\$ 0	\$ 43,365,000
<b>CONSTR</b>	\$ 43,365,000	<b>APPROVED</b>	TOTAL	\$ 34,692,000	\$ 8,673,000	\$ 0	\$ 0	\$ 0	\$ 43,365,000
<b>CONST ENG</b>	\$ 2,007,028	<b>PHASES</b>							
<b>CONTING</b>	\$ 0	\$ 43,365,000							
<b>INDIRECT</b>	\$ 0								
<b>BOND FIN</b>	\$ 0								
<b>PT CHG ORD</b>	\$ 0								
<b>TOTAL CST</b>	\$ 46,372,028								

# NCTCOG CMP PROJECT IMPLEMENTATION FORM



**Submitter Name:** John R. Tillinghast, P.E.  
**Agency Name:** Texas Department of Transportation  
**Agency Address:** 2501 SW Loop 820, Fort Worth Texas 76133  
**Email:** John.Tillinghast@txdot.gov  
**Telephone Number:** (817)-370-6594  
**Date:** 3/1/2016

Please answer the following questions

**Project Name** IH 820 East Loop  
**Project Limits (From)** North SH 121/SH 183 Interchange  
**Project Limits (To)** Randol Mill Road

**2. Does this project add roadway capacity? (IF NOT, THIS FORM IS NOT REQUIRED)**

YES

**3. Are complementary Travel Demand Management (TDM) or Transportation System Management & Operations (TSM&O) projects within the corridor in the TIP?**

If "yes," enter the project name(s), TIP Code(s) and/or CSJ number(s) in table below.

This information can be verified at the following link: [Transportation Improvement Program Information System \(TIPINS\)](#)

\*For a list of TDM and TSM&O project types see: [Appendix A - TDM and TSM&O Strategies](#)

YES

<b>Project Name</b>	Trinity Trails East Fort Worth Extension from Handley-Ederville Road to River Trails Park and Trinity Blvd	<b>TIP Code</b>	40031	<b>CSJ#</b>	[Enter Here]
<b>Project Name</b>	Mobility Assistance Patrol	<b>TIP Code</b>	11204	<b>CSJ#</b>	[Enter Here]
<b>Project Name</b>	TRE/Railtran Project from Fort Worth CBD to Dallas County Line	<b>TIP Code</b>	2686	<b>CSJ#</b>	[Enter Here]
<b>Project Name</b>	TRE-Richland Hills Station Sidewalk Connections on Ash Park Drive from Latham Drive	<b>TIP Code</b>	11852	<b>CSJ#</b>	[Enter Here]

**3b. Are there any other projects not included in the TIP that may compliment the project?**

If "yes," enter the project name(s) and implementing agency in table below.

NO

<b>Project Name</b>	[Enter Here]	<b>Implementing Agency</b>	[Enter Here]
<b>Project Name</b>	[Enter Here]	<b>Implementing Agency</b>	[Enter Here]
<b>Project Name</b>	[Enter Here]	<b>Implementing Agency</b>	[Enter Here]
<b>Project Name</b>	[Enter Here]	<b>Implementing Agency</b>	[Enter Here]

**4. Are the project limits within a corridor included in the current Metropolitan Transportation Plan?**

This information can be verified in the Mobility Options found here: [Appendix E of the MTP \(pg. 53 - 97 / pg. 102 - 112\)](#)

If "yes," enter the MTP Reference #(s) in table below

YES

<b>MTP Reference #</b>	FT1-151.10.1
<b>MTP Reference #</b>	FT1-151.20.1
<b>MTP Reference #</b>	FT1-11.100.1
<b>MTP Reference #</b>	[Enter Here]

**5. Are the project limits within a corridor included in the current CMP Corridor Analysis?**

The complete inventory of corridor fact sheets can be found here: [Appendix C - CMP Corridor Fact Sheet](#)

# NCTCOG CMP PROJECT IMPLEMENTATION FORM



YES

\*If "yes," please proceed to question six.

\*If "no," please evaluate corridor to determine if improvements are needed by completing the Fact Sheet Form in Step 2 in the tab below, before proceeding to question six.

**6. Is the corridor identified as deficient in any category?**

YES

\*If "yes," please proceed to questions seven.

\*If "no," please proceed to question 11.

**7. Identify corridor deficiencies as specified in the current CMP Corridor Analysis or in the CMP Roadway Deficiency Form. (Check all that apply)**

<input type="checkbox"/> Alternative Roadway Infrastructure	<input checked="" type="checkbox"/> Modal Options
<input type="checkbox"/> System Demand	<input checked="" type="checkbox"/> System Reliability

**8. Review Appendix A of the current CMP or other available resources to identify possible congestion mitigation strategies to correct the deficiency. (Check all that apply)**

[Appendix A - TDM and TSM&O Strategies](#)

<input type="checkbox"/> Commuter Transportation Options	<input checked="" type="checkbox"/> Sustainable Development Improvements
<input checked="" type="checkbox"/> Freight Management Activities	<input checked="" type="checkbox"/> System Management and Operations Improvements
<input checked="" type="checkbox"/> Incentive to Use Alternative Modes	<input checked="" type="checkbox"/> Transit System Efficiency Improvements
<input checked="" type="checkbox"/> In-Vehicle System Efficiency Improvements	<input checked="" type="checkbox"/> Traveler Information Services
<input checked="" type="checkbox"/> Roadway Incident and Emergency Management Options	<input checked="" type="checkbox"/> Work Zone/Construction Management Operations
<input checked="" type="checkbox"/> Roadway Infrastructure Improvements	

# NCTCOG CMP PROJECT IMPLEMENTATION FORM



**9. Specify deficiency-correcting congestion mitigation strategy that will be implemented as part of the project.**

1) Add one managed lane in each direction along IH 820 from Trinity Blvd to the NE Mall interchange, and one managed lane in each direction along SH 121 from Handley-Ederville Rd to the south interchange with IH 820. The managed lanes tie into the existing NTE managed lane facility. 2) Access to/from the managed lane system to the Richland Hills TRE Station. 3) Additional GP lanes on IH 820 and SH 121 as outlined on the corridor fact sheets. 4) Access management through the addition of turn lanes at cross street intersections, 5) Intersection improvements at all frontage road/cross street intersections with additional thru and turning lanes. 4) Pedestrian and bicycle accommodations along all frontage roads. 6) Upgrades to the current ITS systems. 7) All electronic toll collection along the managed lanes. 8) Accelerated construction methods to be

**10. If not implementing a congestion mitigation strategy, please explain reason.**

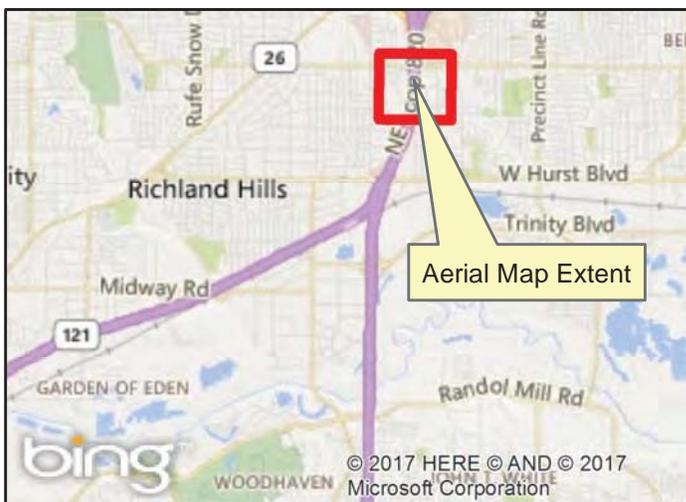
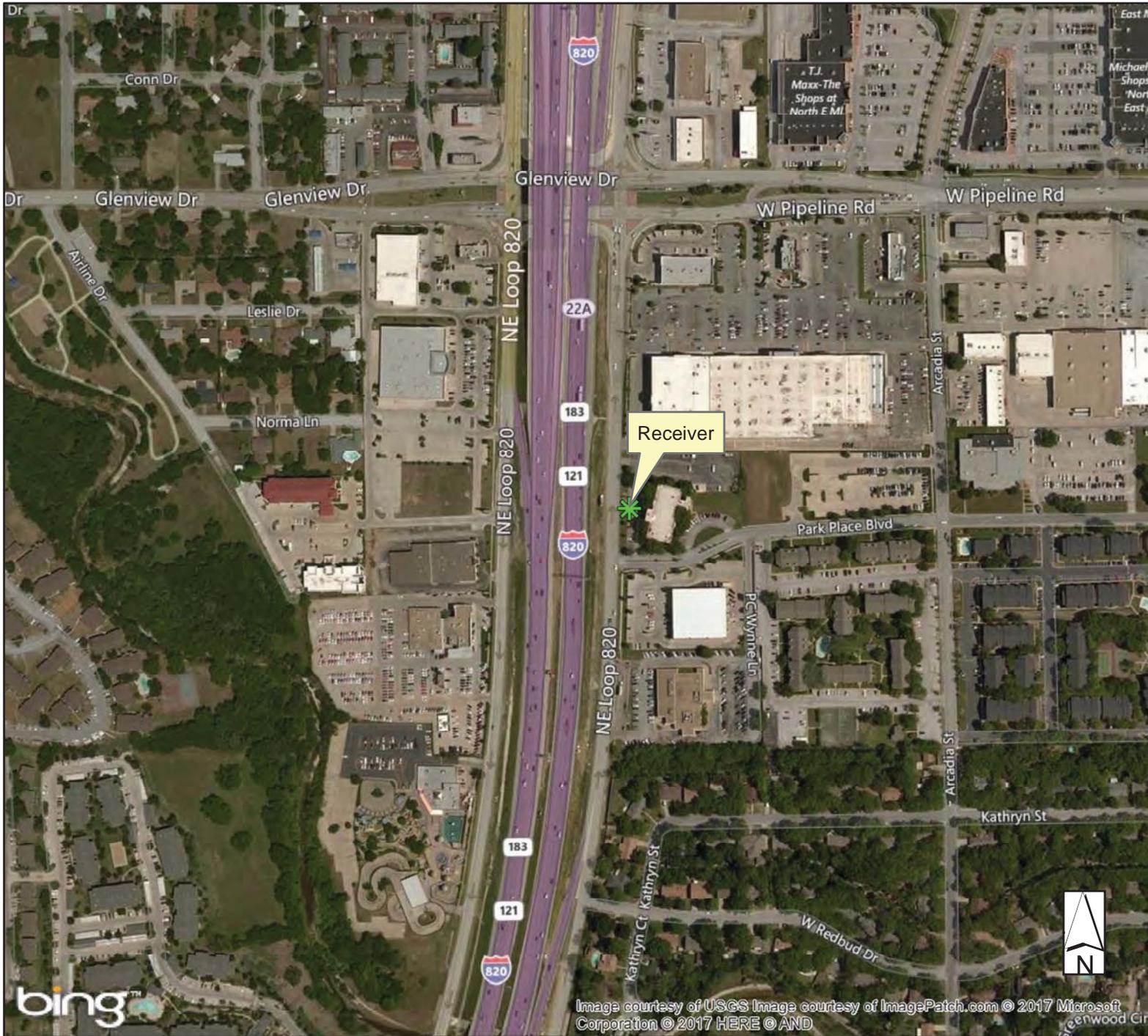
[ENTER HERE]

**11. Submit completed form to NCTCOG - CMP Team at: [CMP@nctcog.org](mailto:CMP@nctcog.org) or by clicking SUBMIT below**

\*Submit button will auto generate email to NCTCOG with completed excel document attached.  
Please finalize step by sending the email.



# CO Model Receiver Location



## CO MODEL RECEIVER LOCATION MAP

I-820 (East)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road  
SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

CSJ: 0008-13-124, etc.



# Bicycle and Pedestrian Accommodations

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## I-820/SH 121 Northeast Interchange

Tarrant County  
Fort Worth District

**Main CSJ:** 0008-13-124

**Associated CSJs:** 0008-13- 179, 202, 210, 221, 235, 236 & 237  
and 0363-03-051 & 054

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



# MEMO

September 12, 2017

**To:** File

**Through:** Curtis Hanan, P.E.  
Director of Advanced Project Development Director

**From:** John R. Tillinghast, P.E.  
Project Manager, Advanced Project Development 

**Subject:** Non Inclusion of Pedestrian Elements along Eastbound SH 121 Frontage Road  
I-820: From Randol Mill Road to the North SH 121 Interchange  
SH 121: From Handley-Ederville Road to I-820  
CSJs: 0008-13-124 & 0363-03-051

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The Ultimate I-820 schematic submitted for Design Division review did not include any pedestrian elements along the Eastbound SH 121 frontage road. Pedestrian accommodations along this frontage road are not provided for the following reasons:

- The requested sidewalk would be placed adjacent to the Trinity Railway Express (TRE) railroad right of way, creating a safety issue.
- At this time, there is no commercial/residential development south of the TRE railroad, which is adjacent to the eastbound SH 121 frontage road/collector distributor that would be accessible by pedestrians due to the TRE railroad. With no new at-grade access over the TRE planned for the future, it is unlikely the vacant tract of property adjacent to the TRE between Handley-Ederville Road and I-820 will be developed commercially or residentially.
- Sidewalks are included along the westbound SH 121 frontage road providing safe access to/from SH 10/SH 183 along with pedestrian access over SH 121 south along I-820 to Trinity Boulevard.
- The proposed sidewalk along eastbound SH 121 frontage road pose conflicts with bridge columns in the I-820/SH 121 interchange

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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As part of the review of the schematic, the Design Division has recommended inclusion of pedestrian elements along the Eastbound SH 121 frontage road or if no pedestrian accommodations are to be included the District would need to state in the NEPA document why no pedestrian elements were provided. Additionally, the District will disclose this information at the public hearing tentatively scheduled for October 5, 2017.

This memo serves as the documentation for the NEPA document for the subject project.



# MEMO

September 12, 2017

**To:** File

**Through:** Curtis Hanan, P.E.  
Director of Advanced Project Development

**From:** John R. Tillinghast, P.E.  
Project Manager, Advanced Project Development 

**Subject:** Non Inclusion of Pedestrian Elements along Northbound I-820 Frontage Road  
I-820: From Randol Mill Road to the North SH 121 Interchange  
SH 121: From Handley-Ederville Road to I-820  
CSJs: 0008-13-221 & 0363-03-054

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The Interim I-820 60% PS&E submitted for Design Division review did not include provisions to complete the proposed sidewalk along the I-820 Northbound Frontage Road (NBFR) indicated in the Ultimate schematic. In the interim project, the proposed sidewalk along the I-820 NBFR is constructed from Sta. 770+20 to Station 782+20. This is the station where the ultimate pedestrian facility is its own bridge structure ending at ~Sta. 788+30. The exclusion of connecting this proposed pedestrian facility from Sta. 782+20 to the I-820/SH 10 intersection is based on the following:

In the interim project, the ultimate width I-820 NBFR structure over the Trinity Railway Express (TRE) railroad will be constructed with the sidewalk terminating at the end of the structure. Currently there is no pedestrian access between Trinity Boulevard and SH 10/SH 183 due to the TRE railroad. With the existing northbound I-820 main lane structure and existing eastbound SH 121 frontage road to remain, no design can be developed to provide safe pedestrian access from the proposed northbound I-820 frontage road structure to SH 10/SH 183 to meet Americans with Disabilities Act (ADA) guidelines.

There are no visible pedestrian paths from Trinity Boulevard to the TRE railroad nor from the TRE railroad to SH 10/SH 183. This is due in part to no pedestrian generators along the east side of I-820 between Trinity Boulevard and SH 10/SH 183 and no residential development along the east side of I-820 between Trinity Boulevard and the TRE railroad.

The interim project currently scheduled for a December, 2017 construction letting is the first phase of implementing the ultimate facility for I-820. The ultimate schematic for I-820 was submitted on May 26, 2017 to DES for review. The ultimate schematic provides for a continuous pedestrian path from Trinity Boulevard to SH 10/SH 183.

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In the ultimate configuration, the pedestrian path is continued to SH 10/SH 183 and is located along the proposed eastbound to northbound SH 121 collector distributor. The proposed pedestrian sidewalk and eastbound to northbound SH 121 collector distributor are located where the existing eastbound to northbound SH 121 frontage road is currently located. All proposed ultimate improvements are contained within the existing right of way (ROW).

To provide for the continuation of the pedestrian sidewalk in the interim project would require one of the following options: 1) The removal of the existing northbound I-820 main lane structure over the TRE railroad, construction of the ultimate structure for northbound I-820 main lanes over the TRE railroad, construction of additional temporary pavement to tie the existing northbound I-820 main lanes to the ultimate bridge, and reconstruction of the eastbound to northbound SH 121 frontage road to accommodate the pedestrian path included on the ultimate schematic. 2) Additional ROW would need to be purchased along I-820 from the TRE railroad to Central Park Drive to allow for an interim pedestrian structure to be constructed meeting ADA guidelines.

For option 1, there is no scope included in the consultants work authorization for development of PS&E design work for these additional components. To include these additional items in the interim project, a Supplemental Agreement and Supplemental Work Authorization would need to be executed. It is not reasonable or feasible to expect approval and execution of the contract documents to include these additional elements in the PS&E package for a December, 2007 letting. Additionally, construction of these additional ultimate facility components would exceed the current funding for the interim project (approximately \$200 million) and would result in the interim project not being let.

Option 2 would require the purchase of ROW not currently included or needed for the ultimate configuration. This project was originally cleared in March, 2004 and the ROW footprint for this area has not changed. Revisions to the schematic and environmental documents would require an additional Supplemental Work Authorization for the consultant to perform the work. It is not reasonable or feasible to expect approval and execution of the contract documents to revise the schematic and update the environmental document to conduct a public hearing and receive environmental clearance by late October/early November 2017.

For the reasons listed, continuous pedestrian access cannot be safely and reasonable provided as requested.

As part of the review of the PS&E for the interim project, the Design Division has recommended continuation of the proposed pedestrian elements along the northbound I-820 frontage road or if no pedestrian accommodations are to be included the District would need to state in the NEPA document why no pedestrian elements were provided. Additionally, the District will disclose this information at the public hearing tentatively scheduled for October 5, 2017.

This memo serves as the documentation for the NEPA document for the subject project.



# Environmental Justice and Community Impacts

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## I-820/SH 121 Northeast Interchange

Tarrant County  
Fort Worth District

**Main CSJ:** 0008-13-124

**Associated CSJs:** 0008-13- 179, 202, 210, 221, 235, 236 & 237  
and 0363-03-051 & 054

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



# Community Impacts Assessment Technical Report Form

[Reset Form](#)

**Project Name:** I-820 (East)  
**CSJ Number:** 0008-13-124, etc.  
**District(s):** Fort Worth  
**County(ies):** Tarrant

## COMMUNITY PROFILE

Attach a map showing the community study area boundaries as well as the locations of any community facilities in the area (schools, places of worship, health care facilities, recreation centers, social services, libraries, etc).

### I. General Information

#### What is the location of the community that may be impacted?

The proposed project limit at I-820 is from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road and SH 121 from the SH 121/I-820 Interchange to approximately 5,000 feet west of Handley-Ederville Road. The Community impacts Assessment (CIA) study area is comprised of 10 census tracts that encompass the proposed project area. Census tracts, adjacent to the proposed project, were selected to represent the study area for this analysis, rather than the more traditional "adjacent block groups." The project team felt that the traditional study area did not represent the entire affected community in the northern portion of the proposed project. Rather than selectively choosing additional block groups to include in a specific neighborhood, the study area for the entire project was expanded to include the entire census tracts immediately adjacent to the proposed project. The CIA study area is in Tarrant County and is located in the municipalities of North Richland Hills, Richland Hills, Hurst, Fort Worth, and Haltom City.

The following maps have been attached to this report:

- CIA Study Area and Facilities Map
- Site Visit Map

The following maps are available in the TXECOS file for the project:

- Project Location Map (0008-13-124, etc.).pdf
- USGS Topographic Map (0008-13-124, etc.).pdf
- Aerial Project Location Map (0008-13-124, etc.).pdf

### II. Project Description

#### Briefly describe the proposed project.

Please see the following document that has been uploaded into TXECOS: Project Description (0008-13-124, etc.).pdf

### III. General Character of the Community

#### What is the name and general character of the community (scattered rural, planned suburban, urban, mixed use)?

The proposed project is located in Tarrant County and is located in the municipalities of North Richland Hills, Richland Hills, Hurst, Fort Worth, and Haltom City. The proposed project area is mostly urban with suburban residential areas on the northern portion. Commercial facilities are also scattered along the project area and at the southern section is primarily



**Reset Form**

commercial properties and vacant lands along the floodplain. The CIA study area is a mixture of commercial, flood control, industrial, institutional, parks/recreation, residential, and vacant lands.

**Describe the community facilities (shown on attached map) in the area:**

Name of Facility	Type of Facility	Public or private?	Does the facility serve a specific population? If so, who?	Additional details, if necessary
1. Isham Cemetery	Cemetery	Private	No	7125 John T. White Road Fort Worth, TX 76120
2. Parker Cemetery	Cemetery	Public	No	1301 Cardinal Road Hurst, TX 76053
3. St. John the Apostle Catholic School	Educational	Private	children	7421 Glenview Drive North Richland Hills, TX 76180
4. Remington College	Educational	Private	No	300 E Loop 820 Fort Worth, TX 76112
5. University of Texas at Arlington - Riverbend	Educational	Public	No	7300 Jack Newell Boulevard S Forth Worth, TX 76118
6. Temple Christian School	Educational	Private	children	6824 Randol Mill Road Fort Worth, TX 76120
7. Tarrant County Juvenile Justice Alternative Education Program	Educational	Public	children	6125 E. Belknap Street Haltom City, TX 76117
8. Richland Middle School	Educational	Public	Children	7400 Hovenkamp Ave., Richland Hills, TX 76118
9. North Richland Middle School	Educational	Public	Children	4800 Rufe Snow Dr., North Richland Hills, TX 76180
10. Medical City North Hills Hospital	Healthcare	Public	No	4401 Booth Calloway Road North Richland Hills, TX 76180
11. Child Care Associates	Non-Profit Organization	Public	children from low-income families	305 NE Loop 820, Hurst, TX 76053
12. Texas WIC Office	State Government	Public	children, pregnant or breastfeeding woman, infants, women who had a baby within last 6 months	1100 Bridgewood Dr., Ste. 116, Fort Worth, TX 76112
13. St. John the Apostle Catholic Church	Place of Worship	Public	No	7341 Glenview Drive North Richland Hills, TX 76180
14. Valley Baptist Church	Place of Worship	Public	No	6301 Elliott Reeder Road Haltom City, TX 76118



[Reset Form](#)

Name of Facility	Type of Facility	Public or private?	Does the facility serve a specific population? If so, who?	Additional details, if necessary
15. St. John the Apostle Formation Center	Place of Worship	Public	No	4101 Frawley Dr., North Richland Hills, TX 76180
16. Friendship Baptist Church	Place of Worship	Public	No	1248 W. Hurst Boulevard Hurst, TX 75053
17. Richland Hills Baptist Church	Place of Worship	Public	No	6852 Baker Boulevard Richland Hills, TX 76118
18. Richland Hills United Methodist Church	Place of Worship	Public	No	7301 Glenview Drive North Richland Hills, TX 76180
19. The Church of Jesus Christ of Latter Day Saints	Place of Worship	Public	No	4401 NE Loop 820 North Richland Hills, TX 76180
20. Bethel Family Worship Center - Church of God of Prophecy	Place of Worship	Public	No	946 W Pipeline Rd Hurst, TX 76053
21. Ark of Faith	Place of Worship	Public	No	7012 Baker Boulevard Richland Hills, TX 76118
22. Mercy Seat Church	Place of Worship	Public	No	7101 Airport Freeway Richland Hills, TX 76118
23. Temple Baptist Church	Place of Worship	Public	No	6824 Randol Mill Road Fort Worth, TX 7612
24. Calvary Lutheran Church	Place of Worship	Public	No	7620 Baker Boulevard Richland Hills, TX 76118
25. Faith Creek Church	Place of Worship	Public	No	6931 Baker Blvd., Richland Hills, TX 76118
26. South Haltom Community Church	Place of Worship	Public	No	4600 Wheeler St., Fort Worth, TX 76117
27. Messiah Baptist Church	Place of Worship	Public	No	7101 Baker Blvd., Richland Hills, TX 76118
28. Baker Boulevard Church of Christ	Place of Worship	Public	No	7139 Baker Blvd., Richland Hills, TX 76118
29. Richland Hills Christian Church	Place of Worship	Public	No	3908 Ruth Rd., Richland Hills, TX 76118
30. Northgate Pentacostals	Place of Worship	Public	No	4647 City Point Dr., North Richland Hills, TX 76180
31. First Church of Christ, Scientist	Place of Worship	Public	No	7318 NE Loop 820, Fort Worth, TX 76180



# Community Impacts Assessment Technical Report Form

[Reset Form](#)

32. Peace Lutheran Church	Place of Worship	Public	No	941 Bedford Eules Rd., Hurst, TX 76053
33. The Glory Church	Place of Worship	Public	No	824 W Pipeline Rd., Hurst, TX 76053
34. Romans VII Ministries	Place of Worship	Public	No	201 Sandy Ln., Fort Worth, TX 76120
35. City on a Hill	Place of Worship	Public	No	1140 Morrison Dr., Fort Worth, TX 76120
36. Pantego Bible Church	Place of Worship	Public	No	800 Anderson Blvd., Fort Worth, TX 76120
37. Richland Hills Fire Department	Municipal	Public	No	3201 Diana Drive Richland Hills, TX 76118
38. Richland Hills Public Library	Municipal	Public	No	6724 Rena Drive Richland Hills, TX 76118
39. Richland Hills City Hall	Municipal	Public	No	3200 Diana Drive Richland Hills, TX 76118
40. River Bend Finance Unit Post Office	Federal Government	Public	No	2414 Gravel Drive Fort Worth, TX 76118
41. Hurst Main Post Office	Federal Government	Public	No	825 Precinct Line Road Hurst, TX 76053
42. Department of Public Safety - Hurst	State Government	Public	No	624 NE Loop 820 Hurst, TX 76053
43. Fort Worth East Regional Public Library	Municipal	Public	No	6301 Bridge Street Fort Worth, TX 76112
44. Hurst Public Library	Municipal	Public	No	901 Precinct Line Road Hurst, TX 76053
45. Richland Hills Police Department	Municipal	Public	No	6700 Baker Boulevard Richland Hills, TX 76118
46. North Richland Hills City Hall	Municipal	Public	No	I-820 and Boulevard 26 North Richland Hills, TX 76180
47. TRE Richland Hills Station	Municipal	Public	No	7225 Burns Street Richland Hills, TX 76118
48. Fort Worth Fire Dept. Station No. 7	Municipal	Public	No	925 Morrison Dr., Fort Worth, TX 76120
49. Fort Worth Fire Dept. Station No. 20	Municipal	Public	No	901 Woodhaven Blvd., Fort Worth, TX 76112
50. Hurst Fire Station No. 2	Municipal	Public	No	937 W. Pipeline Rd., Hurst, TX 76053

**Standard**

**Version 1**



# Community Impacts Assessment Technical Report Form

## Reset Form

51. Mallard Cove Park	Recreational	Public	No	375 Shadow Grass Avenue Fort Worth, TX 76120
52. River Trails Park	Recreational	Public	No	8570 San Joaquin Trail Fort Worth, TX 76118
53. Quanah Parker Park	Recreational	Public	No	5401 Randol Mill Road Fort Worth, TX 76103
54. Sandybrook Park	Recreational	Public	No	7049 Greenview Circle North Fort Worth, TX 76120
55. Gateway Park	Recreational	Public	No	751 Beach St., Fort Worth, TX 76111
56. Hurst Community Park	Recreational	Public	No	601 Precinct Line Rd., Hurst, TX 76053
57. Clyde Zellers Park	Recreational	Public	No	4801 Vance Rd., North Richland Hills, TX 76180
58. Creek Trail Park	Recreational	Public	No	3925 Airline Dr., Richland Hills, TX 76118
59. Rosebud Park	Recreational	Public	No	2600 Rosebud Ln., Richland Hills, TX 76118
60. Kate Baker Park	Recreational	Public	No	3555 Vance Rd., Richland Hills, TX 76118
61. Windmill Park	Recreational	Public	No	6936 Park Place Dr., Richland Hills, TX 76118
62. Billy Creek Park	Recreational	Public	No	161 Billy Creek Dr., Hurst, TX 76053
63. Jaycee Baker Park	Recreational	Public	No	500 Belmont, Hurst, TX 76053
64. Hurst Hills Park	Recreational	Public	No	Redbud Dr., Hurst, TX 76053
65. Heritage Village Plaza	Recreational	Public	No	841 W. Pipeline Rd., Hurst, TX 76053
66. Liberty Park	Recreational	Public	No	901 Precinct Line Rd., Hurst, TX 76053
67. Windmill Park	Recreational	Public	No	840 Cheryl, Hurst, TX 76053
68. Cobblestone Trail Park	Recreational	Public	No	7601 John T White Rd., Fort Worth, TX 76120
69. Fort Woof Dog Park	Recreational	Public	No	751 Beach St., Fort Worth, TX 76111



[Reset Form](#)

#### IV. Data

1. What data sources were used?

Yes **U.S. Census Bureau**

Yes **American Community Survey (ACS)**

No **Texas State Data Center**

Yes **Other**

**If other, describe:**

SITE VISIT CONDUCTED 6/1/2017;  
<https://www.google.com/maps>;  
[https://portal.hud.gov/hudportal/HUD?src=/topics/rental\\_assistance](https://portal.hud.gov/hudportal/HUD?src=/topics/rental_assistance);  
<https://lihtc.huduser.gov/>;  
<https://aspe.hhs.gov/overty-guidelines>

*Attach tables or thematic maps detailing race (including Hispanics), language, income, disability, gender, and age data for the affected community study area. Tables and maps may be downloaded from FactFinder and the ACS Summary File. Instructions for navigating Fact Finder and ACS Summary File can be found in the Toolkit. A list of tables to use can be found in the Toolkit. If you prefer to use template tables see the Demographic Table Template in the Toolkit.*

2. What is the current DHHS poverty level? \$24,600.00

3.  Yes **Do any of the census geographies show over a 50% minority population?**

**Describe:**

The 2010 Census P9 (Hispanic or Latino, and not Hispanic or Latino by Race) data was utilized to identify minority populations. The data was obtained for the CIA study area block groups and tracts from the U.S. Census Bureau's American FactFinder at <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

There are 33 census block groups and 10 tracts within the CIA study area. Because the census block groups and tracts share the same boundary, the total recorded population and percent of each race/ethnicity is the same. The total recorded population of the CIA study area is 45,695. Of these 50.4% are White alone; 21.8% are Hispanic or Latino; 20.9% are Black or African American alone; 0.4% are American Indian and Alaska Native alone; 4.0% are Asian alone; 0.3% Native Hawaiian and Other Pacific Islander alone; 0.2% are some other race alone; and 1.9% are two or more races.

Of the 33 block groups in the CIA study area, 12 have a minority population greater than 50%. Of the 10 tracts within the CIA study area, four have a minority population greater than 50%. Refer to the attached "Census Geography Map - Minority Populations" for the locations of the Environmental Justice (EJ) block groups (minority population greater than 50%) and the attached census data obtained from the American FactFinder. As shown on the "Census Geography Map - Minority Populations", 10 of the 12 EJ block groups are clustered together near the southern end of the proposed project.

4.  Yes **Do any of the census geographies show a median income below the DHHS poverty level?**

**Describe:**

The 2011-2015 ACS 19013 (Median Household Income in the Past 12 Months [in 2015 Inflation-Adjusted Dollars]) data was utilized to identify median household income. The data was obtained for the CIA study



[Reset Form](#)

area block groups and tracts from the U.S. Census Bureau's American FactFinder at <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

There are 33 census block groups and 10 tracts within the CIA study area. Of these, three block groups and one tract have median household incomes less than the DHHS poverty level of \$24,600 (for a family of four). The median incomes of the 33 blocks groups and 10 tracts ranges from \$16,637 to \$120,833, and \$21,444 to \$76,554, respectively. Refer to the attached "Census Geography Map - Median Household Income" for the locations of the EJ block groups (median household income less than \$24,600) and the the attached census data obtained from the American FactFinder. As shown on the "Census Geography Map - Median Household Income", all three of the EJ block groups are clustered together near the southern end of the proposed project. Note that 2011-2015 ACS 19013 data is unavailable for Block Group 2 of Census Tract 1134.05; therefore, 2010-2014 ACS 19013 data was obtained for this block group and is included with the attached census data from the American FactFinder.

Additionally, the 2011-2015 ACS 17017 (Poverty Status in the Past 12 Months by Household Type by Age of Householder) data was utilized to identify the number of households living below the poverty level. The data was obtained for the CIA study area block groups and tracts from the U.S. Census Bureau's American FactFinder at <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

Within the 33 block groups in the CIA study area, there are 18,265 households. Of these 18,265 households, 2,917 (16.0%) live below the poverty level and 15,348 (84.0%) live at or above the poverty level. Refer to the attached census geography maps for the locations of these block groups and the attached census data obtained from the American FactFinder.

5. Yes **Do any of the census geographies show presence of persons who speak English "less than very well"?**

**Describe:**

The 2011-2015 ACS 16004 (Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over) data was utilized to identify persons who speak English "less than very well". The data was obtained for the CIA study area block groups and tracts from the U.S. Census Bureau's American FactFinder at <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

There are 33 census block groups and 10 tracts within the CIA study area. Of these, 30 block groups and all 10 tracts have populations who speak English "less than very well". Because the census block groups and tracts share the same boundary, the total recorded population (age 5 years and over) and percent of Limited English Proficiency (LEP) populations is the same.

The total recorded population (age 5 years and over) for the CIA study area is 43,449. Of the 43,449 people, 4,978, or 11.5%, speak English "less than very well". Of those that speak English "less than very well", 3,853 (8.9%) speak Spanish; 761 (1.8%) speak Asian and Pacific Island languages; 256 (0.6%) speak other languages; and 108 (0.2%) speak other Indo-European languages. Refer to the attached "Census Geography Map - LEP Populations" for the locations of the LEP block groups (contain persons age 5 years and over that speak English "less than very well") and the attached census data obtained from the American FactFinder.

**V. Site Visit**

1. Yes **Was a site visit conducted?**  
*If yes, attach documentation, notes, and photographs from the field visit.*

2. Yes **Were there any signs observed in languages other than English?**



[Reset Form](#)

**Describe the languages(s) observed, frequency, and general location of signs in other languages (throughout the study area, concentrated in a particular vicinity, etc.):**

Signage in Spanish, Chinese, and Korean were observed in the CIA study area. Signage in Spanish was observed throughout the CIA study and was not concentrated in any particular vicinity. The signage in Chinese was observed at the A Chinese Wellness Center located at 3917 Booth Calloway Road, Richland Hills, TX 76118. Signage in Korean was observed at the DFW Korean Adventist Church located at 1000 W. Pipeline Road, Hurst, TX 76053. Signage in Spanish was also observed at the DFW Korean Adventist Church. Refer to the document titled "Project Area Photographs (0008-13-124, etc.).pdf" for example photographs of signage within the CIA study area in non-English languages.

3. Yes **Were there places of worship, businesses, or services that target or serve specific minority groups?**

**Describe:**

The DFW Korean Adventist Church located at 1000 W. Pipeline Road, Hurst, TX 76053 serves Korean and Hispanic/Latino minority groups by providing services in Korean and Spanish. The Mercy Seat Church, located at 7101 Airport Fwy., Richland Hills, TX 76118, and the Centro Cristiano Bet-El, located at 6600 Baker Blvd., Richland Hills, TX 76118, serves Hispanic/Latino minority groups by providing service in Spanish. The Hurst African Market, located at 819 W. Pipeline Rd., Hurst, TX 76053, serves African/Caribbean minority groups by providing food and merchandise specific those regions. Refer to the attached "Site Visit Map" for the location of the facilities.

4. Yes **Were there signs of disabled persons such as ramps on homes or public transportation vehicles or stops specifically designed for disabled persons?**

**Describe:**

The T and the Trinity Railway Express (TRE) provide public transportation within the southern section of the CIA study area (refer to the attached "Site Visit Map"). The T and TRE cater to disabled people, as well as the general population. The TRE has a station within the CIA study area.

5. Yes **Were there signs of other vulnerable populations such as children or elderly (presence of day cares, elementary schools or assisted living facilities)?**

**Describe:**

Signs of other vulnerable populations found within the CIA study area include several elementary schools, child care, and senior care facilities. See the Site Visit Map for names and locations. Refer to the document titled "Project Area Photographs (0008-13-124, etc.).pdf" for representative photographs.

6. Yes **Were there any signs of low-income families or neighborhoods (subsidized housing, homes or cars in need of repair, used goods stores, low-cost health care facilities)?**

**Describe:**

Rental housing within the CIA study area supported by the U.S. Dept. of Housing and Urban Development's (HUD) Low-Income Housing Tax Credit includes the Villas on Calloway Creek, located at 901 W. Hurst Blvd., Hurst, TX 76053; Cobblestone Manor Apartments, located at 8201 Sartain Dr., Fort Worth, TX 76120; and the Mill Stone Apartments, located at 8472 Randol Mill Rd., Fort Worth, TX 76120. HUD Fair Housing Opportunity residences identified within the CIA study area include the Sunny Woods Retirement Community, located at 1604 N. Hills Blvd., Hurst, TX 76053; the Sunny Ridge Retirement Community, located at 320 N. Booth Calloway Rd., Hurst, TX 76053; and Parc at Bakers Pointe located at 7120 Bakers Blvd., Richland Hills, TX 76118. See the attached "Site Visit Map" for locations.

Used goods store identified within the CIA study area include a Goodwill Super Store and Texas Thrift Store on Pipeline Road, and Slightly Used Resale Shop on Baker Boulevard. The Muslim Community Center for



[Reset Form](#)

Human Services, a low/reduced cost health care facility, is located within the CIA study area on Glenview Drive. No other used goods stores or low-cost health care facilities were identified within the CIA study area. See the attached "Site Visit Map" for facility locations. Homes/automobiles within the CIA study area are generally in good repair.

7. Yes **Are there signs of other modes of transportation?**

Yes **Are there bus or train stops?**

**Describe:**

The T and the TRE provide public transportation within the southern section of the CIA study area (refer to the attached "Site Visit Map"). The T and TRE cater to disabled person, as well as the general population. The TRE has a station within the CIA study area.

Yes **Are there marked bike lanes or bicycle lane signage?**

**Describe:**

The West Fork Fort Worth and White's Branch Trails (part of the regional veloweb) are located within the CIA study area (refer to attached "Site Visit Map").

Yes **Did you observe cyclists in the area?**

**Describe:**

While infrequent, cyclists were observed throughout the CIA study area as well as an individual cyclist traveling southbound on I-820. Refer to the document titled "Project Area Photographs (0008-13-124, etc.).pdf" for representative photographs.

Yes **Are there sidewalks?**

**Describe:**

Sidewalks are located within the project limits and within the CIA study area. Refer to the document titled "Project Area Photographs (0008-13-124, etc.).pdf" for representative photographs.

Yes **Did you observe "goat paths" or dirt pathways adjacent to the project area?**

**Describe and show limits of goat paths or dirt pathways on map:**

Goat paths/dirt pathways were observed along the east side of Woodhaven Blvd. north of the Fort Worth Fire Dept. Station No. 20; along the west side of Randol Mill Rd. (north of John T. White Rd.); and along the southbound I-820 frontage road (south of Boca Raton Blvd.). Refer to the document titled "Project Area Photographs (0008-13-124, etc.).pdf" for representative photographs and the attached "Site Visit Map" for locations.

8. No **Is there any additional information about this community that will be helpful?**

9. Yes **Is public involvement planned for this project?**



[Reset Form](#)

## Results from the Scope Development Tool

1. No **Did the Scope Development Tool identify the need for a residential displacements analysis?**
2. Yes **Did the Scope Development Tool identify the need for a commercial displacements analysis?**  
**Select the level of analysis identified on the Scope Development Tool:**
  - Low level commercial displacements analysis
  - Medium level commercial displacements analysis
  - High level commercial displacements analysis
3. No **Did the Scope Development Tool identify the need for an other displacements analysis?**
4. Yes **Did the Scope Development Tool identify the need for an access and travel patterns analysis?**  
**Select the level of analysis identified on the Scope Development Tool:**
  - Medium risk access and travel patterns analysis
  - High risk access and travel patterns analysis
5. Yes **Did the Scope Development Tool identify the need for a community cohesion analysis?**  
**Select the level of analysis identified on the Scope Development Tool:**
  - Medium risk community cohesion analysis
  - High risk community cohesion analysis

## Commercial Displacements

Consider the community facilities and vulnerable populations other than EJ populations listed in your Community Profile answers.

### 1. What types of businesses exist in the study area?

Within the CIA study area, a vast assortment of businesses currently exist which include fast food restaurants, casual dining restaurants, gas stations, convenience stores, manufacturing and distribution centers, construction companies, automotive dealerships and repair centers, medical facilities, retail establishments, and day-care facilities, among others.

### 2. How many businesses will be displaced or impacted in a manner that would prevent them from continuing to operate (loss of parking or access)?

Refer to the Commercial Displacements Map for locations and the document titled "Project Area Photographs (0008-13-124, etc.)" for photographs of the displaced structures.

Property No. 1 - Commercial property (for lease office building) at 227 NE Loop 820, Hurst, TX 76053; building displacement.

Property No. 2 - Amino Transport (office building) at 223 NE Loop 820, Hurst, TX 76053; building displacement.



Reset Form

Property No. 3 - Physicians Open Stand-Up MRI (office building) at 121 NE Loop 820, Hurst, TX 76053; building displacement.

3. No Are these businesses unique to the area?

4. No Do these businesses serve a specific population (specific ethnic group, disabled, low-income families, etc.)?

Explain:

The businesses identified in Step 2 above do not serve a specific population.

5. No Have the businesses indicated if they would relocate?

NOTE: The conclusion statement should be included in the NEPA document if one is being produced. Upon completion, upload this Documentation Standard to the Community Impacts and EJ section of the Documents page in ECOS.

Conclusion: Based on the information above, how will displacements associated with the proposed project impact the community?

Negative impacts to the community resulting from the potential displacements associated with the proposed project are not anticipated. The City of Hurst offers an array of commercial facilities comparative to the businesses being displaced by the proposed project. Patrons of the impacted businesses will have other options and alternatives to patronize. The City has several vacant properties and buildings that are available which gives the displaced businesses options to rebuild in the CIA study area.

ACCESS AND TRAVEL PATTERNS

1. How do people currently access adjacent parcels (car, walking, cycling, mass transit)?

The most common form of transportation people use to access the adjacent parcels is by automobile followed by walking, mass transit, and cycling.

2. Describe the permanent changes to access and/or travel patterns.

Implementation of the proposed project would result in changes of access to/from I-820 and SH 121 within the proposed project limits (refer to the TXECOS file titled "Plans (0008-13-124, etc.).pdf" for the proposed improvements). Changes in travel patterns would likely result from the introduction of continuous frontage roads along I-820 between Trinity Boulevard and the I-820/SH 121/SH 183 interchange. For example, motorists that have to make a short trip between destinations along or in the vicinity of I-820 may now have the option of traveling solely along the frontage roads instead of entering, then soon exiting, the mainlanes. Motorists that intend on traveling the majority or all of this segment of I-820 and SH 121 within the project limits may opt to utilize the proposed managed lanes instead of the mainlanes, where people are regularly entering and exiting I-820 and SH 121. The managed lanes remove travelers from the interchanging traffic and provide them with a continuous route through this segment of I-820 and SH 121.

The proposed bike/pedestrian facilities along the continuous frontage roads and Trinity Boulevard, 14-foot wide outside shared use lane and 6-foot wide sidewalks, may influence a change in travel patterns as people utilize non-motorized transportation.

Some existing ramps to/from I-820 and SH 121 would be modified or removed. However, these construction activities would not impair access to current routes and destinations. Ramp modifications/removals are proposed as follows:

- The ramps between I-820 and Trinity Boulevard would be modified and the footprint greatly reduced
• The ramps between I-820 and Hurst/Baker Boulevard would be modified



Reset Form

- The ramps between SH 121 and Handley-Ederville Road would be modified
  - The ramps between I-820 and SH 121 would be replaced with direct connectors
  - Direct connectors between SH 121 and Trinity Boulevard would be introduced/constructed
- Refer to the TXECOS file titled "Plans (0008-13-124, etc.).pdf" for graphics depicting the above improvements.

Modifications to existing side/intersecting streets are as follows:

- Central Park Drive would end as a cul-de-sac instead of having access to the eastbound SH 121 frontage road/northbound I-820 frontage road connector
- The service road between Booth Calloway Road and the southbound I-820 frontage road/mainlanes would end in a cul-de-sac instead of providing direct access from I-820 to Booth Calloway Road.

Included in the proposed improvements of frontage road/cross street intersections are Texas U-turns. These would be newly constructed at Hurst/Baker Boulevard (south side) and Handley Ederville Road (east side).

3. What neighborhoods and businesses will be affected by these changes?

Changes in access to adjacent properties are as follows (refer to the TXECOS file titled "Plans (0008-13-124, etc.).pdf" for property ID numbers and detailed graphics):

- Driveways to neighboring property Nos. 1B and 2, located on the southwest corner of Randol Mill Road and I-820, would become right in only driveways. Those exiting these properties would do so via the private drive at the rear of the properties connecting to Randol Mill Road.
- Businesses (including property Nos. 57 and 58) along Central Park Drive, which would end as a cul-de-sac instead of having access to the eastbound SH 121 frontage road/northbound I-820 frontage road connector, would be accessible via Hurst Boulevard.
- Property No. 60, located on the southeast corner of Hurst Boulevard and I-820, currently has two driveways to/from the northbound I-820 frontage road. The northernmost driveway would be closed as part of the proposed project. They would retain the southernmost driveway as well as access to/from Hurst Boulevard.
- Property No. 62, located on the east side of I-820 and north of Hurst Boulevard, currently has two driveways to/from the northbound I-820 frontage road. The southernmost driveway would become an exit only driveway. The northernmost driveway would continue to function as it does today.
- Due to the service road between Booth Calloway Road and the southbound I-820 frontage road/mainlanes ending in a cul-de-sac, businesses along the service road (including property No. 29) would no longer be accessible via I-820 and the frontage road. In order to access these businesses, motorists would take the SH 183/Baker Boulevard exit ramp; turn right on SH 183/Baker Boulevard; turn right on Booth Calloway Road; and right at the former service road.
- Driveways to property No. 34, located on the southwest corner of Valencia Drive and I-820, would be closed. The property would continue to be accessible via a shared driveway with property No. 33 and via driveways on Valencia Drive.
- Property No. 35, on the northwest corner of Valencia Drive and I-820, currently has two driveways to/from the frontage road. The northernmost driveway would become a right-in only driveway and the southernmost driveway would be closed. The property would continue to be accessible via a shared driveway with property No. 33 and via driveways on Valencia Drive.
- Property No. 36, on the southwest corner of N. Hills Boulevard and I-820, currently has a driveway to/from the frontage road. The driveway would become a right-in only driveway. The property would continue to be accessible via driveways on N. Hills Boulevard.
- The driveway between the northbound I-820 frontage road and property No. 74 would be removed. Property No. 74 would continue to be accessible via Kathryn Street.
- Property No. 112, located on the north side of SH 121 and east of Handley-Ederville Road, currently has two driveways to/from the frontage road. The westernmost driveway would become an exit only driveway. The property would continue to be accessible via the easternmost driveway and Dogwood Park.
- The dirt driveway between the eastbound SH 121 frontage road and property No. 119, located on the south side of SH 121 and east of Handley-Ederville Road, would be removed. Property No. 119 would continue to be accessible via the dirt driveway from Handley-Ederville Road.
- Property No. 109, located on the northeast corner of the SH 121 and Handley-Ederville Road intersection, currently has two driveways to/from the frontage road. Both driveways would be closed. The property would continue to be accessible via Handley-Ederville Road.
- Property Nos. 109 and 110, located on the northeast corner of the SH 121 and Handley-Ederville Road intersection,



[Reset Form](#)

are currently visible from the southwest-bound SH 121 mainlanes. An exit ramp from the SH 121 mainlanes to Handley-Ederville Road is currently present. The current visibility allows motorists to see the restaurant and gas station/convenience store in advance of the exit ramp, and, if making a planned or unplanned stop, promptly exit to reach these establishment. As part of the proposed improvements, this exit ramp would be removed. In order to reach these establishments, a motorist, southbound on I-820 and destined for SH 121, would be required to take the I-820 exit to SH 10/SH 183. They would continue south on the frontage road until they reached the restaurant and gas station/convenience store. This is also how motorists destined for Handley-Ederville Road, south of SH 121, would reach their destination. Handley-Ederville Road is also easily accessible via Trinity Boulevard, which intersects I-820 south of SH 121. Additionally, an exit ramp from the southbound I-820/westbound SH 121 managed lanes to Handley-Ederville Road would be constructed as part of the proposed project.

-Property No. 98, located on the northeast corner of SH 121 and Ash Park Drive, currently has a driveway to/from the frontage road. The driveway would be closed. The property would continue to be accessible via Ash Park Drive.

-Property No. 95, located on the northwest corner of SH 121 and Willow Park Street, currently has a driveway to/from the frontage road. The driveway would be closed. The property would continue to be accessible via Willow Park Street.

The previously listed driveway closures and modifications would not be anticipated to impact the operation of these businesses, since these businesses would still remain accessible if the proposed project were constructed. Because the ramp improvements and Texas U-turns are proposed for the length of the project, it can be assumed that all neighborhoods and businesses along these portions of I-820 and SH 121 would be affected in some manner by these changes in access and travel patterns.

4.  Yes **Are any community facilities affected?**

**Are any of them "essential services" such as clinics, schools, or emergency responders?**

Again, it can be assumed that all neighborhoods and businesses along these portions of I-820 and SH 121 would be affected in some manner by these changes in access and travel patterns. This includes community facilities such as clinics, schools, and emergency responder stations, all of which are located throughout the CIA study area. The effect to these essential services is anticipated to be positive because the improved access and mobility will allow members of the community better access to these services.

5. **How will emergency response times be affected?**

The proposed project would improve access and mobility in the proposed project area, and is anticipated to improve emergency response times. Changes in access to area hospitals as a result of the proposed improvements is not anticipated.

6. **For mass transit, walking, cycling impacts, which mode(s) will be permanently impacted?**

The impact to walking and cycling modes of transportation would be positive with the introduction of the 14-foot wide outside shared use lanes and 6-foot wide sidewalks along the frontage roads within the project limits. Access to the Trinity Railway Express and the Richland Hills Station would continue to exist as it does today.

7. **How far will the user of this/these modes have to travel to find a comparable route/service? How much time will be added to their trips?**

Not applicable for walking/cycling modes of transportation. Access to the Trinity Railway Express and the Richland Hills Station would continue to exist as it does today.

8.  Yes **Are any design elements proposed to mitigate adverse impacts to these modes?**

**Describe:**

Bike and pedestrian facilities are included in the proposed improvements to better accommodate cyclists and pedestrians in the CIA study area.



[Reset Form](#)

**NOTE:** The conclusion statement should be included in the NEPA document if one is being produced. Upon completion, upload this Documentation Standard to the Community Impacts and EJ section of the Documents page in ECOS.

**Conclusion: Based on the information above, how will the proposed project impact access and travel patterns for the community?**

The proposed project would improve access and mobility for users along I-820 and SH 121 and for the surrounding communities. The proposed roadway could improve emergency response times via improved mobility and reduced congestion. Also, the proposed shared use lanes, sidewalks, and crosswalks could shorten the travel time between trips for pedestrians and cyclists. The proposed roadway would ultimately provide drivers, pedestrians, and cyclists a more efficient route to access cross streets and adjacent properties in the project area. Therefore, negative impacts to access and travel patterns for communities in the project area resulting from the implementation of the proposed project are not anticipated.

## Community Cohesion

Consider the community facilities and vulnerable populations other than EJ populations listed in your Community Profile answers.

**1. If there is an existing roadway or other separation, how will the proposed project change that separation?**

The proposed I-820 improvements would consist of the reconstruction/expansion of I-820 and SH 121. Because the existing facility is already a controlled access highway that functions as a barrier between neighborhoods, the current separation will remain as it does today. The proposed project would increase the size of the highway, but the increase in size isn't substantial enough to ultimately change how people get across the improved facility.

**2. How would the proposed project change the way that people within the community access other parts of the community and participate in local activities?**

By adding lanes to this existing portion of I-820 and SH 121, the proposed project will be able to handle a higher volume of traffic. The additional lanes, continuous frontage roads, and managed lanes will help motorists move within and through the CIA study area more efficiently. The introduction of the shared use lanes and sidewalks along the continuous frontage roads may encourage people to walk or bike throughout the community and to local activities.

**3. How will the proposed project change the way that people use local services and facilities change?**

The introduction of bike/pedestrian facilities may encourage people to pursue alternative modes of transportation. There is a TRE rail station and numerous bus routes and stops within the CIA study area. Instead of driving and parking at the rail station, users may opt to walk or bike, having the option to leave their bicycle at the station or taking it along with them. With improved access to bike/pedestrian facilities and other alternative modes of transportation, people may desire to visit or use local services and facilities such as libraries, senior centers, and community centers more frequently.

**NOTE:** The conclusion statement should be included in the NEPA document if one is being produced. Upon completion, upload this Documentation Standard to the Community Impacts and EJ section of the Documents page in ECOS.

**Conclusion: Based on the information above, how will the proposed project impact community cohesion?**

The proposed project would not restrict access to any existing public or community services, businesses, commercial areas, or employment centers. The proposed project would be constructed entirely within existing ROW in areas adjacent to residences and would not affect, separate, or isolate any distinct neighborhoods, ethnic groups, or other specific groups within or adjacent to the proposed project area. Project completion would increase the roadway capacity and improve traffic flow, benefiting local and non-local commuters, area businesses, and local residents. As part of the proposed facility, improved frontage roads would provide safer access to residential neighborhoods and commercial properties and improve



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travel movements and traffic flow in the area.

The proposed widening of I-820 and SH 121 would increase the facility's capacity and improve mobility. Additionally, bike/pedestrian facilities would be introduced along the proposed project frontage roads, providing improved access/use of the proposed project area for members of the bike/pedestrian community. These proposed improvements would make it easier for people to travel within the CIA study area and to surrounding communities to complete their day to day activities. These effects from the proposed project will lead to improved community cohesion because area residents and workers will be better able to venture out into their communities, patronize local businesses, and interact with other community members and business patrons from both near and far. Negative impacts to community cohesion resulting from the implementation of the proposed project are not anticipated.

## ENVIRONMENTAL JUSTICE

1. Yes Will there be displacements?

**How many are in predominantly minority and/or low income census geographies versus non-minority and non-low income geographies?**

There are three potential commercial displacements associated with the proposed project:

Property No. 1 - Commercial property (for lease office building) at 227 NE Loop 820, Hurst, TX 76053; building displacement.

Property No. 2 - Amino Transport (office building) at 223 NE Loop 820, Hurst, TX 76053; building displacement.

Property No. 3 - Physicians Open Stand-Up MRI (office building) at 121 NE Loop 820, Hurst, TX 76053; building displacement.

All three potential displacements are located in Census Tract 1134.05, Block Group 3. This block group has a minority population of greater than 50%. The median household income of this block group is above the poverty guideline. Refer to the attached "Commercial Displacements Map" and the census geography maps for locations and the document titled "Project Area Photographs (0008-13-124, etc.).pdf for photographs of the displaced structures.

2. Yes Will there be access and travel pattern impacts?

**What types of impacts are in predominantly minority and/or low income census geographies versus non-minority and non-low income geographies?**

As part of the proposed facility, improved frontage roads would provide safer access to residential neighborhoods/commercial properties and improve travel movements/traffic flow in the area. Changes in access and travel patterns would equally impact minority and/or low-income populations and non-minority and/or non-low income populations.

3. No Will there be community cohesion impacts?

4. No Will the community experience any negative impacts to air quality or water quality from increased noise level or from hazardous materials?

5. No Has the community experienced substantial impacts from past transportations projects such as a new roadway causing large number of displacements or introducing a barrier and separating parts of the community?



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- 6. No **Has the community experienced substantial impacts from any other major projects such as utilities, industry, etc?**
- 7. No **Is there any mitigation proposed to specifically lessen the severity of these impacts on EJ populations?**
- 8. No **If there are any impacts to minority or low-income populations would these impacts still be considered disproportionately high and adverse after mitigation has been applied?**

**NOTE:** The conclusion statement should be included in the NEPA document if one is being produced. Upon completion, upload this Documentation Standard to the Community Impacts and EJ section of the Documents page in ECOS. If it is concluded that there will be disproportionately high and adverse impacts to EJ communities, consult the CIA handbook or further guidance.

**Conclusion: Based on the information above and information in the community profile, will the proposed project have disproportionately high and adverse impacts on minority and/or low-income populations?**

Disproportionately high and adverse impacts on minority and/or low-income populations resulting from the implementation of the proposed project are not anticipated.

### Limited English Proficiency

- 1. Yes **Were there LEP persons identified in the project area?**

**What languages do they speak?**

Spanish, other Indo-European languages, Asian and Pacific Island languages, and other languages. Refer to the attached "Census Geography Map - LEP Populations" for the locations of the LEP block groups (contain persons age 5 years and over that speak English "less than very well") and the attached census data obtained from the American FactFinder.

- 2. **What public involvement techniques were used or is planned to be used?**

*Please note in the response whether public involvement notices are available to view under the Public Involvement or Community Impacts section of ECOS.*

A Public Meeting was held on April 4, 2013 at the Hurst Brookside Community Center, 1244 Brookside Drive, Hurst, Texas 76053. The purpose of the Public Meeting was to provide information regarding proposed improvements to I-820 from the north interchange at SH 121 to Randol Mill Road and SH 121 from Handley-Ederville Road to the I-820/SH 121 interchange in the cities of Fort Worth, Hurst, Richland Hills and North Richland Hills. The notices for the Public Meeting were published in The Fort Worth Star-Telegram, and in LaSemana and La Estrella, Spanish language newspapers. Notices were also mailed, in English and in Spanish, to the adjacent property owners. Sixty-eight people attended the meeting and 12 written comments were received. TxDOT thoroughly analyzed all, and responded to many of the comments. All commenters received a thank you letter from TxDOT. No comments were received in opposition to the project. The largest number of comments regarded changes to the ramp locations and other comments were specific to the commenter's property.

On April 24, 2014, a Public Meeting was held at the 2013 Public Meeting location in Hurst. The purpose of the meeting was to provide updated information and changes in the design as a result of the April 3, 2013 Public Meeting. The notices for the Public Meeting were published in The Fort Worth Star-Telegram, and in LaSemana and La Estrella, Spanish language newspapers. Notices were also mailed to the adjacent property owners and those that had attended the 2013 Public Meeting. Sixty-one people attended the meeting and nine written comments were received. TxDOT thoroughly analyzed all, and responded too many of the comments. All commenters received a thank you letter from TxDOT. No comments were received in opposition to the project. The largest number of comments regarded concerns about traffic noise and other comments were specific to the commenter's property.



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A Public Hearing will be held at a later date to present the proposed project, and to encourage and solicit public comment. In addition to the above public involvement techniques, notices will also be made available online at <http://www.txdot.gov/inside-txdot/get-involved/about/hearings-meetings.html>.

3. Yes **Was assistance in a language other than English requested or is it anticipated to be requested?**

**Describe:**

Assistance in a language other than English was not requested in the previous public involvement. Interpreters would be provided should assistance in a language other than English be requested prior to the planned Public Hearing.

4. **How were LEP persons accommodated during the public involvement process?**

*Please note in the response if copies of public involvement materials are available to view under the Public Involvement or Community Impacts section of ECOS.*

The notices for the Public Meetings were published in The Fort Worth Star-Telegram, and in LaSemana and La Estrella, Spanish language newspapers. Notices were also mailed to the adjacent property owners. All Legal Notices published in English language newspapers provided contact information for persons interested in attending the meeting who had special communication/accommodation needs. Meeting notices mailed to elected officials, adjacent property owners, and previous public involvement attendees were in both English and Spanish. A project team member fluent in Spanish was available at the public meetings to provide communication assistance to Spanish-speaking attendees. The public meeting comment form was provided in both English and Spanish. The previously discussed accommodations would be repeated for the Public Hearing.

5. Yes **Is any more public involvement planned?**

Yes **Will LEP persons continue to be accommodated?**

**NOTE:** The conclusion statement should be included in the NEPA document if one is being produced. Upon completion, upload this Documentation Standard to the Community Impacts and EJ section of the Documents page in ECOS.

**Conclusion: Based on the information above and public involvement documentation, were LEP persons given the opportunity for meaningful involvement in the NEPA process?**

Reasonable steps have been and will continue to be taken in the NEPA process to ensure that LEP persons have meaningful access to the programs, services, and information TxDOT provides.

**Prepared By:**

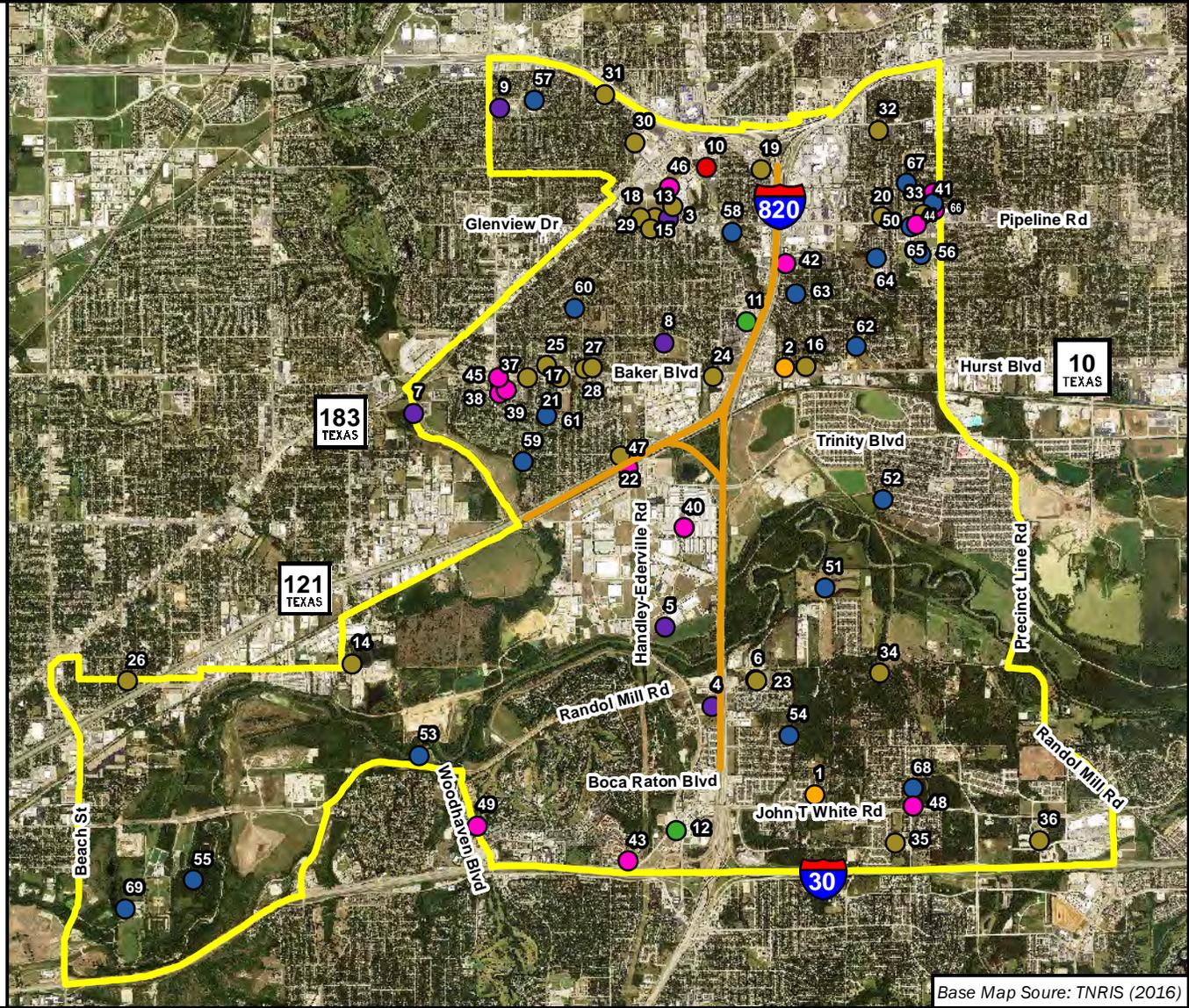
Meghan Karadimos  
*Preparer Name*

Environmental Scientist  
*Title*

  
*Preparer Signature*

08/17/2017  
*Date*

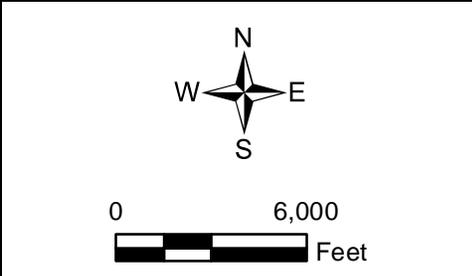
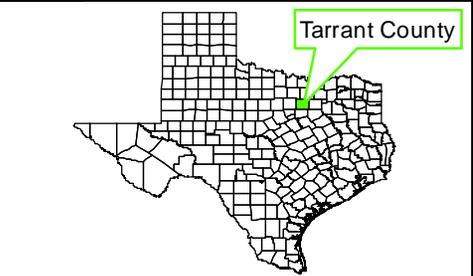
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- 2 PARKER CEMETERY
- 3 ST. JOHN THE APOSTLE CATHOLIC SCHOOL
- 4 REMINGTON COLLEGE
- 5 UNIVERSITY OF TEXAS AT ARLINGTON-RIVERBEND
- 6 TEMPLE CHRISTIAN SCHOOL
- 7 TARRANT COUNTY JUVENILE JUSTICE ALTERNATIVE EDUCATION PROGRAM
- 8 RICHLAND MIDDLE SCHOOL
- 9 NORTH RICHLAND MIDDLE SCHOOL
- 10 MEDICAL CITY NORTH HILLS HOSPITAL
- 11 CHILD CARE ASSOCIATES
- 12 TEXAS WIC OFFICE
- 13 ST. JOHN THE APOSTLE CATHOLIC CHURCH
- 14 VALLEY BAPTIST CHURCH
- 15 ST. JOHN THE APOSTLE FORMATION CENTER
- 16 FRIENDSHIP BAPTIST CHURCH
- 17 RICHLAND HILLS BAPTIST CHURCH
- 18 RICHLAND HILLS UNITED METHODIST CHURCH
- 19 THE CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS
- 20 BETHEL FAMILY WORSHIP CENTER - CHURCH OF GOD OF PROPHECY
- 21 ARK OF FAITH
- 22 MERCY SEAT CHURCH
- 23 TEMPLE BAPTIST CHURCH
- 24 CALVARY LUTHERAN CHURCH
- 25 FAITH CREEK CHURCH
- 26 SOUTH HALTOM COMMUNITY CHURCH
- 27 MESSIAH BAPTIST CHURCH
- 28 BAKER BOULEVARD CHURCH OF CHRIST
- 29 RICHLAND HILLS CHRISTIAN CHURCH
- 30 NORTHGATE PENTACOSTALS
- 31 FIRST CHURCH OF CHRIST, SCIENTIST
- 32 PEACE LUTHERAN CHURCH
- 33 THE GLORY CHURCH
- 34 ROMANS VII MINISTRIES
- 35 CITY ON A HILL
- 36 PANTEGO BIBLE CHURCH
- 37 RICHLAND HILLS FIRE DEPARTMENT
- 38 RICHLAND HILLS PUBLIC LIBRARY
- 39 RICHLAND HILLS CITY HALL
- 40 RIVER BEND FINANCE UNIT POST OFFICE
- 41 HURST MAIN POST OFFICE
- 42 DEPARTMENT OF PUBLIC SAFETY - HURST
- 43 FORT WORTH EAST REGIONAL PUBLIC LIBRARY
- 44 HURST PUBLIC LIBRARY
- 45 RICHLAND HILLS POLICE DEPARTMENT
- 46 NORTH RICHLAND HILLS CITY HALL
- 47 TRE RICHLAND HILLS STATION
- 48 FORT WORTH FIRE DEPT. STATION NO. 7
- 49 FORT WORTH FIRE DEPT. STATION NO. 20
- 50 HURST FIRE STATION NO. 2
- 51 MALLARD COVE PARK
- 52 RIVER TRAILS PARK
- 53 QUANAH PARKER PARK
- 54 SANDYBROOK PARK
- 55 GATEWAY PARK
- 56 HURST COMMUNITY PARK
- 57 CLYDE ZELLERS PARK
- 58 CREEK TRAIL PARK
- 59 ROSEBUD PARK
- 60 KATE BAKER PARK
- 61 WINDMILL PARK
- 62 BILLY CREEK PARK
- 63 JAYCEE BAKER PARK
- 64 HURST HILLS PARK
- 65 HERITAGE VILLAGE PLAZA
- 66 LIBERTY PARK
- 67 WINDMILL PARK
- 68 COBBLESTONE TRAIL PARK
- 69 FORT WOOF DOG PARK



Base Map Source: TNRIS (2016)

**Legend**

Project Limits	Non Profit Organization
CIA Study Area	Place of Worship
Cemetery	Public Facility
Educational Facility	Recreational Facility
Health Care Facility	



**CIA STUDY AREA AND FACILITIES MAP**

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Edeville Road

CSJ: 008-13-124, etc.

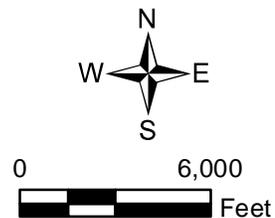
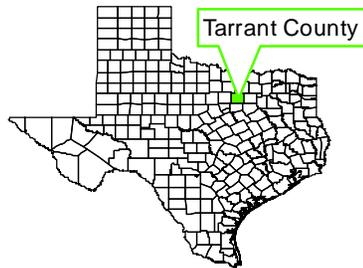
- 1 DFW KOREAN ADVENTIST CHURCH
- 2 MERCY SEAT CHURCH
- 3 CENTRO CRISTIANO BET-EL
- 4 HURST AFRICAN MARKET
- 5 TRE RICHLAND HILLS STATION
- 6 TEMPLE DAYS DAYCARE
- 7 ST. JOHN'S CHILD CARE
- 8 LINDA-KAY CHILD DEVELOPMENT CENTER
- 9 LITTLE TYKE RICHLAND HILLS
- 10 JUNIORS JUNCTION
- 11 TODDLER'S DEN
- 12 ALL-STAR LEARNING CENTER
- 13 RICHLAND ELEMENTARY
- 14 DONNA PARK ELEMENTARY SCHOOL
- 15 HURST HILLS ELEMENTARY SCHOOL
- 16 WEST HURST ELEMENTARY SCHOOL
- 17 RIVER TRAILS ELEMENTARY SCHOOL
- 18 LOWERY ROAD ELEMENTARY SCHOOL
- 19 JOHN T WHILE ELEMENTARY SCHOOL
- 20 JACK C BINION ELEMENTARY SCHOOL
- 21 SNOW HEIGHTS ELEMENTARY SCHOOL
- 22 VILLAS ON CALLOWAY CREEK
- 23 COBBLESTONE MANOR APARTMENTS
- 24 MILL STONE APARTMENTS
- 25 SUNNY WOODS RETIREMENT COMMUNITY
- 26 SUNNY RIDGE RETIREMENT COMMUNITY
- 27 THE PARC AT BAKERS POINTE APARTMENTS
- 28 GOODWILL SUPER STORE
- 29 TEXAS THRIFT STORE
- 30 SLIGHTLY USED RESALE SHOP
- 31 MUSLIM COMMUNITY CENTER FOR HUMAN SERVICES
- 32 HURST SENIOR CITIZENS ACTIVITIES CENTER
- 33 ASHWOOD ASSISTED LIVING
- 34 RICHLAND HILLS REHABILITATION AND HEALTHCARE CENTER
- 35 LEXINGTON PLACE NURSING & REHABILITATION
- 36 HERITAGE VILLAGE RESIDENCES



Base Map Source: TNRIS (2016)

**Legend**

- |                               |                               |
|-------------------------------|-------------------------------|
| Project Limits                | Public Facility               |
| CIA Study Area                | Senior Living Facility        |
| Child Care Facility           | Used Goods Store              |
| Commercial/Retail             | Goat Path/Dirt Path           |
| Educational Facility          | Regional Veloweb              |
| Low Cost Health Care Facility | Trinity Railway Express Route |
| Low Income/HUD Housing        | The T Bus Route               |
| Place of Worship              |                               |

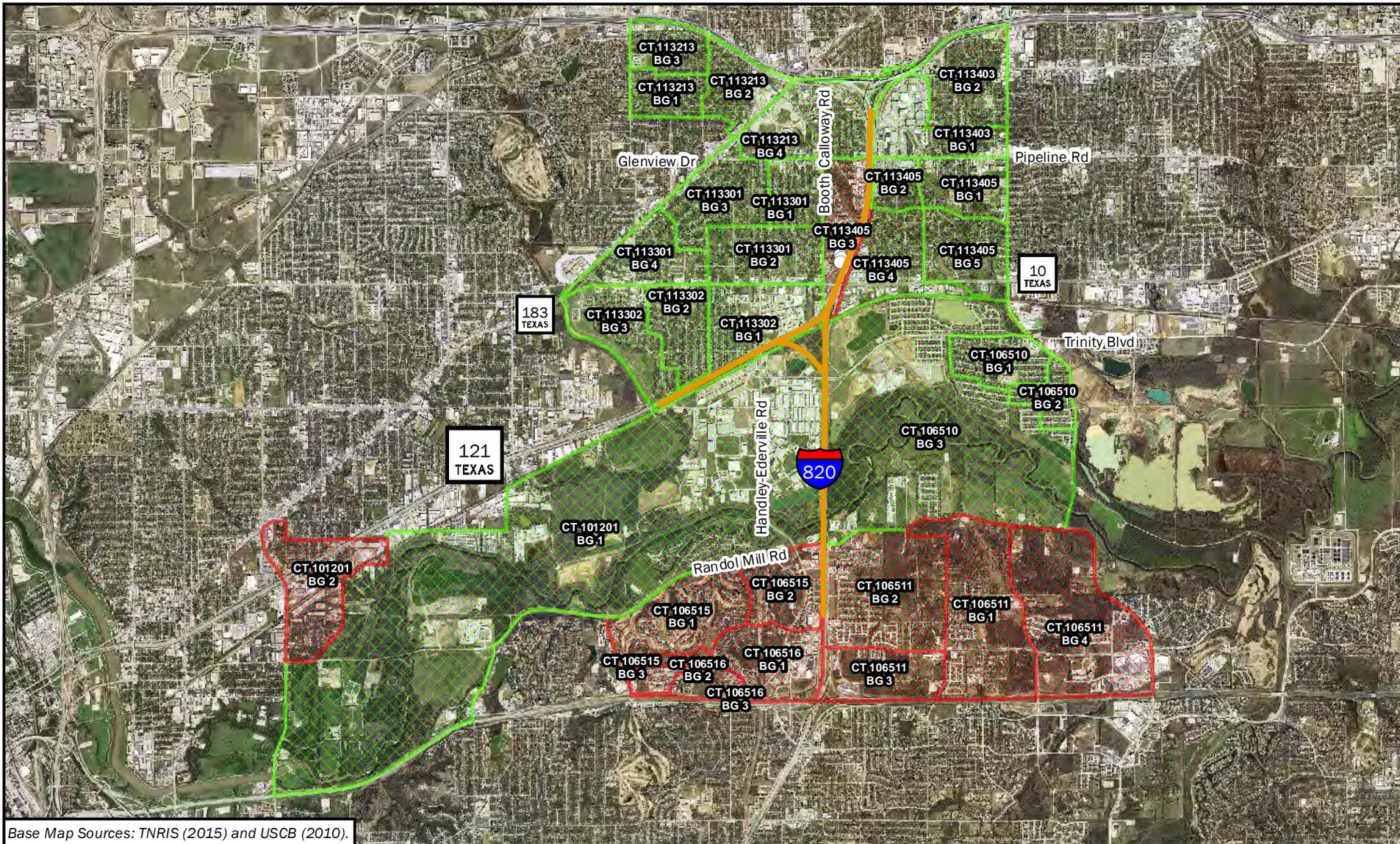


**SITE VISIT MAP**

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Rando Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

CSJ: 0008-13-124, etc.

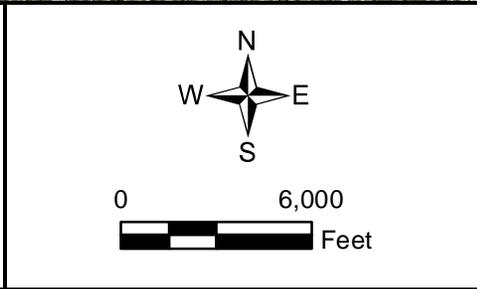
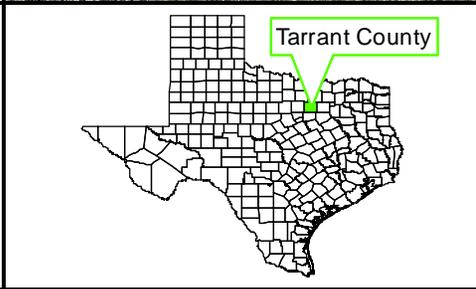


Base Map Sources: TNRIS (2015) and USCB (2010).

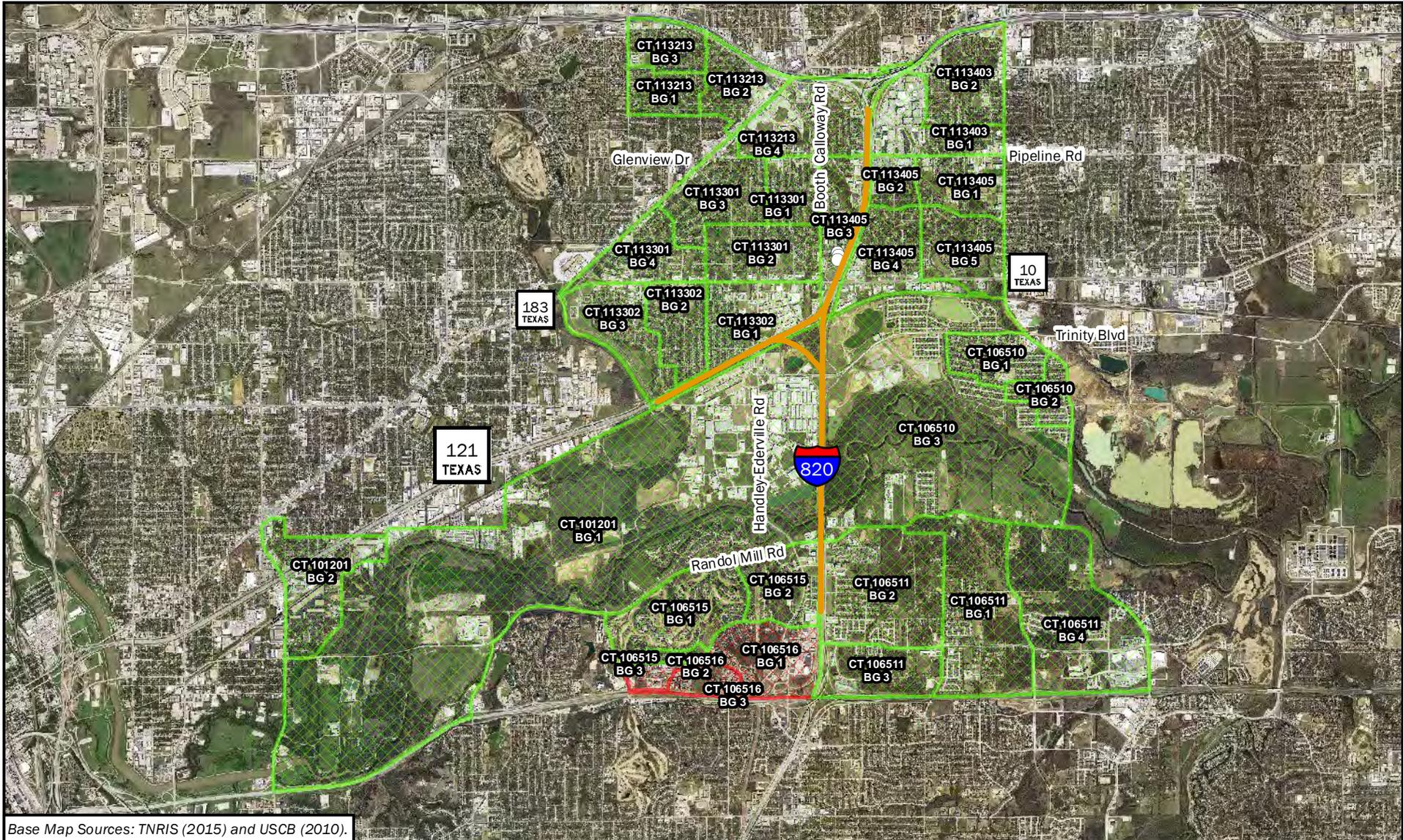
**Legend**

- Project Limits
- Non-EJ Census Block Group
- EJ Census Block Group
- Potential Displacement

EJ = % Minority > 50%  
 BG = Block Group  
 CT = Census Tract



**CENSUS GEOGRAPHY MAP**  
 Minority Populations  
 I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road  
 SH 121 from I-820 to approximately 5,000 feet west of Handley-Edeville Road  
 CSJ: 0008-13-124, etc.

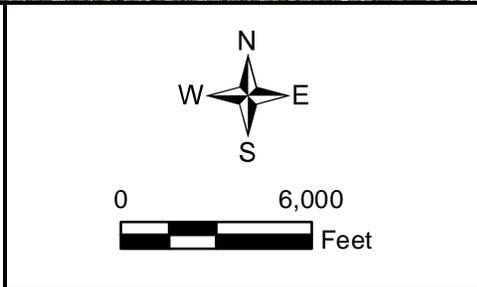
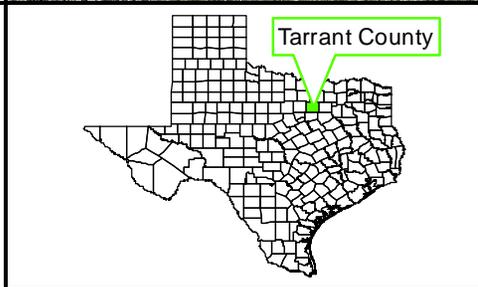


Base Map Sources: TNRIS (2015) and USCB (2010).

**Legend**

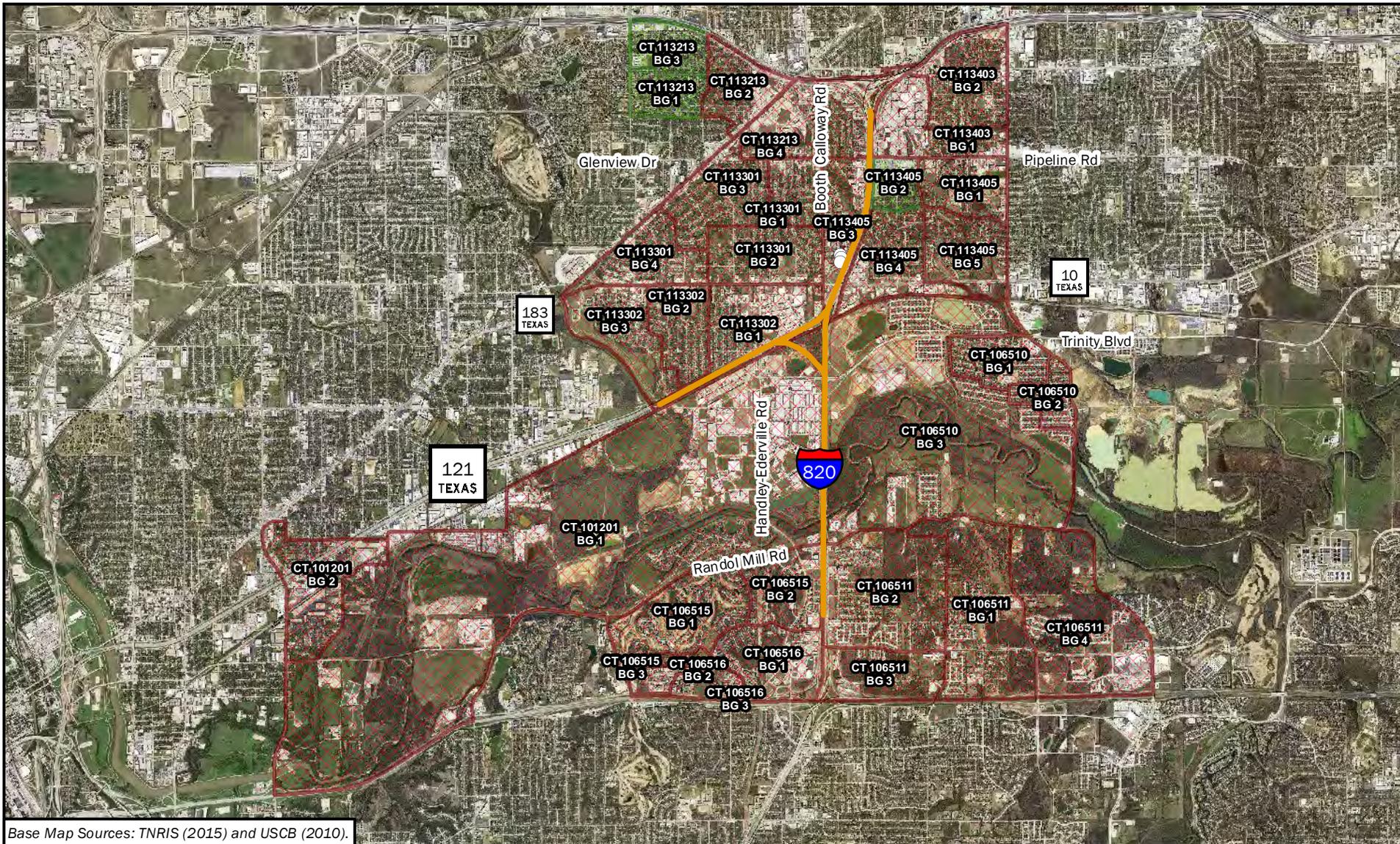
-  Project Limits
-  Non-EJ Census Block Group
-  EJ Census Block Group
-  Potential Displacement

EJ = Median Household Income < \$24,600  
 BG = Block Group  
 CT = Census Tract



**CENSUS GEOGRAPHY MAP**  
 Median Household Income  
 I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Edeville Road  
 CSJ: 0008-13-124, etc.

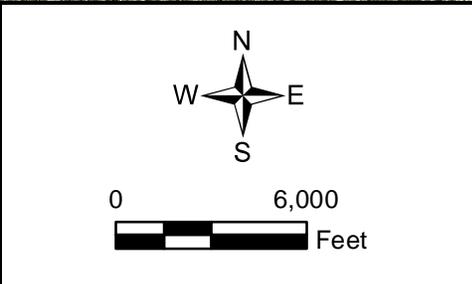
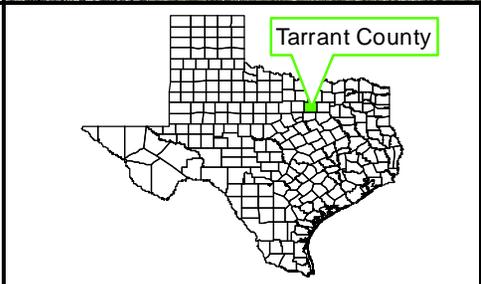


Base Map Sources: TNRIS (2015) and USCB (2010).

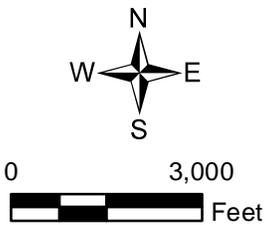
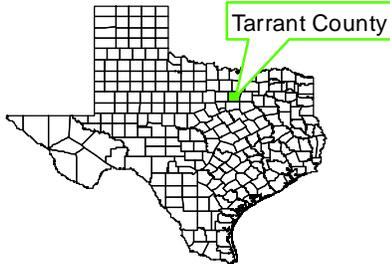
**Legend**

-  Project Limits
-  Non-LEP Census Block Group
-  LEP Census Block Group
-  Potential Displacement

LEP = Population age 5 years and over who speak English "less than very well"  
 BG = Block Group  
 CT = Census Tract



**CENSUS GEOGRAPHY MAP**  
 LEP Populations  
 I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road  
 SH 121 from I-820 to approximately 5,000 feet west of Handley-Edeville Road  
 CSJ: 0008-13-124, etc.



**COMMERCIAL DISPLACEMENTS MAP**

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJ: 0008-13-124, etc.

ARIZON  
NEW MEXICO

OKLAHOMA

ARKANSAS

TENNESSEE

NORTH  
CAROLINASOUTH  
CAROLINA

P9

## HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE

Universe: Total population  
2010 Census Summary File 1

**Note:** This is a modified view of the original table.

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/sf1.pdf>.

	Census Tract 1012.01, Tarrant County, Texas	Census Tract 1065.10, Tarrant County, Texas	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas	Census Tract 1065.16, Tarrant County, Texas
Total:	1,966	8,129	6,634	3,824	5,327
Hispanic or Latino	943	1,305	1,459	822	1,449
Not Hispanic or Latino:	1,023	6,824	5,175	3,002	3,878
Population of one race:	1,010	6,607	5,061	2,953	3,764
White alone	810	4,412	2,037	1,075	655
Black or African American alone	125	1,134	2,703	1,762	2,977
American Indian and Alaska Native alone	3	28	26	5	9
Asian alone	69	928	284	103	113
Native Hawaiian and Other Pacific Islander alone	2	87	1	2	4
Some Other Race alone	1	18	10	6	6
Two or More Races:	13	217	114	49	114

	Census Tract 1132.13, Tarrant County, Texas	Census Tract 1133.01, Tarrant County, Texas	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas	Census Tract 1134.05, Tarrant County, Texas
Total:	3,447	3,836	4,060	2,497	5,975
Hispanic or Latino	528	552	1,068	446	1,393
Not Hispanic or Latino:	2,919	3,284	2,992	2,051	4,582
Population of one race:	2,868	3,213	2,912	1,997	4,467
White alone	2,679	3,053	2,663	1,859	3,775
Black or African American alone	98	75	119	88	492
American Indian and Alaska Native alone	20	19	32	11	43
Asian alone	58	55	65	23	144
Native Hawaiian and Other Pacific Islander alone	10	9	29	2	3
Some Other Race alone	3	2	4	14	10
Two or More Races:	51	71	80	54	115

	<b>Block Group 1, Census Tract 1012.01, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1012.01, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1065.10, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1065.10, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.10, Tarrant County, Texas</b>
Total:	565	1,401	2,652	1,556	3,921
Hispanic or Latino	73	870	456	206	643
Not Hispanic or Latino:	492	531	2,196	1,350	3,278
Population of one race:	490	520	2,130	1,301	3,176
White alone	361	449	1,482	848	2,082
Black or African American alone	87	38	381	153	600
American Indian and Alaska Native alone	2	1	10	7	11
Asian alone	38	31	206	276	446
Native Hawaiian and Other Pacific Islander alone	2	0	45	14	28
Some Other Race alone	0	1	6	3	9
Two or More Races:	2	11	66	49	102

	<b>Block Group 1, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1065.15, Tarrant County, Texas</b>
Total:	2,421	2,181	908	1,124	1,663
Hispanic or Latino	356	835	110	158	272
Not Hispanic or Latino:	2,065	1,346	798	966	1,391
Population of one race:	2,025	1,304	791	941	1,367
White alone	855	623	98	461	628
Black or African American alone	979	621	685	418	688
American Indian and Alaska Native alone	10	6	2	8	2
Asian alone	179	50	6	49	45
Native Hawaiian and Other Pacific Islander alone	0	0	0	1	2
Some Other Race alone	2	4	0	4	2
Two or More Races:	40	42	7	25	24

	<b>Block Group 2, Census Tract 1065.15, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.15, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1065.16, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1065.16, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.16, Tarrant County, Texas</b>
Total:	1,515	646	1,912	1,235	2,180
Hispanic or Latino	314	236	626	273	550
Not Hispanic or Latino:	1,201	410	1,286	962	1,630
Population of one race:	1,179	407	1,253	916	1,595
White alone	272	175	264	174	217
Black or African American alone	858	216	948	730	1,299
American Indian and Alaska Native alone	3	0	3	3	3
Asian alone	46	12	35	9	69
Native Hawaiian and Other Pacific Islander alone	0	0	1	0	3
Some Other Race alone	0	4	2	0	4
Two or More Races:	22	3	33	46	35

	<b>Block Group 1, Census Tract 1132.13, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1132.13, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1132.13, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1132.13, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1133.01, Tarrant County, Texas</b>
Total:	811	755	793	1,088	963
Hispanic or Latino	102	128	96	202	150
Not Hispanic or Latino:	709	627	697	886	813
Population of one race:	695	608	689	876	803
White alone	672	577	666	764	754
Black or African American alone	12	14	3	69	23
American Indian and Alaska Native alone	7	2	5	6	5
Asian alone	3	6	15	34	14
Native Hawaiian and Other Pacific Islander alone	0	9	0	1	7
Some Other Race alone	1	0	0	2	0
Two or More Races:	14	19	8	10	10

	<b>Block Group 2, Census Tract 1133.01, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1133.01, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1133.01, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1133.02, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1133.02, Tarrant County, Texas</b>
Total:	821	1,088	964	1,312	1,305
Hispanic or Latino	87	141	174	346	283
Not Hispanic or Latino:	734	947	790	966	1,022
Population of one race:	717	922	771	937	1,012
White alone	697	889	713	862	980
Black or African American alone	9	15	28	37	9
American Indian and Alaska Native alone	5	8	1	9	11
Asian alone	5	10	26	20	11
Native Hawaiian and Other Pacific Islander alone	1	0	1	9	0
Some Other Race alone	0	0	2	0	1
Two or More Races:	17	25	19	29	10

	<b>Block Group 3, Census Tract 1133.02, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1134.03, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1134.03, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1134.05, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1134.05, Tarrant County, Texas</b>
Total:	1,443	628	1,869	1,122	567
Hispanic or Latino	439	127	319	232	72
Not Hispanic or Latino:	1,004	501	1,550	890	495
Population of one race:	963	488	1,509	868	475
White alone	821	457	1,402	719	432
Black or African American alone	73	18	70	111	36
American Indian and Alaska Native alone	12	2	9	7	0
Asian alone	34	8	15	24	7
Native Hawaiian and Other Pacific Islander alone	20	0	2	3	0
Some Other Race alone	3	3	11	4	0
Two or More Races:	41	13	41	22	20

	<b>Block Group 3, Census Tract 1134.05, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1134.05, Tarrant County, Texas</b>	<b>Block Group 5, Census Tract 1134.05, Tarrant County, Texas</b>
Total:	1,949	889	1,448
Hispanic or Latino	840	75	174
Not Hispanic or Latino:	1,109	814	1,274
Population of one race:	1,074	795	1,255
White alone	796	743	1,085
Black or African American alone	227	23	95
American Indian and Alaska Native alone	13	6	17
Asian alone	34	23	56
Native Hawaiian and Other Pacific Islander alone	0	0	0
Some Other Race alone	4	0	2
Two or More Races:	35	19	19

Source: U.S. Census Bureau, 2010 Census.



B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2015 INFLATION-ADJUSTED DOLLARS)

Universe: Households

2011-2015 American Community Survey 5-Year Estimates

**Note:** This is a modified view of the original table.

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Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

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Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 1012.01, Tarrant County, Texas	Census Tract 1065.10, Tarrant County, Texas	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas	Census Tract 1065.16, Tarrant County, Texas
	Estimate	Estimate	Estimate	Estimate	Estimate
Median household income in the past 12 months (in 2015 inflation-adjusted dollars)	55,078	76,554	40,700	32,131	21,444

	Census Tract 1132.13, Tarrant County, Texas	Census Tract 1133.01, Tarrant County, Texas	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas	Census Tract 1134.05, Tarrant County, Texas
	Estimate	Estimate	Estimate	Estimate	Estimate
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	51,406	60,982	37,475	59,153	40,847

	<b>Block Group 1, Census Tract 1012.01, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1012.01, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1065.10, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1065.10, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.10, Tarrant County, Texas</b>
	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	120,833	38,750	76,511	76,797	76,563

	<b>Block Group 1, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 2, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 3, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1065.15, Tarrant County, Texas</b>
	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	80,465	39,340	34,136	24,688	41,544

	Block Group 2, Census Tract 1065.15, Tarrant County, Texas		Block Group 3, Census Tract 1065.15, Tarrant County, Texas		Block Group 1, Census Tract 1065.16, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	30,391	+/-4,458	32,063	+/-19,183	24,286

	Block Group 1, Census Tract 1065.16, Tarrant County, Texas	Block Group 2, Census Tract 1065.16, Tarrant County, Texas		Block Group 3, Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2015 inflation-adjusted dollars)	+/-13,210	16,637	+/-7,698	20,963	+/-3,895

	Block Group 1, Census Tract 1132.13, Tarrant County, Texas		Block Group 2, Census Tract 1132.13, Tarrant County, Texas		Block Group 3, Census Tract 1132.13, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	72,188	+/-15,786	58,000	+/-24,618	42,036

	<b>Block Group 3, Census Tract 1132.13, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1132.13, Tarrant County, Texas</b>		<b>Block Group 1, Census Tract 1133.01, Tarrant County, Texas</b>	
	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	+/-14,546	41,600	+/-15,770	48,333	+/-18,983

	Block Group 2, Census Tract 1133.01, Tarrant County, Texas		Block Group 3, Census Tract 1133.01, Tarrant County, Texas		Block Group 4, Census Tract 1133.01, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	60,682	+/-16,250	66,771	+/-6,167	58,750

	<b>Block Group 4, Census Tract 1133.01, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1133.02, Tarrant County, Texas</b>		<b>Block Group 2, Census Tract 1133.02, Tarrant County, Texas</b>	
	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	+/-23,704	33,431	+/-12,872	52,371	+/-18,836

	Block Group 3, Census Tract 1133.02, Tarrant County, Texas		Block Group 1, Census Tract 1134.03, Tarrant County, Texas		Block Group 2, Census Tract 1134.03, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	32,194	+/-6,663	77,938	+/-30,651	58,145

	<b>Block Group 2, Census Tract 1134.03, Tarrant County, Texas</b>	<b>Block Group 1, Census Tract 1134.05, Tarrant County, Texas</b>		<b>Block Group 3, Census Tract 1134.05, Tarrant County, Texas</b>	
	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	+/-8,156	25,495	+/-9,948	35,625	+/-10,814

	Block Group 4, Census Tract 1134.05, Tarrant County, Texas		Block Group 5, Census Tract 1134.05, Tarrant County, Texas	
	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2015 Inflation-adjusted dollars)	80,795	+/-37,858	71,827	+/-21,465

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



B19013

**MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)**

Universe: Households

2010-2014 American Community Survey 5-Year Estimates

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	<b>Block Group 2, Census Tract 1134.05, Tarrant County, Texas</b>	
	<b>Estimate</b>	<b>Margin of Error</b>
Median household income in the past 12 months (in 2014 Inflation-adjusted dollars)	44,079	+/-18,103

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Explanation of Symbols:

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2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
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5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



B17017

POVERTY STATUS IN THE PAST 12 MONTHS BY HOUSEHOLD TYPE BY AGE OF HOUSEHOLDER

Universe: Households

2011-2015 American Community Survey 5-Year Estimates

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	Census Tract 1012.01, Tarrant County, Texas		Census Tract 1065.10, Tarrant County, Texas		Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	629	+/-65	2,781	+/-100	2,972
Income in the past 12 months below poverty level:	141	+/-56	135	+/-63	546
Family households:	111	+/-54	60	+/-45	373
Married-couple family:	33	+/-27	0	+/-18	34
Householder under 25 years	0	+/-13	0	+/-18	0
Householder 25 to 44 years	20	+/-22	0	+/-18	34
Householder 45 to 64 years	13	+/-17	0	+/-18	0
Householder 65 years and over	0	+/-13	0	+/-18	0
Other family:	78	+/-46	60	+/-45	339
Male householder, no wife present:	54	+/-42	32	+/-36	92
Householder under 25 years	0	+/-13	0	+/-18	33
Householder 25 to 44 years	13	+/-20	16	+/-27	59
Householder 45 to 64 years	41	+/-37	16	+/-24	0
Householder 65 years and over	0	+/-13	0	+/-18	0
Female householder, no husband present:	24	+/-26	28	+/-33	247
Householder under 25 years	0	+/-13	0	+/-18	48
Householder 25 to 44 years	24	+/-26	28	+/-33	140
Householder 45 to 64 years	0	+/-13	0	+/-18	32
Householder 65 years and over	0	+/-13	0	+/-18	27
Nonfamily households:	30	+/-27	75	+/-54	173
Male householder:	9	+/-11	46	+/-43	61
Householder under 25 years	0	+/-13	26	+/-29	0
Householder 25 to 44 years	4	+/-7	0	+/-18	15
Householder 45 to 64 years	5	+/-7	20	+/-32	46
Householder 65 years and over	0	+/-13	0	+/-18	0
Female householder:	21	+/-24	29	+/-32	112
Householder under 25 years	0	+/-13	15	+/-23	0
Householder 25 to 44 years	0	+/-13	0	+/-18	0
Householder 45 to 64 years	15	+/-23	0	+/-18	112
Householder 65 years and over	6	+/-9	14	+/-22	0

	Census Tract 1012.01, Tarrant County, Texas		Census Tract 1065.10, Tarrant County, Texas		Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Income in the past 12 months at or above poverty level:	488	+/-61	2,646	+/-117	2,426
Family households:	377	+/-62	2,069	+/-166	1,584
Married-couple family:	261	+/-50	1,624	+/-179	820
Householder under 25 years	0	+/-13	14	+/-22	46
Householder 25 to 44 years	61	+/-33	839	+/-138	331
Householder 45 to 64 years	147	+/-43	665	+/-126	376
Householder 65 years and over	53	+/-27	106	+/-55	67
Other family:	116	+/-54	445	+/-160	764
Male householder, no wife present:	28	+/-25	139	+/-86	223
Householder under 25 years	0	+/-13	0	+/-18	58
Householder 25 to 44 years	19	+/-21	32	+/-34	83
Householder 45 to 64 years	9	+/-14	107	+/-84	71
Householder 65 years and over	0	+/-13	0	+/-18	11
Female householder, no husband present:	88	+/-47	306	+/-133	541
Householder under 25 years	4	+/-6	0	+/-18	0
Householder 25 to 44 years	6	+/-9	94	+/-59	324
Householder 45 to 64 years	66	+/-45	197	+/-113	175
Householder 65 years and over	12	+/-12	15	+/-26	42
Nonfamily households:	111	+/-49	577	+/-140	842
Male householder:	93	+/-45	293	+/-120	380
Householder under 25 years	14	+/-22	14	+/-22	39
Householder 25 to 44 years	8	+/-12	145	+/-91	198
Householder 45 to 64 years	35	+/-28	46	+/-41	61
Householder 65 years and over	36	+/-23	88	+/-75	82
Female householder:	18	+/-16	284	+/-91	462
Householder under 25 years	0	+/-13	18	+/-30	0
Householder 25 to 44 years	0	+/-13	87	+/-59	158
Householder 45 to 64 years	6	+/-9	163	+/-68	196
Householder 65 years and over	12	+/-13	16	+/-26	108

	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas		Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-154	1,644	+/-127	2,180	+/-190
Income in the past 12 months below poverty level:	+/-206	281	+/-90	779	+/-169
Family households:	+/-184	177	+/-89	391	+/-132
Married-couple family:	+/-41	36	+/-41	72	+/-57
Householder under 25 years	+/-18	0	+/-13	37	+/-36
Householder 25 to 44 years	+/-41	36	+/-41	35	+/-44
Householder 45 to 64 years	+/-18	0	+/-13	0	+/-13
Householder 65 years and over	+/-18	0	+/-13	0	+/-13
Other family:	+/-173	141	+/-87	319	+/-126
Male householder, no wife present:	+/-99	0	+/-13	54	+/-66
Householder under 25 years	+/-52	0	+/-13	30	+/-49
Householder 25 to 44 years	+/-79	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-18	0	+/-13	24	+/-42
Householder 65 years and over	+/-18	0	+/-13	0	+/-13
Female householder, no husband present:	+/-156	141	+/-87	265	+/-113
Householder under 25 years	+/-61	95	+/-74	62	+/-59
Householder 25 to 44 years	+/-126	46	+/-44	152	+/-102
Householder 45 to 64 years	+/-43	0	+/-13	35	+/-42
Householder 65 years and over	+/-42	0	+/-13	16	+/-25
Nonfamily households:	+/-94	104	+/-58	388	+/-135
Male householder:	+/-64	66	+/-51	199	+/-102
Householder under 25 years	+/-18	0	+/-13	23	+/-36
Householder 25 to 44 years	+/-23	8	+/-14	62	+/-70
Householder 45 to 64 years	+/-60	50	+/-49	85	+/-60
Householder 65 years and over	+/-18	8	+/-12	29	+/-47
Female householder:	+/-80	38	+/-26	189	+/-97
Householder under 25 years	+/-18	7	+/-11	48	+/-54
Householder 25 to 44 years	+/-18	0	+/-13	29	+/-45
Householder 45 to 64 years	+/-80	31	+/-23	96	+/-77
Householder 65 years and over	+/-18	0	+/-13	16	+/-31
Income in the past 12 months at or above poverty level:	+/-241	1,363	+/-122	1,401	+/-200
Family households:	+/-216	754	+/-119	607	+/-161
Married-couple family:	+/-184	413	+/-87	194	+/-86
Householder under 25 years	+/-36	15	+/-17	10	+/-16
Householder 25 to 44 years	+/-152	138	+/-72	116	+/-78
Householder 45 to 64 years	+/-115	166	+/-60	53	+/-50
Householder 65 years and over	+/-39	94	+/-37	15	+/-32
Other family:	+/-196	341	+/-96	413	+/-158
Male householder, no wife present:	+/-126	33	+/-29	105	+/-93
Householder under 25 years	+/-68	0	+/-13	44	+/-61
Householder 25 to 44 years	+/-96	0	+/-13	30	+/-48
Householder 45 to 64 years	+/-61	33	+/-29	31	+/-51
Householder 65 years and over	+/-18	0	+/-13	0	+/-13
Female householder, no husband present:	+/-186	308	+/-90	308	+/-127
Householder under 25 years	+/-18	10	+/-16	21	+/-29
Householder 25 to 44 years	+/-153	188	+/-84	250	+/-123
Householder 45 to 64 years	+/-118	96	+/-54	37	+/-33
Householder 65 years and over	+/-57	14	+/-17	0	+/-13
Nonfamily households:	+/-204	609	+/-142	794	+/-177
Male householder:	+/-154	317	+/-116	409	+/-163
Householder under 25 years	+/-62	70	+/-62	94	+/-86
Householder 25 to 44 years	+/-126	91	+/-64	167	+/-105
Householder 45 to 64 years	+/-44	95	+/-62	133	+/-80
Householder 65 years and over	+/-68	61	+/-42	15	+/-25
Female householder:	+/-143	292	+/-91	385	+/-151
Householder under 25 years	+/-18	9	+/-17	33	+/-38
Householder 25 to 44 years	+/-96	75	+/-66	225	+/-124

	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas		Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 45 to 64 years	+/-106	141	+/-64	105	+/-70
Householder 65 years and over	+/-56	67	+/-43	22	+/-24

	Census Tract 1132.13, Tarrant County, Texas		Census Tract 1133.01, Tarrant County, Texas		Census Tract 1133.02, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	1,323	+/-97	1,659	+/-120	1,635
Income in the past 12 months below poverty level:	180	+/-88	226	+/-94	241
Family households:	86	+/-62	81	+/-68	185
Married-couple family:	0	+/-13	16	+/-19	13
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	13
Householder 45 to 64 years	0	+/-13	16	+/-19	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	86	+/-62	65	+/-65	172
Male householder, no wife present:	0	+/-13	0	+/-13	22
Householder under 25 years	0	+/-13	0	+/-13	3
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	19
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	86	+/-62	65	+/-65	150
Householder under 25 years	21	+/-33	0	+/-13	20
Householder 25 to 44 years	47	+/-47	39	+/-50	92
Householder 45 to 64 years	12	+/-18	0	+/-13	38
Householder 65 years and over	6	+/-9	26	+/-35	0
Nonfamily households:	94	+/-57	145	+/-77	56
Male householder:	25	+/-19	18	+/-27	16
Householder under 25 years	9	+/-15	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	7
Householder 45 to 64 years	7	+/-11	18	+/-27	0
Householder 65 years and over	9	+/-14	0	+/-13	9
Female householder:	69	+/-54	127	+/-72	40
Householder under 25 years	0	+/-13	27	+/-38	0
Householder 25 to 44 years	30	+/-35	23	+/-35	10
Householder 45 to 64 years	0	+/-13	12	+/-19	10
Householder 65 years and over	39	+/-46	65	+/-49	20
Income in the past 12 months at or above poverty level:	1,143	+/-131	1,433	+/-145	1,394
Family households:	719	+/-122	994	+/-107	904
Married-couple family:	543	+/-124	756	+/-119	625
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	184	+/-90	335	+/-98	195
Householder 45 to 64 years	225	+/-75	280	+/-72	258
Householder 65 years and over	134	+/-39	141	+/-54	172
Other family:	176	+/-69	238	+/-100	279
Male householder, no wife present:	85	+/-60	98	+/-72	134
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	46	+/-45	74	+/-64	49
Householder 45 to 64 years	7	+/-13	15	+/-24	74
Householder 65 years and over	32	+/-42	9	+/-16	11
Female householder, no husband present:	91	+/-51	140	+/-64	145
Householder under 25 years	0	+/-13	8	+/-13	49
Householder 25 to 44 years	29	+/-33	42	+/-31	43
Householder 45 to 64 years	30	+/-27	56	+/-47	36
Householder 65 years and over	32	+/-33	34	+/-32	17
Nonfamily households:	424	+/-118	439	+/-100	490
Male householder:	186	+/-89	229	+/-80	219
Householder under 25 years	0	+/-13	0	+/-13	28
Householder 25 to 44 years	22	+/-21	26	+/-31	55
Householder 45 to 64 years	128	+/-82	60	+/-39	81
Householder 65 years and over	36	+/-22	143	+/-67	55
Female householder:	238	+/-93	210	+/-79	271
Householder under 25 years	26	+/-42	0	+/-13	5
Householder 25 to 44 years	5	+/-10	6	+/-9	53

	Census Tract 1132.13, Tarrant County, Texas		Census Tract 1133.01, Tarrant County, Texas		Census Tract 1133.02, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 45 to 64 years	98	+/-74	62	+/-42	128
Householder 65 years and over	109	+/-43	142	+/-67	85

	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas		Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-101	939	+/-71	2,503	+/-192
Income in the past 12 months below poverty level:	+/-88	46	+/-32	342	+/-139
Family households:	+/-84	20	+/-20	147	+/-96
Married-couple family:	+/-17	0	+/-13	11	+/-22
Householder under 25 years	+/-13	0	+/-13	0	+/-18
Householder 25 to 44 years	+/-17	0	+/-13	11	+/-22
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-18
Householder 65 years and over	+/-13	0	+/-13	0	+/-18
Other family:	+/-83	20	+/-20	136	+/-93
Male householder, no wife present:	+/-31	20	+/-20	0	+/-18
Householder under 25 years	+/-8	0	+/-13	0	+/-18
Householder 25 to 44 years	+/-13	14	+/-23	0	+/-18
Householder 45 to 64 years	+/-29	0	+/-13	0	+/-18
Householder 65 years and over	+/-13	6	+/-9	0	+/-18
Female householder, no husband present:	+/-73	0	+/-13	136	+/-93
Householder under 25 years	+/-33	0	+/-13	36	+/-58
Householder 25 to 44 years	+/-68	0	+/-13	83	+/-74
Householder 45 to 64 years	+/-38	0	+/-13	17	+/-28
Householder 65 years and over	+/-13	0	+/-13	0	+/-18
Nonfamily households:	+/-37	26	+/-24	195	+/-123
Male householder:	+/-18	19	+/-23	61	+/-79
Householder under 25 years	+/-13	10	+/-19	0	+/-18
Householder 25 to 44 years	+/-11	0	+/-13	0	+/-18
Householder 45 to 64 years	+/-13	9	+/-13	47	+/-76
Householder 65 years and over	+/-14	0	+/-13	14	+/-23
Female householder:	+/-33	7	+/-11	134	+/-100
Householder under 25 years	+/-13	0	+/-13	46	+/-76
Householder 25 to 44 years	+/-17	0	+/-13	0	+/-18
Householder 45 to 64 years	+/-18	0	+/-13	46	+/-56
Householder 65 years and over	+/-21	7	+/-11	42	+/-42
Income in the past 12 months at or above poverty level:	+/-132	893	+/-76	2,161	+/-208
Family households:	+/-126	636	+/-76	1,242	+/-169
Married-couple family:	+/-110	459	+/-77	763	+/-174
Householder under 25 years	+/-13	13	+/-19	0	+/-18
Householder 25 to 44 years	+/-69	114	+/-46	285	+/-106
Householder 45 to 64 years	+/-71	181	+/-47	340	+/-111
Householder 65 years and over	+/-53	151	+/-37	138	+/-77
Other family:	+/-109	177	+/-61	479	+/-141
Male householder, no wife present:	+/-77	30	+/-32	47	+/-45
Householder under 25 years	+/-13	0	+/-13	13	+/-20
Householder 25 to 44 years	+/-50	10	+/-12	34	+/-39
Householder 45 to 64 years	+/-59	0	+/-13	0	+/-18
Householder 65 years and over	+/-18	20	+/-30	0	+/-18
Female householder, no husband present:	+/-79	147	+/-64	432	+/-134
Householder under 25 years	+/-55	0	+/-13	12	+/-24
Householder 25 to 44 years	+/-37	18	+/-20	100	+/-95
Householder 45 to 64 years	+/-32	80	+/-43	239	+/-116
Householder 65 years and over	+/-20	49	+/-32	81	+/-74
Nonfamily households:	+/-117	257	+/-83	919	+/-195
Male householder:	+/-81	87	+/-55	425	+/-160
Householder under 25 years	+/-40	0	+/-13	42	+/-66
Householder 25 to 44 years	+/-54	35	+/-37	150	+/-103
Householder 45 to 64 years	+/-49	28	+/-24	118	+/-106
Householder 65 years and over	+/-41	24	+/-26	115	+/-62
Female householder:	+/-92	170	+/-65	494	+/-138
Householder under 25 years	+/-10	0	+/-13	32	+/-39
Householder 25 to 44 years	+/-51	19	+/-16	35	+/-34

	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas		Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 45 to 64 years	+/-66	23	+/-23	161	+/-100
Householder 65 years and over	+/-56	128	+/-60	266	+/-88

	Block Group 1, Census Tract 1012.01, Tarrant County, Texas		Block Group 2, Census Tract 1012.01, Tarrant County, Texas		Block Group 1, Census Tract 1065.10, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	196	+/-54	433	+/-65	765
Income in the past 12 months below poverty level:	24	+/-23	117	+/-51	28
Family households:	20	+/-22	91	+/-48	28
Married-couple family:	20	+/-22	13	+/-17	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	20	+/-22	0	+/-13	0
Householder 45 to 64 years	0	+/-13	13	+/-17	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	0	+/-13	78	+/-46	28
Male householder, no wife present:	0	+/-13	54	+/-42	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	13	+/-20	0
Householder 45 to 64 years	0	+/-13	41	+/-37	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	0	+/-13	24	+/-26	28
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	24	+/-26	28
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	4	+/-7	26	+/-26	0
Male householder:	4	+/-7	5	+/-7	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	4	+/-7	0	+/-13	0
Householder 45 to 64 years	0	+/-13	5	+/-7	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder:	0	+/-13	21	+/-24	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	15	+/-23	0
Householder 65 years and over	0	+/-13	6	+/-9	0
Income in the past 12 months at or above poverty level:	172	+/-47	316	+/-60	737
Family households:	140	+/-46	237	+/-60	579
Married-couple family:	126	+/-45	135	+/-45	492
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	18	+/-16	43	+/-28	265
Householder 45 to 64 years	63	+/-33	84	+/-44	175
Householder 65 years and over	45	+/-28	8	+/-11	52
Other family:	14	+/-17	102	+/-50	87
Male householder, no wife present:	0	+/-13	28	+/-25	18
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	19	+/-21	0
Householder 45 to 64 years	0	+/-13	9	+/-14	18
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	14	+/-17	74	+/-45	69
Householder under 25 years	0	+/-13	4	+/-6	0
Householder 25 to 44 years	0	+/-13	6	+/-9	24
Householder 45 to 64 years	14	+/-17	52	+/-41	45
Householder 65 years and over	0	+/-13	12	+/-12	0
Nonfamily households:	32	+/-19	79	+/-44	158
Male householder:	26	+/-16	67	+/-43	71
Householder under 25 years	0	+/-13	14	+/-22	14
Householder 25 to 44 years	0	+/-13	8	+/-12	15
Householder 45 to 64 years	20	+/-14	15	+/-25	15
Householder 65 years and over	6	+/-8	30	+/-22	27
Female householder:	6	+/-9	12	+/-13	87
Householder under 25 years	0	+/-13	0	+/-13	18

	Block Group 1, Census Tract 1012.01, Tarrant County, Texas		Block Group 2, Census Tract 1012.01, Tarrant County, Texas		Block Group 1, Census Tract 1065.10, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	0	+/-13	0	+/-13	16
Householder 45 to 64 years	0	+/-13	6	+/-9	53
Householder 65 years and over	6	+/-9	6	+/-9	0

	Block Group 1, Census Tract 1065.10, Tarrant County, Texas	Block Group 2, Census Tract 1065.10, Tarrant County, Texas		Block Group 3, Census Tract 1065.10, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-121	549	+/-79	1,467	+/-127
Income in the past 12 months below poverty level:	+/-33	14	+/-22	93	+/-57
Family households:	+/-33	0	+/-13	32	+/-36
Married-couple family:	+/-13	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-33	0	+/-13	32	+/-36
Male householder, no wife present:	+/-13	0	+/-13	32	+/-36
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	16	+/-27
Householder 45 to 64 years	+/-13	0	+/-13	16	+/-24
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-33	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-33	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Nonfamily households:	+/-13	14	+/-22	61	+/-48
Male householder:	+/-13	0	+/-13	46	+/-43
Householder under 25 years	+/-13	0	+/-13	26	+/-29
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	20	+/-32
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder:	+/-13	14	+/-22	15	+/-23
Householder under 25 years	+/-13	0	+/-13	15	+/-23
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	14	+/-22	0	+/-13
Income in the past 12 months at or above poverty level:	+/-119	535	+/-82	1,374	+/-139
Family households:	+/-130	437	+/-92	1,053	+/-173
Married-couple family:	+/-126	373	+/-97	759	+/-152
Householder under 25 years	+/-13	0	+/-13	14	+/-22
Householder 25 to 44 years	+/-119	121	+/-68	453	+/-134
Householder 45 to 64 years	+/-81	239	+/-101	251	+/-88
Householder 65 years and over	+/-40	13	+/-20	41	+/-34
Other family:	+/-58	64	+/-50	294	+/-136
Male householder, no wife present:	+/-27	17	+/-26	104	+/-79
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	32	+/-34
Householder 45 to 64 years	+/-27	17	+/-26	72	+/-76
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-50	47	+/-44	190	+/-103
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-30	0	+/-13	70	+/-55
Householder 45 to 64 years	+/-40	32	+/-35	120	+/-87
Householder 65 years and over	+/-13	15	+/-26	0	+/-13
Nonfamily households:	+/-72	98	+/-52	321	+/-131
Male householder:	+/-52	32	+/-36	190	+/-102
Householder under 25 years	+/-22	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-23	32	+/-36	98	+/-83
Householder 45 to 64 years	+/-23	0	+/-13	31	+/-34
Householder 65 years and over	+/-33	0	+/-13	61	+/-70
Female householder:	+/-52	66	+/-44	131	+/-74
Householder under 25 years	+/-30	0	+/-13	0	+/-13

	Block Group 1, Census Tract 1065.10, Tarrant County, Texas	Block Group 2, Census Tract 1065.10, Tarrant County, Texas		Block Group 3, Census Tract 1065.10, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 25 to 44 years	+/-25	13	+/-22	58	+/-44
Householder 45 to 64 years	+/-38	53	+/-43	57	+/-59
Householder 65 years and over	+/-13	0	+/-13	16	+/-26

	Block Group 1, Census Tract 1065.11, Tarrant County, Texas		Block Group 2, Census Tract 1065.11, Tarrant County, Texas		Block Group 3, Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	951	+/-160	795	+/-177	598
Income in the past 12 months below poverty level:	17	+/-29	137	+/-119	204
Family households:	17	+/-29	102	+/-105	145
Married-couple family:	17	+/-29	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	17	+/-29	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	0	+/-13	102	+/-105	145
Male householder, no wife present:	0	+/-13	0	+/-13	59
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	59
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	0	+/-13	102	+/-105	86
Householder under 25 years	0	+/-13	15	+/-24	33
Householder 25 to 44 years	0	+/-13	87	+/-107	53
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	0	+/-13	35	+/-38	59
Male householder:	0	+/-13	0	+/-13	46
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	46
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder:	0	+/-13	35	+/-38	13
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	35	+/-38	13
Householder 65 years and over	0	+/-13	0	+/-13	0
Income in the past 12 months at or above poverty level:	934	+/-164	658	+/-189	394
Family households:	664	+/-166	523	+/-189	178
Married-couple family:	382	+/-100	328	+/-164	23
Householder under 25 years	26	+/-29	0	+/-13	0
Householder 25 to 44 years	117	+/-66	203	+/-144	11
Householder 45 to 64 years	206	+/-86	125	+/-85	0
Householder 65 years and over	33	+/-25	0	+/-13	12
Other family:	282	+/-152	195	+/-124	155
Male householder, no wife present:	50	+/-66	53	+/-65	66
Householder under 25 years	0	+/-13	36	+/-59	22
Householder 25 to 44 years	39	+/-64	0	+/-13	44
Householder 45 to 64 years	0	+/-13	17	+/-28	0
Householder 65 years and over	11	+/-18	0	+/-13	0
Female householder, no husband present:	232	+/-134	142	+/-108	89
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	129	+/-112	108	+/-93	36
Householder 45 to 64 years	103	+/-82	0	+/-13	53
Householder 65 years and over	0	+/-13	34	+/-55	0
Nonfamily households:	270	+/-119	135	+/-97	216
Male householder:	88	+/-68	113	+/-89	128
Householder under 25 years	0	+/-13	0	+/-13	39
Householder 25 to 44 years	53	+/-62	90	+/-86	43
Householder 45 to 64 years	24	+/-27	13	+/-20	10
Householder 65 years and over	11	+/-20	10	+/-16	36
Female householder:	182	+/-107	22	+/-27	88
Householder under 25 years	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1065.11, Tarrant County, Texas		Block Group 2, Census Tract 1065.11, Tarrant County, Texas		Block Group 3, Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	59	+/-61	0	+/-13	51
Householder 45 to 64 years	89	+/-77	11	+/-22	37
Householder 65 years and over	34	+/-32	11	+/-17	0

	Block Group 3, Census Tract 1065.11, Tarrant County, Texas	Block Group 4, Census Tract 1065.11, Tarrant County, Texas		Block Group 1, Census Tract 1065.15, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-162	628	+/-143	769	+/-103
Income in the past 12 months below poverty level:	+/-121	188	+/-119	179	+/-65
Family households:	+/-109	109	+/-95	90	+/-69
Married-couple family:	+/-13	17	+/-28	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	17	+/-28	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-109	92	+/-86	90	+/-69
Male householder, no wife present:	+/-79	33	+/-52	0	+/-13
Householder under 25 years	+/-13	33	+/-52	0	+/-13
Householder 25 to 44 years	+/-79	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-92	59	+/-62	90	+/-69
Householder under 25 years	+/-57	0	+/-13	71	+/-64
Householder 25 to 44 years	+/-68	0	+/-13	19	+/-30
Householder 45 to 64 years	+/-13	32	+/-43	0	+/-13
Householder 65 years and over	+/-13	27	+/-42	0	+/-13
Nonfamily households:	+/-53	79	+/-71	89	+/-56
Male householder:	+/-60	15	+/-23	51	+/-48
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	15	+/-23	8	+/-14
Householder 45 to 64 years	+/-60	0	+/-13	43	+/-47
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder:	+/-22	64	+/-68	38	+/-26
Householder under 25 years	+/-13	0	+/-13	7	+/-11
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-22	64	+/-68	31	+/-23
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Income in the past 12 months at or above poverty level:	+/-167	440	+/-104	590	+/-97
Family households:	+/-97	219	+/-94	389	+/-91
Married-couple family:	+/-18	87	+/-53	239	+/-61
Householder under 25 years	+/-13	20	+/-23	0	+/-13
Householder 25 to 44 years	+/-19	0	+/-13	58	+/-38
Householder 45 to 64 years	+/-13	45	+/-43	112	+/-50
Householder 65 years and over	+/-18	22	+/-24	69	+/-35
Other family:	+/-96	132	+/-79	150	+/-70
Male householder, no wife present:	+/-82	54	+/-55	6	+/-10
Householder under 25 years	+/-37	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-71	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	54	+/-55	6	+/-10
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-94	78	+/-55	144	+/-70
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-59	51	+/-49	61	+/-54
Householder 45 to 64 years	+/-80	19	+/-28	76	+/-51
Householder 65 years and over	+/-13	8	+/-15	7	+/-11
Nonfamily households:	+/-136	221	+/-82	201	+/-82
Male householder:	+/-116	51	+/-36	122	+/-73
Householder under 25 years	+/-62	0	+/-13	47	+/-52
Householder 25 to 44 years	+/-72	12	+/-20	22	+/-23
Householder 45 to 64 years	+/-18	14	+/-21	24	+/-25
Householder 65 years and over	+/-60	25	+/-29	29	+/-35
Female householder:	+/-90	170	+/-77	79	+/-43
Householder under 25 years	+/-13	0	+/-13	0	+/-13

	<b>Block Group 3, Census Tract 1065.11, Tarrant County, Texas</b>	<b>Block Group 4, Census Tract 1065.11, Tarrant County, Texas</b>		<b>Block Group 1, Census Tract 1065.15, Tarrant County, Texas</b>	
	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>	<b>Estimate</b>	<b>Margin of Error</b>
Householder 25 to 44 years	+/-65	48	+/-43	0	+/-13
Householder 45 to 64 years	+/-60	59	+/-50	37	+/-27
Householder 65 years and over	+/-13	63	+/-40	42	+/-30

	Block Group 2, Census Tract 1065.15, Tarrant County, Texas		Block Group 3, Census Tract 1065.15, Tarrant County, Texas		Block Group 1, Census Tract 1065.16, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	602	+/-105	273	+/-84	836
Income in the past 12 months below poverty level:	69	+/-47	33	+/-42	266
Family households:	54	+/-44	33	+/-42	174
Married-couple family:	27	+/-38	9	+/-15	16
Householder under 25 years	0	+/-13	0	+/-13	16
Householder 25 to 44 years	27	+/-38	9	+/-15	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	27	+/-33	24	+/-39	158
Male householder, no wife present:	0	+/-13	0	+/-13	30
Householder under 25 years	0	+/-13	0	+/-13	30
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	27	+/-33	24	+/-39	128
Householder under 25 years	0	+/-13	24	+/-39	38
Householder 25 to 44 years	27	+/-33	0	+/-13	78
Householder 45 to 64 years	0	+/-13	0	+/-13	12
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	15	+/-16	0	+/-13	92
Male householder:	15	+/-16	0	+/-13	17
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	7	+/-10	0	+/-13	17
Householder 65 years and over	8	+/-12	0	+/-13	0
Female householder:	0	+/-13	0	+/-13	75
Householder under 25 years	0	+/-13	0	+/-13	27
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	48
Householder 65 years and over	0	+/-13	0	+/-13	0
Income in the past 12 months at or above poverty level:	533	+/-112	240	+/-72	570
Family households:	231	+/-88	134	+/-63	300
Married-couple family:	98	+/-46	76	+/-52	117
Householder under 25 years	0	+/-13	15	+/-17	10
Householder 25 to 44 years	45	+/-40	35	+/-46	83
Householder 45 to 64 years	40	+/-31	14	+/-15	18
Householder 65 years and over	13	+/-10	12	+/-9	6
Other family:	133	+/-76	58	+/-47	183
Male householder, no wife present:	8	+/-12	19	+/-27	75
Householder under 25 years	0	+/-13	0	+/-13	44
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	8	+/-12	19	+/-27	31
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	125	+/-76	39	+/-40	108
Householder under 25 years	10	+/-16	0	+/-13	21
Householder 25 to 44 years	88	+/-73	39	+/-40	62
Householder 45 to 64 years	20	+/-23	0	+/-13	25
Householder 65 years and over	7	+/-13	0	+/-13	0
Nonfamily households:	302	+/-111	106	+/-53	270
Male householder:	144	+/-84	51	+/-45	122
Householder under 25 years	23	+/-36	0	+/-13	62
Householder 25 to 44 years	69	+/-65	0	+/-13	0
Householder 45 to 64 years	20	+/-23	51	+/-45	60
Householder 65 years and over	32	+/-32	0	+/-13	0
Female householder:	158	+/-76	55	+/-34	148
Householder under 25 years	0	+/-13	9	+/-17	0

	Block Group 2, Census Tract 1065.15, Tarrant County, Texas		Block Group 3, Census Tract 1065.15, Tarrant County, Texas		Block Group 1, Census Tract 1065.16, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	75	+/-66	0	+/-13	139
Householder 45 to 64 years	65	+/-52	39	+/-28	0
Householder 65 years and over	18	+/-29	7	+/-10	9

	Block Group 1, Census Tract 1065.16, Tarrant County, Texas	Block Group 2, Census Tract 1065.16, Tarrant County, Texas		Block Group 3, Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-186	335	+/-142	1,009	+/-160
Income in the past 12 months below poverty level:	+/-117	150	+/-81	363	+/-128
Family households:	+/-98	54	+/-60	163	+/-83
Married-couple family:	+/-27	0	+/-13	56	+/-49
Householder under 25 years	+/-27	0	+/-13	21	+/-24
Householder 25 to 44 years	+/-13	0	+/-13	35	+/-44
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-93	54	+/-60	107	+/-69
Male householder, no wife present:	+/-49	24	+/-42	0	+/-13
Householder under 25 years	+/-49	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	24	+/-42	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-81	30	+/-46	107	+/-69
Householder under 25 years	+/-44	0	+/-13	24	+/-39
Householder 25 to 44 years	+/-69	30	+/-46	44	+/-51
Householder 45 to 64 years	+/-20	0	+/-13	23	+/-38
Householder 65 years and over	+/-13	0	+/-13	16	+/-25
Nonfamily households:	+/-77	96	+/-66	200	+/-109
Male householder:	+/-29	58	+/-54	124	+/-85
Householder under 25 years	+/-13	0	+/-13	23	+/-36
Householder 25 to 44 years	+/-13	29	+/-46	33	+/-52
Householder 45 to 64 years	+/-29	29	+/-31	39	+/-57
Householder 65 years and over	+/-13	0	+/-13	29	+/-47
Female householder:	+/-69	38	+/-47	76	+/-69
Householder under 25 years	+/-43	0	+/-13	21	+/-34
Householder 25 to 44 years	+/-13	0	+/-13	29	+/-45
Householder 45 to 64 years	+/-56	22	+/-35	26	+/-42
Householder 65 years and over	+/-13	16	+/-31	0	+/-13
Income in the past 12 months at or above poverty level:	+/-159	185	+/-115	646	+/-159
Family households:	+/-109	46	+/-72	261	+/-130
Married-couple family:	+/-63	9	+/-23	68	+/-65
Householder under 25 years	+/-16	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-60	0	+/-13	33	+/-53
Householder 45 to 64 years	+/-33	0	+/-13	35	+/-36
Householder 65 years and over	+/-15	9	+/-23	0	+/-13
Other family:	+/-98	37	+/-60	193	+/-113
Male householder, no wife present:	+/-80	0	+/-13	30	+/-48
Householder under 25 years	+/-61	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	30	+/-48
Householder 45 to 64 years	+/-51	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-66	37	+/-60	163	+/-103
Householder under 25 years	+/-29	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-60	37	+/-60	151	+/-101
Householder 45 to 64 years	+/-26	0	+/-13	12	+/-20
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Nonfamily households:	+/-111	139	+/-87	385	+/-120
Male householder:	+/-88	58	+/-68	229	+/-101
Householder under 25 years	+/-70	0	+/-13	32	+/-35
Householder 25 to 44 years	+/-13	29	+/-47	138	+/-94
Householder 45 to 64 years	+/-58	29	+/-48	44	+/-45
Householder 65 years and over	+/-13	0	+/-13	15	+/-25
Female householder:	+/-103	81	+/-59	156	+/-86
Householder under 25 years	+/-13	19	+/-31	14	+/-22

	Block Group 1, Census Tract 1065.16, Tarrant County, Texas	Block Group 2, Census Tract 1065.16, Tarrant County, Texas		Block Group 3, Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 25 to 44 years	+/-99	35	+/-57	51	+/-57
Householder 45 to 64 years	+/-13	14	+/-23	91	+/-67
Householder 65 years and over	+/-15	13	+/-20	0	+/-13

	Block Group 1, Census Tract 1132.13, Tarrant County, Texas		Block Group 2, Census Tract 1132.13, Tarrant County, Texas		Block Group 3, Census Tract 1132.13, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	328	+/-65	254	+/-70	369
Income in the past 12 months below poverty level:	32	+/-33	8	+/-13	54
Family households:	23	+/-30	0	+/-13	12
Married-couple family:	0	+/-13	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	23	+/-30	0	+/-13	12
Male householder, no wife present:	0	+/-13	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	23	+/-30	0	+/-13	12
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	23	+/-30	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	12
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	9	+/-14	8	+/-13	42
Male householder:	9	+/-14	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	9	+/-14	0	+/-13	0
Female householder:	0	+/-13	8	+/-13	42
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	11
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	8	+/-13	31
Income in the past 12 months at or above poverty level:	296	+/-62	246	+/-69	315
Family households:	232	+/-62	182	+/-68	163
Married-couple family:	213	+/-62	77	+/-41	137
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	56	+/-41	8	+/-13	50
Householder 45 to 64 years	94	+/-58	46	+/-36	63
Householder 65 years and over	63	+/-31	23	+/-20	24
Other family:	19	+/-19	105	+/-66	26
Male householder, no wife present:	9	+/-14	69	+/-58	7
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	9	+/-14	37	+/-44	0
Householder 45 to 64 years	0	+/-13	7	+/-13	0
Householder 65 years and over	0	+/-13	25	+/-41	7
Female householder, no husband present:	10	+/-15	36	+/-40	19
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	10	+/-15	19	+/-31	0
Householder 45 to 64 years	0	+/-13	0	+/-13	8
Householder 65 years and over	0	+/-13	17	+/-27	11
Nonfamily households:	64	+/-31	64	+/-37	152
Male householder:	33	+/-25	24	+/-23	83
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	9	+/-13	0	+/-13	0
Householder 45 to 64 years	15	+/-16	16	+/-20	83
Householder 65 years and over	9	+/-13	8	+/-12	0
Female householder:	31	+/-29	40	+/-31	69
Householder under 25 years	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1132.13, Tarrant County, Texas		Block Group 2, Census Tract 1132.13, Tarrant County, Texas		Block Group 3, Census Tract 1132.13, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	25	+/-26	24	+/-26	12
Householder 65 years and over	6	+/-10	16	+/-17	57

	Block Group 3, Census Tract 1132.13, Tarrant County, Texas	Block Group 4, Census Tract 1132.13, Tarrant County, Texas		Block Group 1, Census Tract 1133.01, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-83	372	+/-87	448	+/-94
Income in the past 12 months below poverty level:	+/-49	86	+/-58	80	+/-68
Family households:	+/-18	51	+/-48	44	+/-51
Married-couple family:	+/-13	0	+/-13	5	+/-9
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	5	+/-9
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-18	51	+/-48	39	+/-50
Male householder, no wife present:	+/-13	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-18	51	+/-48	39	+/-50
Householder under 25 years	+/-13	21	+/-33	0	+/-13
Householder 25 to 44 years	+/-13	24	+/-37	39	+/-50
Householder 45 to 64 years	+/-18	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	6	+/-9	0	+/-13
Nonfamily households:	+/-44	35	+/-36	36	+/-44
Male householder:	+/-13	16	+/-19	0	+/-13
Householder under 25 years	+/-13	9	+/-15	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	7	+/-11	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder:	+/-44	19	+/-30	36	+/-44
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-17	19	+/-30	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	12	+/-19
Householder 65 years and over	+/-45	0	+/-13	24	+/-39
Income in the past 12 months at or above poverty level:	+/-89	286	+/-95	368	+/-98
Family households:	+/-63	142	+/-67	232	+/-72
Married-couple family:	+/-59	116	+/-66	190	+/-72
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-49	70	+/-60	47	+/-40
Householder 45 to 64 years	+/-38	22	+/-28	118	+/-63
Householder 65 years and over	+/-18	24	+/-20	25	+/-28
Other family:	+/-22	26	+/-26	42	+/-37
Male householder, no wife present:	+/-13	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-18	26	+/-26	42	+/-37
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	22	+/-24	29	+/-31
Householder 65 years and over	+/-13	4	+/-10	13	+/-22
Nonfamily households:	+/-78	144	+/-76	136	+/-68
Male householder:	+/-73	46	+/-32	85	+/-60
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	13	+/-18	20	+/-28
Householder 45 to 64 years	+/-73	14	+/-13	0	+/-13
Householder 65 years and over	+/-13	19	+/-20	65	+/-54
Female householder:	+/-38	98	+/-69	51	+/-43
Householder under 25 years	+/-13	26	+/-42	0	+/-13

	Block Group 3, Census Tract 1132.13, Tarrant County, Texas	Block Group 4, Census Tract 1132.13, Tarrant County, Texas		Block Group 1, Census Tract 1133.01, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 25 to 44 years	+/-13	5	+/-10	0	+/-13
Householder 45 to 64 years	+/-20	37	+/-57	0	+/-13
Householder 65 years and over	+/-32	30	+/-24	51	+/-43

	Block Group 2, Census Tract 1133.01, Tarrant County, Texas		Block Group 3, Census Tract 1133.01, Tarrant County, Texas		Block Group 4, Census Tract 1133.01, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	300	+/-61	457	+/-93	454
Income in the past 12 months below poverty level:	30	+/-27	11	+/-17	105
Family households:	11	+/-16	0	+/-13	26
Married-couple family:	11	+/-16	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	11	+/-16	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	0	+/-13	0	+/-13	26
Male householder, no wife present:	0	+/-13	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	0	+/-13	0	+/-13	26
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	26
Nonfamily households:	19	+/-21	11	+/-17	79
Male householder:	0	+/-13	0	+/-13	18
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	18
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder:	19	+/-21	11	+/-17	61
Householder under 25 years	0	+/-13	0	+/-13	27
Householder 25 to 44 years	0	+/-13	0	+/-13	23
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	19	+/-21	11	+/-17	11
Income in the past 12 months at or above poverty level:	270	+/-59	446	+/-92	349
Family households:	192	+/-57	291	+/-88	279
Married-couple family:	121	+/-47	229	+/-91	216
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	19	+/-16	128	+/-84	141
Householder 45 to 64 years	47	+/-36	57	+/-36	58
Householder 65 years and over	55	+/-35	44	+/-28	17
Other family:	71	+/-43	62	+/-58	63
Male householder, no wife present:	15	+/-24	49	+/-51	34
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	49	+/-51	25
Householder 45 to 64 years	15	+/-24	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	9
Female householder, no husband present:	56	+/-37	13	+/-21	29
Householder under 25 years	0	+/-13	0	+/-13	8
Householder 25 to 44 years	34	+/-28	0	+/-13	8
Householder 45 to 64 years	14	+/-23	13	+/-21	0
Householder 65 years and over	8	+/-13	0	+/-13	13
Nonfamily households:	78	+/-43	155	+/-53	70
Male householder:	45	+/-31	75	+/-45	24
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	6	+/-11	0
Householder 45 to 64 years	24	+/-19	27	+/-32	9
Householder 65 years and over	21	+/-23	42	+/-32	15
Female householder:	33	+/-27	80	+/-42	46
Householder under 25 years	0	+/-13	0	+/-13	0

	Block Group 2, Census Tract 1133.01, Tarrant County, Texas		Block Group 3, Census Tract 1133.01, Tarrant County, Texas		Block Group 4, Census Tract 1133.01, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	6	+/-9	0	+/-13	0
Householder 45 to 64 years	0	+/-13	33	+/-29	29
Householder 65 years and over	27	+/-26	47	+/-32	17

	Block Group 4, Census Tract 1133.01, Tarrant County, Texas	Block Group 1, Census Tract 1133.02, Tarrant County, Texas		Block Group 2, Census Tract 1133.02, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-73	534	+/-106	447	+/-86
Income in the past 12 months below poverty level:	+/-66	78	+/-62	10	+/-17
Family households:	+/-35	45	+/-56	0	+/-13
Married-couple family:	+/-13	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-35	45	+/-56	0	+/-13
Male householder, no wife present:	+/-13	3	+/-8	0	+/-13
Householder under 25 years	+/-13	3	+/-8	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-35	42	+/-54	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	31	+/-51	0	+/-13
Householder 45 to 64 years	+/-13	11	+/-17	0	+/-13
Householder 65 years and over	+/-35	0	+/-13	0	+/-13
Nonfamily households:	+/-58	33	+/-27	10	+/-17
Male householder:	+/-27	16	+/-18	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	7	+/-11	0	+/-13
Householder 45 to 64 years	+/-27	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	9	+/-14	0	+/-13
Female householder:	+/-52	17	+/-20	10	+/-17
Householder under 25 years	+/-38	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-35	0	+/-13	10	+/-17
Householder 45 to 64 years	+/-13	10	+/-18	0	+/-13
Householder 65 years and over	+/-17	7	+/-11	0	+/-13
Income in the past 12 months at or above poverty level:	+/-74	456	+/-108	437	+/-85
Family households:	+/-71	255	+/-89	324	+/-78
Married-couple family:	+/-76	171	+/-84	265	+/-78
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-67	73	+/-61	58	+/-40
Householder 45 to 64 years	+/-33	74	+/-55	145	+/-63
Householder 65 years and over	+/-22	24	+/-27	62	+/-37
Other family:	+/-47	84	+/-45	59	+/-51
Male householder, no wife present:	+/-46	24	+/-26	59	+/-51
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-41	0	+/-13	8	+/-14
Householder 45 to 64 years	+/-13	24	+/-26	40	+/-48
Householder 65 years and over	+/-16	0	+/-13	11	+/-18
Female householder, no husband present:	+/-27	60	+/-42	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-12	22	+/-22	0	+/-13
Householder 45 to 64 years	+/-13	29	+/-29	0	+/-13
Householder 65 years and over	+/-19	9	+/-15	0	+/-13
Nonfamily households:	+/-35	201	+/-80	113	+/-57
Male householder:	+/-22	69	+/-53	52	+/-36
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	34	+/-43	0	+/-13
Householder 45 to 64 years	+/-13	10	+/-16	22	+/-24
Householder 65 years and over	+/-17	25	+/-29	30	+/-28
Female householder:	+/-28	132	+/-65	61	+/-47
Householder under 25 years	+/-13	0	+/-13	0	+/-13

	Block Group 4, Census Tract 1133.01, Tarrant County, Texas	Block Group 1, Census Tract 1133.02, Tarrant County, Texas		Block Group 2, Census Tract 1133.02, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 25 to 44 years	+/-13	8	+/-14	22	+/-35
Householder 45 to 64 years	+/-27	75	+/-49	22	+/-27
Householder 65 years and over	+/-15	49	+/-48	17	+/-18

	Block Group 3, Census Tract 1133.02, Tarrant County, Texas		Block Group 1, Census Tract 1134.03, Tarrant County, Texas		Block Group 2, Census Tract 1134.03, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	654	+/-95	219	+/-47	720
Income in the past 12 months below poverty level:	153	+/-74	0	+/-13	46
Family households:	140	+/-71	0	+/-13	20
Married-couple family:	13	+/-17	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	13	+/-17	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	127	+/-71	0	+/-13	20
Male householder, no wife present:	19	+/-29	0	+/-13	20
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	14
Householder 45 to 64 years	19	+/-29	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	6
Female householder, no husband present:	108	+/-63	0	+/-13	0
Householder under 25 years	20	+/-33	0	+/-13	0
Householder 25 to 44 years	61	+/-53	0	+/-13	0
Householder 45 to 64 years	27	+/-33	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	13	+/-18	0	+/-13	26
Male householder:	0	+/-13	0	+/-13	19
Householder under 25 years	0	+/-13	0	+/-13	10
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	9
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder:	13	+/-18	0	+/-13	7
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	13	+/-18	0	+/-13	7
Income in the past 12 months at or above poverty level:	501	+/-115	219	+/-47	674
Family households:	325	+/-96	172	+/-50	464
Married-couple family:	189	+/-59	101	+/-35	358
Householder under 25 years	0	+/-13	13	+/-19	0
Householder 25 to 44 years	64	+/-38	13	+/-20	101
Householder 45 to 64 years	39	+/-35	59	+/-32	122
Householder 65 years and over	86	+/-44	16	+/-17	135
Other family:	136	+/-82	71	+/-40	106
Male householder, no wife present:	51	+/-49	20	+/-30	10
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	41	+/-47	0	+/-13	10
Householder 45 to 64 years	10	+/-16	0	+/-13	0
Householder 65 years and over	0	+/-13	20	+/-30	0
Female householder, no husband present:	85	+/-68	51	+/-36	96
Householder under 25 years	49	+/-55	0	+/-13	0
Householder 25 to 44 years	21	+/-34	0	+/-13	18
Householder 45 to 64 years	7	+/-12	34	+/-31	46
Householder 65 years and over	8	+/-13	17	+/-19	32
Nonfamily households:	176	+/-86	47	+/-32	210
Male householder:	98	+/-63	14	+/-18	73
Householder under 25 years	28	+/-40	0	+/-13	0
Householder 25 to 44 years	21	+/-33	10	+/-16	25
Householder 45 to 64 years	49	+/-41	4	+/-8	24
Householder 65 years and over	0	+/-13	0	+/-13	24
Female householder:	78	+/-57	33	+/-26	137
Householder under 25 years	5	+/-10	0	+/-13	0

	Block Group 3, Census Tract 1133.02, Tarrant County, Texas		Block Group 1, Census Tract 1134.03, Tarrant County, Texas		Block Group 2, Census Tract 1134.03, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	23	+/-33	7	+/-11	12
Householder 45 to 64 years	31	+/-43	0	+/-13	23
Householder 65 years and over	19	+/-22	26	+/-24	102

	Block Group 2, Census Tract 1134.03, Tarrant County, Texas	Block Group 1, Census Tract 1134.05, Tarrant County, Texas		Block Group 2, Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-79	455	+/-142	140	+/-59
Income in the past 12 months below poverty level:	+/-32	113	+/-66	0	+/-13
Family households:	+/-20	67	+/-65	0	+/-13
Married-couple family:	+/-13	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Other family:	+/-20	67	+/-65	0	+/-13
Male householder, no wife present:	+/-20	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-23	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-9	0	+/-13	0	+/-13
Female householder, no husband present:	+/-13	67	+/-65	0	+/-13
Householder under 25 years	+/-13	36	+/-58	0	+/-13
Householder 25 to 44 years	+/-13	31	+/-35	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Nonfamily households:	+/-24	46	+/-48	0	+/-13
Male householder:	+/-23	14	+/-23	0	+/-13
Householder under 25 years	+/-19	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	14	+/-23	0	+/-13
Female householder:	+/-11	32	+/-41	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-13	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	22	+/-37	0	+/-13
Householder 65 years and over	+/-11	10	+/-16	0	+/-13
Income in the past 12 months at or above poverty level:	+/-83	342	+/-148	140	+/-59
Family households:	+/-74	222	+/-119	47	+/-42
Married-couple family:	+/-68	97	+/-67	47	+/-42
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-43	40	+/-37	13	+/-22
Householder 45 to 64 years	+/-40	39	+/-43	15	+/-25
Householder 65 years and over	+/-39	18	+/-29	19	+/-29
Other family:	+/-53	125	+/-98	0	+/-13
Male householder, no wife present:	+/-12	0	+/-13	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-12	0	+/-13	0	+/-13
Householder 45 to 64 years	+/-13	0	+/-13	0	+/-13
Householder 65 years and over	+/-13	0	+/-13	0	+/-13
Female householder, no husband present:	+/-51	125	+/-98	0	+/-13
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-20	40	+/-65	0	+/-13
Householder 45 to 64 years	+/-32	85	+/-81	0	+/-13
Householder 65 years and over	+/-29	0	+/-13	0	+/-13
Nonfamily households:	+/-79	120	+/-105	93	+/-58
Male householder:	+/-47	104	+/-103	36	+/-43
Householder under 25 years	+/-13	0	+/-13	0	+/-13
Householder 25 to 44 years	+/-32	0	+/-13	36	+/-43
Householder 45 to 64 years	+/-22	69	+/-99	0	+/-13
Householder 65 years and over	+/-26	35	+/-27	0	+/-13
Female householder:	+/-62	16	+/-25	57	+/-49
Householder under 25 years	+/-13	0	+/-13	0	+/-13

	Block Group 2, Census Tract 1134.03, Tarrant County, Texas	Block Group 1, Census Tract 1134.05, Tarrant County, Texas		Block Group 2, Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Householder 25 to 44 years	+/-14	0	+/-13	9	+/-15
Householder 45 to 64 years	+/-23	0	+/-13	0	+/-13
Householder 65 years and over	+/-57	16	+/-25	48	+/-46

	Block Group 3, Census Tract 1134.05, Tarrant County, Texas		Block Group 4, Census Tract 1134.05, Tarrant County, Texas		Block Group 5, Census Tract 1134.05, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	791	+/-164	486	+/-104	631
Income in the past 12 months below poverty level:	146	+/-118	24	+/-40	59
Family households:	38	+/-61	0	+/-13	42
Married-couple family:	0	+/-13	0	+/-13	11
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	11
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Other family:	38	+/-61	0	+/-13	31
Male householder, no wife present:	0	+/-13	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	38	+/-61	0	+/-13	31
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	38	+/-61	0	+/-13	14
Householder 45 to 64 years	0	+/-13	0	+/-13	17
Householder 65 years and over	0	+/-13	0	+/-13	0
Nonfamily households:	108	+/-108	24	+/-40	17
Male householder:	47	+/-76	0	+/-13	0
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	47	+/-76	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder:	61	+/-81	24	+/-40	17
Householder under 25 years	46	+/-76	0	+/-13	0
Householder 25 to 44 years	0	+/-13	0	+/-13	0
Householder 45 to 64 years	0	+/-13	24	+/-40	0
Householder 65 years and over	15	+/-25	0	+/-13	17
Income in the past 12 months at or above poverty level:	645	+/-163	462	+/-108	572
Family households:	166	+/-94	371	+/-110	436
Married-couple family:	59	+/-76	314	+/-105	246
Householder under 25 years	0	+/-13	0	+/-13	0
Householder 25 to 44 years	59	+/-76	105	+/-66	68
Householder 45 to 64 years	0	+/-13	140	+/-77	146
Householder 65 years and over	0	+/-13	69	+/-53	32
Other family:	107	+/-78	57	+/-67	190
Male householder, no wife present:	25	+/-26	22	+/-34	0
Householder under 25 years	13	+/-20	0	+/-13	0
Householder 25 to 44 years	12	+/-17	22	+/-34	0
Householder 45 to 64 years	0	+/-13	0	+/-13	0
Householder 65 years and over	0	+/-13	0	+/-13	0
Female householder, no husband present:	82	+/-77	35	+/-56	190
Householder under 25 years	12	+/-24	0	+/-13	0
Householder 25 to 44 years	55	+/-67	0	+/-13	5
Householder 45 to 64 years	15	+/-23	35	+/-56	104
Householder 65 years and over	0	+/-13	0	+/-13	81
Nonfamily households:	479	+/-141	91	+/-54	136
Male householder:	224	+/-128	15	+/-24	46
Householder under 25 years	42	+/-66	0	+/-13	0
Householder 25 to 44 years	114	+/-103	0	+/-13	0
Householder 45 to 64 years	34	+/-41	0	+/-13	15
Householder 65 years and over	34	+/-37	15	+/-24	31
Female householder:	255	+/-118	76	+/-49	90
Householder under 25 years	32	+/-39	0	+/-13	0

	Block Group 3, Census Tract 1134.05, Tarrant County, Texas		Block Group 4, Census Tract 1134.05, Tarrant County, Texas		Block Group 5, Census Tract 1134.05, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Householder 25 to 44 years	26	+/-31	0	+/-13	0
Householder 45 to 64 years	115	+/-98	15	+/-22	31
Householder 65 years and over	82	+/-49	61	+/-43	59

**Block Group 5,  
Census Tract  
1134.05, Tarrant  
County, Texas**

**Margin of Error**

Total:	+/-123
Income in the past 12 months below poverty level:	+/-52
Family households:	+/-42
Married-couple family:	+/-22
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-22
Householder 45 to 64 years	+/-13
Householder 65 years and over	+/-13
Other family:	+/-36
Male householder, no wife present:	+/-13
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-13
Householder 65 years and over	+/-13
Female householder, no husband present:	+/-36
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-25
Householder 45 to 64 years	+/-28
Householder 65 years and over	+/-13
Nonfamily households:	+/-29
Male householder:	+/-13
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-13
Householder 65 years and over	+/-13
Female householder:	+/-29
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-13
Householder 65 years and over	+/-29
Income in the past 12 months at or above poverty level:	+/-120
Family households:	+/-108
Married-couple family:	+/-97
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-46
Householder 45 to 64 years	+/-77
Householder 65 years and over	+/-38
Other family:	+/-98
Male householder, no wife present:	+/-13
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-13
Householder 65 years and over	+/-13
Female householder, no husband present:	+/-98
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-15
Householder 45 to 64 years	+/-74
Householder 65 years and over	+/-74
Nonfamily households:	+/-57
Male householder:	+/-41
Householder under 25 years	+/-13
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-24
Householder 65 years and over	+/-33
Female householder:	+/-52
Householder under 25 years	+/-13

	<b>Block Group 5, Census Tract 1134.05, Tarrant County, Texas</b>
	<b>Margin of Error</b>
Householder 25 to 44 years	+/-13
Householder 45 to 64 years	+/-35
Householder 65 years and over	+/-47

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

One person in each household is designated as the householder. In most cases, this is the person or one of the people in whose name the home is owned, being bought, or rented and who is listed on line one of the survey questionnaire. If there is no such person in the household, any adult household member 15 years old and over could be designated as the householder.

Households are classified by type according to the presence of relatives. Two types of householders are distinguished: a family householder and a nonfamily householder. A family householder is a householder living with one or more individuals related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him or her are family members. A nonfamily householder is a householder living alone or with non-relatives only.

To determine poverty status of a householder in family households, one compares the total income in the past 12 months of all family members with the poverty threshold appropriate for that family size and composition. If the total family income is less than the threshold, then the householder together with every member of his or her family are considered as having income below the poverty level.

In determining poverty status of a nonfamily householder, only the householder's own personal income is compared with the appropriate threshold for a single person. The poverty status of a nonfamily householder does not affect the poverty status of the other unrelated individuals living in the household and the incomes of people living in the household who are not related to the householder are not considered when determining the poverty status of a householder. The income of each unrelated individual is compared to the appropriate threshold for a single person.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



B16004

AGE BY LANGUAGE SPOKEN AT HOME BY ABILITY TO SPEAK ENGLISH FOR THE POPULATION 5 YEARS AND OVER

Universe: Population 5 years and over

2011-2015 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

**Tell us what you think.** Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 1012.01, Tarrant County, Texas		Census Tract 1065.10, Tarrant County, Texas		Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	1,718	+/-203	7,638	+/-493	7,446
5 to 17 years:	321	+/-100	1,539	+/-205	1,647
Speak only English	77	+/-50	1,045	+/-169	1,117
Speak Spanish:	220	+/-90	328	+/-166	513
Speak English "very well"	116	+/-65	218	+/-95	379
Speak English "well"	40	+/-27	110	+/-103	134
Speak English "not well"	33	+/-29	0	+/-18	0
Speak English "not at all"	31	+/-40	0	+/-18	0
Speak other Indo-European languages:	0	+/-13	17	+/-27	0
Speak English "very well"	0	+/-13	17	+/-27	0
Speak English "well"	0	+/-13	0	+/-18	0
Speak English "not well"	0	+/-13	0	+/-18	0
Speak English "not at all"	0	+/-13	0	+/-18	0
Speak Asian and Pacific Island languages:	24	+/-35	108	+/-77	17
Speak English "very well"	18	+/-26	92	+/-71	17
Speak English "well"	0	+/-13	0	+/-18	0
Speak English "not well"	0	+/-13	16	+/-26	0
Speak English "not at all"	6	+/-9	0	+/-18	0
Speak other languages:	0	+/-13	41	+/-50	0
Speak English "very well"	0	+/-13	41	+/-50	0
Speak English "well"	0	+/-13	0	+/-18	0
Speak English "not well"	0	+/-13	0	+/-18	0
Speak English "not at all"	0	+/-13	0	+/-18	0
18 to 64 years:	1,215	+/-157	5,688	+/-420	5,166
Speak only English	595	+/-132	4,114	+/-356	3,496
Speak Spanish:	552	+/-116	660	+/-209	1,323
Speak English "very well"	213	+/-91	456	+/-199	590
Speak English "well"	75	+/-34	101	+/-77	246
Speak English "not well"	153	+/-73	103	+/-152	113
Speak English "not at all"	111	+/-52	0	+/-18	374

	Census Tract 1012.01, Tarrant County, Texas		Census Tract 1065.10, Tarrant County, Texas		Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak other Indo-European languages:	50	+/-39	104	+/-77	0
Speak English "very well"	50	+/-39	43	+/-39	0
Speak English "well"	0	+/-13	61	+/-68	0
Speak English "not well"	0	+/-13	0	+/-18	0
Speak English "not at all"	0	+/-13	0	+/-18	0
Speak Asian and Pacific Island languages:	18	+/-20	541	+/-237	238
Speak English "very well"	6	+/-9	258	+/-150	58
Speak English "well"	12	+/-13	134	+/-114	110
Speak English "not well"	0	+/-13	77	+/-57	70
Speak English "not at all"	0	+/-13	72	+/-79	0
Speak other languages:	0	+/-13	269	+/-260	109
Speak English "very well"	0	+/-13	196	+/-231	53
Speak English "well"	0	+/-13	73	+/-71	15
Speak English "not well"	0	+/-13	0	+/-18	0
Speak English "not at all"	0	+/-13	0	+/-18	41
65 years and over:	182	+/-63	411	+/-106	633
Speak only English	161	+/-55	295	+/-99	432
Speak Spanish:	21	+/-34	45	+/-44	54
Speak English "very well"	0	+/-13	14	+/-21	22
Speak English "well"	0	+/-13	15	+/-26	0
Speak English "not well"	11	+/-17	0	+/-18	0
Speak English "not at all"	10	+/-17	16	+/-26	32
Speak other Indo-European languages:	0	+/-13	0	+/-18	23
Speak English "very well"	0	+/-13	0	+/-18	0
Speak English "well"	0	+/-13	0	+/-18	23
Speak English "not well"	0	+/-13	0	+/-18	0
Speak English "not at all"	0	+/-13	0	+/-18	0
Speak Asian and Pacific Island languages:	0	+/-13	41	+/-42	114
Speak English "very well"	0	+/-13	23	+/-27	0
Speak English "well"	0	+/-13	0	+/-18	11
Speak English "not well"	0	+/-13	18	+/-29	50
Speak English "not at all"	0	+/-13	0	+/-18	53
Speak other languages:	0	+/-13	30	+/-49	10
Speak English "very well"	0	+/-13	0	+/-18	0
Speak English "well"	0	+/-13	0	+/-18	0
Speak English "not well"	0	+/-13	30	+/-49	10
Speak English "not at all"	0	+/-13	0	+/-18	0

	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas		Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-637	3,354	+/-360	4,424	+/-647
5 to 17 years:	+/-373	416	+/-134	779	+/-238
Speak only English	+/-360	306	+/-98	425	+/-194
Speak Spanish:	+/-260	93	+/-74	354	+/-138
Speak English "very well"	+/-223	71	+/-64	291	+/-118
Speak English "well"	+/-116	22	+/-36	31	+/-49
Speak English "not well"	+/-18	0	+/-13	32	+/-39
Speak English "not at all"	+/-18	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-18	0	+/-13	0	+/-13
Speak English "very well"	+/-18	0	+/-13	0	+/-13
Speak English "well"	+/-18	0	+/-13	0	+/-13
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-29	17	+/-19	0	+/-13
Speak English "very well"	+/-29	9	+/-13	0	+/-13
Speak English "well"	+/-18	0	+/-13	0	+/-13
Speak English "not well"	+/-18	8	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13
Speak other languages:	+/-18	0	+/-13	0	+/-13
Speak English "very well"	+/-18	0	+/-13	0	+/-13
Speak English "well"	+/-18	0	+/-13	0	+/-13
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13
18 to 64 years:	+/-506	2,575	+/-304	3,532	+/-501
Speak only English	+/-508	1,909	+/-203	2,224	+/-436
Speak Spanish:	+/-512	486	+/-235	1,166	+/-346
Speak English "very well"	+/-210	143	+/-86	497	+/-219
Speak English "well"	+/-154	177	+/-121	259	+/-112
Speak English "not well"	+/-112	83	+/-91	189	+/-149
Speak English "not at all"	+/-338	83	+/-94	221	+/-148
Speak other Indo-European languages:	+/-18	67	+/-96	34	+/-39
Speak English "very well"	+/-18	43	+/-61	34	+/-39
Speak English "well"	+/-18	0	+/-13	0	+/-13
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	24	+/-36	0	+/-13
Speak Asian and Pacific Island languages:	+/-126	96	+/-90	0	+/-13
Speak English "very well"	+/-74	70	+/-71	0	+/-13
Speak English "well"	+/-60	26	+/-32	0	+/-13
Speak English "not well"	+/-50	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13
Speak other languages:	+/-121	17	+/-28	108	+/-93
Speak English "very well"	+/-65	17	+/-28	49	+/-55
Speak English "well"	+/-30	0	+/-13	59	+/-76
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-61	0	+/-13	0	+/-13
65 years and over:	+/-132	363	+/-54	113	+/-72
Speak only English	+/-121	337	+/-57	104	+/-73
Speak Spanish:	+/-58	8	+/-14	0	+/-13
Speak English "very well"	+/-37	0	+/-13	0	+/-13
Speak English "well"	+/-18	8	+/-14	0	+/-13
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-47	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-37	0	+/-13	0	+/-13
Speak English "very well"	+/-18	0	+/-13	0	+/-13
Speak English "well"	+/-37	0	+/-13	0	+/-13
Speak English "not well"	+/-18	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13

	Census Tract 1065.11, Tarrant County, Texas	Census Tract 1065.15, Tarrant County, Texas		Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-133	18	+/-21	0	+/-13
Speak English "very well"	+/-18	13	+/-20	0	+/-13
Speak English "well"	+/-18	5	+/-8	0	+/-13
Speak English "not well"	+/-63	0	+/-13	0	+/-13
Speak English "not at all"	+/-70	0	+/-13	0	+/-13
Speak other languages:	+/-22	0	+/-13	9	+/-15
Speak English "very well"	+/-18	0	+/-13	0	+/-13
Speak English "well"	+/-18	0	+/-13	9	+/-15
Speak English "not well"	+/-22	0	+/-13	0	+/-13
Speak English "not at all"	+/-18	0	+/-13	0	+/-13

	Census Tract 1132.13, Tarrant County, Texas		Census Tract 1133.01, Tarrant County, Texas		Census Tract 1133.02, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	3,047	+/-366	3,978	+/-295	4,156
5 to 17 years:	604	+/-176	577	+/-131	734
Speak only English	435	+/-195	454	+/-125	464
Speak Spanish:	160	+/-87	99	+/-105	270
Speak English "very well"	122	+/-98	78	+/-107	270
Speak English "well"	38	+/-44	0	+/-13	0
Speak English "not well"	0	+/-13	21	+/-35	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	9	+/-16	0	+/-13	0
Speak English "very well"	9	+/-16	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	8	+/-13	0
Speak English "very well"	0	+/-13	8	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	16	+/-25	0
Speak English "very well"	0	+/-13	16	+/-25	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	1,806	+/-244	2,614	+/-238	2,765
Speak only English	1,491	+/-262	2,151	+/-236	1,873
Speak Spanish:	306	+/-96	402	+/-185	823
Speak English "very well"	222	+/-81	167	+/-86	531
Speak English "well"	47	+/-51	131	+/-132	154
Speak English "not well"	37	+/-44	82	+/-73	74
Speak English "not at all"	0	+/-13	22	+/-37	64
Speak other Indo-European languages:	9	+/-16	22	+/-35	3
Speak English "very well"	9	+/-16	22	+/-35	3
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	22	+/-36	66
Speak English "very well"	0	+/-13	9	+/-15	38
Speak English "well"	0	+/-13	0	+/-13	28
Speak English "not well"	0	+/-13	13	+/-21	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	17	+/-26	0
Speak English "very well"	0	+/-13	9	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	8	+/-12	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	637	+/-120	787	+/-102	657
Speak only English	599	+/-91	780	+/-102	604
Speak Spanish:	17	+/-27	7	+/-11	43
Speak English "very well"	0	+/-13	7	+/-11	39
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	5	+/-11	0	+/-13	4
Speak English "not at all"	12	+/-25	0	+/-13	0
Speak other Indo-European languages:	8	+/-12	0	+/-13	10
Speak English "very well"	8	+/-12	0	+/-13	10
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Census Tract 1132.13, Tarrant County, Texas		Census Tract 1133.01, Tarrant County, Texas		Census Tract 1133.02, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	13	+/-18	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	8	+/-12	0	+/-13	0
Speak English "not at all"	5	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas		Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-319	2,309	+/-197	5,379	+/-444
5 to 17 years:	+/-133	311	+/-86	902	+/-270
Speak only English	+/-149	298	+/-90	720	+/-266
Speak Spanish:	+/-131	13	+/-20	182	+/-135
Speak English "very well"	+/-131	0	+/-13	143	+/-153
Speak English "well"	+/-13	0	+/-13	39	+/-69
Speak English "not well"	+/-13	13	+/-20	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-18
Speak English "very well"	+/-13	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-18
Speak English "very well"	+/-13	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak other languages:	+/-13	0	+/-13	0	+/-18
Speak English "very well"	+/-13	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
18 to 64 years:	+/-274	1,422	+/-150	3,550	+/-322
Speak only English	+/-277	1,161	+/-140	3,185	+/-349
Speak Spanish:	+/-208	236	+/-107	279	+/-183
Speak English "very well"	+/-189	69	+/-42	149	+/-103
Speak English "well"	+/-120	102	+/-50	40	+/-65
Speak English "not well"	+/-58	42	+/-35	90	+/-141
Speak English "not at all"	+/-74	23	+/-19	0	+/-18
Speak other Indo-European languages:	+/-8	25	+/-33	25	+/-42
Speak English "very well"	+/-8	25	+/-33	25	+/-42
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak Asian and Pacific Island languages:	+/-68	0	+/-13	39	+/-65
Speak English "very well"	+/-38	0	+/-13	0	+/-18
Speak English "well"	+/-34	0	+/-13	21	+/-35
Speak English "not well"	+/-13	0	+/-13	18	+/-30
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak other languages:	+/-13	0	+/-13	22	+/-38
Speak English "very well"	+/-13	0	+/-13	11	+/-19
Speak English "well"	+/-13	0	+/-13	11	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
65 years and over:	+/-119	576	+/-37	927	+/-177
Speak only English	+/-131	567	+/-32	880	+/-173
Speak Spanish:	+/-54	9	+/-14	47	+/-43
Speak English "very well"	+/-53	9	+/-14	47	+/-43
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-10	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak other Indo-European languages:	+/-17	0	+/-13	0	+/-18
Speak English "very well"	+/-17	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18

	Census Tract 1133.02, Tarrant County, Texas	Census Tract 1134.03, Tarrant County, Texas		Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-18
Speak English "very well"	+/-13	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18
Speak other languages:	+/-13	0	+/-13	0	+/-18
Speak English "very well"	+/-13	0	+/-13	0	+/-18
Speak English "well"	+/-13	0	+/-13	0	+/-18
Speak English "not well"	+/-13	0	+/-13	0	+/-18
Speak English "not at all"	+/-13	0	+/-13	0	+/-18

	Block Group 1, Census Tract 1012.01, Tarrant County, Texas		Block Group 2, Census Tract 1012.01, Tarrant County, Texas		Block Group 1, Census Tract 1065.10, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	437	+/-136	1,281	+/-214	2,101
5 to 17 years:	57	+/-44	264	+/-97	352
Speak only English	23	+/-24	54	+/-50	264
Speak Spanish:	10	+/-16	210	+/-91	70
Speak English "very well"	0	+/-13	116	+/-65	70
Speak English "well"	10	+/-16	30	+/-23	0
Speak English "not well"	0	+/-13	33	+/-29	0
Speak English "not at all"	0	+/-13	31	+/-40	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	24	+/-35	0	+/-13	0
Speak English "very well"	18	+/-26	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	6	+/-9	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	18
Speak English "very well"	0	+/-13	0	+/-13	18
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	281	+/-102	934	+/-160	1,627
Speak only English	200	+/-80	395	+/-150	1,260
Speak Spanish:	29	+/-24	523	+/-116	220
Speak English "very well"	11	+/-13	202	+/-89	189
Speak English "well"	18	+/-21	57	+/-31	31
Speak English "not well"	0	+/-13	153	+/-73	0
Speak English "not at all"	0	+/-13	111	+/-52	0
Speak other Indo-European languages:	34	+/-36	16	+/-24	14
Speak English "very well"	34	+/-36	16	+/-24	14
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	18	+/-20	0	+/-13	89
Speak English "very well"	6	+/-9	0	+/-13	41
Speak English "well"	12	+/-13	0	+/-13	48
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	44
Speak English "very well"	0	+/-13	0	+/-13	44
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	99	+/-52	83	+/-44	122
Speak only English	99	+/-52	62	+/-30	79
Speak Spanish:	0	+/-13	21	+/-34	14
Speak English "very well"	0	+/-13	0	+/-13	14
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	11	+/-17	0
Speak English "not at all"	0	+/-13	10	+/-17	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1012.01, Tarrant County, Texas		Block Group 2, Census Tract 1012.01, Tarrant County, Texas		Block Group 1, Census Tract 1065.10, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	29
Speak English "very well"	0	+/-13	0	+/-13	11
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	18
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1065.10, Tarrant County, Texas	Block Group 2, Census Tract 1065.10, Tarrant County, Texas		Block Group 3, Census Tract 1065.10, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-397	1,435	+/-267	4,102	+/-523
5 to 17 years:	+/-137	244	+/-107	943	+/-222
Speak only English	+/-127	177	+/-86	604	+/-172
Speak Spanish:	+/-60	0	+/-13	258	+/-181
Speak English "very well"	+/-60	0	+/-13	148	+/-104
Speak English "well"	+/-13	0	+/-13	110	+/-103
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	17	+/-27	0	+/-13
Speak English "very well"	+/-13	17	+/-27	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	50	+/-63	58	+/-65
Speak English "very well"	+/-13	34	+/-56	58	+/-65
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	16	+/-26	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-28	0	+/-13	23	+/-38
Speak English "very well"	+/-28	0	+/-13	23	+/-38
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-300	1,134	+/-229	2,927	+/-388
Speak only English	+/-286	860	+/-197	1,994	+/-316
Speak Spanish:	+/-128	37	+/-43	403	+/-243
Speak English "very well"	+/-122	0	+/-13	267	+/-189
Speak English "well"	+/-35	37	+/-43	33	+/-53
Speak English "not well"	+/-13	0	+/-13	103	+/-152
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-22	29	+/-47	61	+/-59
Speak English "very well"	+/-22	0	+/-13	29	+/-33
Speak English "well"	+/-13	29	+/-47	32	+/-49
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-95	76	+/-78	376	+/-208
Speak English "very well"	+/-51	42	+/-51	175	+/-126
Speak English "well"	+/-84	34	+/-56	52	+/-45
Speak English "not well"	+/-13	0	+/-13	77	+/-57
Speak English "not at all"	+/-13	0	+/-13	72	+/-79
Speak other languages:	+/-53	132	+/-236	93	+/-101
Speak English "very well"	+/-53	120	+/-214	32	+/-39
Speak English "well"	+/-13	12	+/-22	61	+/-71
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
65 years and over:	+/-59	57	+/-46	232	+/-117
Speak only English	+/-48	42	+/-38	174	+/-103
Speak Spanish:	+/-21	15	+/-26	16	+/-26
Speak English "very well"	+/-21	0	+/-13	0	+/-13
Speak English "well"	+/-13	15	+/-26	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	16	+/-26
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 1, Census Tract 1065.10, Tarrant County, Texas	Block Group 2, Census Tract 1065.10, Tarrant County, Texas		Block Group 3, Census Tract 1065.10, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-37	0	+/-13	12	+/-19
Speak English "very well"	+/-20	0	+/-13	12	+/-19
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-29	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	30	+/-49
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	30	+/-49
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 1, Census Tract 1065.11, Tarrant County, Texas		Block Group 2, Census Tract 1065.11, Tarrant County, Texas		Block Group 3, Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	2,630	+/-667	2,238	+/-588	1,377
5 to 17 years:	580	+/-319	680	+/-281	193
Speak only English	476	+/-260	283	+/-224	181
Speak Spanish:	104	+/-161	397	+/-250	12
Speak English "very well"	104	+/-161	275	+/-213	0
Speak English "well"	0	+/-13	122	+/-115	12
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	1,753	+/-415	1,481	+/-410	1,125
Speak only English	1,361	+/-361	655	+/-254	881
Speak Spanish:	245	+/-233	810	+/-327	244
Speak English "very well"	79	+/-87	474	+/-228	13
Speak English "well"	34	+/-52	157	+/-129	55
Speak English "not well"	54	+/-85	59	+/-71	0
Speak English "not at all"	78	+/-120	120	+/-118	176
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	132	+/-87	16	+/-26	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	95	+/-57	0	+/-13	0
Speak English "not well"	37	+/-47	16	+/-26	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	15	+/-30	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	15	+/-30	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	297	+/-134	77	+/-69	59
Speak only English	118	+/-77	55	+/-57	59
Speak Spanish:	32	+/-47	22	+/-37	0
Speak English "very well"	0	+/-13	22	+/-37	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	32	+/-47	0	+/-13	0
Speak other Indo-European languages:	23	+/-37	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	23	+/-37	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1065.11, Tarrant County, Texas		Block Group 2, Census Tract 1065.11, Tarrant County, Texas		Block Group 3, Census Tract 1065.11, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	114	+/-133	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	11	+/-18	0	+/-13	0
Speak English "not well"	50	+/-63	0	+/-13	0
Speak English "not at all"	53	+/-70	0	+/-13	0
Speak other languages:	10	+/-22	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	10	+/-22	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 3, Census Tract 1065.11, Tarrant County, Texas	Block Group 4, Census Tract 1065.11, Tarrant County, Texas		Block Group 1, Census Tract 1065.15, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-512	1,201	+/-369	1,644	+/-325
5 to 17 years:	+/-183	194	+/-194	144	+/-101
Speak only English	+/-180	177	+/-192	93	+/-73
Speak Spanish:	+/-19	0	+/-13	43	+/-54
Speak English "very well"	+/-13	0	+/-13	43	+/-54
Speak English "well"	+/-19	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	17	+/-29	8	+/-13
Speak English "very well"	+/-13	17	+/-29	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	8	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-427	807	+/-259	1,265	+/-273
Speak only English	+/-453	599	+/-208	862	+/-160
Speak Spanish:	+/-362	24	+/-38	293	+/-211
Speak English "very well"	+/-21	24	+/-38	116	+/-85
Speak English "well"	+/-73	0	+/-13	94	+/-105
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-289	0	+/-13	83	+/-94
Speak other Indo-European languages:	+/-13	0	+/-13	65	+/-96
Speak English "very well"	+/-13	0	+/-13	41	+/-61
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	24	+/-36
Speak Asian and Pacific Island languages:	+/-13	90	+/-93	45	+/-44
Speak English "very well"	+/-13	58	+/-74	28	+/-35
Speak English "well"	+/-13	15	+/-23	17	+/-28
Speak English "not well"	+/-13	17	+/-28	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	94	+/-124	0	+/-13
Speak English "very well"	+/-13	53	+/-65	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	41	+/-61	0	+/-13
65 years and over:	+/-68	200	+/-85	235	+/-66
Speak only English	+/-68	200	+/-85	217	+/-62
Speak Spanish:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 3, Census Tract 1065.11, Tarrant County, Texas	Block Group 4, Census Tract 1065.11, Tarrant County, Texas		Block Group 1, Census Tract 1065.15, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	18	+/-21
Speak English "very well"	+/-13	0	+/-13	13	+/-20
Speak English "well"	+/-13	0	+/-13	5	+/-8
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 2, Census Tract 1065.15, Tarrant County, Texas		Block Group 3, Census Tract 1065.15, Tarrant County, Texas		Block Group 1, Census Tract 1065.16, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	1,213	+/-258	497	+/-178	1,840
5 to 17 years:	223	+/-109	49	+/-67	363
Speak only English	164	+/-81	49	+/-67	178
Speak Spanish:	50	+/-54	0	+/-13	185
Speak English "very well"	28	+/-40	0	+/-13	122
Speak English "well"	22	+/-36	0	+/-13	31
Speak English "not well"	0	+/-13	0	+/-13	32
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	9	+/-13	0	+/-13	0
Speak English "very well"	9	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	899	+/-201	411	+/-152	1,462
Speak only English	691	+/-172	356	+/-144	811
Speak Spanish:	155	+/-106	38	+/-37	566
Speak English "very well"	11	+/-18	16	+/-19	172
Speak English "well"	61	+/-57	22	+/-27	130
Speak English "not well"	83	+/-91	0	+/-13	117
Speak English "not at all"	0	+/-13	0	+/-13	147
Speak other Indo-European languages:	2	+/-4	0	+/-13	0
Speak English "very well"	2	+/-4	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	51	+/-79	0	+/-13	0
Speak English "very well"	42	+/-65	0	+/-13	0
Speak English "well"	9	+/-15	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	17	+/-28	85
Speak English "very well"	0	+/-13	17	+/-28	26
Speak English "well"	0	+/-13	0	+/-13	59
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	91	+/-43	37	+/-25	15
Speak only English	83	+/-40	37	+/-25	6
Speak Spanish:	8	+/-14	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	8	+/-14	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 2, Census Tract 1065.15, Tarrant County, Texas		Block Group 3, Census Tract 1065.15, Tarrant County, Texas		Block Group 1, Census Tract 1065.16, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	9
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	9
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1065.16, Tarrant County, Texas	Block Group 2, Census Tract 1065.16, Tarrant County, Texas		Block Group 3, Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-486	648	+/-441	1,936	+/-412
5 to 17 years:	+/-163	122	+/-120	294	+/-178
Speak only English	+/-121	86	+/-101	161	+/-128
Speak Spanish:	+/-108	36	+/-57	133	+/-110
Speak English "very well"	+/-89	36	+/-57	133	+/-110
Speak English "well"	+/-49	0	+/-13	0	+/-13
Speak English "not well"	+/-39	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-366	488	+/-346	1,582	+/-328
Speak only English	+/-267	378	+/-296	1,035	+/-277
Speak Spanish:	+/-283	110	+/-138	490	+/-198
Speak English "very well"	+/-149	81	+/-131	244	+/-140
Speak English "well"	+/-88	29	+/-47	100	+/-78
Speak English "not well"	+/-113	0	+/-13	72	+/-74
Speak English "not at all"	+/-105	0	+/-13	74	+/-92
Speak other Indo-European languages:	+/-13	0	+/-13	34	+/-39
Speak English "very well"	+/-13	0	+/-13	34	+/-39
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-84	0	+/-13	23	+/-36
Speak English "very well"	+/-42	0	+/-13	23	+/-36
Speak English "well"	+/-76	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
65 years and over:	+/-19	38	+/-42	60	+/-56
Speak only English	+/-15	38	+/-42	60	+/-56
Speak Spanish:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 1, Census Tract 1065.16, Tarrant County, Texas	Block Group 2, Census Tract 1065.16, Tarrant County, Texas		Block Group 3, Census Tract 1065.16, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-15	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-15	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 1, Census Tract 1132.13, Tarrant County, Texas		Block Group 2, Census Tract 1132.13, Tarrant County, Texas		Block Group 3, Census Tract 1132.13, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	833	+/-239	550	+/-180	721
5 to 17 years:	211	+/-138	88	+/-52	102
Speak only English	169	+/-121	50	+/-40	31
Speak Spanish:	42	+/-70	38	+/-44	71
Speak English "very well"	42	+/-70	0	+/-13	71
Speak English "well"	0	+/-13	38	+/-44	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	488	+/-143	329	+/-131	432
Speak only English	448	+/-128	257	+/-113	339
Speak Spanish:	40	+/-55	72	+/-85	93
Speak English "very well"	40	+/-55	0	+/-13	93
Speak English "well"	0	+/-13	35	+/-41	0
Speak English "not well"	0	+/-13	37	+/-44	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	134	+/-56	133	+/-60	187
Speak only English	134	+/-56	125	+/-60	187
Speak Spanish:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 1, Census Tract 1132.13, Tarrant County, Texas		Block Group 2, Census Tract 1132.13, Tarrant County, Texas		Block Group 3, Census Tract 1132.13, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	8	+/-12	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	8	+/-12	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 3, Census Tract 1132.13, Tarrant County, Texas	Block Group 4, Census Tract 1132.13, Tarrant County, Texas		Block Group 1, Census Tract 1133.01, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-209	943	+/-329	929	+/-221
5 to 17 years:	+/-99	203	+/-160	93	+/-68
Speak only English	+/-40	185	+/-158	77	+/-64
Speak Spanish:	+/-85	9	+/-16	0	+/-13
Speak English "very well"	+/-85	9	+/-16	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	9	+/-16	0	+/-13
Speak English "very well"	+/-13	9	+/-16	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	16	+/-25
Speak English "very well"	+/-13	0	+/-13	16	+/-25
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-166	557	+/-188	610	+/-194
Speak only English	+/-154	447	+/-159	586	+/-196
Speak Spanish:	+/-90	101	+/-91	7	+/-12
Speak English "very well"	+/-90	89	+/-76	7	+/-12
Speak English "well"	+/-13	12	+/-21	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	9	+/-16	0	+/-13
Speak English "very well"	+/-13	9	+/-16	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	17	+/-26
Speak English "very well"	+/-13	0	+/-13	9	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	8	+/-12
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
65 years and over:	+/-55	183	+/-116	226	+/-87
Speak only English	+/-55	153	+/-83	226	+/-87
Speak Spanish:	+/-13	17	+/-27	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	5	+/-11	0	+/-13
Speak English "not at all"	+/-13	12	+/-25	0	+/-13
Speak other Indo-European languages:	+/-13	8	+/-12	0	+/-13
Speak English "very well"	+/-13	8	+/-12	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 3, Census Tract 1132.13, Tarrant County, Texas	Block Group 4, Census Tract 1132.13, Tarrant County, Texas		Block Group 1, Census Tract 1133.01, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	5	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	5	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 2, Census Tract 1133.01, Tarrant County, Texas		Block Group 3, Census Tract 1133.01, Tarrant County, Texas		Block Group 4, Census Tract 1133.01, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	715	+/-187	1,002	+/-226	1,332
5 to 17 years:	26	+/-32	105	+/-67	353
Speak only English	26	+/-32	84	+/-57	267
Speak Spanish:	0	+/-13	21	+/-35	78
Speak English "very well"	0	+/-13	0	+/-13	78
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	21	+/-35	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	8
Speak English "very well"	0	+/-13	0	+/-13	8
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	487	+/-195	661	+/-201	856
Speak only English	346	+/-131	618	+/-198	601
Speak Spanish:	119	+/-123	43	+/-73	233
Speak English "very well"	27	+/-28	0	+/-13	133
Speak English "well"	31	+/-32	0	+/-13	100
Speak English "not well"	61	+/-63	21	+/-36	0
Speak English "not at all"	0	+/-13	22	+/-37	0
Speak other Indo-European languages:	22	+/-35	0	+/-13	0
Speak English "very well"	22	+/-35	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	22
Speak English "very well"	0	+/-13	0	+/-13	9
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	13
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	202	+/-73	236	+/-83	123
Speak only English	195	+/-71	236	+/-83	123
Speak Spanish:	7	+/-11	0	+/-13	0
Speak English "very well"	7	+/-11	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 2, Census Tract 1133.01, Tarrant County, Texas		Block Group 3, Census Tract 1133.01, Tarrant County, Texas		Block Group 4, Census Tract 1133.01, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 4, Census Tract 1133.01, Tarrant County, Texas	Block Group 1, Census Tract 1133.02, Tarrant County, Texas		Block Group 2, Census Tract 1133.02, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-316	1,313	+/-308	1,265	+/-289
5 to 17 years:	+/-140	197	+/-94	166	+/-101
Speak only English	+/-139	167	+/-89	93	+/-58
Speak Spanish:	+/-107	30	+/-44	73	+/-89
Speak English "very well"	+/-107	30	+/-44	73	+/-89
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-230	881	+/-237	880	+/-222
Speak only English	+/-176	661	+/-229	708	+/-197
Speak Spanish:	+/-200	220	+/-190	135	+/-128
Speak English "very well"	+/-96	124	+/-134	135	+/-128
Speak English "well"	+/-137	29	+/-42	0	+/-13
Speak English "not well"	+/-13	43	+/-46	0	+/-13
Speak English "not at all"	+/-13	24	+/-40	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	3	+/-8
Speak English "very well"	+/-13	0	+/-13	3	+/-8
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-36	0	+/-13	34	+/-48
Speak English "very well"	+/-15	0	+/-13	16	+/-19
Speak English "well"	+/-13	0	+/-13	18	+/-31
Speak English "not well"	+/-21	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
65 years and over:	+/-56	235	+/-86	219	+/-105
Speak only English	+/-56	196	+/-75	215	+/-104
Speak Spanish:	+/-13	39	+/-53	4	+/-10
Speak English "very well"	+/-13	39	+/-53	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	4	+/-10
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 4, Census Tract 1133.01, Tarrant County, Texas	Block Group 1, Census Tract 1133.02, Tarrant County, Texas		Block Group 2, Census Tract 1133.02, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 3, Census Tract 1133.02, Tarrant County, Texas		Block Group 1, Census Tract 1134.03, Tarrant County, Texas		Block Group 2, Census Tract 1134.03, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	1,578	+/-288	612	+/-164	1,697
5 to 17 years:	371	+/-116	47	+/-53	264
Speak only English	204	+/-135	47	+/-53	251
Speak Spanish:	167	+/-134	0	+/-13	13
Speak English "very well"	167	+/-134	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	13
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	1,004	+/-214	470	+/-138	952
Speak only English	504	+/-142	290	+/-98	871
Speak Spanish:	468	+/-226	155	+/-91	81
Speak English "very well"	272	+/-201	42	+/-30	27
Speak English "well"	125	+/-109	62	+/-51	40
Speak English "not well"	31	+/-46	28	+/-22	14
Speak English "not at all"	40	+/-63	23	+/-19	0
Speak other Indo-European languages:	0	+/-13	25	+/-33	0
Speak English "very well"	0	+/-13	25	+/-33	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	32	+/-50	0	+/-13	0
Speak English "very well"	22	+/-34	0	+/-13	0
Speak English "well"	10	+/-17	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	203	+/-80	95	+/-50	481
Speak only English	193	+/-75	95	+/-50	472
Speak Spanish:	0	+/-13	0	+/-13	9
Speak English "very well"	0	+/-13	0	+/-13	9
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	10	+/-17	0	+/-13	0
Speak English "very well"	10	+/-17	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 3, Census Tract 1133.02, Tarrant County, Texas		Block Group 1, Census Tract 1134.03, Tarrant County, Texas		Block Group 2, Census Tract 1134.03, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 2, Census Tract 1134.03, Tarrant County, Texas	Block Group 1, Census Tract 1134.05, Tarrant County, Texas		Block Group 2, Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	+/-180	993	+/-332	281	+/-170
5 to 17 years:	+/-82	190	+/-98	56	+/-71
Speak only English	+/-85	174	+/-94	56	+/-71
Speak Spanish:	+/-20	16	+/-27	0	+/-13
Speak English "very well"	+/-13	16	+/-27	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-20	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
18 to 64 years:	+/-133	670	+/-267	119	+/-104
Speak only English	+/-143	612	+/-266	119	+/-104
Speak Spanish:	+/-60	58	+/-94	0	+/-13
Speak English "very well"	+/-28	18	+/-29	0	+/-13
Speak English "well"	+/-38	40	+/-65	0	+/-13
Speak English "not well"	+/-20	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
65 years and over:	+/-62	133	+/-78	106	+/-57
Speak only English	+/-61	133	+/-78	106	+/-57
Speak Spanish:	+/-14	0	+/-13	0	+/-13
Speak English "very well"	+/-14	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other Indo-European languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 2, Census Tract 1134.03, Tarrant County, Texas	Block Group 1, Census Tract 1134.05, Tarrant County, Texas		Block Group 2, Census Tract 1134.05, Tarrant County, Texas	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Speak Asian and Pacific Island languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13
Speak other languages:	+/-13	0	+/-13	0	+/-13
Speak English "very well"	+/-13	0	+/-13	0	+/-13
Speak English "well"	+/-13	0	+/-13	0	+/-13
Speak English "not well"	+/-13	0	+/-13	0	+/-13
Speak English "not at all"	+/-13	0	+/-13	0	+/-13

	Block Group 3, Census Tract 1134.05, Tarrant County, Texas		Block Group 4, Census Tract 1134.05, Tarrant County, Texas		Block Group 5, Census Tract 1134.05, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total:	1,310	+/-373	1,097	+/-331	1,698
5 to 17 years:	205	+/-141	189	+/-190	262
Speak only English	50	+/-58	189	+/-190	251
Speak Spanish:	155	+/-132	0	+/-13	11
Speak English "very well"	116	+/-151	0	+/-13	11
Speak English "well"	39	+/-69	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
18 to 64 years:	974	+/-303	636	+/-211	1,151
Speak only English	788	+/-311	597	+/-215	1,069
Speak Spanish:	186	+/-156	0	+/-13	35
Speak English "very well"	107	+/-97	0	+/-13	24
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	79	+/-139	0	+/-13	11
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	25
Speak English "very well"	0	+/-13	0	+/-13	25
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak Asian and Pacific Island languages:	0	+/-13	39	+/-65	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	21	+/-35	0
Speak English "not well"	0	+/-13	18	+/-30	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	22
Speak English "very well"	0	+/-13	0	+/-13	11
Speak English "well"	0	+/-13	0	+/-13	11
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
65 years and over:	131	+/-53	272	+/-138	285
Speak only English	97	+/-51	259	+/-133	285
Speak Spanish:	34	+/-38	13	+/-21	0
Speak English "very well"	34	+/-38	13	+/-21	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other Indo-European languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

	Block Group 3, Census Tract 1134.05, Tarrant County, Texas		Block Group 4, Census Tract 1134.05, Tarrant County, Texas		Block Group 5, Census Tract 1134.05, Tarrant County, Texas
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Speak Asian and Pacific Island languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0
Speak other languages:	0	+/-13	0	+/-13	0
Speak English "very well"	0	+/-13	0	+/-13	0
Speak English "well"	0	+/-13	0	+/-13	0
Speak English "not well"	0	+/-13	0	+/-13	0
Speak English "not at all"	0	+/-13	0	+/-13	0

**Block Group 5,  
Census Tract  
1134.05, Tarrant  
County, Texas**

**Margin of Error**

Total:	+/-398
5 to 17 years:	+/-180
Speak only English	+/-174
Speak Spanish:	+/-21
Speak English "very well"	+/-21
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak other Indo-European languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak Asian and Pacific Island languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak other languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
18 to 64 years:	+/-335
Speak only English	+/-332
Speak Spanish:	+/-53
Speak English "very well"	+/-34
Speak English "well"	+/-13
Speak English "not well"	+/-23
Speak English "not at all"	+/-13
Speak other Indo-European languages:	+/-42
Speak English "very well"	+/-42
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak Asian and Pacific Island languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak other languages:	+/-38
Speak English "very well"	+/-19
Speak English "well"	+/-18
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
65 years and over:	+/-71
Speak only English	+/-71
Speak Spanish:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak other Indo-European languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13

	<b>Block Group 5, Census Tract 1134.05, Tarrant County, Texas</b>
	<b>Margin of Error</b>
Speak Asian and Pacific Island languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13
Speak other languages:	+/-13
Speak English "very well"	+/-13
Speak English "well"	+/-13
Speak English "not well"	+/-13
Speak English "not at all"	+/-13

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Methodological changes to data collection in 2013 may have affected language data for 2013. Users should be aware of these changes when using multi-year data containing data from 2013. For more information, see: Language User Note.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



# Traffic Noise

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## I-820/SH 121 Northeast Interchange

Tarrant County  
Fort Worth District

**Main CSJ:** 0008-13-124

**Associated CSJs:** 0008-13- 179, 202, 210, 221, 235, 236 & 237  
and 0363-03-051 & 054

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



# Traffic Noise Analysis

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## I-820 (East)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to approximately 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley Ederville Road

CSJ: 0008-13-124, etc.

Fort Worth District  
September 2017

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

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## 1. Introduction

### 1.1 Project Description

Please see the following document that has been uploaded into TXECOS: Project Description (0008 13 124, etc.).pdf.

The following maps have been attached to this report:

- Noise Analysis Map

The following documents are available in the TXECOS file for the project:

- Project Location Map (0008-13-124, etc.).pdf
- USGS Topographic Map (0008-13-124, etc.).pdf
- Aerial Project Location Map (0008-13-124, etc.).pdf
- TxDOT TPP Traffic Data (0008-13-124, etc.).pdf

## 2. Noise Assessment

This analysis was accomplished in accordance with Texas Department of Transportation's (TxDOT) (Federal Highway Administration [FHWA] approved) Guidelines for Analysis and Abatement of Roadway Traffic Noise (2011).

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)."

Also, because traffic sound levels are never constant due to the changing number, type and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis typically includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC) for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur (**Table 1**).

Table 1: FHWA Noise Abatement Criteria

Activity Category	dB(A) Leq	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extra-ordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential
C	67 (exterior)	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

A noise impact occurs when either the absolute or relative criterion is met:

- **Absolute criterion** - The predicted noise level as a receiver approaches, equals or exceeds the NAC. "Approach" is defined as one dB(A) below the NAC. For example: a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.
- **Relative criterion** - The predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the NAC. "Substantially exceeds" is defined as more than 10 dB(A). For example: a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type and speed of vehicles; highway alignment and grade; cuts, fills and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Existing and predicted traffic noise levels were modeled at receiver locations (**Table 2** and the **Noise Analysis Map**) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement.

*Table 2: Traffic Noise Levels dB(A) Leq*

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2035	Change (+/-)	Noise Impact
R1 - Woodbridge Apartments	B	67	76	77	+1	Yes
R2 - Tabernacle Church	D	52	46	46	0	No
R3 - Remington College	D	52	43	44	+1	No
R4 - Americas Best Value Inn	E	72	67	65	-2	No
R5 - Single-family Residence	B	67	74	76	+2	Yes
R6 - Single-family Residence	B	67	74	75	+1	Yes
R7 - Single-family Residence	B	67	75	77	+2	Yes
R8 - Towne Oaks Apartments	B	67	69	73	+4	Yes
R9 - Church of Latter Day Saints	D	52	42	43	+1	No
R10 - McDonalds (outdoor seating)	E	72	69	70	+1	No
R11 - Single-family Residence	B	67	70	72	+2	Yes
R12 - Single-family Residence	B	67	75	77	+2	Yes
R13 - Single-family Residence	B	67	74	76	+2	Yes

As indicated in **Table 2**, the proposed project would result in a traffic noise impact and the following noise abatement measures were considered: traffic management, alteration of horizontal and/or vertical alignments, acquisition of undeveloped property to act as a buffer zone and the construction of noise barriers.

### 3. MITIGATION

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50% of impacted, first row receivers by at least five dB(A); and to be

"reasonable," it must not exceed the cost-effectiveness criterion of \$25,000 for each receiver that would benefit by a reduction of at least five dB(A) and the abatement measure must be able to reduce the noise level at least one impacted, first row receiver by at least seven dB(A).

- **Traffic management** - Control devices could be used to reduce the speed of the traffic; however, the minor benefit of one dB(A) per five mph reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.
- **Alteration of horizontal and/or vertical alignments** - Any alteration of the existing alignment would displace existing businesses and residences, require additional right-of-way (ROW) and not be cost effective/reasonable.
- **Buffer zone** - the acquisition of undeveloped property to act as a buffer zone is designed to avoid rather than abate traffic noise impacts and, therefore, is not feasible.
- **Noise barriers** - This is the most commonly used noise abatement measure. Noise barriers were evaluated for each of the impacted receiver locations.

Noise barriers would be feasible and reasonable (stand alone or cumulative) for the following impacted receivers and, therefore, are proposed for incorporation into the project (**Table 3** and the **Noise Analysis Map**).

**R1 (Noise Barrier 1)** - This receiver represents a total of 23 apartment units (balconies and patios). Based on preliminary calculations, a noise barrier of 1,809 feet (two sections: 1,485 feet and 324 feet) in length and 12 feet in height would reduce noise levels by at least 5 dB(A) for 7 benefited receivers and 7 dB(A) for 16 benefitted receiver at a total cost of \$390,744 or \$16,989 (stand alone reasonable) for each benefited receiver. A continuous noise barrier along the right-of-way (ROW) would restrict access to these residences. Gaps in a noise barrier would satisfy access requirements but the resulting non-continuous barrier segments would not be sufficient to achieve the minimum, feasible reduction of 5 dB(A). Therefore, the noise barrier is proposed between the general purpose lanes and the frontage roads.

**R5 through R7 (Noise Barrier 2)** - These receivers represent a total of 25 residences (backyards). Based on preliminary calculations, a noise barrier of 1,361 feet in length (seven sections: 69 feet, 155 feet, 285 feet, 53 feet, 41 feet, 620 feet, and 138 feet) and 14 feet in height along the ROW would reduce noise levels by at least 5 dB(A) for 7 benefited receivers and 7 dB(A) for 5 benefitted receivers at a total cost of \$342,972 or \$28,581 (cumulative reasonable) for each benefited receiver exceeding the reasonable, cost-effectiveness criterion of \$25,000. However, the Fort Worth District has approved this barrier to be considered under cost-averaging.

**R8 (Noise Barrier 3)** - This receiver represents a total of 30 apartment units (balconies and patios). Based on preliminary calculations, a noise barrier of 1,259 feet (two sections: 515 feet and 744 feet) in length and 20 feet in height would reduce noise levels by at least 5 dB(A) for 12 benefited receivers and 7 dB(A) for 8 benefitted receivers at a total cost of \$453,240 or \$22,662 (stand alone reasonable) for each benefited receiver. The proposed barrier would be placed along the ROW because of design constraints between the general purpose lanes and frontage road.

**R11 thru R13 (Noise Barrier 4)** - These receivers represent a total of 43 residences (backyards). Based on preliminary calculations, a noise barrier of 5,158 feet (two sections: 1,057 feet and 4,101 feet) in length and 12 feet in height would reduce noise levels by at least 5 dB(A) for 18 benefited receivers and 7 dB(A) for 20 benefitted receivers at a total cost of \$1,114,128 or \$29,319 (cumulative reasonable) for each benefited receiver exceeding the reasonable, cost-effectiveness criterion of \$25,000. However, the Fort Worth District has approved this barrier to be considered under cost-averaging. A continuous noise barrier along the ROW would restrict access to these residences. Gaps in a noise barrier would satisfy access requirements but the resulting non-continuous barrier segments would not be sufficient to achieve the minimum, feasible reduction of 5 dB(A). Therefore, the noise barrier is proposed between the general purpose lanes and the frontage roads.

*Table 3: Noise Barrier Proposal (preliminary)*

Barrier	Representative Receivers	Total # Benefited	Length (feet)	Height (feet)	Total Cost
1	R1	23	1,809 <sup>1</sup>	12	\$390,744
2	R5 thru R7	12	1,361 <sup>2</sup>	14	\$342,972
3	R8	20	1259 <sup>3</sup>	20	\$453,240
4	R11 thru R13	38	5,158 <sup>4</sup>	12	\$1,114,128
Average Cost per Benefitted Receiver					\$24,743
<sup>1</sup> – Noise Barrier 1 consists of two sections (1,485' and 324') along the general purpose lanes and associated exit ramp to John T. White Road. <sup>2</sup> – Noise Barrier 2 consists of seven sections (69', 155', 285', 53', 41', 620', and 138') along the ROW. <sup>3</sup> – Noise Barrier 3 consists of two sections (515' and 744') along the ROW. <sup>4</sup> – Noise Barrier 4 consists of two sections (1,057' and 4,101') along the general purpose lanes and associated ramps and over Handley-Ederville Road.					

Any subsequent project design changes may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barrier would not be made until completion of the project design, utility evaluation and polling of adjacent property owners.

To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2035) noise impact contours (**Table 4**).

Table 4: Noise Impact Contours in the Project Study Area

Roadway	Land Use	Impact Contour <sup>1</sup>	Distance from Proposed ROW Line
I-820	NAC category B & C	66 dB(A)	440 feet
	NAC category E	71 dB(A)	200 feet
SH 121	NAC category B & C	66 dB(A)	365 feet
	NAC category E	71 dB(A)	30 feet
<sup>1</sup> – Impact contours are one dB(A) lower than the NAC per category to reflect impacts that would occur as a result of approaching the NAC for the respective contours.			

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

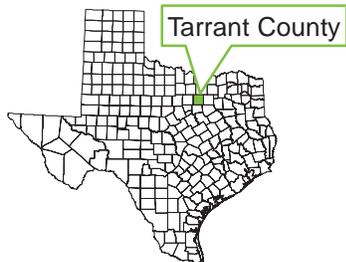
A copy of this traffic noise analysis will be available to local officials. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

# Attachments

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Source: TNRIS (2016)



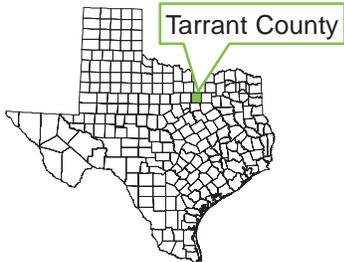
**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.



Source: TNRIS (2016)



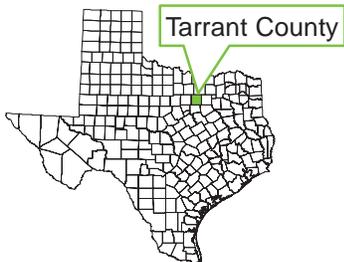
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CSJs: 0008-13-124, etc.



Source: TNRIS (2016)



**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

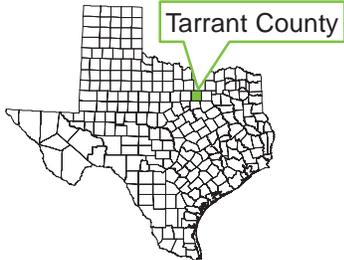
SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.  
Sheet 3 of 10



Source: TNRIS (2016)

**Legend**

- - - Existing ROW
- - - Proposed ROW
- - - Existing Easement
- - - Proposed Easement
- Project Limits
- Proposed Noise Barrier
- Impacted Noise Receiver Benefiting from a Proposed Noise Barrier
- Non-Impacted Noise Receiver



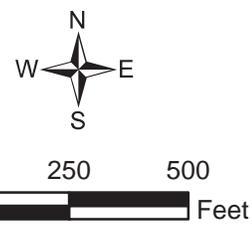
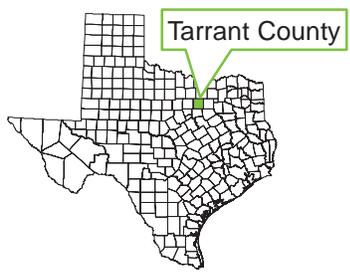
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I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.  
Sheet 4 of 10



Source: TNRIS (2016)



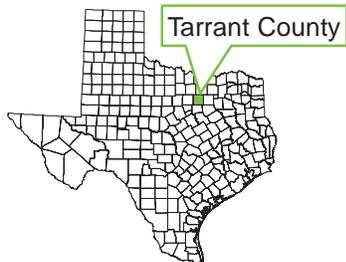
**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.  
Sheet 5 of 10



Source: TNRIS (2016)



**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

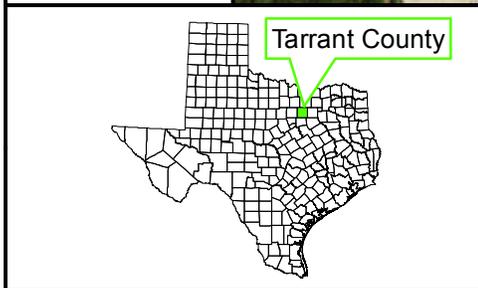
SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.  
Sheet 6 of 10



Source: TNRIS (2016)

**Legend**

- - - Existing ROW
- - - Proposed ROW
- - - Existing Easement
- - - Proposed Easement
- Project Limits
- Proposed Noise Barrier
- Impacted Noise Receiver Benefiting from a Proposed Noise Barrier
- Non-Impacted Noise Receiver

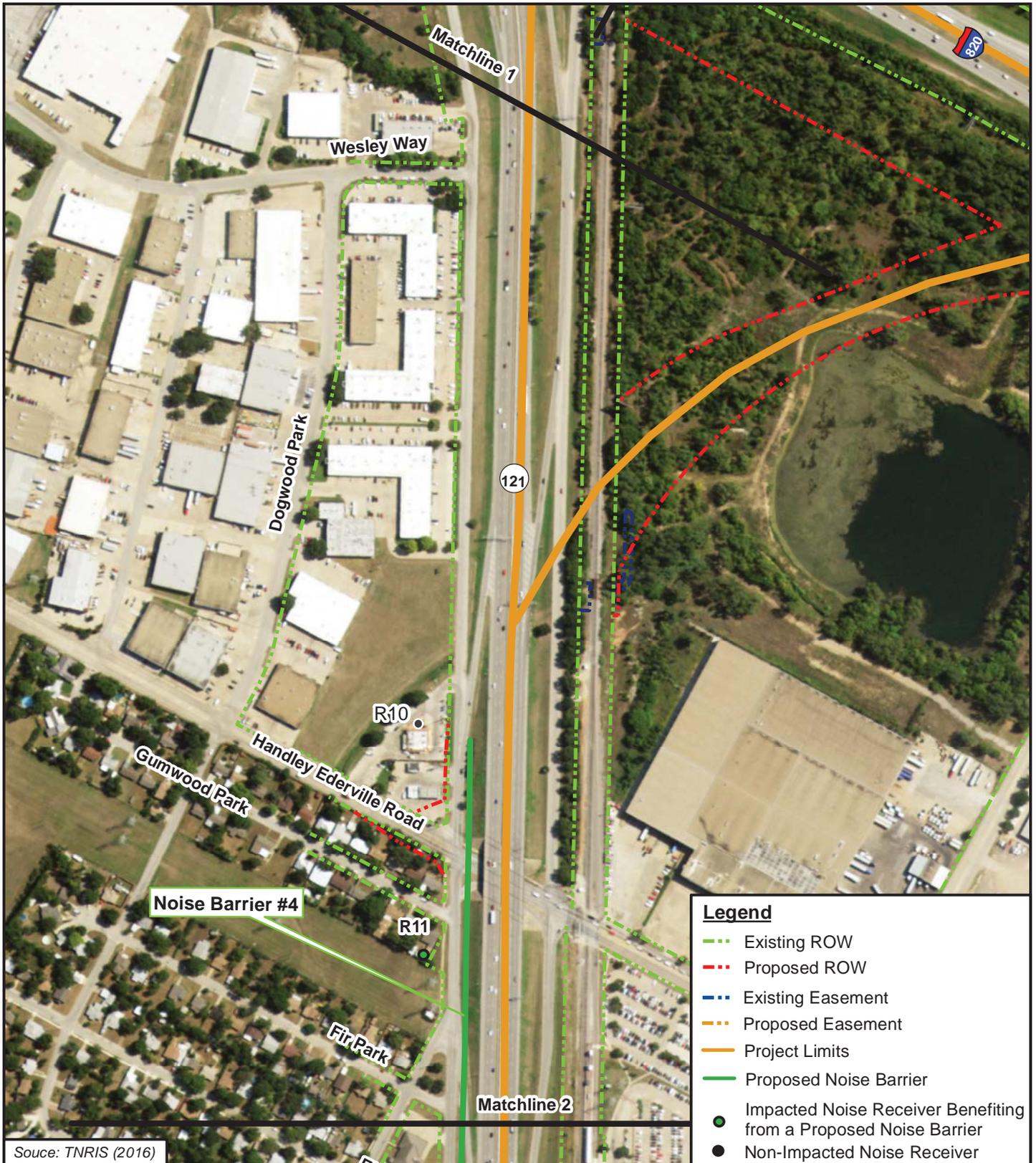


**NOISE ANALYSIS MAP**  
I-820 (EAST)

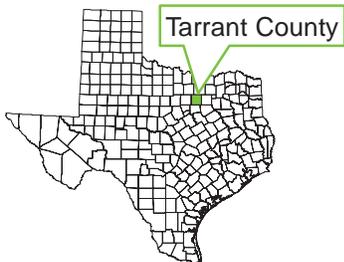
I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.

Sheet 7 of 10



Source: TNRIS (2016)



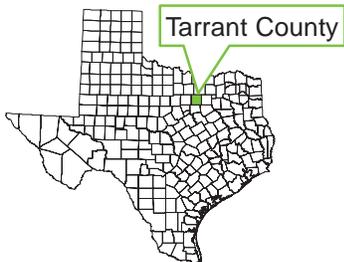
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I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.  
Sheet 8 of 10



Source: TNRIS (2016)



**Legend**

- Existing ROW
- Proposed ROW
- Existing Easement
- Proposed Easement
- Project Limits
- Proposed Noise Barrier
- Impacted Noise Receiver Benefiting from a Proposed Noise Barrier
- Non-Impacted Noise Receiver

**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

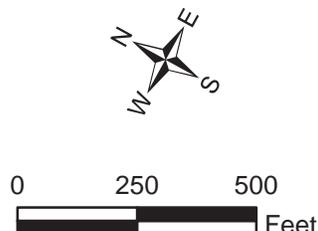
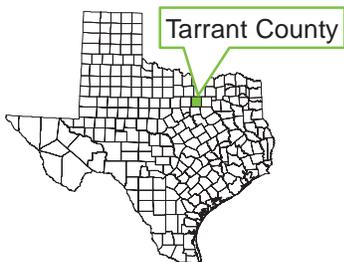
SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.



Source: TNRIS (2016)

**Legend**

- Existing ROW
- Proposed ROW
- Existing Easement
- Proposed Easement
- Project Limits
- Proposed Noise Barrier
- Impacted Noise Receiver Benefiting from a Proposed Noise Barrier
- Non-Impacted Noise Receiver



**NOISE ANALYSIS MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJs: 0008-13-124, etc.

Sheet 10 of 10



# Indirect and Cumulative Impacts

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## I-820/SH 121 Northeast Interchange

Tarrant County  
Fort Worth District

**Main CSJ:** 0008-13-124

**Associated CSJs:** 0008-13- 179, 202, 210, 221, 235, 236 & 237  
and 0363-03-051 & 054

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



# I-820 (East)

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## Indirect and Cumulative Impacts Analysis

Main CSJ: 0008-13-124

Associated CSJs: 0008-13- 179, 202, 210, 221, 235, 236 & 237 and 0363-03-051 & 054

Fort Worth District  
August 2017

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

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# 1 INTRODUCTION

## 1.1 Project Description

The Texas Department of Transportation (TxDOT) is proposing to reconstruct Interstate Highway 820 (I-820) and State Highway (SH) 121 interchange in northern Tarrant County. The proposed actions would take place within the cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth. The proposed project would reconstruct I-820 from approximately 2,000 feet north of Pipeline Road/ Glenview Drive, at the northern I-820/SH 121/SH 183 interchange, to approximately 3,200 feet south of Randol Mill Road. Additionally, SH 121 would be reconstructed from the southern I-820/SH 121 interchange to approximately 5,000 feet west of Handley-Ederville Road. These improvements would also include the addition of connections providing direct access between SH 121 with I-820 and SH 121 with Trinity Boulevard.

The portion of I-820 to be reconstructed is described in two segments. The northern segment extends from the northern I-820/SH 121/SH 183 interchange south to Trinity Blvd. The existing freeway along this segment includes up to four northbound and five southbound general purpose lanes with discontinuous frontage roads varying from two to three lanes in each direction. The proposed project would reconstruct this segment to include up to five northbound and six southbound general purpose lanes, in addition to auxiliary lanes. The proposed project would also include one managed toll lane in each direction and continuous frontage roads that would vary from one to three lanes in each direction along this segment. The southern segment extends between Trinity Boulevard to Randol Mill Road. The existing freeway along this segment includes two general purpose lanes in each direction. The proposed project would reconstruct this segment to include five general purpose lanes each direction.

The existing freeway of SH 121, from I-820 to Handley-Ederville Road, varies from two to three general purpose lanes each direction and includes continuous frontage roads consisting of two lanes in each direction. The proposed project would reconstruct this segment of SH 121 to include three general purpose lanes in each direction, one managed toll lane in each direction and continuous frontage roads varying from one to three lanes in each direction.

The proposed project would require approximately 23 acres of additional right-of-way (ROW) and an approximate 0.03 acre of drainage easement. Refer to the Project Location Map, United States Geological Survey (USGS) Topographic Map, and Aerial Map.

## 1.2 Purpose and Need

The Cities of Hurst, Richland Hills, North Richland Hills, and Fort Worth have experienced steady growth and expansion. This growth is accompanied by increased population density in Tarrant County, as well as substantial increases in motor vehicle numbers utilizing present transportation facilities.

The population in Tarrant County has grown steadily over the past several decades and existing regional and community growth trends in the project vicinity are expected to continue. Traffic volumes continue to increase as a result of area growth. Traffic is particularly congested because the capacity of the existing I-820 facility is being exceeded by the current travel demand and because of the proximity of the existing interchanges. In addition, intersection congestion is occurring at critical signalized locations with high delays and extensive queuing.

The proposed project would provide infrastructure to reduce traffic congestion on existing roadways; to provide a safer, more convenient route for traveling through the area; and to increase mobility and provide access (including improved emergency service access) to area. It would also provide a multitude of functions, which are consistent with adopted area-wide goals, policies, and objectives relating to a comprehensive development plan.

As population and land use changes have occurred, the access needs of drivers to enter and exit I-820/SH121 have also changed. In addition to adding frontage roads to some segments of the existing facility, ramps would be added or removed, and braided ramps would be used in some locations to provide improved access to I-820 and SH 121.

## 2 INDUCED GROWTH INDIRECT IMPACTS

### 2.1 Step 1: Define the Methodology

Induced growth impacts were determined using a planning judgment approach with data collected from the Planning Departments of the Cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth (see attached correspondence with the Planning Departments). Input from the planning staff associated with these cities was essential to determining the most appropriate Area of Influence (AOI). Cartographic techniques using map overlays of constraints such as floodplains were used to identify areas where potential induced growth would not likely occur due to environmental constraints.

## 2.2 Step 2: Define the Area of Influence and Study Timeframe

The proposed project's AOI boundaries were established using roadway locations and geographic boundaries. Roadway locations were chosen to define the north, east, and south sides of the AOI because it was assumed that any new development within proximity to these roadways would be influenced by the roadways and not the project. Geographic boundaries in the form of land parcels touching Big Fossil Creek and West Fork Trinity River were used to help define the western boundary of the AOI due to the lack of north-south roadways. It was assumed that no new development would occur on these parcels due to the presence of Big Fossil Creek, West Fork Trinity River, and associated floodplains. The northern boundary of the AOI consists of sections of SH 121/SH 183 and I-820. The eastern boundary consists of sections of Precinct Line Road, Randol Mill Road, and Cooks Lane. The southern boundary consists of IH 30. The western boundary consists of sections of SH 26, land parcels touching Big Fossil Creek and West Fork Trinity River, and Woodhaven Boulevard.

The area within the AOI encompasses the entire Build Alternative and adjacent areas where development or accelerated rates of development could potentially occur. Extending the AOI out too far would encompass areas unlikely to be affected by the proposed project. The Planning Departments of the Cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth agreed that the AOI, see the attached Area of Influence Map, would encompass any induced growth effects associated with the proposed project. Summaries of the planning discussions are available in the Texas Environmental Compliance Oversight System (TXECOS), the project file of record. The AOI encompasses approximately 14,559 acres. Refer to the AOI Map.

Temporal boundaries for the indirect effects analysis extend from construction of the Build Alternative until 2040, the end of the current Metropolitan Transportation Plan (MTP) planning cycle. The Cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth comprehensive and/or strategic plans all extend into this time period. The proposed project is anticipated to go to letting in December 2017.

## 2.3 Step 3: Identify Areas Subject to Induced Growth in the AOI

Cartographic techniques using constraint overlays showing cemeteries, existing development, floodplains, surface wells, parks, and water bodies were presented to the four cities in the project study area and these data were used by the cities to identify which areas within the AOI would be most likely to experience induced growth.

### 2.3.1 The City of Hurst

City of Hurst planning officials did not identify any project-related induced developments within the AOI, nor did they identify any project-related indirect effects.

### 2.3.2 The City of North Richland Hills

City of North Richland Hills planning officials did not identify any project-related induced development within the AOI. Planning officials stated that their community's primary concern is the uncertainty of the construction timing for the proposed project. They added that the traveling public is continually confused by the opening and closing of access roads.

Next, they stated that the construction of the proposed project would hamper and slow development opportunities adjacent to I-820. City of North Richland Hills planning officials stated that the development of residential and commercial sites, which are dependent on the workers, equipment, and supplies that must travel the I-820 corridor during major reconstruction, would also be hampered, potentially extending those developer's construction schedules.

Lastly, the planners added that the City may never see redevelopment occur in the manner that the Loop 820 Corridor Plan (2005) study projected. The study was developed to address anticipated high-density urban land use along I-820 and SH 183 that is projected to occur as a result of proposed improvements to these roadways and continued growth in the Metroplex.

### 2.3.3 The City of Richland Hills

Planning officials for the City of Richland Hills indicated that because the proposed project does not collectively provide direct access between Handley-Ederville Road and the managed lanes, general purpose lanes, and direct connectors, the proposed project would not promote any induced growth or redevelopment activities in the City.

### 2.3.4 The City of Fort Worth

City of Fort Worth planning officials did not identify any project-related induced development within the AOI, nor did they identify any project-related indirect effects.

## 2.4 **Induced Growth Effects Summary**

The planning staff of the Cities of Hurst, Richland Hills, North Richland Hills, and Fort Worth did not believe that there would be induced growth effects resulting from the proposed project; therefore, Steps 4 through 6 of the indirect impacts analysis are not required.

### 3 CUMULATIVE IMPACTS

The CEQ defines cumulative impacts as those which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7). As such, it may be difficult to understand the role that a proposed action may have in contributing to the overall or cumulative impacts to an area or resource.

In accordance with TxDOT's *Cumulative Impacts Analysis Guidelines* (July 2016), this analysis includes the five steps, listed below, to adequately consider the cumulative effects of the proposed project.

1. Resource Study Area, Conditions and Trends
2. Direct and Indirect Effects on each Resource from the Proposed Project
3. Other Actions – Past, Present, and Reasonably Foreseeable – and their Effect on each Resource
4. The Overall Effects of the Proposed Project Combined with other Actions
5. Mitigation of Cumulative Effects

#### 3.1 Step 1: Resource Study Area, Conditions and Trends

The proposed project's cumulative impacts were narrowed down by carrying forward the direct and indirect impacts that may contribute to a cumulative impact. The cumulative impacts analysis focused on resources substantially impacted by the proposed project and resources in poor or declining health or at risk that are directly or indirectly impacted by the proposed project. The resources which were evaluated for direct and indirect impacts are listed in Table 1. The table summarizes the direct and indirect impacts anticipated for each resource and identifies whether or not the resource is carried forward for cumulative impacts analysis.

Table 1: Population and Employment Trends and Forecasts for Selected Locations

Resource or Topic Evaluated		Direct Effects	Indirect Effects	Carried Forward for Cumulative Effects Analysis	Reason for Elimination
Socio-economics	Community Cohesion, Acquisitions, Relocations and Displacements	<p>Three businesses would be displaced and parking and/or driveways would be encroached upon at seven businesses.</p> <p>No direct impacts to community cohesion are anticipated. The City of Hurst offers an array of commercial facilities comparative to the businesses being displaced by the proposed project. Patrons of the impacted businesses will have other options and alternatives to patronize. The City has several vacant properties and buildings that are available which gives the displaced businesses option to rebuild in the study area.</p>	No indirect effects are anticipated.	No	Direct and indirect impacts to community cohesion are not anticipated and the proposed project would provide a positive benefit to the community.
	Environmental Justice	No disproportionately high or adverse direct impacts.	Indirect effects associated with minority or low-income populations are not anticipated.	No	No adverse direct effects and no indirect effects are anticipated.
	Economy	Reconfiguration of existing exit/entrance ramps and addition of new turnarounds may temporarily inconvenience drivers. These direct effects would likely be short term as commuters become used to the proposed improvements.	Indirect effects that may result from direct effects include changes in travel patterns and changes in the local economy. No substantial adverse indirect effect is anticipated.	No	No adverse direct or indirect effects are anticipated.
Public Facilities and Services		No direct impacts are anticipated.	No indirect effects are anticipated.	No	No direct or indirect effects are anticipated.
Cultural Resources	Historic Structures	No NRHP listed or NRHP eligible properties are located within the project APE.	No indirect effects are anticipated.	No	No adverse direct effects and no indirect effects are anticipated.
	Archeological Resources	TxDOT archeologists determined that the proposed project would have no effect on archeological resources that would be afforded further consideration under cultural resource laws.	No indirect effects are anticipated.	No	No direct or indirect effects are anticipated.
Vegetation and Wildlife Habitat		<p>Approximately 34 acres of non-Urban vegetation would be permanently impacted by the proposed project.</p> <p>Suitable habitat within the proposed project area might be present for the timber rattlesnake, Texas garter snake, and plains spotted skunk.</p>	No indirect effects are anticipated.	Yes. There are direct and indirect impacts, and the resource is in poor and/or declining health.	Not Applicable
Migratory Birds		No impacts to migration patterns or migratory bird habitat are anticipated.	No indirect effects are anticipated.	No	There are no direct impacts, no indirect impacts are anticipated, and the resource is not in poor and/or declining health.
Waters of the U.S., Water Quality		<p>The proposed project would permanently impact approximately 0.274 linear mile (0.49 acre) of Crossing 2 (WF-9) and 0.019 linear mile (less than 0.01 acre) of Crossing 4 (Mosier Valley Lake).</p> <p>Potential impacts would be minimized by BMPs associated with Tier I projects and are not anticipated to be substantial.</p>	No indirect effects are anticipated.	Yes, resource is in poor and/or declining health.	Not applicable.

Table 1: Population and Employment Trends and Forecasts for Selected Locations

Resource or Topic Evaluated	Direct Effects	Indirect Effects	Carried Forward for Cumulative Effects Analysis	Reason for Elimination
Floodplains	<p>Approximately nine acres of the proposed project ROW is located within a FEMA designated 100- year floodplain. The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances.</p> <p>Construction would be limited to the proposed project's existing/proposed ROW/easement areas, and would have no effect on floodplain areas outside the construction area.</p>	No indirect effects are anticipated.	No	Direct effects are not anticipated to be substantial, there are no indirect effects, and resource is not in poor or declining health.
Farmland	The proposed project is not subject to provisions of Farmland Protection Policy Act (FPPA) because lands identified as "urbanized area" (UA) on Census Bureau maps are not covered by the act. The proposed project is located within the Dallas-Fort Worth-Arlington, TX UA. Construction would be limited to the proposed project's existing/proposed ROW/easement areas, and would have no effect on areas outside the construction area.	No indirect effects are anticipated.	No	The project is in the Dallas-Fort Worth-Arlington UA and is not subject to the FPPA.
Air Quality	<p>The project is consistent with MTP, which conforms to the Transportation Improvement Plan; therefore, air quality impacts are not expected related to ozone.</p> <p>Present and future vehicle miles travelled and the associated MSAT emissions and CO emissions resulting from the proposed project are considered a direct effect and were considered in the air quality analyses.</p>	No indirect effects are anticipated.	No	No adverse direct effects and no indirect effects are anticipated.
Noise	Noise impacts would occur at six receivers. To minimize the potential for adverse impacts, noise barriers (two) are proposed for impacted residential receivers (six).	No indirect effects are anticipated.	No	No adverse direct effects and no indirect effects are anticipated.
Visual/Aesthetics	<p>The proposed project improvements are expected to blend with the general character of the area.</p> <p>The proposed project entails improvements/widening of an existing visual element rather than introducing a new visual element into the environment.</p>	No indirect effects are anticipated.	No	No direct or indirect effects are anticipated.

Source: Study Team, August 2017

As shown in Table 1, vegetation/wildlife habitat and Waters of the U.S. will be analyzed to identify adverse effects from cumulative impacts.

### 3.1.1 Resource Study Area

A Resource Study Area (RSA) has both temporal and geographic components. The temporal component of a RSA is the timeframe in which effects to resources are expected to occur. For the natural resources (vegetation and wildlife habitat, and Waters of the U.S.), the year 1963 was used as the beginning temporal boundary because it corresponds to the approximate date for beginning construction of I-820 and SH 121. The year 2040 was chosen as the future temporal limit for all RSAs in order to capture the primary impacts that would be realized by the proposed project and estimated changes in roadway traffic volumes, as well as the expected implementation of local land use plans and Mobility 2040 MTP.

The geographical RSA for Waters of the U.S. and vegetation and wildlife habitat consists of sub-basins of Big Fossil Creek, Calloway Branch, Walker Branch, Mesquite Branch, and the West Fork Trinity River. The sub-basins were delineated using topographic high points encircling the project. The boundary of the RSA ranges from approximately 0.6 mile to 1.2 mile outside of the project area.

Due to laws and regulations concerning Waters of the U.S., agricultural practices and residential/commercial development usually avoid streams and can leave portions of pristine habitat in place. For this reason, quality wildlife habitat and vegetation are usually found within stream systems, adjacent to intermittent and perennial streams. Sub-basins contain the waters, vegetation, and wildlife habitat most likely to be affected by the proposed project. Extending the RSA beyond these sub-basins would include areas outside the influence of the proposed project. The RSA totals approximately 10,083 acres.

The Planning Departments of the Cities of North Richland Hills, Richland Hills, Hurst, and Fort Worth agreed that the RSA shown on the Resource Study Area Map was adequate to capture all potential cumulative impacts to Waters of the U.S. and vegetation and wildlife habitat. Summaries of the planning discussions are available in the TXECOS.

**Table 2** lists the affected resources and their corresponding RSAs. Maps of the RSA are shown on the Resource Study Area Map.

*Table 2: Resource Study Areas for Affected Resources*

Affected Resource	Resource Study Area
Waters of the U.S.	Sub-basins for Big Fossil Creek, Calloway Branch, Walker Branch, Mesquite Branch, and the West Fork Trinity River (Resource Study Area Map)
Vegetation and Wildlife Habitat	Sub-basins for Big Fossil Creek, Calloway Branch, Walker Branch, Mesquite Branch, and the West Fork Trinity River (Resource Study Area Map)

### *3.1.1.1 Waters of the United States*

There are approximately 17 miles of streams and 168 acres of ponds within the Big Fossil Creek, Calloway Branch, Walker Branch, Mesquite Branch, and the West Fork Trinity River drainage sub-basins RSA. Historically, agricultural activities were the primary activities conducted within the RSA. These activities did not require the fill and degradation of Waters of the U.S. Due to the emerging residential, commercial/retail, and industrial setting within the RSA, impacts consisting of bridging, culverting, and filling Waters of the U.S. are occurring more frequently within the RSA. For this reason, the current condition of the Waters of the U.S. within the RSA is considered “in decline.”

### *3.1.1.2 Vegetation and Wildlife Habitat*

The Big Fossil Creek, Calloway Branch, Walker Branch, Mesquite Branch, and the West Fork Trinity River drainage sub-basins RSA are within the Blackland Prairie Natural Region, which was historically dominated by tallgrass prairie on uplands and deciduous bottomland woodlands and forest along rivers and creeks. In the 1870s, with the advent of the railroad, large tracts of the prairie were transformed into cotton fields and the original flora and fauna of the prairie was quickly overtaken by agricultural crops and introduced grasses. The RSA is also located within the Oak Woods and Prairies Natural Region. This natural region historically consisted of oak-hickory forest intermixed with sections of tall-grass prairie. Historically disturbed by fire and drought, the majority of natural vegetation within this natural region has been replaced by cattle ranching and agricultural crops.

The RSA is partially located within eastern Fort Worth. The Cities of Hurst, Richland Hills, and North Richland Hills are also located with the RSA. The RSA lies centrally within the Dallas-Fort Worth Metroplex and its surroundings are highly developed. To the north are the Cities of Keller and Colleyville; to the east is the City of Bedford; to the south is the City of Arlington; and to the west is Haltom City. The majority of the land within and surrounding the RSA is developed. Undeveloped land and wooded areas are present to the southern portion of the RSA and within the West Fork Trinity River floodplain.

The RSA is in the Trinity River floodplain and was historically used for agricultural purposes with farmland and rangeland dominating the area. Based on historic aerial photography, development started moving into the area in the late 1950s/early 1960s, but was primarily concentrated north of SH 183/SH 10. I-820 and SH 121 were introduced to the area in the early 1960s, improving connectivity and opening up the area for further development. The expanding transportation network in the area reduced the available habitat along the riparian corridors and reduced the ability of streams and wetlands to filter runoff and retain water. This allowed for increased erosion and degradation of the water features. Some areas, such as the West Fork Trinity River floodplain, have remained relatively unchanged over the years and continue to provide habitat for wildlife and ecological benefits from water features. Other areas, such as those surrounding Big Fossil Creek, Calloway Branch, Walker Branch, and Mesquite Branch, have been developed or fragmented to such an extent that little habitat exists for wildlife and overall quality and connectivity of riparian corridors has declined. Streams and wetlands have been altered and do not provide the same ecological benefits they once provided. As a result of a change in vegetation and habitat, wildlife species in the area are shifting to species better able to adapt to an urban environment. The current condition of the vegetation and wildlife habitat within the RSA is considered “in decline”.

Based on 2016 aerial photography, the primary vegetation within the RSA is herbaceous vegetation and floodplain forest associated with the West Fork Trinity River. Healthy riparian areas are also found adjacent to portions of Big Fossil Creek, Calloway Branch, Walker Branch, and Mesquite Branch. There are approximately 798 acres of herbaceous vegetation and 1,235 acres of wooded vegetation within the RSA.

Based upon 2016 aerial photography, approximately 78 percent (7,865 acres) of the RSA is urban or developed. The developed areas consist of approximately 2,551 acres of commercial development, 4,252 acres of residential development, and 1,062 acres of transportation facilities.

As discussed previously, the West Fork Trinity River runs through an expansive wooded floodplain within the RSA. This wooded corridor not only provides protection to the West Fork Trinity River from disturbance associated with development, but also serves as a sanctuary for wildlife and plant species. Beyond the wooded corridor are undeveloped areas comprised of maintained herbaceous vegetation. Overall, the floodplain corridor provides a protected environment for native and sensitive wildlife and plant species to live and grow with minimal disturbance.

## **3.2 Step 2: Direct and Indirect Effects on each Resource from the Proposed Project**

### **3.2.1 Waters of the United States**

Permanent impacts to waters of the U.S. include 0.49 acre (0.274 linear mile) at Crossing 2 (WF-9) and less than 0.01 acre (0.019 linear mile) at Crossing 3 (Mosier Valley Lake). There are no project-related indirect impacts to Waters of the U.S. from induced development in the RSA.

### 3.2.2 Vegetation and Wildlife Habitat

Approximately 34 acres of non-Urban vegetation would be directly impacted by the proposed project. There are no project-related indirect impacts to vegetation from induced development in the RSA.

### **3.3 Step 3: Other Actions – Past, Present and Reasonably Foreseeable – and their Effect on each Resource**

To identify other past, present, and reasonably foreseeable actions within the RSA, a 1963 aerial photograph of the RSA was compared to 2016 aerial photograph of the RSA to determine past actions. Planning/platting data was provided by various city representatives to determine present and reasonably foreseeable actions. The past, present, and reasonably foreseeable actions identified are listed in Table and symbolized on the Resource Study Area Map.

*Table 3: Past, Present, and Reasonably Foreseeable Actions*

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Development	Approximate Area (acres)
<b>Past Actions (All Cities)</b>	
Commercial Development	1,755
Residential Development	1,280
Transportation Facilities	632
<b>Present and Reasonably Foreseeable Actions (By City)</b>	
<b>City of Hurst</b>	
Kia Dealership	10.1
QuikTrip	1.6
Fanning Business Park	1.5
<b>City of North Richland Hills</b>	
Northgate Pentecostals	3.0
City Point (redevelopment)	71.0
<b>City of Richland Hills</b>	
Walmart Neighborhood Grocery Store	5.2
TRE Parking Lot	1.0
Advanced Glass	1.3
Conti Center (redevelopment)	11.8
<b>City of Fort Worth</b>	
Trinity Lakes	579.1
Lakes of River Trails East	57.3
Lakes of River Trails West	53.7
Synergy FW 1 Addition	4.2
Jerry Spencer Addition	5.0
Riverbend Office Park	1.1
Greenscaping Offices	4.6
Fountain Creek	4.0
Village Creek Addition	5.7
Manhattan Town Homes Ltd.	19.7

*Table 3: Past, Present, and Reasonably Foreseeable Actions*

Development	Approximate Area (acres)
Parks on Randol Mill	22.2
Weldon Meadows	5.9
Emory Place	4.8
Bridgewood Village	2.7
Riverbend East Office Park	8.1
Riverbend West Business Park	8.9
Hills of Woodhaven	10.0
Noble Hill Addition	15.1
Sunset Oaks Addition	18.8
International Leadership of Texas East For Worth 5-8 School	15.0
<b>Total</b>	<b>4,619.4</b>

*Source: Historic Aerials.com, Interviews with city planners from the Cities of North Richland Hills, Hurst, Richland Hills, and Fort Worth (September 2014, August 2017). TxDOT environmental staff (May 2017).*

### 3.3.1 Waters of the United States

Potential cumulative impacts considered and discussed include impacts on waters of the U.S. resulting from the direct and indirect impacts of the proposed project in combination with the effects of other past, present, and reasonably foreseeable actions. Data is not available to quantify the acreage of streams in the RSA; however, stream lengths in the RSA can be measured using aerial photographs. Acreages of ponds can be determined using aerial photographs. Therefore, the linear mile is the measurement unit used for determining stream impacts and acres is the measurement unit used for determining pond impacts.

Waters within the RSA include approximately 17 miles of streams and 168 acres of ponds/lakes. Common rural and urban wildlife use the riparian areas adjacent to streams within the RSA. The streams and accompanying wildlife habitat surrounding I-820 are connected to other stream systems located to the west and east of the roadway, creating wildlife corridors that can be used by aerial, aquatic, and terrestrial animals. Development within the RSA could fragment existing creeks into small, distinct segments surrounded by manmade structures instead of the existing continuous corridors, effectively removing travel corridors for any wildlife.

### 3.3.2 Vegetation and Wildlife Habitat

Potential cumulative impacts considered and discussed include direct and indirect impacts to the vegetation and wildlife habitat as a result of implementation of the proposed project in combination with the effects of other past, present, and reasonably foreseeable actions. Acreages of vegetation types in the RSA were determined from aerial photographs. For the purposes of this analysis, it was assumed that any of the other past, present, and reasonably foreseeable actions would displace all the native vegetation and wildlife habitat within the confines of the development.

The vegetation within the RSA includes approximately 798 acres of herbaceous vegetation and 1,235 acres of wooded vegetation . Common rural and urban wildlife use the vegetation types as habitat in the RSA. The vegetation and streams surrounding I-820 are connected to other vegetated areas west and east of the roadway, creating open corridors that can be used by aerial and terrestrial animals. Development within the RSA could fragment existing vegetation into small, distinct segments surrounded by man-made structures instead of the existing continuous corridors, effectively removing travel corridors for wildlife.

## 3.4 Step 4: The Overall Effects of the Proposed Project Combined with Other Actions

### 3.4.1 Waters of the United States

The cumulative impacts on waters of the U.S. would total approximately 1.3 miles of streams. Approximately 0.30 mile would be from direct impacts and one mile is from previously described other past, present, and reasonably foreseeable actions in the RSA. Cumulative impacts to streams would affect 7.2 percent of the resource within the RSA.

The cumulative impacts on ponds/lakes by the previously described other past, present, and reasonably foreseeable actions would total approximately 37 acres. This impact to ponds/lakes would affect 22.0 percent of the resource within the RSA.

### 3.4.2 Vegetation and Wildlife Habitat

The cumulative impacts on vegetation and wildlife habitat resulting from the approximately 34 acres of direct impacts to non-Urban vegetation in combination with the 4,095 acres of impact to vegetation from the previously described other past, present, and reasonably foreseeable actions would total 4,129 acres. Cumulative impacts to vegetation and wildlife habitat would affect 70.4 percent of the resource within the RSA.

## 3.5 Step 5: Mitigation of Cumulative Effects

Land development activities for the Cities of Richland Hills, North Richland Hills, Hurst and Fort Worth are regulated by their respective Planning and Development Department. The department is responsible for the orderly development of the city and the administration of various land use regulations, including the zoning code, design review ordinances, and sign code. Other non-

municipal agencies could also be involved in land development regulation depending on the circumstances. The responsibility of transportation providers such as TxDOT would be to implement a transportation system to complement the land use.

### 3.5.1 Waters of the United States

Avoidance or minimization of impacts to waters of the U.S. and wetlands should be performed during the development design phase so that the least amount of impact occurs. Mitigation is only conducted when impacts to waters of the U.S. and wetlands cannot be avoided. Typical mitigation for impacts to waters of the U.S. includes the construction of mitigation areas or purchasing credits from a mitigation bank. Mitigation is frequently conducted as one of the requirements for obtaining a Section 404 permit. The USACE decides what the ratio of the mitigation area would be relative to the acreage of impacts to waters of the U.S. A typical mitigation ratio is three times the amount of acreage impacted, while the minimum mitigation ratio is one time the amount of acreage impacted (i.e. 1:1 ratio).

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or in certain circumstances, preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation. Mitigation banks are used in situations where the construction of a mitigation area is not practical. Mitigation banks are a form of “third-party” compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by a party other than the permittee. The USACE would have jurisdiction over mitigation activities for impacts to waters of the U.S., and as such, would determine the mitigation responsibilities of the developers.

### 3.5.2 Vegetation and Wildlife Habitat

Incorporating parks, open spaces, and riparian corridors around and within developed areas would provide wildlife habitat and shelter. Planting these areas with native fruit or nut-bearing trees and shrubs, and native grain-bearing grasses would provide food for wildlife, and would help to mitigate impacts to habitat used by wildlife. This mitigation could be conducted by whoever is responsible for the impact such as a city or a developer.

Development within the associated municipalities within the RSA would be subject to the laws and ordinances regulating residential, commercial and industrial development set by each municipal government. Mitigation could include mandatory park areas or a limit on lot sizes. State and federal entities protect the quality of water and wildlife habitat in the area and additional development would follow the requirements of state and federal laws.

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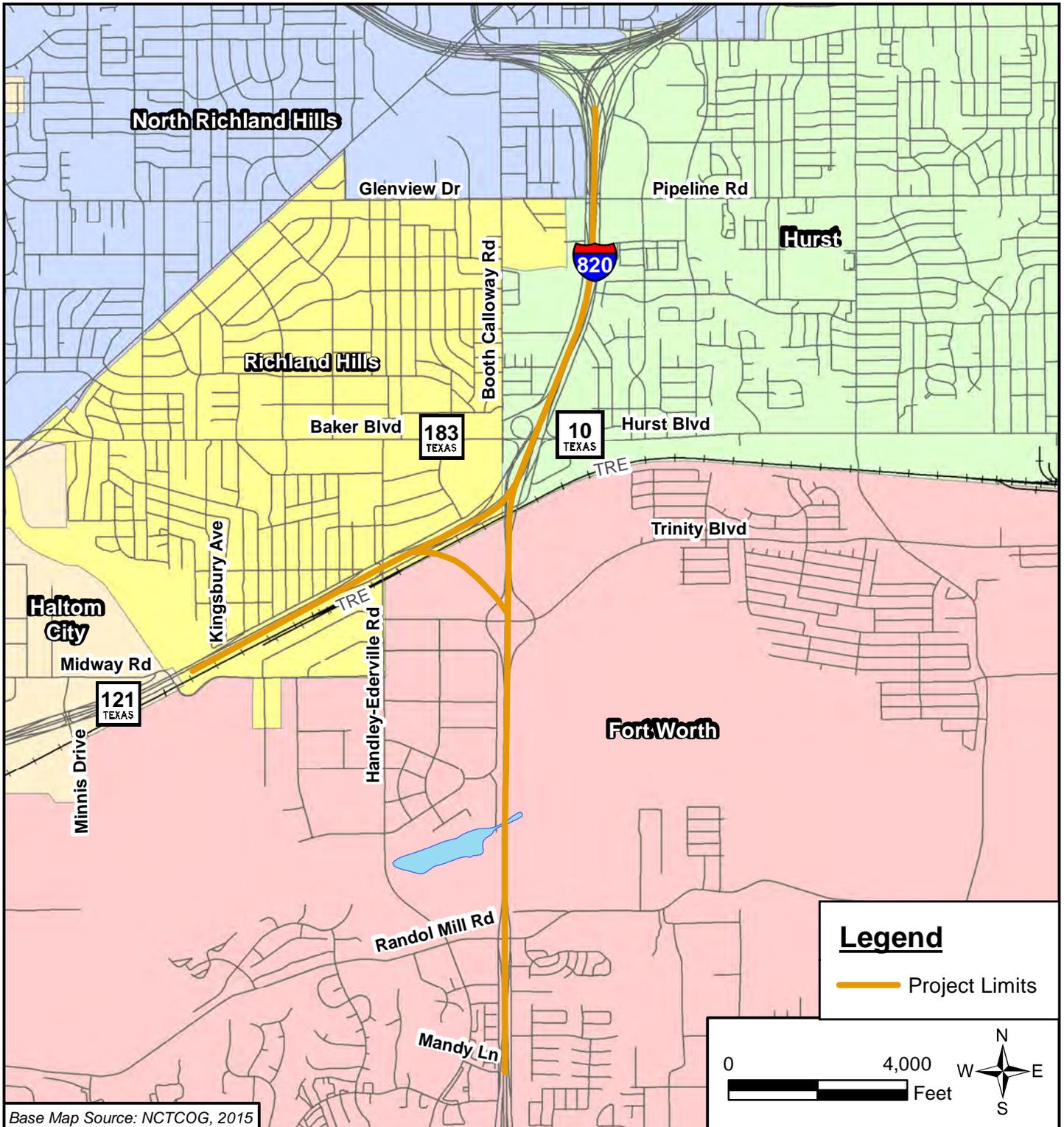
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- . "Aerial Imagery." 10 October 2007. 32°48'16.69" N and 97°12'43.05"W.
- . "Aerial Imagery." 31 March 2008. 32°48'16.69" N and 97°12'43.05"W.
- . "Aerial Imagery." 26 December 2009. 32°48'16.69" N and 97°12'43.05"W.
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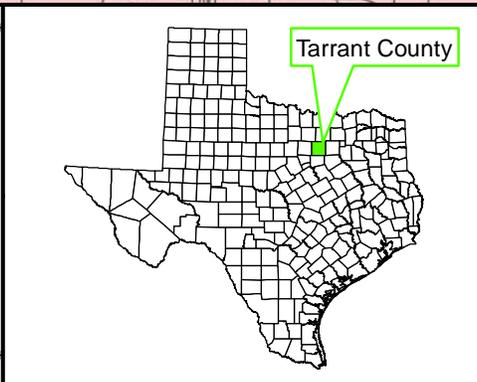
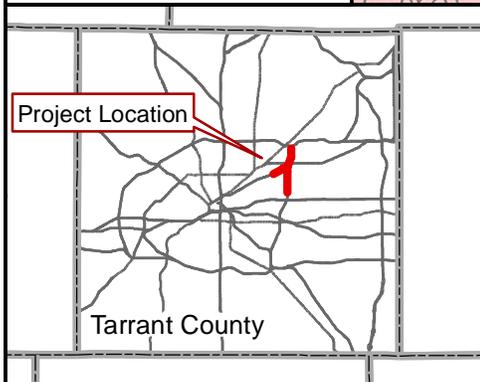


**Legend**

— Project Limits



Base Map Source: NCTCOG, 2015



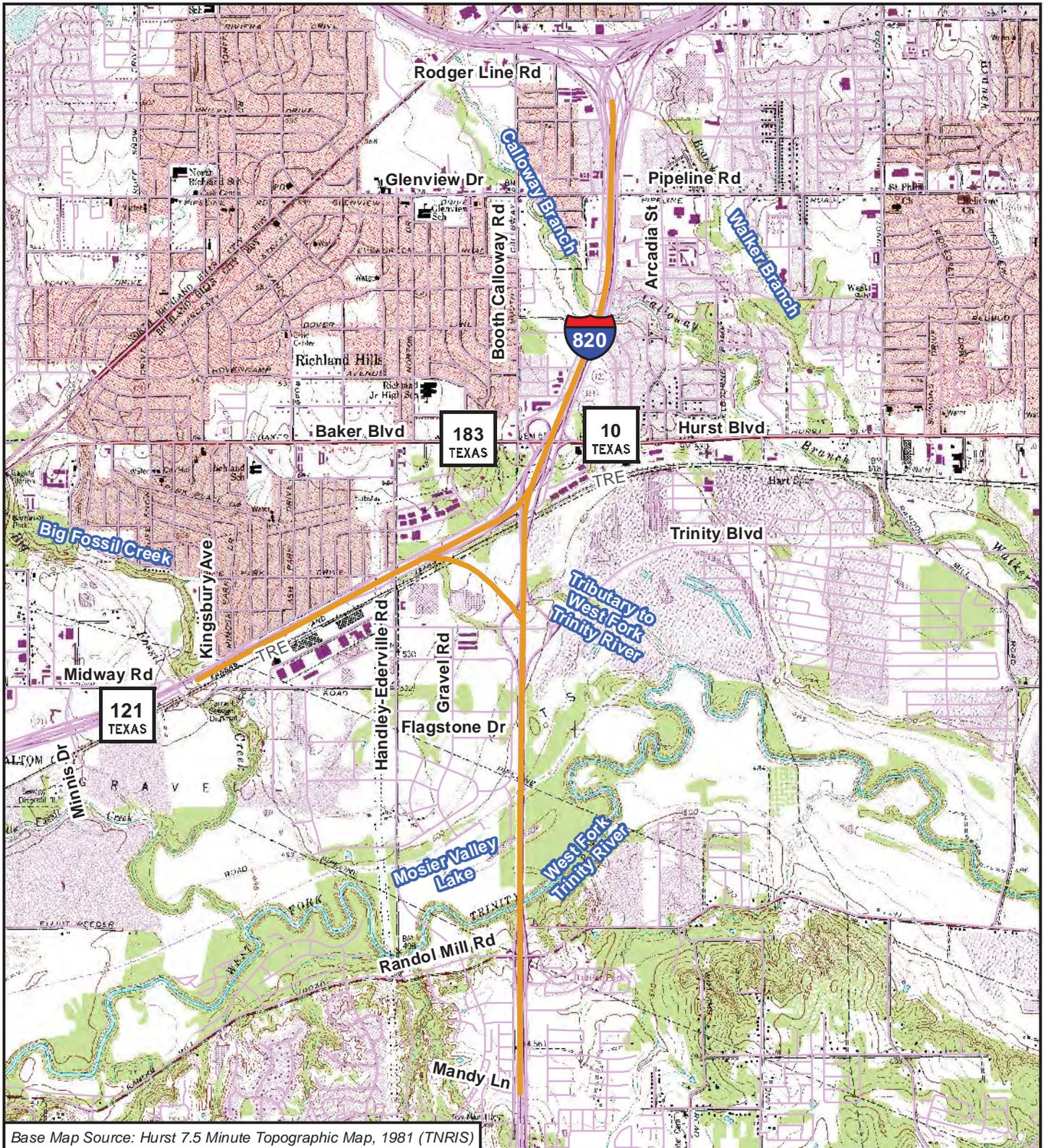
**PROJECT LOCATION MAP**

I-820 (EAST)

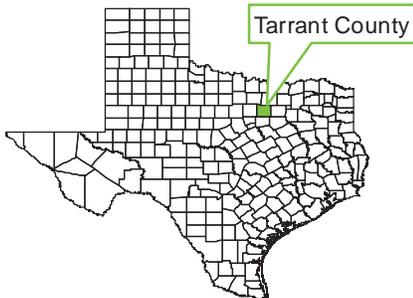
I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

CSJ: 0008-13-124, etc.



Base Map Source: Hurst 7.5 Minute Topographic Map, 1981 (TNRIS)



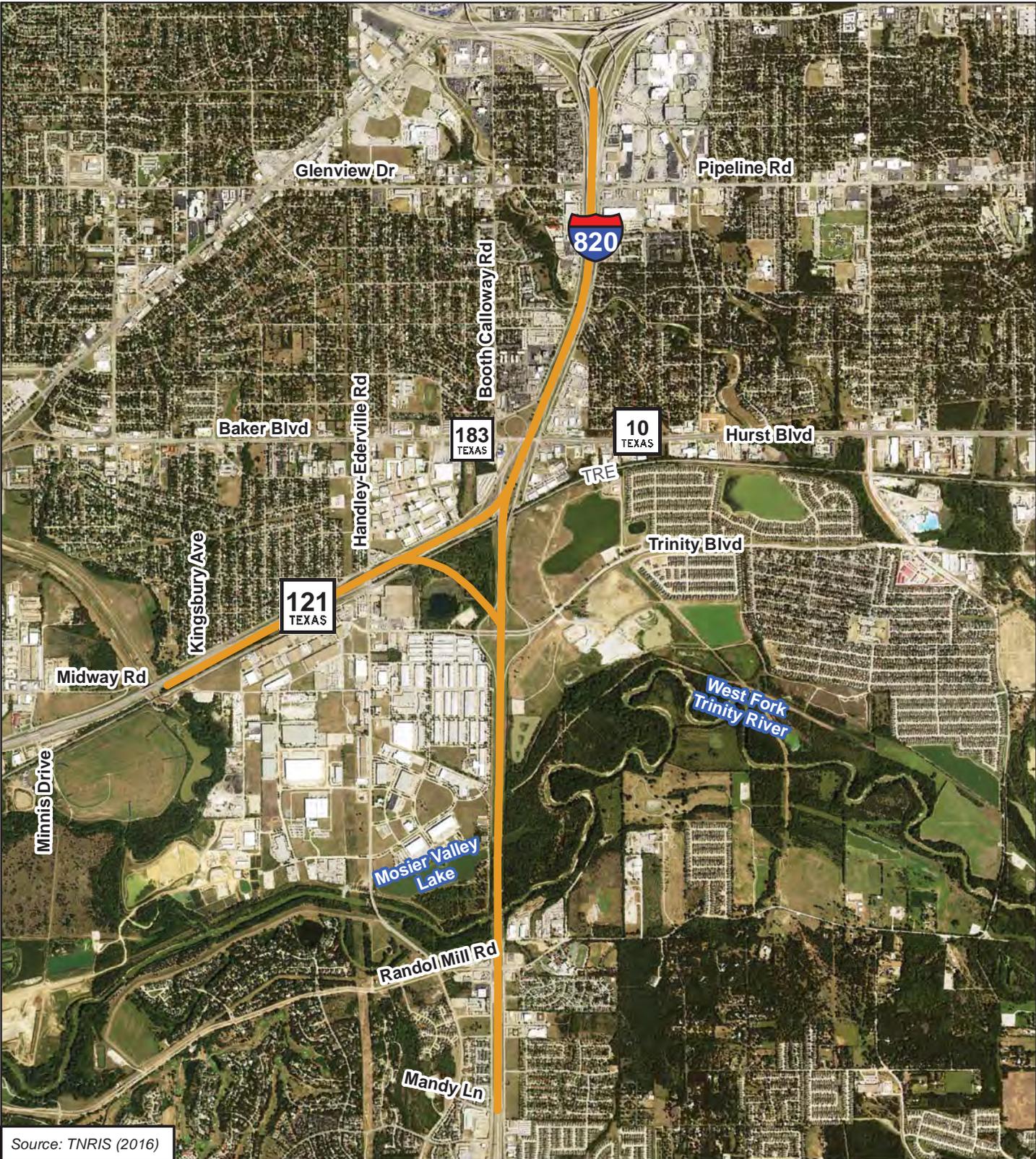
**USGS TOPOGRAPHIC MAP**

I-820 (EAST)

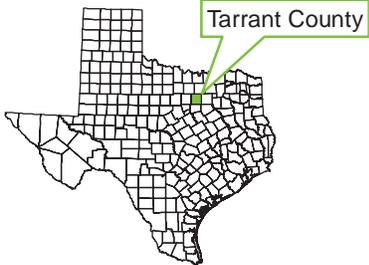
I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 4,900 feet west of Handley-Ederville Road

CSJ: 0008-13-124, etc.



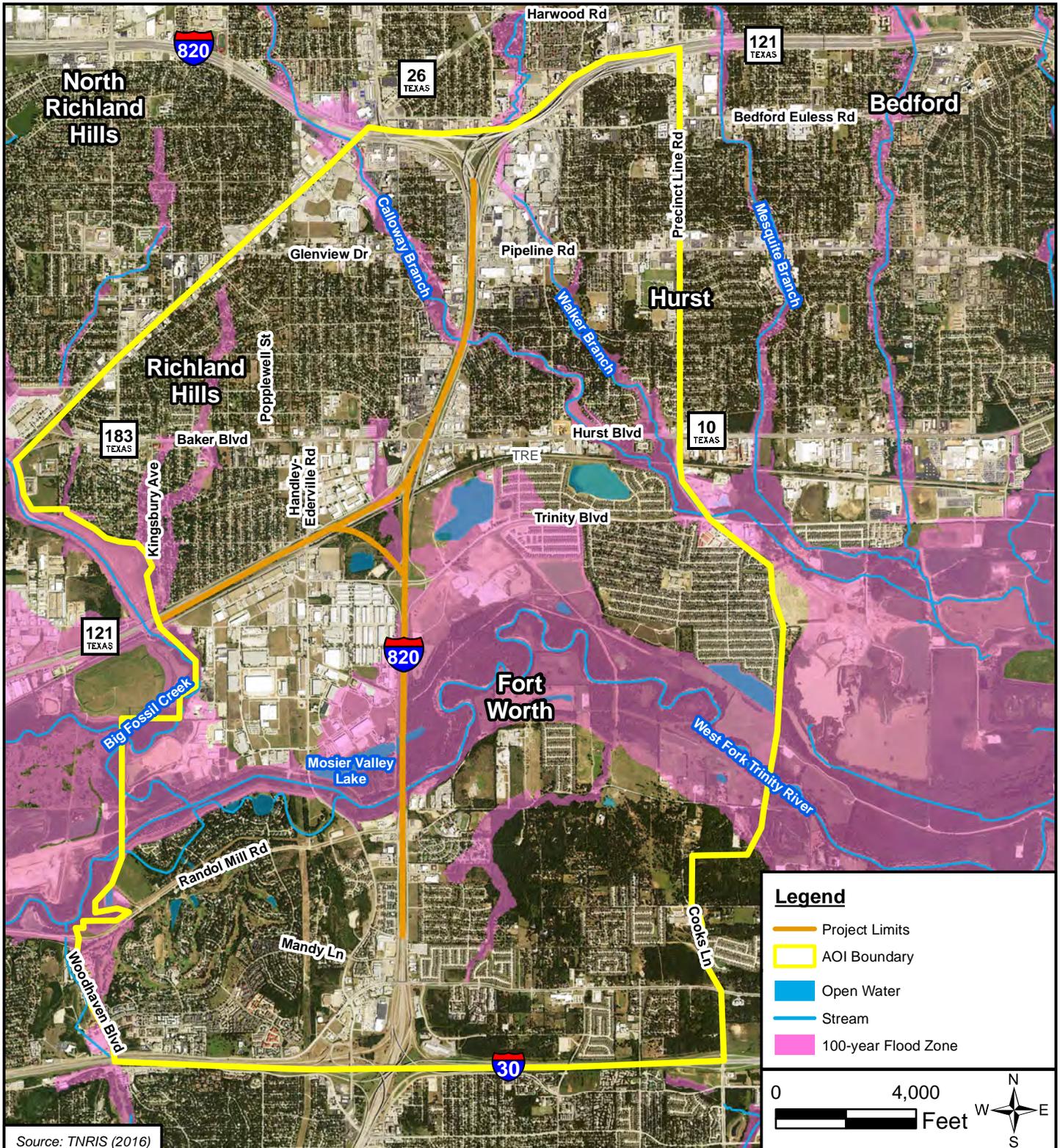
Source: TNRIS (2016)



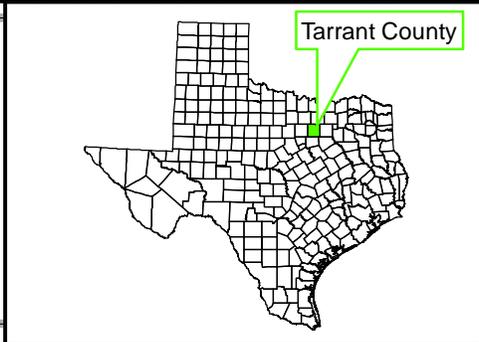
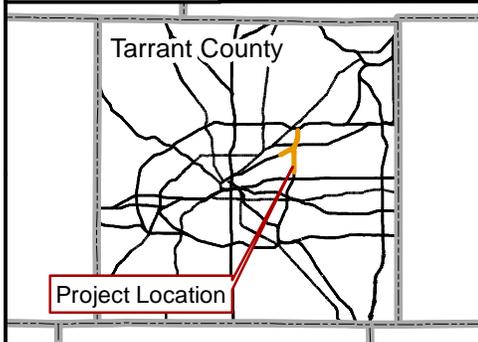
**AERIAL PROJECT LOCATION MAP**  
I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

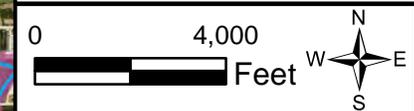
SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road  
CSJ: 0008-13-124, etc.



Source: TNRIS (2016)



- Legend**
- Project Limits
  - AOI Boundary
  - Open Water
  - Stream
  - 100-year Flood Zone

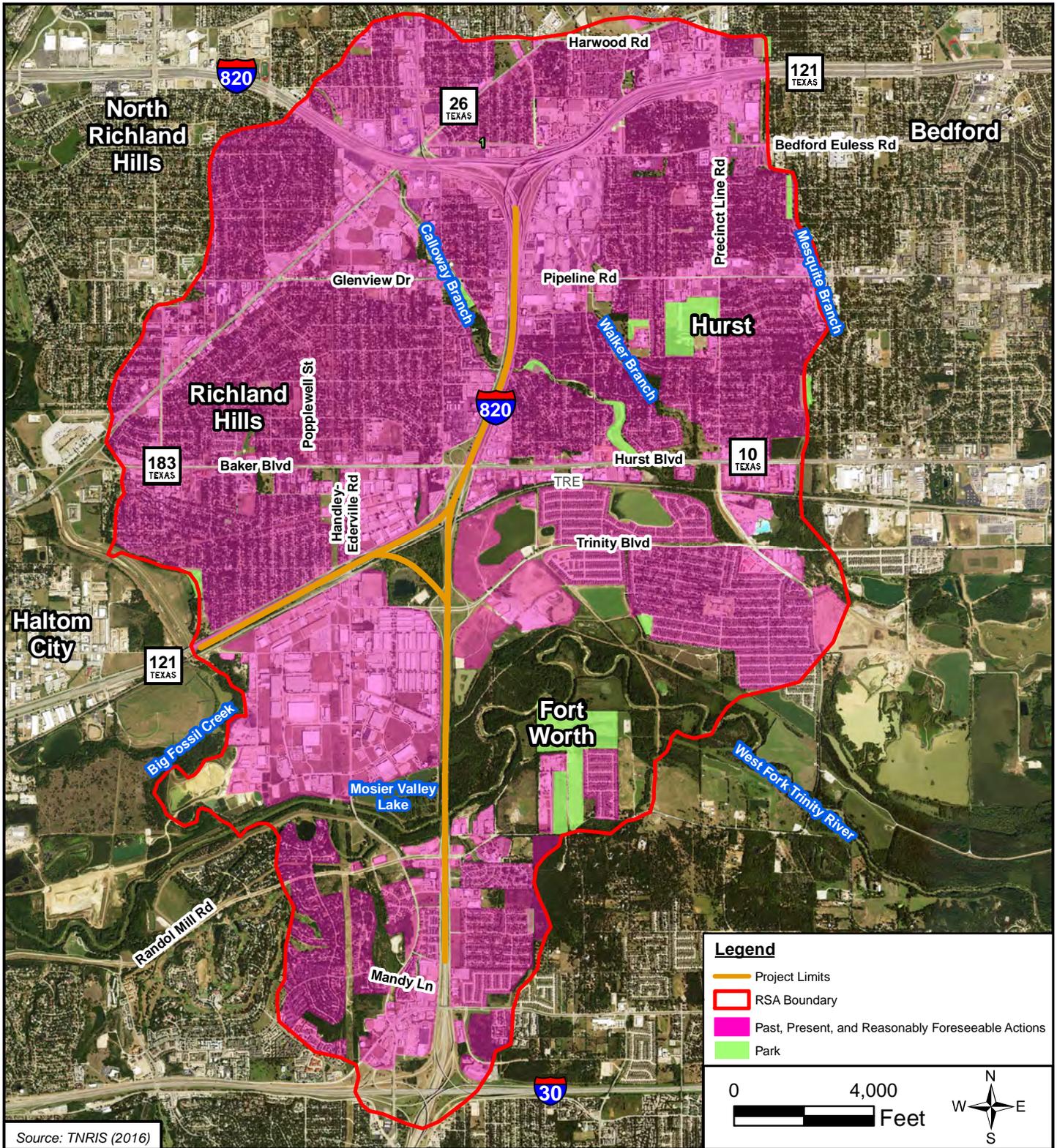


**AREA OF INFLUENCE MAP**  
 I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

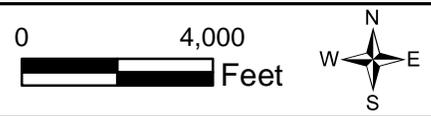
CSJ: 0008-13-124, etc.



Source: TNRIS (2016)

**Legend**

- Project Limits
- RSA Boundary
- Past, Present, and Reasonably Foreseeable Actions
- Park

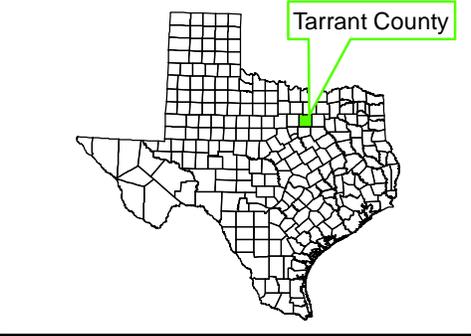
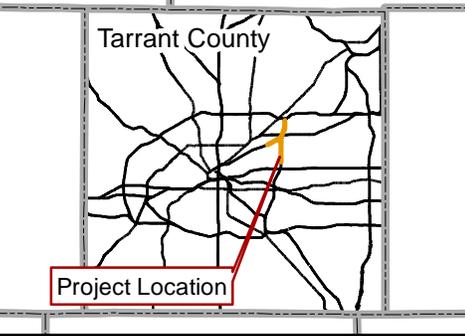


**RESOURCE STUDY AREA**  
 I-820 (EAST)

I-820 from approximately 2,000 feet north of Pipeline Road/Glenview Drive to 3,200 feet south of Randol Mill Road

SH 121 from I-820 to approximately 5,000 feet west of Handley-Ederville Road

CSJ: 0008-13-124, etc.



**From:** [Jason Lester](#)  
**To:** [Alma Canning](#)  
**Subject:** FW: I 820 and SH 121 Improvement Project  
**Date:** Thursday, July 27, 2017 10:43:08 AM

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Just got this from the assistant city manager for Richland Hills. Do you have any follow up questions you would like me to ask?

---

**From:** Jason Moore [REDACTED]  
**Sent:** Thursday, July 27, 2017 10:23 AM  
**To:** Jason Lester [REDACTED]  
**Cc:** Scott Mitchell [REDACTED]; Christopher Hagar [REDACTED]  
**Subject:** RE: I 820 and SH 121 Improvement Project

We misinterpreted the drawing then. Without the direct connectors, the project provides no benefit to our business parks. It will actually harm retail because now, when you are traveling from Hurst to downtown Fort Worth, you can see McDonald's and our other retail tracts in time to exit Handley Ederville. My understanding is that the exit for Handley Ederville will actually be further north with the Baker Blvd/Hwy 10 exit? If that is true, people may not know to exit prior to making the curve to the west. Does that make sense?

Thanks,  
Jason

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**From:** Jason Lester [REDACTED]  
**Sent:** Thursday, July 27, 2017 9:51 AM  
**To:** Jason Moore  
**Cc:** Scott Mitchell; Christopher Hagar  
**Subject:** RE: I 820 and SH 121 Improvement Project

Jason,

Thank you for the quick response. From the schematic it appears that there is not a direct access to the direct connectors from Handley Ederville Rd. Drivers wanting to get on the direct connectors from SH 121 would have to get on the general lanes at Minnis Dr. since the on ramp at Handley Ederville Rd. is after the direct connector. Drivers coming from the direct connectors to SH 121 wouldn't be able to exit the general lanes until Minnis Dr. Without direct access to the direct connectors do you believe the project will still help redevelopment in these areas?

Thanks,  
Jason

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**From:** Jason Moore [REDACTED]  
**Sent:** Thursday, July 27, 2017 8:22 AM  
**To:** Jason Lester [REDACTED]  
**Cc:** Scott Mitchell [REDACTED]  
**Subject:** FW: I 820 and SH 121 Improvement Project

Jason,

When we provided the answer, it was based on the fact that both business areas (north and south of 121) appeared to have access from Handley Ederville to the direct connectors to get on the managed lanes without having to first get on the general lanes. The ability for businesses to get to the airport via managed lanes was the critical point. It appears this is still the case but if our understanding is off, please let me know.

Thanks,  
Jason Moore  
Assistant City Manager  
City of Richland Hills  
817-616-3745

---

**From:** Scott Mitchell  
**Sent:** Thursday, July 27, 2017 8:05 AM  
**To:** Jason Moore; David Burkett  
**Subject:** Fwd: I 820 and SH 121 Improvement Project

Jason-

I remember discussing this... I think you actually wrote the reply.

Sent from my iPhone

Begin forwarded message:

**From:** "Jason Lester" [REDACTED]  
**To:** "Scott Mitchell" [REDACTED]  
**Subject:** I 820 and SH 121 Improvement Project

Mr. Mitchell,

I am a contractor at Civil Associates, Inc. working with TxDOT for their proposed improvements to I-820 and SH 121. Back in August 2014, we sent you an email asking you answer some questions about possible direct and indirect impacts from the proposed project. I have pasted that original email below. As part of your response you wrote the following concerning indirect impacts:

If the access is configured correctly, there could be significant indirect impacts that could positively help redevelopment that might otherwise not occur. Richland Hills has identified significant Mixed Use projects in our Comprehensive Plan, and the right traffic flows and access will be a substantial factor in the success of the redevelopment of the area into a viable mixed use development. The area is both on the north side of 121 and the south side of 121. The south side of 121 is approximately 70 acres, the north side is probably around 40 acres.

Since this response the report has been submitted and we have received comments from TxDOT. One of the comments from TxDOT was in regards to your response. They feel that saying , “there could be significant indirect impacts that could positively help redevelopment that might otherwise not occur.”, is not specific enough of an answer. Would you be able to provide answers to the following questions to form a more detailed response? What attributes of the proposed project do you believe would help the redevelopment of the areas you spoke of? The area on the north side of SH 121 already has direct access from the highway, how would increasing the lanes influence redevelopment? The area south of SH 121 has a TRE station, how would the proposed project affect redevelopment more than the TRE station did? Do you believe that redevelopment would occur without the proposed project? If so, can provide an estimate as to how much the proposed project would speed the redevelopment of these areas?

I have attached Plan Sheets for the proposed project as well as a figure that highlights the two areas of possible redevelopment you spoke of. If you need anything else let me know. If it would be easier to discuss this over the phone let me know a good time that I could call you. Thank you for your help.

Jason Lester

Original Email:

Civil Associates, Inc. (CAI) is preparing the Environmental Assessment (EA) Reevaluation for the proposed improvements to I-820 from the north interchange at SH 121 to Randal Mill Road and SH 121 from I-820 to Handley-Ederville Road for the Texas Department of Transportation (TxDOT). The proposed project consists of the following:

I-820

From the SH 121/183 interchange to the SH 121/10 interchange, the proposed project would reconstruct

I-820 to 10 main lanes with two managed toll lanes and four to six continuous frontage road lanes. From

the SH 121/SH 10 interchange to Randal Mill Road, the proposed project would reconstruct I-820 to 10

main lanes with two to six discontinuous frontage road lanes and auxiliary lanes.

SH 121

From I-820 to Handley-Ederville Road, the proposed project would reconstruct SH 121 to six main lanes

with two managed toll lanes and four to six frontage road lanes.

We need the City of Richland Hills' help to determine what the indirect and cumulative impacts of the proposed project would be. Indirect impacts are defined as those impacts which are caused by an action (such as the widening of I-820 and SH 121) and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative impacts are defined as impacts which result from the incremental impacts of the action's direct and indirect impacts when added to other current and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Included with this message is a study area map. The orange line depicts the proposed project limits and the red line depicts the Indirect Impacts Area of Influence (AOI) and the Cumulative Impacts Resource Study Area (RSA) for Waters and Natural Resources. We are interested in past, current, and foreseeable actions within these study area boundaries.

CAI would be grateful for any information the City of Richland Hills could provide to us regarding indirect and cumulative impacts:

#### Indirect Impacts

Does the City of Richland Hills believe that the indirect impacts resulting from the proposed project would be substantial, minor, or no impact at all (e.g., would development occur regardless of the proposed project or would the proposed project induce development and/or redevelopment)?

For land use indirect impacts, CAI needs any information that the City of Richland Hills has regarding new developments or redevelopments that are anticipated to occur as a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. CAI will need to map these areas as an exhibit in the EA Reevaluation. The exhibit would show the indirect effects of the No Build and Build Alternatives on development within the AOI.

#### Cumulative Impacts

For cumulative impacts, CAI must report past, current, and reasonably foreseeable actions. These actions would include all major development and major roadway projects. Our cumulative impacts analysis encompasses the time period from 2009 to 2035. Extending the timeframe forward to 2035 for cumulative impacts matches the North Central Texas Council of Government's Mobility 2035 - 2013 Update Metropolitan Transportation Plan. Extending the timeframe back to 2009 corresponds to Phase 1 of the Texas Ecological Systems Classification Project which is an effort undertaken by a multidisciplinary group to provide current land cover classification and mapping for Texas with the intent to facilitate improved planning and management. We need any information that you have regarding past, current, and reasonably foreseeable actions that extend from 2009 to 2035.

When reporting past, current, and reasonably foreseeable actions, CAI needs the following information:

\* Development history of the City of Richland Hills from 2009 to present. This should include large residential, retail/commercial, institutional, and transportation projects, and their year of construction. Please note that we will need acreages and locations. If possible, would you please send us this information in a GIS format?

\* Any current and reasonably foreseeable developments or redevelopments in the City of Richland Hills and surrounding area from 2014 to 2035. These developments may or may not be a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. If possible, would you please send us this information in a GIS format?

Thank you for your help. Please call or email me with any questions or comments.

" /> **Jason Lester**  
**Civil Associates, Inc.**  
9330 LBJ Freeway Suite 1150  
Dallas, Texas 75243

Direct: 214-716-4573 | Main: 214-703-5151 ext. 4573 | Fax: 214-703-5150

[www.civilassociates.com](http://www.civilassociates.com)

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TBPE Firm Registration Number F-6981

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\* Development history of the City of Richland Hills from 2009 to present. This should include large residential, retail/commercial, institutional, and transportation projects, and their year of construction. Please note that we will need acreages and locations. If possible, would you please send us this information in a GIS format?

\* Any current and reasonably foreseeable developments or redevelopments in the City of Richland Hills and surrounding area from 2014 to 2035. These developments may or may not be a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. If possible, would you please send us this information in a GIS format?

Thank you for your help. Please call or email me with any questions or comments.

**"/> Jason Lester**  
**Civil Associates, Inc.**  
9330 LBJ Freeway Suite 1150  
Dallas, Texas 75243

Direct: 214-716-4573 | Main: 214-703-5151 ext. 4573 | Fax: 214-703-5150

[www.civilassociates.com](http://www.civilassociates.com)

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From: Clayton Comstock [REDACTED]  
Sent: Friday, March 24, 2017 8:44 AM  
To: Alma Canning  
Cc: Jason Lester  
Subject: RE: Comprehensive Plan

Good morning, Ms. Canning –

Our Comprehensive Plan update project was delayed but actually did just kick off last month. The project is anticipated to last 15 months and will therefore be completed by next summer.

Thank you and take care,

Clayton Comstock, AICP  
Planning Manager  
City of North Richland Hills  
(817)427-6301

From: Alma Canning [REDACTED]  
Sent: Friday, March 24, 2017 8:40 AM  
To: John Pitstick [REDACTED]; Clayton Comstock [REDACTED]  
Cc: Jason Lester [REDACTED]  
Subject: Comprehensive Plan

Good morning John and Clayton,

Is there a most updated Comprehensive Plan for the City based on the chain of email exchanges below?  
Thank you in advanced!

Sincerely,  
Alma R. Canning  
Sr. Environmental Scientist  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243-3497  
214-703-5151 (main)  
214-716-4575 (direct)  
[REDACTED]

From: John Pitstick [REDACTED]  
Sent: Thursday, September 04, 2014 3:49 PM  
To: Meghan D. Karadimos  
Cc: Alma R. Canning; Chris Hagar; Clayton Comstock; Chad VanSteenberg  
Subject: RE: Comprehensive Plan  
Attachments: 2007 Comprehensive Plan Update.pdf; CompLandUsePlanMap\_030812.pdf;  
SPA\_NOV07\_11x17.pdf; Thoroughfare Plan\_NOV07\_11x17.pdf

Ms. Karadimos,

The City of North Richland Hills has not updated the full Comprehensive Plan in several years. We are beginning a multiyear update beginning in early 2015. Please see attached staff Comp Plan update in

2007 and map update in 2012 attached. Please call if you have any questions.

Sincerely,  
John Pitstick

From: Meghan D. Karadimos [REDACTED]  
Sent: Thursday, September 04, 2014 3:14 PM  
To: John Pitstick; Clayton Comstock; Chad VanSteenberg  
Cc: Alma R. Canning; Chris Hagar  
Subject: Comprehensive Plan

Good afternoon,  
Does the City of North Richland Hills have a Comprehensive Plan? If so, is it available for download online or distribution via email?

Thank you,

Meghan D. Karadimos  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243

[REDACTED]  
Direct: 214-716-4577 | Main: 214-703-5151 ext. 4577 | Fax: 214-703-5150  
www.civilassociates.com

Alma Canning  
Civil Associates, Inc.  
9330 LBJ Freeway Suite 1150  
Dallas, Texas 75243

[REDACTED]  
Direct: | Main: 214-703-5151 ext. 4575 | Fax: 214-703-5150  
www.civilassociates.com

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From: Michelle Lazo [REDACTED]  
Sent: Thursday, September 04, 2014 2:50 PM  
To: Meghan D. Karadimos  
Subject: Re: Comprehensive Plan

No we do not. We have an adopted Zoning Map that serves as our Land Use Plan

Michelle Lazo  
Managing Director- Development  
1505 Precinct Line Road  
Hurst, Tx. 76054  
ph. 817-788-7055  
fax. 817-788-7074  
[REDACTED]

>>> "Meghan D. Karadimos" [REDACTED] 9/4/2014 2:37 PM >>>

Good afternoon,  
Does the City of Hurst have a Comprehensive Plan? If so, is it available for download online or distribution via email?

Thank you,

Meghan D. Karadimos  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243  
[REDACTED]

Direct: 214-716-4577 | Main: 214-703-5151 ext. 4577 | Fax: 214-703-5150  
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From: John Pitstick [REDACTED]  
Sent: Thursday, September 04, 2014 3:49 PM  
To: Meghan D. Karadimos  
Cc: Alma R. Canning; Chris Hagar; Clayton Comstock; Chad VanSteenberg  
Subject: RE: Comprehensive Plan  
Attachments: 2007 Comprehensive Plan Update.pdf; CompLandUsePlanMap\_030812.pdf; SPA\_NOV07\_11x17.pdf; Thoroughfare Plan\_NOV07\_11x17.pdf

Ms. Karadimos,

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Sincerely,  
John Pitstick

From: Meghan D. Karadimos [REDACTED]  
Sent: Thursday, September 04, 2014 3:14 PM  
To: John Pitstick; Clayton Comstock; Chad VanSteenberg  
Cc: Alma R. Canning; Chris Hagar  
Subject: Comprehensive Plan

Good afternoon,  
Does the City of North Richland Hills have a Comprehensive Plan? If so, is it available for download online or distribution via email?

Thank you,

Meghan D. Karadimos  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243

[REDACTED]  
Direct: 214-716-4577 | Main: 214-703-5151 ext. 4577 | Fax: 214-703-5150  
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be aware that we may monitor your e-mails and their content.

From: Alma R. Canning  
Sent: Friday, September 05, 2014 9:35 AM  
To: Meghan D. Karadimos  
Cc: Chris Hagar; Meghan D. Karadimos  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121  
Attachments: Appraisal Board Presentation 7.29.14.pdf

Meghan – for the ICI.

From: John Pitstick [REDACTED]  
Sent: Friday, September 05, 2014 9:33 AM  
To: Chris Hagar  
Cc: Alma R. Canning; Jonathan Stewart  
Subject: RE: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Mr. Hagar,

The City of North Richland Hills just underwent the major construction of the North Tarrant Expressway that included the widening and reconstruction of Loop 820 over several years. This activity had a major impact on our community primarily in the disruption of traffic and thus caused a significant decrease in sales for many major businesses along Loop 820. The general economy and construction has continued to be strong coming out of the depression in 2009 until today and we have a desirable market and continue to see residential and commercial construction. However, the Loop 820 freeway construction definitely hampered development along the frontage roads and still has not come back fully. I would say that the primary concern our community would have is the uncertainty of construction timing on the newly proposed Loop 820 South extension. The traveling public is continually confused with closing and opening of access roads and because of this will try to avoid or to seek alternative routes. The use of alternative routes in current Loop 820 construction have also caused significant deterioration of general roadways that have received much more traffic with larger trucks being detoured around the traditional freeway routes.

The new Loop 820 South extension will have both indirect and cumulative impacts for our community but to a much lesser degree than the direct impact that we are currently experiencing in the Loop 820/SH 183 interchange. It will be difficult to quantify, but the major concern is the direct impact to businesses on Loop 820 and the traveling public. The traveling public will avoid businesses during construction and the businesses will suffer. If the general market demand and economy are strong, cities will continue to grow. The freeway construction will certainly hamper and slow development opportunities directly on Loop 820 and will likely cause other traffic concerns and roadway deterioration for alternative routes. The development of residential and commercial sites that are dependent on workers, equipment and supplies that must travel the Loop 820 corridor during major reconstruction will also hamper and extend construction schedules.

Please let us know if you need further insight or information. I have attached a general presentation of active developments that we hope are helpful.

Sincerely,  
John Pitstick

From: Chris Hagar [REDACTED]  
Sent: Wednesday, August 27, 2014 8:48 AM  
To: John Pitstick

Cc: Alma R. Canning; Jonathan Stewart

Subject: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Dear Mr. Pitstick:

Civil Associates, Inc. (CAI) is preparing the Environmental Assessment (EA) Reevaluation for the proposed improvements to I-820 from the north interchange at SH 121 to Randal Mill Road and SH 121 from I-820 to Handley-Ederville Road for the Texas Department of Transportation (TxDOT). The proposed project consists of the following:

#### I-820

From the SH 121/183 interchange to the SH 121/10 interchange, the proposed project would reconstruct I-820 to 10 main lanes with two managed toll lanes and four to six continuous frontage road lanes. From the SH 121/SH 10 interchange to Randal Mill Road, the proposed project would reconstruct I-820 to 10 main lanes with to six discontinuous frontage road lanes and auxiliary lanes.

#### SH 121

From I-820 to Handley-Ederville Road, the proposed project would reconstruct SH 121 to six main lanes with two managed toll lanes and four to six frontage road lanes.

We need the City of North Richland Hills' help to determine what the indirect and cumulative impacts of the proposed project would be. Indirect impacts are defined as those impacts which are caused by an action (such as the widening of I-820 and SH 121) and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative impacts are defined as impacts which result from the incremental impacts of the action's direct and indirect impacts when added to other current and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Included with this message is a study area map. The orange line depicts the proposed project limits and the red line depicts the Indirect Impacts Area of Influence (AOI) and the Cumulative Impacts Resource Study Area (RSA) for Waters and Natural Resources. We are interested in past, current, and foreseeable actions within these study area boundaries.

CAI would be grateful for any information the City of North Richland Hills could provide to us regarding indirect and cumulative impacts:

#### Indirect Impacts

Does the City of North Richland Hills believe that the indirect impacts resulting from the proposed project would be substantial, minor, or no impact at all (e.g., would development occur regardless of the proposed project or would the proposed project induce development and/or redevelopment)?

For land use indirect impacts, CAI needs any information that the City of North Richland Hills has regarding new developments or redevelopments that are anticipated to occur as a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. CAI will need to map these areas as an exhibit in the EA Reevaluation. The exhibit would show the indirect effects of the No Build and Build Alternatives on development within the AOI.

#### Cumulative Impacts

For cumulative impacts, CAI must report past, current, and reasonably foreseeable actions. These actions would include all major development and major roadway projects. Our cumulative impacts analysis encompasses the time period from 2009 to 2035. Extending the timeframe forward to 2035 for cumulative impacts matches the North Central Texas Council of Government's Mobility 2035 - 2013 Update Metropolitan Transportation Plan. Extending the timeframe back to 2009 corresponds to Phase 1 of the Texas Ecological Systems Classification Project which is an effort undertaken by a multidisciplinary group to provide current land cover classification and mapping for Texas with the intent to facilitate improved

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Thank you for your help. Please call or email me with any questions or comments.

Sincerely,

Chris Hagar  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243

Direct: 214-716-4572 | Main: 214-703-5151 ext. 4572 | Fax: 214-703-5150  
[www.civilassociates.com](http://www.civilassociates.com)

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From: Chris Hagar  
Sent: Tuesday, August 19, 2014 11:43 AM  
To: Alma R. Canning; Jonathan Stewart  
Subject: FW: I-820 and SH-121  
Attachments: I-820 Area of Influence Report.zip

One done, three to go.

From: Donaldson, Joshua [REDACTED]  
Sent: Tuesday, August 19, 2014 11:40 AM  
To: Chris Hagar  
Cc: Fladager, Eric  
Subject: I-820 and SH-121

Chris,

Based off the boundaries for the AOI that you passed on to me, I have collected information regarding platting and permitting that captures development in the AOI. This information can be found in the attached zip file that contains a packaged GIS map, the respective shapefiles, and excel tabulations. If you have any question or need for clarifications while in using the data please don't hesitate to contact me.

Joshua Donaldson  
Planner  
Planning and Development Department  
Office Phone: (817) 392-8045  
City of Fort Worth — Working together to build a strong community.

Follow Fort Worth

From: Clayton Comstock [REDACTED]  
Sent: Thursday, April 13, 2017 1:37 PM  
To: Alma Canning  
Subject: RE: Loop 820 Corridor Study

Alma –

John Pitstick's write up from 2014 was accurate for the time and remains mostly true today. Fast forward to 2017, we are just starting to see some flowers (businesses) along 820 bloom, with more in the future. However along 183 we may never see redevelopment occur in the manner the 2005 study projected. Meantime the NTE/South extension will indeed have indirect impacts to new and existing development, while stalling or delaying future development.

Best,

Clayton Comstock, AICP  
Planning Manager  
City of North Richland Hills  
(817)427-6301

From: Alma Canning [REDACTED]  
Sent: Wednesday, April 12, 2017 2:55 PM  
To: Clayton Comstock [REDACTED]  
Subject: Loop 820 Corridor Study  
Importance: High

Good afternoon Clayton,

I would like to see if there is a more recent study for the Loop 820 Corridor Study that was done in 2005. If not, does this study still foresee the changes to the development surrounding the corridor in today's time?

If so, would these proposed redevelopment go away if the I-820 South project (from SH 121/SH 183 Interchange to CR 375) is not built (attached)?

Per the email we received from the City (attached) back in 2014, impact of the project is mostly a direct one instead of Indirect and is mostly tied to the Loop 820/SH 183 interchange (a different project), do you still concur?

Thank you for your time.  
Sincerely,  
Alma  
(214) 716-7545

From: Clayton Comstock [REDACTED]  
Sent: Friday, March 24, 2017 8:44 AM  
To: Alma Canning [REDACTED]  
Cc: Jason Lester [REDACTED]  
Subject: RE: Comprehensive Plan

Good morning, Ms. Canning –

Our Comprehensive Plan update project was delayed but actually did just kick off last month. The project is anticipated to last 15 months and will therefore be completed by next summer.

Thank you and take care,

Clayton Comstock, AICP  
Planning Manager  
City of North Richland Hills  
(817)427-6301

From: Alma Canning [REDACTED]  
Sent: Friday, March 24, 2017 8:40 AM  
To: John Pitstick [REDACTED]; Clayton Comstock [REDACTED]  
Cc: Jason Lester [REDACTED]  
Subject: Comprehensive Plan

Good morning John and Clayton,

Is there a most updated Comprehensive Plan for the City based on the chain of email exchanges below?  
Thank you in advanced!

Sincerely,  
Alma R. Canning  
Sr. Environmental Scientist  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243-3497  
214-703-5151 (main)  
214-716-4575 (direct)  
[REDACTED]

From: John Pitstick [REDACTED]  
Sent: Thursday, September 04, 2014 3:49 PM  
To: Meghan D. Karadimos  
Cc: Alma R. Canning; Chris Hagar; Clayton Comstock; Chad VanSteenberg  
Subject: RE: Comprehensive Plan  
Attachments: 2007 Comprehensive Plan Update.pdf; CompLandUsePlanMap\_030812.pdf;  
SPA\_NOV07\_11x17.pdf; Thoroughfare Plan\_NOV07\_11x17.pdf

Ms. Karadimos,

The City of North Richland Hills has not updated the full Comprehensive Plan in several years. We are beginning a multiyear update beginning in early 2015. Please see attached staff Comp Plan update in 2007 and map update in 2012 attached. Please call if you have any questions.

Sincerely,  
John Pitstick

From: Meghan D. Karadimos [REDACTED]  
Sent: Thursday, September 04, 2014 3:14 PM  
To: John Pitstick; Clayton Comstock; Chad VanSteenberg  
Cc: Alma R. Canning; Chris Hagar  
Subject: Comprehensive Plan

Good afternoon,

Does the City of North Richland Hills have a Comprehensive Plan? If so, is it available for download online or distribution via email?

Thank you,

Meghan D. Karadimos  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243  
[REDACTED]

Direct: 214-716-4577 | Main: 214-703-5151 ext. 4577 | Fax: 214-703-5150  
www.civilassociates.com

" /> Alma Canning  
Civil Associates, Inc.  
9330 LBJ Freeway Suite 1150  
Dallas, Texas 75243  
[REDACTED]

Direct: | Main: 214-703-5151 ext. 4575 | Fax: 214-703-5150  
www.civilassociates.com

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Alma Canning  
Civil Associates, Inc.  
9330 LBJ Freeway Suite 1150  
Dallas, Texas 75243  
[REDACTED]

Direct: 214-716-4575 | Main: 214-703-5151 ext. 4575 | Fax: 214-703-5150  
www.civilassociates.com

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Warning: Although precautions have been taken to make sure no viruses are present in this email, the company cannot accept responsibility for any loss or damage that arise from the use of this email or attachments.

From: Alma R. Canning  
Sent: Thursday, September 04, 2014 2:06 PM  
To: Meghan D. Karadimos  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

From: Chris Hagar  
Sent: Thursday, August 28, 2014 8:58 AM  
To: Alma R. Canning  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

From: Jason Moore [REDACTED]  
Sent: Wednesday, August 27, 2014 3:38 PM  
To: Chris Hagar  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Here were our comments:

Indirect impacts: If the access is configured correctly, there could be significant indirect impacts that would positively help redevelopment that might otherwise not occur. Richland Hills has identified significant Mixed Use projects in our Comprehensive Plan, and the right traffic flows and access will be a substantial factor in the success of the redevelopment of the area into a viable mixed use development. The area is both on the north side of 121 and the south side of 121. The south side of 121 is approximately 70 acres, the north side is probably around 40 acres.

Significant developments since 2009:

1. Transportation: construction of new parking area for commuter rail line (construction 2012) TRE Train Station.
2. No large residential development since 2009
3. Commercial development: Walmart (43,000 square feet, 5 acre site).

Thanks,  
Jason Moore

From: Chris Hagar [REDACTED]  
Sent: Tuesday, August 05, 2014 11:04 AM  
To: Scott Mitchell  
Cc: Alma R. Canning; Jonathan Stewart  
Subject: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Dear Mr. Mitchell:

Civil Associates, Inc. (CAI) is preparing the Environmental Assessment (EA) Reevaluation for the proposed improvements to I-820 from the north interchange at SH 121 to Randal Mill Road and SH 121 from I-820 to Handley-Ederville Road for the Texas Department of Transportation (TxDOT). The

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Thank you for your help. Please call or email me with any questions or comments.

Sincerely,

Chris Hagar  
Civil Associates, Inc.  
9330 LBJ Freeway, Suite 1150  
Dallas, Texas 75243

Direct: 214-716-4572 | Main: 214-703-5151 ext. 4572 | Fax: 214-703-5150  
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From: Alma R. Canning  
Sent: Thursday, September 04, 2014 2:06 PM  
To: Meghan D. Karadimos  
Subject: FW: Indirect and Cumulative Impacts - Richland Hills

From: Chris Hagar  
Sent: Thursday, August 28, 2014 8:58 AM  
To: Alma R. Canning  
Subject: FW: Indirect and Cumulative Impacts - Richland Hills

From: Scott Mitchell [REDACTED]  
Sent: Wednesday, August 27, 2014 4:23 PM  
To: Chris Hagar  
Subject: Indirect and Cumulative Impacts - Richland Hills

Indirect impacts: If the access is configured correctly, there could be significant indirect impacts that would positively help redevelopment that might otherwise not occur. Richland Hills has identified significant Mixed Use projects in our Comprehensive Plan, and the right traffic flows and access will be a substantial factor in the success of the redevelopment of the area into a viable mixed use development. The area is both on the north side of 121 and the south side of 121. The south side of 121 is approximately 70 acres, the north side is probably around 40 acres.

To answer the question on significant developments since 2009:

1. Transportation: construction of new parking area for commuter rail line (construction 2012). TRE Commuter Train Station
2. No large residential development since 2009
3. Commercial development: New – Walmart Neighborhood Grocery Store (43,000 square feet, 5 acre site), 6604 Blvd. 26. Advanced Glass (13,000 square feet, 1.5 acre site) 7200 Baker Blvd. Re-development: Conti Center ( 55.000 square Feet) 7500 Baker Blvd.

The final ramp configurations could create substantial impacts. If access is available onto the managed lanes from Handley-Ederville, this would provide a positive impact to future development. If access to the managed lanes is further west than Handley-Ederville, then that could negatively affect development (essentially pushing it west into Haltom City). Since the TRE rail line buffers the lane widening on the south, I believe this will be positive for Richland Hills.

Scott Mitchell  
Director of Neighborhood Services  
3200 Diana Drive  
Richland Hills, Texas 76118  
Office: 817-616-3770  
Fax: 817-616-3802  
[REDACTED]

From: Alma R. Canning  
Sent: Thursday, September 04, 2014 2:07 PM  
To: Meghan D. Karadimos  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121  
Attachments: FIGURE 5\_I-820 PROJECT LAYOUT MAP.pdf

From: Chris Hagar  
Sent: Wednesday, August 27, 2014 11:45 AM  
To: Jason Moore  
Cc: Alma R. Canning  
Subject: RE: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Jason – Per our telephone discussion this morning, a preliminary design schematic is attached for your use. You stated that induced development might occur within the vicinity of entrance/exit ramps. Please let me know if you need anything else. Thank you again for your help.

Sincerely,

From: Jason Moore [REDACTED]  
Sent: Wednesday, August 27, 2014 10:54 AM  
To: Chris Hagar  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Mr. Hagar,

Can you please call me to discuss?

-Jason Moore  
817-616-3745

From: Scott Mitchell  
Sent: Wednesday, August 27, 2014 9:35 AM  
To: Jason Moore  
Cc: Eric Strong  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

FYI

From: Chris Hagar [REDACTED]  
Sent: Wednesday, August 27, 2014 8:49 AM  
To: Scott Mitchell  
Cc: Alma R. Canning; Jonathan Stewart  
Subject: FW: Indirect and Cumulative Impacts Associated with Proposed Improvements to I-820 and SH 121

Dear Mr. Mitchell:

Civil Associates, Inc. (CAI) is preparing the Environmental Assessment (EA) Reevaluation for the proposed improvements to I-820 from the north interchange at SH 121 to Randal Mill Road and SH 121 from I-820 to Handley-Ederville Road for the Texas Department of Transportation (TxDOT). The proposed project consists of the following:

#### I-820

From the SH 121/183 interchange to the SH 121/10 interchange, the proposed project would reconstruct I-820 to 10 main lanes with two managed toll lanes and four to six continuous frontage road lanes. From the SH 121/SH 10 interchange to Randal Mill Road, the proposed project would reconstruct I-820 to 10 main lanes with to six discontinuous frontage road lanes and auxiliary lanes.

#### SH 121

From I-820 to Handley-Ederville Road, the proposed project would reconstruct SH 121 to six main lanes with two managed toll lanes and four to six frontage road lanes.

We need the City of Richland Hills' help to determine what the indirect and cumulative impacts of the proposed project would be. Indirect impacts are defined as those impacts which are caused by an action (such as the widening of I-820 and SH 121) and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative impacts are defined as impacts which result from the incremental impacts of the action's direct and indirect impacts when added to other current and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Included with this message is a study area map. The orange line depicts the proposed project limits and the red line depicts the Indirect Impacts Area of Influence (AOI) and the Cumulative Impacts Resource Study Area (RSA) for Waters and Natural Resources. We are interested in past, current, and foreseeable actions within these study area boundaries.

CAI would be grateful for any information the City of Richland Hills could provide to us regarding indirect and cumulative impacts:

#### Indirect Impacts

Does the City of Richland Hills believe that the indirect impacts resulting from the proposed project would be substantial, minor, or no impact at all (e.g., would development occur regardless of the proposed project or would the proposed project induce development and/or redevelopment)?

For land use indirect impacts, CAI needs any information that the City of Richland Hills has regarding new developments or redevelopments that are anticipated to occur as a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. CAI will need to map these areas as an exhibit in the EA Reevaluation. The exhibit would show the indirect effects of the No Build and Build Alternatives on development within the AOI.

#### Cumulative Impacts

For cumulative impacts, CAI must report past, current, and reasonably foreseeable actions. These actions would include all major development and major roadway projects. Our cumulative impacts analysis encompasses the time period from 2009 to 2035. Extending the timeframe forward to 2035 for cumulative impacts matches the North Central Texas Council of Government's Mobility 2035 - 2013 Update Metropolitan Transportation Plan. Extending the timeframe back to 2009 corresponds to Phase 1 of the Texas Ecological Systems Classification Project which is an effort undertaken by a multidisciplinary group to provide current land cover classification and mapping for Texas with the intent to facilitate improved planning and management. We need any information that you have regarding past, current, and reasonably foreseeable actions that extend from 2009 to 2035.

When reporting past, current, and reasonably foreseeable actions, CAI needs the following information:

\* Development history of the City of Richland Hills from 2009 to present. This should include large residential, retail/commercial, institutional, and transportation projects, and their year of construction. Please note that we will need acreages and locations. If possible, would you please send us this information in a GIS format?

\* Any current and reasonably foreseeable developments or redevelopments in the City of Richland Hills and surrounding area from 2014 to 2035. These developments may or may not be a result of the proposed project. We must report the types (e.g., subdivision), names (if available), locations, and acreages of the new developments or redevelopments. If possible, would you please send us this information in a GIS format?

Thank you for your help. Please call or email me with any questions or comments.

Sincerely,