

**ENERGY EFFICIENCY/RENEWABLE ENERGY IMPACT  
IN THE TEXAS EMISSIONS REDUCTION PLAN (TERP)**

**VOLUME II—TECHNICAL APPENDIX**

**Annual Report to the  
Texas Commission on Environmental Quality  
January 2019-December 2019**



**Juan-Carlos Baltazar, Ph.D., P.E., Jeff Haberl, Ph.D.,  
Bahman Yazdani, P.E., Patrick Parker, Shirley Ellis,  
Gali Zilbertshtein, Ph.D., David Claridge, Ph.D., P.E.**

**November 2020**



**ENERGY SYSTEMS LABORATORY**  
TEXAS A&M ENGINEERING EXPERIMENT STATION



**TEXAS A&M ENGINEERING  
EXPERIMENT STATION**

**Energy Systems Laboratory**

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November 8, 2020

Mr. Robert Gifford  
Air Quality Planning Section  
Air Quality Division, Office of Air  
Texas Commission on Environmental Quality Austin, TX 78711-3087

Dear Mr. Robert Gifford:

The Energy Systems Laboratory (ESL) at the Texas A&M Engineering Experiment Station of the Texas A&M University System is pleased to provide its annual report, "Energy Efficiency/Renewable Energy Impact in the Texas Emissions Reduction Plan (TERP)," as required under Texas Health and Safety Code 386.205, 386.252, 388.006, 389.003 (e), and under Texas Utilities Code Sec. 39.9051 (g) (h), and Sec. 39.9052 (c) (d).

The ESL is required to annually report the energy savings from statewide adoption of the Texas Building Energy Performance Standards in Senate Bill 5 (SB 5), as amended, and the relative impact of proposed local energy code amendments in the Texas non-attainment and near-non-attainment counties as part of the Texas Emissions Reduction Plan (TERP).

Please contact me at (979) 845-9213 should you or any of the TCEQ staff have any questions concerning this report or any of the work presently being done to quantify emissions reduction from energy efficiency and renewable energy measures as a result of the TERP implementation.

Sincerely,

A handwritten signature in black ink that reads "David E. Claridge". The signature is written in a cursive style.

David E. Claridge, Ph.D., P.E., FASHRAE  
Director

Enclosure

#### Disclaimer

This report is provided by the Energy Systems Laboratory of the Texas A&M Engineering Experiment Station (TEES) as required under Sections 386.205, 386.252, 388.006, and 388.003 (e) of the Texas Health and Safety Code and Sections 39.9051 (g) (h), and 39.9052 (c) (d) of the Texas Utilities Code. The information provided in this report is intended to be the best available information at the time of publication. TEES makes no claim or warranty, express or implied, that the report or data herein is necessarily error-free. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by the Energy Systems Laboratory or any of its employees. The views and opinions of authors expressed herein do not necessarily state or reflect those of the Texas A&M Engineering Experiment Station or the Energy Systems Laboratory.

## VOLUME II – APPENDIX

### Energy Efficiency/Renewable Energy Impact In The Texas Emissions Reduction Plan

#### 1 EXECUTIVE SUMMARY

The Energy Systems Laboratory (Laboratory), a division of the Texas A&M Engineering Experiment Station and a member of The Texas A&M University System, in fulfillment of its responsibilities under Sections 386.205, 386.252, 388.006, and 388.003 (e) of the Texas Health and Safety Code and Sections 39.9051 (g) (h), and 39.9052 (c) (d) of the Texas Utilities Code, submits its annual report, Energy Efficiency/Renewable Energy (EE/RE) Impact in the Texas Emissions Reduction Plan (TERP) to the Texas Commission on Environmental Quality.

The report is organized in two volumes:

- Volume I – Technical Report – provides a detailed report of activities, methodologies and findings, including an executive summary and overview;
- Volume II – Technical Appendix – contains detailed data from simulations for each of the counties included in the analysis.

Accomplishments are as follow:

##### 1.1 Energy Code Amendments

The Laboratory was requested by several Council of Governments (COGs) and municipalities to analyze the stringency of several proposed residential and commercial energy code amendments, including: the 2015 IECC and the ASHRAE Standards 90.1-2013. Results of the analysis are included in the Volume I – Technical Report.

##### 1.2 Technical Assistance

The Laboratory provided technical assistance to the TCEQ, PUCT, SECO, ERCOT, and several political subdivisions, as well as Stakeholders participating in improving the compliance of the Texas Building Energy Performance Standards (TBEPS). The Laboratory also worked closely with the TCEQ to refine the integrated NO<sub>x</sub> emissions reduction calculation procedures that provide the TCEQ with a standardized, creditable NO<sub>x</sub> emissions reduction from energy efficiency and renewable energy (EE/RE) programs, which are acceptable to the US EPA. These activities have improved the accuracy of the creditable NO<sub>x</sub> emissions reduction from EE/RE initiatives contained in the TERP and have assisted the TCEQ, local governments, and the building industry with effective, standardized implementation and reporting.

##### 1.3 NO<sub>x</sub> Emissions Reduction

Under the TERP legislation, the Laboratory must determine the energy savings from energy code adoption and, when applicable, from more stringent local codes or above-code performance ratings, and must report these reductions annually to the TCEQ. Figure 1 shows the integrated NO<sub>x</sub> emissions reduction through 2023 for the electricity and natural gas savings from the various EE/RE programs.

In 2019, the annual NO<sub>x</sub> emissions reduction from code-compliant residential and commercial construction is calculated to be 2,099 tons-NO<sub>x</sub>/year (6.5% of the total NO<sub>x</sub> savings), savings from the PUC's Senate Bill 7 programs will be 1,547 tons-NO<sub>x</sub>/year (4.8%), savings from SECO's Senate Bill 5 program will be 546 tons-NO<sub>x</sub>/year (1.7%), electricity savings from green power purchases (wind) will be 27,757 tons-

NOx/year (86.0%), and savings from residential air conditioner retrofits will be 342 tons-NOx/year (1.1%). The total annual NOx emissions reduction from all programs will be 32,291 tons-NOx/year.

By 2024, the annual NOx emissions reduction from code-compliant residential and commercial construction is calculated to be 4,363 tons-NOx/year (8.8% of the total NOx savings), savings from the PUC’s Senate Bill 7 programs is 2,136 tons-NOx/year (4.3%), savings from SECO’s Senate Bill 5 program is 969 tons-NOx/year (2.0%), electricity savings from green power purchases (wind) are 41,738 tons-NOx/year (84.4%), and savings from residential air conditioner retrofits are 265 tons-NOx/year (0.5%). The total annual NOx emissions reduction from all programs is 49,470 tons-NOx/year.

In 2019, the Ozone Season Period (OSP) NOx emissions reduction from code-compliant residential and commercial construction is calculated to be 6.13 tons-NOx/day (5.4%), savings from the PUC’s Senate Bill 7 programs will be 4.62 tons-NOx/day (4.0%), savings from SECO’s Senate Bill 5 program will be 1.58 tons-NOx/day (1.4%), electricity savings from green power purchases (wind) will be 99.65 tons-NOx/day (87.1%), and savings from residential air conditioner retrofits will be 2.43 tons-NOx/day (2.1%). The total OSP NOx emissions reduction from all programs will be 114.42 tons-NOx/day.

By 2024, the OSP NOx emissions reduction from code-compliant residential and commercial construction is calculated to be 12.77 tons-NOx/day (7.4%), savings from the PUC’s Senate Bill 7 programs will be 6.38 tons-NOx/day (3.7%), savings from SECO’s Senate Bill 5 program will be 2.81 tons-NOx/day (1.6%), electricity savings from green power purchases (wind) will be 149.85 tons-NOx/day (86.3%), and savings from residential air conditioner retrofits will be 1.88 tons-NOx/day (1.1%). The total OSP NOx emissions reduction from all programs will be 173.69 tons-NOx/day.

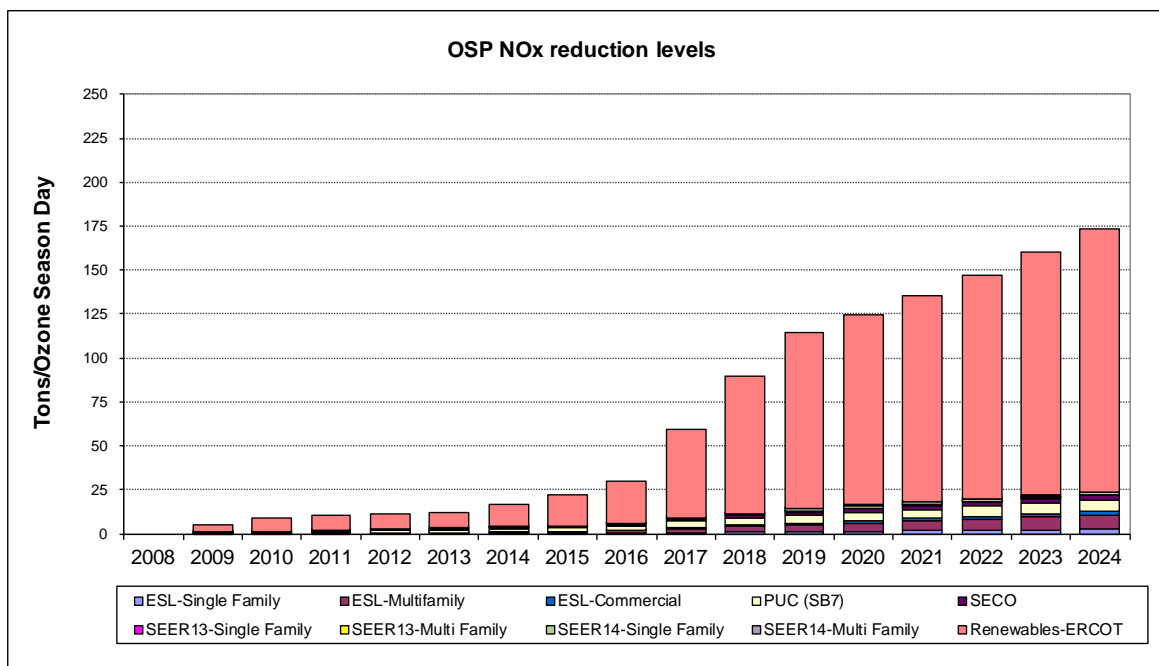


Figure 1: Integrated OSP NOx Emissions Reduction Projections through 2024 (Base Year 2008)

#### 1.4 Technology Transfer

The Laboratory, along with the TCEQ, is host to the annual Clean Air Through Energy Efficiency (CATEE) – Texas Energy Summit conference, which is attended by top experts and policy makers in Texas and from around the country. At the conference the latest educational programs and technology are presented and discussed, including efforts by the Laboratory, and others, to reduce air pollution in Texas through energy efficiency and renewable energy. These efforts have produced significant success in bringing EE/RE closer to US EPA acceptance in the Texas SIP. The Laboratory will continue to provide

superior technology to the State of Texas through such efforts with the TCEQ and the US EPA.

To accelerate the transfer of technology developed as part of the TERP, the Laboratory has also made presentations at national, state and local meetings and conferences, which include the publications of peer-reviewed papers. The Laboratory will continue to provide technical assistance to the TCEQ, counties and communities working toward obtaining full SIP credit for the energy efficiency and renewable energy projects that are lowering emissions and improving the air quality for all Texans.

These efforts have been recognized nationally by the US EPA. In 2007, the Laboratory was awarded a National Center of Excellence on Displaced Emissions Reduction (CEDER) by the US EPA so that these accomplishments could be rapidly disseminated to other states for their use. The benefits of CEDER include: reducing the financial, technical, and administrative costs of determining the emissions reduction from EE/RE measures; continuing to accelerate implementation of EE/RE strategies as a viable clean air effort in Texas and other states; helping other states better identify and prioritize cost-effective clean air strategies from EE/RE, and communicating the results of quantification efforts through case-studies and a clearinghouse of information.

The Laboratory will continue to provide technical assistance to the TCEQ, counties and communities working toward obtaining full SIP credit for the energy efficiency and renewable energy projects that are lowering emissions and improving the air quality for all Texans.

If any questions arise, please contact us by phone at (979) 845-9213.

## ACKNOWLEDGEMENTS

This work has been completed as a fulfillment of Sections 386.205, 386.252, 388.006, and 388.003 (e) of the Texas Health and Safety Code and Sections 39.9051 (g) (h), and 39.9052 (c) (d) of the Texas Utilities Code, which require the Laboratory to assist TCEQ in quantifying emissions reductions credits from energy efficiency and renewable energy programs.

The authors are also grateful for the timely input provided by the following individuals, and agencies: Mr. Robert Gifford, TCEQ.

Likewise, the authors appreciate the contributions of Mr. Sungkyun Jung, Mr. Farshad Kheiri, Mr. Chul Kim, Ms. Qinbo Li, and Mr. Jounghwan Ahn, to this report.

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## 2 CODE AND PRE-CODE SIMULATION RESULTS BY COUNTY

This appendix to the Laboratory's 2019 annual report contains the simulation results for single-family and multi-family residences in the 42 counties. For each county, code and pre-code simulation, and annual results for individual residence are provided (Single-family and Multi-family).

For each county, pre-code and code simulation, and annual results, for 2008 base year, for individual Single-family and Multi-family residences can be viewed using the links provided in Table 2. For counties other than the 42 non-attainment and affected counties, simulations were performed for one representative county per climate zone. The annual savings for each county were calculated using the simulation results for the representative county for the same climate zone and number of houses.

Table 1: List of Counties

	<b>County</b>	<b>Climate Zone</b>
Nonattainment and Affected Counties	Bastrop	2
	Bexar	2
	Brazoria	2
	Caldwell	2
	Chambers	2
	Collin	3
	Comal	2
	Dallas	3
	Denton	3
	El Paso	3
	Ellis	3
	Fort Bend	2
	Galveston	2
	Gregg	3
	Guadalupe	2
	Hardin	2
	Harris	2
	Harrison	3
	Hays	2
	Henderson	3
	Hood	3
	Hunt	3
	Jefferson	2
	Johnson	3
	Kaufman	3
	Liberty	2
	Montgomery	2
	Nueces	2
	Orange	2
	Parker	3
	Rockwall	3
	Rusk	3
	San Patricio	2
	Smith	3
	Tarrant	3
Travis	2	
Upshur	3	
Victoria	2	
Waller	2	
Williamson	2	
Wilson	2	
Wise	3	

Table 2: Simulation Results for Individual Single Family and Multi Family Residences for All Counties<sup>1</sup>.

Non-attainment or Affected Counties	2008		
	Summary	Single Family	Multifamily
BASTROP	Summary	Single Family	Multifamily
BEXAR	Summary	Single Family	Multifamily
CALDWELL	Summary	Single Family	Multifamily
COMAL	Summary	Single Family	Multifamily
GREGG	Summary	Single Family	Multifamily
GUADALUPE	Summary	Single Family	Multifamily
HARRISON	Summary	Single Family	Multifamily
HAYS	Summary	Single Family	Multifamily
NUECES	Summary	Single Family	Multifamily
RUSK	Summary	Single Family	Multifamily
SAN PATRICIO	Summary	Single Family	Multifamily
SMITH	Summary	Single Family	Multifamily
TRAVIS	Summary	Single Family	Multifamily
UPSHUR	Summary	Single Family	Multifamily
VICTORIA	Summary	Single Family	Multifamily
WILLIAMSON	Summary	Single Family	Multifamily
WILSON	Summary	Single Family	Multifamily
BRAZORIA	Summary	Single Family	Multifamily
CHAMBERS	Summary	Single Family	Multifamily
COLLIN	Summary	Single Family	Multifamily
DALLAS	Summary	Single Family	Multifamily
DENTON	Summary	Single Family	Multifamily
EL PASO	Summary	Single Family	Multifamily
ELLIS	Summary	Single Family	Multifamily
FORT BEND	Summary	Single Family	Multifamily
GALVESTON	Summary	Single Family	Multifamily
HARRIS	Summary	Single Family	Multifamily
JOHNSON	Summary	Single Family	Multifamily
KAUFMAN	Summary	Single Family	Multifamily
LIBERTY	Summary	Single Family	Multifamily
MONTGOMERY	Summary	Single Family	Multifamily
PARKER	Summary	Single Family	Multifamily
ROCKWALL	Summary	Single Family	Multifamily
TARRANT	Summary	Single Family	Multifamily
WALLER	Summary	Single Family	Multifamily
WISE	Summary	Single Family	Multifamily

<sup>1</sup> Table 2 contains the list of simulation results that are compiled by the Laboratory each year for the TERP report. These include over 70 megabytes of files of results that contain the results of the simulations. These files are available upon request.

<b>Other Texas Counties</b> (*Representative counties)		<b>2008</b>		
*	COLEMAN	Summary	Single Family	Multifamily
	CALLAHAN		Single Family	Multifamily
	EASTLAND		Single Family	Multifamily
	ERATH		Single Family	Multifamily
	FISHER		Single Family	Multifamily
	HASKELL		Single Family	Multifamily
	JACK		Single Family	Multifamily
	JONES		Single Family	Multifamily
	MITCHELL	Summary	Single Family	Multifamily
	NOLAN		Single Family	Multifamily
	PALO PINTO		Single Family	Multifamily
	SHACKELFORD		Single Family	Multifamily
	STEPHENS		Single Family	Multifamily
*	TAYLOR		Single Family	Multifamily
	THROCKMORTON		Single Family	Multifamily
	YOUNG		Single Family	Multifamily
*	LEON	Summary	Single Family	Multifamily
	TRINITY		Single Family	Multifamily
*	BELL		Single Family	Multifamily
	BOSQUE		Single Family	Multifamily
	BROWN		Single Family	Multifamily
	COMANCHE		Single Family	Multifamily
	CORYELL		Single Family	Multifamily
	FALLS		Single Family	Multifamily
	FREESTONE	Summary	Single Family	Multifamily
	HAMILTON		Single Family	Multifamily
	HILL		Single Family	Multifamily
	LAMPASAS		Single Family	Multifamily
	LIMESTONE		Single Family	Multifamily
	MCLENNAN		Single Family	Multifamily
	MILLS		Single Family	Multifamily
	NAVARRO		Single Family	Multifamily
	ARMSTRONG		Single Family	Multifamily
	BAILEY		Single Family	Multifamily
*	BRISCOE		Single Family	Multifamily
	CARSON		Single Family	Multifamily
	CASTRO		Single Family	Multifamily
	COCHRAN	Summary	Single Family	Multifamily
	DALLAM		Single Family	Multifamily
	DEAF SMITH		Single Family	Multifamily
	DONLEY		Single Family	Multifamily
	FLOYD		Single Family	Multifamily
	GRAY		Single Family	Multifamily

Other Texas Counties (*Representative counties)		2008	
	HALE		Single Family    Multifamily
	HANSFORD		Single Family    Multifamily
	HARTLEY		Single Family    Multifamily
	HOCKLEY		Single Family    Multifamily
	HUTCHINSON		Single Family    Multifamily
	LAMB		Single Family    Multifamily
	LIPSCOMB		Single Family    Multifamily
	MOORE		Single Family    Multifamily
	OCHILTREE		Single Family    Multifamily
	OLDHAM		Single Family    Multifamily
	PARMER		Single Family    Multifamily
	RANDALL		Single Family    Multifamily
	ROBERTS		Single Family    Multifamily
	SHERMAN		Single Family    Multifamily
	SWISHER		Single Family    Multifamily
	YOAKUM		Single Family    Multifamily
	COLLINGSWORTH		Single Family    Multifamily
*	HALL	Summary	Single Family    Multifamily
	HEMPHILL		Single Family    Multifamily
	WHEELER		Single Family    Multifamily
*	BASTROP	Summary	Single Family    Multifamily
	CALDWELL		Single Family    Multifamily
	LEE		Single Family    Multifamily
	BLANCO	Summary	Single Family    Multifamily
	BURNET		Single Family    Multifamily
	GILLESPIE		Single Family    Multifamily
	KERR		Single Family    Multifamily
	REAL		Single Family    Multifamily
	HAYS		Single Family    Multifamily
	LLANO		Single Family    Multifamily
	MASON		Single Family    Multifamily
	SAN SABA		Single Family    Multifamily
*	TRAVIS		Single Family    Multifamily
	WILLIAMSON		Single Family    Multifamily
*	CHAMBERS	Summary	Single Family    Multifamily
	BROOKS	Summary	Single Family    Multifamily
	CAMERON		Single Family    Multifamily
*	HIDALGO		Single Family    Multifamily
	KENEDY		Single Family    Multifamily
	STARR		Single Family    Multifamily
	WILLACY		Single Family    Multifamily
	JIM HOGG	Summary	Single Family    Multifamily
*	ZAPATA		Single Family    Multifamily
*	KLEBERG	Summary	Single Family    Multifamily

<b>Other Texas Counties</b> (*Representative counties)		<b>2008</b>	
	ARANSAS		Single Family    Multifamily
*	NUECES		Single Family    Multifamily
	DUVAL	Summary	Single Family    Multifamily
	JIM WELLS		Single Family    Multifamily
	LIVE OAK		Single Family    Multifamily
	SAN PATRICIO		Single Family    Multifamily
	DIMMIT		Single Family    Multifamily
	LA SALLE	Summary	Single Family    Multifamily
	MAVERICK		Single Family    Multifamily
	MCMULLEN		Single Family    Multifamily
*	WEBB		Single Family    Multifamily
	ZAVALA		Single Family    Multifamily
	HENDERSON	Summary	Single Family    Multifamily
*	SMITH		Single Family    Multifamily
*	DALLAS	Summary	Single Family    Multifamily
	ELLIS		Single Family    Multifamily
	HOOD		Single Family    Multifamily
	JOHNSON		Single Family    Multifamily
	SOMERVELL		Single Family    Multifamily
	TARRANT		Single Family    Multifamily
	BOWIE		Single Family    Multifamily
	CAMP	Summary	Single Family    Multifamily
	CASS		Single Family    Multifamily
	LAMAR		Single Family    Multifamily
	MORRIS		Single Family    Multifamily
	RED RIVER		Single Family    Multifamily
*	TITUS		Single Family    Multifamily
*	COLLIN		Single Family    Multifamily
	DELTA	Summary	Single Family    Multifamily
	DENTON		Single Family    Multifamily
	FRANKLIN		Single Family    Multifamily
	HOPKINS		Single Family    Multifamily
	KAUFMAN		Single Family    Multifamily
	PARKER		Single Family    Multifamily
	RAINS		Single Family    Multifamily
	ROCKWALL		Single Family    Multifamily
	VAN ZANDT		Single Family    Multifamily
	WISE		Single Family    Multifamily
	CULBERSON	Summary	Single Family    Multifamily
*	HUDSPETH		Single Family    Multifamily
	ANDERSON	Summary	Single Family    Multifamily
	ANGELINA		Single Family    Multifamily
	CHEROKEE		Single Family    Multifamily
	HOUSTON		Single Family    Multifamily

Other Texas Counties (*Representative counties)		2008	
	NACOGDOCHES		Single Family    Multifamily
	PANOLA		Single Family    Multifamily
*	RUSK		Single Family    Multifamily
	SABINE		Single Family    Multifamily
	SAN AUGUSTINE		Single Family    Multifamily
	SHELBY		Single Family    Multifamily
	BRAZORIA	Summary	Single Family    Multifamily
*	GALVESTON		Single Family    Multifamily
	AUSTIN	Summary	Single Family    Multifamily
	BRAZOS		Single Family    Multifamily
	BURLESON		Single Family    Multifamily
	COLORADO		Single Family    Multifamily
	FAYETTE		Single Family    Multifamily
	FORT BEND		Single Family    Multifamily
	GRIMES		Single Family    Multifamily
*	HARRIS		Single Family    Multifamily
	MADISON		Single Family    Multifamily
	MONTGOMERY		Single Family    Multifamily
	ROBERTSON		Single Family    Multifamily
	WALKER		Single Family    Multifamily
	WALLER		Single Family    Multifamily
	WASHINGTON		Single Family    Multifamily
*	MILAM	Summary	Single Family    Multifamily
	BORDEN	Summary	Single Family    Multifamily
	CHILDRESS		Single Family    Multifamily
	CROSBY		Single Family    Multifamily
	DAWSON		Single Family    Multifamily
	DICKENS		Single Family    Multifamily
	GARZA		Single Family    Multifamily
	KENT		Single Family    Multifamily
	KING		Single Family    Multifamily
	LUBBOCK		Single Family    Multifamily
	LYNN		Single Family    Multifamily
	MOTLEY		Single Family    Multifamily
*	SCURRY	Single Family    Multifamily	
	STONEWALL	Single Family    Multifamily	
	TERRY	Single Family    Multifamily	
*	CRANE	Summary	Single Family    Multifamily
	REAGAN		Single Family    Multifamily
	UPTON		Single Family    Multifamily
	ANDREWS	Summary	Single Family    Multifamily
*	ECTOR		Single Family    Multifamily
	GAINES		Single Family    Multifamily
	GLASSCOCK		Single Family    Multifamily



Other Texas Counties (*Representative counties)		2008	
	HOWARD		Single Family    Multifamily
	JEFF DAVIS		Single Family    Multifamily
	LOVING		Single Family    Multifamily
	MARTIN		Single Family    Multifamily
	MIDLAND		Single Family    Multifamily
	REEVES		Single Family    Multifamily
	WARD		Single Family    Multifamily
	WINKLER		Single Family    Multifamily
*	ATASCOSA	Summary	Single Family    Multifamily
	FRIO		Single Family    Multifamily
*	BEXAR	Summary	Single Family    Multifamily
	COMAL		Single Family    Multifamily
	GONZALES		Single Family    Multifamily
	GUADALUPE		Single Family    Multifamily
	KINNEY		Single Family    Multifamily
	MEDINA		Single Family    Multifamily
	UVALDE		Single Family    Multifamily
	VAL VERDE		Single Family    Multifamily
	WILSON		Single Family    Multifamily
	BANDERA	Summary	Single Family    Multifamily
*	KENDALL		Single Family    Multifamily
	BREWSTER	Summary	Single Family    Multifamily
	EDWARDS		Single Family    Multifamily
	KIMBLE		Single Family    Multifamily
	PECOS		Single Family    Multifamily
	PRESIDIO		Single Family    Multifamily
	SUTTON		Single Family    Multifamily
	TERRELL		Single Family    Multifamily
	CONCHO		Single Family    Multifamily
	CROCKETT		Single Family    Multifamily
	IRION		Single Family    Multifamily
	MCCULLOCH		Single Family    Multifamily
	MENARD		Single Family    Multifamily
	RUNNELS		Single Family    Multifamily
	SCHLEICHER		Single Family    Multifamily
*	TOM GREEN		Single Family    Multifamily
*	COKE	Summary	Single Family    Multifamily
	STERLING		Single Family    Multifamily
	COOKE	Summary	Single Family    Multifamily
	FANNIN		Single Family    Multifamily
	GRAYSON		Single Family    Multifamily
*	HUNT		Single Family    Multifamily
	MONTAGUE		Single Family    Multifamily
	ARCHER	Summary	Single Family    Multifamily

Other Texas Counties (*Representative counties)		2008		
	BAYLOR		Single Family	Multifamily
	CLAY		Single Family	Multifamily
	COTTLE		Single Family	Multifamily
	FOARD		Single Family	Multifamily
	HARDEMAN		Single Family	Multifamily
	KNOX		Single Family	Multifamily
*	WICHITA		Single Family	Multifamily
	WILBARGER		Single Family	Multifamily
	BEE		Single Family	Multifamily
	CALHOUN		Single Family	Multifamily
	GOLIAD		Single Family	Multifamily
	JACKSON		Single Family	Multifamily
	MATAGORDA	Summary	Single Family	Multifamily
	REFUGIO		Single Family	Multifamily
*	VICTORIA		Single Family	Multifamily
	WHARTON		Single Family	Multifamily
	DE WITT		Single Family	Multifamily
*	KARNES	Summary	Single Family	Multifamily
*	LAVACA	Summary	Single Family	Multifamily
*	HARRISON	Summary	Single Family	Multifamily
	MARION		Single Family	Multifamily
	JASPER		Single Family	Multifamily
*	ORANGE	Summary	Single Family	Multifamily
	NEWTON		Single Family	Multifamily
*	HARDIN		Single Family	Multifamily
	POLK	Summary	Single Family	Multifamily
	TYLER		Single Family	Multifamily
*	LIBERTY	Summary	Single Family	Multifamily
	SAN JACINTO		Single Family	Multifamily