



TEXAS

Table of Contents

Table of Contents	2
Introduction	3
About Susan G. Komen [®]	3
Susan G. Komen Affiliate Network	3
Purpose of the State Community Profile Report	4
Quantitative Data: Measuring Breast Cancer Impact in Local Communities	6
Quantitative Data	6
Conclusions: Healthy People 2020 Forecasts	
Health Systems Analysis	118
Health Systems Analysis Data Sources	118
Breast Cancer Continuum of Care	124
Health Systems Analysis Findings	125
Public Policy Overview	128
Susan G. Komen Advocacy	128
National Breast and Cervical Cancer Early Detection Program	128
State Comprehensive Cancer Control Plan	130
Affordable Care Act	131
Medicaid Expansion	132
Affordable Care Act, Medicaid Expansion and Unisured Women	134
Community Profile Summary	136
Introduction to the Community Profile Report	136
Quantitative Data: Measuring Breast Cancer Impact in Local Communities	136
Health Systems Analysis	144
Public Policy Overview	147
Conclusions	150
References	151
Appendix	154

Introduction

About Susan G. Komen[®]

Susan G. Komen is the world's largest breast cancer organization, funding more breast cancer research than any other nonprofit while providing real-time help to those facing the disease. Since 1982, Komen has funded more than \$889 million in research and provided \$1.95 billion in funding to screening, education, treatment and psychosocial support programs serving millions of people in more than 30 countries worldwide. Komen was founded by Nancy G. Brinker, who promised her sister, Susan G. Komen, that she would end the disease that claimed Suzy's life.

Since 1982, Komen has contributed to many of the advances made in the fight against breast cancer and transformed how the world treats and talks about this disease and have helped turn millions of breast cancer patients into breast cancer survivors:

- More early detection and effective treatment. Currently, about 70 percent of women 40 and older receive regular mammograms, the single most effective screening tool to find breast cancer early. Since 1990, early detection and effective treatment have resulted in a 34 percent decline in breast cancer deaths in the US.
- **More hope.** In 1980, the five-year relative survival rate for women diagnosed with early stage breast cancer was about 74 percent. Today, it's 99 percent.
- **More research.** The federal government now devotes more than \$850 million each year to breast cancer research, treatment and prevention, compared to \$30 million in 1982.
- **More survivors.** Today, there are more than three million breast cancers survivors in the US.

Visit komen.org or call 1-877 GO KOMEN. Connect with us on social at ww5.komen.org/social.

Susan G. Komen Affiliate Network

Thanks to survivors, volunteers and activists dedicated to the fight against breast cancer, the Komen Affiliate Network is working to better the lives of those facing breast cancer in the local community. Through events like the Komen Race for the Cure[®] series, the local Komen Affiliates invest funds raised locally into community health programs to provide evidence-based breast health education and breast cancer screening, diagnostic and treatment programs, and contribute to the more than \$889 million invested globally in research.

For more information or to connect with a local Affiliate, contact the following Komen Affiliates that are located in the State of Texas as of February 2017:

Susan G Komen[®] Austin 5508 Parkcrest Drive, Suite 203 Austin, Texas, 78731 512-473-0900 www.komenaustin.org Susan G Komen[®] Dallas County 5310 Harvest Hill Road Suite 120 Dallas, TX 75230 214-750-7223 www.komen-dallas.org

Susan G Komen[®] East Central Texas

1800 Shiloh Road, Suite 106 Tyler, TX 75703 903- 561-6992 www.komeneastcentraltexas.org

Susan G Komen[®] El Paso

1700 Murchison Suite 207 El Paso, TX 79902 915-533-4433 www.komenelpaso.org

Susan G Komen[®] Greater Amarillo

P.O. Box 50610 Amarillo, TX 79159 806-354-9706 www.komenamarillo.org

Susan G Komen[®] Greater Fort Worth 2216 Green Oaks Rd Fort Worth, TX 76116 817-735-8580 http://komengreaterfortworth.org/

Susan G Komen[®] Houston

602 Sawyer St. Suite 201 Houston, TX 77007 713-893-9188 www.Komen-houston.org

Susan G. Komen[®] Lubbock Area

1655 Main Street #203 Lubbock, TX 79401 806-698-1900 www.komenlubbock.org

Susan G Komen[®] North Texas P.O. Box 261730

Plano, TX 75026 972-378-4808 Website: <u>www.komennorthtexas.org</u>

Susan G Komen[®] San Antonio P.O. Box 6678

San Antonio, Texas 78209 210-222-9009 www.komensanantonio.org

Susan G Komen[®] Texarkana

4530 Summerhill Road Texarkana, Texas, 75503 903-791-9585 www.komentexarkana.org

Purpose of the State Community Profile Report

The purpose of the Texas Community Profile is to assess breast cancer burden within the state by identifying areas at highest risk of negative breast cancer outcomes. Through the Community Profile, populations most at-risk of dying from breast cancer and their demographic and socioeconomic characteristics can be identified; as well as, the needs and disparities that exist in availability, access and utilization of quality care. The Community Profile consists of the following three sections:

- **Quantitative Data:** This section provides secondary data on breast cancer rates and trends that include incidence, deaths and late-stage diagnosis along with mammography screening proportions. This section also explores demographic, social and geographic characteristics that influence breast cancer outcomes such as race/ethnicity, socioeconomic status, educational attainment and insurance status.
- *Health System Analysis:* This section tells the story of the breast cancer continuum of care and the delivery of quality health care in the community. Key to this section is the observation of potential strengths and weaknesses in the health care system that could compromise a women's health as she works her way through the continuum of care (e.g., screening, diagnosis, treatment and follow-up/survivorship services).
- **Public Policy Overview**: This section provides an overview of key breast cancer policies that affect the ability of at-risk women in accessing and utilizing quality care. This section covers the state's National Breast and Cervical Cancer Early Detection Program, the state's National Comprehensive Cancer Control Program and the Affordable Care Act.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

The purpose of the quantitative data report for the State of Texas is to provide quantitative data from many credible sources and use the data to identify the highest priority areas in the state for evidence-based breast cancer programs.

The quantitative data report provides the following data at the state and county-level as well as for the United States:

- Female breast cancer incidence (new cases)
- Female breast cancer death rates
- Late-stage diagnosis
- Screening mammography proportions
- Population demographics (e.g. age, race/ethnicity)
- Socioeconomic indicators (e.g. income and education level)

The data provided in the report can be used to identify priorities within the state based on estimates of how long it would take an area to achieve Healthy People 2020 objectives for breast cancer late-stage diagnosis and death rates (Healthy People 2020, 2010).

Quantitative Data

This section of the report provides specific information on the major types of data that are included in the report.

Incidence Rates

"Incidence" means the number of new cases of breast cancer that develop in a specific time period.

If the breast cancer incidence rate increases, it may mean that more women are getting breast cancer. However, it could also mean that more breast cancers are being found because of an increase in screening.

The breast cancer incidence rate shows the frequency of new cases of breast cancer among women living in an area during a certain time period. Incidence rates may be calculated for all women or for specific groups of women (e.g. for Asian/Pacific Islander women living in the area).

How incidence rates are calculated

The female breast cancer incidence rate is calculated as the number of females in an area who were diagnosed with breast cancer divided by the total number of females living in that area. Incidence rates are usually expressed in terms of 100,000 people. For example, suppose there are 50,000 females living in an area and 60 of them are diagnosed with breast cancer during a

certain time period. Sixty out of 50,000 is the same as 120 out of 100,000. So the female breast cancer incidence rate would be reported as 120 per 100,000 for that time period.

Adjusting for age

Breast cancer becomes more common as women grow older. When comparing breast cancer rates for an area where many older people live to rates for an area where younger people live, it's hard to know whether the differences are due to age or whether other factors might also be involved.

To account for age, breast cancer rates are usually adjusted to a common standard age distribution. This is done by calculating the breast cancer rates for each age group (such as 45-to 49-year-olds) separately, and then figuring out what the total breast cancer rate would have been if the proportion of people in each age group in the population that's being studied was the same as that of the standard population.

Using age-adjusted rates makes it possible to spot differences in breast cancer rates caused by factors other than differences in age between groups of women.

Trends over time

To show trends (changes over time) in cancer incidence, data for the annual percent change in the incidence rate over a five-year period were included in the report. The annual percent change is the average year-to-year change of the incidence rate. It may be either a positive or negative number.

- A negative value means that the rates are getting lower.
- A positive value means that the rates are getting higher.
- A positive value (rates getting higher) may seem undesirable—and it generally is. However, it's important to remember that an increase in breast cancer incidence could also mean that more breast cancers are being found because more women are getting mammograms. So higher rates don't necessarily mean that there has been an increase in the occurrence of breast cancer.

Confidence intervals

Because numbers for breast cancer rates and trends are not exact, this report includes confidence intervals. A confidence interval is a range of values that gives an idea of how uncertain a value may be. It's shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value. For example, if a breast cancer incidence rate was reported as 120 per 100,000 women, with a confidence interval of 105 to 135, the real rate might not be exactly 120 per 100,000, but it's very unlikely that it's less than 105 or more than 135.

Breast cancer incidence rates and trends

Breast cancer incidence rates and trends are shown in Table 2.1 for:

- United States
- State of Texas

• Each county of Texas

For the State of Texas, rates are also shown by race for Whites, Blacks/African-Americans/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The rates in Table 2.1 are shown per 100,000 females from 2006 to 2010.

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
US (states with available data)	145,332,861	198,602	122.1	121.9 : 122.4	-0.2%	-2.0% : 1.7%
Texas	12,251,113	13,742	114.4	113.6 : 115.3	-0.4%	-3.8% : 3.0%
White	10,051,891	11,712	115.1	114.1 : 116.0	-0.4%	-3.5% : 2.8%
Black/African-American	1,569,020	1,562	117.2	114.5 : 119.9	0.7%	-2.5% : 4.1%
AIAN	119,743	35	41.2	34.8 : 48.3	-8.2%	-24.0% : 11.0%
API	510,459	281	63.7	60.2 : 67.4	2.0%	-5.5% : 10.0%
Non-Hispanic/ Latina	7,829,049	11,020	122.4	121.3 : 123.4	0.2%	-3.3% : 3.8%
Hispanic/ Latina	4,422,064	2,722	89.4	87.8 : 90.9	-2.0%	-6.4% : 2.6%
Anderson County	22,684	23	83.9	69.0 : 101.1	3.7%	-36.9% : 70.4%
Andrews County	7,048	7	94.9	66.0 : 132.4	-8.5%	-39.1% : 37.5%
Angelina County	43,515	54	111.8	98.7 : 126.1	-0.8%	-12.5% : 12.5%
Aransas County	11,694	24	137.2	111.5 : 167.6	-0.9%	-22.6% : 26.9%
Archer County	4,515	5	97.7	63.8 : 144.5	-15.4%	-51.6% : 48.1%
Armstrong County	985	SN	SN	SN	SN	SN
Atascosa County	22,368	25	103.1	85.4 : 123.3	-1.4%	NA
Austin County	14,038	25	141.0	116.5 : 169.4	7.1%	-9.9% : 27.3%
Bailey County	3,498	5	121.4	76.3 : 183.5	-9.5%	-61.5% : 113.1%
Bandera County	10,209	12	76.1	57.1 : 100.4	5.3%	-20.8% : 39.9%
Bastrop County	35,309	38	98.5	84.9 : 113.9	1.3%	-15.8% : 21.9%
Baylor County	1,965	SN	SN	SN	SN	SN
Bee County	12,702	14	98.5	76.0 : 125.5	8.4%	-27.4% : 62.0%
Bell County	148,442	159	124.3	115.7 : 133.3	-3.4%	-10.7% : 4.5%
Bexar County	842,469	925	112.4	109.1 : 115.7	-3.1%	-9.7% : 3.9%
Blanco County	5,000	6	83.9	54.8 : 124.8	-0.1%	-65.5% : 189.1%
Borden County	300	SN	SN	SN	SN	SN
Bosque County	9,127	14	103.2	79.6 : 132.6	3.8%	-31.9% : 58.3%
Bowie County	45,123	64	119.1	106.1 : 133.4	5.8%	-8.0% : 21.8%
Brazoria County	147,578	160	112.2	104.5 : 120.3	2.2%	-6.6% : 12.0%
Brazos County	91,611	81	126.3	114.2 : 139.3	-6.7%	-23.7% : 14.0%
Brewster County	4,479	4	65.7	39.4 : 104.5	-13.8%	-39.6% : 23.1%
Briscoe County	841	SN	SN	SN	SN	SN
Brooks County	3,720	4	84.6	50.6 : 134.1	1.4%	-54.8% : 127.3%
Brown County	19,265	30	118.7	100.0 : 140.2	-9.1%	-39.3% : 36.2%
Burleson County	8,655	11	93.9	70.1 : 124.0	-17.4%	-37.0% : 8.5%
Burnet County	21,517	26	87.4	72.5 : 104.8	2.7%	-6.8% : 13.1%
Caldwell County	18,605	25	129.8	108.0 : 154.8	7.2%	-8.5% : 25.6%
Calhoun County	10,411	12	104.5	79.6 : 135.0	-2.4%	-31.9% : 39.8%
Callahan County	6,883	10	104.8	76.9 : 140.5	-11.7%	-36.7% : 23.4%

Table 2.1. Female breast cancer incidence rates and trends

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Cameron County	204,243	168	88.5	82.5 : 94.7	0.7%	-8.2% : 10.4%
Camp County	6,267	9	120.4	87.3 : 162.4	12.7%	-32.1% : 87.1%
Carson County	3,206	SN	SN	SN	SN	SN
Cass County	15,590	17	73.9	58.3 : 92.7	-2.8%	-15.9% : 12.4%
Castro County	3,876	4	90.4	54.2 : 142.0	-33.3%	NA
Chambers County	16,086	16	100.7	79.5 : 125.9	-0.7%	-24.3% : 30.3%
Cherokee County	24,641	30	103.0	86.7 : 121.5	14.4%	3.9% : 25.9%
Childress County	2,912	5	138.1	87.4 : 208.6	19.6%	-0.7% : 44.0%
Clay County	5,567	7	91.9	63.6 : 130.0	11.6%	-14.6% : 45.9%
Cochran County	1,602	SN	SN	SN	SN	SN
Coke County	1,719	SN	SN	SN	SN	SN
Coleman County	4,473	6	93.0	60.4 : 138.5	-12.2%	-36.6% : 21.6%
Collin County	374,897	441	131.2	125.5 : 137.1	-0.7%	NA
Collingsworth County	1,538	SN	SN	SN	SN	SN
Colorado County	10,480	14	90.9	70.5 : 116.1	-18.5%	-34.7%:1.8%
Comal County	52,315	80	121.4	109.5 : 134.2	-0.5%	NA
Comanche County	7,036	10	107.9	78.7 : 145.0	8.5%	-43.0% : 106.5%
Concho County	1,312	SN	SN	SN	SN	SN
Cooke County	19,351	20	86.0	69.5 : 105.3	11.9%	0.4% : 24.7%
Coryell County	37,494	32	109.8	93.0 : 128.6	3.5%	-4.8% : 12.5%
Cottle County	786	SN	SN	SN	SN	SN
Crane County	2,115	SN	SN	SN	SN	SN
Crockett County	1,883	SN	SN	SN	SN	SN
Crosby County	3,183	SN	SN	SN	SN	SN
Culberson County	1,269	SN	SN	SN	SN	SN
Dallam County	3,125	SN	SN	SN	SN	SN
Dallas County	1,171,221	1,330	124.5	121.5 : 127.6	0.9%	-3.0% : 5.0%
Dawson County	6,013	7	89.6	61.0 : 127.5	21.3%	-17.4% : 78.2%
Deaf Smith County	9,572	9	92.1	67.0 : 123.5	8.6%	-30.0% : 68.4%
Delta County	2,675	4	104.7	63.1 : 166.6	2.0%	-42.1% : 79.6%
Denton County	318,811	331	124.9	118.6 : 131.4	0.2%	NA
DeWitt County	9,594	17	139.2	109.7 : 174.5	-16.2%	-36.4% : 10.5%
Dickens County	1,059	SN	SN	SN	SN	SN
Dimmit County	5,095	6	100.6	67.8 : 144.4	-2.9%	-47.4% : 79.6%
Donley County	1,878	3	104.5	60.7 : 177.1	-6.6%	NA
Duval County	5,853	5	75.2	48.9 : 111.3	-4.8%	-35.5% : 40.6%
Eastland County	9,522	12	81.5	61.1 : 107.3	-1.5%	-27.6% : 33.9%
Ector County	67,551	78	118.7	107.1 : 131.2	11.3%	-2.1% : 26.5%
Edwards County	975	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Ellis County	72,575	80	112.7	101.7 : 124.5	-1.6%	-7.8% : 5.1%
El Paso County	398,655	357	94.8	90.4 : 99.3	-1.4%	-6.8% : 4.4%
Erath County	18,851	24	124.5	102.7 : 149.5	2.0%	-15.2% : 22.6%
Falls County	9,409	9	76.1	55.0 : 102.9	-11.5%	-35.9% : 22.1%
Fannin County	15,811	22	105.5	86.0 : 128.4	-7.9%	-32.0% : 24.7%
Fayette County	12,309	21	108.7	87.8 : 133.8	-2.7%	-30.9% : 37.1%
Fisher County	2,053	SN	SN	SN	SN	SN
Floyd County	3,352	3	69.4	39.0 : 116.2	12.6%	-27.0% : 73.7%
Foard County	721	SN	SN	SN	SN	SN
Fort Bend County	275,815	307	121.8	115.4 : 128.4	0.3%	-3.6% : 4.3%
Franklin County	5,435	6	79.5	52.9 : 116.0	-1.9%	-37.5% : 53.9%
Freestone County	9,233	12	101.8	77.2 : 132.2	-1.9%	-24.0% : 26.5%
Frio County	7,203	7	92.8	65.0 : 128.9	5.4%	-22.2% : 42.8%
Gaines County	8,346	6	87.3	59.1 : 123.9	3.4%	-15.5% : 26.6%
Galveston County	144,934	201	129.4	121.4 : 137.7	-2.5%	-14.6% : 11.4%
Garza County	2,393	SN	SN	SN	SN	SN
Gillespie County	12,543	26	121.8	99.5 : 148.4	-8.8%	-20.0% : 4.0%
Glasscock County	566	SN	SN	SN	SN	SN
Goliad County	3,590	4	81.5	50.7 : 127.2	12.8%	-41.5% : 117.2%
Gonzales County	9,800	9	77.8	56.6 : 104.7	-12.6%	-26.4% : 3.7%
Gray County	10,838	18	136.1	108.8 : 168.4	3.0%	-10.2% : 18.3%
Grayson County	61,197	87	115.4	104.6 : 127.1	0.1%	-14.4% : 16.9%
Gregg County	61,175	85	122.9	111.3 : 135.3	6.2%	-3.5% : 16.8%
Grimes County	11,953	14	95.5	74.0 : 121.5	-3.0%	-11.4% : 6.2%
Guadalupe County	62,193	70	106.2	95.3 : 118.0	-4.0%	NA
Hale County	17,447	15	83.4	65.4 : 104.7	3.5%	-39.0% : 75.4%
Hall County	1,743	SN	SN	SN	SN	SN
Hamilton County	4,330	7	88.1	60.1 : 128.0	13.6%	-19.2% : 59.9%
Hansford County	2,734	4	142.0	86.0 : 220.7	1.0%	-36.5% : 60.7%
Hardeman County	2,137	4	122.9	72.7 : 198.6	-10.7%	-34.0% : 20.8%
Hardin County	27,003	36	115.1	98.7 : 133.6	-9.1%	-24.9% : 10.0%
Harris County	1,984,833	2,152	121.7	119.4 : 124.1	0.2%	-2.1% : 2.5%
Harrison County	32,870	47	121.3	106.0 : 138.2	4.2%	-12.6% : 24.3%
Hartley County	2,286	SN	SN	SN	SN	SN
Haskell County	2,808	SN	SN	SN	SN	SN
Hays County	73,374	70	109.5	98.1 : 121.8	-3.1%	-14.6% : 10.1 <mark></mark> %
Hemphill County	1,810	SN	SN	SN	SN	SN
Henderson County	40,017	63	116.4	103.4 : 130.7	-0.8%	NA
Hidalgo County	378,395	267	85.8	81.3 : 90.6	0.3%	-6.3% : 7.5%

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Hill County	17,712	27	118.2	98.5 : 140.9	7.3%	-20.1% : 44.0%
Hockley County	11,654	14	112.5	87.5 : 142.6	3.6%	-17.4% : 30.0%
Hood County	25,324	47	128.0	111.4 : 146.6	-7.8%	-16.8% : 2.1%
Hopkins County	17,468	20	95.0	77.1 : 116.0	-0.7%	-40.5% : 65.7%
Houston County	10,934	15	94.4	73.5 : 120.1	12.7%	-2.4% : 30.1%
Howard County	15,043	14	86.3	67.1 : 109.4	9.2%	-10.6% : 33.4%
Hudspeth County	1,703	SN	SN	SN	SN	SN
Hunt County	42,767	47	94.7	82.9 : 107.8	1.2%	-8.7% : 12.3%
Hutchinson County	11,089	11	82.5	62.2 : 107.7	13.6%	-18.4% : 58.3%
Irion County	791	SN	SN	SN	SN	SN
Jack County	4,039	5	91.6	57.2 : 140.2	-0.7%	-19.9% : 23.1%
Jackson County	7,091	7	84.3	58.9 : 117.5	-27.2%	-48.5% : 2.9%
Jasper County	17,950	23	104.6	86.1 : 126.2	5.4%	-10.5% : 24.1%
Jeff Davis County	1,143	SN	SN	SN	SN	SN
Jefferson County	122,114	157	114.7	106.7 : 123.2	-3.5%	-12.7% : 6.6%
Jim Hogg County	2,640	SN	SN	SN	SN	SN
Jim Wells County	20,623	23	105.4	86.6 : 127.1	-14.1%	-30.0% : 5.4%
Johnson County	73,708	82	106.0	95.9 : 116.9	5.6%	1.0% : 10.4%
Jones County	7,785	13	121.8	93.1 : 157.2	-4.3%	-27.7% : 26.7%
Karnes County	5,982	8	105.8	73.8 : 147.3	-21.7%	-51.6% : 26.5%
Kaufman County	49,860	58	116.7	103.5 : 131.1	-5.5%	-22.4% : 15.2%
Kendall County	16,122	26	128.0	106.3 : 153.2	-6.8%	-31.6% : 26.9%
Kenedy County	196	SN	SN	SN	SN	SN
Kent County	409	SN	SN	SN	SN	SN
Kerr County	25,130	39	99.1	84.7 : 115.5	-10.5%	-24.0% : 5.3%
Kimble County	2,314	5	119.6	72.8 : 190.9	2.3%	-48.9% : 104.7%
King County	143	SN	SN	SN	SN	SN
Kinney County	1,625	SN	SN	SN	SN	SN
Kleberg County	15,547	21	142.4	116.2 : 172.7	-12.2%	-40.9% : 30.5%
Knox County	1,886	3	107.6	59.1 : 185.2	47.4%	-4.0% : 126.5%
Lamar County	25,697	38	120.2	103.3 : 139.3	10.3%	-9.6% : 34.4%
Lamb County	7,065	10	122.5	90.4 : 162.6	-11.5%	-27.8% : 8.5%
Lampasas County	9,992	10	82.5	61.2 : 109.3	4.3%	-25.3% : 45.6%
La Salle County	2,782	SN	SN	SN	SN	SN
Lavaca County	9,863	16	102.5	79.6 : 130.8	-1.6%	-49.7% : 92.3%
Lee County	8,131	10	103.2	75.6 : 137.8	-5.0%	-32.5% : 33.8%
Leon County	8,348	13	111.1	84.0 : 144.8	-6.6%	NA
Liberty County	38,086	36	90.8	77.9 : 105.2	5.4%	-17.0% : 33.9%
Limestone County	11,171	13	90.8	69.3 : 117.3	9.3%	NA

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Lipscomb County	1,629	SN	SN	SN	SN	SN
Live Oak County	5,283	7	82.0	55.9 : 118.1	-2.8%	-40.5% : 58.7%
Llano County	9,807	18	100.5	77.5 : 129.7	9.3%	-11.4% : 34.7%
Loving County	34	SN	SN	SN	SN	SN
Lubbock County	136,756	153	113.6	105.6 : 122.1	-3.5%	-15.0% : 9.5%
Lynn County	3,030	3	93.7	52.4 : 155.2	15.5%	-42.7% : 132.7%
McCulloch County	4,217	5	83.4	51.9 : 128.3	-15.7%	-45.2% : 29.7%
McLennan County	118,109	143	116.1	107.6 : 125.0	-0.1%	-9.9% : 10.9%
McMullen County	359	SN	SN	SN	SN	SN
Madison County	5,671	6	87.9	58.9 : 126.7	8.1%	-45.9% : 115.8%
Marion County	5,520	9	97.2	69.9 : 133.8	8.5%	-29.3% : 66.6%
Martin County	2,295	SN	SN	SN	SN	SN
Mason County	1,977	3	95.1	52.2 : 168.7	17.1%	-23.4% : 78.9%
Matagorda County	18,358	24	107.7	89.0 : 129.3	0.6%	-18.1% : 23.6%
Maverick County	27,014	21	85.1	69.5 : 103.1	5.5%	-10.2% : 24.0%
Medina County	21,898	20	79.6	64.7 : 97.1	5.3%	-21.3% : 40.9%
Menard County	1,083	SN	SN	SN	SN	SN
Midland County	67,465	75	107.0	96.3 : 118.5	1.9%	-13.7% : 20.3%
Milam County	12,583	19	118.6	95.5 : 146.0	-7.7%	-17.5% : 3.2%
Mills County	2,485	5	117.4	72.2 : 185.3	-13.4%	-64.5% : 111.7%
Mitchell County	3,587	6	123.6	81.8 : 180.8	-0.9%	-29.9% : 40.2%
Montague County	10,094	12	89.4	67.5 : 116.6	-20.1%	-33.4% : -4.0%
Montgomery County	215,716	268	121.9	115.4 : 128.8	0.6%	-4.6% : 6.1%
Moore County	10,295	9	96.5	70.5 : 128.7	2.9%	-21.0% : 34.0%
Morris County	6,786	9	105.7	76.1 : 143.4	11.1%	-18.0% : 50.7%
Motley County	587	SN	SN	SN	SN	SN
Nacogdoches County	32,994	33	104.6	89.0 : 122.1	-1.1%	-23.3% : 27.4%
Navarro County	23,973	26	96.8	80.7 : 115.3	8.4%	4.1% : 12.9%
Newton County	7,027	7	78.3	54.1 : 110.5	-34.5%	-60.3% : 7.9%
Nolan County	7,613	11	107.4	80.2 : 141.6	8.5%	-26.0% : 59.1%
Nueces County	170,290	203	112.6	105.7 : 119.8	-0.2%	-14.8% : 17.0%
Ochiltree County	4,893	5	112.4	73.2 : 164.7	-9.7%	-36.8% : 29.0%
Oldham County	1,010	SN	SN	SN	SN	SN
Orange County	41,287	57	118.4	104.8 : 133.3	3.2%	-13.9% : 23.6%
Palo Pinto County	14,185	19	107.2	86.3 : 131.8	2.4%	-21.5% : 33.6%
Panola County	11,947	15	98.2	77.0 : 123.7	-6.2%	-28.3% : 22.7%
Parker County	55,249	79	130.6	117.9 : 144.4	7.2%	2.7% : 11.9%
Parmer County	4,949	5	98.9	63.3 : 147.0	-3.9%	-40.6% : 55.5%
Pecos County	6,711	5	62.8	39.5 : 95.1	9.8%	-37.0% : 91.4%

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Polk County	21,339	37	112.4	95.9 : 131.3	5.8%	-12.8% : 28.5%
Potter County	58,831	63	107.8	96.1 : 120.5	3.2%	-5.4% : 12.6%
Presidio County	3,905	3	76.3	43.7 : 124.3	-22.7%	-35.9% : -6.7%
Rains County	5,435	6	81.7	54.6 : 119.1	37.4%	9.9% : 71.8%
Randall County	60,022	79	119.9	108.2 : 132.5	-6.1%	-12.6% : 0.8%
Reagan County	1,591	SN	SN	SN	SN	SN
Real County	1,646	SN	SN	SN	SN	SN
Red River County	6,650	10	107.0	78.0 : 144.1	-12.9%	-22.0% : -2.8%
Reeves County	5,400	7	106.1	72.9 : 149.7	-4.3%	-39.1% : 50.4%
Refugio County	3,737	6	122.7	82.6 : 177.4	0.2%	-27.3% : 38.2%
Roberts County	453	SN	SN	SN	SN	SN
Robertson County	8,439	14	137.5	106.6 : 175.0	-8.1%	-36.4% : 32.7%
Rockwall County	37,159	48	132.2	115.7 : 150.4	2.9%	-10.7% : 18.5%
Runnels County	5,330	7	91.3	63.4 : 128.9	-11.5%	-39.1% : 28.7%
Rusk County	24,770	32	107.4	91.2 : 125.7	-4.0%	-16.3% : 10.0%
Sabine County	5,437	7	76.9	50.8 : 113.7	4.4%	-36.4% : 71.3%
San Augustine County	4,597	4	69.7	39.0 : 115.3	6.8%	-35.5% : 77.0%
San Jacinto County	12,950	17	106.5	84.1 : 133.2	-6.8%	-16.4% : 3.9%
San Patricio County	33,166	35	101.2	86.7 : 117.5	4.3%	NA
San Saba County	2,759	4	86.5	49.7 : 143.8	-28.9%	-59.2% : 23.6%
Schleicher County	1,616	SN	SN	SN	SN	SN
Scurry County	7,748	11	118.2	88.1 : 155.5	6.6%	-14.9% : 33.6%
Shackelford County	1,755	4	161.3	99.2 : 254.1	-26.0%	-57.1% : 27.6%
Shelby County	12,856	13	84.6	64.6 : 109.0	-3.6%	-35.5% : 44.0%
Sherman County	1,477	SN	SN	SN	SN	SN
Smith County	105,247	157	132.1	122.9 : 141.8	1.6%	-10.1% : 14.8%
Somervell County	4,151	4	83.0	50.0 : 130.4	NA	NA
Starr County	30,968	23	85.7	70.7 : 102.8	-5.7%	NA
Stephens County	4,615	6	94.9	61.2 : 141.2	-23.8%	-53.1% : 23.6%
Sterling County	562	SN	SN	SN	SN	SN
Stonewall County	748	SN	SN	SN	SN	SN
Sutton County	2,135	3	148.4	85.8 : 239.7	-14.5%	-56.8% : 69.3%
Swisher County	3,720	4	89.5	53.3 : 141.7	-3.5%	-24.5% : 23.3%
Tarrant County	886,941	1,015	122.9	119.5 : 126.4	-0.8%	-7.9% : 6.9%
Taylor County	66,598	83	117.7	106.4 : 129.8	-1.3%	-9.3% : 7.3%
Terrell County	452	SN	SN	SN	SN	SN
Terry County	5,907	7	105.2	73.1 : 147.1	-22.4%	-43.2% : 6.2%
Throckmorton County	833	SN	SN	SN	SN	SN
Titus County	15,612	13	83.8	64.6 : 106.9	-0.9%	-31.4% : 43.2%

Population Group	Female Population (Annual Average)	# of New Cases (Annual Average)	Age- adjusted Incidence Rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Incidence Trend (Annual Percent Change)	Confidence Interval of Incidence Trend
Tom Green County	55,256	66	109.7	97.9 : 122.5	-0.5%	-11.5% : 12.0%
Travis County	484,563	504	124.0	119.1 : 129.1	1.8%	-5.9% : 10.0%
Trinity County	7,430	11	107.8	80.2 : 142.9	15.0%	-1.2% : 34.0%
Tyler County	9,947	11	82.0	61.2 : 108.1	-3.6%	-28.3% : 29.6%
Upshur County	19,546	21	86.6	70.6 : 105.4	-3.2%	-25.0% : 25.1%
Upton County	1,627	SN	SN	SN	SN	SN
Uvalde County	13,431	15	102.0	79.5 : 129.0	-2.8%	-27.4% : 30.3%
Val Verde County	24,083	17	69.0	54.9 : 85.5	0.1%	-30.0% : 43.0%
Van Zandt County	26,563	39	106.4	91.6 : 123.2	9.7%	-4.3% : 25.7%
Victoria County	43,983	58	116.9	103.7 : 131.4	-7.8%	-12.4% : -2.9%
Walker County	27,038	30	115.1	97.1 : 135.4	4.1%	-16.5% : 29.8%
Waller County	20,623	19	100.1	80.8 : 122.6	-2.2%	-24.6% : 26.9%
Ward County	5,374	8	122.7	86.7 : 169.2	9.3%	-28.6% : 67.3%
Washington County	16,772	32	149.4	125.9 : 176.2	3.4%	-9.4% : 18.1%
Webb County	123,793	91	93.2	84.8 : 102.3	-8.8%	-18.6% : 2.2%
Wharton County	20,857	22	85.9	70.1 : 104.4	2.6%	-24.5% : 39.3%
Wheeler County	2,653	4	102.1	61.7 : 162.8	-34.4%	NA
Wichita County	63,857	77	109.4	98.6 : 121.2	-3.2%	-12.6% : 7.3%
Wilbarger County	6,857	11	126.7	94.5 : 166.7	1.9%	-20.2% : 30.2%
Willacy County	10,021	7	68.6	48.1 : 95.0	-8.6%	-39.7% : 38.5%
Williamson County	198,535	226	125.9	118.5 : 133.6	-3.9%	-9.0% : 1.5%
Wilson County	20,704	23	97.3	79.9 : 117.5	7.5%	-4.4% : 20.9%
Winkler County	3,479	4	102.5	61.1 : 161.4	-28.0%	-52.6% : 9.2%
Wise County	28,731	30	97.7	82.5 : 114.8	7.1%	-11.9% : 30.2%
Wood County	21,170	33	94.0	79.3 : 110.9	2.6%	-17.2% : 27.2%
Yoakum County	3,875	3	94.1	54.3 : 150.9	12.4%	-38.6% : 105.7%
Young County	9,352	17	128.7	101.7 : 161.3	5.8%	-13.5% : 29.3%
Zapata County	6,765	4	74.3	46.1 : 112.7	-3.2%	-21.2% : 19.0%
Zavala County	5,908	4	60.9	35.6 : 97.0	-14.0%	-50.6% : 49.8%

NA – data not available.

SN - data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Data are for years 2006-2010.

Rates are in cases per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source: NAACCR - CINA Deluxe Analytic File.

Map of incidence rates

Figure 2.1 shows a map of breast cancer incidence rates for the counties in Texas. When the numbers of cases used to compute the rates are small (15 cases or fewer for the five-year data period), those rates are unreliable and are shown as "small numbers" on the map.



Rates are in cases per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source: NAACCR - CINA Deluxe Analytic File.



Conclusions: Breast cancer incidence rates and trends

Overall, the breast cancer incidence rate in the State of Texas was significantly lower than that observed in the US as a whole and the incidence trend was slightly lower than the US as a whole.

For the United States, breast cancer incidence in Blacks/African-Americans is similar to Whites overall. The most recent estimated breast cancer incidence rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated incidence rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the State of Texas, the incidence rate was slightly higher among Blacks/African-Americans than Whites, significantly lower among APIs than Whites, and significantly lower among AIANs than Whites. The incidence rate among Hispanics/Latinas was significantly lower than among Non-Hispanics/Latinas.

The following counties had an incidence rate **significantly higher** than the state as a whole:

- Austin County
- Bell County (Komen East Central Texas)
- Collin County (Komen North Texas)
- Dallas County (Komen Dallas County)
- Denton County (Komen North Texas)
- Fort Bend County (Komen Houston)
- Galveston County (Komen Houston)
- Harris County (Komen Houston)
- Kleberg County
- Montgomery County (Komen Houston)
- Parker County (Komen Greater Fort Worth)
- Rockwall County
- Smith County (Komen East Central Texas)
- Tarrant County (Komen Greater Fort Worth)
- Travis County (Komen Austin)
- Washington County
- Williamson County (Komen Austin)

The incidence rate was significantly lower in the following counties:

- Anderson County (Komen East Central Texas)
- Bandera County
- Brewster County
- Burnet County
- Cameron County
- Cass County (Komen Texarkana)
- Cooke County (Komen North Texas)
- Duval County
- Eastland County

- El Paso County (Komen El Paso)
- Falls County (Komen East Central Texas)
- Gonzales County
- Hale County (Komen Lubbock Area)
- Hidalgo County
- Howard County
- Hunt County (Komen North Texas)
- Hutchinson County (Komen Greater Amarillo)
- Lampasas County
- Liberty County (Komen Houston)
- Maverick County
- Medina County
- Newton County
- Pecos County
- Shelby County
- Starr County
- Titus County
- Tyler County
- Upshur County
- Val Verde County
- Webb County
- Wharton County
- Willacy County
- Wood County
- Zapata County
- Zavala County

Significantly less favorable trends in breast cancer incidence rates were observed in the following counties:

- Cherokee County (Komen East Central Texas)
- Navarro County (Komen East Central Texas)
- Rains County

Significantly more favorable trends in breast cancer incidence rates were observed in the following counties:

- Montague County (Komen North Texas)
- Presidio County

The rest of the counties had incidence rates and trends that were not significantly different than the state as a whole or did not have enough data available.

It's important to remember that an increase in breast cancer incidence could also mean that more breast cancers are being found because more women are getting mammograms.

Death Rates

A fundamental goal is to reduce the number of women dying from breast cancer.

Death rate trends should always be negative: death rates should be getting lower over time.

The breast cancer death rate shows the frequency of death from breast cancer among women living in a given area during a certain time period. Like incidence rates, death rates may be calculated for all women or for specific groups of women (e.g. Black/African-American women).

How death rates are calculated

The death rate is calculated as the number of women from a particular geographic area who died from breast cancer divided by the total number of women living in that area. Like incidence rates, death rates are often shown in terms of 100,000 women and adjusted for age.

Death rate trends

As with incidence rates, data are included for the annual percent change in the death rate over a five-year period.

The meanings of these data are the same as for incidence rates, with one exception. Changes in screening don't affect death rates in the way that they affect incidence rates. So a negative value, which means that death rates are getting lower, is always desirable. A positive value, which means that death rates are getting higher, is always undesirable.

Confidence intervals

As with incidence rates, this report includes the confidence interval of the age-adjusted breast cancer death rates and trends because the numbers are not exact. The confidence interval is shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value.

Breast cancer death rates and trends

Breast cancer death rates and trends are shown in Table 2.2 for:

- United States
- State of Texas
- Each county of Texas

For the state, rates are also shown by race for Whites, Blacks/African-Americans/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race). The rates in Table 2.2 are shown per 100,000 females from 2006 to 2010. The HP2020 death rate target is included for reference.

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
US	154,540,194	40,736	22.6	22.5 : 22.7	-1.9%	-2.0% : -1.8%
HP2020	-	-	20.6*	-	-	-
Texas	12,251,113	2,610	21.8	21.4 : 22.2	-1.8%	-2.0% : -1.7%
White	10,051,891	2,142	20.9	20.5 : 21.3	-1.9%	-2.1% : -1.7%
Black/African-American	1,569,020	429	33.5	32.1 : 35.0	-1.0%	-1.3% : -0.7%
AIAN	119,743	5	5.7	3.4 : 8.9	NA	NA
API	510,459	33	8.6	7.2 : 10.1	-0.4%	-2.0% : 1.2%
Non-Hispanic/ Latina	7,829,049	2,133	23.2	22.8 : 23.7	-1.7%	-1.9% : -1.5%
Hispanic/ Latina	4,422,064	470	16.7	16.1 : 17.5	-1.6%	-2.0% : -1.2%
Anderson County	22,684	6	21.2	14.3 : 30.5	-2.6%	-5.1% : -0.1%
Andrews County	7,048	SN	SN	SN	SN	SN
Angelina County	43,515	10	20.8	15.4 : 27.5	-0.6%	-2.7% : 1.5%
Aransas County	11,694	4	26.6	15.7 : 42.7	-3.8%	-7.2% : -0.4%
Archer County	4,515	SN	SN	SN	SN	SN
Armstrong County	985	SN	SN	SN	SN	SN
Atascosa County	22,368	4	16.5	9.9 : 25.9	-2.0%	-5.4% : 1.6%
Austin County	14,038	5	24.7	15.5 : 37.8	-0.4%	-3.6% : 2.9%
Bailey County	3,498	SN	SN	SN	SN	SN
Bandera County	10,209	SN	SN	SN	SN	SN
Bastrop County	35,309	7	18.8	13.1 : 26.3	-1.7%	-4.1% : 0.7%
Baylor County	1,965	SN	SN	SN	SN	SN
Bee County	12,702	4	28.3	17.1 : 44.1	NA	NA
Bell County	148,442	29	22.6	19.0 : 26.7	-0.2%	-2.0% : 1.6%
Bexar County	842,469	180	21.7	20.3 : 23.2	-1.9%	-2.4% : -1.4%
Blanco County	5,000	SN	SN	SN	SN	SN
Borden County	300	SN	SN	SN	SN	SN
Bosque County	9,127	SN	SN	SN	SN	SN
Bowie County	45,123	13	22.9	17.6 : 29.4	-1.9%	-3.6% : -0.2%
Brazoria County	147,578	34	24.6	20.9 : 28.6	-1.1%	-2.5% : 0.4%
Brazos County	91,611	12	18.8	14.3 : 24.2	-2.5%	-4.6% : -0.4%
Brewster County	4,479	SN	SN	SN	SN	SN

Table 2.2. Female breast cancer death rates and trends

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Briscoe County	841	SN	SN	SN	SN	SN
Brooks County	3,720	SN	SN	SN	SN	SN
Brown County	19,265	7	26.2	18.2 : 36.8	-1.4%	-4.3% : 1.6%
Burleson County	8,655	3	23.5	13.1 : 40.1	NA	NA
Burnet County	21,517	5	17.1	11.1 : 25.5	-7.5%	-13.8% : -0.8%
Caldwell County	18,605	SN	SN	SN	SN	SN
Calhoun County	10,411	SN	SN	SN	SN	SN
Callahan County	6,883	3	34.6	20.0 : 57.1	NA	NA
Cameron County	204,243	34	18.0	15.4 : 20.9	-1.6%	-3.2% : -0.1%
Camp County	6,267	SN	SN	SN	SN	SN
Carson County	3,206	SN	SN	SN	SN	SN
Cass County	15,590	5	25.4	16.4 : 38.0	-0.1%	-3.7% : 3.7%
Castro County	3,876	SN	SN	SN	SN	SN
Chambers County	16,086	SN	SN	SN	SN	SN
Cherokee County	24,641	7	23.2	16.1 : 32.6	-2.0%	-4.5% : 0.6%
Childress County	2,912	SN	SN	SN	SN	SN
Clay County	5,567	SN	SN	SN	SN	SN
Cochran County	1,602	SN	SN	SN	SN	SN
Coke County	1,719	SN	SN	SN	SN	SN
Coleman County	4,473	SN	SN	SN	SN	SN
Collin County	374,897	56	19.1	16.8 : 21.5	-2.6%	-3.6% : -1.6%
Collingsworth County	1,538	SN	SN	SN	SN	SN
Colorado County	10,480	SN	SN	SN	SN	SN
Comal County	52,315	13	19.1	14.7 : 24.6	13.8%	-19.2% : 60.3%
Comanche County	7,036	SN	SN	SN	SN	SN
Concho County	1,312	SN	SN	SN	SN	SN
Cooke County	19,351	5	20.4	12.8 : 31.0	-3.4%	-7.0% : 0.5%
Coryell County	37,494	6	22.4	15.2 : 31.8	-1.4%	-4.4% : 1.7%
Cottle County	786	SN	SN	SN	SN	SN
Crane County	2,115	SN	SN	SN	SN	SN
Crockett County	1,883	SN	SN	SN	SN	SN
Crosby County	3,183	SN	SN	SN	SN	SN
Culberson County	1,269	SN	SN	SN	SN	SN
Dallam County	3,125	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Dallas County	1,171,221	247	23.6	22.2 : 24.9	-1.9%	-2.3% : -1.4%
Dawson County	6,013	SN	SN	SN	SN	SN
DeWitt County	9,594	3	24.2	13.1 : 41.5	1.0%	-3.2% : 5.5%
Deaf Smith County	9,572	SN	SN	SN	SN	SN
Delta County	2,675	SN	SN	SN	SN	SN
Denton County	318,811	50	20.7	18.1 : 23.6	-2.4%	-3.5% : -1.2%
Dickens County	1,059	SN	SN	SN	SN	SN
Dimmit County	5,095	SN	SN	SN	SN	SN
Donley County	1,878	SN	SN	SN	SN	SN
Duval County	5,853	SN	SN	SN	SN	SN
Eastland County	9,522	4	33.7	20.1 : 53.4	-0.5%	-4.1% : 3.2%
Ector County	67,551	16	24.2	19.1 : 30.2	-1.5%	-3.4% : 0.4%
Edwards County	975	SN	SN	SN	SN	SN
El Paso County	398,655	80	21.2	19.1 : 23.3	-2.0%	-2.7% : -1.2%
Ellis County	72,575	14	19.8	15.4 : 25.1	-3.1%	-4.4% : -1.8%
Erath County	18,851	SN	SN	SN	SN	SN
Falls County	9,409	SN	SN	SN	SN	SN
Fannin County	15,811	3	15.1	8.7 : 25.0	SN	SN
Fayette County	12,309	6	28.0	18.2 : 42.1	33.1%	-6.3% : 89.1%
Fisher County	2,053	SN	SN	SN	SN	SN
Floyd County	3,352	SN	SN	SN	SN	SN
Foard County	721	SN	SN	SN	SN	SN
Fort Bend County	275,815	41	17.7	15.2 : 20.4	-3.1%	-4.4% : -1.8%
Franklin County	5,435	SN	SN	SN	SN	SN
Freestone County	9,233	5	38.4	24.0 : 59.0	NA	NA
Frio County	7,203	SN	SN	SN	SN	SN
Gaines County	8,346	SN	SN	SN	SN	SN
Galveston County	144,934	39	25.4	21.9 : 29.3	-2.0%	-3.6% : -0.4%
Garza County	2,393	SN	SN	SN	SN	SN
Gillespie County	12,543	6	21.0	13.7 : 32.5	-2.3%	-5.3% : 0.9%
Glasscock County	566	SN	SN	SN	SN	SN
Goliad County	3,590	SN	SN	SN	SN	SN
Gonzales County	9,800	SN	SN	SN	SN	SN
Gray County	10,838	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Grayson County	61,197	16	19.8	15.6 : 24.8	-2.2%	-3.7% : -0.7%
Gregg County	61,175	21	28.3	23.1 : 34.4	9.6%	-2.9% : 23.8%
Grimes County	11,953	5	31.3	19.7 : 47.7	1.6%	-1.9% : 5.2%
Guadalupe County	62,193	12	18.1	13.8 : 23.4	-4.8%	-6.6% : -3.0%
Hale County	17,447	5	25.5	16.3 : 38.0	0.2%	-3.0% : 3.5%
Hall County	1,743	SN	SN	SN	SN	SN
Hamilton County	4,330	SN	SN	SN	SN	SN
Hansford County	2,734	SN	SN	SN	SN	SN
Hardeman County	2,137	SN	SN	SN	SN	SN
Hardin County	27,003	7	22.6	15.8 : 31.3	-0.2%	-3.4% : 3.2%
Harris County	1,984,833	410	24.2	23.1 : 25.3	-1.9%	-2.3% : -1.5%
Harrison County	32,870	7	18.6	12.9 : 26.1	-1.8%	-4.0% : 0.4%
Hartley County	2,286	SN	SN	SN	SN	SN
Haskell County	2,808	SN	SN	SN	SN	SN
Hays County	73,374	13	21.3	16.3 : 27.3	-1.1%	-3.2% : 0.9%
Hemphill County	1,810	SN	SN	SN	SN	SN
Henderson County	40,017	11	19.0	14.3 : 25.1	-2.3%	-4.5% : 0.0%
Hidalgo County	378,395	49	16.0	14.1 : 18.1	-2.1%	-3.1% : -1.1%
Hill County	17,712	4	19.0	11.6 : 29.7	-2.5%	-5.4% : 0.5%
Hockley County	11,654	SN	SN	SN	SN	SN
Hood County	25,324	8	18.5	13.0 : 26.0	-3.5%	-5.9% : -1.0%
Hopkins County	17,468	5	21.6	13.8 : 32.7	0.1%	-2.5% : 2.8%
Houston County	10,934	3	17.9	10.0 : 30.8	-0.5%	-4.6% : 3.9%
Howard County	15,043	4	20.3	11.8 : 32.8	-2.6%	-4.5% : -0.6%
Hudspeth County	1,703	SN	SN	SN	SN	SN
Hunt County	42,767	14	27.8	21.6 : 35.3	-1.1%	-2.8% : 0.8%
Hutchinson County	11,089	SN	SN	SN	SN	SN
Irion County	791	SN	SN	SN	SN	SN
Jack County	4,039	SN	SN	SN	SN	SN
Jackson County	7,091	SN	SN	SN	SN	SN
Jasper County	17,950	5	21.8	13.9 : 32.8	-0.3%	-3.1% : 2.7%
Jeff Davis County	1,143	SN	SN	SN	SN	SN
Jefferson County	122,114	37	25.9	22.3 : 30.0	-0.5%	-1.8% : 0.8%
Jim Hogg County	2,640	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Jim Wells County	20,623	4	17.1	10.1 : 27.1	-2.8%	-5.8% : 0.4%
Johnson County	73,708	20	26.4	21.5 : 32.3	-0.2%	-2.1% : 1.7%
Jones County	7,785	3	29.2	16.4 : 49.0	-0.4%	-4.3% : 3.6%
Karnes County	5,982	SN	SN	SN	SN	SN
Kaufman County	49,860	14	28.7	22.3 : 36.3	-0.6%	-3.6% : 2.5%
Kendall County	16,122	4	17.0	10.1 : 27.5	NA	NA
Kenedy County	196	SN	SN	SN	SN	SN
Kent County	409	SN	SN	SN	SN	SN
Kerr County	25,130	8	15.5	10.8 : 22.2	-3.7%	-7.0% : -0.3%
Kimble County	2,314	SN	SN	SN	SN	SN
King County	143	SN	SN	SN	SN	SN
Kinney County	1,625	SN	SN	SN	SN	SN
Kleberg County	15,547	4	26.0	15.8 : 40.4	3.8%	-0.3% : 8.1%
Knox County	1,886	SN	SN	SN	SN	SN
La Salle County	2,782	SN	SN	SN	SN	SN
Lamar County	25,697	6	17.1	11.5 : 24.8	-32.1%	-58.4% : 10.9%
Lamb County	7,065	SN	SN	SN	SN	SN
Lampasas County	9,992	SN	SN	SN	SN	SN
Lavaca County	9,863	4	20.6	12.0 : 34.4	NA	NA
Lee County	8,131	SN	SN	SN	SN	SN
Leon County	8,348	SN	SN	SN	SN	SN
Liberty County	38,086	11	26.9	20.1 : 35.3	-1.5%	-3.8% : 0.8%
Limestone County	11,171	SN	SN	SN	SN	SN
Lipscomb County	1,629	SN	SN	SN	SN	SN
Live Oak County	5,283	SN	SN	SN	SN	SN
Llano County	9,807	4	22.5	11.3 : 41.2	-0.9%	-5.8% : 4.3%
Loving County	34	SN	SN	SN	SN	SN
Lubbock County	136,756	29	21.8	18.4 : 25.7	-1.4%	-2.7% : -0.2%
Lynn County	3,030	SN	SN	SN	SN	SN
Madison County	5,671	SN	SN	SN	SN	SN
Marion County	5,520	SN	SN	SN	SN	SN
Martin County	2,295	SN	SN	SN	SN	SN
Mason County	1,977	SN	SN	SN	SN	SN
Matagorda County	18,358	5	22.4	14.2 : 33.7	-1.9%	-5.1% : 1.4%

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Maverick County	27,014	3	13.5	7.6 : 21.9	NA	NA
McCulloch County	4,217	SN	SN	SN	SN	SN
McLennan County	118,109	36	27.9	23.9 : 32.4	-1.2%	-2.6% : 0.1%
McMullen County	359	SN	SN	SN	SN	SN
Medina County	21,898	5	20.6	13.4 : 30.5	1.7%	-4.9% : 8.8%
Menard County	1,083	SN	SN	SN	SN	SN
Midland County	67,465	12	17.8	13.6 : 22.9	-2.9%	-5.2% : -0.6%
Milam County	12,583	4	20.1	12.0 : 32.4	-1.8%	-5.2% : 1.7%
Mills County	2,485	SN	SN	SN	SN	SN
Mitchell County	3,587	SN	SN	SN	SN	SN
Montague County	10,094	SN	SN	SN	SN	SN
Montgomery County	215,716	49	23.3	20.4 : 26.5	-1.1%	-2.9% : 0.6%
Moore County	10,295	SN	SN	SN	SN	SN
Morris County	6,786	SN	SN	SN	SN	SN
Motley County	587	SN	SN	SN	SN	SN
Nacogdoches County	32,994	8	24.7	17.6 : 33.6	0.2%	-2.4% : 3.0%
Navarro County	23,973	6	23.1	15.7 : 33.0	-0.3%	-3.6% : 3.1%
Newton County	7,027	SN	SN	SN	SN	SN
Nolan County	7,613	SN	SN	SN	SN	SN
Nueces County	170,290	41	22.0	19.0 : 25.2	-2.0%	-3.0% : -1.0%
Ochiltree County	4,893	SN	SN	SN	SN	SN
Oldham County	1,010	SN	SN	SN	SN	SN
Orange County	41,287	11	23.2	17.5 : 30.2	-0.6%	-2.5% : 1.3%
Palo Pinto County	14,185	5	30.7	20.0 : 45.4	-2.1%	-6.2% : 2.2%
Panola County	11,947	SN	SN	SN	SN	SN
Parker County	55,249	16	26.6	21.0 : 33.3	-0.6%	-2.5% : 1.2%
Parmer County	4,949	SN	SN	SN	SN	SN
Pecos County	6,711	SN	SN	SN	SN	SN
Polk County	21,339	7	21.1	14.7 : 29.9	-1.4%	-5.6% : 2.9%
Potter County	58,831	16	26.0	20.6 : 32.5	-1.7%	-3.6% : 0.2%
Presidio County	3,905	SN	SN	SN	SN	SN
Rains County	5,435	SN	SN	SN	SN	SN
Randall County	60,022	16	23.8	18.8 : 29.8	-0.9%	-3.1% : 1.3%
Reagan County	1,591	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Real County	1,646	SN	SN	SN	SN	SN
Red River County	6,650	SN	SN	SN	SN	SN
Reeves County	5,400	SN	SN	SN	SN	SN
Refugio County	3,737	SN	SN	SN	SN	SN
Roberts County	453	SN	SN	SN	SN	SN
Robertson County	8,439	SN	SN	SN	SN	SN
Rockwall County	37,159	8	23.2	16.4 : 31.9	NA	NA
Runnels County	5,330	SN	SN	SN	SN	SN
Rusk County	24,770	8	26.2	18.5 : 36.1	-1.4%	-4.0% : 1.3%
Sabine County	5,437	SN	SN	SN	SN	SN
San Augustine County	4,597	SN	SN	SN	SN	SN
San Jacinto County	12,950	4	22.8	13.3 : 36.9	-2.3%	-5.0% : 0.4%
San Patricio County	33,166	8	21.8	15.4 : 30.1	-1.2%	-4.4% : 2.0%
San Saba County	2,759	SN	SN	SN	SN	SN
Schleicher County	1,616	SN	SN	SN	SN	SN
Scurry County	7,748	SN	SN	SN	SN	SN
Shackelford County	1,755	SN	SN	SN	SN	SN
Shelby County	12,856	4	22.9	13.7 : 36.3	-3.6%	-6.7% : -0.4%
Sherman County	1,477	SN	SN	SN	SN	SN
Smith County	105,247	22	17.3	14.1 : 20.9	-3.8%	-5.4% : -2.3%
Somervell County	4,151	SN	SN	SN	SN	SN
Starr County	30,968	7	24.6	16.9 : 34.5	3.6%	-0.4% : 7.7%
Stephens County	4,615	SN	SN	SN	SN	SN
Sterling County	562	SN	SN	SN	SN	SN
Stonewall County	748	SN	SN	SN	SN	SN
Sutton County	2,135	SN	SN	SN	SN	SN
Swisher County	3,720	SN	SN	SN	SN	SN
Tarrant County	886,941	169	20.9	19.5 : 22.4	-2.2%	-2.8% : -1.5%
Taylor County	66,598	19	24.7	19.9 : 30.3	-1.3%	-2.6% : 0.0%
Terrell County	452	SN	SN	SN	SN	SN
Terry County	5,907	SN	SN	SN	SN	SN
Throckmorton County	833	SN	SN	SN	SN	SN
Titus County	15,612	4	24.0	14.5 : 37.3	NA	NA
Tom Green County	55,256	11	16.4	12.3 : 21.5	-3.5%	-5.8% : -1.2%

Population Group	Female Population (Annual Average)	# of Deaths (Annual Average)	Age- adjusted Death Rate /100,000	Confidence Interval of Age-adjusted Death Rate	Death Trend (Annual Percent Change)	Confidence Interval of Death Rate Trend
Travis County	484,563	75	19.6	17.6 : 21.7	-2.5%	-3.1% : -1.9%
Trinity County	7,430	SN	SN	SN	SN	SN
Tyler County	9,947	3	24.9	13.6 : 42.3	-2.7%	-5.4% : 0.0%
Upshur County	19,546	5	20.9	13.4 : 31.4	-0.5%	-2.9% : 2.0%
Upton County	1,627	SN	SN	SN	SN	SN
Uvalde County	13,431	3	19.9	11.3 : 32.6	NA	NA
Val Verde County	24,083	4	15.8	9.6 : 24.5	-4.6%	-8.3% : -0.6%
Van Zandt County	26,563	6	17.3	11.6 : 25.0	-1.4%	-4.7% : 2.0%
Victoria County	43,983	11	22.4	16.9 : 29.3	-0.5%	-2.9% : 1.8%
Walker County	27,038	7	28.2	19.7 : 39.2	1.9%	-1.8% : 5.7%
Waller County	20,623	5	27.1	17.7 : 39.7	0.6%	-2.3% : 3.5%
Ward County	5,374	SN	SN	SN	SN	SN
Washington County	16,772	7	26.7	18.2 : 38.4	-0.4%	-3.0% : 2.2%
Webb County	123,793	16	17.3	13.7 : 21.5	-1.3%	-3.3% : 0.8%
Wharton County	20,857	6	23.1	15.5 : 33.3	-3.1%	-6.0% : -0.1%
Wheeler County	2,653	SN	SN	SN	SN	SN
Wichita County	63,857	14	18.3	14.2 : 23.3	-2.7%	-4.3% : -1.0%
Wilbarger County	6,857	SN	SN	SN	SN	SN
Willacy County	10,021	SN	SN	SN	SN	SN
Williamson County	198,535	33	19.0	16.1 : 22.2	-2.8%	-4.3% : -1.2%
Wilson County	20,704	5	19.8	12.4 : 30.1	0.7%	-2.4% : 3.9%
Winkler County	3,479	SN	SN	SN	SN	SN
Wise County	28,731	6	19.4	12.9 : 28.0	-2.1%	-5.3% : 1.2%
Wood County	21,170	6	15.5	10.1 : 23.5	-3.3%	-6.2% : -0.4%
Yoakum County	3,875	SN	SN	SN	SN	SN
Young County	9,352	6	45.7	29.5 : 67.9	2.8%	-2.2% : 8.0%
Zapata County	6,765	SN	SN	SN	SN	SN
Zavala County	5,908	SN	SN	SN	SN	SN

*Target as of the writing of this report.

NA – data not available.

SN – data suppressed due to small numbers (15 deaths or fewer for the 5-year data period).

Data are for years 2006-2010.

Rates are in deaths per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source of death rate data: CDC – NCHS death data in SEER*Stat.

Source of death trend data: NCI/CDC State Cancer Profiles.

Map of death rates

Figure 2.2 shows a map of breast cancer death rates for the counties in Texas. When the numbers of deaths used to compute the rates are small (15 cases or fewer for the five-year data period), those rates are unreliable and are shown as "small numbers" on the map.



Age-adjusted rates are adjusted to the 2000 US standard population. Source: CDC – NCHS death data in SEER*Stat.



Conclusions: Breast cancer death rates and trends

Overall, the breast cancer death rate and trend in the State of Texas were similar to that observed in the US as a whole.

For the United States, breast cancer death rates in Blacks/African-Americans are substantially higher than in Whites overall. The most recent estimated breast cancer death rates for APIs and AIANs were lower than for Non-Hispanic Whites and Blacks/African-Americans. The most recent estimated death rates for Hispanics/Latinas were lower than for Non-Hispanic Whites and Blacks/African-Americans. For the State of Texas, the death rate was significantly higher among Blacks/African-Americans than Whites, significantly lower among APIs than Whites, and significantly lower among AIANs than Whites. The death rate among Hispanics/Latinas was significantly lower than among Non-Hispanics/Latinas.

The following counties had a death rate **significantly higher** than the state as a whole:

- Floyd County (Komen Lubbock Area)
- Freestone County (Komen East Central Texas)
- Gregg County
- Harris County (Komen Houston)
- Jefferson County
- Kaufman County (Komen East Central Texas)
- McLennan County (Komen East Central Texas)
- Shackelford County
- Young County

The death rate was significantly lower in the following counties:

- Cameron County
- Fort Bend County (Komen Houston)
- Hidalgo County
- Smith County (Komen East Central Texas)

Significantly less favorable trends in breast cancer death rates were observed in the following counties:

- Kleberg County
- Starr County

Significantly more favorable trends in breast cancer death rates were observed in the following counties:

- Guadalupe County
- Smith County (Komen East Central Texas)

The rest of the counties had death rates and trends that were not significantly different than the state as a whole or did not have enough data available.

Late-Stage Diagnosis

People with breast cancer have a better chance of survival if their disease is found early and treated.

The stage of cancer indicates the extent of the disease within the body. Most often, the higher the stage of the cancer, the poorer the chances for survival will be.

If a breast cancer is determined to be regional or distant stage, it's considered a late-stage diagnosis.

Medical experts agree that it's best for breast cancer to be detected early. Women whose breast cancers are found at an early stage usually need less aggressive treatment and do better overall than those whose cancers are found at a late-stage (US Preventive Services Task Force, 2009).

How late-stage breast cancer incidence rates are calculated

For this report, late-stage breast cancer is defined as regional or distant stage using the Surveillance, Epidemiology and End Results (SEER) Summary Stage definitions (SEER Summary Stage, 2001). State and national reporting usually uses the SEER Summary Stage. It provides a consistent set of definitions of stages for historical comparisons.

The late-stage breast cancer incidence rate is calculated as the number of women with regional or distant breast cancer in a particular geographic area divided by the number of women living in that area.

Like incidence and death rates, late-stage incidence rates are often shown in terms of 100,000 women and adjusted for age.

Proportion of late-stage diagnoses

Another way to assess the impact of late-stage breast cancer diagnosis on a community is to look at the proportion (percentage) of breast cancers that are diagnosed at late-stage. By lowering the proportion of female breast cancer cases that are diagnosed at late-stage in a given community, it is reasonable to expect that the community will observe a lower breast cancer death rate.

A change in the proportion of late-stage breast cancer cases can be a good indicator of the direction the breast cancer death rate will move over time. In addition, the proportion of late-stage breast cancer is an indicator of the success of early detection efforts (Taplin et al., 2004). So, in addition to the late-stage breast cancer incidence rate, this report includes the late-stage breast cancer proportion (the ratio of late-stage cases to total cases). Note that the late-stage incidence rate may go down over time yet the late-stage proportion may not if the overall incidence rate is declining as well.

How late-stage breast cancer proportions are calculated

The late-stage breast cancer proportion is the ratio between the number of cases diagnosed at regional or distant stages and the total number of breast cancer cases that have been diagnosed and staged in a particular geographic area. It is important to note that cases with unknown stage are excluded from this calculation. However, assuming the size and distribution of cases with unknown stage does not change significantly, the late-stage proportion can be a very good indicator of the need for or effectiveness of early detection interventions.

Confidence intervals

As with incidence and death rates, this report includes the confidence interval of the late-stage incidence rates and trends, and the late-stage proportions and trends because the numbers are not exact. The confidence interval is shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value.

Late-stage breast cancer incidence, proportions and trends

Late-stage breast cancer incidence rates, proportions and trends are shown in Tables 2.3 and 2.4 for:

- United States
- State of Texas
- Each county of Texas

For the State of Texas, rates are also shown by race for Whites, Blacks/African-Americans/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, rates are shown by ethnicity for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The rates in Table 2.3 are shown per 100,000 females from 2006 to 2010. The HP2020 latestate incidence rate target is included for reference.

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
US (states with available data)	145,332,861	70,218	43.7	43.5 : 43.8	-1.2%	-3.1% : 0.8%
HP2020	-	-	41.0*	-	-	-
Texas	12,251,113	4,905	40.7	40.2 : 41.3	-3.2%	-6.7% : 0.4%
White	10,051,891	4,064	40.0	39.4 : 40.6	-3.3%	-6.7% : 0.2%
Black/African-American	1,569,020	681	50.3	48.6 : 52.1	-1.1%	-5.4% : 3.4%
AIAN	119,743	13	15.2	11.5 : 19.6	-12.6%	-35.1% : 17.5%
API	510,459	103	22.8	20.7 : 25.0	-0.3%	-8.9% : 9.1%
Non-Hispanic/ Latina	7,829,049	3,789	42.3	41.7 : 42.9	-2.5%	-6.1% : 1.3%
Hispanic/ Latina	4,422,064	1,116	35.8	34.8 : 36.7	-4.3%	-8.6% : 0.2%
Anderson County	22,684	8	28.8	20.2 : 39.8	-13.2%	-41.1% : 27.9%
Andrews County	7,048	SN	SN	SN	SN	SN
Angelina County	43,515	18	36.9	29.6 : 45.5	6.2%	-10.7% : 26.4%
Aransas County	11,694	9	57.2	39.9 : 79.7	-17.2%	-49.4% : 35.5%
Archer County	4,515	SN	SN	SN	SN	SN
Armstrong County	985	SN	SN	SN	SN	SN
Atascosa County	22,368	8	34.9	24.9 : 47.6	2.5%	-32.9% : 56.4%
Austin County	14,038	9	53.8	38.7 : 72.9	28.5%	2.6% : 60.9%
Bailey County	3,498	SN	SN	SN	SN	SN
Bandera County	10,209	3	22.6	12.9 : 38.0	-6.3%	-43.0% : 54.1%
Bastrop County	35,309	15	38.2	29.8 : 48.3	1.0%	-21.1% : 29.2%
Baylor County	1,965	SN	SN	SN	SN	SN
Bee County	12,702	5	33.9	21.2 : 51.5	8.8%	-34.5% : 80.6%
Bell County	148,442	63	47.9	42.7 : 53.5	-7.4%	-15.9% : 1.9%
Bexar County	842,469	311	37.7	35.8 : 39.6	-4.3%	-8.6% : 0.3%
Blanco County	5,000	SN	SN	SN	SN	SN
Borden County	300	SN	SN	SN	SN	SN
Bosque County	9,127	5	38.7	24.0 : 59.8	4.5%	-27.2% : 50.0%
Bowie County	45,123	23	43.2	35.4 : 52.2	-1.1%	-12.3% : 11.6%
Brazoria County	147,578	60	41.6	36.9 : 46.6	-2.0%	-15.6% : 13.9%
Brazos County	91,611	24	36.7	30.3 : 44.0	-6.6%	-9.5% : -3.7%
Brewster County	4,479	SN	SN	SN	SN	SN
Briscoe County	841	SN	SN	SN	SN	SN
Brooks County	3,720	SN	SN	SN	SN	SN
Brown County	19,265	9	37.3	27.2 : 50.2	-17.8%	-40.5% : 13.5%
Burleson County	8,655	3	27.7	15.3 : 46.9	-27.1%	-55.0% : 18.2%

Table 2.3. Female breas	st cancer	late-stage	incidence	rates and	trends

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Burnet County	21,517	12	41.6	31.3 : 54.3	0.3%	-23.4% : 31.3%
Caldwell County	18,605	10	55.0	41.0 : 72.3	1.3%	-20.3% : 28.6%
Calhoun County	10,411	5	40.7	25.5 : 61.7	8.4%	-28.8% : 65.0%
Callahan County	6,883	5	49.5	31.0 : 76.1	-16.1%	-43.4% : 24.4%
Cameron County	204,243	69	36.6	32.8 : 40.7	-1.1%	-12.5% : 11.9%
Camp County	6,267	3	44.8	24.9 : 74.5	NA	NA
Carson County	3,206	SN	SN	SN	SN	SN
Cass County	15,590	7	30.2	20.6 : 43.3	-5.1%	-22.0% : 15.5%
Castro County	3,876	SN	SN	SN	SN	SN
Chambers County	16,086	7	44.8	31.2 : 62.4	10.4%	-19.4% : 51.1%
Cherokee County	24,641	8	29.5	21.1 : 40.3	-7.0%	-21.3% : 9.9%
Childress County	2,912	SN	SN	SN	SN	SN
Clay County	5,567	SN	SN	SN	SN	SN
Cochran County	1,602	SN	SN	SN	SN	SN
Coke County	1,719	SN	SN	SN	SN	SN
Coleman County	4,473	SN	SN	SN	SN	SN
Collin County	374,897	128	37.0	34.1 : 40.2	-6.6%	-14.4% : 1.9%
Collingsworth County	1,538	SN	SN	SN	SN	SN
Colorado County	10,480	4	25.4	14.9 : 41.3	1.1%	-47.7% : 95.8%
Comal County	52,315	27	41.8	34.9 : 49.7	-4.6%	-18.9% : 12.1%
Comanche County	7,036	4	45.2	26.9 : 71.8	14.5%	-59.4% : 223.2%
Concho County	1,312	SN	SN	SN	SN	SN
Cooke County	19,351	8	30.6	21.4 : 42.5	-3.6%	-24.4% : 22.9%
Coryell County	37,494	11	39.0	29.4 : 50.8	5.8%	-19.5% : 38.9%
Cottle County	786	SN	SN	SN	SN	SN
Crane County	2,115	SN	SN	SN	SN	SN
Crockett County	1,883	SN	SN	SN	SN	SN
Crosby County	3,183	SN	SN	SN	SN	SN
Culberson County	1,269	SN	SN	SN	SN	SN
Dallam County	3,125	SN	SN	SN	SN	SN
Dallas County	1,171,221	491	45.4	43.6 : 47.2	-1.3%	-3.2% : 0.7%
Dawson County	6,013	4	49.1	28.5 : 79.2	-2.6%	NA
Deaf Smith County	9,572	SN	SN	SN	SN	SN
Delta County	2,675	SN	SN	SN	SN	SN
Denton County	318,811	104	37.5	34.2 : 41.1	-3.4%	-13.1% : 7.4%
DeWitt County	9,594	8	62.1	42.7 : 87.6	-13.2%	-37.8% : 21.2 <mark></mark> %
Dickens County	1,059	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Dimmit County	5,095	SN	SN	SN	SN	SN
Donley County	1,878	SN	SN	SN	SN	SN
Duval County	5,853	SN	SN	SN	SN	SN
Eastland County	9,522	SN	SN	SN	SN	SN
Ector County	67,551	34	53.1	45.4 : 61.8	7.1%	-19.0% : 41.7%
Edwards County	975	SN	SN	SN	SN	SN
Ellis County	72,575	30	41.5	35.0 : 48.9	-2.1%	-9.0% : 5.2%
El Paso County	398,655	149	39.5	36.7 : 42.4	-3.4%	-9.9% : 3.5%
Erath County	18,851	8	43.8	31.3 : 59.7	-4.5%	-47.3% : 73.0%
Falls County	9,409	4	33.7	20.5 : 52.9	-6.3%	-43.2% : 54.6%
Fannin County	15,811	8	42.5	30.2 : 58.5	-18.2%	-52.5% : 40.7%
Fayette County	12,309	7	36.6	24.9 : 52.8	-1.0%	NA
Fisher County	2,053	SN	SN	SN	SN	SN
Floyd County	3,352	SN	SN	SN	SN	SN
Foard County	721	SN	SN	SN	SN	SN
Fort Bend County	275,815	97	37.9	34.5 : 41.7	-3.3%	-11.5% : 5.6%
Franklin County	5,435	SN	SN	SN	SN	SN
Freestone County	9,233	5	37.8	23.6 : 58.0	-2.9%	-47.7% : 80.3%
Frio County	7,203	3	40.5	23.0 : 66.3	16.3%	-0.1% : 35.3%
Gaines County	8,346	4	50.6	29.9 : 79.8	-11.4%	-27.6% : 8.4%
Galveston County	144,934	56	35.8	31.7 : 40.4	-6.9%	-26.4% : 17.8%
Garza County	2,393	SN	SN	SN	SN	SN
Gillespie County	12,543	7	35.8	23.6 : 52.9	0.9%	-24.8% : 35.5%
Glasscock County	566	SN	SN	SN	SN	SN
Goliad County	3,590	SN	SN	SN	SN	SN
Gonzales County	9,800	4	29.6	17.4 : 47.4	1.1%	-56.5% : 135.2%
Gray County	10,838	6	47.7	32.3 : 68.3	-4.6%	-12.6% : 4.0%
Grayson County	61,197	32	42.8	36.3 : 50.2	1.3%	-17.5% : 24.3%
Gregg County	61,175	31	44.9	38.0 : 52.8	-7.2%	-17.7% : 4.7%
Grimes County	11,953	6	40.5	26.9 : 58.8	-14.3%	-30.4% : 5.5%
Guadalupe County	62,193	24	37.2	30.8 : 44.5	1.4%	NA
Hale County	17,447	6	34.0	22.9 : 48.7	-2.1%	-47.5% : 82.3%
Hall County	1,743	SN	SN	SN	SN	SN
Hamilton County	4,330	SN	SN	SN	SN	SN
Hansford County	2,734	SN	SN	SN	SN	SN
Hardeman County	2,137	SN	SN	SN	SN	SN
Hardin County	27,003	19	59.9	48.2 : 73.6	-6.7%	-24.8%:15.8%

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Harris County	1,984,833	771	43.0	41.7 : 44.4	-0.2%	-3.6% : 3.2%
Harrison County	32,870	14	36.4	28.1 : 46.4	-0.3%	-19.1% : 22.8%
Hartley County	2,286	SN	SN	SN	SN	SN
Haskell County	2,808	SN	SN	SN	SN	SN
Hays County	73,374	24	38.2	31.6 : 45.7	-5.9%	-9.7% : -2.0%
Hemphill County	1,810	SN	SN	SN	SN	SN
Henderson County	40,017	24	45.8	37.6 : 55.3	-2.1%	-23.4% : 25.1%
Hidalgo County	378,395	105	33.8	31.0 : 36.9	-3.4%	-17.6% : 13.2%
Hill County	17,712	9	36.7	26.5 : 50.0	-3.7%	-26.7% : 26.5%
Hockley County	11,654	6	49.1	33.0 : 70.5	4.1%	-22.6% : 39.9%
Hood County	25,324	13	36.3	27.6 : 47.2	-2.6%	-24.8% : 26.1%
Hopkins County	17,468	7	31.9	21.9 : 45.1	-18.7%	-45.3% : 20.8%
Houston County	10,934	6	34.4	22.4 : 51.4	-0.2%	-40.6% : 67.6%
Howard County	15,043	5	32.8	21.1 : 48.4	NA	NA
Hudspeth County	1,703	SN	SN	SN	SN	SN
Hunt County	42,767	18	37.2	29.9 : 45.8	-4.7%	-13.2% : 4.8%
Hutchinson County	11,089	5	38.1	24.7 : 56.5	5.3%	-35.2% : 71.0%
Irion County	791	SN	SN	SN	SN	SN
Jack County	4,039	SN	SN	SN	SN	SN
Jackson County	7,091	SN	SN	SN	SN	SN
Jasper County	17,950	12	55.4	41.9 : 72.0	19.9%	-10.3% : 60.4%
Jeff Davis County	1,143	SN	SN	SN	SN	SN
Jefferson County	122,114	81	58.5	52.8 : 64.6	6.1%	-5.4% : 18.9%
Jim Hogg County	2,640	SN	SN	SN	SN	SN
Jim Wells County	20,623	9	43.5	31.6 : 58.4	-6.6%	-32.6% : 29.4%
Johnson County	73,708	29	37.5	31.6 : 44.1	0.8%	-11.8% : 15.4%
Jones County	7,785	4	40.5	25.1 : 62.8	8.6%	-0.2% : 18.2%
Karnes County	5,982	SN	SN	SN	SN	SN
Kaufman County	49,860	20	39.8	32.2 : 48.5	-8.9%	-41.5% : 41.9%
Kendall County	16,122	8	39.6	27.6 : 55.3	-6.3%	-34.3% : 33.7%
Kenedy County	196	SN	SN	SN	SN	SN
Kent County	409	SN	SN	SN	SN	SN
Kerr County	25,130	15	41.5	31.8 : 53.5	-21.0%	-39.6% : 3.5%
Kimble County	2,314	SN	SN	SN	SN	SN
King County	143	SN	SN	SN	SN	SN
Kinney County	1,625	SN	SN	SN	SN	SN
Kleberg County	15,547	7	47.8	33.0 : 66.8	-24.2%	-69.2% : 86.4%

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Knox County	1,886	SN	SN	SN	SN	SN
Lamar County	25,697	16	53.0	41.9 : 66.4	5.0%	-31.5% : 61.0%
Lamb County	7,065	4	53.2	32.1 : 83.0	-1.9%	-29.1% : 35.8%
Lampasas County	9,992	4	30.7	18.3 : 48.8	2.2%	-26.8% : 42.5%
La Salle County	2,782	SN	SN	SN	SN	SN
Lavaca County	9,863	5	35.5	22.4 : 54.3	12.3%	-36.1% : 97.4%
Lee County	8,131	4	42.8	25.7 : 67.2	0.9%	-40.5% : 71.1%
Leon County	8,348	5	45.0	28.3 : 68.5	6.3%	-30.9% : 63.4%
Liberty County	38,086	14	35.0	27.2 : 44.4	2.9%	-25.6% : 42.2%
Limestone County	11,171	SN	SN	SN	SN	SN
Lipscomb County	1,629	SN	SN	SN	SN	SN
Live Oak County	5,283	SN	SN	SN	SN	SN
Llano County	9,807	6	39.0	23.9 : 61.3	15.3%	-39.8% : 120.9%
Loving County	34	SN	SN	SN	SN	SN
Lubbock County	136,756	56	43.0	38.1 : 48.4	-9.5%	-23.5% : 7.0%
Lynn County	3,030	SN	SN	SN	SN	SN
McCulloch County	4,217	SN	SN	SN	SN	SN
McLennan County	118,109	53	43.8	38.6 : 49.4	-2.0%	-17.5% : 16.4%
McMullen County	359	SN	SN	SN	SN	SN
Madison County	5,671	SN	SN	SN	SN	SN
Marion County	5,520	SN	SN	SN	SN	SN
Martin County	2,295	SN	SN	SN	SN	SN
Mason County	1,977	SN	SN	SN	SN	SN
Matagorda County	18,358	9	39.6	28.5 : 53.7	-2.0%	-31.2% : 39.6%
Maverick County	27,014	8	33.4	23.9 : 45.4	-2.8%	-22.1% : 21.3%
Medina County	21,898	6	25.0	16.7 : 35.9	27.7%	-33.1% : 143.8%
Menard County	1,083	SN	SN	SN	SN	SN
Midland County	67,465	26	36.5	30.5 : 43.4	0.3%	-16.9% : 21.1%
Milam County	12,583	7	42.7	29.3 : 60.5	-10.8%	-22.8% : 3.1%
Mills County	2,485	SN	SN	SN	SN	SN
Mitchell County	3,587	SN	SN	SN	SN	SN
Montague County	10,094	4	27.5	16.0 : 44.6	-8.2%	-30.3% : 20.8%
Montgomery County	215,716	88	39.9	36.2 : 43.9	-6.0%	-12.8% : 1.4%
Moore County	10,295	4	46.8	29.3 : 70.8	7.4%	-49.4% : 127.9%
Morris County	6,786	4	53.5	32.7 : 83.0	-0.5%	-45.3% : 80.8%
Motley County	587	SN	SN	SN	SN	SN
Nacogdoches County	32,994	16	51.9	40.9 : 64.8	-7.6%	-21.2% : 8.5%
Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
----------------------	---	--	---	--	---	--
Navarro County	23,973	10	36.7	27.0 : 48.7	-19.5%	-28.8% : -8.9%
Newton County	7,027	3	35.9	20.7 : 58.9	-40.6%	-65.1% : 1.0%
Nolan County	7,613	4	37.4	22.2 : 59.8	22.0%	-43.4% : 163.1%
Nueces County	170,290	64	35.4	31.6 : 39.6	-0.2%	-18.3% : 21.8%
Ochiltree County	4,893	SN	SN	SN	SN	SN
Oldham County	1,010	SN	SN	SN	SN	SN
Orange County	41,287	25	53.2	44.3 : 63.6	0.2%	-18.1% : 22.5%
Palo Pinto County	14,185	7	38.8	26.8 : 54.7	-13.7%	-25.9% : 0.5%
Panola County	11,947	4	28.7	17.4 : 44.9	-15.6%	-52.7% : 50.6%
Parker County	55,249	24	39.9	33.0 : 47.9	7.2%	-8.9% : 26.3%
Parmer County	4,949	SN	SN	SN	SN	SN
Pecos County	6,711	SN	SN	SN	SN	SN
Polk County	21,339	11	33.2	24.5 : 44.3	11.3%	-23.6% : 62.2%
Potter County	58,831	26	44.1	36.8 : 52.4	4.3%	-7.0% : 17.0%
Presidio County	3,905	SN	SN	SN	SN	SN
Rains County	5,435	SN	SN	SN	SN	SN
Randall County	60,022	30	46.2	39.0 : 54.2	-11.3%	-20.8% : -0.7%
Reagan County	1,591	SN	SN	SN	SN	SN
Real County	1,646	SN	SN	SN	SN	SN
Red River County	6,650	3	43.4	24.1 : 72.2	-24.7%	-59.0% : 38.3%
Reeves County	5,400	4	63.9	38.6 : 99.9	3.2%	-30.5% : 53.4%
Refugio County	3,737	SN	SN	SN	SN	SN
Roberts County	453	SN	SN	SN	SN	SN
Robertson County	8,439	5	43.4	27.6 : 65.7	-3.5%	-48.9% : 82.1%
Rockwall County	37,159	15	39.9	31.3 : 50.3	-11.7%	-22.0% : -0.1%
Runnels County	5,330	SN	SN	SN	SN	SN
Rusk County	24,770	10	34.4	25.5 : 45.6	-14.1%	-38.7% : 20.4%
Sabine County	5,437	3	41.5	21.2 : 74.2	6.7%	-53.7% : 145.9%
San Augustine County	4,597	SN	SN	SN	SN	SN
San Jacinto County	12,950	8	51.1	35.5 : 71.3	-3.1%	NA
San Patricio County	33,166	12	34.4	26.2 : 44.5	-2.6%	-28.3% : 32.3%
San Saba County	2,759	SN	SN	SN	SN	SN
Schleicher County	1,616	SN	SN	SN	SN	SN
Scurry County	7,748	5	55.0	34.2 : 83.6	-8.7%	-55.9% : 89.2%
Shackelford County	1,755	SN	SN	SN	SN	SN
Shelby County	12,856	6	38.5	25.2 : 56.3	-11.7%	-45.1% : 42.0%
Sherman County	1,477	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Smith County	105,247	61	52.1	46.3 : 58.4	-6.2%	-18.0% : 7.3%
Somervell County	4,151	SN	SN	SN	SN	SN
Starr County	30,968	9	33.1	24.1 : 44.3	-23.3%	-29.8% : -16.2%
Stephens County	4,615	SN	SN	SN	SN	SN
Sterling County	562	SN	SN	SN	SN	SN
Stonewall County	748	SN	SN	SN	SN	SN
Sutton County	2,135	SN	SN	SN	SN	SN
Swisher County	3,720	SN	SN	SN	SN	SN
Tarrant County	886,941	359	42.6	40.6 : 44.6	-5.8%	-18.9% : 9.5%
Taylor County	66,598	25	36.8	30.6 : 44.0	-6.3%	-17.4% : 6.3%
Terrell County	452	SN	SN	SN	SN	SN
Terry County	5,907	SN	SN	SN	SN	SN
Throckmorton County	833	SN	SN	SN	SN	SN
Titus County	15,612	3	22.5	13.0 : 36.0	-12.2%	-61.2% : 98.6%
Tom Green County	55,256	23	39.1	32.2 : 47.2	5.7%	-15.9% : 32.9%
Travis County	484,563	172	41.6	38.8 : 44.6	-4.9%	-13.0% : 4.1%
Trinity County	7,430	4	36.2	22.1 : 57.7	4.2%	-17.4% : 31.4%
Tyler County	9,947	5	40.5	25.6 : 61.3	-12.7%	-28.9% : 7.2%
Upshur County	19,546	10	39.8	29.2 : 53.3	-5.8%	-37.0% : 40.8%
Upton County	1,627	SN	SN	SN	SN	SN
Uvalde County	13,431	5	36.0	23.0 : 53.6	-13.6%	-46.1% : 38.6%
Val Verde County	24,083	9	36.4	26.4 : 48.8	9.1%	-31.7% : 74.1%
Van Zandt County	26,563	14	41.4	32.2 : 52.7	8.4%	-20.0% : 47.0%
Victoria County	43,983	20	41.2	33.4 : 50.2	-9.1%	-24.5% : 9.4%
Walker County	27,038	12	44.6	33.7 : 57.9	7.1%	-12.1% : 30.6%
Waller County	20,623	7	36.4	25.2 : 50.9	-3.6%	-20.9% : 17.5%
Ward County	5,374	SN	SN	SN	SN	SN
Washington County	16,772	10	48.5	35.4 : 65.0	1.8%	NA
Webb County	123,793	36	36.2	31.1 : 42.0	-9.3%	-19.3% : 1.9%
Wharton County	20,857	6	25.6	17.4 : 36.5	-0.1%	-39.3% : 64.5%
Wheeler County	2,653	SN	SN	SN	SN	SN
Wichita County	63,857	25	35.8	29.7 : 42.8	-11.5%	-29.7% : 11.4%
Wilbarger County	6,857	SN	SN	SN	SN	SN
Willacy County	10,021	SN	SN	SN	SN	SN
Williamson County	198,535	78	41.8	37.7 : 46.2	-8.1%	-14.5% : -1.2%
Wilson County	20,704	9	38.0	27.4 : 51.4	5.5%	-30.6% : 60.3%
Winkler County	3,479	SN	SN	SN	SN	SN

Population Group	Female Population (Annual Average)	# of New Late- stage Cases (Annual Average)	Age- adjusted Late- stage Incidence rate /100,000	Confidence Interval of Age-adjusted Incidence Rate	Late stage Trend (Annual Percent Change)	Confidence Interval of Late-stage Trend
Wise County	28,731	10	32.2	23.6 : 42.8	6.3%	-6.8% : 21.2%
Wood County	21,170	10	29.1	21.4 : 39.2	-5.3%	-24.5% : 18.8%
Yoakum County	3,875	SN	SN	SN	SN	SN
Young County	9,352	5	38.7	24.9 : 58.1	10.9%	-33.7% : 85.8%
Zapata County	6,765	SN	SN	SN	SN	SN
Zavala County	5,908	SN	SN	SN	SN	SN

* Target as of the writing of this report.

NA - data not available.

SN - data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Data are for years 2006-2010.

Rates are in cases per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source: NAACCR - CINA Deluxe Analytic File.

Table 2.4. Female breast cancer late-stage proportion and trendsand distant-stage proportion for women age 50-74

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
US	111,487	39,543	35.5%	35.3% : 35.6%	-1.4%	-1.7% : -1.1%	5.6%
Texas	7,444	2,793	37.5%	37.0% : 38.0%	-2.0%	-2.5% : -1.4%	6.5%
White	6,385	2,329	36.5%	35.9% : 37.0%	-2.4%	-3.1% : -1.7%	6.1%
Black/African- American	828	379	45.8%	44.3% : 47.4%	-0.5%	-3.9% : 2.9%	10.0%
AIAN	17	7	41.0%	30.4% : 51.5%	0.3%	-5.1% : 6.1%	4.8%
API	148	56	37.5%	34.0% : 41.0%	-0.5%	-9.8% : 9.8%	5.7%
Non- Hispanic/Latina	6,078	2,217	36.5%	35.9% : 37.0%	-2.1%	-3.3% : -0.9%	6.4%
Hispanic/Latina	1,366	576	42.2%	41.0% : 43.4%	-1.6%	-5.2% : 2.1%	6.8%
Anderson County	12	5	38.3%	26.0% : 50.6%	-18.5%	-31.2% : -3.4%	6.7%
Andrews County	3	2	47.1%	23.3% : 70.8%	NA	NA	SN
Angelina County	31	12	39.4%	31.7% : 47.0%	6.2%	-6.9% : 21.1%	8.4%
Aransas County	13	5	40.9%	29.0% : 52.8%	-16.0%	-28.9% : -0.7%	9.1%
Archer County	SN	SN	SN	SN	SN	SN	SN
Armstrong County	SN	SN	SN	SN	SN	SN	SN
Atascosa County	14	5	35.3%	23.9% : 46.7%	14.9%	-21.2% : 67.6%	8.8%
Austin County	14	6	40.8%	29.4% : 52.3%	10.9%	-28.5% : 72.1%	5.6%
Bailey County	SN	SN	SN	SN	SN	SN	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Bandera County	7	2	32.4%	16.6% : 48.1%	10.5%	NA	SN
Bastrop County	23	8	34.5%	25.7% : 43.3%	-3.4%	-24.6% : 23.8%	8.0%
Baylor County	SN	SN	SN	SN	SN	SN	SN
Bee County	7	3	42.4%	25.6% : 59.3%	NA	NA	SN
Bell County	87	36	41.1%	36.5% : 45.7%	-4.2%	-18.6% : 12.7%	7.4%
Bexar County	501	173	34.5%	32.7% : 36.4%	-0.9%	-7.9% : 6.7%	5.2%
Blanco County	SN	SN	SN	SN	SN	SN	SN
Borden County	SN	SN	SN	SN	SN	SN	SN
Bosque County	8	3	43.6%	28.0% : 59.2%	NA	NA	SN
Bowie County	32	13	40.3%	32.6% : 47.9%	-8.1%	-25.0% : 12.5%	4.4%
Brazoria County	89	35	39.3%	34.7% : 43.8%	-7.2%	-14.9% : 1.1%	6.3%
Brazos County	42	13	30.1%	23.9% : 36.4%	5.6%	NA	4.8%
Brewster County	SN	SN	SN	SN	SN	SN	SN
Briscoe County	SN	SN	SN	SN	SN	SN	SN
Brooks County	SN	SN	SN	SN	SN	SN	SN
Brown County	18	6	34.8%	25.1% : 44.5%	-20.8%	-50.9% : 27.9%	5.4%
Burleson County	6	2	31.0%	14.2% : 47.9%	NA	NA	SN
Burnet County	17	8	46.4%	35.8% : 57.1%	2.2%	-30.4% : 50.0%	9.5%
Caldwell County	13	6	48.5%	36.4% : 60.5%	-6.6%	-23.5% : 14.1%	12.1%
Calhoun County	6	2	40.0%	22.5% : 57.5%	NA	NA	SN
Callahan County	6	2	40.0%	22.5% : 57.5%	NA	NA	SN
Cameron County	86	38	44.0%	39.3% : 48.6%	-2.4%	-18.4%:16.6%	10.5%
Camp County	5	1	25.9%	9.4% : 42.5%	NA	NA	SN
Carson County	SN	SN	SN	SN	SN	SN	SN
Cass County	10	4	43.8%	29.7% : 57.8%	2.6%	-34.6% : 61.1%	8.3%
Castro County	SN	SN	SN	SN	SN	SN	SN
Chambers County	7	4	56.8%	40.8% : 72.7%	9.2%	-15.9% : 41.8%	10.8%
Cherokee County	18	6	33.7%	24.0% : 43.4%	-20.0%	-23.2% : -16.6%	6.5%
Childress County	SN	SN	SN	SN	SN	SN	SN
Clay County	4	1	23.8%	5.6% : 42.0%	NA	NA	SN
Cochran County	SN	SN	SN	SN	SN	SN	SN
Coke County	SN	SN	SN	SN	SN	SN	SN
Coleman County	3	1	41.2%	17.8% : 64.6%	NA	NA	SN
Collin County	236	74	31.4%	28.8% : 34.1%	-6.6%	-15.3% : 3.1%	3.6%
Collingsworth County	SN	SN	SN	SN	SN	SN	SN
Colorado County	8	3	33.3%	18.5% : 48.1%	34.6%	7.5% : 68.5%	10.3%
Comal County	47	16	33.9%	27.8% : 40.0%	2.8%	-10.5% : 18.0%	3.9%

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Comanche County	6	2	39.3%	21.2% : 57.4%	NA	NA	SN
Concho County	SN	SN	SN	SN	SN	SN	SN
Cooke County	10	5	44.2%	30.7% : 57.7%	-11.5%	-35.2% : 20.9%	SN
Coryell County	19	8	41.9%	31.9% : 52.0%	-0.3%	NA	4.3%
Cottle County	SN	SN	SN	SN	SN	SN	SN
Crane County	SN	SN	SN	SN	SN	SN	SN
Crockett County	SN	SN	SN	SN	SN	SN	SN
Crosby County	SN	SN	SN	SN	SN	SN	SN
Culberson County	SN	SN	SN	SN	SN	SN	SN
Dallam County	SN	SN	SN	SN	SN	SN	SN
Dallas County	731	273	37.4%	35.8% : 39.0%	-0.6%	-3.7% : 2.5%	6.6%
Dawson County	4	2	63.2%	41.5% : 84.8%	NA	NA	SN
Deaf Smith County	6	2	28.6%	11.8% : 45.3%	NA	NA	SN
Delta County	SN	SN	SN	SN	SN	SN	SN
Denton County	174	56	32.3%	29.1% : 35.4%	-3.1%	-11.7% : 6.3%	5.0%
DeWitt County	10	4	37.5%	23.8% : 51.2%	NA	NA	SN
Dickens County	SN	SN	SN	SN	SN	SN	SN
Dimmit County	5	2	47.8%	27.4% : 68.2%	NA	NA	SN
Donley County	SN	SN	SN	SN	SN	SN	SN
Duval County	SN	SN	SN	SN	SN	SN	SN
Eastland County	7	2	23.5%	9.3% : 37.8%	NA	NA	SN
Ector County	45	20	43.8%	37.3% : 50.3%	-4.4%	NA	8.0%
Edwards County	SN	SN	SN	SN	SN	SN	SN
Ellis County	39	15	39.2%	32.3% : 46.0%	-11.5%	NA	3.6%
El Paso County	189	83	44.0%	40.8% : 47.2%	0.2%	NA	5.9%
Erath County	12	4	29.0%	17.7% : 40.3%	-4.7%	-55.1% : 102.3%	SN
Falls County	6	3	51.7%	33.5% : 69.9%	NA	NA	SN
Fannin County	12	4	32.8%	20.7% : 44.8%	-6.2%	NA	SN
Fayette County	11	4	36.8%	24.3% : 49.4%	12.4%	-22.7% : 63.5%	SN
Fisher County	SN	SN	SN	SN	SN	SN	SN
Floyd County	SN	SN	SN	SN	SN	SN	SN
Foard County	SN	SN	SN	SN	SN	SN	SN
Fort Bend County	162	55	34.1%	30.8% : 37.3%	-5.0%	-14.1% : 5.1%	4.7%
Franklin County	SN	SN	SN	SN	SN	SN	SN
Freestone County	7	2	30.6%	15.5% : 45.6%	NA	NA	SN
Frio County	5	3	50.0%	30.8% : 69.2%	NA	NA	SN
Gaines County	4	2	66.7%	44.9% : 88.4%	NA	NA	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Galveston County	103	32	30.6%	26.6% : 34.5%	-2.5%	-7.3% : 2.6%	5.2%
Garza County	SN	SN	SN	SN	SN	SN	SN
Gillespie County	14	4	28.2%	17.7% : 38.6%	6.9%	-19.5% : 41.9%	9.9%
Glasscock County	SN	SN	SN	SN	SN	SN	SN
Goliad County	SN	SN	SN	SN	SN	SN	SN
Gonzales County	5	3	54.2%	34.2% : 74.1%	NA	NA	25.0%
Gray County	11	5	42.1%	29.3% : 54.9%	9.3%	-17.5% : 44.9%	SN
Grayson County	50	20	40.3%	34.2% : 46.4%	-1.4%	-21.4% : 23.8%	7.3%
Gregg County	44	18	40.3%	33.8% : 46.7%	-15.2%	-29.5% : 1.9%	8.6%
Grimes County	8	4	48.7%	33.0% : 64.4%	-10.9%	-36.0% : 23.9%	17.9%
Guadalupe County	42	15	34.9%	28.5% : 41.3%	-2.6%	-9.4% : 4.7%	4.2%
Hale County	9	4	43.2%	28.5% : 57.8%	-4.6%	-12.2% : 3.6%	SN
Hall County	SN	SN	SN	SN	SN	SN	SN
Hamilton County	4	2	52.4%	31.0% : 73.7%	NA	NA	SN
Hansford County	SN	SN	SN	SN	SN	SN	SN
Hardeman County	SN	SN	SN	SN	SN	SN	SN
Hardin County	20	11	52.0%	42.3% : 61.7%	-11.2%	-31.6% : 15.2%	5.9%
Harris County	1,147	429	37.4%	36.2% : 38.7%	-1.0%	-4.5% : 2.6%	8.0%
Harrison County	27	9	34.3%	26.3% : 42.4%	1.0%	-27.5% : 40.8%	8.2%
Hartley County	SN	SN	SN	SN	SN	SN	SN
Haskell County	SN	SN	SN	SN	SN	SN	SN
Hays County	38	13	35.1%	28.3% : 41.9%	-0.9%	-14.7% : 15.2%	2.7%
Hemphill County	SN	SN	SN	SN	SN	SN	SN
Henderson County	36	14	38.7%	31.6% : 45.8%	-8.4%	-21.4% : 6.9%	8.3%
Hidalgo County	132	57	43.5%	39.7% : 47.3%	-0.2%	-11.5% : 12.4%	8.9%
Hill County	14	6	41.7%	30.3% : 53.1%	-16.2%	-37.7% : 12.8%	9.7%
Hockley County	9	4	40.4%	26.4% : 54.5%	3.8%	-20.1% : 34.9%	8.5%
Hood County	26	7	25.8%	18.3% : 33.2%	3.0%	-33.3% : 59.1%	3.0%
Hopkins County	11	4	36.8%	24.3% : 49.4%	-11.3%	-37.4% : 25.6%	7.0%
Houston County	9	4	43.5%	29.2% : 57.8%	-8.5%	-45.1% : 52.6%	SN
Howard County	7	3	42.9%	26.5% : 59.3%	NA	NA	SN
Hudspeth County	SN	SN	SN	SN	SN	SN	SN
Hunt County	26	12	46.2%	37.6% : 54.7%	4.4%	-24.1% : 43.6%	8.5%
Hutchinson County	6	3	43.8%	26.6% : 60.9%	-2.8%	-22.2% : 21.5%	SN
Irion County	SN	SN	SN	SN	SN	SN	SN
Jack County	SN	SN	SN	SN	SN	SN	SN
Jackson County	4	2	44.4%	21.5% : 67.4%	NA	NA	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Jasper County	10	5	49.0%	35.3% : 62.7%	21.0%	11.4% : 31.5%	SN
Jeff Davis County	SN	SN	SN	SN	SN	SN	SN
Jefferson County	81	43	52.6%	47.7% : 57.5%	10.6%	-4.0% : 27.5%	8.4%
Jim Hogg County	SN	SN	SN	SN	SN	SN	SN
Jim Wells County	12	5	45.8%	33.1% : 58.5%	11.2%	-24.5% : 63.8%	SN
Johnson County	43	18	40.6%	34.0% : 47.1%	3.4%	-2.7% : 9.8%	3.7%
Jones County	6	3	50.0%	31.5% : 68.5%	NA	NA	SN
Karnes County	5	2	32.0%	13.7% : 50.3%	SN	SN	SN
Kaufman County	32	10	31.3%	24.1% : 38.4%	-4.3%	-28.4% : 28.1%	5.6%
Kendall County	17	5	27.4%	17.8% : 36.9%	-4.2%	-35.7% : 42.7%	SN
Kenedy County	SN	SN	SN	SN	SN	SN	SN
Kent County	SN	SN	SN	SN	SN	SN	SN
Kerr County	23	9	40.4%	31.3% : 49.4%	1.3%	-15.0% : 20.7%	14.0%
Kimble County	SN	SN	SN	SN	SN	SN	SN
King County	SN	SN	SN	SN	SN	SN	SN
Kinney County	SN	SN	SN	SN	SN	SN	SN
Kleberg County	11	4	37.7%	24.7% : 50.8%	1.4%	-32.9% : 53.1%	SN
Knox County	SN	SN	SN	SN	SN	SN	SN
Lamar County	20	8	42.9%	33.1% : 52.7%	15.4%	-24.7% : 76.9%	24.5%
Lamb County	5	2	41.7%	21.9% : 61.4%	NA	NA	SN
Lampasas County	5	2	40.0%	20.8% : 59.2%	NA	NA	SN
La Salle County	SN	SN	SN	SN	SN	SN	SN
Lavaca County	8	3	36.8%	21.5% : 52.2%	NA	NA	SN
Lee County	5	2	42.3%	23.3% : 61.3%	NA	NA	SN
Leon County	8	3	40.5%	25.6% : 55.3%	-8.8%	-41.6% : 42.4%	SN
Liberty County	21	8	38.1%	28.8% : 47.4%	7.1%	-29.4% : 62.5%	9.5%
Limestone County	6	1	21.9%	7.6% : 36.2%	NA	NA	SN
Lipscomb County	SN	SN	SN	SN	SN	SN	SN
Live Oak County	5	2	44.4%	25.7% : 63.2%	NA	NA	SN
Llano County	10	3	31.4%	18.6% : 44.1%	NA	NA	7.8%
Loving County	SN	SN	SN	SN	SN	SN	SN
Lubbock County	88	32	36.3%	31.8% : 40.8%	-3.6%	-13.0% : 6.8%	5.4%
Lynn County	SN	SN	SN	SN	SN	SN	SN
McCulloch County	SN	SN	SN	SN	SN	SN	SN
McLennan County	81	32	39.9%	35.1% : 44.6%	-0.8%	-18.1% : 20.2%	8.9%
McMullen County	SN	SN	SN	SN	SN	SN	SN
Madison County	4	2	57.1%	36.0% : 78.3 <mark></mark> %	NA	NA	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Marion County	5	2	33.3%	14.5% : 52.2%	NA	NA	SN
Martin County	SN	SN	SN	SN	SN	SN	SN
Mason County	SN	SN	SN	SN	SN	SN	SN
Matagorda County	15	5	35.6%	24.6% : 46.6%	-0.3%	-25.5% : 33.3%	SN
Maverick County	10	5	48.0%	34.2% : 61.8%	-9.2%	-19.2% : 2.1%	8.0%
Medina County	11	3	26.4%	14.5% : 38.3%	26.3%	-40.5% : 168.3%	7.5%
Menard County	SN	SN	SN	SN	SN	SN	SN
Midland County	42	16	38.6%	32.0% : 45.2%	-7.7%	-21.6% : 8.6%	7.1%
Milam County	11	4	37.5%	24.8% : 50.2%	0.8%	-40.0% : 69.4%	SN
Mills County	SN	SN	SN	SN	SN	SN	SN
Mitchell County	SN	SN	SN	SN	SN	SN	SN
Montague County	8	3	38.5%	23.2% : 53.7%	6.9%	-23.3% : 48.9%	SN
Montgomery County	145	51	35.0%	31.5% : 38.5%	-2.7%	-12.4% : 8.0%	7.1%
Moore County	5	2	52.2%	31.8% : 72.6%	NA	NA	SN
Morris County	5	3	60.9%	40.9% : 80.8%	NA	NA	SN
Motley County	SN	SN	SN	SN	SN	SN	SN
Nacogdoches County	18	10	53.3%	43.0% : 63.6%	-6.7%	-36.6% : 37.2%	5.6%
Navarro County	15	6	38.2%	27.2% : 49.1%	-28.1%	-51.6% : 6.8%	5.3%
Newton County	4	2	60.0%	38.5% : 81.5%	NA	NA	SN
Nolan County	6	3	46.7%	28.8% : 64.5%	NA	NA	SN
Nueces County	107	38	35.4%	31.3% : 39.4%	3.3%	-9.8% : 18.2%	5.6%
Ochiltree County	SN	SN	SN	SN	SN	SN	SN
Oldham County	SN	SN	SN	SN	SN	SN	SN
Orange County	32	15	46.5%	38.8% : 54.3%	3.8%	-5.4% : 13.8%	5.7%
Palo Pinto County	11	4	40.0%	27.1% : 52.9%	-17.1%	-41.0% : 16.5%	10.9%
Panola County	10	3	34.7%	21.4% : 48.0%	1.4%	-40.5% : 72.9%	10.2%
Parker County	44	14	32.0%	25.8% : 38.1%	-0.5%	-24.9% : 31.9%	5.0%
Parmer County	SN	SN	SN	SN	SN	SN	SN
Pecos County	SN	SN	SN	SN	SN	SN	SN
Polk County	23	9	38.5%	29.6% : 47.3%	-5.7%	-23.2% : 15.7%	SN
Potter County	38	16	42.0%	35.0% : 49.1%	3.7%	-10.3% : 20.0%	6.9%
Presidio County	SN	SN	SN	SN	SN	SN	SN
Rains County	4	2	50.0%	26.9% : 73.1%	NA	NA	SN
Randall County	47	19	40.2%	33.9% : 46.5%	-2.7%	-14.1% : 10.2%	5.6%
Reagan County	SN	SN	SN	SN	SN	SN	SN
Real County	SN	SN	SN	SN	SN	SN	SN
Red River County	5	1	28.0%	10.4% : 45.6%	NA	NA	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Reeves County	4	2	52.4%	31.0% : 73.7%	NA	NA	19.0%
Refugio County	4	1	33.3%	11.6% : 55.1%	NA	NA	SN
Roberts County	SN	SN	SN	SN	SN	SN	SN
Robertson County	9	4	42.2%	27.8% : 56.7%	-3.0%	-43.6% : 67.0%	SN
Rockwall County	25	7	29.4%	21.4% : 37.3%	-5.7%	-25.8% : 19.8%	SN
Runnels County	4	2	52.4%	31.0% : 73.7%	NA	NA	SN
Rusk County	19	6	32.0%	22.7% : 41.2%	-9.6%	-19.2% : 1.2%	7.2%
Sabine County	4	2	50.0%	28.1% : 71.9%	NA	NA	SN
San Augustine County	SN	SN	SN	SN	SN	SN	SN
San Jacinto County	10	5	46.9%	33.0% : 60.9%	-7.5%	-24.5% : 13.3%	SN
San Patricio County	19	7	36.5%	26.8% : 46.1%	-6.9%	-24.8% : 15.1%	4.2%
San Saba County	SN	SN	SN	SN	SN	SN	SN
Schleicher County	SN	SN	SN	SN	SN	SN	SN
Scurry County	5	3	55.6%	36.8% : 74.3%	NA	NA	14.8%
Shackelford County	SN	SN	SN	SN	SN	SN	SN
Shelby County	7	3	39.4%	22.7% : 56.1%	NA	NA	SN
Sherman County	SN	SN	SN	SN	SN	SN	SN
Smith County	96	36	37.1%	32.8% : 41.5%	-13.9%	-18.6% : -8.9%	4.1%
Somervell County	SN	SN	SN	SN	SN	SN	SN
Starr County	10	4	43.1%	29.5% : 56.7%	-15.6%	-32.7% : 5.8%	7.8%
Stephens County	SN	SN	SN	SN	SN	SN	SN
Sterling County	SN	SN	SN	SN	SN	SN	SN
Stonewall County	SN	SN	SN	SN	SN	SN	SN
Sutton County	SN	SN	SN	SN	SN	SN	SN
Swisher County	SN	SN	SN	SN	SN	SN	SN
Tarrant County	546	195	35.7%	33.9% : 37.5%	-4.5%	-12.9% : 4.7%	5.9%
Taylor County	41	15	37.2%	30.6% : 43.8%	-3.8%	-19.7% : 15.3%	5.8%
Terrell County	SN	SN	SN	SN	SN	SN	SN
Terry County	4	2	42.9%	21.7% : 64.0%	NA	NA	SN
Throckmorton County	SN	SN	SN	SN	SN	SN	SN
Titus County	5	1	29.2%	11.0% : 47.4%	NA	NA	16.7%
Tom Green County	41	14	33.7%	27.2% : 40.1%	6.1%	-17.9% : 37.1%	5.9%
Travis County	259	90	34.8%	32.2% : 37.4%	-7.2%	-12.9% : -1.2%	4.6%
Trinity County	5	2	47.8%	27.4% : 68.2%	NA	NA	SN
Tyler County	6	3	48.4%	30.8% : 66.0%	NA	NA	SN
Upshur County	14	7	48.6%	36.9% : 60.3%	0.4%	-25.8% : 35.9%	14.3%
Upton County	SN	SN	SN	SN	SN	SN	SN

Population Group	# of New Staged Cases (Annual Average)	# of Cases Diagnosed at Late- stage (Annual Average)	Proportion Diagnosed at Late- stage	Confidence Interval of Late-stage Proportion	Late-stage Proportion Trend (Annual Percent Change)	Confidence Interval of Late-stage Proportion Trend	Proportion Diagnosed at Distant- stage
Uvalde County	8	3	39.5%	23.9% : 55.0%	7.0%	-23.0% : 48.7%	SN
Val Verde County	11	6	58.5%	45.2% : 71.8%	10.0%	-13.7% : 40.2%	13.2%
Van Zandt County	24	9	38.0%	29.4% : 46.7%	-2.8%	-34.3% : 43.8%	6.6%
Victoria County	36	13	35.6%	28.6% : 42.5%	2.4%	-5.8% : 11.3%	10.0%
Walker County	16	7	41.8%	30.9% : 52.6%	9.4%	-16.7% : 43.6%	6.3%
Waller County	12	4	33.9%	21.8% : 46.0%	12.4%	-21.0% : 60.0%	6.8%
Ward County	5	2	38.5%	19.8% : 57.2%	NA	NA	SN
Washington County	18	6	35.6%	25.7% : 45.4%	7.5%	-5.6% : 22.5%	7.8%
Webb County	46	18	39.7%	33.4% : 46.1%	-3.6%	-26.7% : 26.9%	4.8%
Wharton County	11	5	43.6%	30.5% : 56.7%	-8.4%	-25.5% : 12.5%	9.1%
Wheeler County	SN	SN	SN	SN	SN	SN	SN
Wichita County	40	16	38.8%	32.1% : 45.5%	-1.9%	-20.3% : 20.7%	3.0%
Wilbarger County	5	1	26.9%	9.9% : 44.0%	NA	NA	SN
Willacy County	4	1	33.3%	13.2% : 53.5%	NA	NA	SN
Williamson County	123	48	39.2%	35.3% : 43.0%	-2.3%	-9.5% : 5.5%	4.1%
Wilson County	12	5	42.6%	30.2% : 55.0%	-12.6%	-42.1% : 31.9%	8.2%
Winkler County	SN	SN	SN	SN	SN	SN	SN
Wise County	18	5	30.7%	21.0% : 40.3%	0.8%	-35.2% : 56.9%	9.1%
Wood County	20	7	37.4%	27.8% : 46.9%	-7.4%	-22.0% : 10.0%	5.1%
Yoakum County	SN	SN	SN	SN	SN	SN	SN
Young County	8	3	37.5%	22.5% : 52.5%	10.2%	-16.3% : 45.0%	SN
Zapata County	SN	SN	SN	SN	SN	SN	SN
Zavala County	SN	SN	SN	SN	SN	SN	SN

NA – data not available.

 $\ensuremath{\mathsf{SN}}$ – data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Data are for years 2006-2010.

Source: NAACCR – CINA Deluxe Analytic File.

Map of late-stage incidence rates

Figure 2.3 shows a map of late-state incidence rates for the counties in Texas. When the numbers of cases used to compute the rates are small (15 cases or fewer for the five-year data period), those rates are unreliable and are shown as "small numbers" on the map.



Rates are in cases per 100,000.

Age-adjusted rates are adjusted to the 2000 US standard population.

Source: NAACCR - CINA Deluxe Analytic File.



Conclusions: Breast cancer late-stage rates, proportions and trends

Late-stage incidence rates and trends

Overall, the breast cancer late-stage incidence rate in the State of Texas was significantly lower than that observed in the US as a whole and the late-stage incidence trend was lower than the US as a whole.

For the United States, late-stage incidence rates in Blacks/African-Americans are higher than among Whites. Hispanics/Latinas tend to be diagnosed with late-stage breast cancers more often than Whites. For the State of Texas, the late-stage incidence rate was significantly higher among Blacks/African-Americans than Whites, significantly lower among APIs than Whites, and significantly lower among AIANs than Whites. The late-stage incidence rate among Hispanics/Latinas was significantly lower than among Non-Hispanics/Latinas.

The following counties had a late-stage incidence rate **significantly higher** than the state as a whole:

- Bell County (Komen East Central Texas)
- Dallas County (Komen Dallas County)
- DeWitt County
- Ector County
- Hardin County
- Harris County (Komen Houston)
- Jasper County
- Jefferson County
- Lamar County
- Orange County
- Smith County (Komen East Central Texas)

The late-stage incidence rate was significantly lower in the following counties:

- Anderson County (Komen East Central Texas)
- Bandera County
- Bexar County (Komen San Antonio)
- Hidalgo County
- Medina County
- Nueces County
- Titus County
- Wharton County
- Wood County

Significantly less favorable trends in breast cancer late-stage incidence rates were observed in the following county:

Austin County

Significantly more favorable trends in breast cancer late-stage incidence rates were observed in the following counties:

- Navarro County (Komen East Central Texas)
- Starr County

The rest of the counties had late-stage incidence rates and trends that were not significantly different than the state as a whole or did not have enough data available.

Late-stage proportions and trends

Overall, the breast cancer late-stage proportion in the State of Texas was significantly higher than that observed in the US as a whole and the late-stage proportion trend was lower than the US as a whole.

For the State of Texas, the late-stage proportion was significantly higher among Blacks/African-Americans than Whites, about the same among APIs and Whites, and higher among AIANs than Whites. The late-stage proportion among Hispanics/Latinas was significantly higher than among Non-Hispanics/Latinas.

The following counties had a late-stage proportion **significantly higher** than the state as a whole:

- Cameron County
- Chambers County (Komen Houston)
- Dawson County
- El Paso County (Komen El Paso)
- Gaines County
- Hardin County
- Hidalgo County
- Jefferson County
- Morris County
- Nacogdoches County
- Newton County
- Orange County
- Val Verde County

The late-stage proportion was significantly lower in the following counties:

- Bexar County (Komen San Antonio)
- Brazos County
- Collin County (Komen North Texas)
- Denton County (Komen North Texas)
- Galveston County (Komen Houston)
- Hood County (Komen Greater Fort Worth)
- Kendall County
- Limestone County (Komen East Central Texas)

Significantly less favorable trends in breast cancer late-stage proportions were observed in the following counties:

- Colorado County
- Jasper County

Significantly more favorable trends in breast cancer late-stage proportions were observed in the following counties:

- Anderson County (Komen East Central Texas)
- Cherokee County (Komen East Central Texas)
- Smith County (Komen East Central Texas)

The rest of the counties had late-stage proportions and trends that were not significantly different than the state as a whole or did not have enough data available.

Mammography Screening

Getting regular screening mammograms (along with treatment if diagnosed) lowers the risk of dying from breast cancer.

Knowing whether or not women are getting regular screening mammograms as recommended by their health care providers can be used to identify groups of women who need help in meeting screening recommendations.

Why mammograms matter

Getting regular screening mammograms (and treatment if diagnosed) lowers the risk of dying from breast cancer. Screening mammography can find breast cancer early, when the chances of survival are highest. The US Preventive Services Task Force found that having screening mammograms reduces the breast cancer death rate for women age 40 to 74. The benefit of mammograms is greater for women age 50 to 74. It's especially high for women age 60 to 69 (Nelson et al., 2009). Because having mammograms lowers the chances of dying from breast cancer, it's important to know whether women are having mammograms when they should. This information can be used to identify groups of women who should be screened who need help in meeting the current recommendations for screening mammography.

Mammography recommendations

Table 2.5 shows some screening recommendations among major organizations for women at average risk.

American Cancer Society	National Comprehensive Cancer Network	US Preventive Services Task Force
Informed decision-making with a health care provider at age 40 Mammography every year starting at age 45 Mammography every other year beginning at age 55	Mammography every year starting at age 40	Informed decision-making with a health care provider ages 40-49 Mammography every 2 years ages 50-74

Table 2.5. Breast cancer screening recommendations for women at average risk*

*As of October 2015

Where the data come from

The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factors Surveillance System (BRFSS) collected the data on mammograms that are used in this report. The data come from interviews with women age 50 to 74 from across the United States. During the interviews, each woman was asked how long it has been since she has had a mammogram. BRFSS is the best and most widely used source available for information on mammography usage among women in the United States, although it does not collect data matching Komen screening recommendations (i.e., from women age 40 and older).

For some counties, data about mammograms are not shown because not enough women were included in the survey (less than 10 survey responses).

The data have been weighted to account for differences between the women who were interviewed and all the women in the area. For example, if 20 percent of the women interviewed are Latina, but only 10 percent of the total women in the area are Latina, weighting is used to account for this difference.

Calculating the mammography screening proportion

This report uses the mammography screening proportion to show whether the women in an area are getting screening mammograms when they should.

Mammography screening proportion is calculated from two pieces of information:

- The number of women living in an area whom the BRFSS determines should have mammograms (i.e., women age 50 to 74).
- The number of these women who actually had a mammogram during the past two years.

The number of women who had a mammogram is divided by the number who should have had one. For example, if there are 500 women in an area who should have had mammograms and

250 of those women actually had a mammogram in the past two years, the mammography screening proportion is 50.0 percent.

Confidence intervals

As with incidence and death rates, this report includes the confidence interval of the screening proportions because numbers are not exact. The confidence interval is shown as two numbers—a lower value and a higher one. It is very unlikely that the true rate is less than the lower value or more than the higher value.

In general, screening proportions at the county level have fairly wide confidence intervals. The confidence interval should always be considered before concluding that the screening proportion in one county is higher or lower than that in another county.

Breast cancer screening proportions

Breast cancer screening proportions are shown in Table 2.6 for:

- United States
- State of Texas
- Each county in Texas

For the State of Texas, proportions are also shown for Whites, Blacks/African-Americans/African-Americans, Asians and Pacific Islanders (API), and American Indians and Alaska Natives (AIAN). In addition, proportions are shown for Hispanics/Latinas and women who are not Hispanic/Latina (regardless of their race).

The proportions in Table 2.6 are based on the number of women age 50 to 74 who reported in 2012 having had a mammogram in the last two years. The data source is the BRFSS, which only surveys women in this age range for mammography usage. The data on the proportion of women who had a mammogram in the last two years have been weighted to account for differences between the women who were interviewed and all the women in the area. For example, if 20.0 percent of the women interviewed are Hispanic/Latina, but only 10.0 percent of the total women in the area are Hispanic/Latina, weighting is used to account for this difference.

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
US	174,796	133,399	77.5%	77.2% : 77.7%
Texas	3,174	2,348	72.0%	69.9% : 74.0%
White	2,694	2,000	72.2%	70.0% : 74.3%
Black/African-American	218	173	75.6%	67.9% : 82.0%
AIAN	24	15	53.1%	26.7% : 77.8%
API	30	24	74.8%	51.2% : 89.4%
Hispanic/ Latina	667	482	67.6%	62.6% : 72.3%
Non-Hispanic/ Latina	2,468	1,841	73.4%	71.1% : 75.5%
Anderson County	12	8	59.7%	27.3% : 85.4%
Andrews County	SN	SN	SN	SN
Angelina County	16	12	72.8%	41.4% : 91.0%
Aransas County	SN	SN	SN	SN
Archer County	SN	SN	SN	SN
Armstrong County	SN	SN	SN	SN
Atascosa County	SN	SN	SN	SN
Austin County	SN	SN	SN	SN
Bailey County	SN	SN	SN	SN
Bandera County	SN	SN	SN	SN
Bastrop County	SN	SN	SN	SN
Baylor County	SN	SN	SN	SN
Bee County	SN	SN	SN	SN
Bell County	29	22	74.9%	52.5% : 89.0%
Bexar County	185	144	70.4%	61.6% : 77.9%
Blanco County	SN	SN	SN	SN
Borden County	SN	SN	SN	SN
Bosque County	SN	SN	SN	SN
Bowie County	13	9	69.4%	35.5% : 90.3%
Brazoria County	16	9	57.8%	33.0% : 79.1%
Brazos County	SN	SN	SN	SN
Brewster County	SN	SN	SN	SN
Briscoe County	SN	SN	SN	SN
Brooks County	SN	SN	SN	SN
Brown County	14	11	84.8%	49.0% : 97.0%
Burleson County	SN	SN	SN	SN

Table 2.6. Proportion of women ages 50-74 with screening mammographyin the last two years, self-report

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Burnet County	SN	SN	SN	SN
Caldwell County	SN	SN	SN	SN
Calhoun County	SN	SN	SN	SN
Callahan County	SN	SN	SN	SN
Cameron County	46	33	64.4%	44.0% : 80.7%
Camp County	SN	SN	SN	SN
Carson County	SN	SN	SN	SN
Cass County	SN	SN	SN	SN
Castro County	SN	SN	SN	SN
Chambers County	SN	SN	SN	SN
Cherokee County	SN	SN	SN	SN
Childress County	SN	SN	SN	SN
Clay County	SN	SN	SN	SN
Cochran County	SN	SN	SN	SN
Coke County	SN	SN	SN	SN
Coleman County	SN	SN	SN	SN
Collin County	41	31	82.3%	64.5% : 92.3%
Collingsworth County	SN	SN	SN	SN
Colorado County	SN	SN	SN	SN
Comal County	22	17	85.6%	62.3% : 95.6%
Comanche County	10	6	46.5%	19.4% : 75.8%
Concho County	SN	SN	SN	SN
Cooke County	SN	SN	SN	SN
Coryell County	SN	SN	SN	SN
Cottle County	SN	SN	SN	SN
Crane County	SN	SN	SN	SN
Crockett County	SN	SN	SN	SN
Crosby County	SN	SN	SN	SN
Culberson County	SN	SN	SN	SN
Dallam County	SN	SN	SN	SN
Dallas County	138	112	76.3%	66.7% : 83.8%
Dawson County	SN	SN	SN	SN
DeWitt County	SN	SN	SN	SN
Deaf Smith County	SN	SN	SN	SN
Delta County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Denton County	45	31	74.0%	57.1% : 85.9%
Dickens County	SN	SN	SN	SN
Dimmit County	SN	SN	SN	SN
Donley County	SN	SN	SN	SN
Duval County	SN	SN	SN	SN
Eastland County	SN	SN	SN	SN
Ector County	SN	SN	SN	SN
Edwards County	SN	SN	SN	SN
El Paso County	225	171	74.8%	66.2% : 81.8%
Ellis County	12	7	48.1%	21.4% : 75.8%
Erath County	12	9	65.5%	31.0% : 88.9%
Falls County	SN	SN	SN	SN
Fannin County	SN	SN	SN	SN
Fayette County	SN	SN	SN	SN
Fisher County	SN	SN	SN	SN
Floyd County	SN	SN	SN	SN
Foard County	SN	SN	SN	SN
Fort Bend County	28	20	67.7%	44.2% : 84.7%
Franklin County	SN	SN	SN	SN
Freestone County	SN	SN	SN	SN
Frio County	SN	SN	SN	SN
Gaines County	SN	SN	SN	SN
Galveston County	11	9	80.5%	39.7% : 96.3%
Garza County	SN	SN	SN	SN
Gillespie County	12	8	75.9%	33.0% : 95.2%
Glasscock County	SN	SN	SN	SN
Goliad County	SN	SN	SN	SN
Gonzales County	SN	SN	SN	SN
Gray County	SN	SN	SN	SN
Grayson County	12	7	71.3%	37.8% : 91.0%
Gregg County	18	11	63.2%	36.7% : 83.6%
Grimes County	SN	SN	SN	SN
Guadalupe County	17	13	76.3%	45.2% : 92.7%
Hale County	SN	SN	SN	SN
Hall County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Hamilton County	SN	SN	SN	SN
Hansford County	SN	SN	SN	SN
Hardeman County	SN	SN	SN	SN
Hardin County	SN	SN	SN	SN
Harris County	160	126	78.5%	70.1% : 85.0%
Harrison County	15	11	72.0%	37.8% : 91.6%
Hartley County	SN	SN	SN	SN
Haskell County	SN	SN	SN	SN
Hays County	22	18	77.1%	50.7% : 91.7%
Hemphill County	SN	SN	SN	SN
Henderson County	21	16	86.9%	57.0% : 97.1%
Hidalgo County	211	149	69.8%	59.8% : 78.2%
Hill County	SN	SN	SN	SN
Hockley County	SN	SN	SN	SN
Hood County	SN	SN	SN	SN
Hopkins County	SN	SN	SN	SN
Houston County	SN	SN	SN	SN
Howard County	SN	SN	SN	SN
Hudspeth County	SN	SN	SN	SN
Hunt County	SN	SN	SN	SN
Hutchinson County	SN	SN	SN	SN
Irion County	SN	SN	SN	SN
Jack County	SN	SN	SN	SN
Jackson County	SN	SN	SN	SN
Jasper County	SN	SN	SN	SN
Jeff Davis County	SN	SN	SN	SN
Jefferson County	33	26	77.2%	53.8% : 90.8%
Jim Hogg County	SN	SN	SN	SN
Jim Wells County	SN	SN	SN	SN
Johnson County	22	16	73.8%	47.0% : 89.9%
Jones County	SN	SN	SN	SN
Karnes County	SN	SN	SN	SN
Kaufman County	SN	SN	SN	SN
Kendall County	SN	SN	SN	SN
Kenedy County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Kent County	SN	SN	SN	SN
Kerr County	19	17	92.6%	69.9% : 98.5%
Kimble County	SN	SN	SN	SN
King County	SN	SN	SN	SN
Kinney County	SN	SN	SN	SN
Kleberg County	SN	SN	SN	SN
Knox County	SN	SN	SN	SN
La Salle County	SN	SN	SN	SN
Lamar County	12	7	43.6%	14.0% : 78.7%
Lamb County	SN	SN	SN	SN
Lampasas County	SN	SN	SN	SN
Lavaca County	SN	SN	SN	SN
Lee County	SN	SN	SN	SN
Leon County	SN	SN	SN	SN
Liberty County	SN	SN	SN	SN
Limestone County	SN	SN	SN	SN
Lipscomb County	SN	SN	SN	SN
Live Oak County	SN	SN	SN	SN
Llano County	SN	SN	SN	SN
Loving County	SN	SN	SN	SN
Lubbock County	33	27	77.9%	54.1% : 91.3%
Lynn County	SN	SN	SN	SN
Madison County	SN	SN	SN	SN
Marion County	SN	SN	SN	SN
Martin County	SN	SN	SN	SN
Mason County	SN	SN	SN	SN
Matagorda County	SN	SN	SN	SN
Maverick County	SN	SN	SN	SN
McCulloch County	SN	SN	SN	SN
McLennan County	26	19	77.4%	53.6% : 91.0%
McMullen County	SN	SN	SN	SN
Medina County	SN	SN	SN	SN
Menard County	SN	SN	SN	SN
Midland County	14	10	75.3%	41.9% : 92.8%
Milam County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Mills County	SN	SN	SN	SN
Mitchell County	SN	SN	SN	SN
Montague County	SN	SN	SN	SN
Montgomery County	28	19	63.3%	41.2% : 81.0%
Moore County	SN	SN	SN	SN
Morris County	SN	SN	SN	SN
Motley County	SN	SN	SN	SN
Nacogdoches County	10	7	60.1%	25.9% : 86.6%
Navarro County	SN	SN	SN	SN
Newton County	SN	SN	SN	SN
Nolan County	SN	SN	SN	SN
Nueces County	29	22	83.2%	61.2% : 94.0%
Ochiltree County	SN	SN	SN	SN
Oldham County	SN	SN	SN	SN
Orange County	SN	SN	SN	SN
Palo Pinto County	SN	SN	SN	SN
Panola County	SN	SN	SN	SN
Parker County	24	16	70.5%	44.1% : 87.9%
Parmer County	SN	SN	SN	SN
Pecos County	SN	SN	SN	SN
Polk County	SN	SN	SN	SN
Potter County	15	10	68.4%	33.2% : 90.4%
Presidio County	SN	SN	SN	SN
Rains County	SN	SN	SN	SN
Randall County	13	9	59.4%	27.4% : 85.0%
Reagan County	SN	SN	SN	SN
Real County	SN	SN	SN	SN
Red River County	SN	SN	SN	SN
Reeves County	SN	SN	SN	SN
Refugio County	SN	SN	SN	SN
Roberts County	SN	SN	SN	SN
Robertson County	SN	SN	SN	SN
Rockwall County	SN	SN	SN	SN
Runnels County	SN	SN	SN	SN
Rusk County	10	6	54.4%	21.9% : 83.5%

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Sabine County	SN	SN	SN	SN
San Augustine County	SN	SN	SN	SN
San Jacinto County	SN	SN	SN	SN
San Patricio County	SN	SN	SN	SN
San Saba County	SN	SN	SN	SN
Schleicher County	SN	SN	SN	SN
Scurry County	SN	SN	SN	SN
Shackelford County	SN	SN	SN	SN
Shelby County	SN	SN	SN	SN
Sherman County	SN	SN	SN	SN
Smith County	35	23	65.6%	47.6% : 80.0%
Somervell County	SN	SN	SN	SN
Starr County	11	6	54.7%	27.5% : 79.3%
Stephens County	SN	SN	SN	SN
Sterling County	SN	SN	SN	SN
Stonewall County	SN	SN	SN	SN
Sutton County	SN	SN	SN	SN
Swisher County	SN	SN	SN	SN
Tarrant County	189	153	81.3%	72.7% : 87.6%
Taylor County	21	20	94.8%	71.2% : 99.3%
Terrell County	SN	SN	SN	SN
Terry County	SN	SN	SN	SN
Throckmorton County	SN	SN	SN	SN
Titus County	SN	SN	SN	SN
Tom Green County	12	7	59.6%	29.5% : 83.9%
Travis County	382	302	71.0%	64.3% : 76.9%
Trinity County	SN	SN	SN	SN
Tyler County	SN	SN	SN	SN
Upshur County	SN	SN	SN	SN
Upton County	SN	SN	SN	SN
Uvalde County	SN	SN	SN	SN
Val Verde County	SN	SN	SN	SN
Van Zandt County	17	11	66.0%	37.5% : 86.2%
Victoria County	12	8	71.4%	33.1% : 92.6%
Walker County	SN	SN	SN	SN

Population Group	# of Women Interviewed (Sample Size)	# w/ Self- Reported Mammogram	Proportion Screened (Weighted Average)	Confidence Interval of Proportion Screened
Waller County	SN	SN	SN	SN
Ward County	SN	SN	SN	SN
Washington County	SN	SN	SN	SN
Webb County	31	23	78.6%	58.7% : 90.5%
Wharton County	SN	SN	SN	SN
Wheeler County	SN	SN	SN	SN
Wichita County	29	23	75.2%	53.1% : 89.1%
Wilbarger County	SN	SN	SN	SN
Willacy County	SN	SN	SN	SN
Williamson County	67	54	82.0%	69.0% : 90.3%
Wilson County	SN	SN	SN	SN
Winkler County	SN	SN	SN	SN
Wise County	SN	SN	SN	SN
Wood County	SN	SN	SN	SN
Yoakum County	SN	SN	SN	SN
Young County	SN	SN	SN	SN
Zapata County	SN	SN	SN	SN
Zavala County	SN	SN	SN	SN

Data are for 2012.

Source: CDC - Behavioral Risk Factor Surveillance System (BRFSS).

Conclusions: Breast cancer screening proportions

The breast cancer screening proportion in the State of Texas was **significantly lower** than that observed in the US as a whole.

For the United States, breast cancer screening proportions among Blacks/African-Americans are similar to those among Whites overall. APIs have somewhat lower screening proportions than Whites and Blacks/African-Americans. Although data are limited, screening proportions among AIANs are similar to those among Whites. Screening proportions among Hispanics/Latinas are similar to those among Non-Hispanic Whites and Blacks/African-Americans. For the State of Texas, the screening proportion was not significantly different among Blacks/African-Americans and Whites, not significantly different among APIs and Whites, and not significantly different among AIANs and Whites. The screening proportion among Hispanics/Latinas was not significantly different from the proportion among Non-Hispanics/Latinas.

None of the counties in the state had substantially different screening proportions than the state as a whole.

Demographic and Socioeconomic Measures

Demographic and socioeconomic data can be used to identify which groups of women are most in need of help and to figure out the best ways to help them.

The report includes basic information about the women in each area (demographic measures) and about factors like education, income, and unemployment (socioeconomic measures) in the areas where they live.

Demographic measures in the report include:

- Age
- Race
- Ethnicity (whether or not a woman is Hispanic/Latina can be of any race)

It is important to note that the report uses the race and ethnicity categories used by the US Census Bureau, and that race and ethnicity are separate and independent categories. This means that everyone is classified as both a member of one of the four race groups as well as either Hispanic/Latina or Non-Hispanic/Latina.

Socioeconomic measures for the areas covered in this report include:

- Education level
- Income
- Unemployment
- Immigration (how many of the people living in an area were born in another country)
- Use of the English language
- Proportion of people who have health insurance
- Proportion of people who live in rural areas
- Proportion of people who in areas that don't have enough doctors or health care facilities (medically underserved areas)

Why these data matter

Demographic and socioeconomic data can be used to identify which groups of women need the most help and to figure out the best ways to help them.

Important details about these data

The demographic and socioeconomic data in this report are the most recent data available for US counties. All the data are shown as percentages. However, the percentages weren't all calculated in the same way.

- The race, ethnicity, and age data are based on the total female population in the area (e.g. the percent of females over the age of 40).
- The socioeconomic data are based on all of the people in the area, not just women.
- Income, education and unemployment data don't include children. They're based on people age 15 and older for income and unemployment and age 25 and older for education.

• The data on the use of English, called "linguistic isolation", are based on the total number of households in the area. The Census Bureau defines a linguistically isolated household as one in which all the adults have difficulty with English.

Where the data come from

The demographic and socioeconomic sources of data are:

- Race/ethnicity, age, and sex data come from the US Census Bureau estimates for July 1, 2011.
- Most of the other data come from the US Census Bureau's American Community Survey program. The most recent data for counties are for 2007 to 2011.
- Health insurance data come from the US Census Bureau's Small Area Health Insurance Estimates program. The most recent data are for 2011.
- Rural population data come from the US Census Bureau's 2010 population survey.
- Medically underserved area information comes from the US Department of Health and Human Services, Health Resources and Services Administration. The most recent data are for 2013.

Population characteristics

Race, ethnicity, and age data for the US, the state, and each of the counties in the state is presented in Table 2.7:

- Race percentages for four race groups: White, Black/African-American, American Indian and Alaska Native (AIAN), and Asian and Pacific Islander (API).
- Percentages of women of Hispanic/Latina ethnicity (who may be of any race).
- Percentages of women in three age-groups: 40 and older, 50 and older, and 65 and older.

Table 2.8 shows socioeconomic data for the US, the state, and each of the counties in the state:

- Educational attainment as the percentage of the population 25 years and over that did not complete high school
- Income relative to the US poverty level. Two levels are shown the percentage of people with income less than the poverty level (below 100 percent) and less than 2.5 times the poverty level (below 250 percent).
- Percentage of the population who are unemployed
- Percentage of the population born outside the US
- Percentage of households that are linguistically isolated (all adults in the household have difficulty with English)
- Percentage living in rural areas
- Percentage living in medically underserved areas as determined by the Health Resources and Services Administration (HRSA)
- Percentage between ages 40 and 64 who have no health insurance

Population Group	White	Black/ African- American	AIAN	ΑΡΙ	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
US	78.8 %	14.1 %	1.4 %	5.8 %	83.8 %	16.2 %	48.3 %	34.5 %	14.8 %
Texas	81.5 %	12.9 %	1.1 %	4.5 %	62.5 %	37.5 %	42.9 %	29.4 %	11.7 %
Anderson County	82.4 %	15.8 %	0.8 %	1.0 %	86.6 %	13.4 %	50.1 %	37.7 %	17.4 %
Andrews County	95.6 %	2.1 %	1.5 %	0.8 %	50.9 %	49.1 %	42.7 %	29.3 %	12.1 %
Angelina County	81.8 %	16.3 %	0.7 %	1.2 %	80.7 %	19.3 %	46.5 %	33.5 %	15.3 %
Aransas County	94.6 %	1.8 %	1.3 %	2.3 %	75.0 %	25.0 %	61.7 %	50.0 %	25.3 %
Archer County	97.6 %	1.0 %	1.0 %	0.4 %	92.8 %	7.2 %	56.4 %	41.8 %	17.8 %
Armstrong County	97.1 %	1.8 %	1.1 %	0.0 %	94.5 %	5.5 %	58.7 %	45.8 %	22.1 %
Atascosa County	96.8 %	1.4 %	1.1 %	0.7 %	38.2 %	61.8 %	46.0 %	33.3 %	14.2 %
Austin County	88.3 %	10.3 %	0.8 %	0.6 %	76.6 %	23.4 %	52.5 %	39.2 %	17.4 %
Bailey County	94.8 %	1.8 %	2.6 %	0.8 %	41.3 %	58.7 %	42.8 %	31.2 %	15.5 %
Bandera County	97.6 %	0.9 %	1.0 %	0.5 %	83.5 %	16.5 %	64.1 %	49.9 %	20.9 %
Bastrop County	88.8 %	8.2 %	1.7 %	1.3 %	68.0 %	32.0 %	49.4 %	35.0 %	13.0 %
Baylor County	96.3 %	2.8 %	0.5 %	0.4 %	86.5 %	13.5 %	59.8 %	47.2 %	27.5 %
Bee County	95.4 %	2.5 %	1.0 %	1.1 %	36.7 %	63.3 %	45.9 %	33.7 %	14.6 %
Bell County	70.0 %	23.6 %	1.2 %	5.1 %	78.1 %	21.9 %	37.7 %	25.2 %	9.8 %
Bexar County	87.0 %	8.2 %	1.4 %	3.3 %	40.9 %	59.1 %	42.3 %	29.0 %	11.7 %
Blanco County	97.0 %	1.0 %	1.1 %	1.0 %	82.4 %	17.6 %	60.8 %	47.7 %	20.0 %
Borden County	98.3 %	0.7 %	0.7 %	0.3 %	86.0 %	14.0 %	63.3 %	43.0 %	21.7 %
Bosque County	96.3 %	2.3 %	0.8 %	0.6 %	84.7 %	15.3 %	57.8 %	45.0 %	22.8 %
Bowie County	72.9 %	24.9 %	1.0 %	1.2 %	94.7 %	5.3 %	49.8 %	36.6 %	16.8 %
Brazoria County	80.3 %	12.6 %	0.9 %	6.2 %	72.2 %	27.8 %	43.4 %	28.9 %	10.9 %
Brazos County	82.0 %	12.0 %	0.7 %	5.2 %	76.6 %	23.4 %	30.2 %	20.8 %	8.6 %
Brewster County	94.9 %	1.6 %	2.4 %	1.1 %	56.0 %	44.0 %	50.7 %	39.0 %	17.7 %
Briscoe County	96.0 %	3.2 %	0.2 %	0.5 %	73.4 %	26.6 %	54.8 %	42.8 %	22.0 %
Brooks County	97.9 %	1.0 %	0.5 %	0.6 %	9.4 %	90.6 %	49.6 %	38.1 %	19.5 %
Brown County	94.5 %	3.9 %	0.8 %	0.7 %	80.4 %	19.6 %	51.7 %	39.7 %	19.1 %
Burleson County	85.6 %	13.1 %	0.9 %	0.4 %	81.9 %	18.1 %	54.8 %	41.6 %	18.8 %
Burnet County	95.9 %	2.3 %	1.0 %	0.8 %	80.5 %	19.5 %	55.7 %	42.9 %	19.6 %
Caldwell County	89.7 %	7.7 %	1.4 %	1.2 %	52.1 %	47.9 %	45.2 %	32.1 %	13.4 %
Calhoun County	91.5 %	3.6 %	0.6 %	4.3 %	52.8 %	47.2 %	48.5 %	35.3 %	15.9 %
Callahan County	96.6 %	2.0 %	0.7 %	0.8 %	91.7 %	8.3 %	54.9 %	41.4 %	18.9 %
Cameron County	97.8 %	0.8 %	0.6 %	0.8 %	11.4 %	88.6 %	40.0 %	27.6 %	12.2 %
Camp County	78.9 %	19.2 %	0.9 %	1.0 %	80.0 %	20.0 %	49.9 %	37.6 %	17.1 %
Carson County	96.8 %	1.2 %	1.4 %	0.6 %	90.9 %	9.1 %	53.7 %	40.1 %	18.0 %

Table 2.7. Population characteristics – demographics

Population Group	White	Black/ African- American	AIAN	ΑΡΙ	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
Cass County	80.1 %	18.7 %	0.7 %	0.5 %	96.4 %	3.6 %	55.5 %	42.6 %	21.2 %
Castro County	95.1 %	2.7 %	1.7 %	0.5 %	40.1 %	59.9 %	43.5 %	31.9 %	14.4 %
Chambers County	88.4 %	9.0 %	1.1 %	1.6 %	80.7 %	19.3 %	44.6 %	29.6 %	10.4 %
Cherokee County	83.1 %	14.7 %	1.5 %	0.7 %	80.4 %	19.6 %	48.0 %	36.3 %	17.0 %
Childress County	92.5 %	5.8 %	0.7 %	1.0 %	78.2 %	21.8 %	52.5 %	40.5 %	20.6 %
Clay County	96.9 %	1.1 %	1.7 %	0.3 %	94.6 %	5.4 %	56.8 %	43.4 %	19.3 %
Cochran County	92.3 %	5.2 %	2.1 %	0.4 %	45.8 %	54.2 %	44.8 %	32.5 %	15.5 %
Coke County	97.2 %	0.6 %	1.8 %	0.3 %	81.9 %	18.1 %	61.6 %	49.5 %	27.0 %
Coleman County	95.3 %	2.8 %	1.3 %	0.6 %	83.2 %	16.8 %	57.8 %	46.0 %	22.7 %
Collin County	77.2 %	9.8 %	0.8 %	12.2 %	85.3 %	14.7 %	43.0 %	26.2 %	8.9 %
Collingsworth County	90.6 %	6.5 %	2.4 %	0.5 %	69.5 %	30.5 %	50.9 %	39.5 %	19.5 %
Colorado County	83.8 %	14.5 %	1.0 %	0.7 %	74.2 %	25.8 %	55.4 %	43.2 %	20.9 %
Comal County	95.5 %	2.2 %	1.0 %	1.4 %	74.6 %	25.4 %	55.0 %	40.6 %	16.9 %
Comanche County	97.4 %	1.0 %	1.1 %	0.5 %	74.7 %	25.3 %	54.9 %	42.6 %	22.7 %
Concho County	97.1 %	1.2 %	1.1 %	0.5 %	68.1 %	31.9 %	56.7 %	44.8 %	21.8 %
Cooke County	93.8 %	3.4 %	1.6 %	1.2 %	84.7 %	15.3 %	51.2 %	38.4 %	17.6 %
Coryell County	76.2 %	18.6 %	1.2 %	4.0 %	84.1 %	15.9 %	36.5 %	22.5 %	8.5 %
Cottle County	89.9 %	9.8 %	0.3 %	0.1 %	79.5 %	20.5 %	60.0 %	47.8 %	26.9 %
Crane County	94.0 %	3.9 %	1.3 %	0.8 %	45.4 %	54.6 %	46.0 %	30.9 %	13.3 %
Crockett County	96.7 %	1.2 %	1.5 %	0.6 %	36.1 %	63.9 %	48.7 %	36.8 %	16.3 %
Crosby County	94.2 %	4.7 %	0.9 %	0.2 %	48.5 %	51.5 %	48.5 %	37.2 %	18.7 %
Culberson County	96.2 %	0.9 %	1.7 %	1.1 %	23.4 %	76.6 %	48.5 %	35.6 %	15.5 %
Dallam County	95.8 %	1.9 %	1.4 %	0.9 %	59.6 %	40.4 %	40.2 %	26.9 %	10.7 %
Dallas County	68.8 %	24.4 %	1.2 %	5.6 %	62.9 %	37.1 %	40.5 %	27.0 %	10.3 %
Dawson County	93.3 %	4.9 %	1.0 %	0.7 %	44.5 %	55.5 %	48.3 %	36.7 %	18.8 %
Deaf Smith County	96.0 %	1.9 %	1.5 %	0.6 %	32.9 %	67.1 %	39.9 %	28.7 %	12.8 %
Delta County	88.7 %	8.8 %	1.6 %	0.9 %	94.7 %	5.3 %	56.3 %	43.4 %	21.3 %
Denton County	81.9 %	9.7 %	1.0 %	7.4 %	81.8 %	18.2 %	40.4 %	24.6 %	8.1 %
DeWitt County	89.7 %	9.1 %	0.7 %	0.5 %	68.7 %	31.3 %	55.4 %	43.2 %	22.0 %
Dickens County	94.3 %	2.9 %	1.7 %	1.1 %	74.2 %	25.8 %	58.4 %	48.7 %	23.0 %
Dimmit County	97.1 %	1.4 %	0.7 %	0.8 %	13.9 %	86.1 %	46.5 %	34.9 %	15.8 %
Donley County	92.6 %	6.1 %	0.9 %	0.4 %	90.6 %	9.4 %	54.4 %	43.4 %	23.7 %
Duval County	98.3 %	0.7 %	0.7 %	0.4 %	10.4 %	89.6 %	48.2 %	36.2 %	18.9 %
Eastland County	96.2 %	2.3 %	1.0 %	0.5 %	85.9 %	14.1 %	54.5 %	43.1 %	22.1 %
Ector County	92.3 %	5.0 %	1.4 %	1.2 %	46.6 %	53.4 %	40.3 %	28.2 %	11.4 %
Edwards County	96.4 %	0.7 %	2.2 %	0.7 %	49.4 %	50.6 %	58.6 %	45.7 %	22.8 %

Population Group	White	Black/ African- American	ΔΙΔΝ	ΔΡΙ	Non- Hispanic/ Latina	Hispanic/	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
Ellis County	88.2 %	9.8 %	10%	10%	76.8 %	23.2 %	401103	30.3 %	11.3 %
El Paso County	94.0 %	34%	1.0 %	1.6 %	16.9 %	83.1 %	40.9 %	28.0 %	11.7 %
Erath County	96.4 %	1.5 %	1.3 %	0.8 %	81.4 %	18.6 %	41.7 %	30.3 %	14.0 %
Falls County	70.3 %	28.3 %	0.9 %	0.6%	80.4 %	19.6 %	50.8 %	35.9 %	17.0 %
Fannin County	92.7 %	5.3 %	1.5 %	0.6%	91.4 %	86%	53.9 %	40.2 %	19.4 %
Favette County	90.9 %	7.3 %	1.0 %	0.5 %	81.6 %	18.4 %	58.8 %	46.4 %	23.5 %
Fisher County	94.3 %	4.5 %	0.8 %	0.5 %	74.4 %	25.6 %	57.9 %	45.4 %	24.1 %
Flovd County	94.6 %	4.1 %	1.0 %	0.3 %	47.5 %	52.5 %	48.7 %	37.0 %	19.5 %
Foard County	93.8 %	52%	0.3 %	0.7 %	85.2 %	14.8 %	59.8 %	46.3 %	26.7 %
Fort Bend County	58.4 %	22.8 %	0.7 %	18.1 %	76.2 %	23.8 %	43.8 %	27.8 %	84%
Franklin County	93.2 %	5.0 %	1.2 %	0.7 %	87.5 %	12.5 %	53.4 %	41.1 %	19.8 %
Freestone County	82.2 %	15.9 %	1.3 %	0.7 %	87.4 %	12.6 %	53.1 %	40.7 %	19.7 %
Frio County	97.2 %	1.2 %	1.0 %	0.6 %	19.9 %	80.1 %	45.8 %	33.2 %	15.3 %
Gaines County	96.3 %	2.3 %	1.1 %	0.3 %	62.7 %	37.3 %	35.9 %	23.8 %	9.6 %
Galveston County	80.4 %	15.0 %	0.9 %	3.6 %	77.5 %	22.5 %	47.7 %	33.3 %	12.6 %
Garza County	91.5 %	7.0 %	1.1 %	0.5 %	61.2 %	38.8 %	46.1 %	33.8 %	15.9 %
Gillespie County	97.7 %	0.7 %	1.1 %	0.5 %	80.9 %	19.1 %	63.6 %	52.3 %	28.3 %
Glasscock County	97.6 %	1.9 %	0.0 %	0.5 %	68.0 %	32.0 %	46.6 %	33.9 %	13.9 %
Goliad County	92.8 %	5.8 %	0.9 %	0.5 %	64.9 %	35.1 %	58.5 %	45.1 %	20.4 %
Gonzales County	89.8 %	7.9 %	1.7 %	0.6 %	52.9 %	47.1 %	47.9 %	35.4 %	16.5 %
Gray County	94.1 %	3.8 %	1.4 %	0.6 %	76.7 %	23.3 %	48.7 %	37.1 %	18.5 %
Grayson County	90.1 %	6.7 %	1.9 %	1.3 %	88.8 %	11.2 %	51.4 %	38.3 %	17.4 %
Gregg County	76.0 %	21.5 %	1.0 %	1.4 %	84.4 %	15.6 %	46.7 %	34.2 %	15.7 %
Grimes County	82.9 %	15.6 %	0.8 %	0.6 %	78.5 %	21.5 %	51.0 %	38.3 %	16.3 %
Guadalupe County	88.8 %	7.5 %	1.1 %	2.5 %	64.3 %	35.7 %	46.4 %	31.2 %	12.6 %
Hale County	92.5 %	5.2 %	1.7 %	0.6 %	42.8 %	57.2 %	41.9 %	29.8 %	13.8 %
Hall County	91.3 %	7.0 %	1.2 %	0.5 %	67.0 %	33.0 %	53.2 %	43.1 %	23.4 %
Hamilton County	97.1 %	0.9 %	1.4 %	0.6 %	89.9 %	10.1 %	59.4 %	48.3 %	27.5 %
Hansford County	96.4 %	1.2 %	1.8 %	0.6 %	58.0 %	42.0 %	45.8 %	33.2 %	15.1 %
Hardeman County	93.1 %	5.9 %	0.7 %	0.4 %	78.9 %	21.1 %	55.4 %	42.9 %	21.8 %
Hardin County	92.2 %	6.6 %	0.5 %	0.7 %	95.4 %	4.6 %	49.3 %	35.7 %	15.2 %
Harris County	71.2 %	20.7 %	1.2 %	6.9 %	59.9 %	40.1 %	40.0 %	26.5 %	9.4 %
Harrison County	74.4 %	23.6 %	1.1 %	0.8 %	89.2 %	10.8 %	48.2 %	34.9 %	14.5 %
Hartley County	97.7 %	0.8 %	0.8 %	0.6 %	81.5 %	18.5 %	48.7 %	35.7 %	17.6 %
Haskell County	94.8 %	3.8 %	0.7 %	0.6 %	76.7 %	23.3 %	58.3 %	46.6 %	25.1 %
Hays County	92.6 %	4.3 %	1.3 %	1.8 %	64.2 %	35.8 %	38.8 %	26.3 %	9.6 %

Population Group	White	Black/ African- American	AIAN	API	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
Hemphill County	97.3 %	0.9 %	0.9 %	0.9 %	72.9 %	27.1 %	45.3 %	32.9 %	14.6 %
Henderson County	91.7 %	6.7 %	0.9 %	0.7 %	89.0 %	11.0 %	55.3 %	42.6 %	20.7 %
Hidalgo County	97.6 %	0.7 %	0.5 %	1.2 %	9.0 %	91.0 %	35.6 %	23.6 %	10.2 %
Hill County	91.1 %	7.7 %	0.7 %	0.6 %	82.3 %	17.7 %	52.3 %	40.2 %	19.4 %
Hockley County	93.6 %	4.4 %	1.5 %	0.4 %	55.6 %	44.4 %	44.3 %	32.4 %	14.3 %
Hood County	97.2 %	0.9 %	0.9 %	1.0 %	90.0 %	10.0 %	59.1 %	46.9 %	23.3 %
Hopkins County	90.2 %	8.1 %	1.0 %	0.7 %	85.5 %	14.5 %	50.4 %	37.3 %	17.2 %
Houston County	73.1 %	25.6 %	0.6 %	0.7 %	91.9 %	8.1 %	56.7 %	44.6 %	22.7 %
Howard County	92.8 %	4.9 %	1.4 %	0.9 %	62.7 %	37.3 %	47.6 %	35.3 %	16.1 %
Hudspeth County	95.6 %	1.6 %	1.9 %	0.9 %	20.0 %	80.0 %	47.8 %	34.9 %	13.3 %
Hunt County	87.9 %	9.3 %	1.3 %	1.5 %	86.4 %	13.6 %	48.8 %	35.1 %	15.3 %
Hutchinson County	93.9 %	3.0 %	2.4 %	0.6 %	79.6 %	20.4 %	47.9 %	36.2 %	15.9 %
Irion County	96.6 %	2.3 %	0.8 %	0.2 %	73.5 %	26.5 %	56.8 %	41.6 %	19.5 %
Jack County	96.8 %	1.6 %	0.9 %	0.7 %	86.4 %	13.6 %	52.5 %	38.9 %	18.2 %
Jackson County	90.5 %	8.3 %	0.6 %	0.5 %	71.4 %	28.6 %	50.6 %	38.6 %	18.5 %
Jasper County	80.6 %	17.9 %	0.7 %	0.8 %	94.7 %	5.3 %	52.3 %	39.2 %	18.1 %
Jeff Davis County	97.1 %	1.9 %	0.5 %	0.4 %	66.1 %	33.9 %	66.7 %	55.5 %	25.0 %
Jefferson County	59.7 %	35.8 %	0.9 %	3.6 %	84.3 %	15.7 %	46.9 %	34.3 %	15.0 %
Jim Hogg County	98.6 %	0.5 %	0.5 %	0.4 %	7.4 %	92.6 %	46.2 %	34.7 %	16.3 %
Jim Wells County	97.5 %	1.0 %	0.9 %	0.6 %	21.2 %	78.8 %	45.6 %	33.2 %	14.6 %
Johnson County	94.4 %	3.1 %	1.1 %	1.4 %	82.1 %	17.9 %	46.5 %	32.4 %	13.0 %
Jones County	93.0 %	5.0 %	1.2 %	0.8 %	78.6 %	21.4 %	54.5 %	41.4 %	19.6 %
Karnes County	95.7 %	2.8 %	1.1 %	0.4 %	47.6 %	52.4 %	51.9 %	39.7 %	19.2 %
Kaufman County	86.3 %	11.4 %	1.0 %	1.3 %	82.6 %	17.4 %	44.5 %	30.1 %	11.5 %
Kendall County	97.1 %	1.1 %	0.8 %	1.0 %	79.6 %	20.4 %	57.3 %	42.3 %	18.3 %
Kenedy County	95.1 %	1.9 %	2.9 %	0.0 %	24.8 %	75.2 %	51.9 %	35.0 %	15.5 %
Kent County	96.9 %	1.6 %	1.4 %	0.0 %	87.1 %	12.9 %	62.6 %	51.8 %	30.4 %
Kerr County	95.7 %	2.1 %	1.2 %	1.1 %	76.3 %	23.7 %	60.4 %	49.0 %	26.6 %
Kimble County	98.0 %	0.6 %	0.8 %	0.6 %	77.1 %	22.9 %	60.8 %	50.1 %	24.1 %
King County	96.2 %	2.3 %	1.5 %	0.0 %	90.9 %	9.1 %	56.1 %	36.4 %	14.4 %
Kinney County	95.6 %	2.5 %	1.0 %	0.9 %	48.2 %	51.8 %	60.6 %	49.8 %	27.6 %
Kleberg County	92.3 %	4.3 %	1.0 %	2.4 %	27.9 %	72.1 %	39.0 %	28.4 %	13.2 %
Knox County	91.3 %	7.1 %	1.2 %	0.4 %	70.2 %	29.8 %	52.7 %	41.2 %	23.3 %
Lamar County	82.4 %	14.9 %	1.8 %	0.9 %	93.5 %	6.5 %	51.5 %	38.0 %	18.6 %
Lamb County	92.3 %	5.4 %	1.9 %	0.4 %	48.7 %	51.3 %	47.7 %	34.8 %	17.8 %
Lampasas County	92.5 %	4.2 %	1.4 %	2.0 %	82.5 %	17.5 %	52.9 %	38.6 %	17.2 %

Population Group	White	Black/ African- American	AIAN	ΑΡΙ	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
La Salle County	98.0 %	1.2 %	0.5 %	0.3 %	16.5 %	83.5 %	46.6 %	34.0 %	16.7 %
Lavaca County	91.3 %	7.6 %	0.5 %	0.6 %	83.8 %	16.2 %	57.4 %	45.3 %	23.6 %
Lee County	87.3 %	10.9 %	1.0 %	0.7 %	78.0 %	22.0 %	51.9 %	38.0 %	17.5 %
Leon County	89.7 %	8.6 %	0.7 %	1.0 %	87.1 %	12.9 %	56.6 %	44.6 %	22.5 %
Liberty County	86.0 %	12.1 %	1.0 %	0.8 %	82.0 %	18.0 %	45.9 %	31.6 %	12.3 %
Limestone County	79.3 %	19.2 %	1.0 %	0.6 %	81.9 %	18.1 %	52.2 %	39.7 %	18.3 %
Lipscomb County	94.8 %	1.9 %	2.5 %	0.7 %	69.0 %	31.0 %	46.9 %	35.4 %	15.8 %
Live Oak County	97.6 %	1.0 %	1.0 %	0.5 %	63.2 %	36.8 %	57.1 %	44.9 %	21.7 %
Llano County	97.0 %	1.2 %	1.0 %	0.8 %	91.3 %	8.7 %	70.7 %	60.8 %	33.3 %
Loving County	93.5 %	4.3 %	2.2 %	0.0 %	80.4 %	19.6 %	63.0 %	43.5 %	10.9 %
Lubbock County	88.2 %	8.2 %	1.1 %	2.5 %	67.8 %	32.2 %	40.3 %	29.0 %	12.5 %
Lynn County	95.0 %	2.8 %	1.8 %	0.4 %	54.6 %	45.4 %	49.0 %	35.5 %	17.8 %
McCulloch County	95.6 %	2.8 %	1.0 %	0.5 %	70.4 %	29.6 %	55.7 %	43.2 %	21.4 %
McLennan County	80.6 %	16.2 %	1.2 %	2.0 %	76.7 %	23.3 %	43.1 %	31.4 %	14.0 %
McMullen County	97.1 %	2.1 %	0.0 %	0.9 %	64.6 %	35.4 %	63.7 %	50.1 %	27.4 %
Madison County	80.6 %	17.3 %	1.2 %	0.9 %	82.7 %	17.3 %	50.1 %	37.6 %	17.8 %
Marion County	73.4 %	24.8 %	1.2 %	0.7 %	96.0 %	4.0 %	62.0 %	49.1 %	22.9 %
Martin County	96.0 %	2.6 %	0.9 %	0.5 %	55.5 %	44.5 %	44.2 %	31.3 %	13.6 %
Mason County	98.1 %	0.9 %	0.5 %	0.4 %	79.0 %	21.0 %	63.2 %	50.3 %	26.7 %
Matagorda County	83.9 %	12.6 %	1.2 %	2.3 %	61.8 %	38.2 %	49.1 %	36.1 %	15.9 %
Maverick County	97.6 %	0.5 %	1.4 %	0.5 %	4.4 %	95.6 %	40.0 %	27.8 %	11.9 %
Medina County	96.4 %	1.6 %	1.1 %	0.9 %	49.7 %	50.3 %	50.6 %	36.6 %	15.2 %
Menard County	97.0 %	0.7 %	2.0 %	0.3 %	65.2 %	34.8 %	64.2 %	53.0 %	27.4 %
Midland County	89.8 %	7.4 %	1.2 %	1.6 %	61.6 %	38.4 %	43.6 %	31.2 %	12.4 %
Milam County	87.5 %	10.9 %	1.1 %	0.5 %	76.5 %	23.5 %	52.2 %	39.8 %	18.9 %
Mills County	97.7 %	1.2 %	0.8 %	0.3 %	83.5 %	16.5 %	59.6 %	47.3 %	25.6 %
Mitchell County	93.3 %	4.8 %	1.3 %	0.6 %	66.1 %	33.9 %	52.5 %	40.0 %	19.3 %
Montague County	97.1 %	1.0 %	1.4 %	0.5 %	90.2 %	9.8 %	55.0 %	42.5 %	21.2 %
Montgomery County	91.0 %	5.1 %	1.1 %	2.8 %	79.4 %	20.6 %	46.1 %	31.4 %	11.8 %
Moore County	90.9 %	1.8 %	1.5 %	5.7 %	47.3 %	52.7 %	39.3 %	26.9 %	10.7 %
Morris County	73.9 %	24.6 %	1.0 %	0.6 %	91.8 %	8.2 %	54.6 %	43.3 %	21.0 %
Motley County	96.2 %	2.2 %	1.5 %	0.2 %	86.0 %	14.0 %	62.0 %	51.3 %	31.3 %
Nacogdoches County	77.6 %	19.9 %	1.0 %	1.5 %	83.0 %	17.0 %	39.3 %	29.0 %	12.9 %
Navarro County	82.5 %	14.8 %	1.1 %	1.6 %	76.6 %	23.4 %	48.0 %	35.3 %	16.0 %
Newton County	78.4 %	20.2 %	0.7 %	0.7 %	96.8 %	3.2 %	53.1 %	39.4 %	17.7 %
Nolan County	92.4 %	5.9 %	1.0 %	0.7 %	65.6 %	34.4 %	50.6 %	38.6 %	18.7 %

Population Group	White	Black/ African- American	AIAN	ΑΡΙ	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
Nueces County	92.3 %	4.5 %	0.9 %	2.3 %	38.6 %	61.4 %	45.7 %	32.9 %	13.7 %
Ochiltree County	96.8 %	0.9 %	1.7 %	0.5 %	52.2 %	47.8 %	40.3 %	27.7 %	12.2 %
Oldham County	93.5 %	4.4 %	0.8 %	1.4 %	87.7 %	12.3 %	47.6 %	34.0 %	14.2 %
Orange County	88.7 %	9.4 %	0.7 %	1.3 %	94.1 %	5.9 %	49.5 %	36.0 %	15.5 %
Palo Pinto County	95.6 %	2.8 %	0.8 %	0.8 %	81.9 %	18.1 %	51.9 %	38.9 %	17.6 %
Panola County	81.3 %	17.5 %	0.7 %	0.6 %	92.1 %	7.9 %	50.4 %	38.5 %	17.3 %
Parker County	96.5 %	1.6 %	1.0 %	1.0 %	89.6 %	10.4 %	50.6 %	35.2 %	13.5 %
Parmer County	95.8 %	1.8 %	1.6 %	0.8 %	40.7 %	59.3 %	41.9 %	29.0 %	13.2 %
Pecos County	96.6 %	1.2 %	1.2 %	1.0 %	28.0 %	72.0 %	44.7 %	32.3 %	14.0 %
Polk County	86.8 %	9.9 %	2.4 %	0.8 %	88.3 %	11.7 %	56.1 %	43.9 %	20.8 %
Potter County	84.3 %	10.0 %	1.4 %	4.3 %	64.5 %	35.5 %	41.7 %	29.7 %	12.8 %
Presidio County	96.6 %	1.0 %	1.2 %	1.1 %	15.1 %	84.9 %	49.8 %	37.3 %	18.9 %
Rains County	94.7 %	3.3 %	1.4 %	0.7 %	92.3 %	7.7 %	59.0 %	46.1 %	21.6 %
Randall County	94.2 %	2.9 %	1.0 %	1.8 %	82.8 %	17.2 %	45.5 %	33.1 %	13.8 %
Reagan County	95.7 %	2.7 %	1.0 %	0.6 %	39.3 %	60.7 %	42.9 %	29.8 %	10.7 %
Real County	96.4 %	1.4 %	1.7 %	0.5 %	74.1 %	25.9 %	62.3 %	50.6 %	24.8 %
Red River County	79.7 %	19.0 %	1.1 %	0.3 %	93.6 %	6.4 %	58.7 %	45.6 %	23.3 %
Reeves County	95.2 %	2.8 %	0.9 %	1.1 %	19.8 %	80.2 %	47.0 %	34.9 %	16.7 %
Refugio County	92.0 %	6.6 %	0.7 %	0.7 %	51.8 %	48.2 %	55.3 %	41.8 %	21.6 %
Roberts County	96.7 %	1.4 %	0.9 %	0.9 %	89.1 %	10.9 %	52.0 %	39.2 %	19.9 %
Robertson County	74.2 %	23.9 %	1.1 %	0.8 %	81.1 %	18.9 %	51.8 %	38.5 %	18.1 %
Rockwall County	89.6 %	6.4 %	0.8 %	3.2 %	84.2 %	15.8 %	45.5 %	29.7 %	11.1 %
Runnels County	95.9 %	2.1 %	1.2 %	0.7 %	67.4 %	32.6 %	54.2 %	41.3 %	21.2 %
Rusk County	81.2 %	17.1 %	1.0 %	0.7 %	86.0 %	14.0 %	49.7 %	36.9 %	16.6 %
Sabine County	91.1 %	7.7 %	0.6 %	0.5 %	96.6 %	3.4 %	62.8 %	51.5 %	27.5 %
San Augustine County	74.2 %	24.9 %	0.5 %	0.5 %	93.7 %	6.3 %	59.6 %	47.1 %	24.9 %
San Jacinto County	87.3 %	11.2 %	0.9 %	0.6 %	88.6 %	11.4 %	53.9 %	41.5 %	17.6 %
San Patricio County	95.4 %	2.4 %	0.9 %	1.3 %	44.9 %	55.1 %	46.6 %	33.3 %	14.7 %
San Saba County	97.3 %	1.0 %	1.5 %	0.3 %	73.6 %	26.4 %	57.6 %	46.5 %	22.6 %
Schleicher County	97.1 %	1.7 %	0.7 %	0.5 %	51.9 %	48.1 %	45.3 %	32.7 %	14.2 %
Scurry County	94.6 %	3.6 %	1.1 %	0.7 %	64.4 %	35.6 %	48.0 %	36.4 %	17.2 %
Shackelford County	97.0 %	1.9 %	0.6 %	0.5 %	90.5 %	9.5 %	54.8 %	40.6 %	18.4 %
Shelby County	79.6 %	19.1 %	0.8 %	0.5 %	84.5 %	15.5 %	47.8 %	35.4 %	16.7 %
Sherman County	97.3 %	0.7 %	1.3 %	0.6 %	59.7 %	40.3 %	46.8 %	31.6 %	15.0 %
Smith County	78.2 %	19.3 %	0.9 %	1.6 %	83.3 %	16.7 %	46.6 %	34.2 %	15.8 %
Somervell County	95.8 %	1.8 %	1.5 %	0.9 %	81.1 %	18.9 %	51.2 %	37.1 %	16.7 %

Population Group	White	Black/ African-	ΔΙΔΝ	۸DI	Non- Hispanic/	Hispanic/	Female Age	Female Age	Female Age
Starr County	90 1 %		0.3 %	AFI 0.3 %	4 3 %	95.7 %	40 Flus	25.6 %	11 2 %
Stephens County	97.0 %	1.8 %	0.8 %	0.0 %	80.0 %	20.0 %	53.4 %	41.5 %	20.2 %
Sterling County	95.1 %	1.0 %	3.2 %	0.4 %	66.4 %	33.6 %	52.4 %	38.5 %	17.9 %
Stonewall County	93.1 %	3.9%	1.7 %	1.0 %	84.4 %	15.6 %	59.3 %	47.1 %	27.0 %
Sutton County	98.2 %	0.7 %	0.8 %	0.3 %	40.9 %	59.1 %	48.8 %	35.8 %	15.4 %
Swisher County	92.3 %	5.5%	1.7 %	0.5 %	59.2 %	40.8 %	40.0 %	37.6 %	20.4 %
Tarrant County	77.2 %	16.4 %	1.7 %	5.5 %	73.6 %	26.4 %	42.1 %	27.7 %	10.3 %
Taylor County	88.4 %	81%	1.0 %	24%	77.7 %	22.3 %	44.1 %	32.4 %	14.9 %
	96.8 %	0.6%	22%	0.4 %	53.1 %	46.9 %	59.6 %	49.0 %	24.8 %
Terry County	94.2 %	4 1 %	1.0 %	0.7 %	499%	50.1 %	47.2 %	34.8 %	16.9 %
Throckmorton County	96.7 %	1.2 %	1.5 %	0.6 %	89.3 %	10.7 %	58.9 %	45.1 %	25.7 %
Titus County	86.0 %	10.7 %	2.2 %	1.1 %	61.0 %	39.0 %	41.9 %	29.2 %	12.9 %
Tom Green County	92.4 %	4.8 %	1.2 %	1.6 %	63.8 %	36.2 %	46.0 %	34.1 %	15.4 %
Travis County	82.1 %	9.8 %	1.5 %	6.6 %	66.9 %	33.1 %	38.3 %	24.7 %	8.5 %
Trinity County	88.1 %	10.4 %	1.0 %	0.5 %	91.9 %	8.1 %	58.8 %	47.1 %	22.8 %
Tyler County	90.0 %	9.0 %	0.6 %	0.4 %	96.6 %	3.4 %	57.9 %	44.9 %	22.1 %
Upshur County	88.5 %	9.8 %	1.0 %	0.7 %	92.9 %	7.1 %	52.2 %	39.0 %	17.2 %
Upton County	93.9 %	2.8 %	2.8 %	0.4 %	49.6 %	50.4 %	47.2 %	35.4 %	15.5 %
Uvalde County	97.0 %	1.1 %	1.0 %	0.9 %	30.3 %	69.7 %	45.8 %	33.8 %	15.9 %
Val Verde County	96.4 %	1.9 %	0.7 %	0.9 %	18.2 %	81.8 %	42.1 %	29.9 %	13.8 %
Van Zandt County	94.9 %	3.4 %	1.1 %	0.5 %	90.9 %	9.1 %	54.5 %	41.1 %	19.3 %
Victoria County	90.7 %	7.1 %	0.9 %	1.4 %	56.0 %	44.0 %	47.1 %	34.5 %	14.8 %
Walker County	77.4 %	20.3 %	0.9 %	1.3 %	83.8 %	16.2 %	40.8 %	30.1 %	13.3 %
Waller County	71.1 %	26.5 %	1.5 %	0.8 %	71.7 %	28.3 %	42.1 %	29.2 %	10.9 %
Ward County	91.9 %	5.9 %	1.4 %	0.8 %	52.0 %	48.0 %	46.9 %	35.0 %	15.9 %
Washington County	79.9 %	18.1 %	0.5 %	1.5 %	86.6 %	13.4 %	54.2 %	42.2 %	20.9 %
Webb County	98.1 %	0.6 %	0.6 %	0.7 %	4.0 %	96.0 %	35.1 %	22.5 %	9.1 %
Wharton County	83.8 %	15.1 %	0.6 %	0.5 %	63.0 %	37.0 %	48.6 %	36.0 %	16.7 %
Wheeler County	95.0 %	3.2 %	1.2 %	0.6 %	75.4 %	24.6 %	51.3 %	40.1 %	19.6 %
Wichita County	85.1 %	10.8 %	1.4 %	2.7 %	83.8 %	16.2 %	46.1 %	34.2 %	15.7 %
Wilbarger County	89.0 %	8.5 %	1.5 %	1.0 %	73.2 %	26.8 %	49.1 %	37.2 %	17.6 %
Willacy County	97.6 %	1.3 %	0.6 %	0.5 %	11.0 %	89.0 %	43.4 %	31.5 %	14.3 %
Williamson County	86.0 %	7.3 %	1.0 %	5.7 %	76.7 %	23.3 %	42.0 %	26.8 %	10.2 %
Wilson County	96.0 %	2.1 %	1.1 %	0.9 %	61.5 %	38.5 %	51.2 %	35.7 %	13.5 %
Winkler County	94.4 %	3.3 %	1.9 %	0.5 %	46.4 %	53.6 %	45.0 %	31.0 %	13.4 %
Wise County	96.8 %	1.4 %	1.2 %	0.6 %	82.9 %	17.1 %	48.9 %	33.8 %	13.6 %

Population Group	White	Black/ African- American	AIAN	ΑΡΙ	Non- Hispanic/ Latina	Hispanic/ Latina	Female Age 40 Plus	Female Age 50 Plus	Female Age 65 Plus
Wood County	93.1 %	5.3 %	1.0 %	0.6 %	91.7 %	8.3 %	60.7 %	49.2 %	26.1 %
Yoakum County	96.2 %	1.7 %	1.7 %	0.4 %	41.4 %	58.6 %	41.1 %	28.6 %	12.0 %
Young County	96.3 %	1.8 %	1.2 %	0.7 %	84.6 %	15.4 %	53.9 %	42.0 %	20.9 %
Zapata County	98.8 %	0.5 %	0.4 %	0.4 %	6.9 %	93.1 %	36.5 %	25.1 %	11.1 %
Zavala County	97.7 %	1.3 %	0.7 %	0.3 %	6.7 %	93.3 %	41.8 %	30.4 %	13.3 %

Data are for 2011.

Data are in the percentage of women in the population.

Source: US Census Bureau – Population Estimates.

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un- employed	Foreign Born	Linguis- tically Isolated	in Rural Areas	In Medically Under- served Areas	No Health Insurance (Age: 40-64)
US	14.6 %	14.3 %	33.3 %	8.7 %	12.8 %	4.7 %	19.3 %	23.3 %	16.6 %
Texas	19.6 %	17.0 %	37.1 %	7.3 %	16.2 %	8.2 %	15.3 %	32.2 %	24.7 %
Anderson County	21.3 %	18.8 %	43.1 %	7.4 %	6.2 %	1.5 %	67.1 %	100.0 %	25.0 %
Andrews County	26.9 %	17.0 %	29.0 %	4.9 %	13.3 %	11.4 %	16.5 %	0.0 %	22.2 %
Angelina County	22.2 %	18.4 %	44.5 %	6.9 %	7.7 %	4.6 %	43.1 %	16.4 %	24.3 %
Aransas County	13.3 %	17.6 %	40.3 %	6.4 %	6.0 %	2.8 %	27.3 %	100.0 %	25.7 %
Archer County	15.0 %	13.1 %	29.5 %	2.7 %	3.6 %	0.8 %	89.0 %	70.6 %	21.6 %
Armstrong County	8.6 %	11.1 %	31.3 %	3.2 %	4.1 %	0.0 %	100.0 %	100.0 %	23.5 %
Atascosa County	24.8 %	17.7 %	46.6 %	10.1 %	6.1 %	8.3 %	60.7 %	100.0 %	27.0 %
Austin County	17.3 %	9.3 %	30.4 %	5.7 %	9.8 %	4.5 %	66.3 %	100.0 %	21.0 %
Bailey County	28.3 %	19.2 %	48.5 %	6.2 %	12.9 %	4.6 %	28.8 %	0.0 %	32.0 %
Bandera County	12.6 %	17.4 %	36.1 %	6.4 %	3.6 %	0.5 %	100.0 %	100.0 %	25.3 %
Bastrop County	18.9 %	14.2 %	36.4 %	7.7 %	10.2 %	4.9 %	63.9 %	100.0 %	24.2 %
Baylor County	13.8 %	15.8 %	48.8 %	4.9 %	2.0 %	0.8 %	100.0 %	100.0 %	25.2 %
Bee County	28.8 %	20.6 %	47.0 %	8.7 %	4.5 %	6.8 %	43.0 %	100.0 %	22.4 %
Bell County	11.6 %	14.8 %	37.1 %	8.3 %	8.3 %	3.3 %	15.2 %	3.0 %	20.1 %
Bexar County	18.3 %	17.1 %	41.3 %	7.3 %	12.8 %	7.2 %	4.5 %	27.2 %	22.6 %
Blanco County	12.3 %	8.1 %	35.2 %	6.2 %	7.3 %	5.5 %	100.0 %	100.0 %	25.5 %
Borden County	13.0 %	0.0 %	27.9 %	2.3 %	2.9 %	3.0 %	100.0 %	100.0 %	15.1 %
Bosque County	19.2 %	15.2 %	40.3 %	8.7 %	5.8 %	3.1 %	81.2 %	100.0 %	26.1 %
Bowie County	15.4 %	18.4 %	39.8 %	9.2 %	3.2 %	1.2 %	35.4 %	13.8 %	21.5 %
Brazoria County	15.1 %	10.7 %	26.6 %	5.7 %	12.0 %	4.0 %	22.5 %	14.6 %	20.7 %
Brazos County	15.2 %	29.7 %	34.0 %	7.0 %	12.7 %	6.6 %	12.1 %	25.0 %	21.7 %

Table 2.8. Population characteristics – socioeconomics

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un-	Foreign	Linguis- tically	in Rural Areas	In Medically Under- served Areas	No Health Insurance (Age: 40-64)
Brewster County	18.7 %	13.9 %	39.7 %	3.7 %	6.0 %	4.1 %	34.9 %	100.0 %	24.5 %
Briscoe County	18.9 %	22.9 %	42.9 %	7.2 %	7.5 %	4.7 %	100.0 %	100.0 %	33.9 %
Brooks County	45.2 %	39.6 %	59.0 %	11.5 %	4.8 %	16.4 %	31.8 %	100.0 %	26.9 %
Brown County	17.0 %	17.1 %	42.2 %	3.5 %	4.1 %	1.6 %	40.4 %	100.0 %	20.9 %
Burleson County	23.7 %	13.3 %	39.1 %	6.0 %	7.5 %	2.4 %	76.7 %	100.0 %	26.9 %
Burnet County	14.9 %	14.0 %	36.3 %	5.6 %	6.9 %	3.3 %	55.7 %	100.0 %	24.9 %
Caldwell County	23.2 %	20.7 %	44.8 %	11.0 %	5.4 %	4.1 %	42.3 %	100.0 %	27.1 %
Calhoun County	23.1 %	16.7 %	38.0 %	10.9 %	8.5 %	7.2 %	44.7 %	100.0 %	23.1 %
Callahan County	13.0 %	12.7 %	41.0 %	6.0 %	1.8 %	0.5 %	72.2 %	100.0 %	25.3 %
Cameron County	37.5 %	34.9 %	63.2 %	8.0 %	25.0 %	18.3 %	8.4 %	63.2 %	43.6 %
Camp County	25.6 %	18.6 %	48.2 %	8.1 %	11.8 %	5.4 %	61.5 %	100.0 %	27.6 %
Carson County	13.0 %	6.5 %	27.7 %	2.4 %	2.3 %	0.5 %	95.2 %	100.0 %	14.3 %
Cass County	17.9 %	18.9 %	42.9 %	8.9 %	1.8 %	0.6 %	74.0 %	100.0 %	22.5 %
Castro County	32.3 %	24.6 %	51.2 %	4.3 %	20.5 %	12.8 %	45.8 %	100.0 %	33.2 %
Chambers County	14.2 %	8.3 %	22.4 %	5.6 %	6.1 %	2.8 %	45.7 %	100.0 %	16.8 %
Cherokee County	25.2 %	22.3 %	48.7 %	6.1 %	9.8 %	4.2 %	63.0 %	100.0 %	28.7 %
Childress County	15.7 %	12.5 %	45.5 %	2.9 %	4.5 %	1.1 %	33.1 %	100.0 %	25.4 %
Clay County	11.7 %	10.4 %	32.3 %	5.5 %	1.0 %	0.9 %	74.6 %	100.0 %	21.9 %
Cochran County	30.7 %	16.2 %	49.9 %	10.6 %	12.3 %	11.2 %	100.0 %	100.0 %	32.1 %
Coke County	14.2 %	13.6 %	38.3 %	7.1 %	3.9 %	1.1 %	100.0 %	100.0 %	28.2 %
Coleman County	20.0 %	30.8 %	53.6 %	6.1 %	2.0 %	1.4 %	51.5 %	100.0 %	29.1 %
Collin County	7.1 %	7.3 %	16.9 %	5.4 %	17.2 %	5.2 %	5.2 %	7.8 %	14.5 %
Collingsworth County	26.4 %	26.8 %	46.1 %	3.4 %	10.4 %	5.7 %	100.0 %	100.0 %	35.2 %
Colorado County	19.4 %	15.7 %	38.4 %	5.4 %	9.1 %	3.8 %	62.6 %	33.2 %	25.9 %
Comal County	11.1 %	9.5 %	25.0 %	6.0 %	6.2 %	2.5 %	46.1 %	0.0 %	18.4 %
Comanche County	23.2 %	23.4 %	46.4 %	5.0 %	7.7 %	2.7 %	71.5 %	100.0 %	32.1 %
Concho County	21.3 %	21.7 %	46.5 %	3.9 %	34.6 %	5.3 %	100.0 %	73.8 %	27.1 %
Cooke County	18.1 %	13.6 %	34.8 %	7.2 %	8.1 %	3.0 %	59.0 %	100.0 %	23.6 %
Coryell County	11.7 %	14.1 %	41.4 %	9.3 %	5.9 %	1.5 %	19.4 %	100.0 %	21.2 %
Cottle County	24.2 %	13.3 %	53.0 %	2.0 %	3.4 %	1.9 %	100.0 %	100.0 %	33.9 %
Crane County	28.9 %	19.3 %	32.0 %	9.1 %	13.4 %	12.1 %	10.7 %	100.0 %	22.8 %
Crockett County	40.0 %	18.0 %	36.1 %	10.8 %	15.1 %	15.4 %	22.7 %	100.0 %	26.5 %
Crosby County	28.0 %	27.4 %	50.5 %	4.8 %	5.2 %	7.7 %	100.0 %	100.0 %	27.8 %
Culberson County	38.6 %	32.3 %	56.1 %	15.0 %	16.4 %	11.5 %	100.0 %	100.0 %	34.6 %

	Less than HS	Income Below 100%	Income Below 250% Poverty (Age:	Un-	Foreign	Linguis- tically	In Rural	In Medically Under- served	No Health Insurance (Age:
Population Group	Education	Poverty	40-64)	employed	Born	Isolated	Areas	Areas	40-64)
	25.9 %	12.3 %	45.7 %	4.0 %	16.5 %	8.1 %	23.5 %	100.0 %	33.2 %
	23.3 %	18.3 %	40.9 %	8.2 %	23.0 %	10.9 %	0.7 %	9.0 %	29.1 %
Dawson County	32.0 %	20.6 %	44.2 %	7.2 %	7.1 %	7.2 %	16.3 %	100.0 %	26.4 %
Deaf Smith County	31.4 %	16.8 %	51.4 %	6.8 %	16.9 %	14.0 %	17.7 %	100.0 %	31.6 %
Delta County	15.9 %	20.2 %	43.9 %	6.4 %	2.2 %	1.1 %	100.0 %	100.0 %	23.9 %
Denton County	8.6 %	7.9 %	19.4 %	6.5 %	13.8 %	4.8 %	6.9 %	0.0 %	15.9 %
DeWitt County	24.6 %	14.7 %	37.8 %	4.3 %	2.7 %	3.2 %	49.6 %	100.0 %	21.7 %
Dickens County	26.0 %	20.5 %	47.1 %	3.7 %	4.4 %	1.3 %	100.0 %	100.0 %	26.3 %
Dimmit County	42.1 %	33.0 %	54.0 %	11.0 %	8.6 %	25.2 %	39.5 %	100.0 %	29.5 %
Donley County	16.3 %	12.5 %	45.1 %	2.4 %	1.9 %	0.5 %	100.0 %	100.0 %	27.2 %
Duval County	33.7 %	22.8 %	51.4 %	8.1 %	4.4 %	20.9 %	67.0 %	100.0 %	25.7 %
Eastland County	20.2 %	19.5 %	50.5 %	4.9 %	3.6 %	2.0 %	60.3 %	100.0 %	28.0 %
Ector County	26.9 %	16.2 %	40.2 %	5.7 %	12.4 %	7.0 %	9.5 %	11.2 %	27.3 %
Edwards County	27.0 %	20.8 %	49.9 %	9.5 %	7.8 %	5.7 %	100.0 %	100.0 %	34.5 %
Ellis County	16.5 %	11.4 %	29.1 %	6.9 %	8.0 %	4.3 %	32.0 %	64.0 %	21.4 %
El Paso County	28.0 %	25.0 %	54.6 %	7.6 %	26.5 %	19.9 %	2.2 %	37.8 %	36.1 %
Erath County	19.1 %	19.5 %	40.1 %	4.9 %	9.7 %	3.6 %	46.3 %	100.0 %	28.5 %
Falls County	23.7 %	23.6 %	51.0 %	7.8 %	4.9 %	3.2 %	67.4 %	100.0 %	26.3 %
Fannin County	18.9 %	15.3 %	40.6 %	7.5 %	3.4 %	1.0 %	70.5 %	100.0 %	25.8 %
Fayette County	19.9 %	12.8 %	30.3 %	2.6 %	7.0 %	5.4 %	67.1 %	100.0 %	20.9 %
Fisher County	17.1 %	13.6 %	40.3 %	5.5 %	3.0 %	2.7 %	100.0 %	100.0 %	23.2 %
Floyd County	27.4 %	21.8 %	44.0 %	4.7 %	6.4 %	8.1 %	53.3 %	100.0 %	27.3 %
Foard County	24.4 %	21.7 %	51.3 %	15.8 %	3.6 %	1.8 %	100.0 %	100.0 %	33.5 %
Fort Bend County	11.4 %	8.3 %	21.6 %	5.1 %	25.0 %	6.5 %	5.5 %	22.0 %	18.9 %
Franklin County	16.2 %	13.4 %	40.0 %	7.8 %	6.7 %	4.3 %	69.1 %	100.0 %	22.8 %
Freestone County	19.6 %	14.0 %	37.2 %	7.4 %	4.7 %	2.6 %	66.5 %	100.0 %	23.3 %
Frio County	36.2 %	22.1 %	54.2 %	9.5 %	8.3 %	12.2 %	22.2 %	100.0 %	24.7 %
Gaines County	38.1 %	19.0 %	43.8 %	3.3 %	21.5 %	14.0 %	63.0 %	100.0 %	31.8 %
Galveston County	13.6 %	13.1 %	28.6 %	7.7 %	9.7 %	3.5 %	6.1 %	8.6 %	19.6 %
Garza County	37.6 %	22.5 %	42.0 %	2.4 %	37.7 %	9.1 %	22.3 %	100.0 %	23.0 %
Gillespie County	13.6 %	9.1 %	30.0 %	3.8 %	6.3 %	4.1 %	53.7 %	0.0 %	24.7 %
Glasscock County	16.8 %	5.1 %	25.9 %	0.0 %	7.6 %	2.7 %	100.0 %	100.0 %	21.0 %
Goliad County	14.8 %	13.8 %	34.2 %	3.1 %	2.1 %	2.3 %	100.0 %	100.0 %	20.0 %
Gonzales County	31.0 %	22.3 %	49.0 %	9.8 %	13.6 %	8.9 %	65.3 %	100.0 %	29.3 %
	Less than HS	Income Below 100%	Income Below 250% Poverty (Age:	Un-	Foreign	Linguis- tically	In Rural	In Medically Under- served	No Health Insurance (Age:
-------------------	-----------------	-------------------------	---	----------	---------	---------------------	----------	-------------------------------------	---------------------------------
Population Group	Education	Poverty	40-64)	employed	Born	Isolated	Areas	Areas	40-64)
Gray County	21.2 %	14.6 %	38.5 %	8.1%	6.2 %	4.3 %	19.4 %	2.9 %	25.8 %
Grayson County	14.3 %	14.4 %	36.1 %	7.9 %	5.5 %	2.3 %	43.2 %	8.7 %	22.4 %
Gregg County	17.5 %	16.6 %	39.0 %	6.8 %	9.2 %	3.8 %	13.4 %	0.0 %	21.6 %
Grimes County	23.4 %	15.6 %	43.1 %	7.3 %	8.0 %	4.1 %	68.9 %	100.0 %	27.0 %
Guadalupe County	14.6 %	9.7 %	29.0 %	6.1 %	6.8 %	4.2 %	26.2 %	27.3 %	20.0 %
Hale County	30.3 %	20.0 %	48.4 %	6.6 %	9.6 %	7.9 %	23.1 %	0.0 %	27.7 %
Hall County	26.4 %	25.9 %	53.3 %	8.4 %	13.3 %	3.9 %	100.0 %	100.0 %	37.6 %
Hamilton County	17.4 %	12.5 %	42.2 %	6.0 %	3.6 %	2.6 %	64.4 %	0.0 %	25.8 %
Hansford County	24.4 %	13.3 %	34.9 %	3.1 %	18.2 %	7.9 %	40.3 %	0.0 %	27.7 %
Hardeman County	19.0 %	22.2 %	46.7 %	13.6 %	2.9 %	3.7 %	100.0 %	100.0 %	25.9 %
Hardin County	13.9 %	11.5 %	31.4 %	6.8 %	1.3 %	0.5 %	51.5 %	100.0 %	19.2 %
Harris County	22.1 %	17.3 %	38.1 %	7.6 %	25.0 %	12.6 %	1.2 %	17.1 %	26.9 %
Harrison County	15.3 %	14.5 %	37.9 %	6.6 %	5.0 %	2.1 %	56.1 %	100.0 %	22.4 %
Hartley County	22.3 %	8.0 %	25.8 %	2.5 %	5.1 %	3.8 %	57.3 %	100.0 %	20.0 %
Haskell County	21.1 %	17.0 %	48.2 %	10.7 %	4.4 %	3.9 %	47.6 %	100.0 %	27.3 %
Hays County	11.4 %	16.4 %	27.1 %	7.0 %	6.9 %	2.9 %	31.7 %	100.0 %	19.9 %
Hemphill County	17.5 %	16.5 %	22.6 %	0.9 %	11.6 %	6.8 %	27.0 %	0.0 %	20.6 %
Henderson County	20.2 %	16.0 %	43.8 %	8.3 %	5.5 %	1.3 %	60.1 %	0.0 %	28.2 %
Hidalgo County	39.7 %	35.3 %	64.7 %	10.1 %	29.6 %	21.6 %	5.1 %	100.0 %	45.0 %
Hill County	21.5 %	16.3 %	43.5 %	6.9 %	7.6 %	3.9 %	76.3 %	100.0 %	27.1 %
Hockley County	24.8 %	16.0 %	38.2 %	6.0 %	6.7 %	4.6 %	39.8 %	100.0 %	23.3 %
Hood County	14.3 %	11.3 %	27.9 %	6.5 %	5.3 %	1.2 %	32.8 %	0.0 %	21.0 %
Hopkins County	20.8 %	18.2 %	43.0 %	7.9 %	7.7 %	3.7 %	59.6 %	100.0 %	27.2 %
Houston County	21.3 %	20.7 %	48.9 %	7.6 %	4.4 %	2.3 %	73.5 %	100.0 %	29.4 %
Howard County	27.8 %	19.7 %	40.8 %	8.1 %	15.2 %	3.3 %	20.1 %	100.0 %	22.0 %
Hudspeth County	46.9 %	44.7 %	65.1 %	9.3 %	32.5 %	22.9 %	100.0 %	100.0 %	39.1 %
Hunt County	19.4 %	18.3 %	38.3 %	9.4 %	6.4 %	1.6 %	56.6 %	100.0 %	24.0 %
Hutchinson County	16.5 %	14.9 %	32.7 %	7.7 %	6.3 %	2.6 %	22.6 %	100.0 %	22.5 %
Irion County	19.0 %	3.4 %	30.2 %	4.5 %	1.5 %	3.8 %	100.0 %	100.0 %	22.9 %
Jack County	19.4 %	16.6 %	35.0 %	5.9 %	4.4 %	0.9 %	53.2 %	100.0 %	23.0 %
Jackson County	22.2 %	12.5 %	36.4 %	5.5 %	5.4 %	4.0 %	61.8 %	100.0 %	22.2 %
Jasper County	17.3 %	17.5 %	45.7 %	7.6 %	3.0 %	1.6 %	78.2 %	0.0 %	25.3 %
Jeff Davis County	15.1 %	9.7 %	36.0 %	6.6 %	6.9 %	1.4 %	100.0 %	100.0 %	28.4 %
Jefferson County	17.9 %	18.9 %	39.8 %	9.5 %	10.0 %	4.1 %	8.4 %	6.2 %	21.8 %

	Less than HS	Income Below 100%	Income Below 250% Poverty (Age:	Un-	Foreign	Linguis- tically	In Rural	In Medically Under- served	No Health Insurance (Age:
Population Group	Education	Poverty	40-64)	employed	Born	16.0 %	Areas	Areas	40-64)
Jim Wolls County	31.2 %	22.0 %	44.0 %	7.6%	3 / 0/	0.1 %	17.4 %	100.0 %	20.9 /0
	17.0 %	10.9.0/	22 7 0/	7.0 /0	7.0%	3.1 /0	40.1 /0	17.7.0/	21.4 /0
	21.2 %	12.0 %	33.7 %	6.7.9/	1.0 %	2.9 %	95 1 0/	100.0.%	24.5 %
Karpos County	30.6%	13.0 %	44.7 %	0.7 %	4.0 %	3.0 %	39.1.%	100.0 %	25.4 %
Kaufman County	17.2 %	11.9.%	42.0 %	9.7%	6.6%	3.0 %	19.9 %	17.5 %	21.0 /0
Kandall County	0.2.9/	0.0%	10.2.0/	0.7 70	0.0 %	3.9 %	40.0 %	17.5 %	22.4 %
Kendali County	9.3 %	0.9 %	19.3 %	4.1 %	0.4 %	3.4 %	00.2 %	0.0 %	17.0 %
Kenedy County	20.2 %	19.1 %	54.0 %	0.0 %	2.2 %	3.7 %	100.0 %	100.0 %	21.1 %
Kent County	10.9 %	7.0 %	40.2 %	4.0 %	2.2 %	1.5 %	100.0 %	100.0 %	19.7 %
	11.9 %	14.1 %	36.5 %	5.4 %	6.6 %	3.9 %	41.1 %	0.0 %	24.6 %
	22.2 %	17.4 %	44.3 %	4.1 %	10.3 %	5.6 %	44.3 %	100.0 %	31.8 %
King County	14.9 %	5.5 %	36.8 %	2.2 %	13.0 %	5.0 %	100.0 %	100.0 %	15.1 %
Kinney County	24.1 %	27.9 %	44.9 %	10.9 %	8.0 %	5.7 %	20.5 %	100.0 %	26.7 %
Kleberg County	24.3 %	24.8 %	44.8 %	11.1 %	6.4 %	8.8 %	18.9 %	100.0 %	22.9 %
Knox County	24.7 %	18.9 %	47.7 %	6.3 %	7.7 %	5.5 %	100.0 %	50.3 %	32.8 %
Lamar County	18.1 %	17.0 %	44.6 %	6.8 %	4.4 %	1.2 %	47.1 %	100.0 %	24.0 %
Lamb County	27.0 %	21.1 %	49.3 %	8.3 %	10.1 %	9.3 %	57.7 %	100.0 %	29.8 %
Lampasas County	15.1 %	15.3 %	36.8 %	8.4 %	7.3 %	1.8 %	68.3 %	100.0 %	25.3 %
La Salle County	47.2 %	24.3 %	49.5 %	8.3 %	7.1 %	14.1 %	46.4 %	100.0 %	29.5 %
Lavaca County	22.5 %	10.1 %	35.4 %	6.1 %	5.7 %	3.2 %	81.3 %	100.0 %	22.4 %
Lee County	20.2 %	12.5 %	35.7 %	4.9 %	6.3 %	4.6 %	69.7 %	100.0 %	23.8 %
Leon County	20.2 %	17.5 %	41.9 %	5.5 %	4.8 %	2.0 %	100.0 %	100.0 %	26.7 %
Liberty County	24.9 %	16.2 %	41.3 %	10.4 %	6.6 %	3.2 %	63.2 %	100.0 %	26.5 %
Limestone County	21.3 %	19.1 %	43.8 %	5.1 %	8.6 %	3.3 %	53.6 %	100.0 %	22.5 %
Lipscomb County	20.4 %	14.7 %	33.0 %	1.8 %	12.1 %	7.9 %	100.0 %	14.9 %	25.9 %
Live Oak County	22.3 %	14.6 %	36.9 %	4.4 %	4.4 %	4.3 %	100.0 %	100.0 %	21.2 %
Llano County	12.7 %	13.1 %	35.0 %	4.8 %	2.9 %	0.8 %	45.2 %	100.0 %	22.2 %
Loving County	7.1 %	16.1 %	34.0 %	6.7 %	0.0 %	0.0 %	100.0 %	0.0 %	20.3 %
Lubbock County	16.5 %	19.1 %	39.3 %	6.2 %	5.5 %	3.0 %	11.3 %	24.1 %	23.6 %
Lynn County	23.9 %	18.5 %	42.3 %	2.9 %	6.9 %	9.9 %	56.7 %	100.0 %	26.8 %
McCulloch County	20.5 %	20.8 %	46.1 %	3.4 %	5.7 %	2.8 %	35.3 %	100.0 %	27.5 %
McLennan County	19.2 %	21.7 %	40.0 %	7.2 %	8.5 %	5.0 %	23.4 %	45.2 %	21.4 %
McMullen County	21.6 %	15.2 %	23.9 %	7.4 %	7.3 %	8.5 %	100.0 %	100.0 %	19.8 %
Madison County	23.8 %	22.7 %	45.9 %	6.6 %	6.4 %	1.9 %	67.4 %	100.0 %	29.7 %

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un- emploved	Foreign Born	Linguis- tically Isolated	In Rural Areas	In Medically Under- served Areas	No Health Insurance (Age: 40-64)
Marion County	20.1 %	22.6 %	49.8 %	8.9 %	2.2 %	0.6 %	100.0 %	100.0 %	24.8 %
Martin County	27.8 %	11.5 %	34.6 %	4.7 %	9.8 %	6.2 %	100.0 %	28.4 %	24.3 %
Mason County	19.5 %	13.2 %	41.3 %	6.5 %	5.0 %	3.3 %	100.0 %	100.0 %	26.9 %
Matagorda County	21.4 %	21.2 %	40.8 %	10.2 %	10.3 %	4.6 %	36.4 %	100.0 %	26.6 %
Maverick County	43.9 %	31.5 %	66.1 %	11.9 %	34.9 %	37.6 %	9.3 %	100.0 %	40.5 %
Medina County	20.5 %	16.6 %	38.7 %	8.4 %	5.8 %	6.0 %	61.6 %	100.0 %	24.4 %
Menard County	18.4 %	19.3 %	50.8 %	9.3 %	5.5 %	4.1 %	100.0 %	100.0 %	34.2 %
Midland County	18.2 %	11.5 %	29.9 %	4.0 %	8.6 %	6.7 %	12.3 %	12.0 %	21.5 %
Milam County	18.4 %	17.0 %	43.5 %	5.9 %	4.5 %	3.9 %	56.2 %	100.0 %	25.3 %
Mills County	22.5 %	16.8 %	43.6 %	6.5 %	8.2 %	1.8 %	100.0 %	100.0 %	30.9 %
Mitchell County	23.8 %	13.3 %	41.8 %	5.7 %	5.8 %	5.7 %	36.7 %	100.0 %	22.8 %
Montague County	19.3 %	13.1 %	38.1 %	7.1 %	4.1 %	0.9 %	58.9 %	100.0 %	25.7 %
Montgomery County	13.9 %	11.5 %	24.6 %	6.6 %	12.3 %	4.2 %	22.7 %	36.8 %	19.1 %
Moore County	28.9 %	15.1 %	42.9 %	5.4 %	22.6 %	13.3 %	16.8 %	0.0 %	28.7 %
Morris County	19.4 %	17.4 %	45.4 %	9.6 %	3.7 %	1.6 %	78.4 %	100.0 %	23.3 %
Motley County	15.4 %	21.6 %	46.9 %	7.5 %	2.0 %	0.0 %	100.0 %	100.0 %	27.9 %
Nacogdoches County	19.5 %	24.1 %	44.5 %	7.3 %	8.7 %	3.3 %	46.5 %	0.0 %	25.9 %
Navarro County	23.1 %	20.0 %	44.3 %	8.5 %	10.9 %	6.7 %	52.7 %	100.0 %	25.6 %
Newton County	19.3 %	17.4 %	47.4 %	10.9 %	1.9 %	0.4 %	100.0 %	100.0 %	25.0 %
Nolan County	22.6 %	18.9 %	46.1 %	8.4 %	5.2 %	4.5 %	32.7 %	100.0 %	24.5 %
Nueces County	20.8 %	18.8 %	41.1 %	8.0 %	7.5 %	7.6 %	6.4 %	7.4 %	23.8 %
Ochiltree County	30.5 %	21.6 %	33.2 %	8.4 %	19.6 %	12.9 %	13.9 %	100.0 %	26.6 %
Oldham County	18.0 %	20.0 %	35.4 %	6.6 %	2.5 %	0.4 %	100.0 %	100.0 %	19.4 %
Orange County	14.4 %	13.6 %	35.6 %	7.2 %	2.7 %	1.1 %	35.2 %	9.9 %	20.4 %
Palo Pinto County	22.2 %	15.8 %	45.2 %	8.3 %	6.1 %	4.2 %	50.2 %	30.5 %	26.7 %
Panola County	18.1 %	12.8 %	35.5 %	6.6 %	3.5 %	0.9 %	72.7 %	100.0 %	20.5 %
Parker County	13.4 %	10.9 %	25.5 %	6.0 %	4.1 %	1.4 %	56.1 %	0.0 %	19.8 %
Parmer County	35.0 %	19.7 %	47.9 %	3.3 %	18.6 %	11.9 %	60.0 %	100.0 %	30.3 %
Pecos County	34.9 %	17.0 %	40.5 %	3.1 %	16.0 %	15.0 %	39.8 %	100.0 %	28.6 %
Polk County	22.9 %	19.9 %	48.1 %	10.3 %	6.1 %	1.8 %	77.6 %	100.0 %	28.7 %
Potter County	24.3 %	22.7 %	49.1 %	6.3 %	13.8 %	7.3 %	9.0 %	8.0 %	29.1 %
Presidio County	46.3 %	22.9 %	58.1 %	11.4 %	28.2 %	30.7 %	40.5 %	100.0 %	39.1 %
Rains County	18.4 %	11.8 %	42.1 %	8.2 %	4.0 %	1.1 %	93.2 %	0.0 %	27.1 %
Randall County	8.4 %	9.4 %	24.6 %	4.4 %	4.2 %	1.5 %	14.4 %	5.7 %	16.5 %

Develotion Occurs	Less than HS	Income Below 100%	Income Below 250% Poverty (Age:	Un-	Foreign	Linguis- tically	In Rural	In Medically Under- served	No Health Insurance (Age:
Population Group	Education	10.8 %	40-64)	employed	18.2 %	12.2 %	Areas	Areas	40-64)
Real County	25.3 %	25.1 %	52.7 %	14.4 %	56%	3.9 %	100.0 %	100.0 %	34.9 %
Red River County	26.5 %	16.8 %	48.2 %	66%	2.8 %	21%	75.7 %	100.0 %	24.6 %
Reeves County	41.8 %	28.4 %	48.5 %	11.2 %	17.2 %	15.0 %	14.5 %	100.0 %	28.8 %
Refugio County	25.4 %	16.8 %	40.9 %	86%	34%	4.0 %	60.7 %	100.0 %	22.2 %
Roberts County	72%	10.2 %	26.3 %	4.0 %	15%	0.0 %	100.0 %	0.0%	18.0 %
Robertson County	23.9 %	22.1 %	43.7 %	88%	72%	2.5 %	73.9 %	100.0 %	25.1 %
Rockwall County	9.2 %	5.5 %	16.9 %	5.7 %	10.3 %	2.4 %	16.0 %	0.0 %	15.9 %
Runnels County	22.2 %	20.0 %	43.3 %	1.9 %	5.7 %	2.6 %	40.8 %	100.0 %	24.8 %
Rusk County	19.9 %	13.5 %	39.6 %	4.8 %	6.2 %	2.2 %	65.9 %	100.0 %	25.1 %
Sabine County	20.3 %	21.8 %	45.4 %	9.9 %	1.0 %	1.4 %	100.0 %	100.0 %	23.9 %
San Augustine County	27.1 %	27.2 %	50.5 %	12.2 %	1.8 %	1.0 %	100.0 %	100.0 %	25.5 %
San Jacinto County	22.0 %	17.7 %	44.5 %	12.9 %	2.6 %	1.6 %	100.0 %	100.0 %	26.9 %
San Patricio County	23.6 %	17.3 %	40.5 %	7.6 %	4.5 %	8.2 %	19.7 %	69.2 %	23.0 %
San Saba County	16.2 %	22.0 %	46.7 %	6.5 %	5.8 %	6.5 %	49.4 %	100.0 %	30.1 %
Schleicher County	21.4 %	22.4 %	37.2 %	3.5 %	9.4 %	3.6 %	100.0 %	100.0 %	24.3 %
Scurry County	26.1 %	18.5 %	35.0 %	4.7 %	7.1 %	5.8 %	31.7 %	0.0 %	21.8 %
Shackelford County	14.6 %	13.0 %	37.0 %	4.4 %	3.7 %	0.2 %	100.0 %	100.0 %	25.1 %
Shelby County	23.7 %	24.5 %	47.4 %	7.3 %	8.9 %	4.5 %	79.4 %	100.0 %	27.7 %
Sherman County	25.3 %	14.0 %	38.2 %	7.0 %	17.8 %	8.6 %	100.0 %	100.0 %	30.0 %
Smith County	15.3 %	15.5 %	36.9 %	7.5 %	9.1 %	3.1 %	31.6 %	18.8 %	23.2 %
Somervell County	12.6 %	9.0 %	30.6 %	2.9 %	8.0 %	0.5 %	100.0 %	0.0 %	21.8 %
Starr County	53.7 %	36.3 %	71.3 %	10.3 %	30.1 %	34.3 %	23.7 %	100.0 %	39.7 %
Stephens County	20.3 %	14.9 %	45.1 %	3.4 %	5.4 %	2.9 %	39.4 %	100.0 %	28.5 %
Sterling County	28.0 %	14.7 %	29.1 %	0.0 %	10.2 %	14.2 %	100.0 %	100.0 %	21.5 %
Stonewall County	14.3 %	18.9 %	42.7 %	4.6 %	1.0 %	1.5 %	100.0 %	100.0 %	27.0 %
Sutton County	29.1 %	11.7 %	31.5 %	2.6 %	12.6 %	8.2 %	18.8 %	100.0 %	26.5 %
Swisher County	24.9 %	17.2 %	46.4 %	9.4 %	5.8 %	5.7 %	37.6 %	100.0 %	27.6 %
Tarrant County	16.0 %	14.2 %	32.4 %	7.8 %	15.6 %	6.7 %	1.3 %	5.2 %	21.8 %
Taylor County	14.8 %	16.5 %	38.6 %	5.3 %	5.3 %	2.8 %	16.0 %	19.0 %	21.9 %
Terrell County	17.5 %	14.0 %	37.8 %	0.0 %	14.7 %	4.0 %	100.0 %	100.0 %	27.0 %
Terry County	32.7 %	16.7 %	47.3 %	7.0 %	9.8 %	11.3 %	24.7 %	100.0 %	27.3 %
Throckmorton County	20.8 %	13.3 %	39.7 %	1.3 %	5.1 %	2.8 %	100.0 %	100.0 %	32.2 %
Titus County	27.6 %	18.3 %	47.2 %	7.2 %	19.8 %	10.1 %	50.6 %	0.0 %	30.2 %

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un- employed	Foreign Born	Linguis- tically Isolated	In Rural Areas	In Medically Under- served Areas	No Health Insurance (Age: 40-64)
Tom Green County	18.1 %	15.9 %	39.5 %	6.8 %	6.8 %	4.6 %	15.6 %	36.3 %	, 22.7 %
Travis County	13.3 %	16.6 %	29.9 %	6.9 %	18.0 %	7.6 %	5.5 %	4.2 %	19.4 %
Trinity County	20.5 %	16.6 %	47.0 %	5.4 %	3.4 %	1.4 %	77.2 %	100.0 %	26.2 %
Tyler County	18.2 %	19.2 %	45.9 %	10.0 %	1.4 %	0.4 %	78.1 %	100.0 %	24.9 %
Upshur County	16.8 %	13.0 %	38.7 %	7.0 %	3.3 %	1.3 %	79.3 %	100.0 %	24.3 %
Upton County	25.7 %	13.7 %	34.9 %	1.3 %	9.3 %	8.9 %	100.0 %	100.0 %	26.9 %
Uvalde County	29.5 %	27.7 %	53.7 %	9.7 %	9.0 %	9.0 %	31.4 %	100.0 %	30.2 %
Val Verde County	35.4 %	23.0 %	52.7 %	8.8 %	22.9 %	17.2 %	10.2 %	100.0 %	31.9 %
Van Zandt County	20.3 %	15.9 %	41.5 %	6.9 %	4.1 %	1.5 %	75.0 %	100.0 %	27.4 %
Victoria County	18.9 %	17.1 %	35.7 %	7.3 %	5.6 %	3.9 %	26.6 %	0.0 %	21.5 %
Walker County	18.4 %	23.4 %	39.7 %	4.7 %	7.3 %	2.5 %	45.6 %	100.0 %	23.4 %
Waller County	20.8 %	18.3 %	38.1 %	6.3 %	13.8 %	5.7 %	61.6 %	100.0 %	26.5 %
Ward County	29.1 %	14.2 %	37.7 %	5.5 %	6.4 %	6.6 %	27.9 %	100.0 %	24.8 %
Washington County	19.4 %	14.3 %	37.0 %	4.9 %	6.1 %	2.9 %	53.5 %	100.0 %	20.8 %
Webb County	36.4 %	30.6 %	60.3 %	7.1 %	29.6 %	36.7 %	2.6 %	57.2 %	43.1 %
Wharton County	26.4 %	17.5 %	42.0 %	6.4 %	8.9 %	6.1 %	49.9 %	100.0 %	26.4 %
Wheeler County	18.9 %	12.3 %	34.4 %	5.3 %	8.4 %	5.1 %	100.0 %	0.0 %	26.2 %
Wichita County	16.7 %	13.9 %	39.6 %	5.6 %	6.6 %	2.5 %	10.7 %	19.9 %	22.8 %
Wilbarger County	24.8 %	20.6 %	42.9 %	4.7 %	4.7 %	4.9 %	21.9 %	100.0 %	23.1 %
Willacy County	39.8 %	42.3 %	63.4 %	7.5 %	15.8 %	14.5 %	34.6 %	100.0 %	32.0 %
Williamson County	8.1 %	6.3 %	21.0 %	7.0 %	10.4 %	3.0 %	12.0 %	100.0 %	16.8 %
Wilson County	15.4 %	10.1 %	29.2 %	5.4 %	4.9 %	3.7 %	85.9 %	100.0 %	20.2 %
Winkler County	33.5 %	15.6 %	36.3 %	5.9 %	14.8 %	13.4 %	18.1 %	100.0 %	26.6 %
Wise County	16.8 %	10.0 %	31.2 %	8.9 %	6.1 %	2.3 %	72.1 %	0.0 %	21.5 %
Wood County	18.2 %	14.8 %	40.4 %	7.4 %	4.0 %	0.9 %	74.2 %	100.0 %	26.0 %
Yoakum County	31.8 %	22.4 %	34.0 %	6.2 %	24.4 %	24.2 %	37.3 %	100.0 %	25.1 %
Young County	21.8 %	16.6 %	38.7 %	5.6 %	4.5 %	4.9 %	33.6 %	100.0 %	23.7 %
Zapata County	43.4 %	36.7 %	55.4 %	7.7 %	22.9 %	26.2 %	23.5 %	100.0 %	36.2 %
Zavala County	41.4 %	39.0 %	66.3 %	9.9 %	13.3 %	28.4 %	38.0 %	100.0 %	30.9 %

Data are in the percentage of people (men and women) in the population.

Source of health insurance data: US Census Bureau – Small Area Health Insurance Estimates (SAHIE) for 2011.

Source of rural population data: US Census Bureau – Census 2010.

Source of medically underserved data: Health Resources and Services Administration (HRSA) for 2013.

Source of other data: US Census Bureau – American Community Survey (ACS) for 2007-2011.

Conclusions: Population characteristics

Proportionately, the State of Texas has a slightly larger White female population than the US as a whole, a slightly smaller Black/African-American female population, a slightly smaller Asian and Pacific Islander (API) female population, a slightly smaller American Indian and Alaska Native (AIAN) female population, and a substantially larger Hispanic/Latina female population. The state's female population is slightly younger than that of the US as a whole. The state's education level is slightly lower than and income level is slightly lower than those of the US as a whole. The state has a slightly larger percentage of people who are foreign born and a substantially larger percentage of people who are foreign born and a substantially larger percentage of people living in rural areas, a substantially larger percentage of people without health insurance, and a substantially larger percentage of people living in medically underserved areas.

The following counties have substantially larger Black/African-American female population percentages than that of the state as a whole:

- Bell County (Komen East Central Texas)
- Bowie County (Komen Texarkana)
- Camp County
- Cass County (Komen Texarkana)
- Coryell County (Komen East Central Texas)
- Dallas County (Komen Dallas County)
- Falls County (Komen East Central Texas)
- Fort Bend County (Komen Houston)
- Gregg County
- Harris County (Komen Houston)
- Harrison County
- Houston County
- Jefferson County
- Limestone County (Komen East Central Texas)
- Marion County
- Morris County
- Nacogdoches County
- Newton County
- Red River County
- Robertson County
- San Augustine County
- Shelby County
- Smith County (Komen East Central Texas)
- Walker County
- Waller County
- Washington County

The following counties have substantially larger API female population percentages than that of the state as a whole:

- Collin County (Komen North Texas)
- Fort Bend County (Komen Houston)

The following counties have substantially larger Hispanic/Latina female population percentages than that of the state as a whole:

- Andrews County
- Atascosa County
- Bailey County (Komen Lubbock Area)
- Bee County
- Bexar County (Komen San Antonio)
- Brewster County
- Brooks County
- Caldwell County (Komen Austin)
- Calhoun County
- Cameron County
- Castro County (Komen Greater Amarillo)
- Cochran County (Komen Lubbock Area)
- Crane County
- Crockett County
- Crosby County (Komen Lubbock Area)
- Culberson County
- Dawson County
- Deaf Smith County (Komen Greater Amarillo)
- Dimmit County
- Duval County
- Ector County
- Edwards County
- El Paso County (Komen El Paso)
- Floyd County (Komen Lubbock Area)
- Frio County
- Gonzales County
- Hale County (Komen Lubbock Area)
- Hidalgo County
- Hockley County (Komen Lubbock Area)
- Hudspeth County
- Jim Hogg County
- Jim Wells County
- Karnes County
- Kenedy County
- Kinney County

- Kleberg County
- Lamb County (Komen Lubbock Area)
- La Salle County
- Lynn County (Komen Lubbock Area)
- Martin County
- Maverick County
- Medina County
- Moore County (Komen Greater Amarillo)
- Nueces County
- Ochiltree County (Komen Greater Amarillo)
- Parmer County (Komen Greater Amarillo)
- Pecos County
- Presidio County
- Reagan County
- Reeves County
- Refugio County
- San Patricio County
- Schleicher County
- Starr County
- Sutton County
- Terrell County
- Terry County (Komen Lubbock Area)
- Upton County
- Uvalde County
- Val Verde County
- Victoria County
- Ward County
- Webb County
- Willacy County
- Winkler County
- Yoakum County (Komen Lubbock Area)
- Zapata County
- Zavala County

The following counties have substantially older female populations than that of the state as a whole:

- Anderson County (Komen East Central Texas)
- Aransas County
- Archer County (Komen North Texas)
- Armstrong County (Komen Greater Amarillo)
- Austin County
- Bandera County

- Baylor County (Komen North Texas)
- Blanco County
- Borden County
- Bosque County (Komen East Central Texas)
- Bowie County (Komen Texarkana)
- Brewster County
- Briscoe County (Komen Greater Amarillo)
- Brooks County
- Brown County
- Burleson County
- Burnet County
- Callahan County
- Camp County
- Carson County (Komen Greater Amarillo)
- Cass County (Komen Texarkana)
- Cherokee County (Komen East Central Texas)
- Childress County (Komen Greater Amarillo)
- Clay County (Komen North Texas)
- Coke County
- Coleman County
- Collingsworth County (Komen Greater Amarillo)
- Colorado County
- Comal County
- Comanche County
- Concho County
- Cooke County (Komen North Texas)
- Cottle County (Komen Lubbock Area)
- Crosby County (Komen Lubbock Area)
- Dawson County
- Delta County
- DeWitt County
- Dickens County (Komen Lubbock Area)
- Donley County (Komen Greater Amarillo)
- Duval County
- Eastland County
- Edwards County
- Falls County (Komen East Central Texas)
- Fannin County (Komen North Texas)
- Fayette County
- Fisher County
- Floyd County (Komen Lubbock Area)
- Foard County

- Franklin County
- Freestone County (Komen East Central Texas)
- Gillespie County
- Goliad County
- Gray County (Komen Greater Amarillo)
- Grayson County (Komen North Texas)
- Hall County (Komen Greater Amarillo)
- Hamilton County
- Hardeman County
- Hartley County (Komen Greater Amarillo)
- Haskell County
- Henderson County (Komen East Central Texas)
- Hill County (Komen East Central Texas)
- Hood County (Komen Greater Fort Worth)
- Hopkins County
- Houston County
- Irion County
- Jack County
- Jackson County
- Jasper County
- Jeff Davis County
- Jones County
- Karnes County
- Kendall County
- Kent County (Komen Lubbock Area)
- Kerr County
- Kimble County
- Kinney County
- Knox County
- Lamar County
- Lampasas County
- Lavaca County
- Lee County
- Leon County
- Limestone County (Komen East Central Texas)
- Live Oak County
- Llano County
- Lynn County (Komen Lubbock Area)
- McCulloch County
- McMullen County
- Madison County
- Marion County

- Mason County
- Menard County
- Milam County (Komen East Central Texas)
- Mills County
- Mitchell County
- Montague County (Komen North Texas)
- Morris County
- Motley County (Komen Lubbock Area)
- Newton County
- Nolan County
- Palo Pinto County
- Panola County
- Polk County
- Presidio County
- Rains County
- Real County
- Red River County
- Refugio County
- Roberts County (Komen Greater Amarillo)
- Robertson County
- Runnels County
- Sabine County
- San Augustine County
- San Jacinto County
- San Saba County
- Scurry County
- Shackelford County
- Stephens County
- Sterling County
- Stonewall County
- Swisher County (Komen Greater Amarillo)
- Terrell County
- Throckmorton County
- Trinity County
- Tyler County
- Upshur County
- Van Zandt County (Komen East Central Texas)
- Washington County
- Wheeler County (Komen Greater Amarillo)
- Wilbarger County (Komen North Texas)
- Wood County
- Young County

The following counties have substantially lower education levels than that of the state as a whole:

- Andrews County
- Atascosa County
- Bailey County (Komen Lubbock Area)
- Bee County
- Brooks County
- Cameron County
- Camp County
- Castro County (Komen Greater Amarillo)
- Cherokee County (Komen East Central Texas)
- Cochran County (Komen Lubbock Area)
- Collingsworth County (Komen Greater Amarillo)
- Crane County
- Crockett County
- Crosby County (Komen Lubbock Area)
- Culberson County
- Dallam County (Komen Greater Amarillo)
- Dawson County
- Deaf Smith County (Komen Greater Amarillo)
- Dickens County (Komen Lubbock Area)
- Dimmit County
- Duval County
- Ector County
- Edwards County
- El Paso County (Komen El Paso)
- Floyd County (Komen Lubbock Area)
- Frio County
- Gaines County
- Garza County (Komen Lubbock Area)
- Gonzales County
- Hale County (Komen Lubbock Area)
- Hall County (Komen Greater Amarillo)
- Hidalgo County
- Hockley County (Komen Lubbock Area)
- Howard County
- Hudspeth County
- Jim Hogg County
- Jim Wells County
- Jones County
- Karnes County
- Kenedy County

- Knox County
- Lamb County (Komen Lubbock Area)
- La Salle County
- Liberty County (Komen Houston)
- Martin County
- Maverick County
- Moore County (Komen Greater Amarillo)
- Ochiltree County (Komen Greater Amarillo)
- Parmer County (Komen Greater Amarillo)
- Pecos County
- Presidio County
- Reagan County
- Real County
- Red River County
- Reeves County
- Refugio County
- San Augustine County
- Scurry County
- Sherman County (Komen Greater Amarillo)
- Starr County
- Sterling County
- Sutton County
- Swisher County (Komen Greater Amarillo)
- Terry County (Komen Lubbock Area)
- Titus County
- Upton County
- Uvalde County
- Val Verde County
- Ward County
- Webb County
- Wharton County
- Wilbarger County (Komen North Texas)
- Willacy County
- Winkler County
- Yoakum County (Komen Lubbock Area)
- Zapata County
- Zavala County

The following counties have substantially lower income levels than that of the state as a whole:

- Briscoe County (Komen Greater Amarillo)
- Brooks County
- Cameron County

- Castro County (Komen Greater Amarillo)
- Cherokee County (Komen East Central Texas)
- Coleman County
- Collingsworth County (Komen Greater Amarillo)
- Comanche County
- Crosby County (Komen Lubbock Area)
- Culberson County
- Dimmit County
- Duval County
- El Paso County (Komen El Paso)
- Falls County (Komen East Central Texas)
- Frio County
- Gonzales County
- Hall County (Komen Greater Amarillo)
- Hardeman County
- Hidalgo County
- Hudspeth County
- Jim Wells County
- Kinney County
- Kleberg County
- La Salle County
- Madison County
- Marion County
- Maverick County
- Nacogdoches County
- Potter County (Komen Greater Amarillo)
- Presidio County
- Real County
- Reeves County
- Robertson County
- San Augustine County
- Shelby County
- Starr County
- Uvalde County
- Val Verde County
- Webb County
- Willacy County
- Zapata County
- Zavala County

The following counties have substantially lower employment levels than that of the state as a whole:

- Brooks County
- Caldwell County (Komen Austin)
- Calhoun County
- Cochran County (Komen Lubbock Area)
- Crockett County
- Culberson County
- Dimmit County
- Foard County
- Hardeman County
- Haskell County
- Jim Hogg County
- Kinney County
- Kleberg County
- Liberty County (Komen Houston)
- Maverick County
- Newton County
- Polk County
- Presidio County
- Real County
- Reeves County
- San Augustine County
- San Jacinto County
- Starr County

The counties with substantial foreign born and linguistically isolated populations are:

- Cameron County
- El Paso County (Komen El Paso)
- Gaines County
- Harris County (Komen Houston)
- Hidalgo County
- Hudspeth County
- Maverick County
- Moore County (Komen Greater Amarillo)
- Presidio County
- Starr County
- Val Verde County
- Webb County
- Yoakum County (Komen Lubbock Area)
- Zapata County

The following counties have substantially larger percentages of adults without health insurance than does the state as a whole:

- Bailey County (Komen Lubbock Area)
- Briscoe County (Komen Greater Amarillo)
- Cameron County
- Castro County (Komen Greater Amarillo)
- Cochran County (Komen Lubbock Area)
- Collingsworth County (Komen Greater Amarillo)
- Comanche County
- Cottle County (Komen Lubbock Area)
- Culberson County
- Dallam County (Komen Greater Amarillo)
- Deaf Smith County (Komen Greater Amarillo)
- Edwards County
- El Paso County (Komen El Paso)
- Foard County
- Gaines County
- Hall County (Komen Greater Amarillo)
- Hidalgo County
- Hudspeth County
- Kimble County
- Knox County
- Lamb County (Komen Lubbock Area)
- Maverick County
- Menard County
- Mills County
- Parmer County (Komen Greater Amarillo)
- Presidio County
- Real County
- San Saba County
- Sherman County (Komen Greater Amarillo)
- Starr County
- Throckmorton County
- Titus County
- Uvalde County
- Val Verde County
- Webb County
- Willacy County
- Zapata County
- Zavala County

Healthy People 2020 Forecasts

Healthy People 2020 is a major federal government program that has set specific targets (called "objectives") for improving Americans' health by the year 2020.

This report shows whether areas are likely to meet the two Healthy People 2020 objectives related to breast cancer: reducing breast cancer death rate and reducing the number of late-stage breast cancers.

Healthy People 2020 (HP2020) is a major federal government initiative that provides specific health objectives for communities and for the country as a whole (Healthy People 2020, 2010). Many national health organizations use HP2020 targets to monitor progress in reducing the burden of disease and improve the health of the nation. Likewise, Komen believes it is important to refer to HP2020 to see how areas across the country are progressing towards reducing the burden of breast cancer.

HP2020 has several cancer-related objectives, including:

- Reducing women's death rate from breast cancer.
- Reducing the number of breast cancers that are found at a late-stage.

The HP2020 objective for breast cancer death rates

As of the writing of this report, the HP2020 target for the breast cancer death rate is 20.6 breastcancer related deaths per 100,000 females – a 10 percent improvement in comparison to the 2007 rate.

To see how well counties in Texas are progressing toward this target, this report uses the following information:

- County breast cancer death rate data for years 2006 to 2010.
- Estimates for the trend (annual percent change) in county breast cancer death rates for years 2006 to 2010.
- Both the data and the HP2020 target are age-adjusted.

These data are used to estimate how many years it will take for each county to meet the HP2020 objective. Because the target date for meeting the objective is 2020 and 2008 (the middle of the 2006-2010 period) was used as a starting point, a county has 12 years to meet the target.

Death rate data and trends are used to calculate whether an area will meet the HP2020 target, assuming that the trend seen in years 2006 to 2010 continues for 2011 and beyond. The calculation was conducted using the following procedure:

• The annual percent change for 2006-2010 was calculated.

- Using 2008 (the middle of the period 2006-2010) as a starting point, the annual percent change was subtracted from (or added to) the expected death rate (based on the 2006-2010 death rate) for each year between 2010 and 2020.
- These calculated death rates were then compared with the target.
 - If the breast cancer death rate for 2006-2010 was already below the target, it is reported that the area "Currently meets target."
 - If it would take more than 12 years (2008 to 2020) to meet the target, it is reported that the area would need "13 years or longer" to meet the target.
 - If the rate is currently below the target but the trend is increasing such that the target will no longer be met in 2020, it is reported that the area would need "13 years or longer" to meet the target.
 - In all other cases, the number of years it would take for the area to meet the target is reported. For example, if the area would meet the target in 2016, it would be reported as "eight years," because it's eight years from 2008 to 2016.

The HP2020 objective for late-stage breast cancer diagnoses

Another Healthy People 2020 objective is a decrease in the number of breast cancers diagnosed at a late stage. As of the writing of this report, the HP2020 target for late-stage diagnosis rate is 41.0 late-stage cases per 100,000 females. For each county in the state, the late-stage incidence rate and trend are used to calculate the amount of time, in years, needed to meet the HP2020 target, assuming that the trend observed from 2006 to 2010 continues for years 2011 and beyond.

The calculation was conducted using the following procedure:

- The annual percent change for 2006-2010 was calculated.
- Using 2008 (the middle of the period 2006-2010) as a starting point, the annual percent change was subtracted from (or added to) the expected late-stage incidence rate (based on the 2006-2010 rate) for each year between 2010 and 2020.
- The calculated late-stage incidence rates were then compared with the target.
 - If the late-stage incidence rate for 2006-2010 was already below the target, it is reported that the area "Currently meets target."
 - If it would take more than 12 years (2008 to 2020) to meet the target, it is reported that the area would need "13 years or longer" to meet the target.
 - If the rate is currently below the target but the trend is increasing such that the target will no longer be met in 2020, it is reported that the area would need "13 years or longer" to meet the target.
 - In all other cases, the number of years it would take for the area to meet the target is reported.

Identification of HP2020 breast cancer at-risk areas

Identifying geographic areas and groups of women with high needs will help develop effective, targeted breast cancer programs.

Priority areas are identified based on the time needed to meet Healthy People 2020 targets for breast cancer. The purpose of this report is to combine evidence from many credible sources and use it to identify the highest HP2020 breast cancer at-risk areas (at-risk areas) for breast cancer programs (i.e., the areas of greatest need).

Classification of at-risk areas are based on the time needed to achieve HP2020 targets in each area. These time projections depend on both the starting point and the trends in death rates and late-stage incidence.

Late-stage incidence reflects both the overall breast cancer incidence rate in the population and the mammography screening coverage. The breast cancer death rate reflects the access to care and the quality of care in the healthcare delivery area, as well as cancer stage at diagnosis.

There has not been any indication that either one of the two HP2020 targets is more important than the other. Therefore, the report considers them equally important.

How counties are classified by need

Counties are classified as follows.

- Counties that are not likely to achieve either of the HP2020 targets are considered to have the highest needs.
- Counties that have already achieved both targets are considered to have the lowest needs.
- Other counties are classified based on the number of years needed to achieve the two targets.

Table 2.9 shows how counties are assigned to at-risk categories.

		Time to A	Time to Achieve Late-stage Incidence Reduction Target							
		13 years or longer	7-12 yrs.	0 – 6 yrs.	Currently meets target	Unknown				
Time to Achieve Death Rate Reduction Target	13 years or longer	Highest	High	Medium High	Medium	Highest				
	7-12 yrs.	High	Medium High	Medium	Medium Low	Medium High				
	0 – 6 yrs.	Medium High	Medium	Medium Low	Low	Medium Low				
	Currently meets target	Medium	Medium Low	Low	Lowest	Lowest				
	Unknown	Highest	Medium High	Medium Low	Lowest	Unknown				

Table 2.9. Needs/At-risk classification based on the projected time to achieve HP2020 breast cancer targets

If the time to achieve a target cannot be calculated for one of the HP2020 indicators, then the county is classified based on the other indicator. If both indicators are missing, then the county

is not classified. This doesn't mean that the county may not have high needs; it only means that sufficient data are not available to classify the county.

Healthy People 2020 forecasts and at-risk areas

The results presented in Table 2.10 help identify which counties have the greatest needs when it comes to meeting the HP2020 breast cancer targets.

- For counties in the "13 years or longer" category, current trends would need to change to achieve the target.
- Some counties may currently meet the target but their rates are increasing and they could fail to meet the target if the trend is not reversed.

Trends can change for a number of reasons, including:

- Improved screening programs could lead to breast cancers being diagnosed earlier, resulting in a decrease in both late-stage incidence rates and death rates.
- Improved socioeconomic conditions, such as reductions in poverty and linguistic isolation could lead to more timely treatment of breast cancer, causing a decrease in death rates.

The data in this table should be considered together with other information on factors that affect breast cancer death rates such as screening percentages and key breast cancer death determinants such as poverty and linguistic isolation.

Table 2.10. Breast cancer at-risk area for Texas with predicted time to achieve the HP2020 breast cancer targets and key population characteristics

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Austin County		Highest	13 years or longer	13 years or longer	Older, rural, medically underserved
Bee County		Highest	SN	13 years or longer	%Hispanic/Latina, education, rural, medically underserved
Bosque County	Komen East Central Texas	Highest	SN	13 years or longer	Older, rural, medically underserved
Caldwell County	Komen Austin	Highest	SN	13 years or longer	%Hispanic/Latina, employment, rural, medically underserved
Calhoun County		Highest	SN	13 years or longer	%Hispanic/Latina, employment, rural, medically underserved
Chambers County	Komen Houston	Highest	SN	13 years or longer	Rural, medically underserved
Comanche County		Highest	SN	13 years or longer	Older, poverty, rural, insurance, medically underserved
Eastland County		Highest	13 years or longer	SN	Older, rural, medically underserved
Frio County		Highest	SN	13 years or longer	%Hispanic/Latina, education, poverty, language, rural, medically underserved
Hockley County	Komen Lubbock Area	Highest	SN	13 years or longer	%Hispanic/Latina, education, rural, medically underserved
Hutchinson County	Komen Greater Amarillo	Highest	SN	13 years or longer	Rural, medically underserved
Jasper County		Highest	13 years or longer	13 years or longer	Older, rural
Jefferson County		Highest	13 years or longer	13 years or longer	%Black/African-American
Johnson County	Komen Greater Fort Worth	Highest	13 years or longer	13 years or longer	Rural
Jones County		Highest	13 years or longer	13 years or longer	Older, education, rural, medically underserved
Lamb County	Komen Lubbock Area	Highest	SN	13 years or longer	%Hispanic/Latina, education, rural, insurance, medically underserved
Lavaca County		Highest	NA	13 years or longer	Older, rural, medically underserved
Lee County		Highest	SN	13 years or longer	Older, rural, medically underserved
Leon County		Highest	SN	13 years or longer	Older, rural, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Liberty County	Komen Houston	Highest	13 years or longer	13 years or longer	Education, employment, rural, medically underserved
Medina County		Highest	13 years or longer	13 years or longer	%Hispanic/Latina, rural, medically underserved
Moore County	Komen Greater Amarillo	Highest	SN	13 years or longer	%Hispanic/Latina, education, foreign, language
Morris County		Highest	SN	13 years or longer	%Black/African-American, older, rural, medically underserved
Nolan County		Highest	SN	13 years or longer	Older, rural, medically underserved
Orange County		Highest	13 years or longer	13 years or longer	Rural
Parker County	Komen Greater Fort Worth	Highest	13 years or longer	13 years or longer	Rural
Potter County	Komen Greater Amarillo	Highest	13 years or longer	13 years or longer	Poverty
Reeves County		Highest	SN	13 years or longer	%Hispanic/Latina, education, poverty, employment, language, medically underserved
Sabine County		Highest	SN	13 years or longer	Older, rural, medically underserved
Trinity County		Highest	SN	13 years or longer	Older, rural, medically underserved
Walker County		Highest	13 years or longer	13 years or longer	%Black/African-American, rural, medically underserved
Washington County		Highest	13 years or longer	13 years or longer	%Black/African-American, older, rural, medically underserved
Wilson County		Highest	13 years or longer	13 years or longer	Rural, medically underserved
Young County		Highest	13 years or longer	13 years or longer	Older, rural, medically underserved
Ector County		High	11 years	13 years or longer	%Hispanic/Latina, education
Harris County	Komen Houston	High	9 years	13 years or longer	%Black/African-American, foreign, language
Llano County		High	10 years	13 years or longer	Older, rural, medically underserved
Angelina County		Medium High	2 years	13 years or longer	Rural
Bell County	Komen East Central Texas	Medium High	13 years or longer	2 years	%Black/African-American
Brazoria County	Komen Houston	Medium High	13 years or longer	1 year	Rural

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Comal County		Medium High	13 years or longer	1 year	Older, rural
Coryell County	Komen East Central Texas	Medium High	6 years	13 years or longer	%Black/African-American, medically underserved
Dallas County	Komen Dallas County	Medium High	8 years	8 years	%Black/African-American, foreign
Dawson County		Medium High	SN	7 years	%Hispanic/Latina, older, education, medically underserved
DeWitt County		Medium High	13 years or longer	3 years	Older, rural, medically underserved
Gregg County		Medium High	13 years or longer	2 years	%Black/African-American
Hardin County		Medium High	13 years or longer	6 years	Rural, medically underserved
Kleberg County		Medium High	13 years or longer	1 year	%Hispanic/Latina, poverty, employment, medically underserved
McLennan County	Komen East Central Texas	Medium High	13 years or longer	4 years	Rural, medically underserved
Nacogdoches County		Medium High	13 years or longer	3 years	%Black/African-American, poverty, rural
Polk County		Medium High	2 years	13 years or longer	Older, employment, rural, medically underserved
Randall County	Komen Greater Amarillo	Medium High	13 years or longer	1 year	
Victoria County		Medium High	13 years or longer	1 year	%Hispanic/Latina, rural
Aransas County		Medium	7 years	2 years	Older, rural, medically underserved
Atascosa County		Medium	Currently meets target	13 years or longer	%Hispanic/Latina, education, rural, medically underserved
Bastrop County	Komen Austin	Medium	Currently meets target	13 years or longer	Rural, medically underserved
Brown County		Medium	13 years or longer	Currently meets target	Older, rural, medically underserved
Burnet County		Medium	Currently meets target	13 years or longer	Older, rural, medically underserved
Cass County	Komen Texarkana	Medium	13 years or longer	Currently meets target	%Black/African-American, older, rural, medically underserved
Fayette County		Medium	13 years or longer	Currently meets target	Older, rural, medically underserved
Grayson County	Komen North Texas	Medium	Currently meets target	13 years or longer	Older, rural

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Grimes County		Medium	13 years or longer	Currently meets target	Rural, medically underserved
Guadalupe County		Medium	Currently meets target	13 years or longer	Rural
Hale County	Komen Lubbock Area	Medium	13 years or longer	Currently meets target	%Hispanic/Latina, education, rural
Hopkins County		Medium	13 years or longer	Currently meets target	Older, rural, medically underserved
Hunt County	Komen North Texas	Medium	13 years or longer	Currently meets target	Rural, medically underserved
Kaufman County	Komen East Central Texas	Medium	13 years or longer	Currently meets target	Rural
Lamar County		Medium	Currently meets target	13 years or longer	Older, rural, medically underserved
Navarro County	Komen East Central Texas	Medium	13 years or longer	Currently meets target	Rural, medically underserved
Palo Pinto County		Medium	13 years or longer	Currently meets target	Older, rural
Rusk County		Medium	13 years or longer	Currently meets target	Rural, medically underserved
San Jacinto County		Medium	5 years	7 years	Older, employment, rural, medically underserved
Starr County		Medium	13 years or longer	Currently meets target	%Hispanic/Latina, education, poverty, employment, foreign, language, rural, insurance, medically underserved
Taylor County		Medium	13 years or longer	Currently meets target	
Tom Green County		Medium	Currently meets target	13 years or longer	
Val Verde County		Medium	Currently meets target	13 years or longer	%Hispanic/Latina, education, poverty, foreign, language, insurance, medically underserved
Van Zandt County	Komen East Central Texas	Medium	Currently meets target	13 years or longer	Older, rural, medically underserved
Waller County		Medium	13 years or longer	Currently meets target	%Black/African-American, rural, medically underserved
Wise County	Komen North Texas	Medium	Currently meets target	13 years or longer	Rural
Bowie County	Komen Texarkana	Medium Low	6 years	5 years	%Black/African-American, older, rural
Callahan County		Medium Low	SN	2 years	Older, rural, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Erath County		Medium Low	SN	2 years	Rural, medically underserved
Fannin County	Komen North Texas	Medium Low	SN	1 year	Older, rural, medically underserved
Gaines County		Medium Low	SN	2 years	Education, foreign, language, rural, insurance, medically underserved
Galveston County	Komen Houston	Medium Low	11 years	Currently meets target	
Gray County	Komen Greater Amarillo	Medium Low	SN	4 years	Older
Lubbock County	Komen Lubbock Area	Medium Low	5 years	1 year	
Montgomery County	Komen Houston	Medium Low	12 years	Currently meets target	Rural
Red River County		Medium Low	SN	1 year	%Black/African-American, older, education, rural, medically underserved
Robertson County		Medium Low	SN	2 years	%Black/African-American, older, poverty, rural, medically underserved
Scurry County		Medium Low	SN	4 years	Older, education, rural
Tarrant County	Komen Greater Fort Worth	Medium Low	1 year	1 year	
Tyler County		Medium Low	7 years	Currently meets target	Older, rural, medically underserved
Anderson County	Komen East Central Texas	Low	2 years	Currently meets target	Older, rural, medically underserved
Bexar County	Komen San Antonio	Low	3 years	Currently meets target	%Hispanic/Latina
Cherokee County	Komen East Central Texas	Low	6 years	Currently meets target	Older, education, poverty, rural, medically underserved
Denton County	Komen North Texas	Low	1 year	Currently meets target	
El Paso County	Komen El Paso	Low	2 years	Currently meets target	%Hispanic/Latina, education, poverty, foreign, language, insurance, medically underserved
Ellis County	Komen East Central Texas	Low	Currently meets target	1 year	Rural, medically underserved
Gillespie County		Low	1 year	Currently meets target	Older, rural
Hays County	Komen Austin	Low	4 years	Currently meets target	Rural, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Henderson County	Komen East Central Texas	Low	Currently meets target	6 years	Older, rural
Jim Wells County		Low	Currently meets target	1 year	%Hispanic/Latina, education, poverty, rural, medically underserved
Kerr County		Low	Currently meets target	1 year	Older, rural
Matagorda County		Low	5 years	Currently meets target	Rural, medically underserved
Milam County	Komen East Central Texas	Low	Currently meets target	1 year	Older, rural, medically underserved
Nueces County		Low	4 years	Currently meets target	%Hispanic/Latina
San Patricio County		Low	5 years	Currently meets target	%Hispanic/Latina, medically underserved
Shelby County		Low	3 years	Currently meets target	%Black/African-American, poverty, rural, medically underserved
Smith County	Komen East Central Texas	Low	Currently meets target	4 years	%Black/African-American, rural
Travis County	Komen Austin	Low	Currently meets target	1 year	
Upshur County		Low	3 years	Currently meets target	Older, rural, medically underserved
Wharton County		Low	4 years	Currently meets target	Education, rural, medically underserved
Williamson County	Komen Austin	Low	Currently meets target	1 year	Medically underserved
Bandera County		Lowest	SN	Currently meets target	Older, rural, medically underserved
Brazos County		Lowest	Currently meets target	Currently meets target	
Burleson County		Lowest	SN	Currently meets target	Older, rural, medically underserved
Cameron County		Lowest	Currently meets target	Currently meets target	%Hispanic/Latina, education, poverty, foreign, language, insurance, medically underserved
Collin County	Komen North Texas	Lowest	Currently meets target	Currently meets target	%API
Colorado County		Lowest	SN	Currently meets target	Older, rural
Cooke County	Komen North Texas	Lowest	Currently meets target	Currently meets target	Older, rural, medically underserved

			Predicted Time to Achieve Death	Predicted Time to	
County	Komen Affiliate	Priority	Rate Target	Achieve Late-stage Incidence Target	Key Population Characteristics
Falls County	Komen East Central Texas	Lowest	SN	Currently meets target	%Black/African-American, older, poverty, rural, medically underserved
Fort Bend County	Komen Houston	Lowest	Currently meets target	Currently meets target	%Black/African-American, %API, foreign
Freestone County		Lowest	NA	Currently meets target	Older, rural, medically underserved
Gonzales County		Lowest	SN	Currently meets target	%Hispanic/Latina, education, poverty, rural, medically underserved
Harrison County		Lowest	Currently meets target	Currently meets target	%Black/African-American, rural, medically underserved
Hidalgo County		Lowest	Currently meets target	Currently meets target	%Hispanic/Latina, education, poverty, foreign, language, insurance, medically underserved
Hill County	Komen East Central Texas	Lowest	Currently meets target	Currently meets target	Older, rural, medically underserved
Hood County	Komen Greater Fort Worth	Lowest	Currently meets target	Currently meets target	Older, rural
Houston County		Lowest	Currently meets target	Currently meets target	%Black/African-American, older, rural, medically underserved
Howard County		Lowest	Currently meets target	NA	Education, medically underserved
Kendall County		Lowest	NA	Currently meets target	Older, rural
Lampasas County		Lowest	SN	Currently meets target	Older, rural, medically underserved
Maverick County		Lowest	NA	Currently meets target	%Hispanic/Latina, education, poverty, employment, foreign, language, insurance, medically underserved
Midland County		Lowest	Currently meets target	Currently meets target	
Montague County	Komen North Texas	Lowest	SN	Currently meets target	Older, rural, medically underserved
Newton County		Lowest	SN	Currently meets target	%Black/Latina, older, employment, rural, medically underserved
Panola County		Lowest	SN	Currently meets target	Older, rural, medically underserved
Rockwall County		Lowest	NA	Currently meets target	
Titus County		Lowest	NA	Currently meets target	Education, rural, insurance

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Uvalde County		Lowest	NA	Currently meets target	%Hispanic/Latina, education, poverty, rural, insurance, medically underserved
Webb County		Lowest	Currently meets target	Currently meets target	%Hispanic/Latina, education, poverty, foreign, language, insurance, medically underserved
Wichita County	Komen North Texas	Lowest	Currently meets target	Currently meets target	
Wood County		Lowest	Currently meets target	Currently meets target	Older, rural, medically underserved
Andrews County		Undetermined	SN	SN	%Hispanic/Latina, education, language
Archer County	Komen North Texas	Undetermined	SN	SN	Older, rural, medically underserved
Armstrong County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural, medically underserved
Bailey County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, education, rural, insurance
Baylor County	Komen North Texas	Undetermined	SN	SN	Older, rural, medically underserved
Blanco County		Undetermined	SN	SN	Older, rural, medically underserved
Borden County		Undetermined	SN	SN	Older, rural, medically underserved
Brewster County		Undetermined	SN	SN	%Hispanic/Latina, older, rural, medically underserved
Briscoe County	Komen Greater Amarillo	Undetermined	SN	SN	Older, poverty, rural, insurance, medically underserved
Brooks County		Undetermined	SN	SN	%Hispanic/Latina, older, education, poverty, employment, language, rural, medically underserved
Camp County		Undetermined	SN	NA	%Black/African-American, older, education, rural, medically underserved
Carson County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural, medically underserved
Castro County	Komen Greater Amarillo	Undetermined	SN	SN	%Hispanic/Latina, education, poverty, language, rural, insurance, medically underserved
Childress County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural, medically underserved
Clay County	Komen North Texas	Undetermined	SN	SN	Older, rural, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage	Key Population Characteristics
Cochran County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, education, employment, rural, insurance, medically underserved
Coke County		Undetermined	SN	SN	Older, rural, medically underserved
Coleman County		Undetermined	SN	SN	Older, poverty, rural, medically underserved
Collingsworth County	Komen Greater Amarillo	Undetermined	SN	SN	Older, education, poverty, rural, insurance, medically underserved
Concho County		Undetermined	SN	SN	Older, foreign, rural, medically underserved
Cottle County	Komen Lubbock Area	Undetermined	SN	SN	Older, rural, insurance, medically underserved
Crane County		Undetermined	SN	SN	%Hispanic/Latina, education, language, medically underserved
Crockett County		Undetermined	SN	SN	%Hispanic/Latina, education, employment, language, rural, medically underserved
Crosby County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, older, education, poverty, rural, medically underserved
Culberson County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, employment, language, rural, insurance, medically underserved
Dallam County	Komen Greater Amarillo	Undetermined	SN	SN	Education, rural, insurance, medically underserved
Deaf Smith County	Komen Greater Amarillo	Undetermined	SN	SN	%Hispanic/Latina, education, language, insurance, medically underserved
Delta County		Undetermined	SN	SN	Older, rural, medically underserved
Dickens County	Komen Lubbock Area	Undetermined	SN	SN	Older, education, rural, medically underserved
Dimmit County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, employment, language, rural, medically underserved
Donley County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural, medically underserved
Duval County		Undetermined	SN	SN	%Hispanic/Latina, older, education, poverty, language, rural, medically underserved
Edwards County		Undetermined	SN	SN	%Hispanic/Latina, older, education, rural, insurance, medically underserved

			Predicted Time to Achieve Death Rate	Predicted Time to Achieve Late-stage	Key Population
County	Komen Affiliate	Priority	Target	Incidence Target	Characteristics
Fisher County		Undetermined	SN	SN	Older, rural, medically underserved
Floyd County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, older, education, rural, medically underserved
Foard County		Undetermined	SN	SN	Older, employment, rural, insurance, medically underserved
Franklin County		Undetermined	SN	SN	Older, rural, medically underserved
Garza County	Komen Lubbock Area	Undetermined	SN	SN	Education, foreign, rural, medically underserved
Glasscock County		Undetermined	SN	SN	Rural, medically underserved
Goliad County		Undetermined	SN	SN	Older, rural, medically underserved
Hall County	Komen Greater Amarillo	Undetermined	SN	SN	Older, education, poverty, rural, insurance, medically underserved
Hamilton County		Undetermined	SN	SN	Older, rural
Hansford County	Komen Greater Amarillo	Undetermined	SN	SN	Rural
Hardeman County		Undetermined	SN	SN	Older, poverty, employment, rural, medically underserved
Hartley County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural, medically underserved
Haskell County		Undetermined	SN	SN	Older, employment, rural, medically underserved
Hemphill County	Komen Greater Amarillo	Undetermined	SN	SN	Rural
Hudspeth County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, foreign, language, rural, insurance, medically underserved
Irion County		Undetermined	SN	SN	Older, rural, medically underserved
Jack County		Undetermined	SN	SN	Older, rural, medically underserved
Jackson County		Undetermined	SN	SN	Older, rural, medically underserved
Jeff Davis County		Undetermined	SN	SN	Older, rural, medically underserved
Jim Hogg County		Undetermined	SN	SN	%Hispanic/Latina, education, employment, language, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Karnes County		Undetermined	SN	SN	%Hispanic/Latina, older, education, rural, medically underserved
Kenedy County		Undetermined	SN	SN	%Hispanic/Latina, education, rural, medically underserved
Kent County	Komen Lubbock Area	Undetermined	SN	SN	Older, rural, medically underserved
Kimble County		Undetermined	SN	SN	Older, rural, insurance, medically underserved
King County		Undetermined	SN	SN	Rural, medically underserved
Kinney County		Undetermined	SN	SN	%Hispanic/Latina, older, poverty, employment, rural, medically underserved
Knox County		Undetermined	SN	SN	Older, education, rural, insurance, medically underserved
La Salle County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, language, rural, medically underserved
Limestone County	Komen East Central Texas	Undetermined	SN	SN	%Black/African-American, older, rural, medically underserved
Lipscomb County	Komen Greater Amarillo	Undetermined	SN	SN	Rural
Live Oak County		Undetermined	SN	SN	Older, rural, medically underserved
Loving County		Undetermined	SN	SN	Rural
Lynn County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, older, rural, medically underserved
Madison County		Undetermined	SN	SN	Older, poverty, rural, medically underserved
Marion County		Undetermined	SN	SN	%Black/African-American, older, poverty, rural, medically underserved
Martin County		Undetermined	SN	SN	%Hispanic/Latina, education, rural
Mason County		Undetermined	SN	SN	Older, rural, medically underserved
McCulloch County		Undetermined	SN	SN	Older, rural, medically underserved
McMullen County		Undetermined	SN	SN	Older, rural, medically underserved
Menard County		Undetermined	SN	SN	Older, rural, insurance, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Mills County		Undetermined	SN	SN	Older, rural, insurance, medically underserved
Mitchell County		Undetermined	SN	SN	Older, rural, medically underserved
Motley County	Komen Lubbock Area	Undetermined	SN	SN	Older, rural, medically underserved
Ochiltree County	Komen Greater Amarillo	Undetermined	SN	SN	%Hispanic/Latina, education, language, medically underserved
Oldham County	Komen Greater Amarillo	Undetermined	SN	SN	Rural, medically underserved
Parmer County	Komen Greater Amarillo	Undetermined	SN	SN	%Hispanic/Latina, education, language, rural, insurance, medically underserved
Pecos County		Undetermined	SN	SN	%Hispanic/Latina, education, language, rural, medically underserved
Presidio County		Undetermined	SN	SN	%Hispanic/Latina, older, education, poverty, employment, foreign, language, rural, insurance, medically underserved
Rains County		Undetermined	SN	SN	Older, rural
Reagan County		Undetermined	SN	SN	%Hispanic/Latina, education, language
Real County		Undetermined	SN	SN	Older, education, poverty, employment, rural, insurance, medically underserved
Refugio County		Undetermined	SN	SN	%Hispanic/Latina, older, education, rural, medically underserved
Roberts County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural
Runnels County		Undetermined	SN	SN	Older, rural, medically underserved
San Augustine County		Undetermined	SN	SN	%Black/African-American, older, education, poverty, employment, rural, medically underserved
San Saba County		Undetermined	SN	SN	Older, rural, insurance, medically underserved
Schleicher County		Undetermined	SN	SN	%Hispanic/Latina, rural, medically underserved
Shackelford County		Undetermined	SN	SN	Older, rural, medically underserved
Sherman County	Komen Greater Amarillo	Undetermined	SN	SN	Education, rural, insurance, medically underserved

County	Komen Affiliate	Priority	Predicted Time to Achieve Death Rate Target	Predicted Time to Achieve Late-stage Incidence Target	Key Population Characteristics
Somervell County		Undetermined	SN	SN	Rural
Stephens County		Undetermined	SN	SN	Older, rural, medically underserved
Sterling County		Undetermined	SN	SN	Older, education, language, rural, medically underserved
Stonewall County		Undetermined	SN	SN	Older, rural, medically underserved
Sutton County		Undetermined	SN	SN	%Hispanic/Latina, education, medically underserved
Swisher County	Komen Greater Amarillo	Undetermined	SN	SN	Older, education, rural, medically underserved
Terrell County		Undetermined	SN	SN	%Hispanic/Latina, older, rural, medically underserved
Terry County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, education, language, rural, medically underserved
Throckmorton County		Undetermined	SN	SN	Older, rural, insurance, medically underserved
Upton County		Undetermined	SN	SN	%Hispanic/Latina, education, rural, medically underserved
Ward County		Undetermined	SN	SN	%Hispanic/Latina, education, rural, medically underserved
Wheeler County	Komen Greater Amarillo	Undetermined	SN	SN	Older, rural
Wilbarger County	Komen North Texas	Undetermined	SN	SN	Older, education, rural, medically underserved
Willacy County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, language, rural, insurance, medically underserved
Winkler County		Undetermined	SN	SN	%Hispanic/Latina, education, language, medically underserved
Yoakum County	Komen Lubbock Area	Undetermined	SN	SN	%Hispanic/Latina, education, foreign, language, rural, medically underserved
Zapata County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, foreign, language, rural, insurance, medically underserved
Zavala County		Undetermined	SN	SN	%Hispanic/Latina, education, poverty, language, rural, insurance, medically underserved

NA – data not available.

SN-data suppressed due to small numbers (15 cases or fewer for the 5-year data period).

Map of intervention at-risk areas

Figure 2.4 shows a map of the intervention categories for the counties in Texas. When both of the indicators used to establish a category for a county are not available, the priority is shown as "undetermined" on the map.



Figure 2.4. Intervention categories

Data Limitations

The quantitative data in this report have been gathered from credible sources and uses the most current data available at the time.

Recent data

The most recent data available were used but, for cancer incidence and death rates, these data are still several years behind. The most recent breast cancer incidence and death rates data available in 2013 were data from 2010. For the US as a whole and for most states, breast cancer incidence and death rates do not often change rapidly. Rates in individual counties might change more rapidly. In particular if a cancer control program has been implemented in 2011-2013, any impact of the program on incidence and death rates would not be reflected in this report.

Over the planning period for this report (2015 to 2019), the data will become more out-of-date. The trend data included in the report can help estimate more current values. Also, the State Cancer Profiles Web site (<u>http://statecancerprofiles.cancer.gov/</u>) is updated annually with the latest cancer data for states and can be a valuable source of information about the latest breast cancer rates for your community.

Data availability

For some areas, data might not be available or might be of varying quality. Cancer surveillance programs vary from state to state in their level of funding and this can impact the quality and completeness of the data in the cancer registries and the state programs for collecting death information. There are also differences in the legislative and administrative rules for the release of cancer statistics for studies such as these. These factors can result in missing data for some of the data categories in this report.

Small populations

Areas with small populations might not have enough breast cancer cases or breast cancer deaths each year to support the generation of reliable statistics. Because breast cancer has relatively good survival rates, breast cancer deaths occur less often in an area than breast cancer cases. So it may happen that breast cancer incidence rates are reported for a county with a small number of people but not breast cancer death rates.

The screening mammography data have a similar limitation because they are based on a survey of a small sample of the total population. So screening proportions may not be available for some of the smaller counties. Finally, it may be possible to report a late-stage incidence rate but not have enough data to report a late-stage trend and to calculate the number of years needed to reach the HP2020 late-stage target.

Data on population characteristics were obtained for all counties, regardless of their size. These data should be used to help guide planning for smaller counties where there are not enough specific breast cancer data to calculate a priority based on HP2020 targets.

Other cancer data sources

If a person has access to other sources of cancer data for their state, they might notice minor differences in the values of the data, even for the same time period. There are often several sources of cancer statistics for a given population and geographic area. State registries and vital statistics offices provide their data to several national organizations that compile the data. This report used incidence data compiled by the North American Association of Central Cancer Registries (NAACCR) and the National Cancer Institute (NCI) and death data compiled by the National Center for Health Statistics (NCHS).

Individual state registries and health departments often publish their own cancer data. These data might be different from the data in this report for several reasons. The most common reason is differences in the timing of when cases are reported.

Sometimes, a small number of cancer cases are reported to cancer registries with as much as a five year delay. Because of this delay, counts of cancer cases for a particular year may differ. In addition, data need to be checked to see whether the same case might have been counted twice in different areas. If a case is counted twice, one of the two reports is deleted. These small adjustments may explain small inconsistencies in the number of cases diagnosed and the rates for a specific year. However, such adjustments shouldn't have a substantial effect on cancer rates at the state level.

Specific groups of people

Data on cancer rates for specific racial and ethnic subgroups such as Somali, Hmong, or Ethiopian are not generally available. Records in cancer registries often record where a person was born if they were born in a foreign country. However, matching data about the population in an area are needed to calculate a rate (the number of cases per 100,000 people) and these matching population data are often not available.

Inter-dependent statistics

The various types of breast cancer data in this report are inter-dependent. For example, an increase in screening can result in fewer late-stage diagnoses and fewer deaths. However, an increase in screening mammography can also result in an increase in breast cancer incidence – simply because previously undetected cases are now being diagnosed. Therefore, caution is needed in drawing conclusions about the causes of changes in breast cancer statistics.

It is important to consider possible time delay between a favorable change in one statistic such as screening and the impact being reflected in other statistics such as the death rate. There can take 10 to 20 years for favorable changes in breast cancer control activities to be reflected in death rates.

Missing factors

There are many factors that impact breast cancer risk and survival for which quantitative data are not available. Some examples include family history, genetic markers like HER2 and
BRCA, other medical conditions that can complicate treatment, and the level of family and community support available to the patient. Good quantitative data are not available on how factors such as these vary from place to place. The quantitative data in this report should be supplemented by qualitative information about these other factors from your communities whenever possible.

Trend limitations

The calculation of the years needed to meet the HP2020 objectives assume that the current trends will continue until 2020. However, the trends can change for a number of reasons. For example, breast cancer programs, if they are successful, should change the trends. In fact, this is the primary goal of breast cancer programs.

However, trends could also change from differences in the population characteristics of the area such as shifts in the race or ethnicity of the people in the area or changes in their general socioeconomics. Areas with high migration rates, either new people moving into an area or existing residents moving elsewhere, are particularly likely to see this second type of change in breast cancer trends.

Late-stage data and un-staged cases

Not all breast cancer cases have a stage indication. Breast cancer might be suspected in very elderly women and a biopsy may not be performed. Also, some breast cancer cases may be known only through an indication of cause-of-death on a death certificate. When comparing late-stage statistics, it is assumed that the rates of unknown staging don't change and are similar between counties. This may not be a good assumption when comparing data between urban and rural areas or between areas with younger and older populations. It is also assumed that the size and types of unknown cases do not change over time when the trends in late-stage statistics are calculated.

In this report, both late-stage incidence rates and late-stage proportions are provided. These two statistics differ in how un-staged cases are represented. With late-stage incidence rates, un-staged cases are excluded from the numerator (the number of late-stage cases) but are included in the denominator (total number of people in the population). With late-stage proportions, un-staged cases are excluded from both the numerator (the number of late-stage cases) and the denominator (number of staged cases). These differences can explain why comparisons using the two late-stage statistics may get different results

Conclusions: Healthy People 2020 Forecasts

Breast Cancer Death Rates

The State of Texas as a whole is **likely to achieve** the HP2020 death rate target. The state had a base rate of 21.8 breast cancer deaths per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent death rate trend, indicates that the State of Texas will likely achieve the HP2020 target of 20.6 female breast cancer deaths per 100,000.

The following counties **currently meet** the HP2020 breast cancer death rate target of 20.6:

- Atascosa County
- Bastrop County (Komen Austin)
- Brazos County
- Burnet County
- Cameron County
- Collin County (Komen North Texas)
- Cooke County (Komen North Texas)
- Ellis County (Komen East Central Texas)
- Fort Bend County (Komen Houston)
- Grayson County (Komen North Texas)
- Guadalupe County
- Harrison County
- Henderson County (Komen East Central Texas)
- Hidalgo County
- Hill County (Komen East Central Texas)
- Hood County (Komen Greater Fort Worth)
- Houston County
- Howard County
- Jim Wells County
- Kerr County
- Lamar County
- Midland County
- Milam County (Komen East Central Texas)
- Smith County (Komen East Central Texas)
- Tom Green County
- Travis County (Komen Austin)
- Val Verde County
- Van Zandt County (Komen East Central Texas)
- Webb County
- Wichita County (Komen North Texas)
- Williamson County (Komen Austin)
- Wise County (Komen North Texas)
- Wood County

The following counties are **likely to miss** the HP2020 breast cancer death rate target unless the death rate falls at a faster rate than currently estimated:

- Austin County
- Bell County (Komen East Central Texas)
- Brazoria County (Komen Houston)
- Brown County

- Cass County (Komen Texarkana)
- Comal County
- DeWitt County
- Eastland County
- Fayette County
- Gregg County
- Grimes County
- Hale County (Komen Lubbock Area)
- Hardin County
- Hopkins County
- Hunt County (Komen North Texas)
- Jasper County
- Jefferson County
- Johnson County (Komen Greater Fort Worth)
- Jones County
- Kaufman County (Komen East Central Texas)
- Kleberg County
- Liberty County (Komen Houston)
- McLennan County (Komen East Central Texas)
- Medina County
- Nacogdoches County
- Navarro County (Komen East Central Texas)
- Orange County
- Palo Pinto County
- Parker County (Komen Greater Fort Worth)
- Potter County (Komen Greater Amarillo)
- Randall County (Komen Greater Amarillo)
- Rusk County
- Starr County
- Taylor County
- Victoria County
- Walker County
- Waller County
- Washington County
- Wilson County
- Young County

Because data for small numbers of people are not reliable, it can't be predicted whether Andrews County, Archer County, Armstrong County, Bailey County, Bandera County, Baylor County, Bee County, Blanco County, Borden County, Bosque County, Brewster County, Briscoe County, Brooks County, Burleson County, Caldwell County, Calhoun County, Callahan County, Camp County, Carson County, Castro County, Chambers County, Childress County, Clay County, Cochran County, Coke County, Coleman County, Collingsworth County, Colorado County, Comanche County, Concho County, Cottle County, Crane County, Crockett County, Crosby County, Culberson County, Dallam County, Dawson County, Deaf Smith County, Delta County, Dickens County, Dimmit County, Donley County, Duval County, Edwards County, Erath County, Falls County, Fannin County, Fisher County, Floyd County, Foard County, Franklin County, Freestone County, Frio County, Gaines County, Garza County, Glasscock County, Goliad County, Gonzales County, Gray County, Hall County, Hamilton County, Hansford County, Hardeman County, Hartley County, Haskell County, Hemphill County, Hockley County, Hudspeth County, Hutchinson County, Irion County, Jack County, Jackson County, Jeff Davis County, Jim Hogg County, Karnes County, Kendall County, Kenedy County, Kent County, Kimble County, King County, Kinney County, Knox County, Lamb County, Lampasas County, La Salle County, Lavaca County, Lee County, Leon County, Limestone County, Lipscomb County, Live Oak County, Loving County, Lynn County, McCulloch County, McMullen County, Madison County, Marion County, Martin County, Mason County, Maverick County, Menard County, Mills County, Mitchell County, Montague County, Moore County, Morris County, Motley County, Newton County, Nolan County, Ochiltree County, Oldham County, Panola County, Parmer County, Pecos County, Presidio County, Rains County, Reagan County, Real County, Red River County, Reeves County, Refugio County, Roberts County, Robertson County, Rockwall County, Runnels County, Sabine County, San Augustine County, San Saba County, Schleicher County, Scurry County, Shackelford County, Sherman County, Somervell County, Stephens County, Sterling County, Stonewall County, Sutton County, Swisher County, Terrell County, Terry County, Throckmorton County, Titus County, Trinity County, Upton County, Uvalde County, Ward County, Wheeler County, Wilbarger County, Willacy County, Winkler County, Yoakum County, Zapata County and Zavala County will reach the death rate target.

The remaining counties are likely to achieve the target by 2020 or earlier.

Breast Cancer Late-Stage Incidence Rates

The State of Texas as a whole **currently meets** the HP2020 late-stage incidence rate target. The state had a base rate of 40.7 new late-stage cases per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent late-stage incidence rate trend, indicates that the State of Texas will meet the HP2020 target of 41.0 new late-stage cases per 100,000.

The following counties **currently meet** the HP2020 late-stage incidence rate target of 41.0:

- Anderson County (Komen East Central Texas)
- Bandera County
- Bexar County (Komen San Antonio)
- Brazos County
- Brown County
- Burleson County
- Cameron County
- Cass County (Komen Texarkana)
- Cherokee County (Komen East Central Texas)

- Collin County (Komen North Texas)
- Colorado County
- Cooke County (Komen North Texas)
- Denton County (Komen North Texas)
- El Paso County (Komen El Paso)
- Falls County (Komen East Central Texas)
- Fayette County
- Fort Bend County (Komen Houston)
- Freestone County (Komen East Central Texas)
- Galveston County (Komen Houston)
- Gillespie County
- Gonzales County
- Grimes County
- Hale County (Komen Lubbock Area)
- Harrison County
- Hays County (Komen Austin)
- Hidalgo County
- Hill County (Komen East Central Texas)
- Hood County (Komen Greater Fort Worth)
- Hopkins County
- Houston County
- Hunt County (Komen North Texas)
- Kaufman County (Komen East Central Texas)
- Kendall County
- Lampasas County
- Matagorda County
- Maverick County
- Midland County
- Montague County (Komen North Texas)
- Montgomery County (Komen Houston)
- Navarro County (Komen East Central Texas)
- Newton County
- Nueces County
- Palo Pinto County
- Panola County
- Rockwall County
- Rusk County
- San Patricio County
- Shelby County
- Starr County
- Taylor County
- Titus County

- Tyler County
- Upshur County
- Uvalde County
- Waller County
- Webb County
- Wharton County
- Wichita County (Komen North Texas)
- Wood County

The following counties are **likely to miss** the HP2020 late-stage incidence rate target unless the late-stage incidence rate falls at a faster rate than currently estimated:

- Angelina County
- Atascosa County
- Austin County
- Bastrop County (Komen Austin)
- Bee County
- Bosque County (Komen East Central Texas)
- Burnet County
- Caldwell County (Komen Austin)
- Calhoun County
- Chambers County (Komen Houston)
- Comanche County
- Coryell County (Komen East Central Texas)
- Ector County
- Frio County
- Grayson County (Komen North Texas)
- Guadalupe County
- Harris County (Komen Houston)
- Hockley County (Komen Lubbock Area)
- Hutchinson County (Komen Greater Amarillo)
- Jasper County
- Jefferson County
- Johnson County (Komen Greater Fort Worth)
- Jones County
- Lamar County
- Lamb County (Komen Lubbock Area)
- Lavaca County
- Lee County
- Leon County
- Liberty County (Komen Houston)
- Llano County
- Medina County

- Moore County (Komen Greater Amarillo)
- Morris County
- Nolan County
- Orange County
- Parker County (Komen Greater Fort Worth)
- Polk County
- Potter County (Komen Greater Amarillo)
- Reeves County
- Sabine County
- Tom Green County
- Trinity County
- Val Verde County
- Van Zandt County (Komen East Central Texas)
- Walker County
- Washington County
- Wilson County
- Wise County (Komen North Texas)
- Young County

Because data for small numbers of people are not reliable, it can't be predicted whether Andrews County, Archer County, Armstrong County, Bailey County, Baylor County, Blanco County, Borden County, Brewster County, Briscoe County, Brooks County, Camp County, Carson County, Castro County, Childress County, Clay County, Cochran County, Coke County, Coleman County, Collingsworth County, Concho County, Cottle County, Crane County, Crockett County, Crosby County, Culberson County, Dallam County, Deaf Smith County, Delta County, Dickens County, Dimmit County, Donley County, Duval County, Eastland County, Edwards County, Fisher County, Floyd County, Foard County, Franklin County, Garza County, Glasscock County, Goliad County, Hall County, Hamilton County, Hansford County, Hardeman County, Hartley County, Haskell County, Hemphill County, Howard County, Hudspeth County, Irion County, Jack County, Jackson County, Jeff Davis County, Jim Hogg County, Karnes County, Kenedy County, Kent County, Kimble County, King County, Kinney County, Knox County, La Salle County, Limestone County, Lipscomb County, Live Oak County, Loving County, Lynn County, McCulloch County, McMullen County, Madison County, Marion County, Martin County, Mason County, Menard County, Mills County, Mitchell County, Motley County, Ochiltree County, Oldham County, Parmer County, Pecos County, Presidio County, Rains County, Reagan County, Real County, Refugio County, Roberts County, Runnels County, San Augustine County, San Saba County, Schleicher County, Shackelford County, Sherman County, Somervell County, Stephens County, Sterling County, Stonewall County, Sutton County, Swisher County, Terrell County, Terry County, Throckmorton County, Upton County, Ward County, Wheeler County, Wilbarger County, Willacy County, Winkler County, Yoakum County, Zapata County and Zavala County will reach the late-stage incidence rate target.

The remaining counties are likely to achieve the target by 2020 or earlier.

HP2020 Conclusions

Highest priority areas

Thirty-four counties in the State of Texas are in the highest priority category. Fourteen of the thirty-four, Austin County, Jasper County, Jefferson County, Johnson County, Jones County, Liberty County, Medina County, Orange County, Parker County, Potter County, Walker County, Washington County, Wilson County and Young County, are not likely to meet either the death rate or late-stage incidence rate HP2020 targets. One of the thirty-four, Eastland County is not likely to meet the death rate HP2020 target. Nineteen of the thirty-four, Bee County, Bosque County, Caldwell County, Calhoun County, Chambers County, Comanche County, Frio County, Hockley County, Hutchinson County, Lamb County, Lavaca County, Lee County, Leon County, Moore County, Morris County, Nolan County, Reeves County, Sabine County and Trinity County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Austin County (141.0 per 100,000), Parker County (130.6 per 100,000) and Washington County (149.4 per 100,000) are significantly higher than the state as a whole (114.4 per 100,000). The age-adjusted death rates in Jefferson County (25.9 per 100,000) and Young County (45.7 per 100,000) are significantly higher than the state as a whole (21.8 per 100,000). The age-adjusted late-stage incidence rates in Jasper County (55.4 per 100,000), Jefferson County (58.5 per 100,000) and Orange County (53.2 per 100,000) are significantly higher than the state as a whole (40.7 per 100,000). Late-stage incidence trends in Austin County (28.5 percent per year) are significantly less favorable than the state as a whole (-3.2 percent per year).

Austin County has an older population. Bee County has a relatively large Hispanic/Latina population and low education levels. Bosque County has an older population. Caldwell County has a relatively large Hispanic/Latina population and high unemployment. Calhoun County has a relatively large Hispanic/Latina population and high unemployment. Comanche County has an older population and high poverty levels. Eastland County has an older population. Frio County has a relatively large Hispanic/Latina population, low education levels, high poverty levels and a relatively large number of households with little English. Hockley County has a relatively large Hispanic/Latina population and low education levels. Jasper County has an older population. Jefferson County has a relatively large Black/African-American population. Jones County has an older population and low education levels. Lamb County has a relatively large Hispanic/Latina population and low education levels. Lavaca County has an older population. Lee County has an older population. Leon County has an older population. Liberty County has low education levels and high unemployment. Medina County has a relatively large Hispanic/Latina population. Moore County has a relatively large Hispanic/Latina population, low education levels, a relatively large foreign-born population and a relatively large number of households with little English. Morris County has a relatively large Black/African-American population and an older population. Notan County has an older population. Potter County has high poverty levels. Reeves County has a relatively large Hispanic/Latina population, low education levels, high poverty levels, high unemployment and a relatively large number of households with little English. Sabine County has an older population. Trinity County has an older population. Walker County has a relatively large Black/African-American population. Washington County has a

relatively large Black/African-American population and an older population. Young County has an older population.

High priority areas

Three counties in the State of Texas are in the high priority category. All of the three, Ector County, Harris County and Llano County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Harris County (121.7 per 100,000) are significantly higher than the state as a whole (114.4 per 100,000). The age-adjusted death rates in Harris County (24.2 per 100,000) are significantly higher than the state as a whole (21.8 per 100,000). The age-adjusted late-stage incidence rates in Ector County (53.1 per 100,000) and Harris County (43.0 per 100,000) are significantly higher than the state as a whole (40.7 per 100,000). Ector County has a relatively large Hispanic/Latina population and low education levels. Harris County has a relatively large Black/African-American population, a relatively large foreign-born population and a relatively large number of households with little English. Llano County has an older population.

Health Systems Analysis

This section of the state report tells the story of the breast cancer continuum of care and the delivery of quality health care in the community. Key to this section is the observation of potential strengths and weaknesses in the health care system that could compromise a women's health as she works her way through the continuum of care (e.g., screening, diagnosis, treatment and follow-up/survivorship services).

Health Systems Analysis Data Sources

Breast Cancer Programs and Services

An inventory of breast cancer programs and services in the state were collected through a comprehensive internet search to identify the following types of health care facilities or community organizations that may provide breast cancer related services:

- Hospitals- Public or private, for-profit or nonprofit.
- Community Health Centers (CHC) Community based organizations that provide primary care regardless of ability to pay; include Federally Qualified Health Centers (FQHCs) and FQHC look-alikes.
- Free Clinic- Free and charitable clinics are safety-net health care organizations that utilize a volunteer/staff model and restrict eligibility for their services to individuals who are uninsured, underinsured and/or have limited or no access to primary health care.
- Health Department- Local health department run by government entity (e.g. county, city) focused on the general health of its citizens.
- Title X Provider- Family planning centers that also offer breast and cervical cancer screening. Services are provided through state, county, and local health departments; community health centers; Planned Parenthood centers; and hospital-based, school-based, faith-based, other private nonprofits.
- Other- Any institution that is not a hospital, CHC, free clinic, health department or Title X provider (e.g., FDA certified mammography center that is not a hospital/CHC, community organization that is not a medical provider but does connect people to services or provide support services such as financial/legal assistance).

Information collected through these means was inputted into a Health Systems Analysis spreadsheet by service type: screening, diagnostics, treatment, and support. The screening service category encompasses clinical breast exams (CBEs), screening mammograms, mobile mammography units, ultrasounds, and patient navigation. The category of diagnostics includes diagnostic mammograms, ultrasounds, biopsy, MRI, and patient navigation. Treatment modalities counted were chemotherapy, radiation, surgery consultations, surgery, reconstruction, and patient navigations. Support encompasses a broad range of services including support groups, wigs, mastectomy wear, individual counseling/psychotherapy, exercise/nutrition programs, complementary therapies, transportation assistance, financial assistance for cost of living expenses, as well as end of life care, legal services, and education.

In order to understand the effect available health systems have on the state, the identified resources were plotted on an asset map by Susan G. Komen Information Technology (IT) staff to visually illustrate the services (or lack thereof) available in the state. While every effort was

made to ensure these findings were comprehensive, it may be possible that a facility or organization was missed or has since closed; as a result, these findings should not be considered exhaustive and/or final.

Quality of Care Indicators

For all health care facilities and hospitals, an additional layer of analysis was applied using quality of care indicators. Quality of care indicators are quantifiable measures related to the process of care, outcomes of care, and patient satisfaction levels from a particular program and/or organization. Multiple national organizations have developed key quality of care indicators for breast health services, and if an organization meets all of the key indicators they are designated an "accredited" health care institution. These accreditations outline key quality of care indicators health care institutions must meet in order to obtain and/or retain accreditation status. The following five accreditations were considered high quality of care indicators in the state's health system analysis.

• FDA Approved Mammography Facilities

The Food and Drug Administration (FDA) passed the Mammography Quality Standards Act (MQSA) in 1992 to ensure facilities meet standards for performing high quality mammography. Accreditation bodies administer the MQSA to evaluate and accredit mammography facilities based upon quality standards. These quality standards are extensive and outline how a facility can operate. For instance, physicians interpreting mammograms must be licensed to practice medicine, be certified to interpret radiological procedures including mammography, and must complete continuing experience or education to maintain their qualifications (US Food and Drug Administration [US FDA], 2014). Radiologic technologists must also be trained and licensed to perform general radiographic procedures and complete continuing experience or education to maintain their qualifications. Facilities are required to maintain personnel records to document the qualifications of all personnel who work at the facility such as physicians, radiologic technologists or medical physicists.

All radiographic equipment used in FDA approved mammography centers must be specifically designed for mammography and must not be equipment designed for general purpose or equipment that has been modified with special attachments for mammography. Equipment regulations also apply to compression paddles, image receptor size, light fields and magnification, focal spot selection, x-ray film, film processing solutions, lighting and film masking devices. Facilities must also prepare a written report of the results of each mammography examination performed under its certificate. The report must include the name of the patient and an additional patient identifier, date of examination, the name of the interpreting physician, and the overall final assessment of findings. Findings from mammograms are classified into four different categories, including negative, benign, probably benign, and highly suggestive of malignancy. An assessment can also be assigned as incomplete indicating additional imaging evaluation is needed.

FDA approved mammography facilities are obligated to communicate the results of mammograms to the patient and the patient's primary care provider in a written report within 30 days. Each facility must also maintain mammography films and reports in a permanent medical record for a period of no less than five years or longer if mandated by State or local law. Patients can request to permanently or temporarily transfer the original mammograms and patient report to a medical institution, physician, health care provider, or to the patient directly. Any fees for providing transfer services shall not exceed the documented costs associated with this service.

A quality assurance program must be established at each facility to ensure safety, reliability, clarity, and accuracy of mammography services. At least once a year, each facility undergoes a survey by a medical physicist that includes the performance of tests to ensure the facility meets quality assurance requirements. The FDA evaluates the performance of each certificated agency annually through the use of performance indicators that address the adequacy of program performance in certification, inspection, and enforcement activities. Only facilities that are accredited by FDA accrediting bodies or are undergoing accreditation by accrediting bodies may obtain a certificate from the FDA to legally perform mammography (US FDA, 2014). Only FDA approved mammography centers were included in the health system analysis for each target community.

American College of Surgeons Commission on Cancer Certification (CoCC)
 Applying and sustaining an American College of Surgeons Commission on Cancer
 Certification (CoCC) is a voluntary effort a cancer program can undertake to ensure a
 range of services necessary to diagnose and treat cancer, as well as rehabilitate and
 support patients and their families, are available (American College of Surgeons [ACoS],
 2013). There are various categories of cancer programs, and each facility is assigned a
 category based on the type of facility or organization, services provided, and cases
 accessioned or recorded. Program categories include: Integrated Network Cancer
 Program (INCP); NCI-Designated Comprehensive Cancer Center Program (NCIP);
 Academic Comprehensive Cancer Program (ACAD); Veterans Affairs Cancer Program
 (VACP); Comprehensive Community Cancer Program (PCP); Hospital Associate
 Cancer Program (FCCP) (ACoS, 2013).

CoCC cancer programs are surveyed every three years. In preparation for survey, the cancer committee for that facility must assess program compliance with the requirements for all standards outlined in *Cancer Program Standards 2012: Ensuring Patient-Centered Care*. An individual must then review and complete an online Survey Application Record (SAR). In addition, the individual responsible for completing the SAR will perform a self-assessment and rate compliance with each standard using the Cancer Program Ratings Scale.

The surveyor's role is to assist in accurately defining the standards and verifying the facility's cancer program is in compliance. To accomplish this task, the surveyor will meet with the cancer committee, cancer registry staff and cancer liaison physicians, review pathology reports, and attend a cancer conference to observe the multidisciplinary patient management discussions and confirm treatment is planned using nationally recognized, evidence-based treatment guidelines. CoCC-accredited programs must also submit documentation of cancer program activities with the SAR using multiple sources such as policies, procedures, manuals, and grids.

Each cancer program standard is rated on a compliance scale that consists of the score of (1+) commendation, (1) compliance, (5) noncompliance, and (8) not applicable. A deficiency is defined as any standard with a rating of five. A deficiency in one or more standards will affect the accreditation award. Commendation ratings (+1) are valid for eight standards, can only be earned at the time of survey, and are used to determine the accreditation award and award level (bronze, silver, or gold). Accreditation awards are based on consensus ratings by the cancer program surveyor, CoCC staff and when necessary, the Program Review Subcommittee. A program can earn one of the following Accreditation Awards; three-year with commendation accreditation, three-year accreditation, three-year accreditation with contingency, provisional accreditation, or no accreditation. Programs are surveyed at three-year intervals from the date of survey.

Award notification takes place within 45 days following the completed survey and will include The Accredited Cancer Program Performance Report. This report includes a comprehensive summary of the survey outcome and accreditation award, the facility's compliance rating for each standard, an overall rating compared with other accredited facilities nation- and state-wide, and the category of accreditation. In addition, a narrative description of deficiencies that require correction, suggestions to improve or enhance the program, and commendations awarded are also included.

• American College of Surgeons National Accreditation Program for Breast Centers (NAPBC)

The American College of Surgeons' National Accreditation Program for Breast Centers (NAPBC) is a consortium of national professional organizations focused on breast health and dedicated to improving quality of care and outcomes for patients with diseases of the breast (ACoS, 2014). The NAPBC utilizes evidence-based standards as well as patient and provider education, and encourages leaders from major disciplines to work together to diagnose and treat breast disease. The NAPBC has defined 28 program standards and 17 program components of care that provide the most efficient and contemporary care for patients diagnosed with diseases of the breast. Quality standards cover a range of topics and levels of operation including leadership, clinical management, research, community outreach, professional education, and quality improvement (ACoS, 2014).

To be considered for initial survey, breast center leadership must ensure clinical services, interdisciplinary/multidisciplinary conference(s), and quality management programs are in place and ensure a facility can meet the requirements outlined for all standards. Critical standards include having breast program leadership that is responsible and accountable for services and also establishes, monitors, and evaluates the interdisciplinary breast cancer conference frequency, multidisciplinary and individual attendance, prospective case presentation, and total case presentation annually. In addition, the interdisciplinary patient management standard requires patient management to be conducted by an interdisciplinary team after a patient is diagnosed with breast cancer.

Breast center leadership then completes a pre-application to participate and pay for the survey fee within 30 days of the receipt from the NAPBC. To prepare for a survey, the breast center must complete a Survey Application Record (SAR) prior to the on-site visit. The SAR is intended to capture information about the breast center activity and includes portions of individuals to perform a self-assessment and rate compliance with each standard using a provided rating system. The NAPBC will then complete a survey of the facility within six months. A survey of a facility typically includes a tour of the center, a meeting between the surveyor and breast center leadership and staff, chart and medical record review, and the attendance of a breast conference.

Accreditation awards are based on consensus ratings by the surveyor, the NAPBC staff, and, if required, the Standards and Accreditation Committee. Accreditation award is based on compliance with 28 standards. A three year, full accreditation is granted to centers that comply with 90 percent or more of the standards with resolution of all deficient standards documented within 12 months of survey. Centers that do not resolve all deficiencies within the 12 month period risk losing NAPBC accreditation status and are required to reapply. Once a performance report and certificate of accreditation are issued, these centers are surveyed every three years.

A three-year contingency accreditation is granted to centers that meet less than 90 percent, but more than 75 percent of the standards at the time of survey. The contingency status is resolved by the submission of documentation of compliance within 12 months from the date of survey. A performance report and certificate of accreditation are issued, and these facilities are surveyed every three years. An accreditation can be deferred if a center meets less than 75 percent of the standards at the time of the survey. The deferred status is resolved by the submission of documentation of compliance within 12 months from the date of survey. Based on the resolution of deficiencies and survey results, a performance report and certificate of accreditation are issued, and these facilities are surveyed every three years. For the complete list of NAPBC quality standards, visit: <u>http://www.napbc-breast.org/standards/standards.html</u>.

• American College of Radiology Breast Imaging Centers of Excellence (BICOE) The American College of Radiology (ACR) Breast Imaging Centers of Excellence (BICOE) designation is awarded to breast imaging centers that seek and earn accreditation in the ACR's entire voluntary breast imaging accreditation programs and modules, in addition to the Mandatory Mammography Accreditation Program (MMAP) (American College of Radiology [ACR], n.d.). The ACR MMAP is designed to provide facilities with peer review and constructive feedback on staff qualifications, equipment, quality control, quality assurance, image quality, and radiation dose. This ensures facilities comply with the 1992 Mammography Quality Standards Act (MQSA), which requires all mammography facilities be accredited. In order to receive the ACR's BICOE designation, a facility must be accredited by the ACR in mammography, stereotactic breast biopsy, breast ultrasound, and effective January 1, 2016, breast MRI.

The ACR will send a BICOE certificate to each facility that fulfills the necessary requirements. The designation remains in effect as long as all breast imaging facilities (an organizations home location or a different location) remain accredited in all required breast imaging services provided. If the center or facility neglects to renew any of its accreditations or fails during renewal, the facility will be notified that it no longer has the BICOE designation and the BICOE certificate must be removed from public display. Some centers will need to specifically request a BICOE designation, while in most cases the ACR will consult its database and automatically provide an eligible center a BICOE certificate if the center is at a single physical location and meets all breast imaging requirements (ACR, n.d.).

National Cancer Institute Designated Cancer Centers

A National Cancer Institute (NCI) designated Cancer Center is an institution dedicated to researching the development of more effective approaches to the prevention, diagnosis, and treatment of cancer (National Cancer Institute [NCI], 2012). A NCI-designated Cancer Center conducts cancer research that is multidisciplinary and incorporates collaboration between institutions and university medical centers. This collaboration also provides training for scientists, physicians, and other professionals interested in specialized training or board certification in cancer-related disciplines. NCI-designated Cancer Centers also provide clinical programs that offer the most current forms of treatment for various types of cancers and typically incorporate access to clinical trials of experimental treatments. In addition, public education and community outreach regarding cancer prevention and screening are important activities of a NCI-designated Cancer Center (NCI, 2012).

HRSA Shortage Designations

The US Department of Health and Human Services-Health Resources and Services Administration (HRSA) designations for Health Professional Shortage Areas (HSPAs) and Medically Underserved Areas/Populations (MUA/Ps) were used to identify areas within the state where individuals may have inadequate access to primary care providers and facilities (US Department of Health and Human Services, n.d.).

- Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center or other state or federal prisons).
- *Medically Underserved Areas/Populations (MUA/Ps)* are areas or populations designated by HRSA as having too few primary care providers, high infant deaths, high poverty or a high elderly population.

Breast Cancer Continuum of Care

The Breast Cancer Continuum of Care (CoC), shown in Figure 3.1, is a model that shows how a woman typically moves through the health care system for breast care. A woman would ideally move through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcomes. Education can play an important role throughout the entire CoC.

While a woman may enter the continuum at any point, ideally, a woman would enter the CoC by getting screened for breast cancer – with a clinical breast exam or a screening mammogram. If the screening test results are normal, she would loop back into followup care, where she would get another screening exam at the recommended interval. Education plays a role in both providing education to encourage women to get screened and reinforcing the need to continue to get screened routinely thereafter.





If a screening exam resulted in abnormal results, diagnostic tests would be needed, possibly several, to determine if the abnormal finding is in fact breast cancer. These tests might include a diagnostic mammogram, breast ultrasound, or biopsy. If the tests were negative (or benign) and breast cancer was not found, she would go into the follow-up loop and return for screening at the recommended interval. The recommended intervals may range from three to six months for some women to 12 months for most women. Education plays a role in communicating the importance of proactively getting test results, keeping follow-up appointments, and understanding what everything means. Education can empower a woman and help manage anxiety and fear.

The woman would proceed to treatment if breast cancer is diagnosed. Education can cover such topics as treatment options, how a pathology reports determines the best options for

treatment, understanding side effects and how to manage them, and helping to formulate questions a woman may have for her providers.

For some breast cancer patients, treatment may last a few months and for others, it may last years. While the CoC model shows that follow-up and survivorship come after treatment ends, they actually may occur at the same time. Follow-up and survivorship may include things like navigating insurance issues, locating financial assistance, symptom management, such as pain, fatigue, sexual issues, bone health, etc. Education may address topics such as making healthy lifestyle choices, long term effects of treatment, managing side effects, the importance of follow-up appointments, and communication with their providers. Most women will return to screening at a recommended interval after treatment ends, or for some, during treatment (such as those taking long term hormone therapy).

There are often delays in moving from one point of the continuum to another – at the point of follow-up of abnormal screening exam results, starting treatment, and completing treatment – that can all contribute to poorer outcomes. There are also many reasons why a woman does not enter or continue in the breast cancer CoC. These barriers can include things such as lack of transportation, system issues including long waits for appointments and inconvenient clinic hours, language barriers, fear, and lack of information or the wrong information (myths and misconceptions). Education can address some of these barriers and help a woman enter and progress through the CoC more quickly.

Health Systems Analysis Findings

In the State of Texas there were 976 locations found to provide breast cancer services varying between screening, diagnostic, treatment, and survivorship (Figure 3.2). There were 976 locations that provided screening services, 498 locations in the state that provide diagnostic services and 222 locations providing treatment services. In the state there were 139 locations that provided survivorship services or care. Identified facilities that provide mammography services were all accredited by the Federal Drug Administration. There are 96 locations that are accredited by the American College of Surgeons Commission on Cancer, 70 locations accredited by the American College of Radiology as a Breast Imaging Center of Excellence and 30 locations accredited as an American College of Surgeons NAPBC program. There were four locations designated as a NCI Cancer Center.

The following counties are designated as a Medically Underserved Area/Population and/or a Health Professional Shortage Area for primary care: Anderson, Andrews, Angelina, Aransas, Archer, Armstrong, Atascosa, Austin, Bailey, Bandera, Bastrop, Baylor, Bee, Bell, Bexar, Blanco, Borden, Bosque, Bowie, Brazoria, Brazos, Brewster, Briscoe, Brooks, Brown, Burleson, Burnet, Caldwell, Calhoun, Callahan, Cameron, Camp, Carson, Cass, Castro, Chambers, Cherokee, Childress, Clay, Cochran, Coke, Coleman, Collin, Collingsworth, Colorado, Comal, Comanche, Concho, Cooke, Coryell, Cottle, Crane, Crockett, Crosby, Culberson, Dallam, Dallas, Dawson, Deaf Smith, Delta, Denton, DeWitt, Dickens, Dimmit, Donley, Duval, Eastland, Ector, Edwards, El Paso, Ellis, Erath, Falls, Fannin, Fayette, Fisher, Floyd, Foard, Fort Bend, Franklin, Freestone, Frio, Gaines, Galveston, Garza, Glasscock, Goliad, Gonzales, Gray, Grayson, Gregg, Grimes, Guadalupe, Hale, Hall, Hamilton, Hansford, Hardeman, Hardin, Harris, Harrison, Hartley, Haskell, Hays, Hemphill, Henderson, Hidalgo, Hill, Hockley, Hopkins, Houston, Howard, Hudspeth, Hunt, Hutchinson, Irion, Jack, Jackson, Jasper, Jeff Davis, Jefferson, Jim Hogg, Jim Wells, Johnson, Jones, Karnes, Kaufman, Kenedy, Kent, Kerr, Kimble, King, Kinney, Kleberg, Knox, La Salle, Lamar, Lamb, Lampasas, Lavaca, Lee, Leon, Liberty, Limestone, Lipscomb, Live Oak, Llano, Loving, Lubbock, Lynn, Madison, Marion, Martin, Mason, Matagorda, Maverick, McCulloch, McLennan, McMullen, Medina, Menard, Midland, Milam, Mills, Mitchell, Montague, Montgomery, Moore, Morris, Motley, Nacodoches, Navarro, Newton, Nolan, Nueces, Ochiltree, Oldham, Orange, Palo Pinto, Panola, Parmer, Pecos, Polk, Potter, Presidio, Rains, Randall, Reagan, Real, Red River, Reeves, Refugio, Roberts, Robertson, Runnels, Rusk, Sabine, San Augustine, San Jacinto, San Patricio, San Saba, Schleicher, Scurry, Shackelford, Shelby, Sherman, Smith, Starr, Stephens, Sterling, Stonewall, Sutton, Swisher, Tarrant, Taylor, Terrell, Terry, Throckmorton, Titus, Tom Green, Travis, Trinity, Tyler, Upshur, Upton, Uvalde, Val Verde, Van Zandt, Victoria, Walker, Waller, Ward, Washington, Webb, Wharton, Wheeler, Wichita, Wilbarger, Willacy, Williamson, Wilson, Winkler, Wood, Yoakum, Young, Zapata and Zavala.



Figure 3.2. Breast cancer services available in Texas

Public Policy Overview

In recent years, public policies pertaining to breast cancer have undergone substantial changes that will affect at-risk women across the United States. States have responded differently to the public policy developments concerning access to services within the breast cancer continuum of care (screening, diagnostic, treatment and survivorship care); therefore, women are dependent on their state's agenda and action on health care reform. This section of the state report will focus on the following public policies that affect breast cancer care in the state: National Breast and Cervical Cancer Early Detection Program, State Comprehensive Cancer Control Plan, the Affordable Care Act and Medicaid Expansion.

Susan G. Komen Advocacy

Susan G. Komen is the voice for the more than three million breast cancer survivors and those who love them, working to ensure that the fight against breast cancer is a priority among policymakers in Washington, D.C., and every Capitol across the country.

Each year, Komen works to identify, through a transparent and broad-based, intensive vetting and selection process, the policy issues that have the greatest potential impact on Komen's mission. This process includes the collection of feedback from Komen Headquarters leadership, policy staff, and subject matter experts; Komen Affiliates from across the country; advisory groups including the Komen Advocacy Advisory Taskforce (KAAT), Advocates in Science (AIS), and Komen Scholars; and other stakeholders with a vested interest in breast cancer-related issues.

The selected issues are the basis for Komen's state and federal advocacy work in the coming year. While the priority issues may change on an annual basis, the general focus for Komen's advocacy work is to ensure high-quality, affordable care for all, though access to services and an increased investment in research to ensure the continued development of the latest technologies and treatments. For more information on Komen's current Advocacy Priorities, please visit: <u>http://ww5.komen.org/WhatWeDo/Advocacy/Advocacy.html.</u>

National Breast and Cervical Cancer Early Detection Program

The United States Congress passed the Breast and Cervical Cancer Mortality Prevention Act of 1990, which directed the Centers for Disease Control and Prevention (CDC) to create the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) to improve access to screening (CDC, 2015a). NBCCEDP is a federal-state partnership which requires states to satisfy a 1:3 matching obligation (\$1 in state funds or in-kind funds for every \$3 in federal funds provided to that state) (CDC, n.d.). Currently, the NBCCEDP funds all 50 states, the District of Columbia, five US territories, and 11 American Indian/Alaska Native tribes or tribal organizations, to provide the following services to women (CDC, 2015a; CDC, n.d.):

- Breast and cervical cancer screening for women with priority to low-income women.
- Providing appropriate follow-up and support services (i.e., case management and referrals for medical treatment).
- Developing and disseminating public information and education programs.

- Improving the education, training and skills of health professionals.
- Monitoring screening procedure quality and interpretation.

To be eligible to receive NBCCEDP services, uninsured and underinsured women must be at or below 250 percent of the federal poverty level and between the ages of 40 to 64 for breast cancer screening (CDC, 2015a; CDC, n.d.). Uninsured women between the ages of 50 and 64 who are low-income (up to 250 percent federal poverty level) and who have not been screened in the past year are a priority population for NBCCEDP (CDC, n.d.).

While federal guidelines are provided by the CDC, there are some variations among states, tribal organizations and territories (CDC, 2015b):

- Program funding, clinical costs and additional eligibility guidelines vary by state, tribal organization and territory which influence the number of services that can be provided.
- Flexibility of the program allows each state, tribal organization and territory to adopt an operational model that is appropriate for their respective public health infrastructure and legislative polices.

Since the launch of the program in 1991, NBCCEDP has served more than 4.8 million women providing over 12 million breast and cervical cancer screening services that has resulted in more than 67,900 women being diagnosed with breast cancer (CDC, 2015a).

Congress passed the Breast and Cervical Cancer Prevention and Treatment Act in 2000 to provide states the option to offer Medicaid coverage for breast cancer treatment for women who were diagnosed when receiving services through from the NBCCEDP (CDC, 2015a). To date, all 50 states and the District of Columbia have approved provision of Medicaid coverage for cancer treatment; therefore, providing low-income, uninsured and underinsured women coverage from screening through completion of treatment (CDC, 2015a). Congress expanded this option 2001, with the passage of the Native American Breast and Cervical Cancer Treatment Technical Amendment Act, to include eligible American Indians and Alaska Natives that receive services by the Indian Health Service or by a tribal organization (CDC, 2015a).

In the State of Texas, the NBCCEDP is known as Texas's Breast and Cervical Cancer Services program and is administered by the Texas Department of State Health Services. From July 2009 to June 2014, Texas's Breast and Cervical Cancer Services program provided 128,199 cancer and cervical cancer screening and diagnostic services to women. The program provided 59,617 mammograms that resulted in 7,418 women receiving an abnormal result and 767 women being diagnosed with breast cancer (NBCCEDP Minimum Data Elements, 2015). To find out more information about getting screened and eligibility, contact the Breast and Cervical Cancer Services program (1-512-776-7796).

State Comprehensive Cancer Control Plan

Comprehensive cancer control is a process through which communities and partner organizations pool resources to reduce cancer risk, find cancers earlier, improve treatments, increase the number of people who survive cancer and improve quality of life for cancer survivors to ultimately reduce the burden of cancer in the state (CDC, 2015d).

The National Comprehensive Cancer Control Program (NCCCP)

(http://www.cdc.gov/cancer/ncccp/) is an initiative by the CDC to help states, tribes, US affiliated Pacific Islands, and territories form or support existing coalitions to fight cancer by using local data to determine the greatest cancer-related needs in their area (2015d). Once areas have been identified, the state coalition works collaborative to develop and implement a State Comprehensive Cancer Control Plan to meet the identified needs (CDC, 2015d). These plans include initiatives involving healthy lifestyles, promotion of cancer screening tests, access to good cancer care, and improvement in the quality of life for people who survive cancer (CDC, 2015d). State Comprehensive Cancer Control Plans (2015c) can be located at the following link: http://www.cdc.gov/cancer/ncccp/ccc_plans.htm.

Texas' comprehensive cancer control plan for 2012-2016

(<u>http://www.cprit.state.tx.us/images/uploads/tcp2012_web_v2a.pdf</u>) includes the following goal, objectives and strategies specific to breast cancer:

Goal: Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from breast cancer.

Objectives:

- Increase proportion of women who receive breast cancer screening according to national guidelines.
- Reduce the rate of late-stage diagnosis of breast cancer.

Strategic Actions:

- Increase and improve access to care by reducing structural and financial barriers. *Evidence-based strategies may include:*
 - Increasing hours of operation.
 - Increasing access to transportation services.
 - o Increasing mobile and other alternative screening opportunities.
 - Increasing access to insurance coverage.
 - Promoting investments in and increasing availability of patient navigation services.
 - Using best practice models for increasing collaboration among service providers to ensure continuum of care (access to treatment).
 - Ensuring appropriate follow-up for those who receive abnormal breast-cancer screening results.

- Using evidence-based interventions, provide education on breast cancer and promote screening guidelines and awareness of insurance coverage options, including all underserved populations.
- Promote the provision of screening services through medical homes, accountable-care organizations, and other emerging models of healthcare delivery.
- Increase availability and utilization of electronic medical records and implementation of clinical system changes to increase utilization of evidence-based cancer screening.
- Improve health professional knowledge, practice behaviors, and system support related to improving service delivery.
- Implement evidence-based interventions related to diagnosis, treatment, and palliation to decrease disparities in racial/ethnic populations, populations with less education, underserved adolescents and young adults, and underserved geographic areas of the state.

For more information regarding Texas' comprehensive cancer plan please visit: http://www.cprit.state.tx.us/about-cprit/texas-cancer-plan/.

Affordable Care Act

In 2010, Congress passed the Patient Protection and Affordable Care Act (commonly known as Affordable Care Act or ACA) to expand access to care through insurance coverage, enhance the quality of health care, improve health care coverage for those with health insurance and to make health care more affordable (US Department of Health and Human Services, 2015a).

The ACA includes the following mandates to improve health insurance coverage and enhance health care quality (US Department of Health and Human Services, 2015a):

- Prohibit insurers from denying coverage based on pre-existing conditions
- Prohibit insurers from rescinding coverage
- Prohibit annual and lifetime caps on coverage
- Provide coverage of preventive services with no cost-sharing (including screening mammography, well women visits)
- Establish minimum benefits standards, known as the Essential Health Benefits (EHB)

The ACA provides tax subsidies for middle-income individuals to purchase insurance through the health insurance exchanges (commonly called the Marketplace). To be eligible to receive health coverage through the Marketplace, an individuals must live in the United States, be a US citizen or national (or lawfully present), cannot be incarcerated, fall into certain income guidelines and cannot be eligible for other insurance coverage (i.e., Medicaid, Medicare and employer sponsored health care coverage) (US Centers for Medicare and Medicaid Services, n.d.).

Based on 2015 data, of the estimated 4,425,000 total number of uninsured in Texas, 11.0 percent are Medicaid eligible, 23.0 percent are eligible for tax subsidies and 48.0 percent are

ineligible for financial assistance due to income, employer sponsored insurance offer or citizenship status (Garfield et al., 2015).

Some of the ways that the ACA has affected Texas over the past five years include (US Department of Health and Human Service, 2015b):

- Making health care more affordable and accessible through Health Insurance Marketplaces.
 - In Texas, 1,205,174 consumers selected or were automatically re-enrolled in health insurance coverage.
- Reducing the number of uninsured.
 - The number of uninsured in Texas decreased to 24.4 percent (2014) from 27.0 percent (2013).
- Removing lifetime limits on health benefits and discrimination for pre-existing conditions resulting in cancer patients not having to worry about going without treatment.
 - In Texas, over 2,771,000 women no longer have to worry about lifetime limits on coverage.
- Making prescription drug coverage more affordable for those on Medicare.
 - In Texas, Medicare covered individuals have saved nearly \$971,785,893 on prescription drugs.
- Covering preventive services, such as screening mammograms, with no deductible or co-pay.
 - In Texas, over 2,211,000 women received preventive services without costsharing.
- Providing increased funding to support health care delivery improvement projects that offer a broader array of primary care services, extend hours of operations, employ more providers and improve health care facilities.
 - Texas received \$470,331,234 under the health care law.

For more information about the Affordable Care Act or to obtain coverage, please visit the following websites:

- US Department of Health and Human Services: <u>http://www.hhs.gov/healthcare</u>
- Information about health insurance coverage: 1-800-318-2596 or <u>www.healthcare.gov</u>
- ACA assistance in the local community: <u>https://localhelp.healthcare.gov/#intro</u>

Medicaid Expansion

Traditional Medicaid had gaps in coverage for adults because eligibility was restricted to specific categories of low-income individuals (i.e., children, their parents, pregnant women, the elderly, or individuals with disabilities) (Figure 4.1) (The Henry J. Kaiser Family Foundation, 2014). In most states, non-elderly adults without dependent children were ineligible for Medicaid, regardless of their income.

Under the ACA, states were provided the option to expand Medicaid coverage to a greater number of non-elderly adults with incomes at or below 138 percent of poverty (about \$16,242 per year for an individual in 2015); thus reducing the number of uninsured, low-income adults (The Henry J. Kaiser Family Foundation, n.d.). As of January 2016, 32 states including the District of Columbia have adopted and implemented Medicaid Expansion, three states are still considering adopting Medicaid Expansion and 16 are not adopting Medicaid Expansion at this time (The Henry J. Kaiser Family Foundation, n.d.).



NOTE: The June 2012 Supreme Court decision in *National Federation of Independent Business v. Sebelius* maintained the Medicaid expansion, but limited the Secretary's authority to enforce it, effectively making the expansion optional for states. 138% FPL = \$15,856 for an individual and \$26,951 for a family of three in 2013.



Figure 4.1. The ACA Medicaid Expansion fills current gaps in coverage

Additional information regarding Medicaid Expansion can be found at the following websites:

- The Henry J. Kaiser Family Foundation State Health Facts: <u>http://kff.org/</u>
- US Centers for Medicare and Medicaid Services: <u>https://www.healthcare.gov/medicaid-chip/medicaid-expansion-and-you/</u>

As of January 2016, Texas has not adopted Medicaid Expansion. In states that did not adopt Medicaid Expansion, low-income "adults fall into a 'coverage gap' of having incomes above Medicaid eligibility limits but below the lower limit for Marketplace premium tax credits (Figure 4.2) (Garfield and Damico, 2016).



Figure 4.2. Gap in coverage for adults in states that do not expand Medicaid under ACA

In Texas, 766,000 people fall within the "coverage gap". Of those in the "coverage gap", 67.0 percent are people of color, 66.0 percent are adults without dependent children, 55.0 percent are female and 69.0 percent are part of a working family (the individual, or a family member, is employed but still living below the poverty line) (*Note:* individuals can be classified in more than one category) (Garfield and Damico, 2016). If Texas would have adopted Medicaid Expansion, an estimated 1,314,000 uninsured adults (including those in the coverage gap) would have been eligible for Medicaid coverage (Garfield and Damico, 2016).

Affordable Care Act, Medicaid Expansion and Unisured Women

Even after implementation of the ACA and Medicaid Expansion (in some states), there are approximately 12.8 million women (ages 19 to 64) in the US that remain uninsured (The Henry J. Kaiser Family Foundation, 2016). Uninsured women have been found to have inadequate access to care and receive a lower standard of care within health systems that lead to poorer health outcomes (Kaiser Commission on Medicaid and the Uninsured, 2013). Women that are single parents, have incomes below 100 percent federal poverty level, have less than a high school education, are women of color or immigrants are at greatest risk of being uninsured (Figure 4.3) (The Henry J. Kaiser Family Foundation, 2016).



Percentage of women ages 19 to 64 years among various groups who are uninsured

A 2014 survey by The Henry J. Kaiser Family Foundation (2016) found that 47.0 percent of uninsured women indicated that insurance was too expensive, 13.0 percent were unemployed/work does not offer/not eligible through work, 8.0 percent tried to obtain coverage but were told they were ineligible, 7.0 percent were not eligible due to immigration status and 4.0 percent indicated that they did not need coverage. Of the 8,221,000 women in Texas, 1,808,620 (22.0 percent) were without health insurance coverage in 2014 (The Henry J. Kaiser Family Foundation, 2016).

Introduction to the Community Profile Report

Susan G. Komen is the world's largest breast cancer organization, funding more breast cancer research than any other nonprofit while providing real-time help to those facing the disease. Since its founding in 1982, Komen has funded more than \$889 million in research and provided \$1.95 billion in funding to screening, education, treatment and psychosocial support programs serving millions of people in more than 30 countries worldwide. Komen was founded by Nancy G. Brinker, who promised her sister, Susan G. Komen, that she would end the disease that claimed Suzy's life.

The purpose of the Texas Community Profile is to assess breast cancer burden within the state by identifying areas at highest risk of negative breast cancer outcomes. Through the Community Profile, populations most at-risk of dying from breast cancer and their demographic and socioeconomic characteristics can be identified; as well as, the needs and disparities that exist in availability, access and utilization of quality care.

Quantitative Data: Measuring Breast Cancer Impact in Local Communities

After review of breast cancer late-stage diagnosis and death rates and trends for each county in the state, areas of greatest need were identified based on if the county would meet Healthy People 2020 late-stage diagnosis rate (41.0 per 100,000 women) and death rate (20.6 per 100,000 women) targets.

Breast Cancer Death Rates

The State of Texas as a whole is **likely to achieve** the HP2020 death rate target. The state had a base rate of 21.8 breast cancer deaths per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent death rate trend, indicates that the State of Texas will likely achieve the HP2020 target of 20.6 female breast cancer deaths per 100,000.

The following counties currently meet the HP2020 breast cancer death rate target of 20.6:

- Atascosa County
- Bastrop County (Komen Austin)
- Brazos County
- Burnet County
- Cameron County
- Collin County (Komen North Texas)
- Cooke County (Komen North Texas)
- Ellis County (Komen East Central Texas)
- Fort Bend County (Komen Houston)
- Grayson County (Komen North Texas)
- Guadalupe County
- Harrison County

- Henderson County (Komen East Central Texas)
- Hidalgo County
- Hill County (Komen East Central Texas)
- Hood County (Komen Greater Fort Worth)
- Houston County
- Howard County
- Jim Wells County
- Kerr County
- Lamar County
- Midland County
- Milam County (Komen East Central Texas)
- Smith County (Komen East Central Texas)
- Tom Green County
- Travis County (Komen Austin)
- Val Verde County
- Van Zandt County (Komen East Central Texas)
- Webb County
- Wichita County (Komen North Texas)
- Williamson County (Komen Austin)
- Wise County (Komen North Texas)
- Wood County

The following counties are **likely to miss** the HP2020 breast cancer death rate target unless the death rate falls at a faster rate than currently estimated:

- Austin County
- Bell County (Komen East Central Texas)
- Brazoria County (Komen Houston)
- Brown County
- Cass County (Komen Texarkana)
- Comal County
- DeWitt County
- Eastland County
- Fayette County
- Gregg County
- Grimes County
- Hale County (Komen Lubbock Area)
- Hardin County
- Hopkins County
- Hunt County (Komen North Texas)
- Jasper County
- Jefferson County
- Johnson County (Komen Greater Fort Worth)

- Jones County
- Kaufman County (Komen East Central Texas)
- Kleberg County
- Liberty County (Komen Houston)
- McLennan County (Komen East Central Texas)
- Medina County
- Nacogdoches County
- Navarro County
- Orange County
- Palo Pinto County
- Parker County (Komen Greater Fort Worth)
- Potter County (Komen Greater Amarillo)
- Randall County (Komen Greater Amarillo)
- Rusk County
- Starr County
- Taylor County
- Victoria County
- Walker County
- Waller County
- Washington County
- Wilson County
- Young County

Because data for small numbers of people are not reliable, it can't be predicted whether Andrews County, Archer County, Armstrong County, Bailey County, Bandera County, Baylor County, Bee County, Blanco County, Borden County, Bosque County, Brewster County, Briscoe County, Brooks County, Burleson County, Caldwell County, Calhoun County, Callahan County, Camp County, Carson County, Castro County, Chambers County, Childress County, Clay County, Cochran County, Coke County, Coleman County, Collingsworth County, Colorado County, Comanche County, Concho County, Cottle County, Crane County, Crockett County, Crosby County, Culberson County, Dallam County, Dawson County, Deaf Smith County, Delta County, Dickens County, Dimmit County, Donley County, Duval County, Edwards County, Erath County, Falls County, Fannin County, Fisher County, Floyd County, Foard County, Franklin County, Freestone County, Frio County, Gaines County, Garza County, Glasscock County, Goliad County, Gonzales County, Gray County, Hall County, Hamilton County, Hansford County, Hardeman County, Hartley County, Haskell County, Hemphill County, Hockley County, Hudspeth County, Hutchinson County, Irion County, Jack County, Jackson County, Jeff Davis County, Jim Hogg County, Karnes County, Kendall County, Kenedy County, Kent County, Kimble County, King County, Kinney County, Knox County, Lamb County, Lampasas County, La Salle County, Lavaca County, Lee County, Leon County, Limestone County, Lipscomb County, Live Oak County, Loving County, Lynn County, McCulloch County, McMullen County, Madison County, Marion County, Martin County, Mason County, Maverick County, Menard County, Mills County, Mitchell County, Montague County, Moore County, Morris County, Motley

County, Newton County, Nolan County, Ochiltree County, Oldham County, Panola County, Parmer County, Pecos County, Presidio County, Rains County, Reagan County, Real County, Red River County, Reeves County, Refugio County, Roberts County, Robertson County, Rockwall County, Runnels County, Sabine County, San Augustine County, San Saba County, Schleicher County, Scurry County, Shackelford County, Sherman County, Somervell County, Stephens County, Sterling County, Stonewall County, Sutton County, Swisher County, Terrell County, Terry County, Throckmorton County, Titus County, Trinity County, Upton County, Uvalde County, Ward County, Wheeler County, Wilbarger County, Willacy County, Winkler County, Yoakum County, Zapata County and Zavala County will reach the death rate target.

The remaining counties are likely to achieve the target by 2020 or earlier.

Breast Cancer Late-Stage Incidence Rates

The State of Texas as a whole **currently meets** the HP2020 late-stage incidence rate target. The state had a base rate of 40.7 new late-stage cases per 100,000 females per year from 2006 to 2010 (age-adjusted). This rate coupled with a desirable direction (decrease) in the recent late-stage incidence rate trend, indicates that the State of Texas will meet the HP2020 target of 41.0 new late-stage cases per 100,000.

The following counties **currently meet** the HP2020 late-stage incidence rate target of 41.0:

- Anderson County (Komen East Central Texas)
- Bandera County
- Bexar County (Komen San Antonio)
- Brazos County
- Brown County
- Burleson County
- Cameron County
- Cass County (Komen Texarkana)
- Cherokee County (Komen East Central Texas)
- Collin County (Komen North Texas)
- Colorado County
- Cooke County (Komen North Texas)
- Denton County (Komen North Texas)
- El Paso County (Komen El Paso)
- Falls County (Komen East Central Texas)
- Fayette County
- Fort Bend County (Komen Houston)
- Freestone County (Komen East Central Texas)
- Galveston County (Komen Houston)
- Gillespie County
- Gonzales County
- Grimes County
- Hale County (Komen Lubbock Area)

- Harrison County
- Hays County (Komen Austin)
- Hidalgo County
- Hill County (Komen East Central Texas)
- Hood County (Komen Greater Fort Worth)
- Hopkins County
- Houston County
- Hunt County (Komen North Texas)
- Kaufman County (Komen East Central Texas)
- Kendall County
- Lampasas County
- Matagorda County
- Maverick County
- Midland County
- Montague County (Komen North Texas)
- Montgomery County (Komen Houston)
- Navarro County
- Newton County
- Nueces County
- Palo Pinto County
- Panola County
- Rockwall County
- Rusk County
- San Patricio County
- Shelby County
- Starr County
- Taylor County
- Titus County
- Tyler County
- Upshur County
- Uvalde County
- Waller County
- Webb County
- Wharton County
- Wichita County (Komen North Texas)
- Wood County

The following counties are **likely to miss** the HP2020 late-stage incidence rate target unless the late-stage incidence rate falls at a faster rate than currently estimated:

- Angelina County
- Atascosa County
- Austin County

- Bastrop County (Komen Austin)
- Bee County
- Bosque County (Komen East Central Texas)
- Burnet County
- Caldwell County (Komen Austin)
- Calhoun County
- Chambers County (Komen Houston)
- Comanche County
- Coryell County (Komen East Central Texas)
- Ector County
- Frio County
- Grayson County (Komen North Texas)
- Guadalupe County
- Harris County (Komen Houston)
- Hockley County (Komen Lubbock Area)
- Hutchinson County (Komen Greater Amarillo)
- Jasper County
- Jefferson County
- Johnson County (Komen Greater Fort Worth)
- Jones County
- Lamar County
- Lamb County (Komen Lubbock Area)
- Lavaca County
- Lee County
- Leon County
- Liberty County (Komen Houston)
- Llano County
- Medina County
- Moore County (Komen Greater Amarillo)
- Morris County
- Nolan County
- Orange County
- Parker County (Komen Greater Fort Worth)
- Polk County
- Potter County (Komen Greater Amarillo)
- Reeves County
- Sabine County
- Tom Green County
- Trinity County
- Val Verde County
- Van Zandt County (Komen East Central Texas)
- Walker County

- Washington County
- Wilson County
- Wise County (Komen North Texas)
- Young County

Because data for small numbers of people are not reliable, it can't be predicted whether Andrews County, Archer County, Armstrong County, Bailey County, Baylor County, Blanco County, Borden County, Brewster County, Briscoe County, Brooks County, Camp County, Carson County, Castro County, Childress County, Clay County, Cochran County, Coke County, Coleman County, Collingsworth County, Concho County, Cottle County, Crane County, Crockett County, Crosby County, Culberson County, Dallam County, Deaf Smith County, Delta County, Dickens County, Dimmit County, Donley County, Duval County, Eastland County, Edwards County, Fisher County, Floyd County, Foard County, Franklin County, Garza County, Glasscock County, Goliad County, Hall County, Hamilton County, Hansford County, Hardeman County, Hartley County, Haskell County, Hemphill County, Howard County, Hudspeth County, Irion County, Jack County, Jackson County, Jeff Davis County, Jim Hogg County, Karnes County, Kenedy County, Kent County, Kimble County, King County, Kinney County, Knox County, La Salle County, Limestone County, Lipscomb County, Live Oak County, Loving County, Lynn County, McCulloch County, McMullen County, Madison County, Marion County, Martin County, Mason County, Menard County, Mills County, Mitchell County, Motley County, Ochiltree County, Oldham County, Parmer County, Pecos County, Presidio County, Rains County, Reagan County, Real County, Refugio County, Roberts County, Runnels County, San Augustine County, San Saba County, Schleicher County, Shackelford County, Sherman County, Somervell County, Stephens County, Sterling County, Stonewall County, Sutton County, Swisher County, Terrell County, Terry County, Throckmorton County, Upton County, Ward County, Wheeler County, Wilbarger County, Willacy County, Winkler County, Yoakum County, Zapata County and Zavala County will reach the late-stage incidence rate target.

The remaining counties are likely to achieve the target by 2020 or earlier.

HP2020 Conclusions

Highest priority areas

Thirty-four counties in the State of Texas are in the highest priority category. Fourteen of the thirty-four, Austin County, Jasper County, Jefferson County, Johnson County, Jones County, Liberty County, Medina County, Orange County, Parker County, Potter County, Walker County, Washington County, Wilson County and Young County, are not likely to meet either the death rate or late-stage incidence rate HP2020 targets. One of the thirty-four, Eastland County is not likely to meet the death rate HP2020 target. Nineteen of the thirty-four, Bee County, Bosque County, Caldwell County, Calhoun County, Chambers County, Comanche County, Frio County, Hockley County, Hutchinson County, Lamb County, Lavaca County, Lee County, Leon County, Moore County, Morris County, Nolan County, Reeves County, Sabine County and Trinity County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Austin County (141.0 per 100,000), Parker County (130.6 per 100,000) and Washington County (149.4 per 100,000) are significantly higher than the state as a whole (114.4 per 100,000). The age-adjusted death rates in Jefferson County (25.9 per 100,000) and Young County (45.7 per 100,000) are significantly higher than the state as a whole (21.8 per 100,000). The age-adjusted late-stage incidence rates in Jasper County (55.4 per 100,000), Jefferson County (58.5 per 100,000) and Orange County (53.2 per 100,000) are significantly higher than the state as a whole (40.7 per 100,000). Late-stage incidence trends in Austin County (28.5 percent per year) are significantly less favorable than the state as a whole (-3.2 percent per year).

Austin County has an older population. Bee County has a relatively large Hispanic/Latina population and low education levels. Bosque County has an older population. Caldwell County has a relatively large Hispanic/Latina population and high unemployment. Calhoun County has a relatively large Hispanic/Latina population and high unemployment. Comanche County has an older population and high poverty levels. Eastland County has an older population. Frio County has a relatively large Hispanic/Latina population, low education levels, high poverty levels and a relatively large number of households with little English. Hockley County has a relatively large Hispanic/Latina population and low education levels. Jasper County has an older population. Jefferson County has a relatively large Black/African-American population. Jones County has an older population and low education levels. Lamb County has a relatively large Hispanic/Latina population and low education levels. Lavaca County has an older population. Lee County has an older population. Leon County has an older population. Liberty County has low education levels and high unemployment. Medina County has a relatively large Hispanic/Latina population. Moore County has a relatively large Hispanic/Latina population, low education levels, a relatively large foreign-born population and a relatively large number of households with little English. Morris County has a relatively large Black/African-American population and an older population. Notan County has an older population. Potter County has high poverty levels. Reeves County has a relatively large Hispanic/Latina population, low education levels, high poverty levels, high unemployment and a relatively large number of households with little English. Sabine County has an older population. Trinity County has an older population. Walker County has a relatively large Black/African-American population. Washington County has a relatively large Black/African-American population and an older population. Young County has an older population.

High priority areas

Three counties in the State of Texas are in the high priority category. All of the three, Ector County, Harris County and Llano County, are not likely to meet the late-stage incidence rate HP2020 target.

The age-adjusted incidence rates in Harris County (121.7 per 100,000) are significantly higher than the state as a whole (114.4 per 100,000). The age-adjusted death rates in Harris County (24.2 per 100,000) are significantly higher than the state as a whole (21.8 per 100,000). The age-adjusted late-stage incidence rates in Ector County (53.1 per 100,000) and Harris County (43.0 per 100,000) are significantly higher than the state as a whole (40.7 per 100,000).

Ector County has a relatively large Hispanic/Latina population and low education levels. Harris County has a relatively large Black/African-American population, a relatively large foreign-born population and a relatively large number of households with little English. Llano County has an older population.

Health Systems Analysis

The Breast Cancer Continuum of Care (CoC), shown in Figure 5.1, is a model that shows how a woman typically moves through the health care system for breast care. A woman would ideally move through the CoC quickly and seamlessly, receiving timely, quality care in order to have the best outcomes. Education can play an important role throughout the entire CoC.

There are often delays in moving from one point of the continuum to another – at the point of follow-up of abnormal screening exam results, starting treatment, and completing treatment – that can all contribute to poorer

outcomes. There are also many reasons why a woman does not enter or continue in the breast cancer CoC. These barriers can include things such as lack of access to services, lack of



Figure 5.1. Breast Cancer Continuum of Care (CoC)

transportation, system issues including long waits for appointments and inconvenient clinic hours, language barriers, fear, and lack of information or the wrong information (myths and misconceptions).

In the State of Texas there were 976 locations found to provide breast cancer services varying between screening, diagnostic, treatment, and survivorship (Figure 5.2). There were 976 locations that provided screening services, 498 locations in the state that provide diagnostic services and 222 locations providing treatment services. In the state there were 139 locations that provided survivorship services or care. Identified facilities that provide mammography services were all accredited by the Federal Drug Administration. There are 96 locations that are accredited by the American College of Surgeons Commission on Cancer, 70 locations accredited by the American College of Radiology as a Breast Imaging Center of Excellence and 30 locations accredited as an American College of Surgeons NAPBC program. There were four locations designated as a NCI Cancer Center.

The following counties are designated as a Medically Underserved Area/Population and/or a Health Professional Shortage Area for primary care: Anderson, Andrews, Angelina, Aransas, Archer, Armstrong, Atascosa, Austin, Bailey, Bandera, Bastrop, Baylor, Bee, Bell, Bexar,
Blanco, Borden, Bosque, Bowie, Brazoria, Brazos, Brewster, Briscoe, Brooks, Brown, Burleson, Burnet, Caldwell, Calhoun, Callahan, Cameron, Camp, Carson, Cass, Castro, Chambers, Cherokee, Childress, Clay, Cochran, Coke, Coleman, Collin, Collingsworth, Colorado, Comal, Comanche, Concho, Cooke, Coryell, Cottle, Crane, Crockett, Crosby, Culberson, Dallam, Dallas, Dawson, Deaf Smith, Delta, Denton, DeWitt, Dickens, Dimmit, Donley, Duval, Eastland, Ector, Edwards, El Paso, Ellis, Erath, Falls, Fannin, Fayette, Fisher, Floyd, Foard, Fort Bend, Franklin, Freestone, Frio, Gaines, Galveston, Garza, Glasscock, Goliad, Gonzales, Gray, Grayson, Gregg, Grimes, Guadalupe, Hale, Hall, Hamilton, Hansford, Hardeman, Hardin, Harris, Harrison, Hartley, Haskell, Hays, Hemphill, Henderson, Hidalgo, Hill, Hockley, Hopkins, Houston, Howard, Hudspeth, Hunt, Hutchinson, Irion, Jack, Jackson, Jasper, Jeff Davis, Jefferson, Jim Hogg, Jim Wells, Johnson, Jones, Karnes, Kaufman, Kenedy, Kent, Kerr, Kimble, King, Kinney, Kleberg, Knox, La Salle, Lamar, Lamb, Lampasas, Lavaca, Lee, Leon, Liberty, Limestone, Lipscomb, Live Oak, Llano, Loving, Lubbock, Lynn, Madison, Marion, Martin, Mason, Matagorda, Maverick, McCulloch, McLennan, McMullen, Medina, Menard, Midland, Milam, Mills, Mitchell, Montague, Montgomery, Moore, Morris, Motley, Nacodoches, Navarro, Newton, Nolan, Nueces, Ochiltree, Oldham, Orange, Palo Pinto, Panola, Parmer, Pecos, Polk, Potter, Presidio, Rains, Randall, Reagan, Real, Red River, Reeves, Refugio, Roberts, Robertson, Runnels, Rusk, Sabine, San Augustine, San Jacinto, San Patricio, San Saba, Schleicher, Scurry, Shackelford, Shelby, Sherman, Smith, Starr, Stephens, Sterling, Stonewall, Sutton, Swisher, Tarrant, Taylor, Terrell, Terry, Throckmorton, Titus, Tom Green, Travis, Trinity, Tyler, Upshur, Upton, Uvalde, Val Verde, Van Zandt, Victoria, Walker, Waller, Ward, Washington, Webb, Wharton, Wheeler, Wichita, Wilbarger, Willacy, Williamson, Wilson, Winkler, Wood, Yoakum, Young, Zapata and Zavala.



Figure 5.2. Breast cancer services available in Texas

Public Policy Overview

In recent years, public policies pertaining to breast cancer have undergone substantial changes that will affect at-risk women across the United States. States have responded differently to the public policy developments concerning access to services within the breast cancer continuum of care (screening, diagnostic, treatment and survivorship care); therefore, women are dependent on their state's agenda and action on health care reform.

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

The NBCCEDP is a nationwide program that provides low-income women with breast and cervical cancer screening, follow-up and support services (i.e., case management and referrals for medical treatment), developing and disseminating public information and education programs and improving the education, training and skills of health professionals.

In the State of Texas, the NBCCEDP is known as Texas's Breast and Cervical Cancer Services program and is administered by the Texas Department of State Health Services. From July 2009 to June 2014, Texas's Breast and Cervical Cancer Services program provided 128,199 cancer and cervical cancer screening and diagnostic services to women. The program provided 59,617 mammograms that resulted in 7,418 women receiving an abnormal result and 767 women being diagnosed with breast cancer (NBCCEDP Minimum Data Elements, 2015). To find out more information about getting screened and eligibility, contact the Breast and Cervical Cancer Services program (1-512-776-7796).

State Comprehensive Cancer Control Plan

Comprehensive cancer control is a process through which communities and partner organizations pool resources to reduce cancer risk, find cancers earlier, improve treatments, increase the number of people who survive cancer and improve quality of life for cancer survivors to ultimately reduce the burden of cancer in the state. Under the National Comprehensive Cancer Control Program (NCCCP), state cancer coalitions develop and implement a State Comprehensive Cancer Control Plan to meet identified cancer needs.

Texas' comprehensive cancer control plan for 2012-2016 (<u>http://www.cprit.state.tx.us/images/uploads/tcp2012_web_v2a.pdf</u>) includes the following goal, objectives and strategies specific to breast cancer:

Goal: Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from breast cancer.

Objectives:

- Increase proportion of women who receive breast cancer screening according to national guidelines.
- Reduce the rate of late-stage diagnosis of breast cancer.

Strategic Actions:

- Increase and improve access to care by reducing structural and financial barriers. *Evidence-based strategies may include:*
 - Increasing hours of operation.
 - Increasing access to transportation services.
 - o Increasing mobile and other alternative screening opportunities.
 - Increasing access to insurance coverage.
 - Promoting investments in and increasing availability of patient navigation services.
 - Using best practice models for increasing collaboration among service providers to ensure continuum of care (access to treatment).
 - Ensuring appropriate follow-up for those who receive abnormal breast-cancer screening results.
- Using evidence-based interventions, provide education on breast cancer and promote screening guidelines and awareness of insurance coverage options, including all underserved populations.
- Promote the provision of screening services through medical homes, accountable-care organizations, and other emerging models of healthcare delivery.
- Increase availability and utilization of electronic medical records and implementation of clinical system changes to increase utilization of evidence-based cancer screening.
- Improve health professional knowledge, practice behaviors, and system support related to improving service delivery.
- Implement evidence-based interventions related to diagnosis, treatment, and palliation to decrease disparities in racial/ethnic populations, populations with less education, underserved adolescents and young adults, and underserved geographic areas of the state.

For more information regarding Texas' comprehensive cancer plan please visit: <u>http://www.cprit.state.tx.us/about-cprit/texas-cancer-plan/</u>

Affordable Care Act

In 2010, Congress passed the Patient Protection and Affordable Care Act (commonly known as Affordable Care Act or ACA) to expand access to care through insurance coverage, enhance the quality of health care, improve health care coverage for those with health insurance and to make health care more affordable.

The ACA includes the following mandates to improve health insurance coverage and enhance health care quality (US Department of Health and Human Services, 2015a):

- Prohibit insurers from denying coverage based on pre-existing conditions
- Prohibit insurers from rescinding coverage
- Prohibit annual and lifetime caps on coverage
- Provide coverage of preventive services with no cost-sharing (including screening mammography, well women visits)
- Establish minimum benefits standards, known as the Essential Health Benefits (EHB)

The ACA provides tax subsidies for middle-income individuals to purchase insurance through the health insurance exchanges (commonly called the Marketplace). To be eligible to receive health coverage through the Marketplace, an individuals must live in the United States, be a US citizen or national (or lawfully present), cannot be incarcerated, fall into certain income guidelines and cannot be eligible for other insurance coverage (i.e., Medicaid, Medicare and employer sponsored health care coverage) (US Centers for Medicare and Medicaid Services, n.d.).

Based on 2015 data, of the estimated 4,425,000 total number of uninsured in Texas, 11.0 percent are Medicaid eligible, 23.0 percent are eligible for tax subsidies and 48.0 percent are ineligible for financial assistance due to income, employer sponsored insurance offer or citizenship status (Garfield et al., 2015).

Medicaid Expansion

Traditional Medicaid had gaps in coverage for adults because eligibility was restricted to specific categories of low-income individuals (i.e., children, their parents, pregnant women, the elderly, or individuals with disabilities). In most states, non-elderly adults without dependent children were ineligible for Medicaid, regardless of their income.

Under the ACA, states were provided the option to expand Medicaid coverage to a greater number of non-elderly adults with incomes at or below 138 percent of poverty (about \$16,242 per year for an individual in 2015); thus reducing the number of uninsured, low-income adults.

As of January 2016, Texas has not adopted Medicaid Expansion. If Texas would have adopted Medicaid Expansion, an estimated 1,314,000 uninsured adults (including those in the coverage gap) would have been eligible for Medicaid coverage (Garfield and Damico, 2016).

Affordable Care Act, Medicaid Expansion and Uninsured Women

Even after implementation of the ACA and Medicaid Expansion (in some states), there are approximately 12.8 million women (ages 19 to 64) in the US that remain uninsured. Of the 8,221,000 women in Texas, 1,808,620 (22.0 percent) were without health insurance coverage in 2014.

Uninsured women have been found to have inadequate access to care and receive a lower standard of care within health systems that lead to poorer health outcomes. Women that are single parents, have incomes below 100 percent federal poverty level, have less than a high school education, are women of color or immigrants are at greatest risk of being uninsured.

Conclusions

Overall, Texas currently meets the HP2020 late-stage incidence target and is likely to achieve the HP2020 death rate target. A total of 976 locations were identified as providing at least one type of breast cancer service along the continuum of care. While all of the facilities providing mammography services were accredited by the FDA, only 20.0 percent of the locations have been recognized as receiving additional quality of care accreditations. Texas also has many designated areas that are rural and/or medically underserved - where individuals may have inadequate access to health care. Although Texas has implemented programs (i.e., NBCCEDP) to assist low-income and uninsured individuals, there are still far too many individuals that have inadequate access to health care and may be receiving a lower standard of care. Both may contribute to poorer breast cancer outcomes.

The information provided in this report can be used by public health organizations, local service providers and policymakers to identify areas of greatest need and the potential demographic and socioeconomic factors that may be causing suboptimal breast cancer outcomes. Susan G. Komen will continue to utilize evidence-based practices to reduce breast cancer late-stage diagnosis and death rates by empowering others, ensuring quality care for all and energizing science to find the cures.

References

American College of Radiology. n.d. Mammography accreditation. Accessed on 07/11/2014 from http://www.acr.org/~/media/ACR/Documents/Accreditation/BICOE/BICOErequirements.

American College of Surgeons. 2013. About accreditation. Accessed on 07/11/2014 from http://www.facs.org/cancer/coc/whatis.html.

American College of Surgeons. 2014. National accreditation program from breast centers. Accessed on 07/11/2014 from <u>http://napbc-breast.org/</u>.

Centers for Disease Control and Prevention. n.d. NBCCEDP program manual: NBCCEDP policies and procedures. Atlanta, GA: Author.

Centers for Disease Control and Prevention. 2015a. National Breast and Cervical Cancer Early Detection Program (NBCCEDP)- About the program. Accessed on 02/03/2016 from http://www.cdc.gov/cancer/nbccedp/about.htm.

Centers for Disease Control and Prevention. 2015b.NBCCEDP minimum data elements: Fiveyear summary: July 2009-June 2014. Accessed on 02/03/2016 from <u>http://www.cdc.gov/cancer/nbccedp/data/index.htm</u>.

Centers for Disease Control and Prevention. 2015c. National Comprehensive Cancer Control Plans. Accessed on 02/03/2016 from <u>http://www.cdc.gov/cancer/ncccp/ccc_plans.htm</u>.

Centers for Disease Control and Prevention. 2015d. What is comprehensive cancer control. Accessed on 02/03/2016 from http://www.cdc.gov/cancer/ncccp/what is <a href="http://www.cdc.gov/cancer/ncccp/what is <a href="http://www.cdc.gov/cancer/ncccp/what is <a href="http://www.cdc.gov/cancer/ncccp/what is <a href="http://www.cdc.gov/cancer/ncccp/what is <a href="http://wwww.cdc.gov/cancer/ncccp/what is <a href="http://www.cdc.g

Garfield, R., Damico, A., Cox, C., Claxton, G. and Levitt, L. 2015. New estimates of eligibility for ACA coverage among the uninsured. Accessed on 02/05/2016 from The Henry J. Kaiser Family Foundation website at http://kff.org/uninsured/issue-brief/new-estimates-of-eligibility-for-aca-coverage-among-the-uninsured/.

Garfield, R. and Damico, A. 2016. The Coverage Gap: Uninsured poor adults in states that do not expand Medicaid- An update. Accessed on 02/12/2016 from The Henry J. Kaiser Family Foundation website- <u>http://kff.org/health-reform/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid-an-update/</u>.

Healthy People 2020. 2010. Healthy People 2020 homepage. Accessed on 08/02/2013 from US Department of Health and Human Services at <u>http://www.healthypeople.gov/</u>.

Henry J. Kaiser Family Foundation, The. n.d. The ACA and Medicaid expansion waivers. Accessed on 02/03/2016 from <u>http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/</u>. Henry J. Kaiser Family Foundation, The. 2014. State Profiles: How will the uninsured fare under the Affordable Care Act?. Accessed on 02/05/2016 from <u>http://kff.org/state-profiles-uninsured-under-aca/</u>.

Henry J. Kaiser Family Foundation, The. 2016. Women's health insurance coverage. Accessed on 02/05/2016 from <u>http://kff.org/womens-health-policy/fact-sheet/womens-health-insurance-coverage-fact-sheet/</u>.

Kaiser Commission on Medicaid and the Uninsured. 2013. The uninsured: A primer. Accessed on 02/08/2016 from <u>http://kff.org/about-kaiser-commission-on-medicaid-and-the-uninsured/</u>.

National Cancer Institute. 2012. NCI-Designated cancer centers. Accessed on 07/11/2014 from <u>http://www.cancer.gov/researchandfunding/extramural/cancercenters/about</u>.

Nelson, H.D., Tyne, K., Naik, A., Bougatsos, C., Chan, B.K. and Humphrey, L. 2009. Screening for breast cancer: an update for the US Preventive Services Task Force. *Annals of Internal Medicine*, 151:727-37.

SEER Summary Stage. Young, J.L. Jr., Roffers, S.D., Ries, L.A.G., Fritz, A.G. and Hurlbut, A.A. (eds). 2001. *SEER Summary Staging Manual - 2000*: Codes and coding instructions, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD. Accessed on 08/02/2013 from http://seer.cancer.gov/tools/ssm/.

Taplin, S.H., Ichikawa, L., Yood, M.U., Manos, M.M., Geiger, A.M., Weinmann, S., Gilbert, J., Mouchawar, J., Leyden, W.A., Altaras, R., Beverly, R.K., Casso, D., Westbrook, E.O., Bischoff, K., Zapka, J.G. and Barlow, W.E. 2004. Reason for late-stage breast cancer: Absence of screening or detection, or breakdown in follow-up. *Journal of the National Cancer Institute*, 96 (20): 1518-1527.

US Centers for Medicare and Medicaid Services. n.d. Are you eligible to use the Marketplace? Accessed on 02/05/2016 from <u>https://www.healthcare.gov/quick-guide/eligibility/</u>.

US Department of Health and Human Services. n.d. HRSA shortage designation. Accessed on 02/16/2016 from <u>http://www.hrsa.gov/shortage/</u>

US Department of Health and Human Services. 2015a. About the law. Accessed on 02/03/2016 from <u>http://www.hhs.gov/healthcare/about-the-law/</u>.

US Department of Health and Human Services. 2015b. 5 years later: How the Affordable Care Act is working – State by state. Accessed on 02/03/2016 from http://www.hhs.gov/healthcare/facts-and-features/state-by-state.

US Food and Drug Administration. 2014. About the mammography program. Accessed on 07/11/2014 from <u>http://www.fda.gov/Radiation-</u>

EmittingProducts/MammographyQualityStandardsActandProgram/AbouttheMammographyProgram/default.htm.

US Preventive Services Task Force. 2009. Screening for breast cancer: US Preventive Services Task Force. *Annals of Internal Medicine*, 151:716-726.

Appendix

Appendix A. State Map with County Names



Source: US Census Bureau, 2014