Regional Needs Assessment

REGION 7: CENTRAL TEXAS

PREVENTION RESOURCE CENTER REGION 7

PRC Address:	Phone Number:	Website:
4001 E. 29th st. Ste. 90	979-846-3560	www.PRCSEVEN.org
Bryan, TX, 77802		

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Executive Summary

The Regional Needs Assessment (RNA) is a document created by the Prevention Resource Center (PRC) in Region 7 (PRC7) along with Evaluators from PRCs across the State of Texas and supported by the Brazos Valley Council on Alcohol and Substance Abuse (BVCASA) and the Texas Health and Human Services Commission (HHSC). The PRC 7 serves 30 counties in central Texas.

This assessment was designed to aid PRC's, HHSC, and community stakeholders in long-term strategic prevention planning based on most current information relative to the unique needs of the diverse communities in the State of Texas. This document will present a summary of statistics relevant to risk and protective factors associated with drug use, as well as consumption patterns and consequences data, at the same time it will offer insight related to gaps in services and data availability challenges.

A team of regional evaluators has procured national, state, regional, and local data through partnerships of collaboration with diverse agencies in sectors such as law enforcement, public health, and education, among others. Secondary qualitative data collection has also been conducted, in the form of surveys, focus groups, and interviews with key informants. The information obtained through these partnerships has been analyzed and synthesized in the form of this Regional Needs Assessment. PRC 7 recognizes those collaborators who contributed to the creation of this RNA. **Most data presented is available at a county level upon request (contact the PRC to make a request).**

Main key findings from this assessment include:

- Perceptions of marijuana as harmful have decreased among college students and adolescents.
- Alcohol and Marijuana were the primary substances for which people sought DSHS treatment.
- High risk use of alcohol (5 or more drinks in a 2 hour period) by students (grades 7-12) appears to be slowly decreasing in the region though current use has stayed constant.
- There are more prescriptions than people (1.3 prescriptions per person).
- Social support association scores for Region 7 were greater than the state average score.
- The percent of high school seniors who reported marijuana us e in the last 30 days has increased from 10-20% to 20-30% in the last 10 years while lifetime use remains constant around 40%.
- Between 2013 and 2017 Region 7 has held steady as the fourth highest region in opioid related exposure calls to poison control
- The dropout rate in Mills County has greatly increased starting in 2015, with many other counties seeing a jump to above 10 in 2016, while Brazos country has stayed consistently high for the region.

Prevention Resource Centers

There are eleven regional Prevention Resource Centers (PRCs) servicing the State of Texas. Each PRC acts as the central data repository and substance abuse prevention training liaison for their region. Data collection efforts carried out by PRC are focused on the state's prevention priorities of alcohol (underage drinking), marijuana, and prescription drug use, as well as other illicit drugs.

Our Purpose

Prevention Resource Centers (PRC) are a program funded by the Texas Health and Human Services Commission (HHSC) to provide data and information related to substance use and misuse, and to support prevention collaboration efforts in the community. There is one PRC located in each of the eleven Texas Health Service Regions (see Figure 1) to provide support to prevention providers located in their region with substance use data, trainings, media activities, and regional workgroups.

Prevention Resource Centers have four fundamental objectives related to services provided to partner agencies and the community in general: (1) collect data relevant to alcohol, tobacco, and other drug use among adolescents and adults and share findings with community partners (2) ensure sustainability of a Regional Epidemiological Workgroup focused on identifying strategies related to data collection, gaps in data, and prevention needs, (3) coordinate regional prevention trainings and conduct media awareness activities related to risks and consequences of ATOD use, and (4) conduct voluntary compliance checks and education on state tobacco laws to retailers.

Efforts carried out by PRCs are focused on the state's three prevention priorities of underage drinking, use of marijuana and other cannabinoids, and prescription drug misuse.

Our Regions

Current areas serviced by a Prevention Resource Center are:

Region 1	Panhandle and South Plains
Region 2	Northwest Texas
Region 3	Dallas/Fort Worth Metroplex
Region 4	Upper East Texas
Region 5	Southeast Texas
Region 6	Gulf Coast
Region 7	Central Texas
Region 8	Upper South Texas
Region 9	West Texas
Region 10	Upper Rio Grande
Region 11	Rio Grande Valley/Lower South Texas
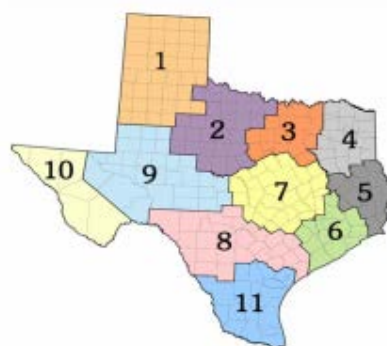
How We Help the Community

PRCs provide technical assistance and consultation to providers, community groups, and other stakeholders in identifying data and data resources related to substance use or other behavioral health indicators. PRCs work to promote and educate the community on substance use and misuse and associated consequences through various data products, media awareness activities, and an annual regional needs assessment. These resources and information provide stakeholders with knowledge and understanding of the local populations they serve, help guide programmatic decision making, and provide community awareness and education related to substance use and misuse. Additionally, the program provides a way to identify community strengths as well as gaps in services and areas of improvement.

Conceptual Framework of This Report

As one reads through this needs assessment, two guiding concepts will appear throughout the report: a focus on the youth population and the use of an empirical approach from a public health framework. For the purpose of strategic prevention planning related to drug and alcohol use among youth populations, this report is based on three main aspects: risk and protective factors, consumption patterns, and consequences of substance misuse and substance use disorders (SUDs).

Adolescence

The World Health Organization (WHO) identifies adolescence as a critical transition in the life span characterized by tremendous growth and change, second only to infancy. This period of mental and physical development poses a critical point of vulnerability where the use and misuse of substances, or other risky behaviors, can have long-lasting negative effects on future health and well-being. This focus of prevention efforts on adolescence is particularly important since about 90 percent of adults who are clinically diagnosed with SUDs, began misusing substances before the age of 18. [1]

The information presented in this document is compiled from multiple data sources and will therefore consist of varying demographic subsets of age which generally define adolescence as ages 10 through 17-19. Some domains of youth data conclude with ages 17, 18 or 19, while others combine "adolescent" and "young adult" to conclude with age 21.

Epidemiology: The WHO describes epidemiology as the "study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems." This definition provides the theoretical framework through which this assessment discusses the overall impact of substance use and misuse. Through this lens, epidemiology frames substance use and misuse as a preventable and treatable public health concern. The Substance Abuse and Mental Health Services Administration (SAMHSA) establishes epidemiology to identify and analyze community patterns of substance misuse as well as the contributing factors influencing this behavior. SAMHSA adopted an epidemiology-based framework on a national level while this needs assessment establishes this framework on a regional level.

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[1] The National Center on Addiction and Substance Abuse at Columbia University. 2011. *CASA analysis of the National Survey on Drug Use and Health, 2009* [Data file]. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Socio-Ecological Model: The Socio-Ecological Model (SEM) is a conceptual framework developed to better understand the multidimensional factors that influence health behavior and to categorize health intervention strategies.[2] Intrapersonal factors are the internal characteristics of the individual of focus and include knowledge, skills, attitudes, and beliefs. Interpersonal factors include social norms and interactions with significant others, such as family, friends, and teachers. Organizational/institutional factors are social and physical factors that indirectly impact the individual of focus (e.g., zero tolerance school policies, classroom size, mandatory workplace drug testing). Finally, community/societal factors include neighborhood connectedness, collaboration between organizations, and policy.

The SEM proposes that behavior is impacted by all levels of influence, from the intrapersonal to the societal, and that the effectiveness of health promotion programs is significantly enhanced through the coordination of interventions targeting multiple levels. For example, changes at the community level will create change in individuals and support of individuals in the population is essential for implementing environmental change.

Risk and Protective Factors

Researchers have examined the characteristics of effective prevention programs for more than 20 years. One component shared by effective programs is a focus on risk and protective factors that influence substance misuse among adolescents. Protective factors are characteristics that decrease an individual's risk for a substance use disorder. Examples may include factors such as strong and positive family bonds, parental monitoring of children's activities, and access to mentoring. Risk factors are characteristics that increase the likelihood of substance use behaviors. Examples may include unstable home environments, parental use of alcohol or drugs, parental mental illnesses, poverty levels, and failure in school performance. Risk and protective factors are classified under four main domains: societal, community, relationship, and individual (see Figure 2).[3]

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[2] McLeroy, KR, Bibeau, D, Steckler, A, Glanz, K. (1988). An ecological perspective on health promotion programs. Health Education & Behavior, 15(4), 351-377.

[3] Urban Peace Institute. Comprehensive Violence Reduction Strategy (CVRS). http://www.urbanpeaceinstitute.org/cvrs/. Accessed May 29, 2018.

Figure 2. Examples of risk and protective factors within the domains of the Socio-Ecological Model
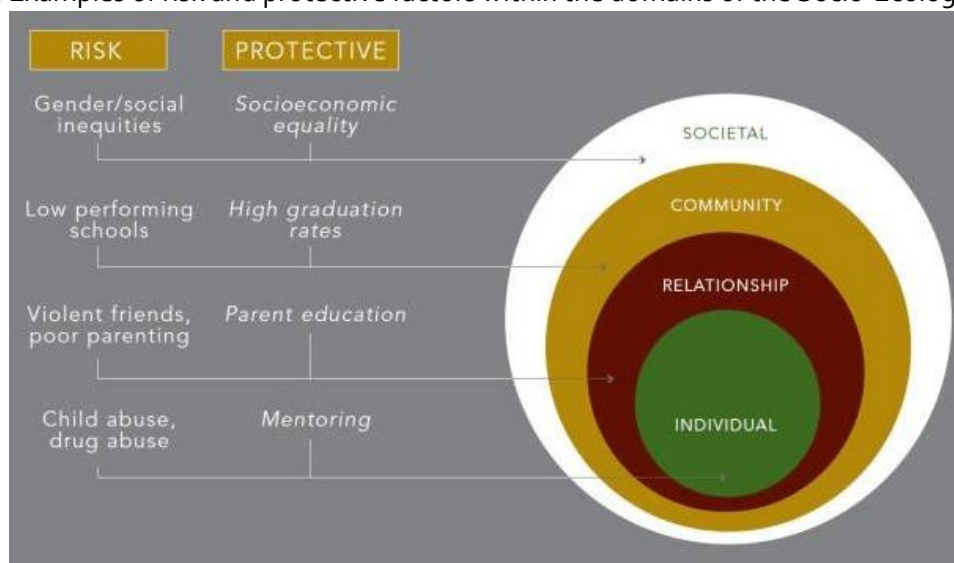
Source: Urban Peace Institute. Comprehensive Violence Reduction Strategy (CVRS). http://www.urbanpeaceinstitute.org/cvrs/ Accessed May 29, 2018.

Consumption Patterns

For the purpose of this needs assessment, and in following with operational definitions typically included in widely used measures of substance consumption, such as the Texas School Survey of Drug and Alcohol Use (TSS)[4], the Texas Youth Risk Surveillance System (YRBSS)[5], and the National Survey on Drug Use and Health (NSDUH)[6], consumption patterns are generally operationalized into three categories: lifetime use (ever tried a substance, even once), school year use (past year use when surveying adults or youth outside of a school setting), and current use (use within the past 30 days). These three categories of consumption patterns are used in the TSS to elicit self-reports from adolescents on their use and misuse of tobacco, alcohol (underage drinking), marijuana, prescription drugs, and illicit drugs. The TSS, in turn, is used as the primary outcome measure in reporting on Texas youth substance use and misuse in this needs assessment.

Due to its overarching and historical hold on the United States, there exists a plethora of information on the evaluation of risk factors that contribute to Alcohol Use Disorder (AUD). According to SAMHSA, AUD is ranked as the most wide-reaching SUD in the United States, for people ages 12 and older, followed by Tobacco Use Disorder, Cannabis Use Disorder, Stimulant Use Disorder, Hallucinogen Use Disorder, and Opioid Use Disorder (presented in descending order by prevalence rates).[7] When evaluating alcohol

[4] Texas A&M University. *Texas School Survey of Drug and Alcohol Use: 2016 State Report.* 2016. http://www.texasschoolsurvey.org/Documents/Reports/State/16State712.pdf. Accessed May 30, 2018.
[5] Texas Department of State Health Services. *2001-2017 High School Youth Risk Behavior Surveillance System Data.* 2017. http://healthdata.dshs.texas.gov/HealthRisks/YRBS. Accessed April 27, 2018.
[6] Substance Abuse and Mental Health Services Administration. *National Survey on Drug Use and Health.* 2016. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.pdf. Accessed May 30, 2018.
[7] Substance Abuse and Mental Health Services Administration. Substance use disorders. https://www.samhsa.gov/disorders/substance-use. Updated October 27, 2015. Accessed May 29, 2018.

consumption patterns in adolescents, more descriptive information beyond the aforementioned three general consumption categories is often desired and can be tapped by adding specific quantifiers (i.e., per capita sales, frequency and trends of consumption, and definitions of binge drinking and heavy drinking), and qualifiers (i.e., consequential behaviors, drinking and driving, alcohol consumption during pregnancy) to the operationalization process.

For example, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) has created very specific guidelines that are widely used in the in quantitative measurement of alcohol consumption.[8] These standards define binge drinking as the drinking behaviors that raise an individual's Blood Alcohol Concentration (BAC) up to or above the level of .08gm%, which is typically five or more drinks for men and four or more drinks for women, within a two-hour time span. At-risk or heavy drinking, is defined as more than four drinks a day or 14 drinks per week for men and more than three drinks a day or seven drinks per week for women. "Benders" are considered two or more days of sustained heavy drinking. See Figure 3 for the NIAAA's operational definitions of the standard drink.

Figure 3. NIAAA (2004) rubric for operationalizing the standard drink by ounces and percent alcohol across beverage type
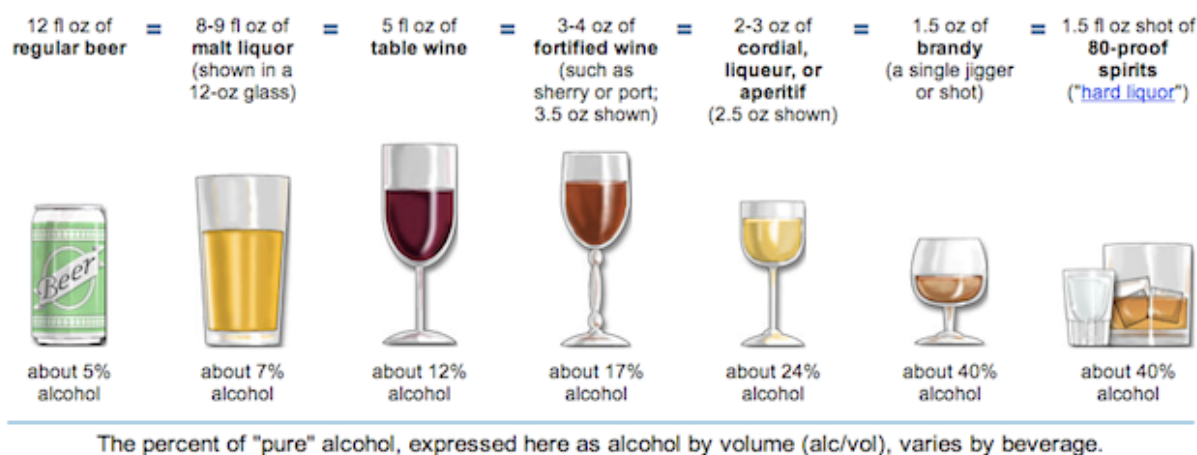
Source: National Institute for Alcohol Abuse and Alcoholism. What is a "standard" drink? https://www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx. Accessed May 24, 2018.

Consequences

One of the hallmarks of SUDs is the continued use of a substance despite harmful or negative consequences. The types of consequences most commonly associated with SUDs, the most severe of SUDs being addiction, typically fall under the categories of health consequences, physical consequences, social consequences, and consequences for adolescents. The prevention of such consequences has

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[8] National Institute for Alcohol Abuse and Alcoholism. What is a "standard" drink? https://www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx. Accessed May 24, 2018.

received priority attention as Goal 2 (out of four goals) on the 2016-2020 NIDA Strategic Plan titled *Develop new and improved strategies to prevent drug use and its consequences.*[9]

The consequences associated with SUDs tend to be developmentally, culturally, and contextually dependent and the measurement and conceptualization of such associations has proven to be quite difficult for various reasons, including the fact that consequences are not always caused or worsened by substance use or misuse.[10] Therefore, caution should be taken in the interpretation of the data presented in this needs assessment. Caution in inferring relationships or direction of causality should be taken, also, because only secondary data is reported out and no sophisticated analytic procedures are involved once that secondary data is obtained by the PRCs and reported out in this needs assessment, which is intended to be used as a resource.

Audience

Potential readers of this document include stakeholders from a variety of disciplines: substance use prevention and treatment providers; medical providers; school districts and higher education; substance use prevention community coalitions; city, county, and state leaders; and community members interested in increasing their knowledge of public health factors related to drug consumption. The information presented in this report aims to contribute to program planning, evidence-based decision making, and community education.

The executive summary found at the beginning of this report will provide highlights of the report for those seeking a brief overview. Since readers of this report will come from a variety of professional fields, each yielding specialized genres of professional terms and concepts related to substance misuse and substance use disorders prevention, a glossary of key concepts can be found in Appendix A of this needs assessment. The core of the report focuses on risk factors, consumption patterns, consequences, and protective factors. A list of tables and figures can be found in Appendix B.

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[9] National Institute on Drug Abuse. *2016-2020 NIDA Strategic Plan.* 2016.
https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/nida_2016strategicplan_032316.pdf. Accessed May 29, 2018.
[10] Martin, CS., Langenbucher, JW, Chung, Sher, KJ. Truth or consequences in the diagnosis of substance use disorders. *Addiction.* 2014. 109(11): 1773-1778.

Introduction

The Texas Health and Human Services Commission (HHSC) administers approximately 225 school and community-based prevention programs across 72 different providers with federal funding from the Substance Abuse Prevention and Treatment Block Grant to prevent the use and consequences of alcohol, tobacco and other drugs (ATOD) among Texas youth and families. These programs provide evidence-based curricula and effective prevention strategies identified by SAMHSA's Center for Substance Abuse Prevention (CSAP).

The Strategic Prevention Framework (SPF) provided by CSAP guides many prevention activities in Texas (see Figure 4). In 2004, Texas received a state incentive grant from CSAP to implement the Strategic Prevention Framework in close collaboration with local communities in order to tailor services to meet local needs for substance abuse prevention. This prevention framework provides a continuum of services that target the three classifications of prevention activities under the Institute of Medicine (IOM), which are universal, selective, and indicated. [11]

The Health and Human Services Commission Substance Abuse Services funds Prevention Resource Centers (PRCs) across the state of Texas. These centers are part of a larger network of youth prevention programs providing direct prevention education to youth in schools and the community, as well as community coalitions that focus on implementing effective environmental strategies. This network of substance abuse prevention services work to improve the welfare of Texans by discouraging and reducing substance use and abuse. Their work provides valuable resources to enhance and improve our state's prevention services aimed to address our state's three prevention priorities to reduce: (1) underage drinking; (2) marijuana use; and (3) non-medical prescription drug abuse. These priorities are outlined in the Texas Behavioral Health Strategic Plan developed in 2012.

Our Audience

Readers of this document include stakeholders from a variety of disciplines such as substance use prevention and treatment providers; medical providers; school districts and higher education; substance use prevention community coalitions; city, county, and state leaders; and community members interested in increasing their knowledge of public health factors related to drug consumption. The information presented in this report aims to contribute to program planning, evidence-based decision making, and community education.

Purpose of This Report

This needs assessment reviews substance abuse data and related variables across the state that aid in substance abuse prevention decision making. The report is a product of the partnership between the regional Prevention Resource Centers and the Texas Department of State Health Services. The report seeks to address the substance abuse prevention data needs at the state, county and local levels. The assessment focuses on the state's prevention priorities of alcohol (underage drinking), marijuana, and prescription drugs and other drug use among adolescents in Texas. This report explores drug

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[11] SAMHSA. Strategic Prevention Framework. https://www.samhsa.gov/capt/applying-strategic-prevention-framework. Last updated June 5, 2017. Accessed July 30, 2017.

consumption trends and consequences. Additionally, the report explores related risk and protective factors as identified by the Center for Substance Abuse Prevention (CSAP).

Figure 4. Strategic Prevention Framework (SPF)

Source: SAMHSA. Strategic Prevention Framework. https://www.samhsa.gov/capt/applying-strategic-prevention-framework. Last updated June 5, 2017. Accessed July 30, 2017.

Methodology

This needs assessment is a review of data on substance misuse, substance use disorders, and related variables that will aid in substance misuse prevention decision making at the county, regional, and state level. In this needs assessment, the reader will find the following: primary focus on the state-delineated prevention priorities of alcohol (underage drinking), marijuana, prescription drugs, and other drug use among adolescents; exploration of drug consumption trends and consequences, particularly where adolescents are concerned; and an exploration of related risk and protective factors as operationalized by CSAP.

Specifically, this regional needs assessment can serve in the following capacities:

- To determine patterns of substance use among adolescents and monitor changes in substance use trends over time;
- To identify gaps in data where critical substance misuse information is missing;
- To determine county-level differences and disparities;
- To identify substance use issues that are unique to specific communities;
- To provide a comprehensive resource tool for local providers to design relevant, data-driven prevention and intervention programs targeted to needs;
- To provide data to local providers to support their grant-writing activities and provide justification for funding requests;

- To assist policy-makers in program planning and policy decisions regarding substance misuse prevention, intervention, and treatment at the region and state level.

Process

The state evaluator and the regional evaluators collected primary and secondary data at the county, regional, and state levels between September 1, 2018 and May 30, 2019.

Between September and July the State Evaluator meet with Regional Evaluators via bi-weekly conference calls to discuss the criteria for processing and collecting data. The information is primarily gathered through established secondary sources including federal and state government agencies. In addition, region-specific data collected through local law enforcement, community coalitions, school districts and local-level governments are included to address the unique regional needs of the community. Additionally, qualitative data is collected through primary sources such as surveys and focus groups conducted with stakeholders and participants at the regional level.

Primary and secondary data sources are identified when developing the methodology behind this document. Readers can expect to find information from the American Community Survey, Texas Department of Public Safety, Texas School Survey of Drug and Alcohol Use, and the Community Commons, among others. Also, adults and youth in the region were selected as primary sources.

Qualitative Data Selection

During the year, focus groups, surveys and interviews are conducted by the Regional Evaluator to better understand what members of the communities believe their greatest need to be. The information collected by this research serves to identify avenues for further research and provide access to any quantitative data that each participant may have access to.

Focus Groups

Participants for the focus groups are invited from a wide selection of professionals including law enforcement, health, community leaders, clergy, high school educators, town councils, state representatives, university professors, and local business owners. In these sessions, participants discuss their perceptions of how their communities are affected by alcohol, marijuana, and prescription drugs.

Interviews

Interviews are conducted primarily with school officials and law enforcement officers. Participants are randomly selected by city and then approached to participate in an interview with the Regional Evaluator. Each participant is asked the following questions:

- What problems do you see in your community?
- What is the greatest problem you see in your community?
- What hard evidence do you have to support this as the greatest problem?
- What services do you lack in your community?

Other questions inevitably arise during the interviews, but these four are asked of each participant.

Longitudinally Presented Data

In an attempt to capture a richer depiction of possible trends in the data presented in this needs assessment, data collection and reporting efforts consist of multi-year data where it is available from respective sources.   Most longitudinal presentations of data in this needs assessment consist of (but are not limited to) the most recently-available data collected over three years in one-year intervals of data-collection, or the most recently-available data collected over three data-collection intervals of more than one year (e.g. data collection for the TSS is done in two-year intervals). Efforts are also made in presenting state-and national-level data with county-level data for comparison purposes. However, where it is the case that neither state-level nor national-level date are included in tables and figures, the assumption can be made by the reader that this data is not made available at the time of the data request. Such requests are made to numerous county, state, and national-level agencies in the development of this needs assessment.

Regional Demographics

The state of Texas demographic section will describe statewide conditions for the following categories: Population, Age, Race, Ethnicity, Languages, Concentrations of Populations, and General Socioeconomics, which includes: Average Wages by County, Household Composition, Employment Rates, Industry, TANF Recipients, Food Stamp Recipients, and Free School Lunch Recipients. This section will also highlight some of the regions of the state that may be identified as priority populations in terms of higher needs related to demographic and socio-economic status indicators. A priority population may be defined by demographic factors such as age, gender, race/ethnicity, income level, education attainment or grade level, or health care coverage status; disparities among demographic factors should be identified[i].
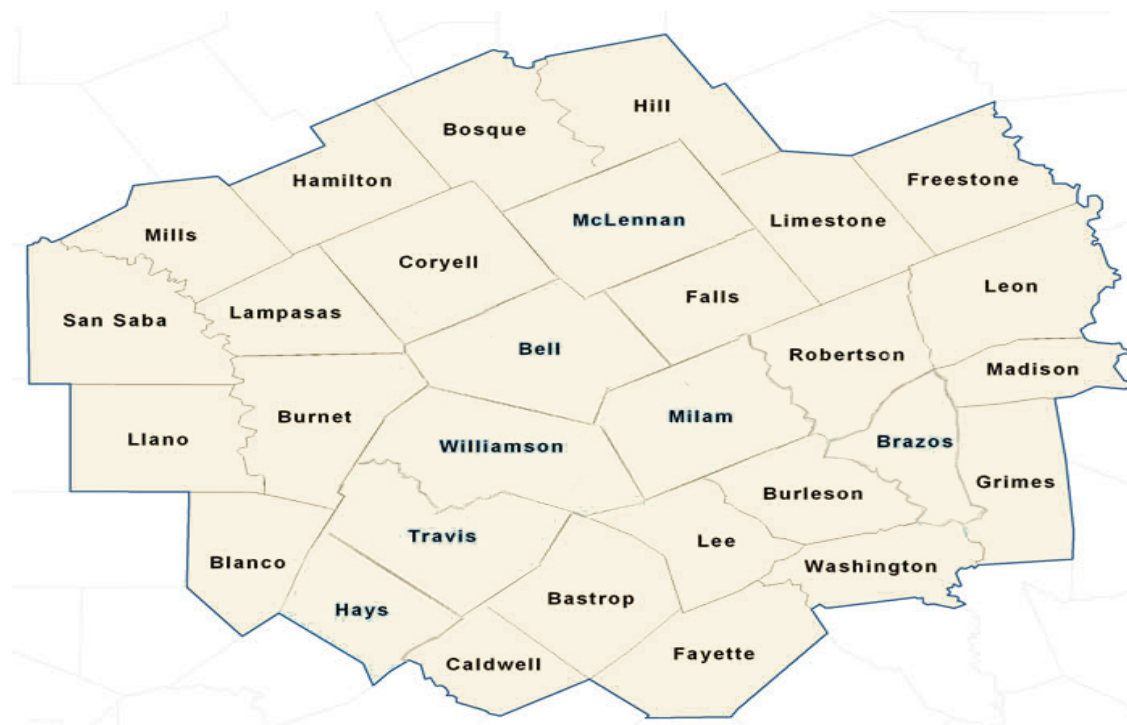
TABLE 1 - REGIONAL POPULATION, 2010-2019

	2010 Population	*2019 Population Estimate*	*Growth (+/-)*	*Percent Female*
Region 7	2,948,316	3,656,350	708,034	50.28%
Texas	25,146,105	29,948,091	4,801,986	50.20%
U.S.	308,758,105	329,190,612	14,369,408	50.49%

Population

Texas is a state of vast land area and a rapidly growing population. Compared to the U.S. as a whole, Texas' 2018 population estimate of 27,315,362 people ranks it as the second-most populous state, behind California's 39,144,818, and Texas ranks as the second-fastest growing state with a 2010-2015 growth change of 9.33% well ahead of the national growth rate of 4.10%.

The population for PRC7 in 2012 was 2,962,195 with a population density of 115.98. While PRC 7 has a total land area (square miles) of 25,540.27, the 2013 estimates for the region reflect a 118.48 population density with a 3,025,901 total population. The Texas 2012 population density was 96.53 while the United States had a population density of 87.55. For 2013, increases in population on land area for Texas rose to a population density of 98.17 and a population density of 88.23 for the United States.

Region 7 Projected Population for Region 7, 2010-2050

6,000,000

5,000,000
                                                                                          5,093,032

2,948,364
4,000,000   3,251,535

                                                                                    2,561,666
3,000,000

Female   1,629,318
2,000,000   1,475,690   2,531,366
                                                                                     Male
                          1,622,217
1,000,000   1,472,674

0

2010 2012 2014 2016 2018 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 2044 2046 2048 2050

━━ Population   ━━ Female   ━━ Male
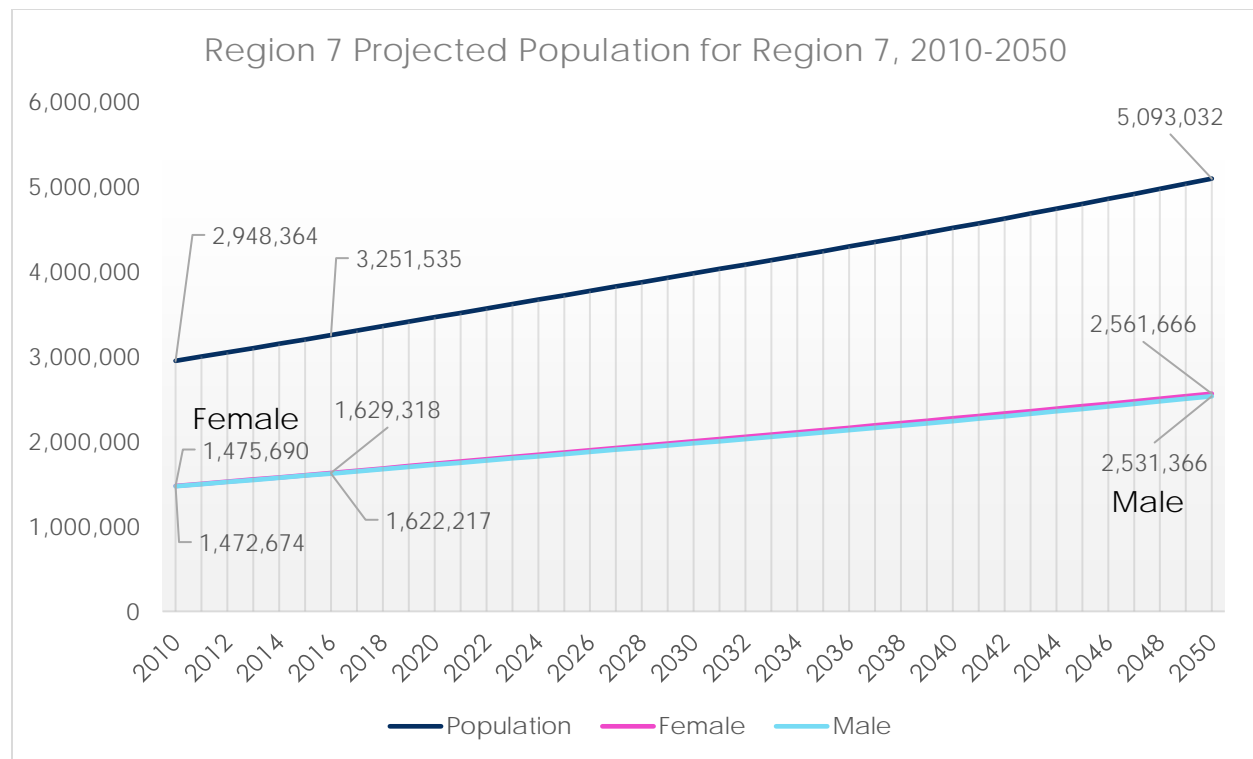
Age

Texas' population is significantly younger than the United States as a whole. In 2014 the categories of teen-aged youth (0-18 years of age), Texas stands at 26.23% while the U.S. is 22.80%. The younger population is also revealed in the category of persons 65 years and over, where Texas has fewer in that group (11.83%) than the U.S. at 15.20%.

TABLE 2 - REGIONAL POPULATION BY AGE CATEGORY 2019

	Population <18	Percent	Population 60+	Percent
Region 7	1,018,888	27.87%	641,216	17.54%
Texas	8,571,879	28.62%	5,460,399	18.23%

Estimated Ages of Region 7

■ '0-9' ■ '10-19' ■ '20-29' ■ '30-39' ■ '40-49' ■ '50-59' ■ '60-69' ■ '70-79' ■ '80+'
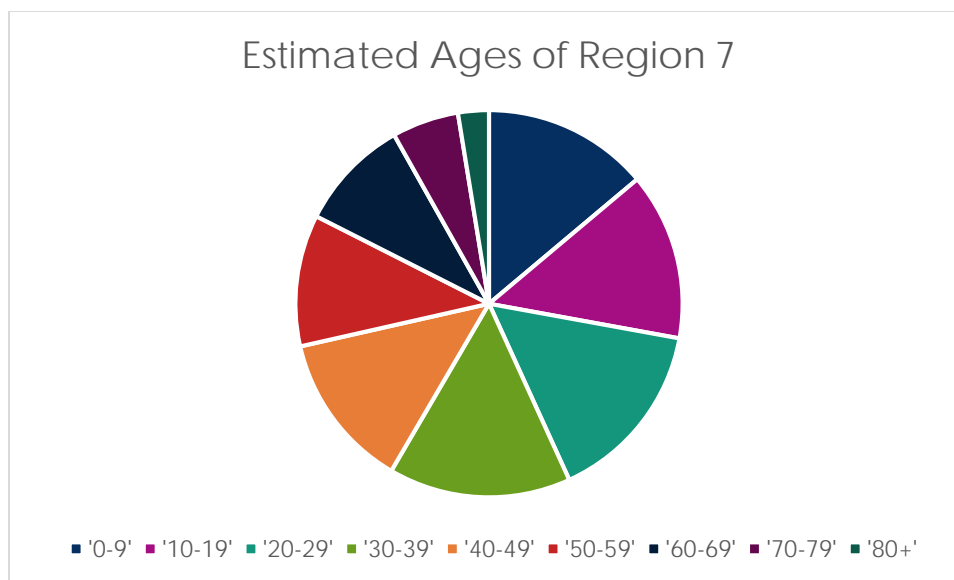
Race/Ethnicity

Texas is an increasingly diverse state with a strong Hispanic representation. The table below shows the racial and ethnic make-up of Texas' population, which is represented by slightly fewer black and other races and a significantly higher Hispanic or Latino population. The Hispanic population is concentrated in region 11 and region 10, which are the regions with the highest percent of Hispanics.

TABLE 3 - REGIONAL POPULATION BY RACE AND ETHNICITY

	Anglo	Black	Hispanic	Other
Region 7	52.28%	9.37%	31.09%	7.26%
Texas	39.64%	11.38%	41.97%	7.01%

Region 7

■ Anglo ■ Black ■ Hispanic ■ Other
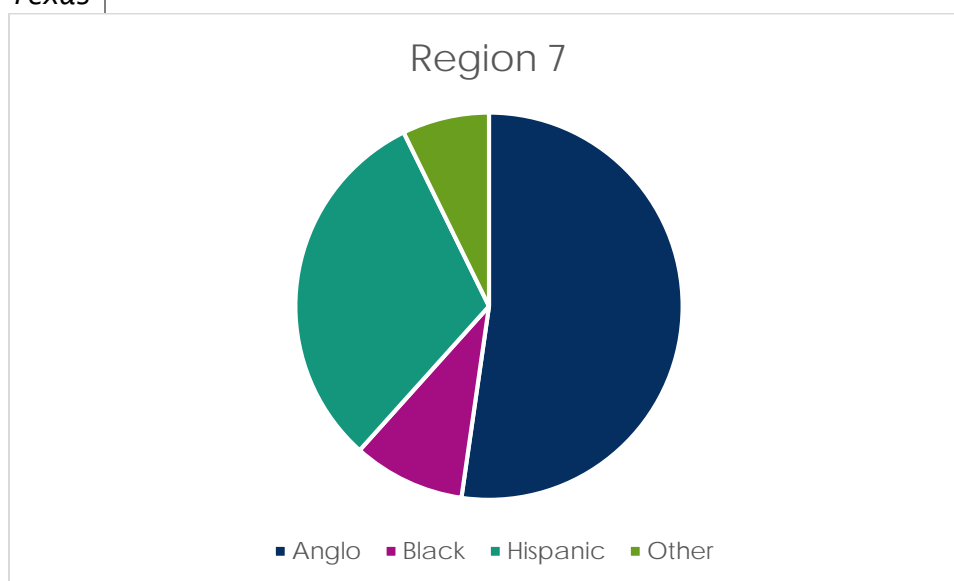
The total population in relation to race is graphically illustrated in three different pie charts. The first chart displays the total population in Region 7 and how they break into the seven race categories listed. The

second chart shows the population percentage difference when the Hispanic population is taken from the total population. Then, the Hispanic population is assessed on how they see themselves in the listed race categories. The last pie chart provides a Non-Hispanic population amount.

Region 7 Race/Ethnicity, Population Projection 2010-2050
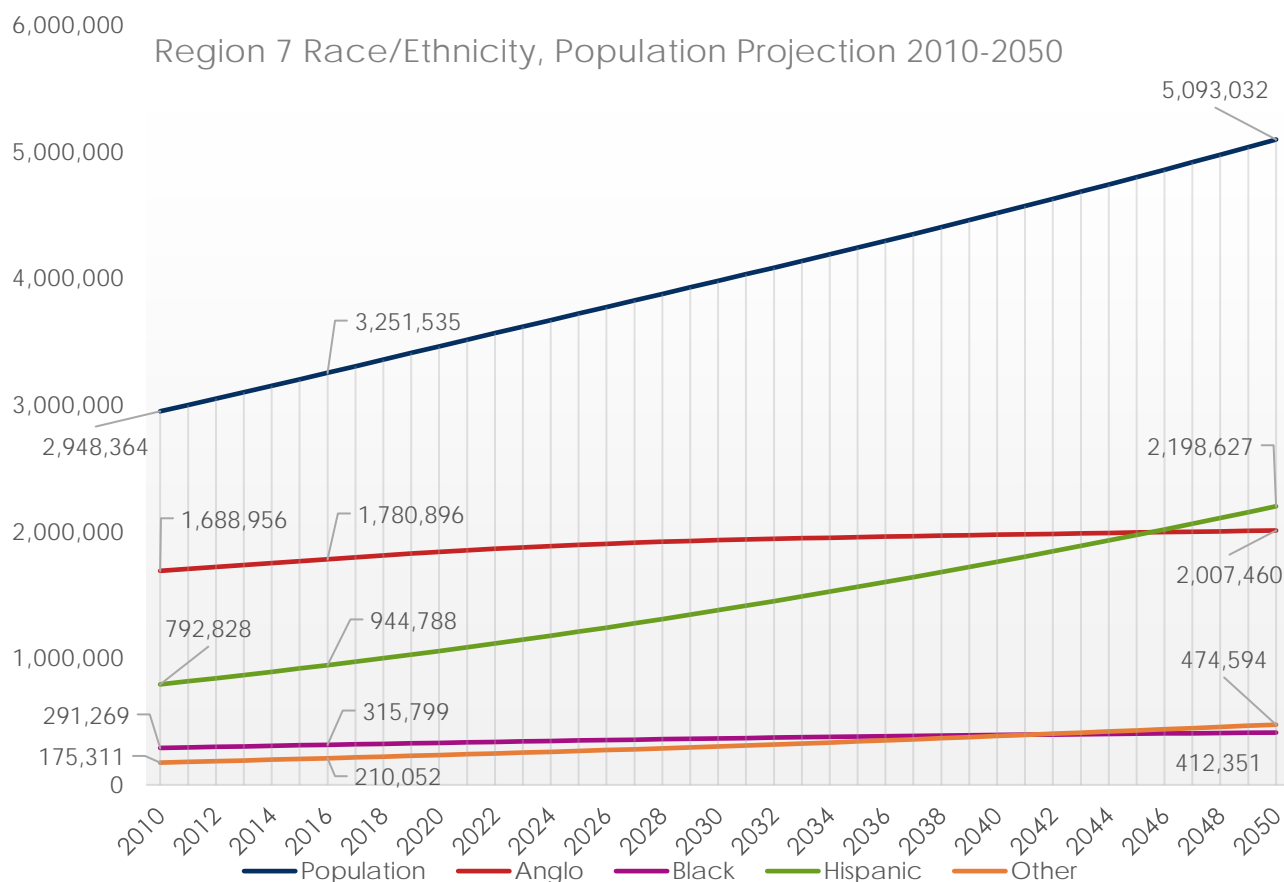
Concentrations of Populations

Texas' land area of 268,580.82 square miles places it as the 2nd largest state, behind Alaska's vast 663,267.26 square miles. Texas 96.3 persons per square mile (density) is very close to the national average of 87.3, with New Jersey (1,195.5) and Alaska (1.2) representing the highest and lowest density.

Also, Table 5 below contains the 2010 Census designations of populations by urban and rural status. To qualify as an urban area, the territory identified according to criteria must encompass at least 2,500 people, at least 1,500 of which reside outside institutional group quarters. Areas adjacent to urban areas and cores are also designated as urban when they are non-residential, but contain urban land uses, or when they contain low population, but link outlying densely settled territory with the densely settled core.

"Rural" areas consist of all territory, population, and housing units located outside UAs and UCs. Geographic entities, such as metropolitan areas, counties, minor civil divisions, places, and census tracts, often contain both urban and rural territory, population, and housing units.

Most of the population in Region 7 can be found in the following counties: Travis, Williamson, Bell, Brazos, McLennan and Hays. Of the 6 counties mentioned, five are closely positioned to Interstate Highway (IH) 35. Brazos County is the only county mentioned outside the IH 35 route.

The proportion of land to population in Region 7 is presented in the above figure to illustrate that large amounts of land are still available for the growing population in the region. The potential for further housing development is indicated in the figure as the trajectory of the population density is closer to population rather than land area. This suggests people in the region are living in concentrated areas. In the table below comparisons of Region 7 totals for population, population density and land area are provided. These values indicate Region 7 or Central Texas has plenty of room for future growth and development. In fact, most of the Region 7 land area has considerable potential for economic gain in relation to the Texas Triangle (a mega region anchored by Houston, Dallas-Fort Worth, Austin, and San Antonio).

Population Density of Region 7 Compared to Texas and U.S.			
Report Area	Total Population	Population Density*	Total Land Area**
Region 7	3,025,901	118.48	25,540
Texas	25,639,372	261,162.44	98.17
United States	311,536,591	3,530,997.60	88.23
Note. *=per square mile; **=unit in square miles. American Community Survey 2009-2013.			

TABLE 4 - REGIONAL URBAN AND RURAL POPULATIONS

Region	2010 Population	Urban	Urban Percent	Rural	Rural Percent
1	839,586	649,052	77.31%	190,534	22.69%
2	550,250	354,892	64.50%	195,358	35.50%
3	6,733,179	6,100,919	90.61%	632,260	9.39%
4	1,111,696	542,818	48.83%	568,878	51.17%
5	767,222	432,088	56.32%	335,134	43.68%
6	6,087,133	5,625,713	92.42%	461,420	7.58%

7	2,948,364	2,309,329	78.33%	639,035	21.67%
8	2,604,647	2,143,709	82.30%	460,938	17.70%
9	571,871	451,190	78.90%	120,681	21.10%
10	825,913	793,905	96.12%	32,008	3.88%
11	2,105,700	1,894,424	89.97%	211,276	10.03%
Texas	25,145,561	21,298,039	84.70%	3,847,522	15.30%
United States	312,471,327	252,746,527	80.89%	59,724,800	19.11%
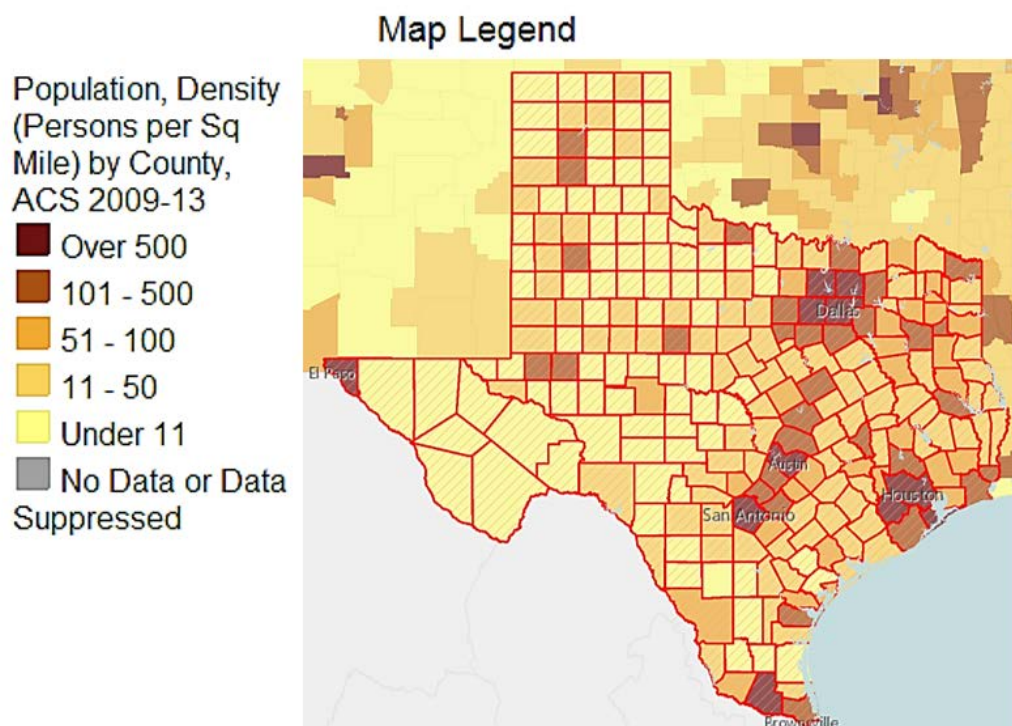
Languages

Texas has a significantly higher number of residents that are foreign born (16.5%) than the U.S. as a whole (13.1%). As a result, there are also significantly higher numbers of the population (ages 5+, 2010-2014) that report a "language other than English is spoken at home," with Texas at 34.9% compared to 20.9% nationally. Another similar indicator is the population with limited English proficiency (LEP). In Texas, it is much higher at 14.22% of the population versus 8.60% for the U.S. Persons are considered to have limited English proficiency they indicated that they spoke a language other than English, and if they spoke English less than "very well," measured as a percentage of the population aged 5 or older.

TABLE 5 - REGIONAL LIMITED ENGLISH PROFICIENCY

Region	Persons 5+ in Household	Number 5+ with LEP	Percent 5+ with LEP
1	789,750	69,948	8.86%
2	514,095	26,457	5.15%
3	6,495,307	843,803	12.99%

4	1,048,689	56,541	5.39%
5	719,756	39320	5.46%
6	5,885,315	987,163	16.77%
7	2,873,636	264,024	9.19%
8	2,516,577	299,357	11.90%
9	550,027	65,133	11.84%
10	780,139	240,145	30.78%
11	1,977,989	543,369	27.47%
Texas	24,151,279	3,435,260	14.22%
United States	294,133,388	25,305,204	8.60%

The rising population of English language learners (ELL) is also a concern in Central Texas because language can serve as a barrier to services. In this report, ELL population is tied to limited English proficient individuals. The inability to speak English can relate to barriers in healthcare access, provider communications, and health literacy or education. Below is a chart showing the percent of people older than 5 that speak English less than "very well" provided by the US Census Bureau.

Percent who speak English less than "very well"				
County	2016	2015	2014	2013	2012
Bastrop	10.02	9.98	10.9	10.3	9.7
Bell	5.34	5.64	5.5	5.2	5.2
Blanco	4.65	6.38	5.8	7.3	7.5
Bosque	5.35	5.77	4.9	4.4	4.8
Brazos	9.26	9.70	9.6	9.7	9.2
Burleson	5.21	5.50	5.7	6	6.4
Burnet	5.07	6.13	6.6	6.3	6.1
Caldwell	10.08	9.91	9.6	8.5	7.5
Coryell	4.43	4.36	4.3	4	3.7
Falls	6.93	7.93	7.2	7.1	5.8
Fayette	3.94	4.70	6.1	6.4	6.9
Freestone	5.28	5.10	5.3	5.3	4.4
Grimes	7.27	7.69	7.5	7.2	7.4
Hamilton	3.42	4.14	3	2.4	2.7
Hays	7.08	7.32	7.1	6.9	6.7
Hill	5.86	6.13	6.2	6.5	6.3
Lampasas	3.72	4.15	4.8	5.5	4.5
Lee	7.51	7.43	7.2	8.1	8.2
Leon	6.28	6.40	6.3	5.8	5.6
Limestone	11.92	12.73	14	12.5	12
Llano	2.88	2.49	2.8	2.9	3
Madison	9.17	8.98	8.3	8.2	8.2
McLennan	7.39	5.81	4.6	4.5	4.5

Milam	4.38	4.34	4.6	5.3	5.5
Mills	7.26	5.86	4.7	5.5	7
Robertson	6.39	6.47	5.7	5	6.4
San Saba	12.21	10.92	10.4	7.6	7.3
Travis	12.17	12.72	13.1	13.5	13.8
Washington	4.77	3.53	3.1	3.5	4.1
Williamson	6.69	6.78	6.7	6.5	6.6

General Socioeconomics

Approximating general socioeconomics for the State of Texas has led to describing several components of socioeconomic status. The RNA provides descriptive information for average wages, household composition in relation to single-parent households, employment rates, and industry.

Average Wages

In Texas, the average weekly wage was $842.10 (including federal). Excluding federal wages, the average weekly wage was 833.40. The employment numbers in Texas were 11,388,114 (including federal) and 11,197,863 (excluding federal). The total wages amounted to $156,873,914,181 (including federal) and $153,542,103,331 (excluding federal). In the table below, we see higher employment in Bell and McLennan counties. Higher average weekly wages exist in Travis, Lee, and Leon Counties.

Total (Including Federal)			
County	**Employment**	**Wages**	**AWW**
Bastrop	15,846	$149,654,837	$726.49
Bell	112,608	$1,178,088,801	$804.76
Blanco	2,965	$32,299,760	$838.07
Bosque	3,814	$39,657,625	$799.91
Brazos	99,371	$997,572,171	$772.22
Burleson	4,253	$47,235,133	$854.40
Burnet	13,508	$143,485,472	$817.12
Caldwell	8,211	$79,895,823	$748.49
Coryell	14,968	$123,265,183	$633.49
Falls	3,031	$27,836,754	$706.54
Fayette	9,551	$104,168,979	$838.94
Freestone	5,915	$70,614,150	$918.32
Grimes	8,535	$109,889,603	$990.36
Hamilton	2,578	$22,132,664	$660.40
Hays	59,884	$571,312,900	$733.87
Hill	9,634	$96,497,763	$770.49
Lampasas	4,572	$37,843,917	$636.76
Lee	7,269	$98,523,549	$1,042.61
Leon	5,776	$77,336,746	$1,029.95
Limestone	8,563	$80,231,741	$720.71
Llano	4,363	$38,091,090	$671.63

Madison	5,007	$44,090,116	$677.36
McLennan	106,148	$1,148,710,874	$832.44
Milam	5,677	$66,689,349	$903.69
Mills	1,361	$11,113,103	$627.95
Robertson	3,947	$46,296,292	$902.34
San Saba	1,613	$12,938,080	$617.01
Travis	667,437	$10,152,693,762	$1,170.11
Washington	15,392	$157,642,397	$787.83
Williamson	147,604	$1,843,042,197	$960.49
Source. **Quarterly Census of Employment and Wages. AWW=Average Weekly Wage**			

Household Composition

Another way to gain a basic understanding of stresses to the family unit is the composition of the household. One basic indicator is the number of persons per household. Texas has a greater number of persons per household (2.83, 2010-2014) than the U.S. as a whole (2.63). The Community Commons report defines an overcrowded unit as one that has more than one occupant per room. Information related to the percent of overcrowded housing is presented below. This indicator is relevant as housing conditions are associated with a wide range of health conditions and increased risk for diseases. Region 11 has the highest percent of population living in an overcrowded unit.

TABLE 5 - REGIONAL HOUSING CONDITIONS

	Total Households	Total Occupied Housing Units	Overcrowded Housing Units	% Of Housing Units Overcrowded
Region 7	752,154	894,120	39,920	4.46
Texas	6,933,496	6,909,687	444,709	6.44
U.S.	73,019,542	90,364,208	3,852,710	4.26

Also children in single-parent households are statistically at greater risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use. Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality then their peers in two-parent households.

TABLE 6 - REGIONAL HOUSEHOLD COMPOSITION

	Percent Single Parent Household				
	2019	2018	2017	2016	2015
Region 7	29.70%	30.26%	30.49%	31.28%	31.53%
Texas	32.96%	33.32%	33.29%	33.39%	33.24%

In Region 7 between 2012-2016 more single-parent households with children exist within Grimes (45%), Leon (42%), and Falls (42%) Counties.

Percent Single Parent Households 2012-2016
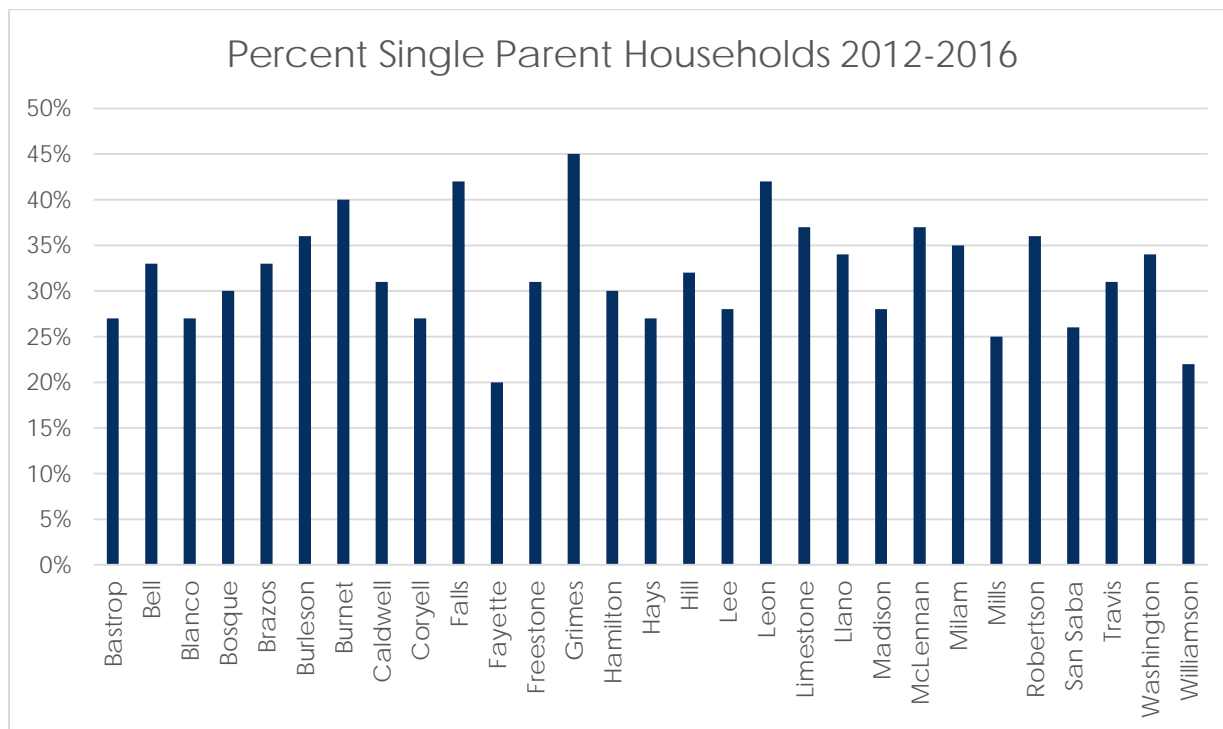
Employment

Texas generally enjoys a substantially more favorable employment climate than most states, as previously evidenced in part by the population growth figures. This indicator is relevant because unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status. The latest data from the Bureau of Labor Statistics (BLS, April 2016) indicates that Texas currently holds an April 2016 unemployment rate of 4.2%, while the nation as a whole sits at 4.7%. The current rate of 4.2% represents a 0.1% increase from April 2015. The rates by region are indicated below, with Regions 3 and 1 in the metro Austin and Panhandle areas having the least current unemployment. Lemstra et al. (2008) conducted a meta-analysis of marijuana and alcohol use in adolescents (aged 10-15) by socio-economic status (SES). They concluded that "lower SES adolescents have higher rates of marijuana and alcohol risk behavior than higher SES adolescents. Observing the implication of what Lemstra et al. (2008) described, poverty measures for Region 7 can help identify at-risk counties.

Employment Rates

In Region 7 the labor force consisted of 1,685,311 individuals. Of the Region 7 labor force, 1,624,989 individuals were employed. The unemployment rate in Region 7 was 3.58%, which was lower than the State (4.61%) and the nation (4.9%). In the figure below counties in red are the five counties with the highest rates in Region 7.

Unemployment Rates

Legend: US, Texas, Region 7
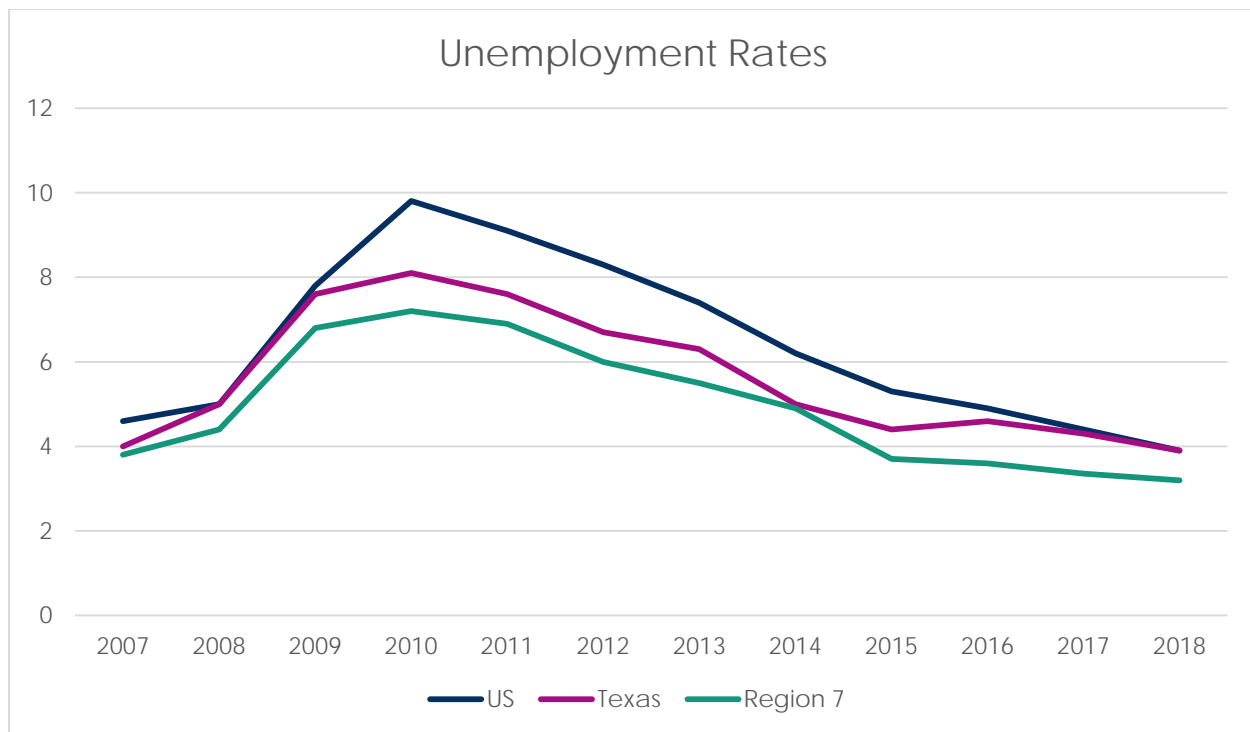
Industry

When compared to the U.S., Texas firms employ roughly the same proportions of workers by industry type. The data in the chart below indicates that Texas has a slightly more "blue collar" workforce, with marginally fewer management and business employees and slightly more mining, construction and similar labor force types. Region 7 (Austin area) and Region 3 (Dallas/Ft. Worth area) pace the state for white collar, high-tech industries.

TABLE 7 - REGIONAL EMPLOYMENT BY INDUSTRY TYPE

Region	Civilian employed population 16+	Management, business, science, arts	Service	Sales and office	Natural resources, construction, maintenance	Production, transportation, and material moving
7	1,386,140	40.67%	9.56%	8.77%	23.86%	17.14%
Texas	12,094,262	35.11%	10.87%	11.95%	24.40%	17.67%
U.S.	191,756,000	34.92%	15.44%	26.09%	8.80%	14.75%
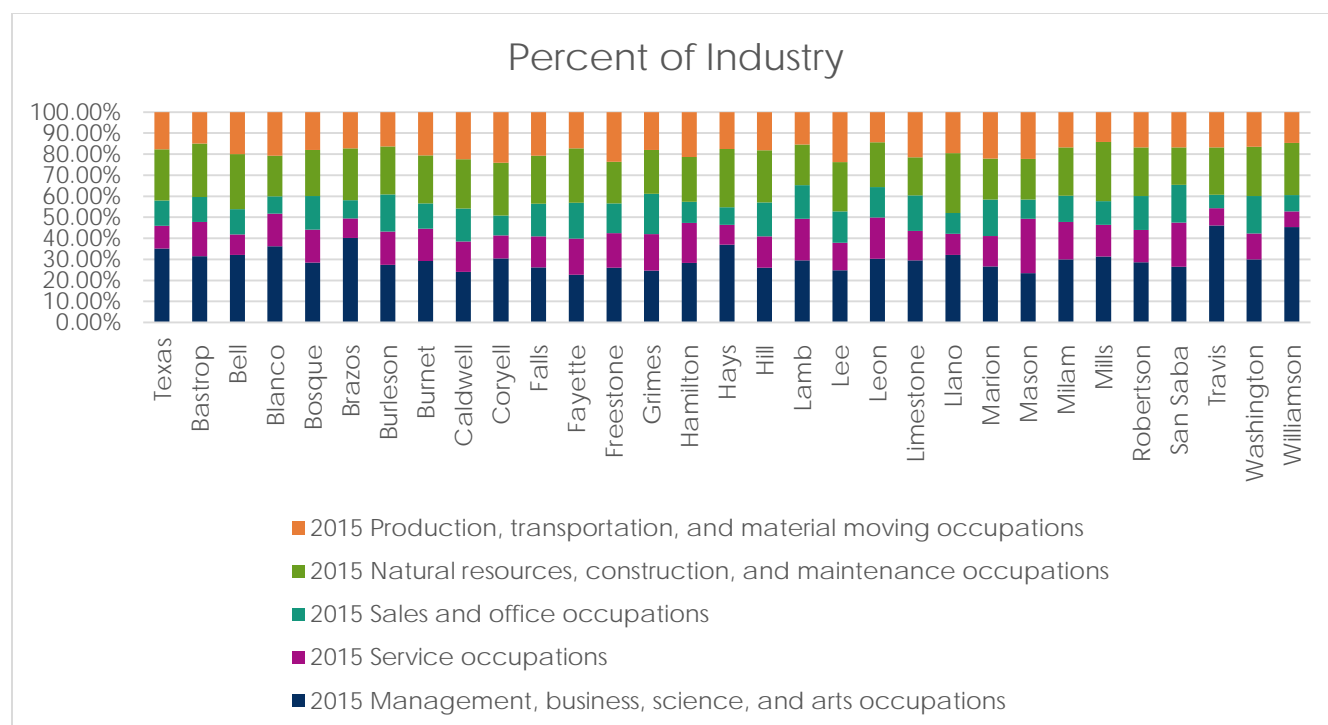
TANF Recipients

This indicator reports the percentage of recipients per 100,000 populations receiving public assistance income. Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) is excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps. The table below details the basic TANF and state program TANF for 2014-2018 in region 7 and Texas a whole.

TABLE 8 - REGIONAL TANF RECIPIENTS

	2018		2017		2016		2015		2014	
	TANF BASIC		**TANF BASIC**		**TANF BASIC**		**TANF BASIC**		**TANF BASIC**	
	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT
REGION 7	3900	$84.10	4155	$83.44	5054	$89.91	4027	$82.42	4788	$82.71
STATE	51055	$75.82	57827	$74.78	59729	$82.65	64158	$73.24	73858	$73.06
	TANF STATE PROGRAM		**TANF STATE PROGRAM**		**TANF STATE PROGRAM**		**TANF STATE PROGRAM**		**TANF STATE PROGRAM**	
	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT	RECIPIENTS	AVG PAYMENT
REGION 7	251	$42.79	302	$43.01	280	$44.81	276	$48.26	343	$36.94
STATE	2040	$78.20	2483	$76.36	2499	$76.76	2605	$75.46	3333	$75.20

Food Assistance Recipients

Another estimate of instability in providing for basic needs is the estimated percentage of households receiving the Supplemental Nutrition Assistance Program (SNAP) benefits. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrolment.

TABLE 9 - REGIONAL SNAP RECIPIENTS

	2018	**2017**	**2016**	**2015**	**2014**
Region 7	333,315	345,579	339,621	339,715	316,132
Texas	3,725,683	3,943,512	3,867,476	3,784,329	3,489,144

In Region 7 in 2018 there were 333,315 people who received SNAP benefits out of a population of approximately 9.91% of the population of the region compared to 12.69% for Texas as a whole.

Free and Reduced-Price School Lunch Recipients

The National School Lunch Program is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students can be charged no more than 40 cents. The table below details the number of students receiving free and reduced school lunches for Region 7 and Texas as a whole.

TABLE 10 - REGIONAL SCHOOL LUNCH ASSISTANCE

Free and Reduced Lunch Students

	2015-16	**2014-15**	**2013-14**	**2012-13**
Texas	3,107,545	3,058,606	3,080,822	3,059,437
Bastrop	9,862	9,663	9,643	9,251
Bell	37,193	36,624	36,455	35,278
Blanco	746	773	954	805
Bosque	1,910	1,955	2,072	1,955
Brazos	17,139	16,489	16,164	15,965
Burleson	1,661	1,627	1,677	1,708
Burnet	4,392	4,198	4,320	4,310
Caldwell	5,081	5,046	4,926	4,767
Coryell	8,117	8,015	7,963	8,196
Falls	‡	1,805	1,723	1,823
Fayette	1,975	1,858	1,919	1,953
Freestone	1,946	1,856	1,880	1,849
Grimes	2,998	2,817	2,962	2,985

Hamilton	798	815	820	814
Hays	16,405	16,123	15,589	14,738
Hill	4,150	4,177	4,236	4,346
Lampasas	1,995	1,964	2,259	2,305
Lee	2,046	2,126	2,060	2,091
Leon	1,724	1,615	1,692	1,691
Limestone	3,058	2,981	3,059	2,782
Llano	1,118	1,093	1,079	1,095
Madison	1,891	1,914	1,974	1,855
McLennan	28,034	27,677	28,105	27,945
Milam	3,157	3,118	3,072	3,068
Mills	443	500	501	505
Robertson	2,122	2,069	2,094	2,094
San Saba	673	715	595	601
Travis	94,536	96,251	95,236	95,021
Washington	2,833	2,865	2,905	3,045
Williamson	31,117	30,857	30,985	31,455

‡ indicates that the data do not meet NCES data quality standards.

Uninsured

Insurance increases the individual's ability to access treatment programs, those who are uninsured will therefore have fewer treatment programs that they can access. The number of children without insurance is a decent indicator for the rates of insurance in the population while also indicating the number of children at an increased risk. Below is Data from 2012-2016 showing the percentage of the population under age 19 that has no health insurance coverage is presented bellow for Region 7 compared to Texas as a whole.

Percent of Uninsured Children

County	2016	2015	2014	2013	2012
Texas	10%	10%	12%	13%	13%
Bastrop	12%	12%	16%	18%	16%
Bell	7%	6%	8%	10%	10%
Blanco	20%	19%	22%	23%	20%
Bosque	15%	15%	19%	18%	16%
Brazos	9%	10%	12%	13%	12%
Burleson	13%	15%	17%	19%	17%
Burnet	12%	14%	17%	17%	16%
Caldwell	11%	14%	13%	14%	12%
Coryell	7%	7%	9%	11%	10%
Falls	11%	12%	15%	16%	14%

Fayette	13%	15%	18%	20%	17%
Freestone	12%	15%	15%	18%	15%
Grimes	12%	14%	17%	18%	16%
Hamilton	15%	15%	17%	18%	17%
Hays	9%	10%	11%	13%	12%
Hill	14%	14%	16%	16%	15%
Lampasas	13%	14%	16%	17%	14%
Lee	11%	13%	15%	19%	16%
Leon	16%	16%	19%	19%	17%
Limestone	12%	13%	16%	16%	14%
Llano	13%	13%	16%	17%	16%
Madison	13%	13%	16%	17%	16%
McLennan	11%	9%	11%	12%	12%
Milam	11%	11%	15%	15%	15%
Mills	17%	18%	24%	24%	20%
Robertson	12%	12%	16%	17%	16%
San Saba	15%	17%	21%	19%	17%
Travis	9%	9%	11%	11%	12%
Washington	12%	13%	13%	17%	15%
Williamson	7%	7%	9%	11%	10%

Environmental Risk Factors

Environmental risk factors that will be covered in this needs assessment range from educational attainment and dropout, criminal activity, mental health influences, and perceived access and risk of harm. These risk factors will influence consumption and therefore rates of substance abuse.

Education

Courtesy of CommunityCommons.org – Educational Attainment shows the distribution of educational attainment levels in Region 7. Educational attainment is calculated for persons over 25, and is an average for the period from 2009 to 2013. In the Table below, Falls County has the highest percent of individuals without a high school diploma, followed by Robertson and Burleson counties.

	Less Than High School	*High School Diploma or Equivalent*	*Some College or Associate's Degree*	*Bachelor's Degree*	*Graduate or Professional Degree*

United States	12.78%	27.72%	31.15%	18.04%	11.80%
Texas	17.02%	25.98%	31.07%	17.41%	9.86%
Texas	19.59%	30.57%	31.55%	12.85%	6.11%
Bastrop	9.58%	28.80%	40.38%	14.37%	8.24%
Bell	9.62%	31.42%	31.89%	17.27%	10.77%
Blanco	15.91%	35.56%	31.44%	11.59%	6.02%
Bosque	10.60%	17.84%	41.52%	18.20%	18.14%
Brazos	19.18%	40.46%	26.58%	8.72%	5.60%
Burleson	14.45%	31.25%	32.13%	15.01%	8.08%
Burnet	20.65%	39.55%	26.94%	8.95%	4.61%
Caldwell	11.26%	32.30%	43.17%	9.65%	4.42%
Coryell	24.27%	36.97%	27.87%	8.70%	2.49%
Falls	16.77%	39.19%	27.12%	12.70%	4.63%
Fayette	18.56%	35.48%	34.58%	8.69%	2.97%
Freestone	22.97%	35.37%	29.32%	8.23%	4.65%
Grimes	17.49%	35.53%	26.08%	15.49%	6.03%
Hamilton	10.13%	22.48%	37.25%	20.55%	12.41%
Hays	18.72%	33.62%	32.77%	10.07%	5.41%
Hill	12.62%	29.04%	39.81%	12.25%	6.93%
Lampasas	18.49%	36.38%	29.06%	11.34%	5.36%
Lee	18.21%	39.73%	27.63%	10.82%	4.06%
Leon	19.62%	35.39%	32.39%	9.03%	4.02%
Limestone	13.53%	27.21%	34.06%	17.57%	8.14%
Llano	15.01%	27.87%	36.98%	13.67%	8.07%
Madison	24.65%	37.88%	25.78%	8.65%	3.53%
McLennan	19.03%	37.78%	29.04%	10.70%	3.82%
Milam	20.29%	27.18%	31.77%	13.68%	7.98%
Mills	17.73%	36.93%	31.97%	9.23%	4.66%
Robertson	26.81%	30.44%	28.38%	10.56%	4.26%
San Saba	11.20%	17.88%	27.57%	28.28%	17.23%
Travis	14.78%	29.79%	34.43%	14.83%	7.22%
Washington	7.79%	21.61%	33.58%	25.11%	13.34%

Source: 2012 - 2016 American Community Survey 5-Year Estimates, 2016 Educational Attainment.

Dropout Rates

The table below compares graduation rates and dropout rates between the 11 regions from 2015 to 2017.

2017	**2016**	**2015**

HHSC REGION	All Graduate Rate	All Dropout Rate	All Graduate Rate	All Dropout Rate	All Graduate Rate	All Dropout Rate
REGION 1	92.9	4.3	91.3	4.9	90.6	5.3
REGION 2	94.2	3.4	92.9	4.6	92.1	5
REGION 3	89.1	5.6	88.4	6	88	6.4
REGION 4	94.1	3.4	93.5	3.8	93.7	3.6
REGION 5	91.7	5.4	90.4	6.5	90.7	6.4
REGION 6	89.1	6.3	88.5	6.5	88.9	6.3
REGION 7	89	6.1	89.3	6	90.2	5.4
REGION 8	89.3	7.2	89.4	6.8	89.2	6.9
REGION 9	88.6	7.1	87.4	8.3	85.8	9.6
REGION 10	93.3	3.9	92.6	4.1	92.5	4.1
REGION 11	90.3	5.7	89.4	6.3	88	7.1

School Discipline

The table below shows alcohol and drug violations as well as total in-school and out-of-school suspensions for Region 7 in 2017 provided by the Texas Education Agency (TEA).

County	Year-End Enrollment 2017	Number of Students with Alcohol Violations	Number of Students with Controlled Substance Violations	In-School Suspensions Total	Out-of-School Suspensions Total
Bastrop	18199	37	178	2633	1039
Bell	83174	*	*	10543	4566
Blanco	1824	*	*	83	12
Bosque	3137	*	0	158	32
Brazos	31894	28	120	3246	1666
Burleson	2928	*	15	647	116
Burnet	7941	12	48	895	149
Caldwell	7942	21	34	965	341
Coryell	12804	16	28	1389	378

Falls	2370	0	*	222	69
Fayette	4033	*	*	429	68
Freestone	4054	*	*	254	116
Grimes	4891	*	*	568	183
Hamilton	1518	*	0	99	23
Hays	38570	26	231	2642	938
Hill	7149	*	11	693	215
Lampasas	1448	*	12	407	64
Lee	3309	*	*	417	141
Leon	3401	*	0	229	35
Limestone	4342	*	19	648	201
Llano	2034	*	13	340	63
Madison	1400	0	*	287	94
McLennan	276	38	156	6961	3308
Milam	5017	14	*	617	124
Mills	1451	N/A	N/A	109	35
Robertson	3552	*	*	544	144
San Saba	1055	*	0	25	11
Travis	174222	132	989	10894	6106
Washington	5727	*	21	755	255
Williamson	122293	120	460	6762	1952
* = masked data, 1-9 cases					

Of the TEA discipline rates related to alcohol and drugs in 2014 and 2016, the following counties had the highest percent of drugs/alcohol incidents: Travis (10.86%), Burnet (12.24%), and Williamson (9.35%).

Percent of Incidents Related to ATOD

Homeless Students

In the school year 2014-2015 Texas had around 110,302 students identify as homeless approximately 13,152 of those students were in Region 7 this increased to 234,137 in Texas with 15,438 in region 7 in 2017-2018.

Homeless students				
	2014-2015	2015-2016	2016-2017	2017-2018
Region 7	13,152	14,225	13,789	15,438
Texas	110,302	117,718	113,219	234,137

Criminal Activity

Criminal activity, even when not related to alcohol or substance abuse, is a significant environmental risk factor. For the purposes of this RNA there are six sections that will be detailed: violent index crime, property index crime, domestic and child abuse, sexual assault, juvenile offences, and drug seizures and trafficking. All alcohol and drug related crimes will be noted in the Consequences section.

Index Violent Crime

The table below displays the number of violent crimes reported from 2016 to 2018. All arrest and offense numbers were acquired from the uniform crime reporting of index crimes.

	2016		2017		2018	
County	Murder	Rape	Murder	Rape	Murder	Rape
Bastrop	9	58	2	37	5	54
Bell	27	228	30	283	25	241

Blanco	1	5	0	2	0	1
Bosque	0	0	0	0	0	0
Brazos	5	129	6	125	4	152
Burleson	0	9	0	2	0	6
Burnet	0	28	1	38	0	27
Caldwell	2	11	2	9	1	6
Coryell	2	22	2	13	0	17
Falls	1	0	0	0	1	5
Fayette	1	8	2	11	1	6
Freestone	0	5	0	5	0	0
Grimes	5	5	5	7	0	5
Hamilton	0	1	0	2	0	1
Hays	5	94	7	104	4	136
Hill	0	8	2	12	1	19
Lampasas	0	8	1	3	0	9
Lee	0	6	1	10	1	12
Leon	0	2	0	1	1	0
Limestone	1	12	1	10	0	10
Llano	1	2	0	2	0	0
Madison	0	6	0	2	0	2
McLennan	6	207	8	205	3	206
Milam	0	8	2	5	1	8
Mills	0	0	0	0	0	0
Robertson	0	10	2	9	1	8
San Saba	0	1	0	0	0	1
Travis	53	850	39	1,009	38	951
Washington	1	18	2	10	0	28
Williamson	1	169	2	6	5	187
Texas	**1469**	**13408**	**1415**	**14480**	**1324**	**14866**

	2016		2017		2018	
County	Robbery	Assault	Robbery	Assault	Robbery	Assault
Bastrop	52	256	39	178	26	147
Bell	365	834	417	830	245	510
Blanco	1	10	1	12	0	13
Bosque	1	6	0	8	0	4
Brazos	151	474	120	399	83	395
Burleson	4	20	6	28	2	27
Burnet	3	82	6	73	3	76
Caldwell	14	69	13	74	10	65
Coryell	41	150	23	231	12	147

Falls	1	17	0	0	6	14
Fayette	8	47	5	54	6	48
Freestone	2	21	5	20	5	23
Grimes	10	60	9	36	3	34
Hamilton	2	17	0	18	0	5
Hays	92	286	83	273	69	314
Hill	15	39	6	36	7	51
Lampasas	0	17	2	26	1	22
Lee	8	26	2	27	2	21
Leon	0	26	1	17	0	19
Limestone	13	62	12	56	0	56
Llano	0	9	1	6	2	9
Madison	9	32	2	50	4	19
McLennan	183	682	143	792	144	734
Milam	2	45	3	50	4	45
Mills	0	2	0	2	0	2
Robertson	7	22	2	35	8	27
San Saba	0	3	0	6	0	15
Travis	1,156	2,830	1,083	2,832	1,096	2,728
Washington	11	40	4	136	15	63
Williamson	98	386	5	37	79	375
Texas	33242	72497	32122	75315	28272	74183

Index Property Crime

The table below displays the number of property crimes reported from 2016 to 2018. All arrest and offense numbers were acquired from the uniform crime reporting of index crimes.

	2016			2017			2018		
County	Burglary	Larceny	Auto Theft	Burglary	Larceny	Auto Theft	Burglary	Larceny	Auto Theft
Bastrop	360	1,211	149	319	951	106	311	827	101
Bell	2,106	6,060	652	2,067	5,800	931	1,553	5,359	541
Blanco	20	46	9	40	52	12	14	33	2
Bosque	71	72	2	41	72	5	26	45	5
Brazos	972	4,354	288	752	4,011	267	784	4,087	330
Burleson	65	83	8	46	107	9	60	109	11
Burnet	190	526	57	167	408	47	131	392	50
Caldwell	161	379	31	103	415	50	102	256	28
Coryell	245	913	51	245	864	50	196	688	36

Falls	37	58	15	2	6	1	32	56	16
Fayette	91	184	13	65	208	19	75	201	11
Freestone	91	126	16	69	121	19	66	119	12
Grimes	146	277	38	107	180	22	103	138	43
Hamilton	40	66	9	16	67	5	14	56	11
Hays	695	2,867	378	568	2,436	319	522	2,328	189
Hill	190	409	21	146	452	45	138	467	48
Lampasas	84	378	12	79	219	9	55	197	5
Lee	42	189	10	31	165	6	24	123	12
Leon	86	129	15	45	101	9	42	92	8
Limestone	139	334	24	123	386	19	125	266	30
Llano	54	84	2	53	81	7	36	48	4
Madison	93	172	14	86	119	5	52	119	12
McLennan	1,516	5,295	283	1,312	5,340	300	1,461	5,009	480
Milam	131	299	17	108	254	15	86	197	24
Mills	10	14	2	12	8	2	6	7	1
Robertson	71	120	8	107	166	12	74	142	23
San Saba	12	12	5	16	18	5	41	36	5
Travis	6,398	30,743	2,457	5,458	29,276	2,409	5,495	30,736	2,903
Washington	160	323	38	128	275	36	78	350	28
Williamson	1,076	5,438	307	144	268	52	956	5,463	264
Texas	**148023**	**549541**	**68530**	**132692**	**518988**	**67339**	**116869**	**489467**	**68713**

Family Violence and Child Abuse

The value for confirmed victims of child abuse/neglect per 1,000 children was highest in 2015 in San Saba (38.8), Llano (26.1), and Falls (19.9). Looking at the ratio between total Child Protective Services (CPS) completed investigations and confirmed CPS investigations, the counties with the highest percent were Blanco (42.2%), San Saba (37.9%), and Milam (32.0%).

County	Child Population	Confirmed Victims of Child Abuse/Neglect	Confirmed Victims of Child Abuse/Neglect per 1,000 Children	Total CPS Completed Investigations	Confirmed CPS Investigations	Percent Investigations Confirmed
Bastrop	21,379	291	13.6	668	176	26.3%
Bell	98,721	1,046	10.6	3,160	664	21.0%
Blanco	2,278	29	12.7	45	19	42.2%
Bosque	4,089	55	13.5	141	35	24.8%
Brazos	47,729	308	6.5	976	195	20.0%
Burleson	4,140	70	16.9	167	40	24.0%

Burnet	10,299	172	16.7	409	113	27.6%
Caldwell	10,317	122	11.8	335	83	24.8%
Coryell	22,926	259	11.3	681	162	23.8%
Falls	3,876	77	19.9	129	26	20.2%
Fayette	5,417	38	7.0	123	27	22.0%
Freestone	4,646	39	8.4	135	21	15.6%
Grimes	6,105	81	13.3	171	48	28.1%
Hamilton	1,789	14	7.8	59	11	18.6%
Hays	47,624	378	7.9	938	227	24.2%
Hill	8,734	133	15.2	278	85	30.6%
Lampasas	4,923	92	18.7	181	47	26.0%
Lee	4,076	46	11.3	116	28	24.1%
Leon	3,867	48	12.4	119	29	24.4%
Limestone	5,653	81	14.3	193	51	26.4%
Llano	3,144	82	26.1	186	53	28.5%
Madison	3,082	22	7.1	88	15	17.0%
McLennan	61,080	884	14.5	2,055	548	26.7%
Milam	6,366	95	14.9	197	63	32.0%
Mills	1,153	9	7.8	41	7	17.1%
Robertson	4,243	24	5.7	99	17	17.2%
San Saba	1,212	47	38.8	58	22	37.9%
Travis	274,241	2,157	7.9	7,151	1,434	20.1%
Washington	7,696	79	10.3	183	49	26.8%
Williamson	137,516	731	5.3	2,241	457	20.4%
STATEWIDE	**7,266,760**	**66,572**	**9.2**	**168,164**	**40,369**	**24.0%**

Juvenile Justice Activity

The table below highlights the juvenile justice activity for Region 7 from 2015-2017 including violent felonies, other felonies, misdemeanors, and violation of parole, status offenses and other children in need of supervision referrals.

Year	Juvenile Population	Violent Felony	Other Felony	Misd. A & B	VOP	Status	Other CINS	Total Referrals	Referral Rate/1,000	Youth Referred
2015	304237	717	1149	3962	1410	834	219	8291	27.25	5485
2016	310018	746	1282	3785	1169	631	182	7795	25.14	5201
2017	312102	712	1139	3440	996	544	111	6942	22.24	4772

Drug Seizures/Trafficking

Among the 30 counties in Region 7 the table below is the summation of drug seizures (2014) in Region 7. The counties that had the highest rates of drug seized to general population were Bell, Fayette,

McLennan, Travis, Washington, and Williamson are graphed in the figure below (Excluding ounces of marijuana seized in Travis county which was .

Drug	Region 7 2014	Region 7 2015	Region 7 2016
Marijuana(Packaged) (lbs.)	85130.8125	4121.5625	21878.625
Hashish(Solid) (lbs.)	108.4205264	14.12191744	147.1836468
Opiates (combined) (lbs.)	163.2216814	93.00618466	657.2437276
Opiates (combined) (dose units)	9831	2252	2410
Cocaine(Solid) (lbs.)	987.644627	215.3063349	853.5438778
Hallucinogens (combined) (lbs.)	42.15256775	102.4173369	31.08996051
Hallucinogens (combined) (dose units)	4607	4650	5610
Barbiturates (ounces)	22	17	67
Barbiturates (dose units)	1512	2649	3049
Methamphetamine and Amphetamine (lbs.)	985.4618777	2748.685422	1147.376561
Methamphetamine and Amphetamine (dose units)	1416	1532	4327
Tranquilizers (ounces)	2	484	1118
Tranquilizers (dose units)	13199	23864	23212
Synthetic Narcotics (ounces)	71	50	328
Synthetic Narcotics (dose units)	11504	6180	11830

Mental Health

Mental health problems and substance abuse problems go hand in hand with many being highly comorbid, for example co-occurring depression and alcohol abuse. This section will cover the rates of many mental health issues that are related to substance abuse.

Suicide

The table below details the rates of suicide for Region 7 and Texas as a whole from 1999-2017 to provide a long term stable rate of suicide for the counties in Region 7.

County	Deaths	Population	Crude Rate	Age Adjusted Rate
Bastrop	222	1352217	16.4	16.3
Bell	699	5530989	12.6	13.2
Blanco	37	189663	19.5	20.3
Bosque	59	339217	17.4	16.5
Brazos	268	3511894	7.6	9.2
Burleson	53	324423	16.3	16.2

Burnet	109	781109	14	13.9
Caldwell	87	707210	12.3	12.4
Coryell	199	1413126	14.1	13.9
Falls	47	338531	13.9	13.3
Fayette	61	453463	13.5	12.3
Freestone	71	362997	19.6	18.3
Grimes	67	493389	13.6	13.1
Hamilton	31	157813	19.6	21.1
Hays	317	2806485	11.3	11.9
Hill	114	651980	17.5	18
Lampasas	59	369778	16	15.7
Lee	35	312285	11.2	11.5
Leon	60	311437	19.3	20.1
Limestone	67	437345	15.3	14.8
Llano	70	357258	19.6	19.8
Madison	478	4373498	10.9	11.4
McLennan	38	255888	14.9	14.2
Milam	65	469289	13.9	14
Mills	Suppressed	93541	Suppressed	Suppressed
Robertson	43	312756	13.7	13.6
San Saba	13	114123	Unreliable	Unreliable
Travis	2212	18837547	11.7	12
Washington	60	621722	9.7	8.7
Williamson	760	7403888	10.3	10.6
Texas	51622	461846329	11.2	11.4

The Healthy People 2020 Target seeks to observe suicide death rates below 10.20. Unfortunately, suicide death rates in Region 7 do not reflect any indication of dropping to the Healthy People 2020 Target suicide rate goal, especially with increasing suicide numbers reported annually.

Depression

With numerous individuals seeking to self-medicate in order to treat symptoms of depression the rates of depression are very important when considering substance abuse in a community. The graph below charts the Behavioral Risk Factor Surveillance System (BRFSS) reported rates of adult depression for the United States as a whole and Texas from 2011-2017.

2011-2017 U.S. and Texas Adult Depression

	2011	2012	2013	2014	2015	2016	2017
Texas	16.6	15.5	16	14.6	16.1	12.5	16.7
U.S.	17.5	18	18.7	19	19	17.4	20.5

Texas   U.S.
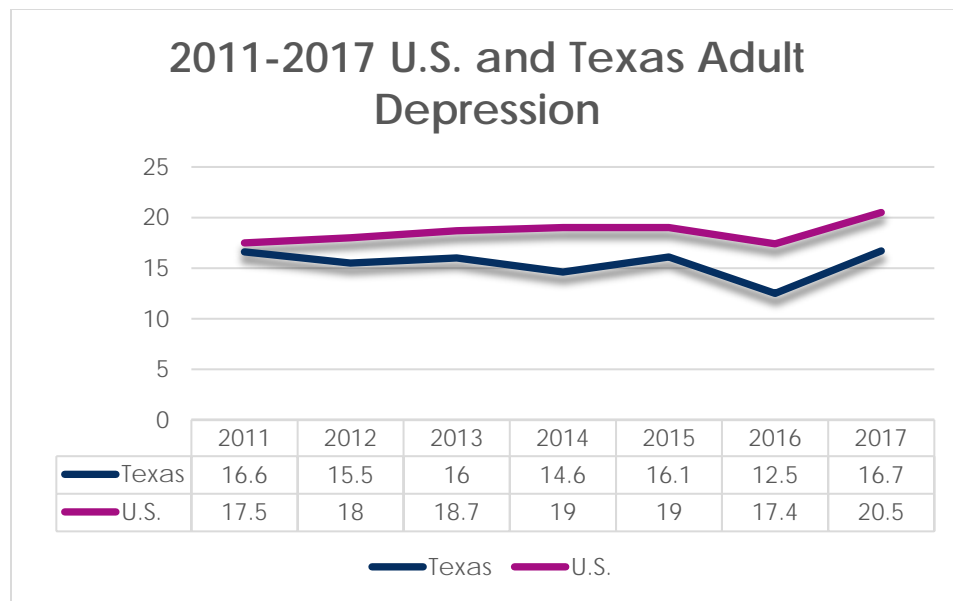
The figure below demonstrates rates of older individuals with depression in 2014.

Percent of Medicare beneficiaries with depression

County	Value
BASTROP	15.84
BELL	18.09
BLANCO	11.92
BOSQUE	16.04
BRAZOS	17.20
BURLESON	15.53
BURNET	12.10
CALDWELL	15.02
CORYELL	16.28
FALLS	18.52
FAYETTE	11.53
FREESTONE	15.52
GRIMES	17.11
HAMILTON	23.25
HAYS	15.87
HILL	15.38
LAMPASAS	16.92
LEE	13.83
LEON	13.02
LIMESTONE	18.73
LLANO	15.11
MADISON	16.00
MC LENNAN	17.36
MILAM	15.99
MILLS	14.63
ROBERTSON	17.22
SAN SABA	12.55
TRAVIS	16.25
WASHINGTON	13.05
WILLIAMSON	16.21

Psychiatric Hospital Admissions

The data below is showing in Region 7 that there are a total of 13,901 hospital discharges, which have a total cost of $391,614 and had an average rate per 1,000 at 4.38 (TX rate=4.5; U.S. rate = 4.8). Among the 30 counties in Region 7 during 2012.

Total Discharges

County	Discharges
Bastrop	329
Bell	2,214
Blanco	31
Bosque	79
Brazos	675
Burleson	90
Burnet	149
Caldwell	179
Coryell	342
Falls	58
Fayette	71
Freestone	99
Grimes	145
Hamilton	28
Hays	474
Hill	145
Lampasas	202
Lee	37
Leon	89
Limestone	110
Llano	73
McLennan	1,285
Madison	54
Milam	98
Mills	33
Robertson	95
San Saba	13
Travis	5,131
Washington	182
Williamson	1,391

Average Discharge Cost

County	Cost
Bastrop	$14,723
Bell	$10,742
Blanco	$9,409
Bosque	$13,461
Brazos	$13,360
Burleson	$12,129
Burnet	$7,801
Caldwell	$10,681
Coryell	$11,866
Falls	$11,352
Fayette	$8,500
Freestone	$19,649
Grimes	$12,501
Hamilton	$16,453
Hays	$12,194
Hill	$10,213
Lampasas	$11,174
Lee	$10,523
Leon	$19,703
Limestone	$23,752
Llano	$10,292
McLennan	$10,976
Madison	$17,563
Milam	$13,972
Mills	$15,784
Robertson	$15,149
San Saba	$9,506
Travis	$12,248
Washington	$16,923
Williamson	$9,015

Reported Regional Psychiatric Hospital Discharges Rate per 1,000					
Bastrop	4.2	Fayette	2.8	Llano	3.7
Bell	6.8	Freestone	4.9	McLennan	5.4
Blanco	2.8	Grimes	5.3	Madison	3.9
Bosque	4.3	Hamilton	3.2	Milam	3.9
Brazos	3.3	Hays	2.8	Mills	6.7
Burleson	5.2	Hill	4.0	Robertson	5.6
Burnet	3.3	Lampasas	9.8	San Saba	2.1
Caldwell	4.5	Lee	2.2	Travis	4.8
Coryell	4.6	Leon	5.1	Washington	5.3
Falls	3.3	Limestone	4.6	Williamson	3.0
Source. MONARHQ 2012					

Substance abuse related disorder discharge, from MONAHRQ, for Region 7 totaled 177 discharges with a mean cost of $33,082 (Discharge per 1,000 rate = 0.06). The top three counties are listed in the table below.

Substance Related Disorder Discharges (Rate per 1,000)			
County	No. of Discharges	Rate of Discharge	Mean Costs
Travis	78	0.1	$39,779
Bell	28	0.1	$15,334
Williamson	26	0.1	$37,400
Source. MONARHQ 2012			

Hospital Discharges

While we do not have access to the number of people who go to the hospital for drug and alcohol problems the number of discharges in general can tell us about changes in the population in general as well as how burdened the health care system is in that county.

Hospital County	2013 Total Discharges	2014 Total Discharges	2015 Total Discharges
Bastrop	337	261	245
Bell	48092	37681	51659
Bosque			406
Brazos	26786	26757	28693
Burleson	264	214	214
Burnet	1279	1128	1766
Caldwell	1316	1093	1043
Coryell	581	547	673
Falls			343
Fayette	1747	1877	1947
Freestone	432	417	441
Grimes	402	309	247
Hamilton	N/A	N/A	1040
Hays	12278	12506	13444
Hill	1605	1466	1237
Lampasas	732	714	668
Limestone	837	736	975
Llano	982	931	647
Madison	345	231	244
McLennan	31347	30855	34576
Milam	437	453	343
Travis	145019	142167	138975
Washington	1815	1212	1693

Williamson	33425	34216	40808

 Below is a chart comparing the percent of total Texas poison control opioid related exposures for each region. The regions that account for the most exposures in Texas are Regions 3, 6, 7, and 8.

2013-2017 Texas Poison Center Network Opioid Related Exposures by Region											
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11	Unknown County
2013	3.54%	3.10%	25.28%	5.38%	3.36%	19.25%	11.12%	11.32%	1.92%	3.63%	7.75%	4.34%
2014	3.07%	2.61%	25.05%	4.85%	3.38%	19.40%	10.29%	10.82%	2.85%	3.60%	8.36%	5.72%
2015	3.37%	2.92%	25.70%	4.60%	2.84%	18.42%	10.90%	11.48%	2.75%	3.89%	7.52%	5.62%
2016	3.36%	3.09%	27.11%	4.14%	3.16%	17.02%	10.27%	11.68%	2.62%	3.66%	8.39%	5.51%
2017	3.30%	3.34%	25.81%	4.62%	3.40%	18.25%	11.13%	11.32%	2.13%	3.32%	8.24%	5.13%
Source: Texas Poison Center Network Opioid-Related Exposures 2013-2017											

Adolescents and Adults Receiving Substance Abuse Treatment

The table below compares the percent of cases of the state in mental health diagnoses for each of the public health regions in 2016 and 2017.

Region	2017 % of Clients	2016 % of Clients
1	2.81%	2.64%
2	2.63%	2.73%
3	30.49%	31.26%
4	4.65%	4.93%
5	4.91%	4.38%
6	13.06%	12.90%
7	11.63%	11.33%
8	8.91%	8.73%
9	2.44%	2.62%
10	2.52%	2.38%
11	15.95%	16.11%
Texas	100.00%	100.00%

The table below shows the makeup of mental health problems for youth in Region 7 in 2016 and 2017 with blank cells being too small to be reported as a percentage with 2 decimal digits.

Primary Diagnosis	2017 % of Clients	2016 % of Clients
Region 7 Subtotal	100.00%	100.00%
Adjustments / Other non-psychotic	21.72%	21.86%
Affective disorders - Bipolar	3.95%	4.28%
Affective disorders - Major depression	18.18%	16.58%
Affective disorders - Other	8.58%	9.36%

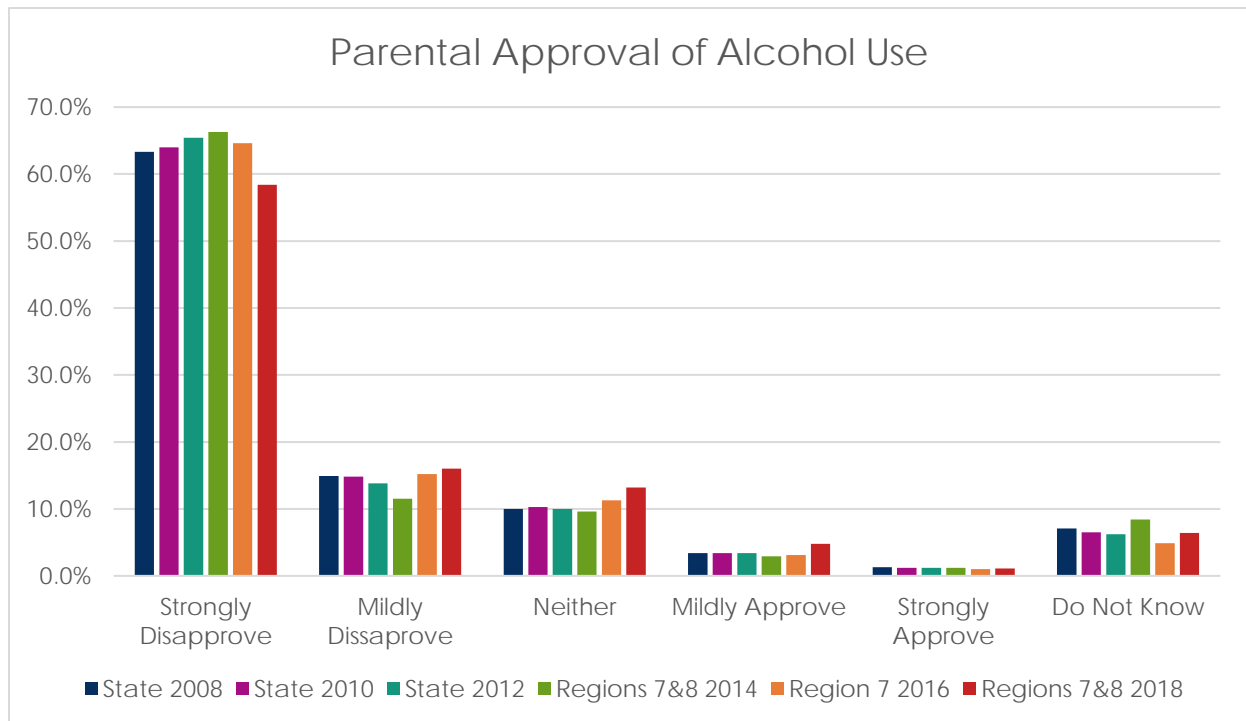|		
Alcohol related disorders		
Anxiety / Somatoform / Dissociative	4.54%	4.69%
Attention Deficit Disorder	23.31%	24.67%
Autism / Pervasive Disorders	1.17%	1.20%
Dementia / Other cognitive disorders	0.38%	0.48%
Disruptive Behavior Disorder	5.91%	6.92%
Drug Related disorders	0.21%	
Mental Retardation	0.65%	0.92%
Not Applicable	8.08%	5.83%
Other Developmental / Behavioral	0.43%	0.52%
Other psychoses	0.42%	0.43%
Personality / Factitious / Impulse	0.74%	0.67%
Schizophrenia and related disorders	0.43%	0.34%
Undiagnosed Mental Health	1.30%	1.25%

State-Funded Screenings

In Region 7, there were 10175 people screened for substance abuse treatment in 2015 and 9808 in 2016. The primary substances for which treatment was sought were alcohol and amphetamines followed by cannabis.
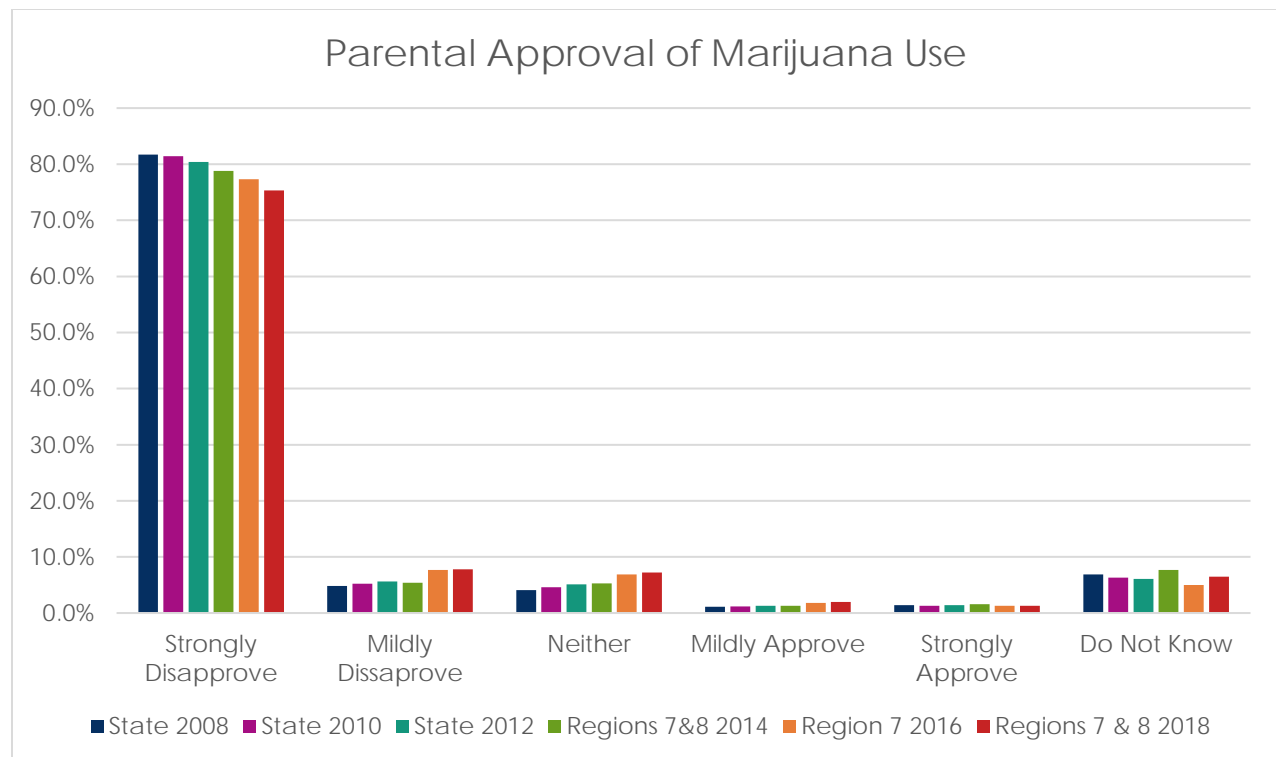
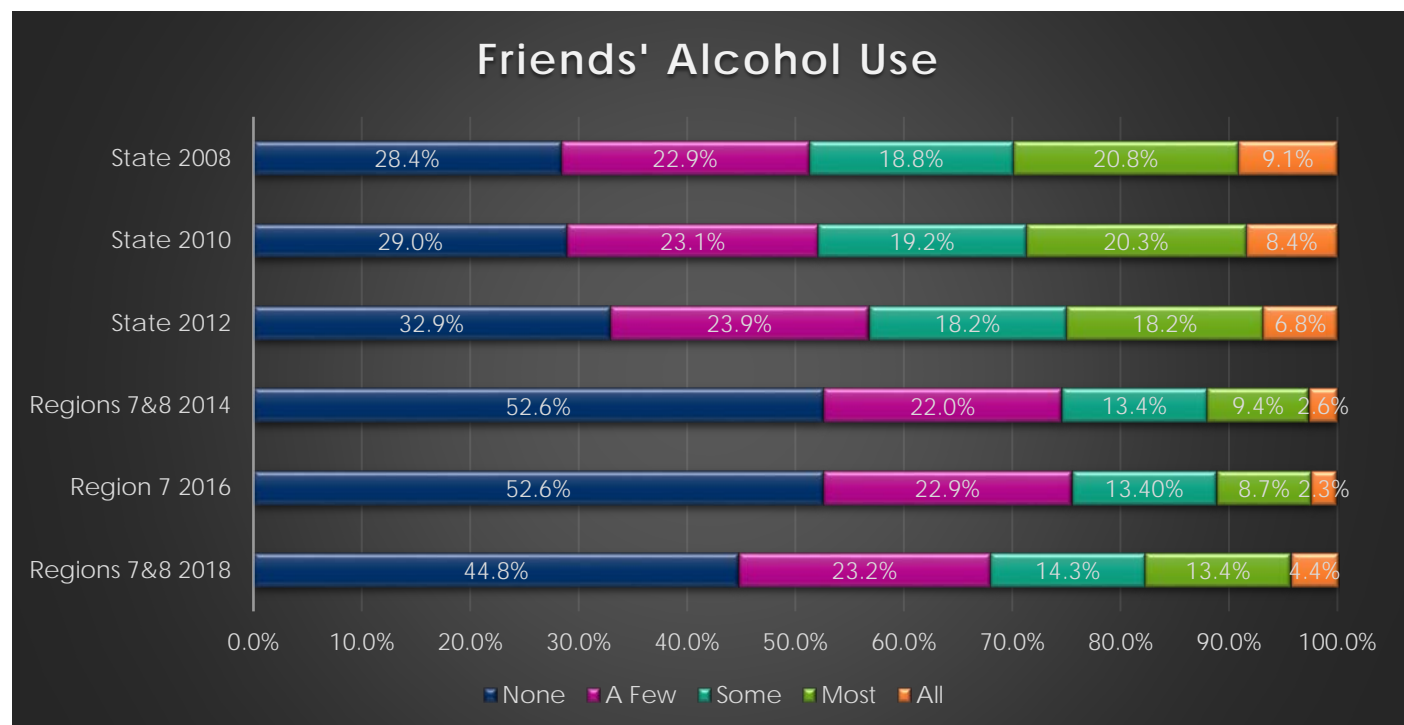| Preliminary Diagnosis	2015 Number Screened	2016 Number Screened
Alcohol	3468	3265
Amphetamines	1667	1661
Cannabis	1622	1541
Cocaine	788	692
Diagnosis Deferred	77	417
Hallucinogens	12	0
Inhalants	0	0
No Diagnosis	1087	1290
Opioids	1046	805
Other	0	0
PCPs	58	38
Polysubstance Abuse	246	5
Sedatives, Hypnotics, or Anxiolytics	104	94

Social Factors

There are many social factors which influence substance use and abuse. This section will detail youth perceptions, risky behavior, misunderstandings, and cultural factors. Data from the Texas School Survey (TSS, 2016; TSS, 2014; TSS, 2012; TSS, 2010; TSS, 2008) for Region 7 is combined with Region 8. As a result, what follows are numbers from two regions. The data extracted from the TSS is presented below as best matching social norms of substance consumption.
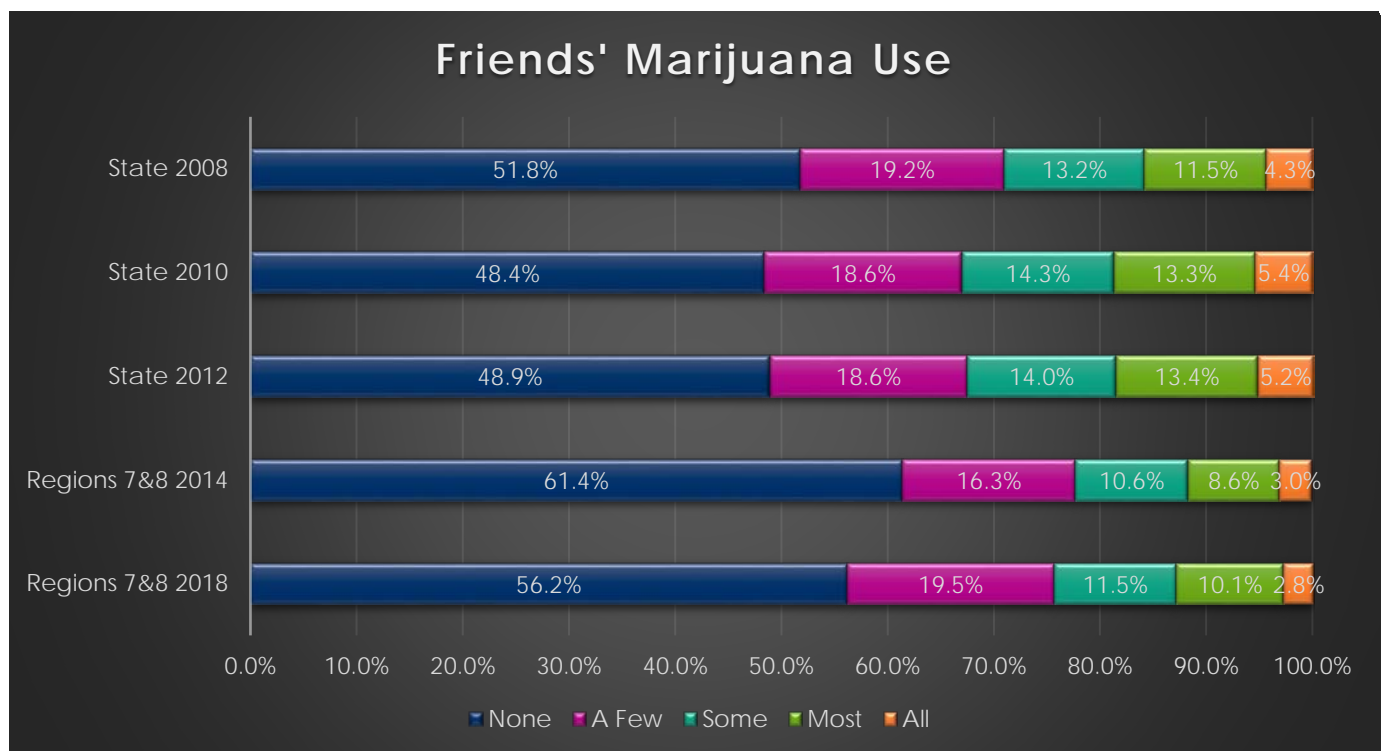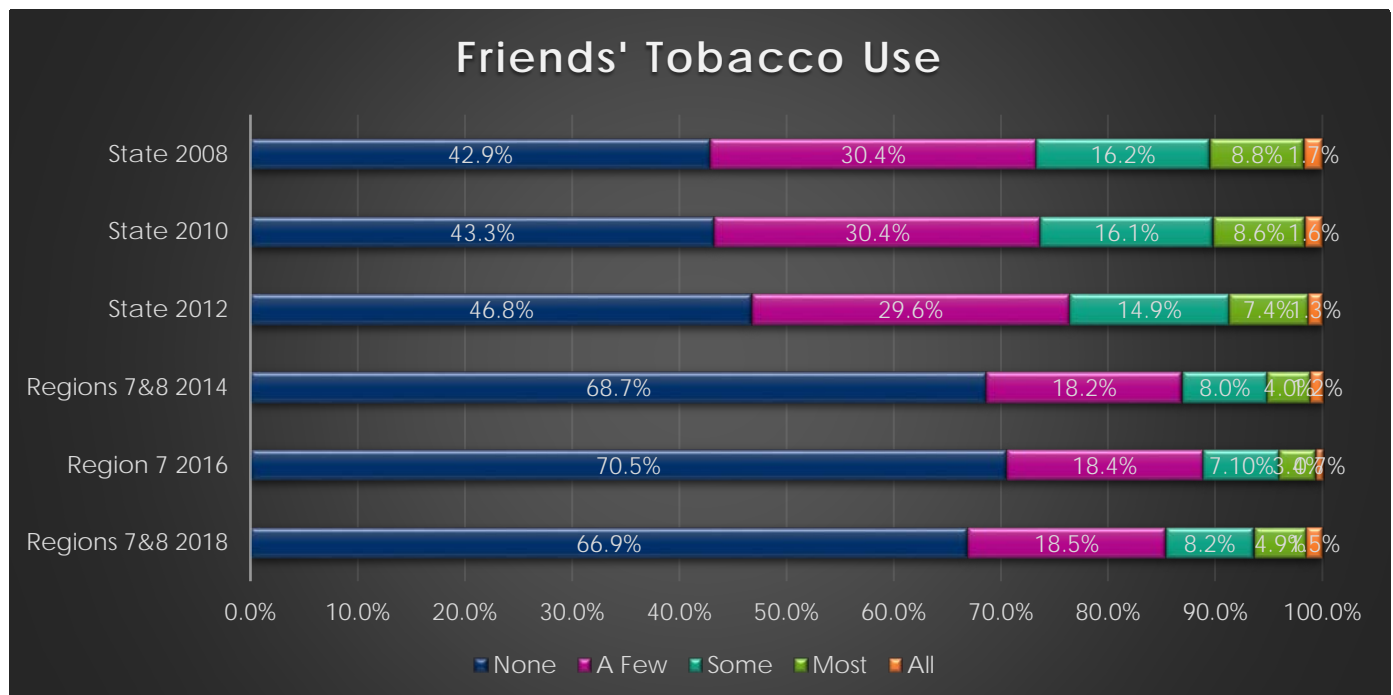
Perception of Parental Approval

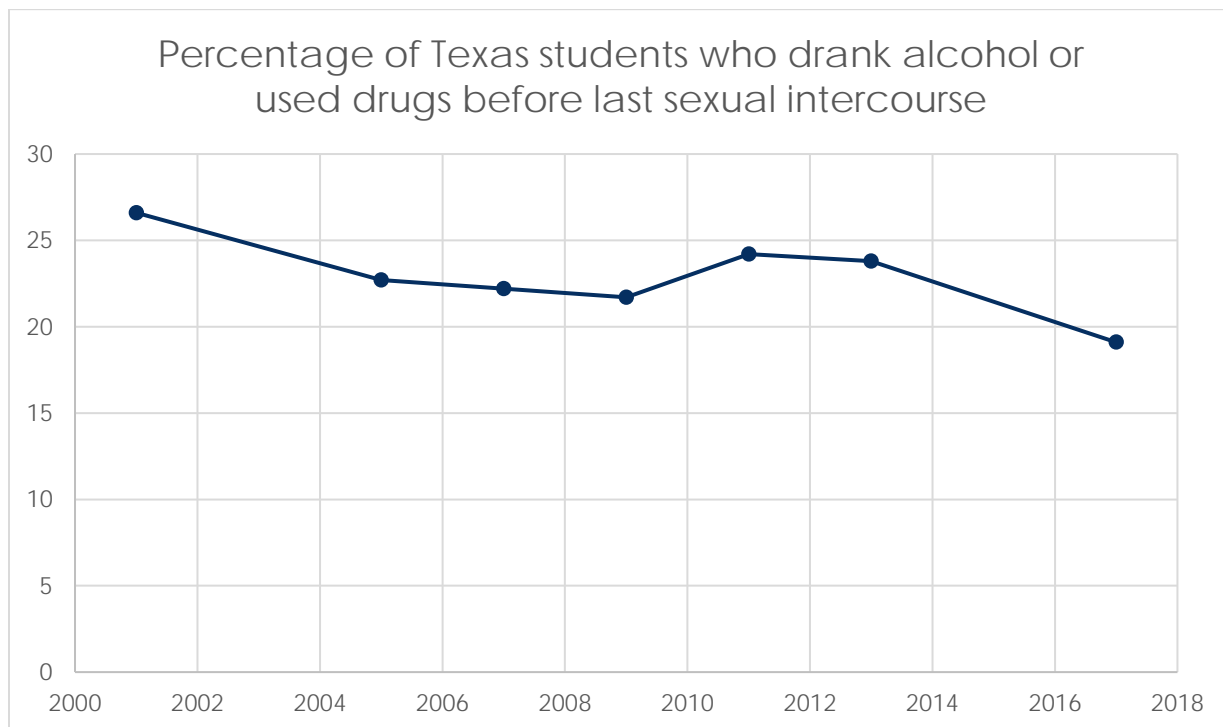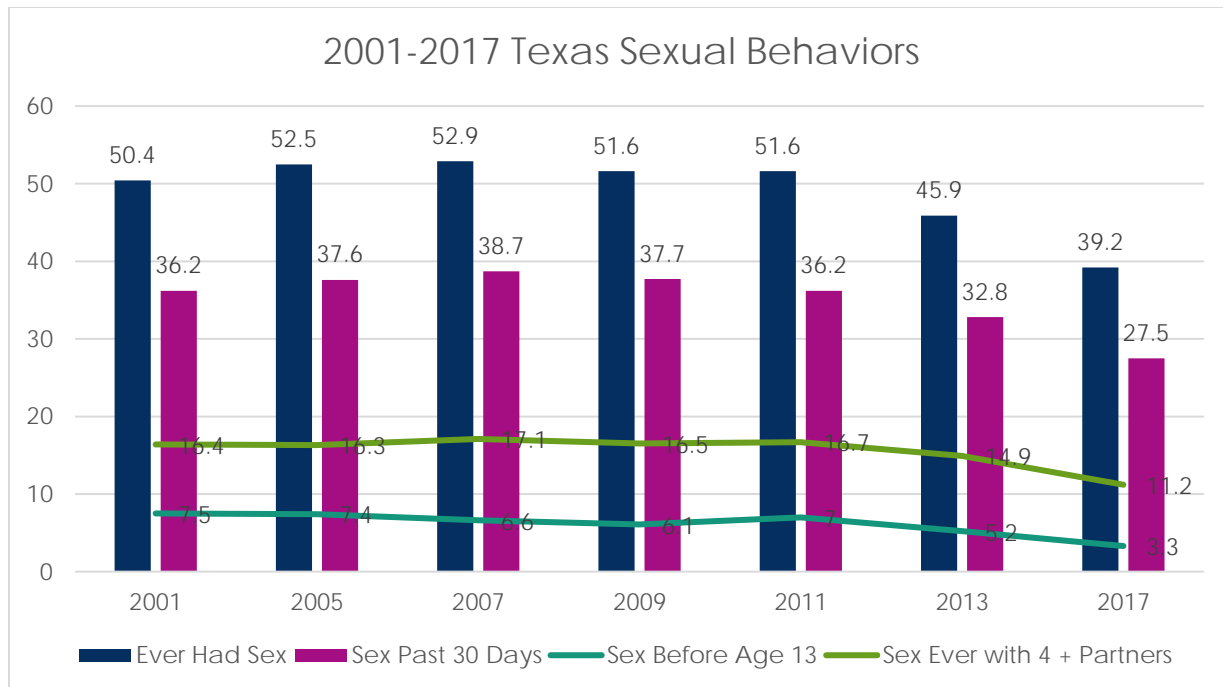## Parental Approval of Alcohol Use

Legend: State 2008, State 2010, State 2012, Regions 7&8 2014, Region 7 2016, Regions 7&8 2018

Categories: Strongly Disapprove, Mildly Dissaprove, Neither, Mildly Approve, Strongly Approve, Do Not Know

Parental Approval of Tobacco Use

Legend: State 2008, State 2010, State 2012, Regions 7&8 2014, Region 7 2016, Regions 7&8 2018

Categories: Strongly Disapprove, Mildly Dissaprove, Neither, Mildly Approve, Strongly Approve, Do Not Know

Parental Approval of Marijuana Use

Legend: ■ State 2008 ■ State 2010 ■ State 2012 ■ Regions 7&8 2014 ■ Region 7 2016 ■ Regions 7 & 8 2018

Perception of Peer Use

Friends' Alcohol Use

	None	A Few	Some	Most	All
State 2008	28.4%	22.9%	18.8%	20.8%	9.1%
State 2010	29.0%	23.1%	19.2%	20.3%	8.4%
State 2012	32.9%	23.9%	18.2%	18.2%	6.8%
Regions 7&8 2014	52.6%	22.0%	13.4%	9.4%	2.6%
Region 7 2016	52.6%	22.9%	13.40%	8.7%	2.3%
Regions 7&8 2018	44.8%	23.2%	14.3%	13.4%	4.4%

Legend: ■ None ■ A Few ■ Some ■ Most ■ All

Friends' Tobacco Use

	None	A Few	Some	Most	All
State 2008	42.9%	30.4%	16.2%	8.8%	1.7%
State 2010	43.3%	30.4%	16.1%	8.6%	1.6%
State 2012	46.8%	29.6%	14.9%	7.4%	1.3%
Regions 7&8 2014	68.7%	18.2%	8.0%	4.0%	1.2%
Region 7 2016	70.5%	18.4%	7.10%	3.40%	0.7%
Regions 7&8 2018	66.9%	18.5%	8.2%	4.9%	1.5%

Legend: None, A Few, Some, Most, All

Friends' Marijuana Use

	None	A Few	Some	Most	All
State 2008	51.8%	19.2%	13.2%	11.5%	4.3%
State 2010	48.4%	18.6%	14.3%	13.3%	5.4%
State 2012	48.9%	18.6%	14.0%	13.4%	5.2%
Regions 7&8 2014	61.4%	16.3%	10.6%	8.6%	3.0%
Regions 7&8 2018	56.2%	19.5%	11.5%	10.1%	2.8%

Legend: None, A Few, Some, Most, All

Note: Friends' marijuana use was not provided for 2016.

Adolescent Sexual Behavior

The graph below is a comparison of certain sexual behaviors for Texas as reported in the Youth Risk Behavioral Surveillance system from 2001-2017.

2001-2017 Texas Sexual Behaviors

Year	Ever Had Sex	Sex Past 30 Days	Sex Before Age 13	Sex Ever with 4 + Partners
2001	50.4	36.2	7.5	16.4
2005	52.5	37.6	7.4	16.3
2007	52.9	38.7	6.6	17.1
2009	51.6	37.7	6.1	16.5
2011	51.6	36.2	7	16.7
2013	45.9	32.8	5.2	14.9
2017	39.2	27.5	3.3	11.2

Percentage of Texas students who drank alcohol or used drugs before last sexual intercourse

Below is the percent of births by teens by county for Region 7 between 2011 and 2014.

County	2011 Total Percent	2012 Total Percent	2013 Total Percent	2014 Total Percent
BASTROP	3.7	3.4	2.8	3.9

BELL	2.3	2.2	1.9	2.1
BLANCO	1	2.2	1.5	1
BOSQUE	4.6	1.6	3	1.2
BRAZOS	3	2.7	2.5	2.1
BURLESON	1.1	3.5	1.7	2.9
BURNET	3.7	4	4.2	2.6
CALDWELL	5.6	4.9	3.9	1.9
CORYELL	1.8	1.6	0.8	1.4
FALLS	4.8	3.5	3.9	3.2
FAYETTE	4	2.3	2	2.9
FREESTONE	2.5	2.6	4.7	3.4
GRIMES	2.8	2.1	2.8	2.7
HAMILTON	3	4.2	3.7	2.4
HAYS	3.2	2.7	2	2
HILL	4.3	4.8	5.4	2.7
LAMPASAS	3.5	2.8	2.8	2.8
LEE	5	1	1.1	2.2
LEON	4.6	4.6	4.1	2.4
LIMESTONE	6.4	2.5	6.2	3.2
LLANO	2.8	0.6	2.5	4.3
MCLENNAN	4.3	4.1	3.4	3
MADISON	5.6	3.8	3.3	3
MILAM	7.2	6.1	2.3	2.7
MILLS	-	2.6	4.1	1.7
ROBERTSON	2.8	7.2	4.3	2.6
SAN SABA	2.8	5.3	1.7	2.9
TRAVIS	3	2.6	2.2	2
WASHINGTON	3.3	3.8	2.8	3.6
WILLIAMSON	2.2	1.9	1.5	1

Below is the number of births per 1,000 female population ages 15-19. Region 7 between 2010 and 2016.

County	Teen Birth Rate (2010-2016)	County	Teen Birth Rate (2010-2016)
Bastrop	38	Hill	41

Bell	49	Lampasas	40
Blanco	26	Lee	40
Bosque	32	Leon	52
Brazos	20	Limestone	55
Burleson	46	Llano	56
Burnet	38	Madison	49
Caldwell	42	McLennan	39
Coryell	37	Milam	51
Falls	62	Mills	38
Fayette	27	Robertson	54
Freestone	46	San Saba	48
Grimes	41	Travis	31
Hamilton	40	Washington	29
Hays	21	Williamson	19
TEXAS AVERAGE		**41**	

Misunderstandings about Marijuana

One misunderstanding concerning marijuana use is the difference between medical and recreational marijuana use. Recreational marijuana is commonly known to have more THC, while medical marijuana will have more Cannabidiol (CBD). The high from marijuana comes from THC. Another misunderstanding, especially among children, is that marijuana is legal in Texas as it is in Colorado or Washington.

Cultural Factors

Cultural factors influence decisions related to substance use. Many times, substance use is connected to accessibility. While misunderstanding or misbeliefs about a substance can also relate to cultural factors, a greater danger occurs when new habits or patterns for substance use connect themselves to culture. This can be increasingly seen with the culture developing around marijuana use since legalization in certain states.

Accessibility

The ease of alcohol and drug accessibility for adolescents is a concern because of the potential to promote use at earlier ages. According to the Texas College Survey in 2015 12% of underage respondents have a fake ID and 22% of underage respondents were not carded at liquor stores, bars, or restaurants. However, the predominant method was through a friend who was over 21 with 74% of underage respondents reporting that that is how they acquired alcohol. The following figures based off of the Texas School Survey provide insight into how students perceive their access to substances (TSS, 2018; TSS, 2016; TSS, 2014; TSS, 2012; TSS, 2010; TSS, 2008).
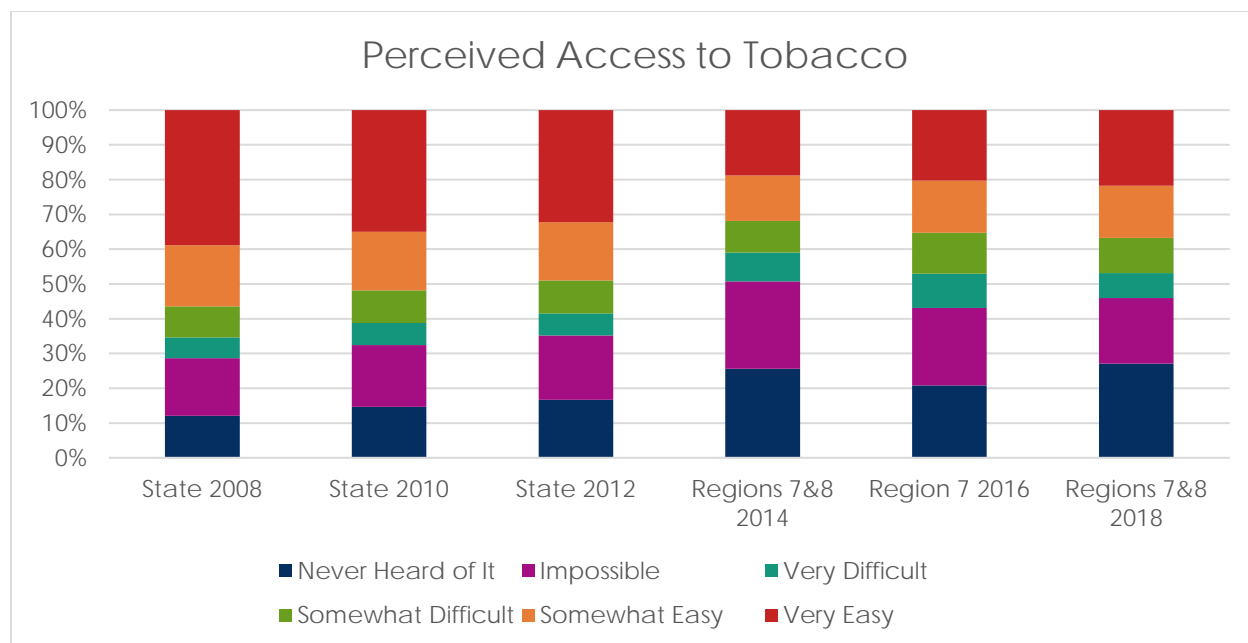
**Perceived Access of Alcohol**

Perceived Access to Alcohol
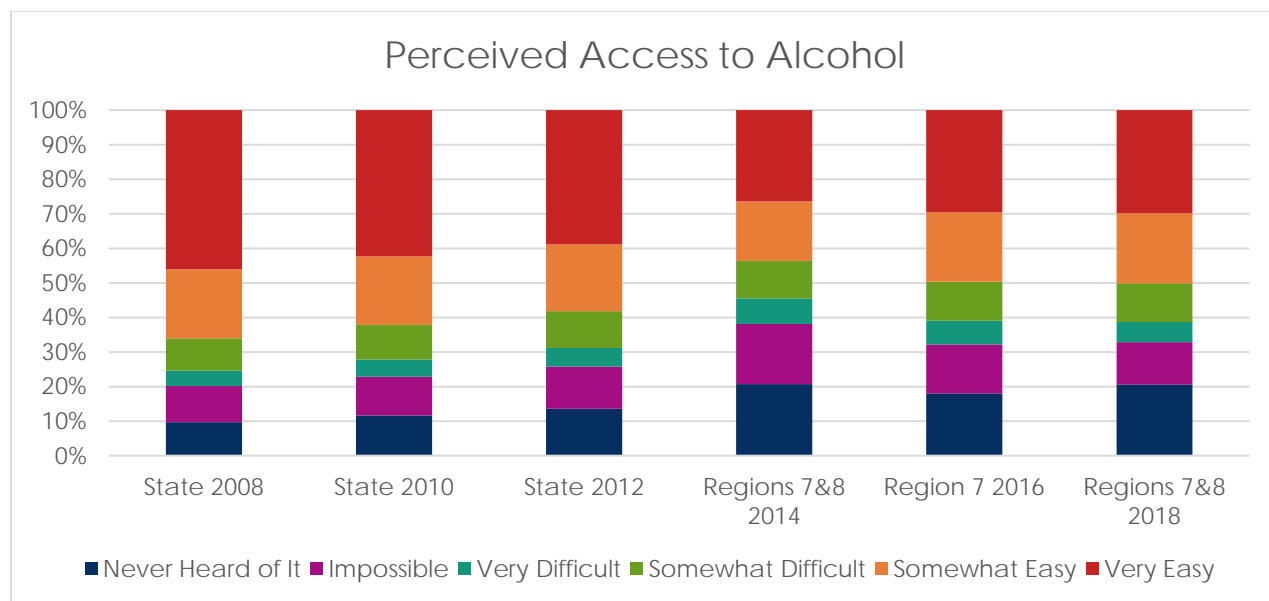
In the figure below, access to alcohol in Region 7 is illustrated by county-level rates. The rates are calculated by dividing the number of alcohol permits per county by the population of each county and multiplying by 1000. Alcohol establishments in this sample include those selling beer, wine, and liquor.

Alchol Permit Rate by County
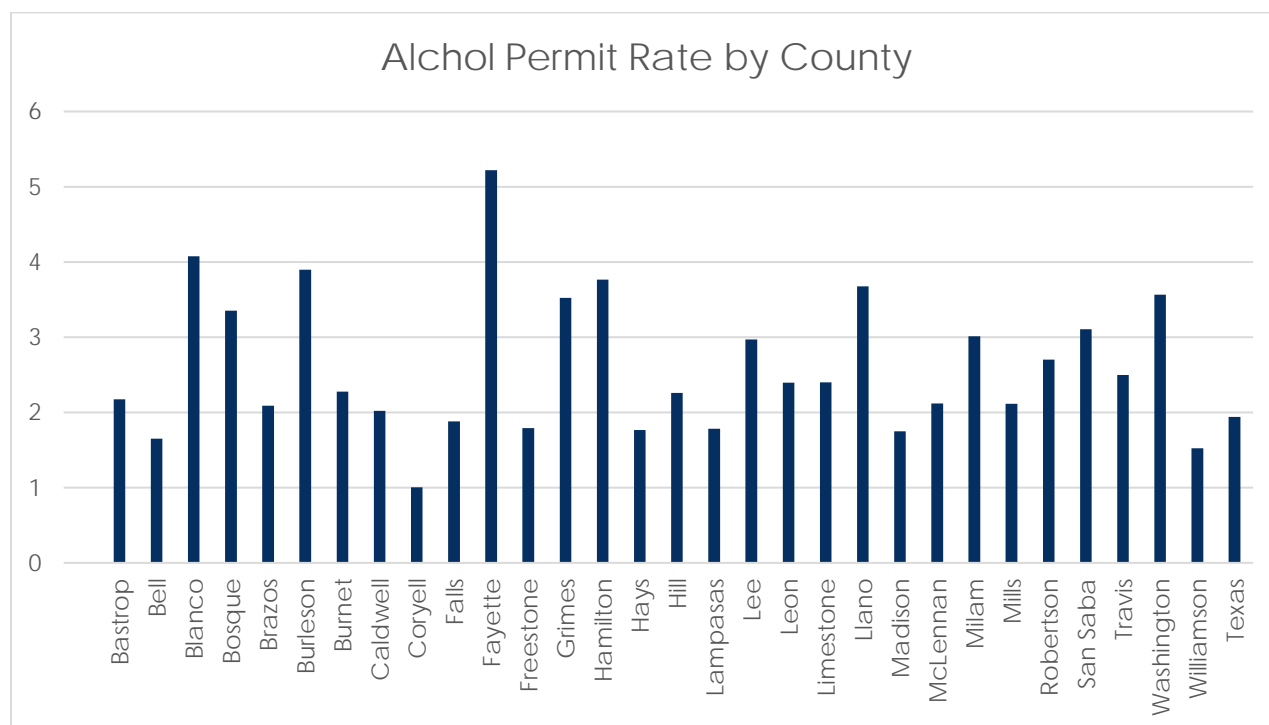
Perceived Access of Tobacco and Nicotine Products

Perceived Access to Tobacco

Perceived Access of Marijuana

Perceived Access to Marijuana
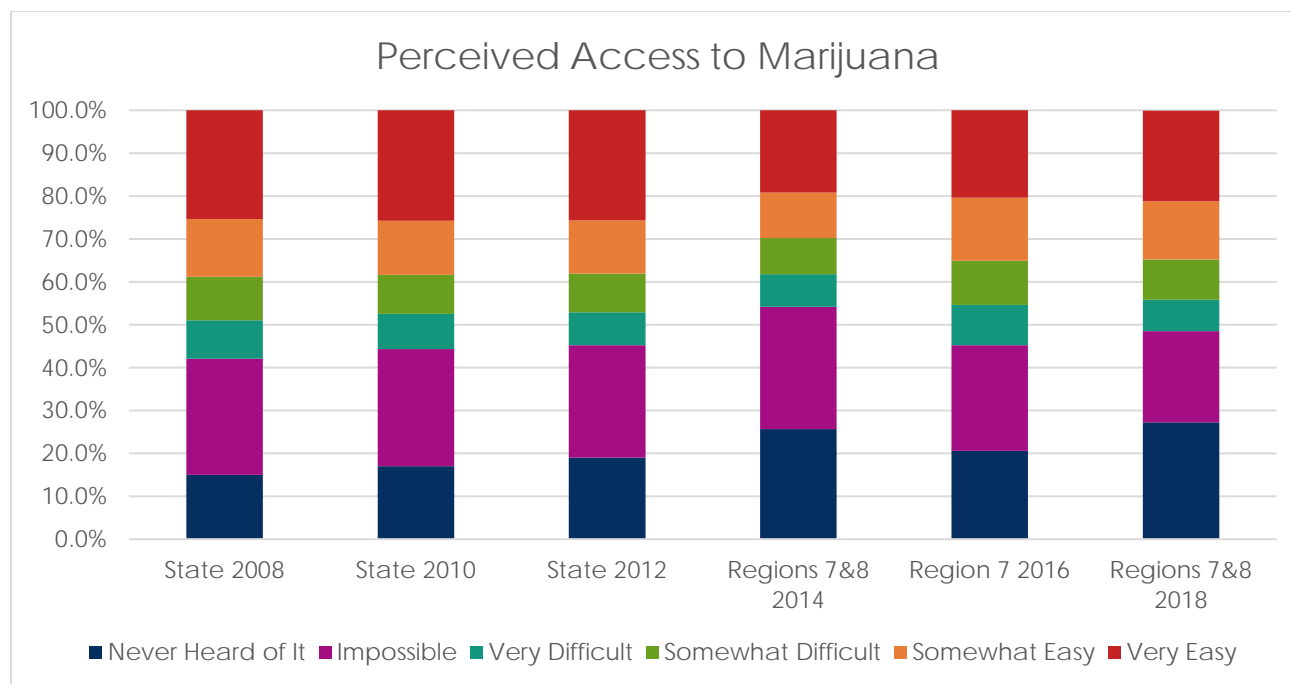
Although medical marijuana is legalized in Texas only for intractable epilepsy and under the care of an authorized doctor after trying two FDA-approved drugs and the cannabis subsequently used must contain less than 10% THC, there are many advocates attesting to beneficial uses outside of epilepsy. However, the short-sightedness of marijuana use is the long-term health concerns. While, other states in the US have legalized medical marijuana, while other states have legalized marijuana for recreational use, recreational use in Texas still illegal. At the time of writing this Texas does allow medical cannabis oil for patients with epilepsy. Access to marijuana is mostly influenced from outside sources and will

depend on law enforcement or marijuana decriminalization policies in order to reduce and control marijuana access.

**Illegal Drugs on School Property**
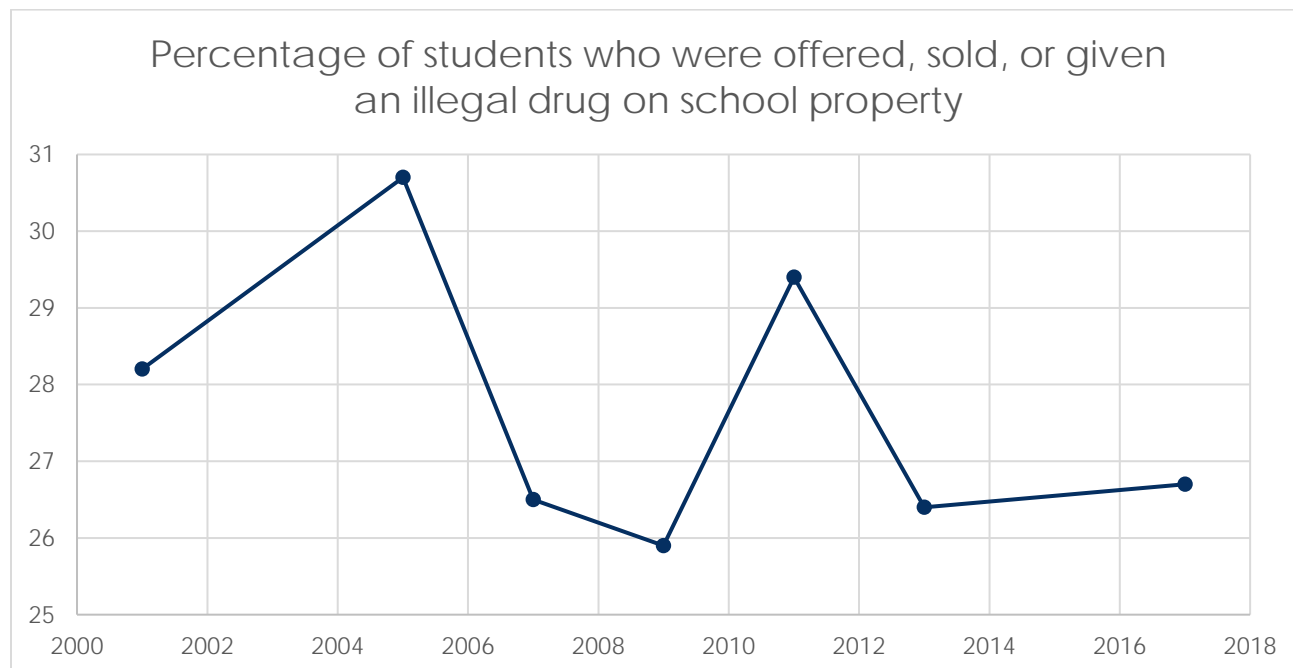
Perceived Risk of Harm

Below are graphs depicting the perceived danger of alcohol tobacco and other drugs as gathered from the Texas school surveys starting in 2014 for alcohol, marijuana, and prescription drugs and in 2016 for tobacco and nicotine products.

Perceived Risk of Harm from Alcohol
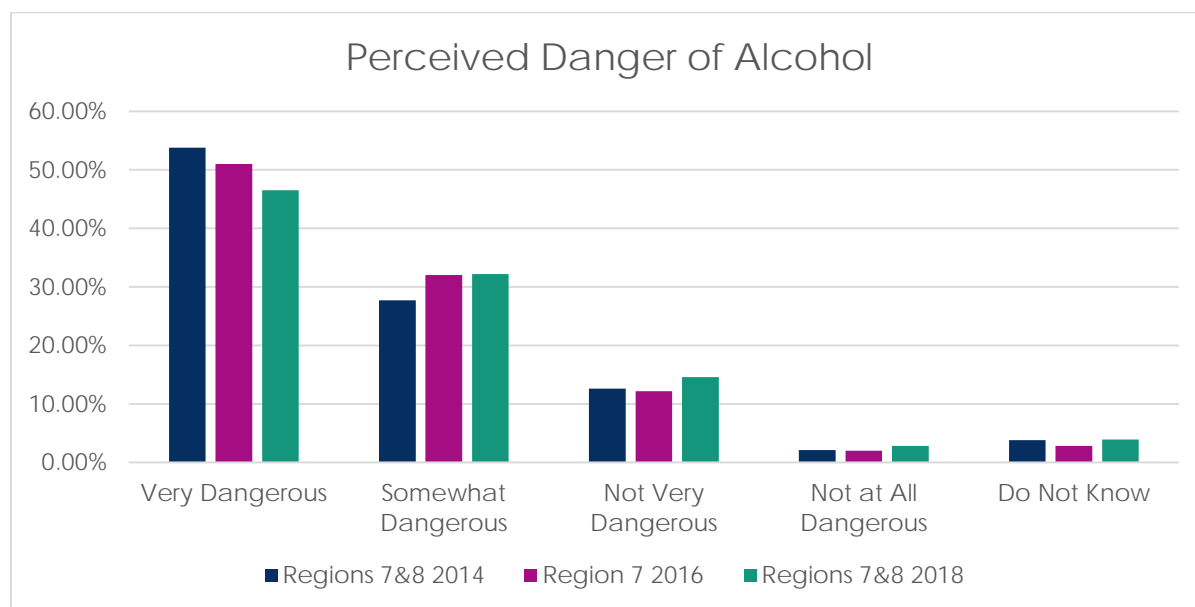
Perceived Risk of Harm from Tobacco and Other Nicotine Products

Perceived Danger of Tobacco

Perceived Danger of Vape Products
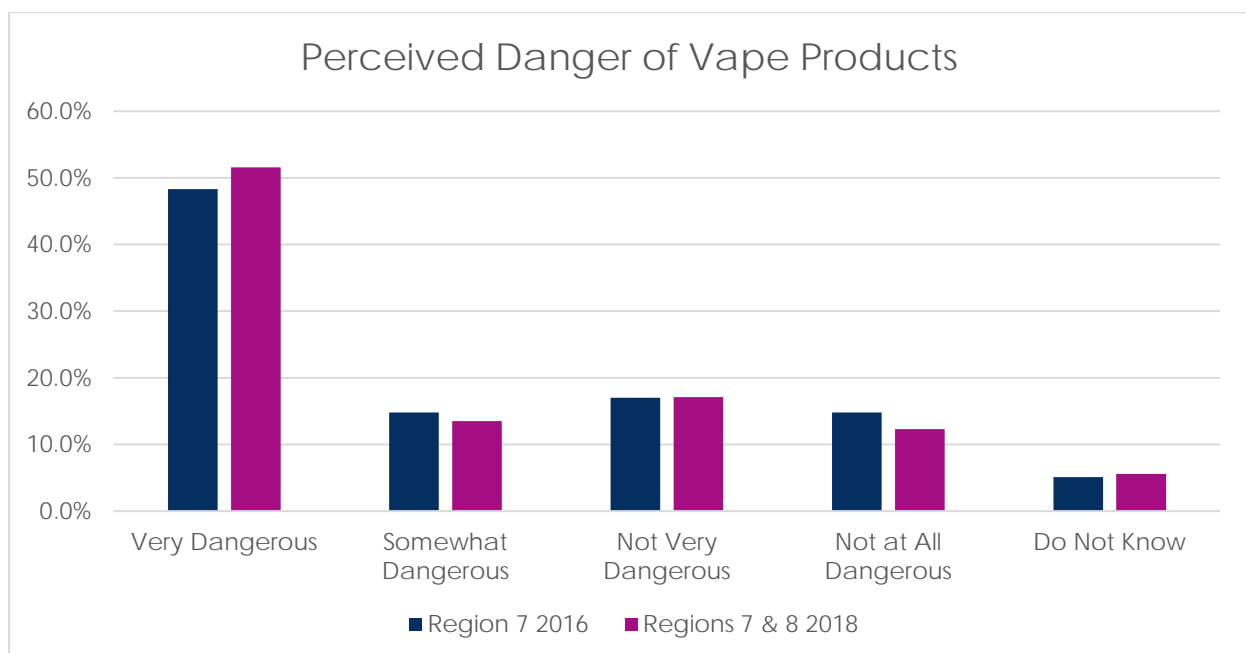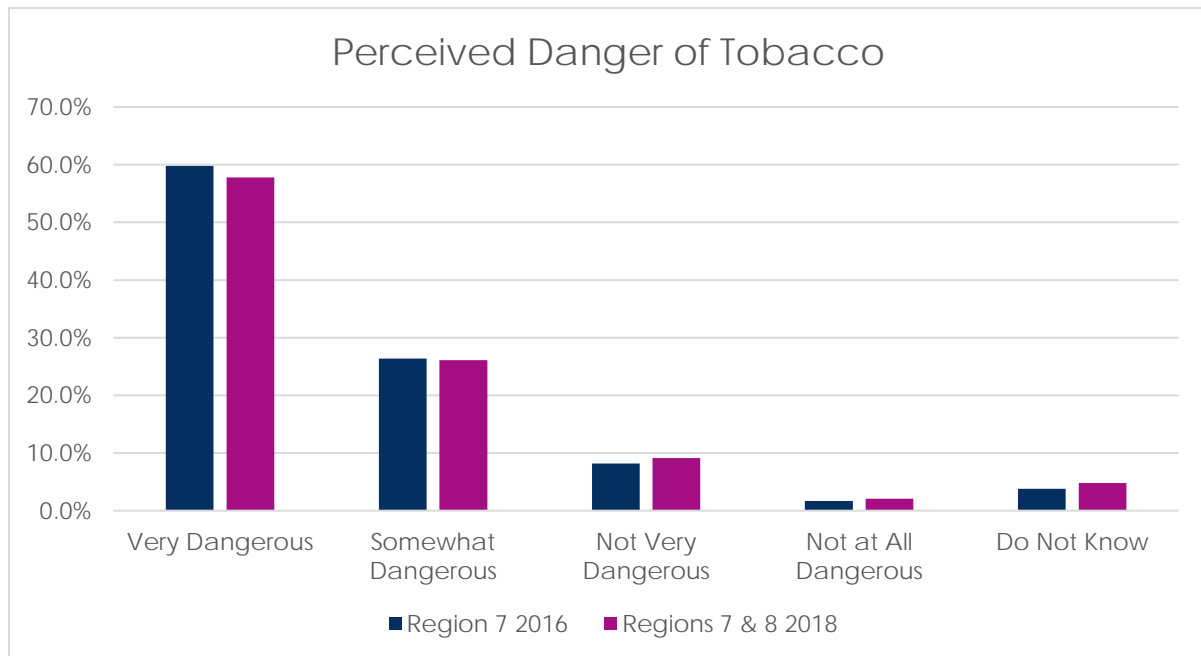
Perceived Risk of Harm from Marijuana

Perceived Danger of Marijuana
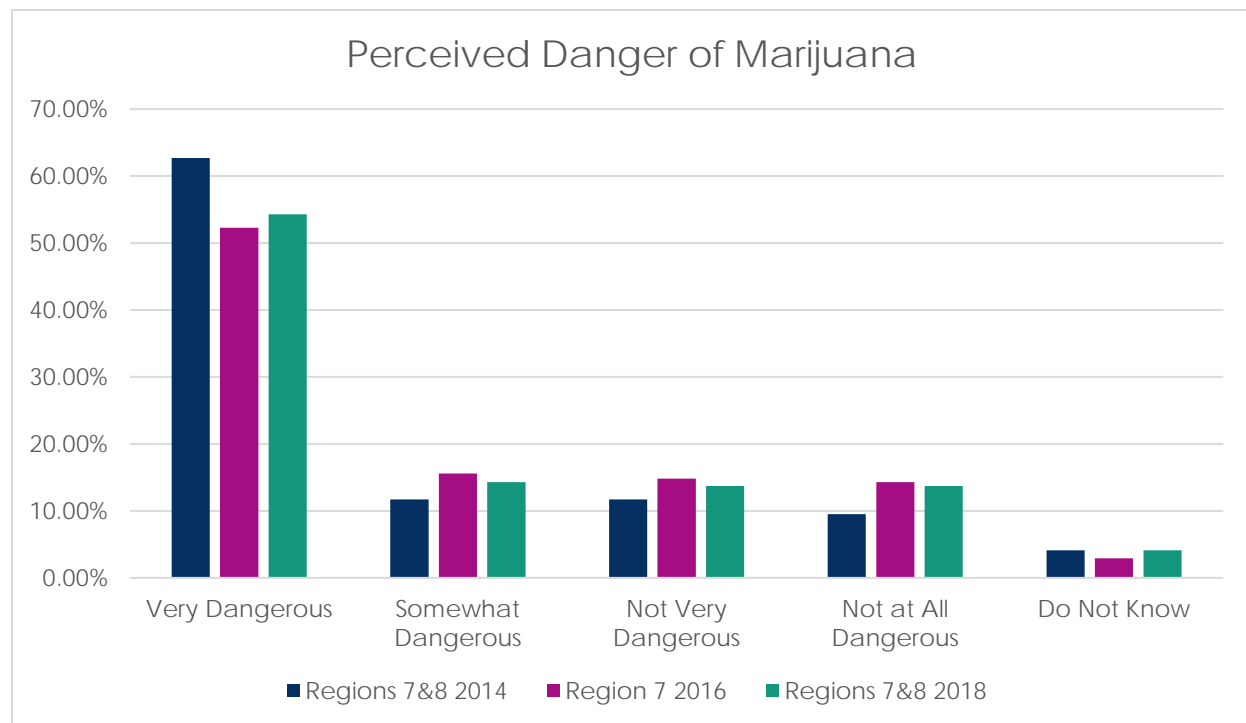
Perceived Risk of Harm from Prescription Drugs

Perceived Danger of Prescription Drugs
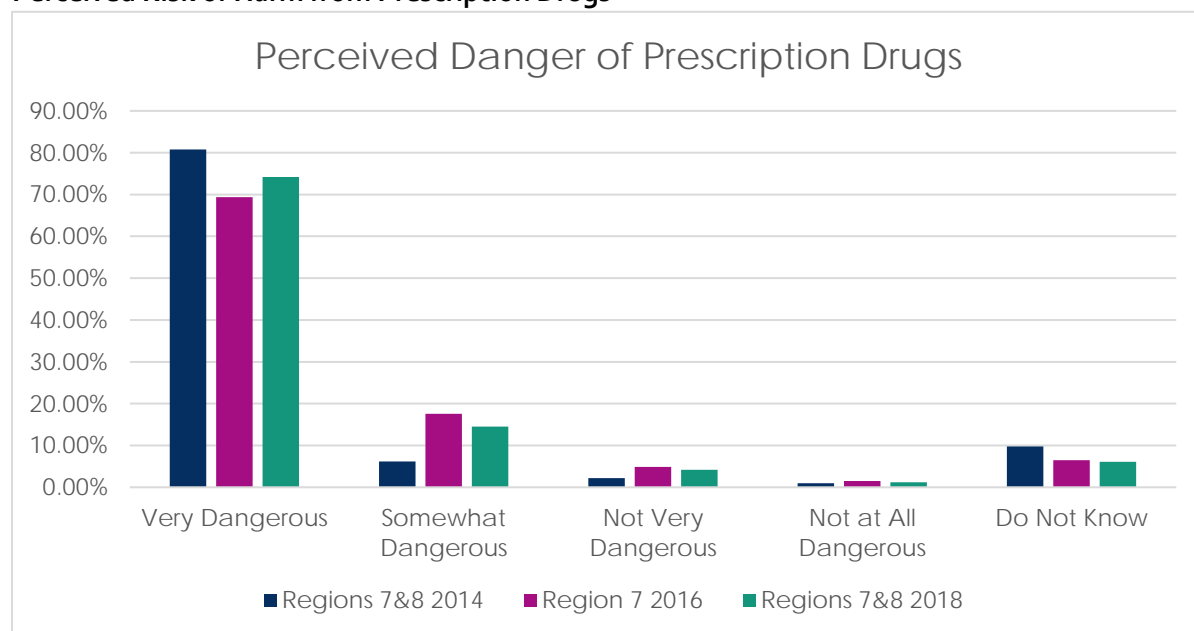
Regional Consumption

This section of the needs assessment will focus on self-reported Use and initiation for alcohol, tobacco, marijuana, and prescription drug use mainly gathered from the Texas School Survey, 2016 is missing because it was not asked on the survey that year.

Alcohol
Age of Initiation

Between 2008 and 2018 we saw age of initiation mostly stay constant and the percent of people who first tried alcohol before age 13 slowly decrease somewhat.

	Age of Initiation	Early Initiation (<13)
State 2008	12.9	42.10%
State 2010	13	40.20%
State 2012	13.1	38.50%
Regions 7&8 2014	13.2	35.70%
Regions 7&8 2018	13.1	*

Current and Lifetime Use

	State 2008	State 2010	State 2012	Regions 7&8 2014	Region 7 2016	Regions 7&8 2018
Current Use, All Grades	30.4%	29.0%	25.1%	18.6%	25.7%	32.1%
Lifetime Use, All Grades	62.9%	61.8%	57.5%	45.7%	51.1%	55.2%
High-Risk Use*, All Grades	20.6%	20.3%	17.8%	11.3%	9.8%	14.2%
Current Use, Grade 7	16.9%	15.0%	11.5%	10.4%	10.1%	15.9%
Lifetime Use, Grade 7	44.9%	42.1%	36.2%	27.8%	31.5%	36.2%
High-Risk Use*, Grade 7	8.7%	8.7%	6.7%	5.2%	2.6%	4.8%
Current Use, Grade 12	45.2%	43.4%	40.3%	33.6%	44.6%	51.9%
Lifetime Use, Grade 12	76.0%	75.0%	72.7%	61.5%	70.3%	72.1%
High-Risk Use*, Grade 12	34.0%	33.3%	31.2%	21.0%	20.9%	7.1%
*High-risk use is current (last 30 days) binge drinking (5 or more drinks in a 2-hour period).						

Tobacco
Age of Initiation

Between 2008 and 2018 the age at which students first tried tobacco increased from 12.9 to 13.7 while the percent of students who used tobacco before 13 decreased.

	Age of Initiation	Early Initiation (<13)
State 2008	12.9	42.1%
State 2010	13	40.2%
State 2012	13.1	38.5%
Regions 7&8 2014	13.2	35.7%
Regions 7&8 2018	13.7	*

Current and Lifetime Use

	State 2008	State 2010	State 2012	Regions 7&8 2014	Region 7 2016	Regions 7&8 2018
Current Use, All Grades	12.9%	12.5%	11.0%	7.4%	13.0%	19.9%
Lifetime Use, All Grades	31.7%	30.5%	27.7%	19.4%	26.5%	33.5%
Current Use, Grade 7	4.8%	4.8%	3.7%	1.9%	2.7%	5.1%
Lifetime Use, Grade 7	16.6%	15.1%	12.9%	8.8%	7.5%	14.2%
Current Use, Grade 12	24.0%	22.7%	21.3%	15.3%	26.5%	36.5%
Lifetime Use, Grade 12	47.8%	45.1%	42.3%	32.5%	46.3%	53.1%

Marijuana
Age of Initiation

Between 2008 and 2018 the age of first marijuana use for students has increased slightly from 13.6 to 14.2.

	Age of Initiation	Early Initiation (<13)
State 2008	13.6	27.5%
State 2010	13.7	25.8%

State 2012	13.7	24.9%
Regions 7&8 2014	13.7	26.5%
Regions 7&8 2018	14.2	*

Current and Lifetime Use

	State 2008	State 2010	State 2012	Regions 7&8 2014	Region 7 2016	Regions 7&8 2018
Current Use, All Grades	10.0%	11.4%	11.1%	6.9%	10.6%	14.2%
Lifetime Use, All Grades	24.6%	26.2%	26.2%	19.2%	19.7%	23.0%
Current Use, Grade 7	4.0%	3.9%	3.2%	1.7%	1.6%	3.5%
Lifetime Use, Grade 7	9.5%	9.5%	8.7%	5.1%	4.1%	5.8%
Current Use, Grade 12	15.3%	18.4%	18.9%	11.1%	21.9%	27.1%
Lifetime Use, Grade 12	38.6%	41.5%	41.8%	35.0%	38.0%	44.2%

Prescription Drugs
Current and Lifetime Use

	State 2008	State 2010	State 2012	Regions 7&8 2014	Region 7 2016	Regions 7&8 2018
Current Use, All Grades	6.4%	6.3%	5.9%	7.3%	10.1%	7.6%
Lifetime Use, All Grades	15.3%	14.8%	14.2%	13.1%	18.3%	19.0%
Current Use, Grade 7	3.9%	3.7%	3.5%	3.0%	8.5%	5.7%
Lifetime Use, Grade 7	8.5%	8.3%	7.9%	5.2%	15.2%	15.1%
Current Use, Grade 12	7.9%	7.7%	7.8%	10.2%	13.1%	9.1%
Lifetime Use, Grade 12	20.8%	19.8%	20.8%	22.2%	24.0%	25.7%

College Student Consumption

Alcohol, tobacco, and marijuana remain the main substances used by college students with synthetic marijuana and hallucinogens following.

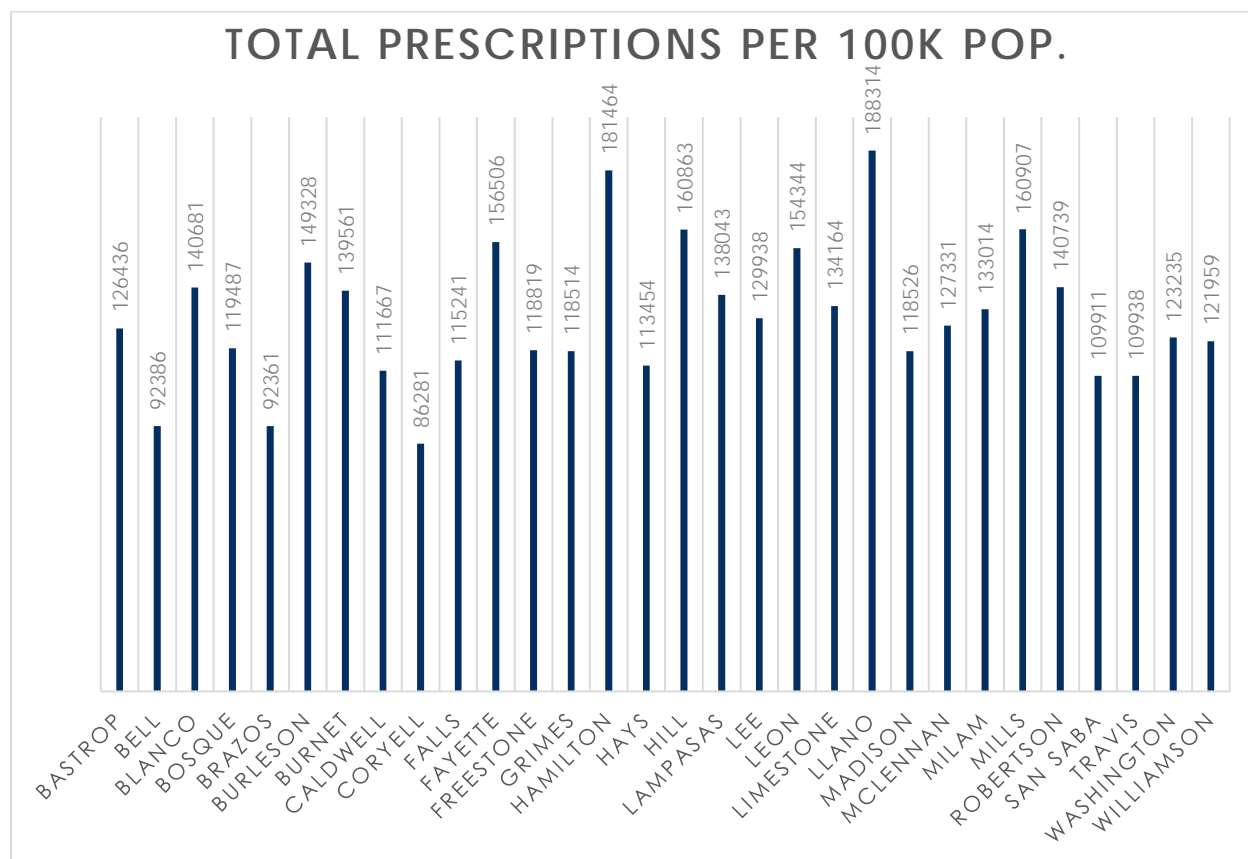| Lifetime Drug Use by Texas College Students			
	2013	2015	2017
Alcohol	80.7%	81.9%	78.7%
Tobacco	47.6%	55.0%	46.5%
Inhalants	4.9%	3.9%	2.9%
DXM	6.6%	7.3%	6.2%
Marijuana	42.0%	42.8%	39.4%
Synthetic Marijuana	12.4%	9.0%	5.2%
Cocaine	9.4%	8.8%	7.3%
Stimulants	12.4%	6.5%	5.1%
Sedatives	7.4%	12.1%	10.2%
Hallucinogens	10.1%	10.8%	9.4%
Heroin	1.2%	1.2%	0.8%
Other Narcotics	11.5%	11.2%	7.9%
Steroids	1.1%	1.0%	1.1%
Bath Salts	N/A	1.1%	0.9%
GHB	0.9%	N/A	N/A
MDMA	11.1%	9.5%	7.0%
* Since the cells are precise only to one decimal place, values smaller than 0.1% are displayed as 0.0%			
N/A - Not asked on survey			

Past Year Drug Use By Texas College Students			
	2013	2015	2017
Alcohol	74.7%	75.8%	72.6%
Tobacco	33.8%	43.1%	31.2%
Inhalants	1.2%	1.3%	1.0%
DXM	2.7%	4.0%	3.2%
Marijuana	24.3%	29.8%	27.5%
Synthetic Marijuana	3.5%	1.1%	0.6%
Cocaine	3.2%	4.9%	4.1%
Stimulants	6.7%	3.9%	3.0%
Sedatives	3.1%	7.4%	5.5%
Hallucinogens	4.2%	5.7%	4.6%
Heroin	0.3%	0.3%	0.2%
Other Narcotics	5.7%	6.6%	3.2%
Steroids	0.5%	0.5%	0.4%
Bath Salts	N/A	0.3%	0.3%

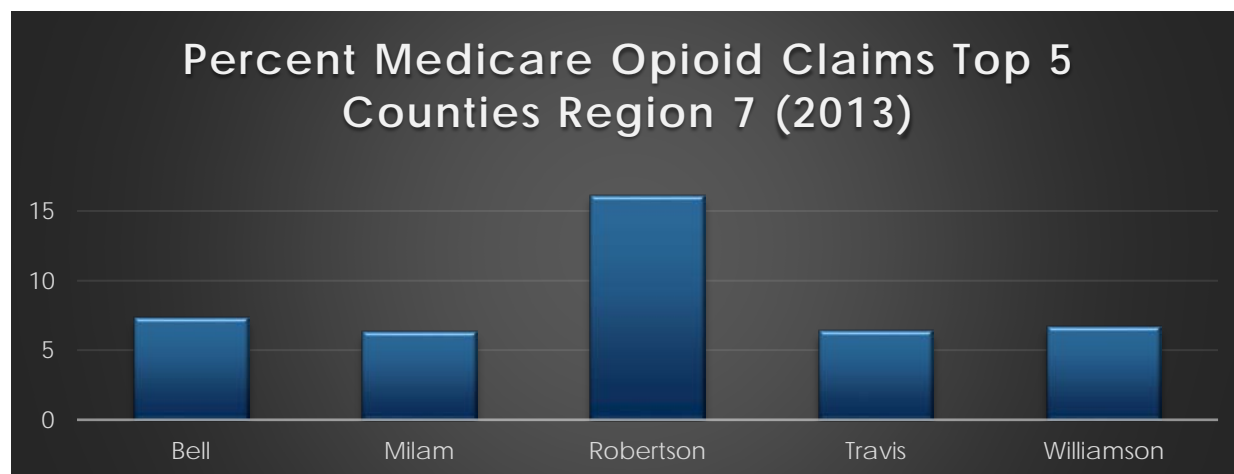| GHB	0.4%	N/A	N/A
MDMA	3.8%	4.1%	3.0%
* Since the cells are precise only to one decimal place, values smaller than 0.1% are displayed as 0.0%			
N/A - Not asked on survey			

Past Month Drug Use By Texas College Students			
	2013	2015	2017
Alcohol	61.5%	60.9%	57.6%
Tobacco	22.1%	25.7%	18.2%
Inhalants	0.5%	0.4%	0.3%
DXM	0.8%	1.8%	1.0%
Marijuana	14.9%	17.6%	15.9%
Synthetic Marijuana	1.0%	0.2%	0.1%
Cocaine	1.1%	2.1%	1.5%
Stimulants	3.3%	2.2%	1.3%
Sedatives	1.5%	3.0%	2.5%
Hallucinogens	1.4%	1.6%	1.5%
Heroin	0.2%	0.1%	0.0%
Other Narcotics	2.1%	2.1%	1.0%
Steroids	0.2%	0.2%	0.2%
Bath Salts	N/A	0.1%	0.1%
GHB	0.2%	N/A	N/A
MDMA	1.2%	1.1%	0.8%
* Since the cells are precise only to one decimal place, values smaller than 0.1% are displayed as 0.0%			
N/A - Not asked on survey			

Special Topic: Opioids
National Crisis

As use of prescription and illicit opiates has increased and an estimated 91 Americans die from an opioid overdose every day the opioid epidemic has reached national news many times in the last couple years. The death toll seems to be focused predominantly in the northeast of the U.S. in 2013-2015 Since 1999 the number of overdose deaths involving opioids has quadrupled (CDC, 2016).
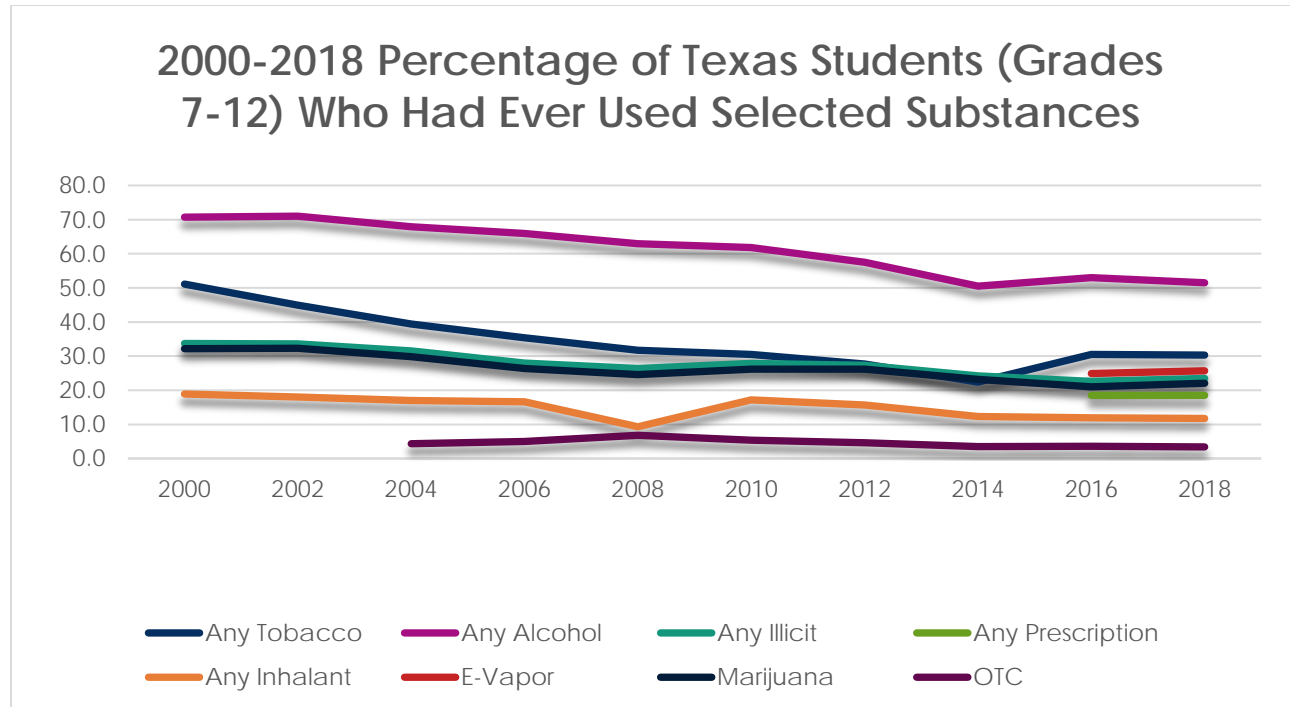
Regional Use

Region 7 has not seen an increase in opioids and while many states saw an increase in drug overdose death Texas, despite its proximity to Mexico was not one of them (CDC 2016).The primary drugs seized and used in Region 7 are Marijuana, Cocaine, and Methamphetamine. But this is not to downplay the problems of opioid use in this region, the majority of drug deaths involve an opioid and this is expected to hold true for Region 7 as well.

The state average percent of opioid Medicare claims to total claims for Texas is 5.79 and for Region 7 it was 5.53. The county that had the highest percent in Region 7 was Robertson at 16.16%. The below figure shows the top 5 highest in Region 7.

Percent Medicare Opioid Claims Top 5 Counties Region 7 (2013)

TOTAL PRESCRIPTIONS PER 100K POP.

Emerging Trends

The description of emerging trends is guided by the following tables and figures describing substance use in Texas. Alcohol use among adolescents is still the number one concern. The second concern is marijuana use. Sporadic in use, the use of synthetic marijuana tends to make headlines during spring and summer.

2000-2018 Percentage of Texas Students (Grades 7-12) Who Had Ever Used Selected Substances

Legend: Any Tobacco, Any Alcohol, Any Illicit, Any Prescription, Any Inhalant, E-Vapor, Marijuana, OTC

Synthetic Cannabinoids

In Region 7, use of synthetic marijuana has been sporadic and inconsistent. Below are a series of figures describing use of synthetic cannabinoids by adolescents.

Average Age of First Synthetic Marijuana Use			
	All	**Grade7**	**Grade 12**
Region 1	13.6	11.6	14.6
Region 2	13.6	12.6	13.9
Region 3	13.6	11.5	14.8
Region 4	13.5	10.6	13.9
Region 5	13.7	12.4	14.6
Region 6&7	13.6	11.2	14.6
Region 8	14.0	11.5	15.1
Region 9	13.4	11.3	14.4
Region 10	14.1	12.0	14.9
Region 11	13.7	11.5	14.9

Synthetic Marijuana Use Grades 7-12		
	Past Month	**Ever Used**
Texas	1.0	3.4
Region 1	1.0	3.1
Region 2	0.5	2.7

Region 3	0.8	2.7
Region 4	0.9	3.5
Region 5	0.8	3.3
Region 6&7	1.0	3.6
Region 8	1.4	4.1
Region 9	1.3	4.0
Region 10	1.6	4.2
Region 11	1.1	3.9

Synthetic Cathinoids

Bath salts were more prevalent in 2011. As recorded by the Texas Poison Center Network the number of bath salt cases had declined in Region 7. From the table that follows, only 11 counties in Region 7 had cases of synthetic cathinoids. An observable improvement is the decline in bath salt exposures in Travis County.

County	2010	2011	2012	2013	2014
Bastrop		1			
Bell	2	9	1	1	
Brazos				1	
Burleson		3		1	
Burnet		1			
Hays		1	1	1	
McLennan		2			
Milam					1
Travis		14	4	4	
Washington			1	1	
Williamson	2	2	4		
Total	4	33	11	9	1
Source. Annual number of synthetic cathinone (bath salts) exposures reported to the Texas Poison Center Network during 1/1/2010 to 11/30/2014. Counties not present did not have any reported.					

Synthetic Cathinoids Use Grades 7-12		
	Past Month	**Ever Used**
Texas	0.1	0.4
Region 1	0.2	0.4
Region 2	0.0	0.3
Region 3	0.1	0.3
Region 4	0.1	0.3
Region 5	0.1	0.3
Region 6&7	0.1	0.5

Region 8	0.2	0.6
Region 9	0.1	0.4
Region 10	0.2	0.3
Region 11	0.1	0.2

E-Cigarettes/Vaping

The use of e-cigarettes (e-cigs) is a new trend. In the table below, the Texas Poison Center Network (TPCN) received reports on electronic cigarette exposures from 2009-2014. Counties missing from the list in Region 7 are counties where no calls exist. From 2013 to 2014, the amount of e-cigs exposure increased by a multiple of 3 – an incredible jump in exposure among 14 counties in Region 7.

County	2010	2011	2012	2013	2014
Bastrop					2
Bell			1		4
Bosque				1	
Brazos		1			2
Burnet					2
Coryell				2	2
Hays				1	1
Hill					1
Madison					1
McLennan					4
Milam					1
Travis			3	6	13
Washington					1
Williamson			1	4	7
Total	0	1	5	14	41

BHO "Dabbing" and Consumables

Butane hash oil (BHO) or honey oil is a more condensed version of THC (component of marijuana providing the high) use. The practice of cooking BHO has led to individuals blowing up their homes and injuring themselves and those in proximity. BHO "dabbing" and consumables need marijuana. The table below provides an idea of possible BHO in Region 7.

Description	Solid Pounds	Solid Ounces	Solid Grams	Liquid Ounces	Dose Units	Items
Marijuana(Packaged)	166365	234	0	0	0	0
Hashish(Liquid Oil)	0	0	0	27	0	0
Hashish(Solid)	69	29	100	0	0	0
Total	166434	263	100	27	0	0

Consequences

Several consequences are associated with alcohol and drug use, including: death, incarceration, hospitalization, and lower SES status. Below is an attempt to describe consequences as a result of alcohol and substance abuse.

Overview of Consequences

Mortality

The Texas Department of State Health Services estimated the years of potential life lost before 65 due to deaths related to drugs and alcohol between 2010 and 2015 this data is shown in the tables below.

County	2010	2011	2012	2013	2014	2015	2016
Years of Potential Life Lost							
Texas	36780.5	39403.5	37911.5	38316	39136.5	43674.5	49236
BASTROP	96.5	49.5	72.5	151.5	143.5	42.5	87
BELL	368.5	266.5	535.5	465.5	321	340.5	233.5
BLANCO	49		10	-0.5	.	10.5	.
BOSQUE	52.5	10.5	13.5	-1.5	.	.	.
BRAZOS	198	235	68.5	92	132.5	474.5	153.5
BURLESON	30.5		34	30.5	1.5	28	17.5
BURNET	66.5	124	83	.	58	18.5	141
CALDWELL	43.5	52.5	.	37	11.5	24.5	100
CORYELL	.	32.5	90.5	89	58.5	77.5	68
FALLS	.	25.5	.	20.5	.	36.5	.
FAYETTE	.		.	.	20.5	14.5	.
FREESTONE	.		.	49	.	.	11.5
GRIMES	91.5		.	.	17.5	63	2.5
HAMILTON	.		38.5	.	.	20	20.5
HAYS	201	198	82	242.5	133.5	238.5	418.5
HILL	12.5	24.5	94.5	76.5	.	76.5	66
LAMPASAS	.	45	.	.	0.5	11.5	.
LEE	.	47	.	.	13.5	17	12.5
LEON	.	7.5	4.5	28.5	15	34.5	92.5
LIMESTONE	46		42.5	.	47.5	.	48
LLANO	21	39	80	32.5	.	11	56.5
MC LENNAN	299	100.5	401.5	144.5	172	361	272.5
MADISON	22	15.5	.	46.5	10.5	48	.
MILAM	38.5	9.5	39	51	9.5	47.5	.
MILLS	.		.	.	.	.	46

ROBERTSON	49	13.5	.	33.5	19	22.5	.
SAN SABA	.		22.5	.	.	.	4.5
TRAVIS	1719.5	2031.5	1687	1918.5	1022.5	2693.5	3018
WASHINGTON	38.5	38.5	.	2.5	.	15.5	.
WILLIAMSON	376	408	377.5	450.5	232	548.5	704
. = Suppressed numbers							

The table below compares the years of potential life lost due to drugs and alcohol for each of the Public Health Regions for Texas.

Public Health Region	2010	2011	2012	2013	2014	2015	2016
1	596.5	875.5	580.0	1,162.5	858.0	1,217.0	1,512.0
2	674.5	685.5	531.5	790.0	977.5	689.5	929.5
3	8,827.5	10,715.0	11,898.5	10,906.5	14,014.5	12,734.0	15,356.0
4	1,127.5	1,161.0	1,258.5	1,476.0	1,632.0	1,524.0	1,540.0
5	1,306.5	1,156.0	1,193.0	896.5	1,123.0	1,299.5	1,409.5
6	11,839.5	10,306.0	9,905.0	9,896.0	10,142.0	12,432.0	13,028.5
7	3,819.5	3,774.0	3,777.0	3,960.0	2,437.0	5,276.0	5,542.0
8	4,892.0	6,961.5	4,823.0	4,811.5	4,185.5	4,704.0	5,072.5
9	758.5	603.5	676.0	988.0	923.0	714.5	791.5
10	392.0	480.5	293.5	592.5	717.5	876.0	1,178.5
11	2,546.5	2,685.0	2,975.5	2,836.5	2,126.5	2,208.0	2,876.0
Texas Total	36,780.5	39,403.5	37,911.5	38,316.0	39,136.5	43,674.5	49,236.0

Drug and Alcohol Related Fatalities

Below is a table comparing the number of drug and alcohol poisoning deaths for each public health region and for Texas as a whole between 2010 and 2016.

Public Health Region	2010	2011	2012	2013	2014	2015	2016
1	31	41	26	57	44	58	74
2	27	33	33	38	49	31	51

3	361	414	481	461	583	578	658
4	43	52	69	70	76	74	74
5	67	70	64	55	66	65	73
6	570	500	486	520	494	606	671
7	175	174	172	170	134	252	266
8	192	272	198	193	177	206	243
9	35	23	28	40	44	35	33
10	16	19	13	27	35	40	61
11	111	112	121	131	109	106	126
Texas Total	1,628	1,710	1,691	1,762	1,811	2,051	2,330

From CDC Wonder the following table shows the death rate attributed to alcohol and drugs for each county within Region 7.

County	Age Adjusted Rate per 100K 2012-2016	Age Adjusted Rate per 100K 2007-2011
Bastrop	20.5	18.5
Bell	14.3	13.3
Blanco	Unreliable	Unreliable
Bosque	Unreliable	Unreliable
Brazos	14.3	14.9
Burleson	Unreliable	Unreliable
Burnet	17.6	19.4
Caldwell	13.3	19.5
Coryell	13.2	11.3
Falls	Unreliable	Suppressed
Fayette	Unreliable	Unreliable
Freestone	Unreliable	Suppressed
Grimes	11.6	18.3
Hamilton	Unreliable	Suppressed
Hays	15.2	17.8
Hill	23.5	15.3
Lampasas	Suppressed	Suppressed
Lee	Suppressed	Unreliable
Leon	Unreliable	Unreliable
Limestone	Unreliable	16.7
Llano	49	29.1
Madison	Suppressed	Suppressed
McLennan	20.4	13.9
Milam	22.9	18.8
Mills	Suppressed	Suppressed
Robertson	22.7	24.3
San Saba	Suppressed	Suppressed
Travis	21.2	19.4

Washington	11.7	11.8
Williamson	13.1	12.2
Texas	17.1	15.9

DUI Fatalities

Rural counties display (in the table below) higher DUI fatality rates. For example, Blanco (16.81), San Saba (16.28), and Fayette (15.29) are counties with higher DUI fatality rates. Looking into the crash rate, we observe that counties Blanco (218.56), Burleson (194.84), and Llano (155.01) are greater in rate. Of the two rates, Blanco appears twice and would be an area of interest for improvement.

County	County Population 2010-14	Total DUI Crashes, 2010-14	Total DUI Fatalities, 2010-14	DUI Crash Rate per 100K, 2010-14	DUI Fatality Rate per 100K, 2010-14
Bastrop	383785	353	25	91.98	6.51
Bell	1613971	1504	67	93.19	4.15
Blanco	53531	117	9	218.56	16.81
Bosque	92050	90	8	97.77	8.69
Brazos	1003418	1093	16	108.93	1.59
Burleson	87249	170	10	194.84	11.46
Burnet	218396	306	16	140.11	7.33
Caldwell	196214	272	22	138.62	11.21
Coryell	387292	290	13	74.88	3.36
Falls	90339	79	5	87.45	5.53
Fayette	124224	157	19	126.38	15.29
Freestone	100463	145	3	144.33	2.99
Grimes	135698	202	10	148.86	7.37
Hamilton	42578	35	1	82.2	2.35
Hays	836521	1083	28	129.46	3.35
Hill	178140	207	18	116.2	10.1
Lampasas	100364	91	0	90.67	0
Lee	84402	119	9	140.99	10.66
Leon	85411	103	10	120.59	11.71
Limestone	118685	135	8	113.75	6.74
Llano	96770	150	8	155.01	8.27
Madison	69464	65	6	93.57	8.64
McLennan	1190932	1478	63	124.1	5.29
Milam	125127	183	10	146.25	7.99
Mills	24691	25	3	101.25	12.15
Robertson	84736	127	13	149.88	15.34
San Saba	30721	36	5	117.18	16.28
Travis	5296170	7387	169	139.48	3.19

County	County Population 2010-14	Total DUI Crashes, 2010-14	Total DUI Fatalities, 2010-14	DUI Crash Rate per 100K, 2010-14	DUI Fatality Rate per 100K, 2010-14
Washington	170746	222	10	130.02	5.86
Williamson	2221217	1285	57	57.85	2.57

Legal Consequences

Adult Alcohol and Drug Related Incarceration report

For legal consequences, the incarceration rate for offenders is highest among the following counties: Limestone (474.88), McLennan (473.80), and Hill (438.56). The rates presented here come from the Texas Commission on Jail Standards, Incarceration rate report for March 2014 to February 2015. Also, the rates are based on 100,000 population amounts. The incarceration rate report provides a general estimate.

INCARCERATION RATE REPORT
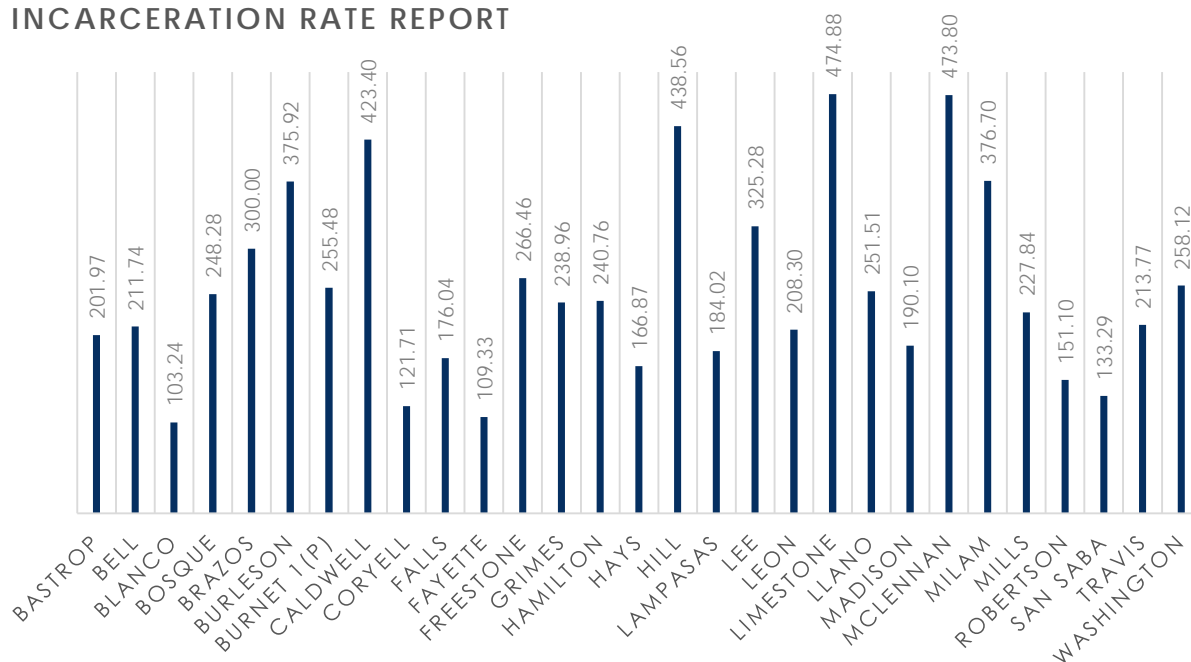
Adult Alcohol and Drug Related Arrests

The following charts will show the number of arrests related to drugs and alcohol by country of conviction.

	Drug Possession and Delivery				DWI			
	2015	2016	2017	2018	2015	2016	2017	2018
Bastrop	32	29	19	24	13	16	18	17
Bell	284	320	313	324	67	53	47	50

Blanco	2	2	6	14	2	2	3	4
Bosque	15	22	30	30	13	11	9	9
Brazos	196	187	204	256	54	64	56	45
Burleson	28	17	22	34	6	9	14	16
Burnet	64	71	75	63	22	20	18	21
Caldwell	35	16	24	22	18	15	16	13
Coryell	40	68	74	81	9	15	12	17
Falls	32	34	35	38	7	4	2	3
Fayette	26	33	39	40	4	5	7	3
Freestone	24	23	28	25	8	10	8	8
Grimes	33	28	25	28	11	15	15	14
Hamilton	15	18	26	22	4	4	5	2
Hays	59	62	92	103	43	51	46	34
Hill	60	86	81	98	31	34	20	35
Lampasas	31	37	24	39	8	8	5	4
Lee	14	12	7	8	8	7	6	4
Leon	8	17	15	12	6	6	8	9
Limestone	39	41	57	46	7	13	13	6
Llano	30	27	39	34	17	17	10	15
McLennan	506	544	564	616	105	128	115	103
Madison	15	17	15	18	2	1	0	6
Milam	32	38	32	33	11	8	10	5
Mills	17	22	21	21	2	1	3	4
Robertson	20	22	10	12	1	3	2	1
San Saba	8	5	4	1	5	3	4	2
Travis	423	419	439	426	247	240	230	191
Washington	40	40	46	48	11	12	10	4
Williamson	187	176	178	184	113	99	95	95
Texas	23,577	23,558	23,631	23,963	7,171	7,044	6,643	6,031

Juvenile Drug Use Related Arrests and Incarcerations

The table below shows the number of drug referrals as reported by the Texas Juvenile Justice Department.

County	Drug Referrals 2014	Drug Referrals 2015	Drug Referrals 2016	Drug Referrals 2017
BASTROP	49	36	39	31
BELL	97	76	75	85
BLANCO	9	1	2	0
BOSQUE	2	4	0	0
BRAZOS	84	70	67	75
BURLESON	7	3	4	0
BURNET	19	18	27	24
CALDWELL	18	15	19	15
CORYELL	20	11	16	14
FALLS	0	5	1	4
FAYETTE	4	11	0	2
FREESTONE	4	4	4	5
GRIMES	7	3	12	4
HAMILTON	0	4	0	1
HAYS	75	73	85	92
HILL	5	3	1	6
LAMB	7	7	4	2
LEE	7	4	2	1
LEON	1	1	2	0
LIMESTONE	7	4	3	4
LLANO	0	5	4	10
MCCULLOCH	1	15	6	0
MATAGORDA	13	13	8	8
MILAM	3	3	2	8
MILLS	0	0	0	0
ROBERTSON	0	2	0	4
SAN SABA	2	0	0	0
TRAVIS	446	380	427	382
WASHINGTON	9	6	11	11
WILLIAMSON	185	144	176	172
Texas Total	9507	8100	7883	7868

The table below shows alcohol and drug violations as well as total in-school and out-of-school suspensions for Region 7 in 2017 provided by the Texas Education Agency (TEA).

County	Year-End Enrollment 2017	Number of Students with Alcohol Violations	Number of Students with Controlled Substance Violations	In-School Suspensions Total	Out-of-School Suspensions Total

Bastrop	18199	37	178	2633	1039
Bell	83174	*	*	10543	4566
Blanco	1824	*	*	83	12
Bosque	3137	*	0	158	32
Brazos	31894	28	120	3246	1666
Burleson	2928	*	15	647	116
Burnet	7941	12	48	895	149
Caldwell	7942	21	34	965	341
Coryell	12804	16	28	1389	378
Falls	2370	0	*	222	69
Fayette	4033	*	*	429	68
Freestone	4054	*	*	254	116
Grimes	4891	*	*	568	183
Hamilton	1518	*	0	99	23
Hays	38570	26	231	2642	938
Hill	7149	*	11	693	215
Lampasas	1448	*	12	407	64
Lee	3309	*	*	417	141
Leon	3401	*	0	229	35
Limestone	4342	*	19	648	201
Llano	2034	*	13	340	63
Madison	1400	0	*	287	94
McLennan	276	38	156	6961	3308
Milam	5017	14	*	617	124
Mills	1451	N/A	N/A	109	35
Robertson	3552	*	*	544	144
San Saba	1055	*	0	25	11
Travis	174222	132	989	10894	6106
Washington	5727	*	21	755	255
Williamson	122293	120	460	6762	1952
* = masked data, 1-9 cases					

Of the TEA discipline rates related to alcohol and drugs in 2014 and 2016, the following counties had the highest percent of drugs/alcohol incidents: Travis (10.86%), Burnet (12.24%), and Williamson (9.35%).

Hospitalization and Treatment

In Region 7 in 2013, there were 177 AOD discharges. This resulted in a mean cost of $33,082 (MONAHRQ 2012 data). If we multiple the number of discharges by the mean cost we get a total of $5,855,496.52. However, there are significant costs in several counties: Bell ($15,334; 28 discharges), Brazos ($21,087; 6 discharges), Coryell ($40,297; 10 discharges), McLennan ($23,233; 14 discharges), Travis ($39,779; 78 discharges), and Williamson ($37,400; 26 discharges). For other counties in Region 7, their data has been suppressed because for 5 discharges or less the data is protected.

Hospital Use due to AOD

ER numbers were not determined. However, health professionals express that they usually help with any bodily injury and do not necessarily address substance use. As a result, a repeat substance abuser would keep coming to the ER if sustaining bodily injury.

In Region 7, there were 196 cases of synthetic cannabinoid use. This represented a 7.4% regional use compared to the rest of the State. Region 7 had the fifth highest synthetic cannabinoid use in the State with a rate per 100,000 of 6.65. Also, data from the Texas Poison Center Network (TPCN), 2009-2014 indicates that 8 individuals died from synthetic cannabinoid and synthetic cathinone exposures. For synthetic cathinone use, Region 7 had 58 cases. This total made up 9.9% use of total State percentages; Region 7 had the fourth highest percentage in synthetic cathinone use.

Medical outcome	Synthetic cannabinoid	%	Synthetic cathinone	%
No effect	151	5.4	21	3.5
Minor effect	615	22.0	78	13.0
Moderate effect	1146	41.0	290	48.3

Medical outcome	Synthetic cannabinoid	%	Synthetic cathinone	%
Major effect	220	7.9	70	11.7
Death	4	0.1	4	0.7
Not followed, judged as nontoxic exposure (clinical effects not expected)	1	0.0	1	0.2
Not followed, minimal clinical effects possible (no more than minor effect possible)	171	6.1	24	4.0
Unable to follow, judged as a potentially toxic exposure	452	16.2	102	17.0
Unrelated effect, the exposure was probably not responsible for the effect(s)	32	1.1	10	1.7
Total	2792		600	

AOD-related ER Admits

While we were not able to get hospital data related to alcohol or substance abuse the chart below shows EMS runs where the primary symptom was overdose, 2015 data was unavailable due to internal reporting issues.

EMS runs with primary symptom of overdose (drugs or alcohol)					
County of Incident	2010	2011	2012	2013	2014
Texas	1789	4102	3939	1086	1784
Bastrop		7	10		
Bell	365	362	558	495	356
Blanco	11	5		5	8
Bosque	18	15	12		
Brazos	152	259	237	93	192
Burleson	--	--	10	23	19
Burnet	55	82	104	63	45
Caldwell	40	26	34	9	--
Coryell	65	62	43	45	23
Falls		--	--		--
Fayette	19	21	24	28	24
Freestone	22	21	29	14	17
Grimes	--	18	18	28	17
Hamilton	--	--			--
Hays	71	197	180	149	181
Hill	18	23	--		
Lampasas	27	26	--		
Lee	--	6	--		
Leon	12	6	7	--	--
Limestone	23	22	21	13	28
Llano	24	30	18	--	13
Marion	9	--	6	--	--
Mason					
Milam	--	5	--	22	28
Mills	--	--	--		
Robertson	--		--		--
San Saba	12			--	--
Travis	2183	4251	2815	2755	3073
Washington	21	25	29	11	5
Williamson	38	78	104	85	93
Non-zero counts less than five are suppressed to protect patient confidentiality					

Adolescents Receiving SA Treatment

From 2014 to 2018 there were 2,539 youth treated for substance abuse by state services. The following graph shows the change over time of the number of clients treated for each substance in Region 7, some clients were treated for multiple substances.
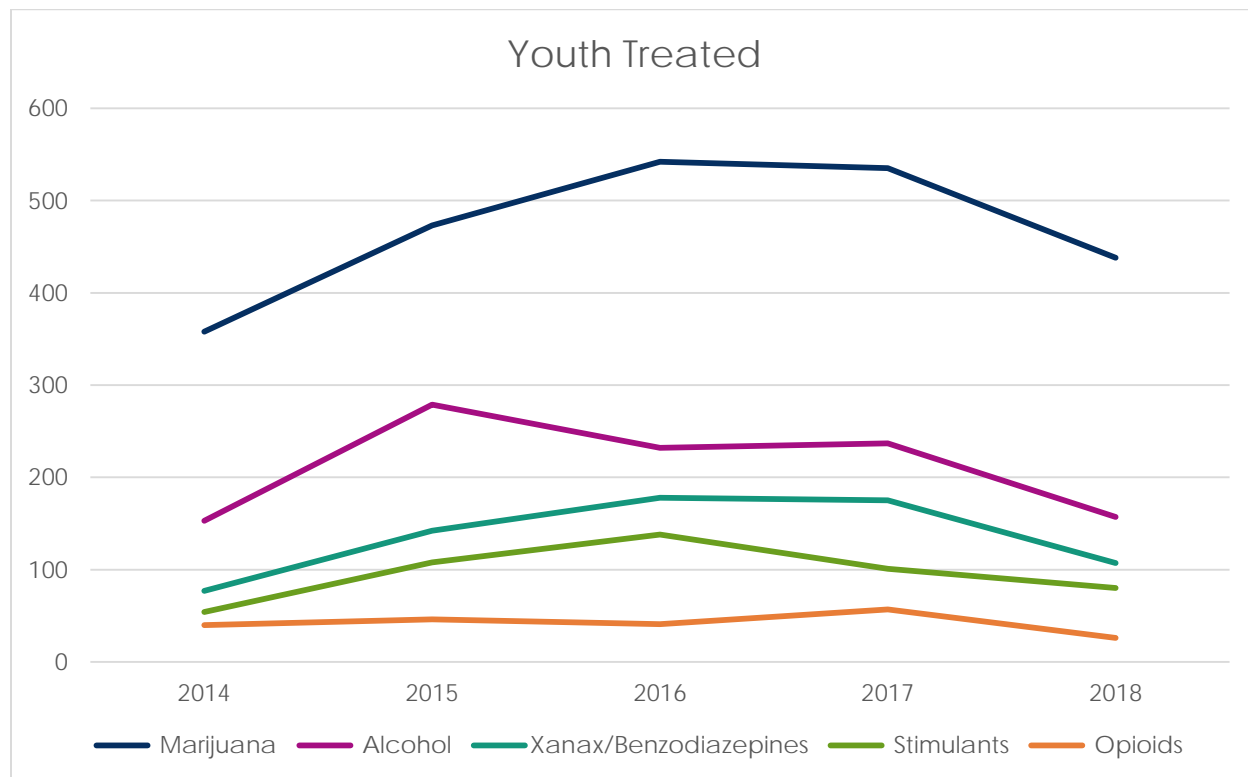
Economic Impacts

Underage Drinking/Drug Use

Problems related to the misuse of alcohol can cost the United States $223.5 billion with $18.82 billion of that coming from Texas ($14.97 billion of that is attributed to binge drinking). That is $1.99 per drink and $748 per person in Texas. The Centers for Disease Control and Prevention has determined that almost three-quarters of the total cost for alcohol abuse is tied to binge drinking.

Average Cost of Treatment in Region

The average cost of treatment in Region 7 varies and is subject to change over time. However, some examples in the region include the following: Austin Recovery (Austin, TX)-$8,850 per month; Burning Tree (Kaufman and Elgin, TX)-$33,000 for a 3 month stay; Christian Farms Treehouse Inc. (Temple, TX)-intensive treatment for $4,500 per month and supportive treatment for $3,000 per month. For more precise estimates, evaluators need additional information

Employability and College Admissions

Two very effective means for encouraging adolescents and youth to stay away from alcohol and drugs is employment and college admissions. Today's young people are concerned about getting a job or going to college. In Region 7 a media effort was used to address these two concerns. Current estimates indicate

3 out of 5 businesses drug test employees; we know marijuana remains in the human system for long periods of time. Therefore, the notion of not keeping or not receiving employment because of drug use connects with people. Most of the media efforts were concentrated in Greater Austin and the Brazos Valley.

Environmental Protective Factors

Overview of Protective Factors

Protective factors range in several different categories. In this section, the author has attempted to begin identifying the protective factors by choosing apparent contributors.

Community Domain

The use of coalitions is the current method for reaching into communities to address issues of substance abuse. Alcohol and drugs are present everywhere and each community must be transparent in making issues of substance abuse known to all members of the community. Currently, there are 39 HHSC-funded coalitions in Texas. Of these 39 coalitions, 4 operate in Region 7. The presence of these coalitions serves as proactive factors in helping adolescents remain drug-free. There are also several noteworthy agencies working in Region 7, such as Texans Standing Tall and the Heart of Texas MHMR working to develop a Waco ROSC (Recovery Oriented System of Care). As well as a movement to develop a ROSC in Brazos County.

Community Coalitions

In Region 7, according to Coalitions Texas, four DSHS-funded coalitions currently operate. These coalitions include the Voice Against Substance Abuse Coalition in Waco; the Community Alcohol and Substance Awareness Partnership (CASAP) in Bryan and Brenham; the Hearne Zero Tolerance Youth Coalition in Hearne; and the LifeSteps Substance Abuse Prevention Coalition in Round Rock.

Regional Coalitions

A fifth coalition working in Region 7 is the Robertson County Community Coalition (RCCC). This coalition is financially supported through a Drug-Free Communities (DFC) grant and works in partnership with the Hearne Zero Tolerance Youth Coalition. Together, both coalitions work with partners in Robertson County to address issues of alcohol abuse and drug use in the community. There is also an Anti-Smoking coalition for Brazos County funded under HHSC.

Also, another coalition of note is the Hays Caldwell Council on Alcohol and Substance Abuse. This coalition is involved in education and advocacy for better conditions free of substance abuse concerns is inspiring. They are well informed on their communities and knowledgeable about specific substance abuse struggle is present.

A final noteworthy organization is Texans Standing Tall (TST). This state-wide coalition is known for being leaders in producing reports and generating activities for awareness concerning underage drinking. One such report describes how the increase of an alcohol tax by 10 cents can dramatically change the health and economic status of Texas school children. This coalition, however, is expanding to address state-wide issues related to the dangers of substance abuse.

Treatment/Intervention Providers

Substance abuse and mental health treatment providers are centered in San Marcos, Austin, Georgetown, Belton, Waco, and Bryan/College Station. Most service providers are located in Austin. There are a few mental health providers located in areas such as Caldwell, Cameron, Hearne, Navasota, Killeen, Lampasas, Hamilton, and Liberty Hill counties. BVCASA (which serves Brazos, Burleson, Grimes, Leon, Madison, Robertson, and Washington counties) has adult and adolescent outpatient treatment services and has the pregnant-postpartum intervention program providing intervention and HIV/AIDS services. **More Treatment facilities available upon request.**

Organization	Services	Counties Served
MHMR Authority of the Brazos Valley	- Veteran Services - Vocational Services for Disabled Individuals - Day Habilitation and Skill Building Services - Residential Services for Disabled Individuals - Health, Dental, and Nursing Services - Specialized Therapies (physical, occupational, etc....) - Crisis services - Intake - Individual, Group, and Family Counseling - Skills training - Parent Support Groups - Psychiatric Evaluation, Medication Monitoring and Management - Patient and Family Education - Respite - Routine Case Management - Intensive Case Management with Wraparound Planning - Peer Support Services - Psychosocial Rehabilitation Services - Diagnostic Assessment	- Brazos - Burleson - Grimes - Leon - Madison - Robertson - Washington
Heart of Texas Region MHMR Center	- Early Childhood Interventions - Veterans Services - Intellectual/Developmental Disabilities Services - Child/Adolescent Mental Health Services - Crisis Treatment Center - Mental Health Admissions - Crisis Hotline - Inpatient Psychiatric Hospitalization - Mobile Crisis Outreach Teams - Mental Health Case Management - Psychiatric Services - Rehabilitation/Counseling - Medication Coordination - Assertive Community Treatment - Independence Center	- Bosque - Falls - Freestone - Hill - Limestone - McLennan

	• Mexia Peer Support Center • Supported Housing • Supported Employment Texas Correctional Office on Offenders with Medical or Mental Impairments (TCOOMMI) Services	
Central Counties Services	• Crisis Hotline • Crisis Intervention • Screening • Intake • Routine Case Management • Skills Training • Psychiatric Services • Supported Employment • Supported housing • Counseling • Assertive Community Treatment (ACT) • Psychosocial Services • Respite • Day Programs • Children's Mental health Services • YES Waiver • Early Childhood Intervention • Service Coordination • Behavior Supports • Home and Community Based Services • Day Habilitation • Veteran Services	• Bell • Coryell • Hamilton • Lampasas • Milam
Bluebonnet Trails Community Services	• Crisis Hotline • Psychiatric Services • Counseling • Case Management • Psychosocial Services • Supported Housing • Supported Employment • Peer Support • Respite • Mobile Crisis Outreach Team • Skills training • TCOOMMI Services • Referrals • Financial Support • Outreach-Screening-Assessment-Referral Services (OSAR) • Outpatient Services • Medical and Dental services • Peer Support Services • Veteran Services • Early Intervention for Babies and Toddlers	• Bastrop • Burnet • Caldwell • Fayette • Gonzales • Guadalupe • Lee • Williamson

	• Early Childhood Intervention • Specialized Therapies (physical, occupational, etc....) • Community Supports	
Austin Travis County Integral Care	• Crisis Hotline • Community AIDS Resources and Education (C.A.R.E.) • E-Merge Program (behavioral health and integral care collaboration) • Jail Diversion Services • Substance Use Services • Integrated Care Clinics • Family Preservation Program • Early Childhood Intervention • First Steps Program (birth to age 3) Services • Intensive Case Management • Juvenile Justice • Out-Patient Services • YES Waiver Medicaid program • Disability Employment Program • Individual Support Services for Disabled Individuals • Mental Health first Aid • Suicide Prevention • Tobacco Cessation Programs • Mobile Crisis Outreach • Psychiatric Services • Transitional Services	• Travis
Center for Life Resources	• Crisis Hotline • Information & Referral • 24-Hour Crisis Services • Diagnostic Assessment • Symptom Management • Psychiatric Services • Client & Family Mental Health Education • Service Coordination • Community Living & Problem Solving Skills • Respite • Housing Assistance • Vocational Training & Employment Assistance • Family Support Services • Autism Services and Support Group • Case Management and Treatment Planning • Skills Training • Family Partner Support • Inpatient services • Wraparound Planning • Counseling	• Brown • Coleman • Comanche • Eastland • MucCulloch • Mills • San Saba

	• Nurturing Parenting Skills Training • School-Based Services • Nursing • Day Habilitation • Adaptive Aids • Residential Assistance • Supported Employment • Early Childhood Interventions • Inpatient and Outpatient Services • Veteran Services	
Hill Country Mental Health & Developmental Disabilities Centers	• Crisis Hotline • Skills training • Psychiatric Services • Peer Groups • Supported Employment • Supported Housing • Mental Health Crisis Support • Day Programs • Residential Services • Supported Home Living • Respite • Service Coordination • Vocational Services • Community Supports • Adult Outpatient Services • Ambulatory Detoxification Services • Early Childhood Intervention • Veteran Services • 1115 and YES waivers	• Bandera • Blanco • Comal • Edwards • Gillespie • Hays • Kendall • Kerr • Kimble • Kinney • Llano • Mason • Medina • Menard • Real • Schleicher • Sutton • Uvalde • Val Verde

Supportive Services

Although it's powerful for youth to witness testimonies from their peers overcoming addictions, the data involved in such occurrences lends itself to a rich qualitative nature. The transformative motivation and inspirational call to not get involved with drugs and alcohol after a testimony can have incredible influence over a community. Among other supportive options related to intervention and supportive services are Celebrate Recovery, Alcoholics Anonymous, and Narcotics Anonymous which aim to help with recovery and support as well as Al-Anon which aims to help family members and loved ones of people addicted to substances. These organizations have numerous testimonies of being effective in helping those who are struggling with an addiction, yet clear numbers of how many individuals are recovering from an addiction and remain free from their addiction is not readily known partially due to the anonymous nature of such groups.

School Domain
YP Programs

Agencies providing youth prevention (YP) programs are empowered by local coalitions and the Prevention Resource Center. Considering all YPs, along with coalitions and the Regional Prevention Resource Center, there are 9 agencies that contribute to youth prevention. According to HHSC, the following agencies are funded in Region 7 and work in some capacity toward youth prevention, if not directly: (1) Austin-Travis County MHMR and Austin Travis County Integral Care, (2) Brazos Valley Council on Alcohol and Substance Abuse, (3) Connections Individual and Family Services Inc., (4) Hays Caldwell Council on Alcohol and Drug Abuse, (5) Phoenix Houses of Texas, Inc., (6) Viable Options in Community Endeavors, (7) Williamson Council on Alcohol and Drugs, DBA LifeSteps, (8) Youth and Family Alliance, and (9) YWCA of Greater Austin.

Students Receiving AOD Education in School

Although students across Texas and in Region 7 receive education about the dangers of alcohol and other drugs, complete data collection is still needed. From the Brazos Valley Council on Alcohol and Substance Abuse (BVCASA), 1310 students receive education about the danger of alcohol and other drugs in 2016 and approximately 14,770 students were involved in a prevention program across the 30 counties in 2016. All of these students are from Education Service Center 6. Further data collection and inquiry is needed to identify more students receiving education.

High School to College and Academic Achievement

Academic achievement and educational attainment are discussed in Environmental Risk Factors, however it could also fit equally well in this section.

Family Domain
Parental/Social Support

Members of Region 7 work to identify and support social associations in the region. Associations identified include civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations and professional organizations. Social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network. Social association rates per 10,000 were collected from County Health Rankings and Roadmaps and are charted below. In general Region 7 has better social association rates than Texas as a whole.

Social Association Rates (Per 10,000)

Categories (left to right): Texas, Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, McLennan, Madison, Milam, Mills, Robertson, San Saba, Travis, Washington, Williamson

Legend: ■ 2017 ■ 2018 ■ 2019
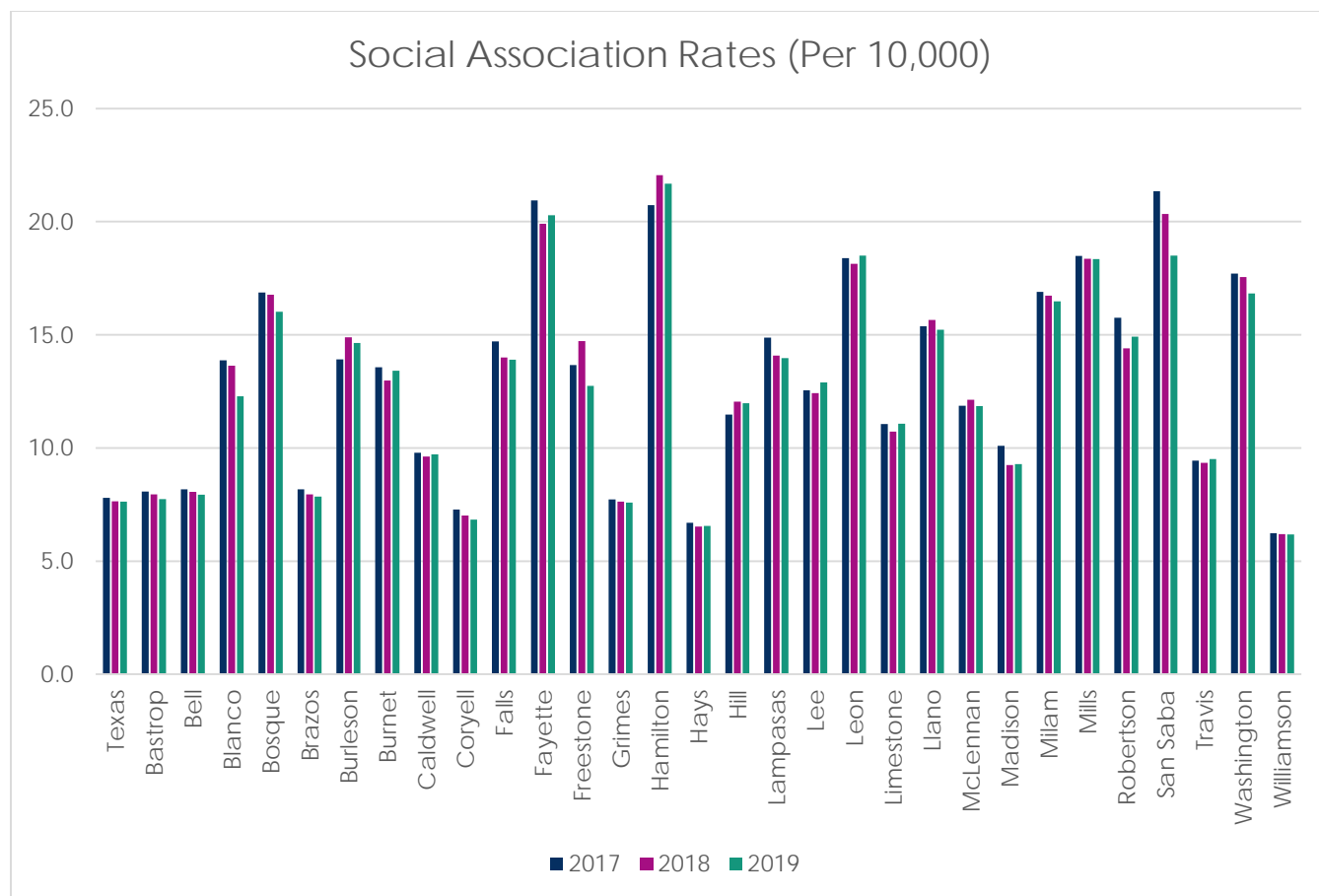
Parental Attitudes toward Alcohol and Drug Consumption

Parental attitudes toward alcohol and drug use influence decisions made by youth and adolescents. For example, in one meeting from the LifeSteps Coalition (Round Rock, TX), a high school student organization introduced – SOS, Students Opposing Substances. The SOS organization worked to establish an agreement between students and parents that parental drug testing of students only occurred after spending time with other students. Students described this method as a way to not give into peer pressure and to inform parents of students' choices in peers. Strengthening the parent-student relationships is important for describing current struggles of both parties.

Students Talking to Parents about ATOD

Youth prevention (YP) services provide a unique opportunity for students to start the conversation with parents about alcohol, tobacco, and other drug (ATOD) use. There are several YP programs in Region 7, yet data collection methods and psychometric evaluation of instruments is required. Data from some YP services have undergone rigorous data quality measures to yield reliable results for informing policy makers and stakeholders.

Individual Domain
Life Skills Learned in YP Programs

Youth Prevention Programs occur in Region 7, yet exact data from youth prevention is still not incorporated or evaluated for feasibility in the RNA. We know youth prevention programs are required to inform evidenced based practices. With that said, more work is needed to identify how impact life skills learned in YP programs have reshaped the community. For example, there is evidence that resiliency program have helped youth overcome difficult circumstances and succeed by going to college.

Mental Health and Family Recovery Services

Mental health and family recovery services continue to expand and meet the changing needs of mental health first aid in the classroom. For example, Austin Integral Care has offered services to educators because of increased incidences of violence among youth in schools. In fact, the ACE study demonstrated that students no longer feel safe in schools.

Youth Employment

The percentage of youth working can create a positive factor in reducing drug use. For example, Llano County had the lowest employment for males, 16-19 years of age (13.35%). For females, 16-19 years of age, the county with the lowest employment was Mills (10.08%). For males, 20-21 years of age, the county with the lowest employment was Madison (25.57%). As for females, 20-21 years of age, the county with the lowest employment was Blanco. Other specific percentages can be found in Appendix B. From the figure below, San Saba and Burnet Counties have the most youth employed.

Youth Employment

Youth Perception of Access

Illustrated in Accessibility, youth easily gain access to alcohol, marijuana, and prescription drugs. Therefore, the use of youth prevention programs becomes vital in helping youth decide drugs are not for them. Our cause as prevention professionals also comes into the picture, because youth have access "in a sense" to whatever they want. Our message about the dangers of alcohol and drug use becomes a priority and the cost for prevention becomes that more necessary. As we continue to limit access, helping youth be aware of the real life dangers in alcohol and drug use remains important.

Youth Perception of Risk and Harm

Illustrated in Perceived Risk of Harm section, youth tend to develop the belief that alcohol and prescription drugs are not dangerous. That trend is seen by observing the increased "not harmful" perspective of students from grades 6 to 12. For students in grade 12, the largest numbers occur for youth perceiving low risk in relation to alcohol and prescription drug use. For marijuana use, however, the largest numbers occur with students in grades 10 and 11. This suggests high school prevention programs talking about marijuana have been influenced by youth in grade 12.

Trends of Declining Substance Use
Although there is indication of downward trends related to alcohol and drugs over time, the sporadic spikes of synthetic marijuana use have led to an increase in concern across communities and changes in community and user behaviors. For example, quick and sudden spikes in synthetic marijuana use have been driven by employers' effort to drug test employees. Community stakeholders offer the possibility that marijuana users seek synthetic marijuana to get the same high and pass drug test.

Region in Focus
Gaps in Services
There are many opportunities for improvement concerning the services of Region 7. A growing issue in Region 7 is the language barrier. Not all service providers can help the Spanish-speaking population. This becomes more apparent in rural areas where services are already limited (e.g., San Saba County). Access to services (e.g., detox facility) is also lacking in rural areas. Finally, navigating the healthcare system is a challenge for many individuals living in Region 7.

Gaps in Data
Gaps exist in county-level data collection efforts across the region. In addition, as efforts are made to unify counties in data collection, gathering data in Spanish becomes apparent. The need to support local communities in collecting data remains a constant effort; especially as regional needs assessments attempt to tie into relevance at the local level. Stakeholders in the community have expressed that data become more local or specific to their communities.

A significant source of surveying across the region is conducted through the Public Policy Research Institute. For the most part, drug and alcohol data collected from adolescents throughout the region is short of rich and detailed regional assessment, especially at the county-level. There are a number of coalitions assessing their community needs, but data outcomes are not representative for the region. Community-level data reporting can be collected for our evaluation and study of variables and factors at work, but more region-wide data collection is necessary. As a result, existing data is currently the only way to begin assessing and estimating the effects of alcohol, marijuana, and prescription drug use

in the region. Therefore, continued encouragement and support for community-level efforts in the region is required. Further community-level activity is necessary to translate community data to a regional-level assessment. Expanding community data gathering efforts allows members of the region to develop county-level assessments and relational connections to neighboring counties.

The evaluation of certain seasonal occurrences is also necessary. For example, times related to the numerical value of 420 are commonly used in marijuana activity. The numerical value 420 can mean April 20th or the times 4:20pm or 4:20am. Also, the term "420 friendly" is sometimes used in online social media settings as an indication of being open to marijuana use. In addition to marijuana activity, alcohol use generally increases during holidays (e.g., New Year's Eve). However, instruments (e.g., surveys) are needed to measure spikes in alcohol abuse to address this issue in the following years.

Regional Partners

Many regional partners support the efforts of the Prevention Resource Center 7. Public schools and districts have been vital in providing necessary education to students concerning the dangers of alcohol and drug use. Likewise, coalitions have been instrumental in prompting local change in communities. Though we are many people working for the same cause, we should continue in our work to identify others doing the same work and build stronger relationships.

Regional Successes

Region 7 has several permanent drop boxes for individuals to drop off unwanted prescribed medicine. There are 2 drop boxes in Robertson county one in Hearne: City of Hearne Office 209 Cedar Street, Hearne, Texas 77859 and one in Franklin: Robertson County Sheriff's Department 113 W. Decherd St. Franklin, Texas 77856. There are 2 drop boxes in Brazos county one in College Station: College Station Fire Department Administration Offices 300 Krenek Tap Road College Station, Texas 77842 and one in Bryan: Brazos County Sheriff's Office 1700 Hwy 21 West Bryan, TX 77803. There is also a drop box in Washington county in Brenham: Brenham Fire Department 101 N Chappell Hill St Brenham 77833.

Additionally, there are several prescription drug collection events conducted in the region. Also, through the efforts of CVS/pharmacy and The Partnership at Drugfree.org, another site for the collection of prescription drugs, Med Return, was created. In Region 7, the collection site is located at the following: San Marcos Police Department, 630 E. Hopkins, San Marcos, TX 78666.

Several individuals involved in policy making at the city and college level in Region 7 are now discussing and developing policies related to the use of e-cigarettes in public establishments. For example, Baylor University has created policy disallowing e-cigarettes on-campus. The same discussion is occurring at the community-level as tobacco-free individuals have expressed discomfort when in close proximity to users of e-cigarettes.

Due to the presences of numerous public and private universities, Region 7 is enriched with access to academic scholars. These scholars have been instrumental in forming an epidemiological workgroup to address issues of marijuana use, prescription drug abuse, and underage drinking among adolescents. A second epidemiological workgroup is currently working to address issues related to tobacco use. Having multiple epidemiological workgroups helps foster the scientific investigation of alcohol and substance abuse issues in Central Texas. Finally, the work and efforts of several coalitions in the area have been vital in addressing issues of marijuana use, underage drinking, and the status of prescription drug abuse in Region 7. A key aspect of the coalition in Central Texas has been the willingness of

members to participate with the Prevention Resource Center and to contribute information from their experiences.

Conclusion

Most alcohol, tobacco, and other drug trends have stayed constant in the region with only minor changes presenting. Opioid use does not seem to be as big of a problem in Region 7 as it is in other parts of Texas or the U.S. in general with Methamphetamine appearing to be more of an issue, especially in more rural areas, and non-opioid prescription drugs remaining a problem on college campuses. While Region 7 has certain environmental risk factors that may hinder efforts to prevent substance abuse there are notable protective factors as well, notably good social support association scores and numerous agencies in metropolitan areas.

Key Findings

The following key findings can be said of Region 7:

- Perceptions of marijuana as harmful have decreased among college students and adolescents.
- Alcohol and Marijuana were the primary substances for which people sought DSHS treatment.
- High risk use of alcohol (5 or more drinks in a 2 hour period) by students (grades 7-12) appears to be slowly decreasing in the region though current use has stayed constant.
- There are more prescriptions than people (1.3 prescriptions per person).
- Social support association scores for Region 7 were greater than the state average score.
- The percent of high school seniors who reported marijuana us e in the last 30 days has increased from 10-20% to 20-30% in the last 10 years while lifetime use remains constant around 40%.
- Between 2013 and 2017 Region 7 has held steady as the fourth highest region in opioid related exposure calls to poison control
- The dropout rate in Mills County has greatly increased starting in 2015, with many other counties seeing a jump to above 10 in 2016, while Brazos country has stayed consistently high for the region.

Summary of Region Compared to State

Region 7 tends to have higher social association scores, lower opioid abuse reports, higher hallucinogen reports, and more drug seizures than most of the state. This is likely due to the presence of Austin in the region as well as several major colleges and highways. Most consumption patterns are very similar to the state in general's consumption patterns. Many counties in Region 7 have substantially higher age adjusted suicide rates compared to the state.

Moving Forward

Prevention activities in Region 7 that address underage drinking, marijuana use, and prescription drug abuse are still important for stakeholders. Education for youth is needed to change perceptions about the dangers of alcohol and drugs. Similarly, we believe key findings should direct our actions as we continue moving forward in addressing alcohol and drug use in our region.

Appendix A

PRC Region	Counties
1: Panhandle and South Plains	Armstrong, Bailey, Briscoe, Carson, Castro, Childress, Cochran, Collingsworth, Crosby, Dallam, Deaf Smith, Dickens, Donley, Floyd, Garza, Gray, Hale, Hall, Hansford, Hartley, Hemphill, Hockley, Hutchinson, King, Lamb, Lipscomb, Lubbock, Lynn, Moore, Motley, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Terry, Wheeler, and Yoakum (41)
2: Northwest Texas	Archer, Baylor, Brown, Callahan, Clay, Coleman, Comanche, Cottle, Eastland, Fisher, Foard, Hardeman, Haskell, Jack, Jones, Kent, Knox, Mitchell, Montague, Nolan, Runnels, Scurry, Shackelford, Stonewall, Stephens, Taylor, Throckmorton, Wichita, Wilbarger, and Young (30)
3: Dallas/Fort Worth Metroplex	Collin, Cooke, Dallas, Denton, Ellis, Erath, Fannin, Grayson, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, Tarrant, and Wise (19)
4: Upper East Texas	Anderson, Bowie, Camp, Cass, Cherokee, Delta, Franklin, Gregg, Harrison, Henderson, Hopkins, Lamar, Marion, Morris, Panola, Rains, Red River, Rusk, Smith, Titus, Upshur, Van Zandt, and Wood (23)
6: Gulf Coast	Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton (13)
7: Central Texas	Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson (30)
11: Rio Grande Valley/Lower South Texas	Aransas, Bee, Brooks, Cameron, Duval, Hidalgo, Jim Hogg, Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, San Patricio, Starr, Webb, Willacy, and Zapata (19)

Note. PRC stands for Prevention Resource Center and the number in parenthesis is the total number of counties in that particular region.

2019 Regional Evaluators

Region	Evaluator	Email
1	Vacant	N/A
2	Ashley Simpson	asimpson@abirecovery.org
3	Kaothar Ibrahim Hashim	k.ibrahimhashim@recoverycouncil.org
4	Mindy Robertson	mrobertson@etcada.com
5	Kim Bartel	kbartel@adacdet.org
6	Melissa Romain-Harrott	mromainharrott@councilonrecovery.org
7	Jared Datzman	jdatzman@bvcasa.org
8	Teresa Stewart	tstewart@sacada.org
9	Maanami Bolton	mbolton@pbrcada.org
10	Antonio Martinez	amartinez@aliviane.org
11	Karen Rodriguez	krodriguez@bhsst.org

Glossary of Terms

30 Day Use	The percentage of people who have used a substance in the 30 days before they participated in the survey.
Adolescent	An individual between the ages of 12 and 17 years.
Age-adjustment	Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes allowing communities with different age structures to be compared
ATOD	Alcohol, tobacco, and other drugs.
Crude Mortality Rate	the mortality rate from all causes of death for a population during a specific time period
DSHS	Department of State Health Services
Epidemiology	Epidemiology is concerned with the distribution and determinants of health and diseases, sickness, injuries, disabilities, and death in populations.
Evaluation	Systematic application of scientific and statistical procedures for measuring program conceptualization, design, implementation, and utility; making comparisons based on these measurements; and the use of the resulting information to optimize program outcomes.
Incidence	A measure of the risk for new substance abuse cases within the region.
PRC	Prevention Resource Center
Prevalence	The proportion of the population within the region found to already have a certain substance abuse problem.
Protective Factor	Conditions or attributes (skills, strengths, resources, supports or coping strategies) in individuals, families, communities or the larger society that help people deal more effectively with stressful events and mitigate or eliminate risk in families and communities.
Risk Factor	Conditions, behaviors, or attributes in individuals, families, communities or the larger society that contribute to or increase the risk in families and communities.
SPF	Strategic Prevention Framework. The idea behind the SPF is to use findings from public health research along with evidence-based prevention programs to build capacity and sustainable prevention. This, in turn, promotes resilience and decreases risk factors in individuals, families, and communities.
Substance Abuse	When alcohol or drug use adversely affects the health of the user or when the use of a substance imposes social and personal costs. Abuse might be used to describe the behavior of a woman who has four glasses of wine one evening and wakes up the next day with a hangover.
Substance Misuse	The use of a substance for a purpose not consistent with legal or medical guidelines. This term often describes the use of a prescription drug in a way that varies from the medical direction,

	such as taking more than the prescribed amount of a drug or using someone else's prescribed drug for medical or recreational use.
Substance Use	The consumption of low and/or infrequent doses of alcohol and other drugs such that damaging consequences may be rare or minor. Substance use might include an occasional glass of wine or beer with dinner, or the legal use of prescription medication as directed by a doctor to relieve pain or to treat a behavioral health disorder.
SUD	Substance Use Disorder
TPII	Texas Prevention Impact Index
TSS	Texas Student Survey
VOICES	Volunteers Offering Involvement in Communities to Expand Services. Essentially, VOICES is a community coalition dedicated to create positive changes in attitudes, behaviors, and policies to prevent and reduce at-risk behavior in youth. They focus on changes in alcohol, marijuana, and prescription drugs.
YRBS	Youth Risk Behavior Surveillance Survey

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