



# Acknowledgments

The dedication, expertise, and leadership of many agencies and people made the 2022 Williamson County Community Health Assessment (CHA) possible. This collaboratively developed plan engaged the community to produce a comprehensive assessment that will be used to develop the 2023–2025 Community Health Improvement Plan. Williamson County and Cities Health District led this CHA effort in collaboration with strong community partners, including Ascension Seton, Baylor Scott & White Health, Bluebonnet Trails Community Services, Georgetown Health Foundation, Healthy Williamson County Coalition, Lone Star Circle of Care, Opportunities for Williamson and Burnet Counties, St. David's Foundation, United Way of Williamson County (which merged with United Way for Greater Austin during the CHA process), and Williamson County. An important aspect of this project was the opportunity it provided for hospital systems and local public health agencies to collaboratively assess the health needs of the community we all serve. This shared ownership of community health among diverse stakeholders enhances coordination and use of resources across entities to improve the community's health. The following organizations graciously supported this project:

Ascension Seton

**Baylor Scott & White Health** 

**Bluebonnet Trails Community Services** 

**Georgetown Health Foundation** 

**Healthy Williamson County Coalition** 

Lone Star Circle of Care

Opportunities for Williamson & Burnet Counties

St. David's Foundation

**United Way of Williamson County** 

Williamson County and Cities Health District

Williamson County

Organizations that participated in data collection methods include:

Asian American Community Health Initiative
Baylor Scott and White Health
Bluebonn Trails Community Services
Boys and Girls Club
Catalyst Collective
City of Taylor

Community Resource Centers of Texas Dickey Museum & Multipurpose Center Faith in Action Georgetown

Georgetown Chamber of Commerce (Hispanic Owned Business Circle)

Georgetown Health Foundation
Georgetown Independent School District
Hill Country Community Ministries
Interagency Support Council of Eastern Williamson
County, Inc.

Lone Star Circle of Care
Opportunities for Williamson and Burnet Counties
Partners in Hope
Pavilion Clubhouse of Williamson County
Sacred Heart Community Clinic
The Caring Place
The Georgetown Project
United Way for Greater Austin
United Way of Williamson County (now merged with
United Way for Greater Austin)
Williamson County and Cities Health District
Williamson County Children's Advocacy Center
Williamson County EMS Mobile Outreach Team

Williamson County Juvenile Services

**Workforce Solutions Rural Capital Area** 

LifePark Center

The CHA Task Force thanks the many individuals who contributed to the process (listed in Appendix K: Acknowledgments) as well as the Williamson County residents who provided their opinions during community discussions and interviews.

# **Table of Contents**

Acknowledgments	1
Executive Summary	3
Introduction	
Methodology	g
Community Health Status Assessment	16
Community Themes and Strengths Assessment	94
Top Health Priorities and Health Equity Zones	106
Conclusion and Implications for Williamson County	111
Appendices	112
Appendix A: Works Cited	112
Appendix B: Lists of Tables and Figures	117
Appendix C: List of Abbreviations	
Appendix D: Conduent Healthy Communities Institute Data Scoring Tool Methodology and Results	122
Appendix E: Community Health Survey	124
Appendix F: Community Health Survey Results	
Appendix G: "Youth with Cameras" Photovoice Results	
Appendix H: Social Determinants of Health and COVID-19 Vaccine Survey	
Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute	
Appendix K: Acknowledgments	192

# **Executive Summary**

#### Overview

To strategically address health issues within the community, it is vital to sustain broad community partnerships first and develop a shared vision and goals for the future. Led by Williamson County and Cities Health District, the 2022 Williamson County Community Health Assessment (CHA) was developed by a strong task force of community partners (CHA Task Force): Ascension Seton, Baylor Scott & White Health, Bluebonnet Trails Community Services, Georgetown Health Foundation, Healthy Williamson County Coalition, Lone Star Circle of Care, Opportunities for Williamson and Burnet Counties, St. David's Foundation, United Way of Williamson County, and Williamson County. The 2022 CHA is designed to collect and analyze data to educate and mobilize communities, develop priorities, gather resources, plan actions to improve population health, and enable evidence-based goal setting and decision making for Williamson County.

#### Methodology

The CHA Task Force used a modified format of the Mobilizing for Action through Planning and Partnerships (MAPP) process from the National Association of County and City Health Officials. The MAPP process is a proven systematic framework for identifying community health needs and the resources to meet them. The CHA Task Force used two assessments from the MAPP process: the Community Health Status Assessment and the Community Themes and Strengths Assessment. The findings from each assessment are included as individual sections in the report. Together, the two assessments provide a comprehensive view of the factors influencing the community's health and guide the community's determination of priority areas.

The assessment process involved both quantitative data (e.g., numbers) and qualitative data (e.g., voices of the community) collection through various methods:

- Community Health Survey
- Photovoice (also known as "Youth with Cameras")
- Community and stakeholder focus groups
- Key informant interviews
- Primary and secondary data analysis
- Social Determinants of Health and COVID-19 Vaccine Survey

# Community Health Status Assessment

The Community Health Status Assessment (CHSA) explores aggregated, population-level data to define the health status of the county and provide key findings to residents and stakeholders. Indicators are divided into 11 broad categories based on the Mobilizing for Action through Planning and Partnerships framework's "Core Indicator List." The CHSA draws comparisons between Williamson County and Texas health indicators, as well as applicable targets from the U.S. Department of Health and Human Services' Healthy People 2030 initiative. The CHA Task Force obtained data from many primary and secondary sources at the local, state, and national levels. Significant secondary data sources include American Community Survey, Texas Department of State Health Services, and the U.S. Department of Agriculture. Local organizations, including Bluebonnet Trails Community Services, Hill Country Community Ministries, and Lone Star Circle of Care, also provided primary data.

In 2020, the TOP 10 CAUSES OF DEATH in Williamson County were<sup>3</sup>:

- 1. Heart diseases
- 2. Cancer
- 3. Alzheimer's disease
- 4. Coronavirus disease (COVID-19)
- 5. Cerebrovascular diseases

- 6. Unintentional Injuries
- 7. Chronic lower respiratory diseases
- 8. Parkinson's disease
- 9. Suicide
- 10. Influenza and pneumonia

<sup>&</sup>lt;sup>1</sup> "Phase 3: Collecting and Analyzing Data."

<sup>&</sup>lt;sup>2</sup> "Healthy People 2030."

<sup>&</sup>lt;sup>3</sup> "Underlying Cause of Death 1999-2020: 15 Leading Causes of Death: Williamson County, TX on CDC WONDER Online Database."

#### Community Themes and Strengths Assessment

The Community Themes and Strengths Assessment (CTSA) identifies current community concerns, perceptions about quality of life, and community strengths and assets through feedback from community stakeholders and the public. The concerns the CTSA found reveal four common themes: 1) the importance of engaging the community to improve health, 2) the connection to mental health, which was found to be woven throughout all the health concerns; 3) the impact of disparities, which exist in health across the county; and 4) effects of the COVID-19 pandemic, which has changed people's lives and opportunities to achieve health in many ways.





#### STRENGTHS AND ASSETS

- Communication and collaboration between agencies that provide community resources
- Availability of quality healthcare services
- Availability of community programs and services
- Availability of fresh food
- Availability of parks, green spaces, and opportunities for exercise
- Low crime/safe neighborhoods
- Good schools
- Mental health awareness
- Local assets and wealth

#### **CONCERNS**

#### **Access to Healthcare**

- Affordable healthcare for publicly insured or uninsured
- Awareness of resources and support for navigating healthcare system
- Lack of medical insurance
- Culturally and linguistically appropriate care and services

#### Social and Structural Determinants of Health

- Housing and homelessness
- Transportation
- Cost of living, affordability, and low socioeconomic status
- Broadband or internet access
- Ethnic and racial segregation

#### **Community Health Needs**

- Challenges related to aging
- Chronic disease and chronic disease risk factors
- Dental care
- Mental health, isolation, and substance use

#### Children's Health

- Child abuse
- Intellectual disabilities
- Mental health

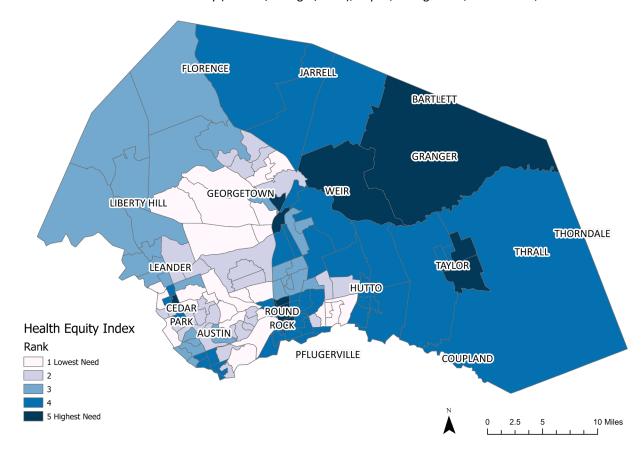
#### **Health Equity Zones**

In 2021, Robert Wood Johnson Foundation ranked Williamson County as the second healthiest county in Texas, yet disparities in health and wellness persist.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> "County Health Rankings: Texas."

According to the Robert Wood Johnson Foundation, health equity "means that everyone has a fair and just opportunity to be as healthy as possible." Health equity is a critical factor that contributes to the economic prosperity, safety, and security of all county residents.<sup>5</sup>

The 2021 Health Equity Index is a measure of socioeconomic need that is correlated with poor health outcomes. In Williamson County, census tracts are ranked from 1 (low need) to 5 (high need) based on their index value relative to similar locations within the county. Gusing the index, five health equity zones (HEZs) were identified in Williamson County. These are census tract areas that tend to have higher-than-average health risks and burdens. The HEZs in Williamson County include census tracts in northern rural Williamson County (Bartlett/Granger/Weir), Taylor, Georgetown, Round Rock, and Cedar Park.



## **Top Health Priorities**

The Community Health Assessment (CHA) is just the first step of the community health improvement process. The companion document, the Community Health Improvement Plan, will be the community's action plan for addressing the top health priorities and coordinating countywide efforts for the next three years. Through feedback and prioritization from residents, stakeholders, and the two Mobilizing for Action through Planning and Partnerships assessments, the CHA identified four health focus areas for decision makers to prioritize to improve health and wellness for all.

Unlike the health priorities in the past two CHAs, these are not ranked, as doing so would neglect the intertwined nature of the top health priorities. Quantitative and qualitative data show the importance of taking a whole-person- and whole-community-centered approach to improving health, for example, supporting holistic healthcare that includes mental health and basic needs, like transportation and housing. Furthermore, data show that the needs of the communities, cities, regions, and neighborhoods in Williamson County differ.

<sup>&</sup>lt;sup>5</sup> "What Is Health Equity?"

<sup>6 &</sup>quot;2021 Health Equity Index."

In developing solutions to health disparities, groups should focus not only on countywide efforts, but also on efforts targeted to each community, neighborhood, and region. More importantly, communities' needs are often better met by equipping them to make decisions that will impact health. By including community members in planning and by facilitating community-led efforts, groups can ensure their resources are used for appropriate and sustainable interventions.

The following are the top health priorities as identified by the 2022 CHA.



# Social and structural determinants of health

Focus on improving basic needs (housing, transportation, broadband or internet access, and living wages) for all and eliminating ethnic and racial segregation.

"Not having money really affects your mental health. You are trying to figure out, how I am going to pay this water bill, this gas bill, this light bill. I got electric due. I got car insurance. It's all rolling through your head, and there is no sleep, because you're trying to figure out how you're going to do it...I'm in a survival mode, and I need finances to just keep my head above water." — Focus Group Participant



#### Mental health and well-being

Focus on building resilience by improving mental health for children and youth and mitigating the impact of the COVID-19 pandemic.

"A lot of hospitals forget that if a parent has a child in a [mental health] crisis, that parent is in crisis too. They forget that they need to help the family navigate and advocate...It is not a rush-through system. Help them learn how to help their family member or their child." — Focus Group Participant



# Chronic disease and chronic disease risk factors

Focus on increasing healthy food access and physical activity.

Junk food is widely marketed, available almost everywhere, and is offered at unbeatably low prices, making it a contributing factor to high obesity rates. Healthy foods tend to be much more expensive than unhealthy food. It is difficult to eat healthily when unhealthy foods, such as donuts and cake, are cheaper than healthy food, such as apples. — Summary of discussion with youth Photovoice participant



#### Access to healthcare

Focus on increasing access to culturally and linguistically appropriate care and dental care for vulnerable populations (e.g., older adults, people of color, and people experiencing homelessness).

"Even the free places...a lot of times, they will still only work on one tooth, or they won't offer certain things like root canals." — Focus Group Participant

# Conclusion and Implications for Williamson County

The 2022 Community Health Assessment is a comprehensive snapshot of the health and quality of life of Williamson County residents. Though the county consistently ranks among the healthiest in Texas, inequity persists — that is, health is not equally accessible for all community members. Community partners will use this assessment to guide the development of the Community Health Improvement Plan, the community's action plan to address the top health priorities and areas of need in the county. The CHA Task Force hopes this assessment will increase engagement in supporting the health of all who live, learn, work, play, worship, or age in the county and inspire efforts to build a resilient Williamson County.

## Introduction

Many factors shape the health and wellness of an individual and a community. According to the County Health Rankings, health is shaped 10% by the physical environment, 40% by social and economic factors, 20% by clinical care, and 30% by health behaviors.<sup>7</sup>

The U.S. Department of Health and Human Services' Healthy People 2030 initiative emphasizes the importance of addressing the social determinants of health to achieving health equity. Social determinants of health are "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." Among the social determinants of health are economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. To improve the health of all Williamson County residents, the county must improve the places and conditions in which people live.

Sustained and widespread community involvement is necessary to strategically address the health issues within the community. These efforts require the resources of multiple agencies and individuals in a shared ownership structure that offers better mobilization and use of resources to improve community health. The first step in this community health improvement process is the Community Health Assessment (CHA).<sup>10</sup>

#### The CHA is designed to:

- 1. Collect, analyze, and use data to educate and mobilize communities, develop priorities, gather resources, and plan actions to improve population health
- 2. Provide a foundation of data to be used for evidence-based goal setting and decision making

## Williamson County Community Health Assessment

Williamson County and Cities Health District led the CHA in collaboration with strong community partners. The 2022 Williamson County CHA Task Force (hereafter known as the CHA Task Force) included Ascension Seton, Baylor Scott & White Health, Bluebonnet Trails Community Services, Georgetown Health Foundation, Healthy Williamson County Coalition, Lone Star Circle of Care, Opportunities for Williamson and Burnet Counties, St. David's Foundation, United Way of Williamson County, and Williamson County.

#### The goals of the CHA Task Force were to:

- 1. Identify existing and emerging community health needs
- 2. Identify the strengths and assets available to improve health
- 3. Determine key issues that affect quality of life
- 4. Identify top health priorities for future health improvement efforts
- 5. Identify the ways COVID-19 has impacted the community

## **Community Description**

Williamson County, Texas is bounded by Burnet County to the West, Bell County to the North, Milam and Lee Counties to the East, and Travis and Bastrop Counties to the South. The second healthiest county in Texas, Williamson County has an estimated population of 613,104 residents — a number that has grown by about 38.7% over the past ten years. 11;12 Austin's continued increase in population and development has fueled local growth, with more Williamson County residents commuting into Austin for work each day.

Williamson County is an economic magnet with major employers such as Dell, Sears Teleserv, Emerson, Round Rock Premium Outlets, Baylor Scott & White Health, St. David's Round Rock Medical Center and Georgetown Hospital, Ascension Seton

<sup>&</sup>lt;sup>7</sup> "County Health Rankings Model."

<sup>8 &</sup>quot;Healthy People 2030."

<sup>&</sup>lt;sup>9</sup> "Social Determinants of Health."

<sup>&</sup>lt;sup>10</sup> "Phase 3: Collecting and Analyzing Data."

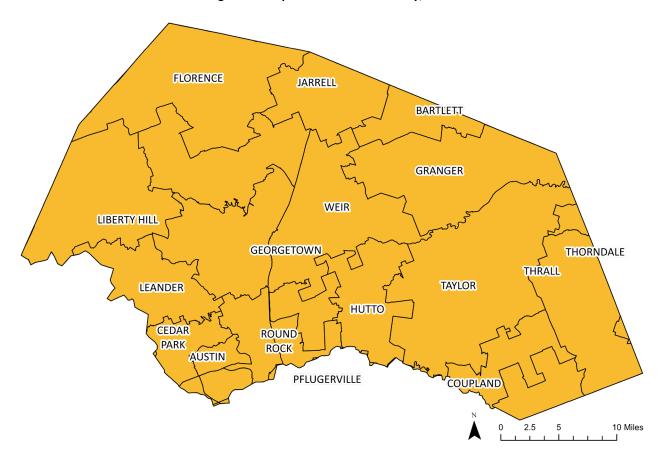
<sup>11 &</sup>quot;County Health Rankings: Texas."

<sup>12 &</sup>quot;2021 Demographics: Williamson County."

Medical Center Williamson, Cedar Park Regional Medical Center, Southwestern University, Texas A&M Health Science Center Round Rock, Texas State University, and TECO Westinghouse.

Figure 1 is a map of Williamson County with city labels and ZIP code outlines.

Figure 1: Map of Williamson County, Texas



# Methodology

### The Mobilizing for Action through Planning and Partnerships Framework

The Mobilizing for Action through Planning and Partnerships (MAPP) framework from the National Association of County and City Health Officials is a proven, systematic, and outcome-oriented process for the ongoing engagement of community stakeholders. The framework helps communities prioritize public health issues, identify resources available, and act. The CHA Task Force used this process to provide an update to the 2019 report. The MAPP framework (Figure 2) includes four assessments that offer important information for improving community health. Because of time constraints and resource

limitations due to COVID-19, the CHA Task Force conducted two of the four assessments to provide a comprehensive understanding of the community's health. <sup>13</sup> These were:

- The Community Health Status Assessment (CHSA), which identifies priority health issues in the community and looks at health outcomes and health behaviors. Questions answered by this assessment include "How healthy are Williamson County residents?" and "What does the health status of our community look like?"
- The Community Themes and Strengths Assessment (CTSA), which identifies important issues in the community and answers the questions "What is important to our community?" and "What assets do we have that can be used to improve community health?"

Community Themes & Strengths Assessment

Organize for Success Partnership Development
Visioning

Four MAPP Assessments
Identify Strategic Issues
Formulate Goals & Strategies
Evaluate Action Plan
Implement

Community Health
Status Assessment

Figure 2: MAPP Framework

**Data Collection Methods** 

The CHA Task Force used both quantitative and qualitative data from primary and secondary data sources to compile the two MAPP assessments and determine health priorities.

Method	Time Frame	Participants	Results	Assessment
Community Health Survey	5/3/2021– 5/16/2021	1,009 Community residents	Appendix F: Community Health Survey Results	CTSA
Photovoice (also known as "Youth with Cameras")	6/10/2021– 7/8/2021	8 Youth photographers (Williamson County)	Appendix G: "Youth with Cameras" Photovoice Results	CTSA
Community and Stakeholder Focus Groups	8/2021–11/2021	21 Community residents and stakeholders	Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute  Appendix J: Community Focus Group and Key Informant Results — IBM Watson Health	CTSA
Key Informant Interviews	8/2021–11/2021	11 Stakeholders	Appendices I and J	CTSA

<sup>13 &</sup>quot;Phase 3: Collecting and Analyzing Data."

				Community Health Status Assessment	
<u>lılı.</u>	Primary and Secondary Data Analysis	Dependent on data source	Dependent on data source	Appendix D: Conduent Healthy Communities Institute Data Scoring Tool Methodology and Results	CHSA
	Social Determinants of Health and COVID- 19 Vaccine Survey	10/1/2020– 2/12/2021	370 Survey respondents	Appendix H: Social Determinants of Health and COVID-19 Vaccine Survey	CHSA

#### Community Health Survey

A countywide Community Health Survey kicked off the first phase of data collection in May 2021. The purpose of the survey was to understand resident perspectives on health and health-related needs, and the results guided topics for subsequent CHA data collection. Survey questions were adapted from the 2018 Community Health Survey, distributed during the 2019 Community Health Assessment process. The CHA Task Force piloted the community survey and adjusted it based on feedback. The Community Health Survey was translated into Spanish, Simplified Chinese, Vietnamese, and Korean. A copy of the Community Health Survey (English) can be found in Appendix E: Community Health Survey. The survey comprised five required questions, four optional demographic questions, and one health leader question.

Because of time constraints and COVID-19 restrictions, surveys were disseminated mostly through digital methods: convenience sampling, media distribution, and the NextDoor app.

- 1. Convenience Sampling The CHA Task Force partnered with Hill Country Community Ministries to distribute surveys during food distributions and with Williamson County and Cities Health District to distribute surveys at the COVID-19 vaccine distribution site in Taylor.
- 2. Media Distribution Links to the electronic survey in English, Spanish, Simplified Chinese, Vietnamese, and Korean were made available on the HealthyWilliamsonCounty.org/CHA website. Organizations included links to the electronic survey in press releases, newsletters, and social media. Advertisements were placed on Community Impact and Healthy Williamson County's Facebook page.
- 3. NextDoor App The NextDoor app is a private social network for neighborhoods. Individuals can connect with their neighbors and engage their local community.

The CHA Task Force collected 923 surveys (91.4% of total collected) with a Williamson County ZIP code. Of these, 785 were electronic (85%) and 138 were paper (15%).

Almost all the surveys (98.0%) collected were in English (Table 1). About 3% of households in Williamson County are linguistically isolated and have difficulty accessing services that are available to fluent English speakers. Linguistic isolation prevents some households from accessing transportation, medical, and social services, as well as employment and educational opportunities. A household is considered linguistically isolated if all adults (those ages 14 and older) in the household speak a language other than English and none speaks English at the level of "very well." <sup>14</sup>

The surveys were separated by region, revealing that the North provided the most surveys (383), followed by the South (283) and the West (207). Paper surveys constituted 42% of surveys collected in the East (Figure 3). The percentage of surveys collected was highest in the North (41.5%), where only 19.1% of the population lives, yet in the West, where 39.7% of residents live, only 22.4% of residents completed a survey (Figure 4). Additional survey results are in Appendix F: Community Health Survey Results.

<sup>14 &</sup>quot;Linguistic Isolation."

Table 1: Total Surveys Collected in Williamson County

Survey Type	Count	Percent
Electronic	785	85.0%
English	779	84.4%
Chinese	4	0.4%
Korean	1	0.1%
Spanish	1	0.1%
Paper	138	15.0%
English	128	13.9%
Spanish	12	1.3%
Total	923	100%

Figure 3: Electronic and Paper Surveys Collected by Williamson County Region

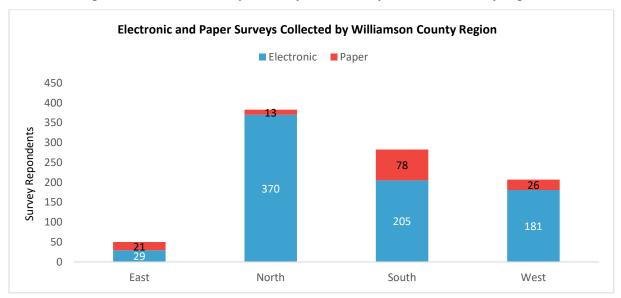
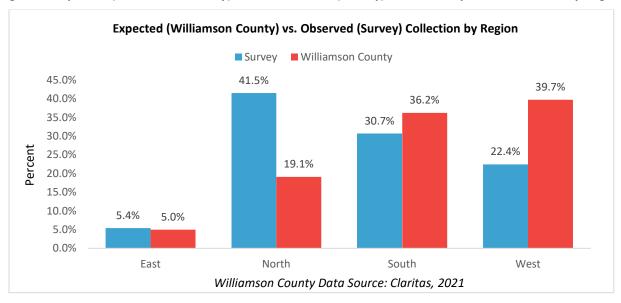


Figure 4: Expected (Williamson County) versus Observed (Survey) Collection by Williamson County Region



#### Photovoice (also known as "Youth with Cameras")





The Community Health Assessment is designed to gather information from community leaders, experts, and members of all ages. This information is collected through

numerous methods, from surveys and key informant interviews to formal data abstraction and analysis. The Community Health Survey conducted in May 2021 identified three areas of focus:

- Mental health and isolation
- Healthy eating and exercise
- Basic needs

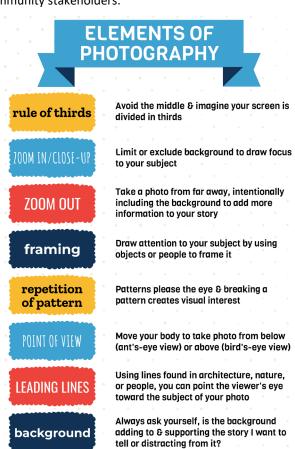
To gain more perspective on these areas, Williamson County and Cities Health District (WCCHD) conducted a Photovoice study in June 2021 to gather insights and ideas from youth in the community. Photovoice is a qualitative method of community-based participatory research that formulates narratives to describe health needs and solutions. WCCHD recruited youth photographers to enhance community leaders' understanding of challenges, strengths, and perspectives faced in the community. This initiative was called "Youth with Cameras" in Williamson County. Youth photographers were given \$20 gift cards for participating.

WCCHD recruited youth by distributing flyers (pictured to the left) through community stakeholders.

Youth photographers were identified through partner organizations: Catalyst Collective, Boys and Girls Club of Georgetown, and The Georgetown Project.

- Catalyst Collective exists to help the next generation bring their unique purpose to life.
- Boys and Girls Club of Georgetown provides a safe space for youth to learn and grow, build relationships with adult professionals, and engage in lifeenhancing programs and character development experiences.
- The Georgetown Project's NEST Empowerment Center is a safe haven that offers basic needs, counseling, academic, and enrichment support for Georgetown Independent School District high school students who are homeless, at risk, or living in transition.

After registration and parental consent were complete, there were two Zoom meetings with the photographers. The first was an introductory meeting, in which Meg Green of Safe Austin conducted a 90-minute "Photo 101" workshop to teach ten youth about photography composition and methods to capture meaningful pictures. Green's presentation was summarized in the "Elements of Photography" handout for students (pictured to the right).



Following the workshop, WCCHD investigators explained the three areas of focus that should serve as themes for photographers' pictures from their neighborhoods, home, and local community. Eight youth submitted their photographs to WCCHD over the next two weeks.

The second Zoom meeting was a one-hour focus group with the eight youth who submitted photographs. Three separate focus groups were held: two for youth in the Boys and Girls Club of Georgetown and The Georgetown Project, and one for youth in Catalyst Collective. During these focus groups, photographers were encouraged to use the SHOWD acronym to describe their pictures:

- S: What do you see? What is the first thing you notice?
- H: What is really happening?
- O: How is this related to **our** lives? Make it personal.
- W: Why does this condition exist?
- D: What are some things we can do about it?

Additional prompts for the discussions were:

- How does \_\_\_\_\_ affect you?
- Does \_\_\_\_ affect your community?
- What would you like to see done in your neighborhood? What is on your wish list?

Focus group discussions were recorded, transcribed, and analyzed in Appendix G: "Youth with Cameras" Photovoice Results.

#### Community and Stakeholder Focus Groups



An outside consultant, Texas Health Institute (THI), conducted two English-speaking focus groups of four to five individuals. A total of nine community residents participated across the county. Focus groups capturing lived experiences and voices were conducted among the following population groups:

- Participants included female residents of ZIP codes 78634 and 78628 with ages ranging from 30 to 65. Participants self-identified as Black/African American, White, and Not Hispanic/Latinx.
- Participants included male and female residents of ZIP codes 78729, 78681, and 78634 with ages ranging from 40 to 65+. Participants self-identified as Mexican/Mexican American/Chicano, Hispanic/Latinx/Spanish origin, White, Not Hispanic/Latinx, and Black/African American.

The CHA Task Force partnered with trusted organizations in the community to recruit participants, who received a \$25 gift card for participating. Facilitators asked open-ended questions to allow participants to share their stories of health and wellness in the community.

A variety of potential focus groups were promoted during the months of September and October through community partners; however, there were many limitations that prevented them from being held. The COVID-19 pandemic has hampered the ability to hold in-person focus groups, limiting the participation of older adults and individuals with digital access issues. Many community partners have reduced participation from the community in their programs and services, resulting in their inability to recruit for focus groups. There is a general sense of COVID-19 fatigue among stakeholders and community members. Results of the focus groups are in Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute.

Another outside consultant, IBM Watson Health — which facilitates health research using digital tools and analytics — conducted one stakeholder focus group of ten to 14 stakeholders. Stakeholders discussed strengths in and challenges to the community's health, access and barriers to good health, community partnerships, and opportunities to improve health in the community, then prioritized community health needs. Summaries are in Appendix J: Community Focus Group and Key Informant Results — IBM Watson Health.

#### **Key Informant Interviews**



Texas Health Institute conducted key informant interviews with nine stakeholders from the following organizations:

- Asian American Community Health Initiative
- Workforce Solutions Rural Capital Area
- Georgetown Chamber of Commerce (Hispanic Owned Business Circle)
- Williamson County Children's Advocacy Center
- Williamson County Indigent Care Program at WCCHD
- Dickey Museum & Multipurpose Center
- Georgetown Independent School District
- Harris-Ross Head Start

Key informants discussed strengths in and challenges to the community's health, access and barriers to good health, community partnerships, and opportunities to improve health in the community. Key informant notes are summarized in Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute.

IBM Watson Health conducted seven additional surveys and conducted interviews with the following organizations to supplement the stakeholder focus group:

- Bluebonnet Trails Community Services
- City of Taylor
- Baylor Scott & White Health
- Community Resource Centers of Texas

- LifePark Center
- Sacred Heart Community Clinic
- United Way for Greater Austin

The COVID-19 pandemic required IBM Watson Health to conduct virtual focus groups, web-based video interviews, and telephone interviews as well as expand outreach through a web-based survey. Even with these additional efforts, many key informants were unable to participate due to the later surge of COVID-19 cases (including Delta variant cases) requiring their management, attention, and time. Key informants discussed strengths in and challenges to the community's health, access and barriers to good health, community partnerships, and opportunities to improve health in the community, then prioritized community health needs. Key informant notes are in Appendix J: Community Focus Group and Key Informant Results — IBM Watson Health.

#### Primary and Secondary Data Analysis



The CHA team obtained data from many secondary sources at the local, state, and national levels. Significant secondary data sources included:

- American Community Survey (ACS)
- Area Health Resource File (AHRF)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Centers for Medicare & Medicaid Services (CMS)
- County Business Patterns (CBP)
- Feeding America
- Healthy Communities Institute (Conduent)
- National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)
- National Vital Statistics System (NVSS)
- Nielsen Claritas and SiteReports
- Texas Department of Family and Protective Services
- Texas Department of State Health Services (DSHS)
- Texas Education Agency (TEA)
- Texas Office of the State Demographer (OSD)
- Uniform Crime Reporting FBI
- U.S. Census Bureau (Census)
- U.S. Department of Agriculture (USDA)

Primary data were also obtained from local organizations (listed below) and through the Social Determinants of Health and COVID-19 Vaccine Survey.

- Bluebonnet Trails Community Services
- Hill Country Community Ministries
- Lone Star Circle of Care

- United Way of Williamson County 2-1-1 Hotline
- Findhelp (formerly Aunt Bertha)

The CHA team used the Conduent Healthy Communities Institute (HCI) Data Scoring Tool to rank health topic areas from data on the Healthy Williamson County website, from which most secondary data were gathered. The tool provides a summary of indicator comparisons, which can be used to compare health and health-related issues in a specific community. Scores for indicators and topics are calculated by Conduent HCI's Indicator Management System. The results and methodology are in Appendix D: Conduent Healthy Communities Institute Data Scoring Tool Methodology and Results.

#### Prioritization of Health Equity Zones and Top Health Priorities.

The 2019 CHA identified health equity zones (HEZs) from available census tract—level measures related to poorer health outcomes. New HEZs will be updated once 2020 Census data are released. Health priorities were selected based on themes identified through the two Mobilizing for Action through Planning and Partnerships assessments as well as prioritization by the community and stakeholders through the Community Health Survey, focus groups, and key informant interviews.

#### **Data Limitations**

#### **Community Health Status Assessment**

The availability of data sources was the most significant limitation to the Community Health Status Assessment. The lengthy process of data collection, aggregation, and publication by multiple sources prevented access to comprehensive, recent data for the assessment. For some health indicators, the available data were several years old and may no longer be representative of the community. Data may be suppressed and/or limited for certain racial and ethnic groups due to small numbers of significant health events. This restricts the ability to identify disparities among subgroups, namely Asian Americans, American Indians/Alaska Natives, and Native Hawaiians/Pacific Islanders.

The CHA Task Force strived to include the most up-to-date data available, incorporating local data from the most recent full calendar year and certain secondary data from the past two years. However, the most recent data from some secondary data sources were collected more than two years before, limiting the ability to draw full conclusions based on recent data. While there was greater representation of local data from community organizations than in past Community Health Assessments, the CHA Task Force would like to include more local data to provide a truly comprehensive snapshot of health status in Williamson County.

The surveys collected were not geographically representative of Williamson County's population: the proportion of surveys collected from the North region is twice its share of the population, while the proportion of surveys collected from the West region is almost half its share of the population. The proportion of surveys collected from the South and East regions were more representative of their shares of the population.

#### **Community Themes and Strengths Assessment**

For the Community Themes and Strengths Assessment, assuring representation from all population groups and sectors in Williamson County proved challenging. Respondents to the Community Health Survey tended to be older, female, and White compared to the demographics of Williamson County. The survey lacked representation from vulnerable populations and minority groups and prevented individuals who have barriers to using the internet or technology from responding.

In accordance with social distancing guidelines during the COVID-19 pandemic, it was necessary to conduct virtual focus groups, which limited individuals with barriers to internet access from participating. Furthermore, it was very difficult to recruit participants despite promotion through community organizations, social media, and press releases. The CHA Task Force sought to conduct focus groups in Eastern Williamson County and among the Spanish-speaking population; however, participation was low, and no focus group was held solely in Spanish. The CHA Task Force planned to hold four community focus groups with Texas Health Institute, of which only two were held.

To compensate for the lack of representation of various populations, key informant interviews with stakeholders were held. Despite holding these virtually, many key informants were unable to participate due to the later surge of COVID-19 cases (including Delta variant cases) requiring their management, attention, and time. Bias in stakeholders' responses should be considered.

# COMMUNITY HEALTH STATUS ASSESSMENT



# **CORE INDICATORS**

Based on the NACCHO MAPP Framework

- C1. Demographic Characteristics
- C2. Socioeconomic Characteristics
- C3. Health Resource Availability
- C4. Quality of Life
- C5. Behavioral Risk Factors
- C6. Environmental Health Indicators
- C7. Social and Mental Health
- C8. Maternal and Child Health
- C9. Death, Illness, and Injury
- C10. Communicable Disease
- C11. Sentinel Events
- C12. COVID-19

#### Overview

The Community Health Status Assessment (CHSA) presents aggregate population-level data in the form of statistics, graphs, charts, and maps to define the health status of Williamson County. Data were obtained from many primary and secondary sources at the local, state, and national levels. The CHA Task Force collected primary data through online and household surveys as well as through focus groups, listening sessions, and Photovoice. Quotes from focus groups are included to provide lived experiences and real-world context to supplement quantitative findings. Secondary data include health indicators, which have been analyzed to compare rates or trends of health outcomes and determinants. The most up-to-date secondary data can be found at the Healthy Williamson County website (www.healthywilliamsoncounty.org). Rankings of topic areas of secondary health data highlighted on the website are found in Appendix D: Conduent Healthy Communities Institute Data Scoring Tool Methodology and Results.

The CHSA divides indicators into 11 broad categories based on the Mobilizing for Action for Planning and Partnerships framework's "Core Indicator List," with a 12th category for COVID-19. Comparisons are drawn between Williamson County and Texas health indicators, as well as

applicable Healthy People 2030 targets. Healthy People 2030 is a nationwide set of ten-year health promotion and disease prevention goals established by the United States Department of Health and Human Services. <sup>15</sup> Achievements and gaps in health status are identified among race, ethnicity, age, gender, or socioeconomic groups within the county. Key findings are summarized at the end of each section to help stakeholders plan, implement, and establish evidence-based health improvements for specific geographic areas and residents of Williamson County.

For the purposes of this assessment, the non-Hispanic White population was referred to as "White," the non-Hispanic African American population was referred to as "Black," and the Asian American population as "Asian." The term "Hispanic" is used and does not distinguish by race, although the definition by the U.S. Census is "Hispanic White."

# C1. Demographic Characteristics

The population of Williamson County continues to grow and expand as more people move to Central Texas. Williamson County's growth rate from 2011 to 2021 was 2.5 times that of the state of Texas. This rapid population growth results in a changing population landscape, which will influence the availability of health resources and services.

The tables, maps, and discussions in this section examine three key topic areas: demographic distribution, population change, and population projection. Demographic distribution describes gender, age, race, and ethnicity of Williamson County residents. Population change identifies growth and migration in the county, specifically by city and ZIP code. Lastly, population projection predicts county growth by 2050 for gender, age, race, and ethnicity. The continuous tracking of demographic trends will assist strategic planning and program development to address the health status of all Williamson County residents.

#### Demographic Distribution

The gender distribution in Williamson County is comparable to the gender distribution in Texas, with slightly more females (50.8%) than males (49.2%) in the county (Table 2).

Individuals ages 25 to 44 years make up the largest age group in the county (28.5%) and in Texas (27.5%) (Table 3). Additionally, individuals younger than age 18 years make up 24.9% of the county's population, like they do Texas' (25.5%).

In 2018, the largest racial/ethnic group in Williamson County was White (72.4%), followed by Asian American (8.2%), Other (7.7%), Black/African American (7.0%), American Indian/Alaska Native (0.7%) and Native Hawaiian/Pacific Islander (0.1%)

<sup>15 &</sup>quot;Healthy People 2030."

(Table 2). About one in four persons was Hispanic (25.7%). Compared to Texas', Williamson County's population has a higher percentage of White and Asian American persons and a lower percentage of Black/African American, Hispanic/Latino, and Other persons.

Table 2: Demographic Characteristics of Williamson County and Texas, 2021

Demographic Characteristics of Williamson County and Texas, 2021

Population	Williamson County	Texas
Population Count	613,104	29,570,729
Percent Growth from April 1, 2011, to January 2021	38.7%	15.3%
Sex		
Male	49.2%	49.6%
Female	50.8%	50.4%
Age		
<18	24.9%	25.6%
18-24	8.7%	9.9%
25-44	28.5%	27.5%
45-64	25.0%	23.6%
65+	12.9%	13.5%
Race		
White	72.4%	66.7%
Black/African American	7.0%	12.3%
Asian American	8.2%	5.3%
American Indian/Alaska Native	0.7%	0.7%
Native Hawaiian/Pacific Islander	0.1%	0.1%
Other	7.7%	11.6%
2+ Races	3.9%	3.3%
Ethnicity		
Hispanic/Latino	25.7%	40.9%
Non-Hispanic/Latino	74.3%	59.1%
D 1 C Cl 11 2021		

Data Source: Claritas, 2021

#### **Population Change**

Between 2010 and 2020, the county's population grew by 45.6%, which is more than double the growth within Texas (17.8%) (Table 3). Liberty Hill, Leander, and Hutto lead the county in growth, with Liberty Hill reaching growth that is more than seven times the county growth rate and almost 20 times the state growth rate.

Table 3: Population Change in Williamson County and Texas, 2010–2020

Population Change in Williamson County and Texas, 2010–2020

Geographic Area	2010 Pop. <sup>1</sup>	2020 Pop. <sup>2</sup>	% Growth 2010–2020
Texas	24,311,891	28,635,442	17.8%
Williamson County	391,715	570,437	45.6%
Cedar Park	44,877	77,181	72.0%
Georgetown	44,109	75,470	71.1%
Hutto	12,306	26,778	117.6%
Leander	23,295	60,613	160.2%
Liberty Hill	1,028	4,633	350.7%
Round Rock	93,092	128,812	38.4%
Taylor	14,928	17,291	15.8%

Data Sources: <sup>1</sup>American Community Survey (ACS), 2006–2010; <sup>2</sup>ACS, 2016–2020

Population change in Williamson County is broken down by ZIP code in Figure 5. All ZIP codes within Williamson County have experienced population growth from 2010 to 2021, ranging from 1.8% in 76511 (Bartlett) to 90.4% in 76537 (Jarrell). Other growing ZIP codes include 78634 (Hutto) at 65.0%, 78665 (Round Rock) at 68.7%, 78641 (Leander) at 60.3%, and 78642 (Liberty Hill) at 61.4%.

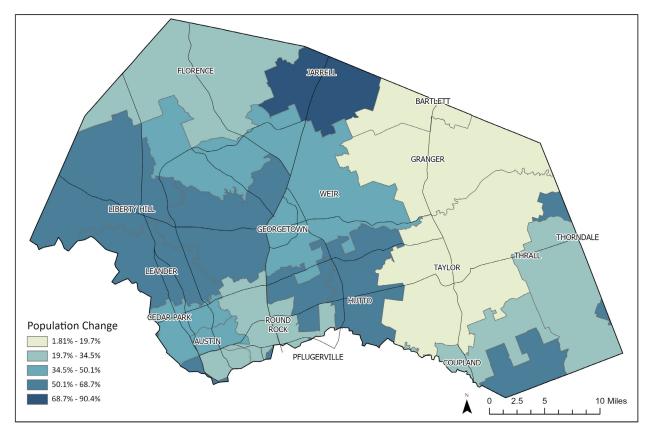


Figure 5: Population Change by ZIP Code in Williamson County, 2010-2021

Data Source: Claritas, 2021 Date Created: 7/22/2021

#### **Population Projection**

At the current rate of growth, the Office of the State Demographer predicts that the county's population will reach nearly 1.7 million residents by 2050 (Table 4). Williamson County is projected to experience population growth among multiple age, gender, and racial/ethnic groups. The percentage of females is projected to increase from 50.8% to 51.5% by 2050. Among the age groups, only the "65+" population is projected to increase, growing from 12.9% to 18.1%. The percentage of the population that is Hispanic/Latino is projected to increase from 24.4% to 27.1% by 2050, while the percentage of the population that is Asian American is projected to triple, from 6.8% to 25.5%. The percentage of the population that is White Non-Hispanic is projected to decrease from 59.4% to 36.3%.

Table 4: Population Projection by Demographic Characteristics in Williamson County, 2021 and 2050 Population Projection by Demographic Characteristics in Williamson County, 2021 and 2050

	<b>2021</b> <sup>1</sup>	<b>2050</b> <sup>2</sup>
Population	613,104	1,645,982
Sex		
Male	49.2%	48.5%
Female	50.8%	51.5%
Age		
<18	24.9%	23.9%
18–24	8.7%	7.6%
25–44	28.5%	28.1%
45–64	25.0%	22.3%
65+	12.9%	18.1%
Race/Ethnicity	<b>2019</b> <sup>3</sup>	2050
White (Non-Hispanic)	59.4%	36.3%
Hispanic/Latino	24.4%	27.1%
Black/African American (Non-Hispanic)	6.1%	6.6%
Asian American (Non-Hispanic)	6.8%	25.5%
Total Other	3.3%	4.5%
American Indian/Alaska Native (Non-Hispanic)	0.2%	N/A
Native Hawaiian/Pacific Islander (Non-Hispanic)	0.1%	N/A
Other	3.0%	N/A

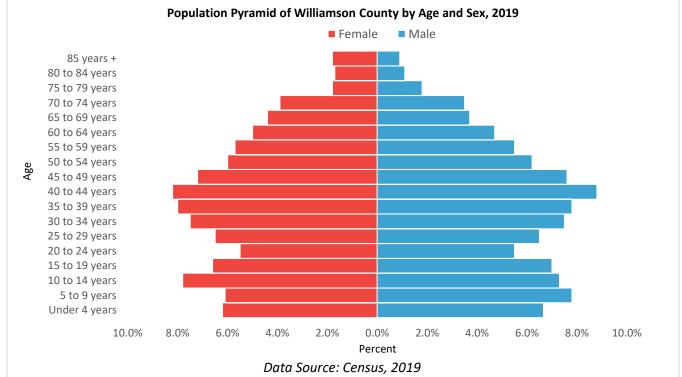
Notes: \*Population Projections: 1.0 Migration Rate; N/A: Population Percentages and Projections Not Available.

Data Sources: ¹Claritas, 2021; ²Office of the State Demographer, 2050; ³American Community Survey 5 Year Estimate, 2015-2019

The figures below display population pyramids for Williamson County in 2019 (Figure 6) and 2050 (Figure 7). Population pyramids are used to display population distribution and predict population growth by gender and age groups.

Figure 6: Population Pyramid of Williamson County by Age and Sex, 2019

Population Pyramid of Williamson County by Age and Sex, 2019 ■ Female Male



Population Pyramid of Williamson Count by Age and Sex, 2050 ■ Female Male 85 years + 80 to 84 years 75 to 79 years 70 to 74 years 65 to 69 years 60 to 64 years 55 to 59 years 50 to 54 years 45 to 49 years 40 to 44 years 35 to 39 years 30 to 34 years 25 to 29 years 20 to 24 years 15 to 19 years 10 to 14 years 5 to 9 years Under 4 years 6.0% 10.0% 8.0% 4 0% 2.0% 0.0% 2.0% 4.0% 6.0% 8.0% 10.0%

Figure 7: Population Pyramid of Williamson County by Age and Sex, 2050

#### Language Spoken at Home

A large majority (73.7%) of Williamson County residents over the age of 5 years speak English at home, as compared to 62.2% of Texas residents (Table 5). Of the Williamson County residents who speak a language other than English at home (26.3%), 18.5% speak Spanish.

Data Source: Office of the State Demographer, 2050

Percent

Table 5: Language Spoken at Home (Ages 5 and Over) in Williamson County and Texas, 2021

Language Spoken at Home (Ages 5 and Over) in Williamson County and Texas, 2021

Indicator	Williamson County	Texas
Speak only English	73.7%	62.2%
Speak a language other than English	26.3%	37.8%
Spanish	18.5%	31.7%

Data Source: Claritas, 2021

#### **Key Findings**

Williamson County has experienced rapid growth over the past 11 years and will continue to experience significant growth over the next three decades. This growth has the potential to cause a shortage of providers and services, placing greater demands on the healthcare system. In addition, health resources and programs will need to be structured around age, race, ethnicity, culture, language, and geography to accommodate residents of Williamson County. Below are key considerations for stakeholders responsible for healthcare system planning and development.

- Growing numbers of people are moving to the county, especially to rural areas. Those living in rural areas cite transportation as a major barrier to healthcare access. A lack of adequate transportation may result in rescheduled or missed appointments, delayed care, and missed or delayed medication use. This ultimately leads to poor management of chronic illness and health outcomes. 16 Programs should strongly consider expanding their services to rural areas to increase healthcare coverage and access.
- Population growth is expected for those ages 65 and older. This will increase the prevalence of chronic diseases in Williamson County, since "it has been well established that the incidence of chronic disease rises sharply with age

<sup>&</sup>lt;sup>16</sup> Syed, Gerber, and Sharp, "Traveling towards Disease: Transportation Barriers to Health Care Access."

and that the majority of patients with a chronic ailment are over the age of 65 years."<sup>17</sup> Population aging is associated with an increasing healthcare expenditure. Future planning should consider chronic disease management, quality of life resources, and preventive healthcare for the aging population.

The Asian population is expected to triple and the White population is expected to decrease by 23 percentage points by 2050. These findings should be considered when planning health improvement and intervention strategies. Although White and Asian populations have the same leading cause of morbidity and mortality, programs must be tailored to the target populations, which can be done by designing culturally competent interventions to strengthen awareness, knowledge, and access to clinical and preventive health resources and services.<sup>18</sup>

#### C2. Socioeconomic Characteristics

Socioeconomic characteristics include indicators that affect health status, such as median household income, poverty, unemployment, and education. When examined together, these indicators describe an individual's socioeconomic status. Research shows that socioeconomic status "is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health." <sup>19</sup>

#### Median Household Income

Why is this important?

"Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have more educated residents and lower unemployment rates. Higher employment rates lead to better access to health care and better health outcomes because many families get their health insurance through the employer. Areas with higher median household incomes also have higher home values and their residents enjoy more disposable income." <sup>20</sup>

Williamson County has a median household income of \$90,834, which is about \$27,000 more than the median household income for Texas (\$63,826) (Figure 8).<sup>21</sup> The White (\$90,878) and Asian (\$125,472) populations have median household incomes above the Williamson County total. The Hispanic (\$76,148), Black (\$73,186), and American Indian and Alaska Native (AI/AN) (\$77,813) populations have median household incomes below the county total.

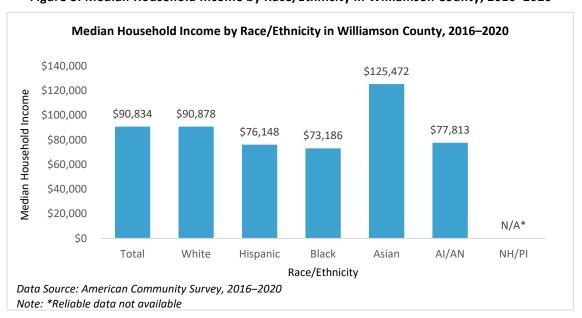


Figure 8: Median Household Income by Race/Ethnicity in Williamson County, 2016-2020

<sup>&</sup>lt;sup>17</sup> Prasad, Sung, and Aggarwal, "Age-Associated Chronic Diseases Require Age-Old Medicine: Role of Chronic Inflammation."

<sup>&</sup>lt;sup>18</sup> "Profile: Asian Americans."

<sup>&</sup>lt;sup>19</sup> "Work, Stress, Health and Socioeconomic Status."

<sup>&</sup>lt;sup>20</sup> "Median Household Income."

<sup>&</sup>lt;sup>21</sup> "Median Income in the Past 12 Months (in 2020 Inflation-Adjusted Dollars)."

More than one in five (22.5%) Williamson County households earn more than \$150,000, while about one in eight (14.2%) households earns less than \$35,000 (Figure 9). Additionally, more than one in three (36.8%) households earn between \$75,000 and \$149,000, and about one in four (26.5%) households earns between \$35,000 and \$74,999. Compared to Texas, Williamson County has a higher percentage of households that earn \$75,000 or more, while Texas has a higher percentage of households that earn less than \$75,000 (Figure 9 and Figure 10).

Figure 9: Household Income Distribution in Williamson County, 2016–2020

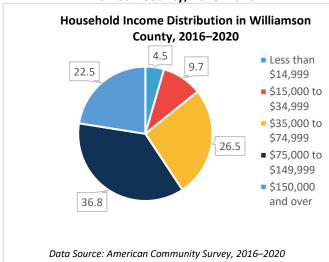
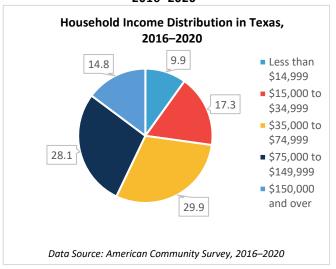


Figure 10: Household Income Distribution in Texas, 2016–2020



#### **Poverty**

Why is this important?

"A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased taxes and buying power, poverty is associated with lower-quality schools and decreased business survival." <sup>22</sup>

Williamson County has a lower percentage (6.1%) of individuals living below the federal poverty line compared to Texas (14.2%) (Table 6). The percentage of adults ages 65 and older who are living in poverty is 5.4% in Williamson County and 10.7% in Texas. Of Williamson County adults ages 18 to 64 with any disability, 10.2% are living in poverty; in Texas, 20.0% are living in poverty. The percentage of youth under age 18 who are living in poverty is 6.3% in Williamson County and 20.0% in Texas.

Table 6: Percent of Residents Living Below the Federal Poverty Line (FPL) in Williamson County and Texas, 2016–2020

# Percent of Residents Living Below the Federal Poverty Line (FPL) in Williamson County and Texas, 2016–2020

Indicator	Williamson County	Texas
People Living Below FPL	6.1%	14.2%
People 65+ Living Below FPL	5.4%	10.7%
People with a Disability Living Below FPL	10.2%	20.0%
Children Under 18 Living Below FPL	6.3%	20.0%

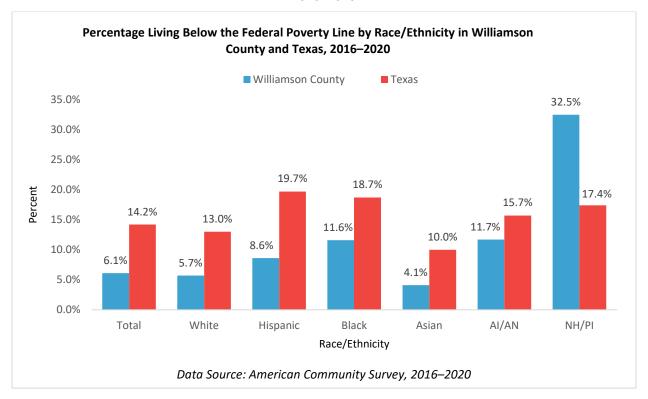
Data Source: American Community Survey, 2016-2020

Williamson County has lower percentages of residents living below the federal poverty line across most racial/ethnic groups compared to Texas (Figure 11). In Williamson County, the percentages of residents living in poverty among the White (5.7%) and Asian (4.1%) populations are lower than the overall county value of 6.1% (Figure 11). In contrast, the percentages of residents living in poverty among the Hispanic (8.6%), Black (11.6%), American Indian and Alaska Native (AI/AN) (11.7%), and Native Hawaiian and Pacific Islander (NH/PI) (32.5%) populations in Williamson County are higher than the overall county

<sup>&</sup>lt;sup>22</sup> "Families Living Below Poverty Level."

value. The percentage of the NH/PI population that is living in poverty is far higher than the percentages among all other racial/ethnic groups and is the only racial/ethnic group of which the percentage of the population living in poverty is higher than that in Texas (17.4%).

Figure 11: Percentage Living Below the Federal Poverty Line by Race/Ethnicity in Williamson County and Texas, 2016–2020



#### Unemployment

Why is this important?

On the effects of unemployment, Healthy Williamson County writes:

The unemployment rate is a key indicator of the local economy. Unemployment occurs when local businesses are not able to supply enough and/or appropriate jobs for local employees and/or when the labor force is not able to supply appropriate skills to employers. A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs.<sup>23</sup>

About five percent (4.5%) of the Williamson County workforce ages 16 and older is unemployed, compared to 6.4% in Texas (Table 7). Williamson County has the same percentage of veterans unemployed (4.6%) as Texas (4.6%).

Table 7: Percentage of Civilian Workforce Unemployed in Williamson County and Texas, 2021

Percentage of Civilian Workforce Unemployed in Williamson County and Texas, 2021

	,	
Indicator	Williamson County	Texas
Unemployment-civilian*1	4.5%	6.4%
Unemployment-Veterans <sup>2</sup>	4.6%	4.6%

Notes: \*Unemployment Rate as of April 1st, 2021

Data Sources: 1U.S. Bureau of Labor Statistics, 2021; 2American Community Survey, 2016–2020

<sup>&</sup>lt;sup>23</sup> "Unemployed Workers in Civilian Labor Force."

Between 2015 and 2020, unemployment rates among the civilian workforce were lower in Williamson County than in Texas (Figure 12). However, the percentage of unemployed workers in Williamson County increased from 3.6% in 2013 to 6.8% in 2020.

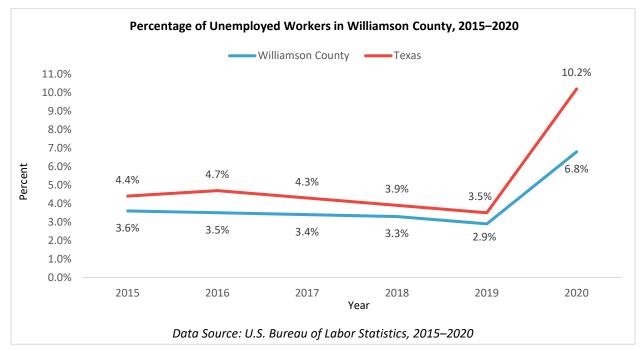


Figure 12: Percentage of Unemployed Workers in Williamson County and Texas, 2015–2020

#### **Educational Attainment**

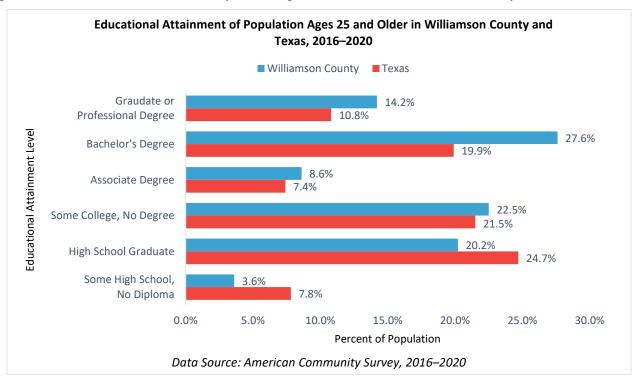
Why is this important?

"Graduating high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates are also an important indicator of the performance of the educational system." <sup>24</sup>

About 73% of Williamson County adults ages 25 years and older have attained some college- or higher-level education (combined percentages with a graduate or professional, bachelor's, or associate degree, or some college), which is higher than Texas (about 60%) (Figure 13). In Williamson County, about one in 25 residents has some high school education but no diploma (3.6%), and about one in five residents has obtained a high school diploma (20.2%). About one in four residents has some college experience but no degree (22.5%). About one in twelve has an associate degree (8.6%), one in four has a bachelor's degree (27.6%), and one in seven has a master's or doctoral degree (14.2%).

<sup>&</sup>lt;sup>24</sup> "Veterans With a High School Degree or Higher."

Figure 13: Educational Attainment of Population Ages 25 and Older in Williamson County and Texas, 2016–2020



#### **Basic Needs**

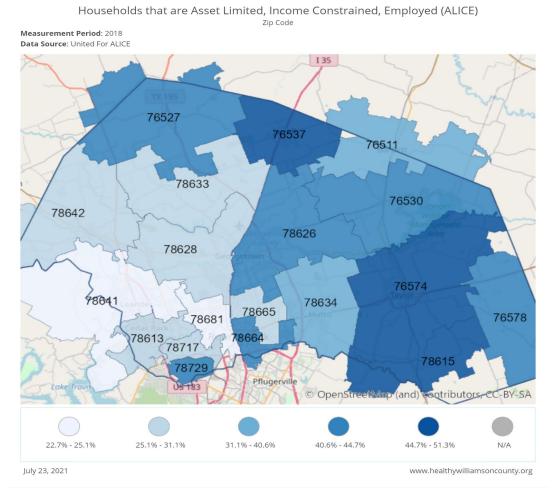
Why are these important?

The abbreviation ALICE stands for Asset Limited, Income Constrained, Employed. "ALICE households represent men and women of all ages and races who are working but unable to afford the basic necessities of housing, food, childcare, health care, and transportation due to the lack of jobs that can support basic necessities and increases in the basic cost of living." <sup>25</sup> In Williamson County, 33.1% of households are ALICE, which is higher than the Texas value (30.0%).

According to Figure 14, there are higher percentages of ALICE households east of Interstate 35. The highest percentages of households that are ALICE are in ZIP codes 76574 (51.3%), 78615 (49.7%), and 76537 (48.5%).

<sup>&</sup>lt;sup>25</sup> "Households That Are Asset Limited, Income Constrained, Employed (ALICE)."

Figure 14: Households that are Asset Limited, Income Constrained, Employed (ALICE), 2018



#### Local Spotlight: United Way of Williamson County 2-1-1 Hotline

United Way of Williamson County is focused on "the health, financial stability and education of every person in every Williamson County community." They do so "by strategically investing in education, financial stability, health and basic needs programs and resources that serve people [and] communities." The 2-1-1 hotline, operated by United Ways across Texas, connects "people with services and resources in their local communities, including people who need financial or other assistance as a result of lost wages from event cancellations, business closures, and quarantines." 27

In the first and second quarters of 2021, 2-1-1 received calls for 8,967 needs in Williamson County. The top needs are listed in Table 8. Figure 15 shows the number of calls by Williamson County ZIP code in 2020. The highest number of calls is from ZIP code 78664, followed by 78613 and 78641.

Table 8: Top 2-1-1 Needs in Williamson County, 2021

Top 2-1-1 Needs in Williamson County, 2021

Top Needs	Number of Calls
COVID-19 Immunization Clinics	1067
Rent Payment Assistance	669
Rent Payment Assistance * COVID-19	625
Vaccine Information * COVID-19	578
Electric Service Payment Assistance	468

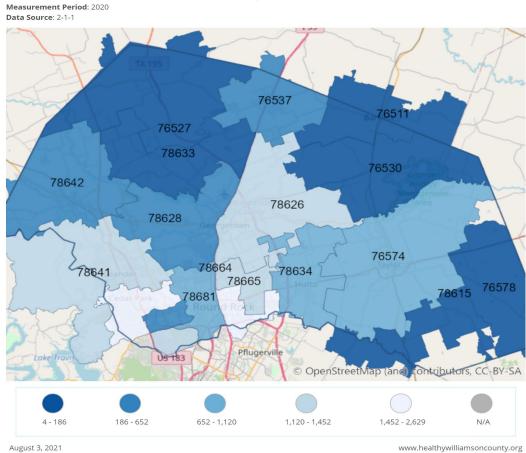
Data Source: United Way of Williamson County, January-June 2021

<sup>&</sup>lt;sup>26</sup> "Frequently Asked Questions."

<sup>&</sup>lt;sup>27</sup> "211 Is Here for Texas Information."

Figure 15: 2-1-1 Calls by ZIP Code in Williamson County, 2020

2-1-1 Calls Zip Code



#### Local Spotlight: findhelp

Findhelp (formerly Aunt Bertha) is "a community resource and social services finder often used by Williamson County organizations and residents searching for support services." In the first and second quarters of 2021, people conducted 19,910 searches on findhelp. The top search terms are in Table 9.

Table 9: Most Common Search Terms in findhelp, 2021

Most Common Search Terms in findhelp, 2021

Top Search Terms	Number of Searches
Help pay for housing	1,130
Help pay for utilities	501
Help find housing	381
Housing vouchers	260
Emergency food	213

Data Source: findhelp, January-June 2021

Figure 16 displays the number of findhelp searches in each ZIP code of Williamson County. The highest number of searches was in ZIP code 78664, followed by 78626 and 78665. Figure 17 displays the percentage of findhelp searches by category in Williamson County. The top categories include housing (43%) and health (21%).

<sup>&</sup>lt;sup>28</sup> "Aunt Bertha Searches."

Figure 16: Findhelp Searches by ZIP Code in Williamson County, 2018–2020

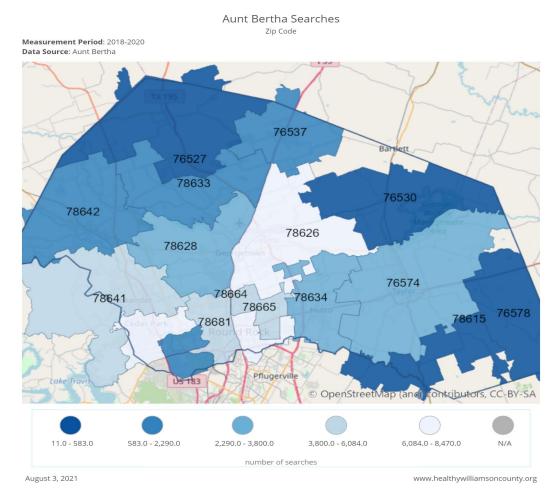
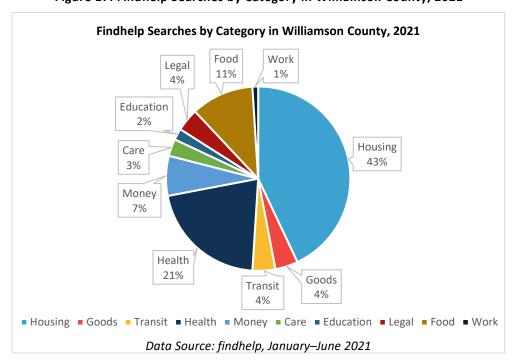


Figure 17: Findhelp Searches by Category in Williamson County, 2021



#### **Key Findings**

Although Williamson County fares better than Texas in terms of median household income, poverty, unemployment, and education, many socioeconomic factors should still be considered and addressed. Certain populations have substantially worse socioeconomic status compared to others. This is described in further detail below.

- One out of three households in the county works but cannot afford basic needs. "These households struggle to
  manage even their most basic needs housing, food, transportation, childcare, health care, and necessary
  technology."<sup>29</sup> Many people using the 2-1-1 hotline and findhelp need help with COVID-19, housing, rent, utilities,
  and food.
- Nearly twice as many adults with disabilities live below the poverty line as the general adult population. "Persons with a disability are more likely to live in poverty as compared to the rest of the population. The poverty rate is especially high among persons with long-term disabilities. Without adequate income, individuals with disabilities may not be able to afford necessary expenses, such as rent or mortgage, utility bills, medical and dental care, and food. People with disabilities living below the poverty level are more likely to experience material hardship in comparison to others living in poverty." 30
- 6.3% of youth experience poverty, which equates to 10,544 children. "Family income has been shown to affect a
  child's well-being in numerous studies. Compared to their peers, children in poverty are more likely to have physical
  health problems like low birth weight or lead poisoning and are more likely to have behavioral and emotional
  problems. Children in poverty also tend to exhibit cognitive difficulties, as shown in achievement test scores, and
  are less likely to complete basic education."
- 5.4% of older adults experience poverty, which equates to 3,728 people ages 65 years and older. Older adults "who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs, and social isolation. [Older adults] often live on a fixed income from pensions or other retirement plans and social security. If this income is insufficient in the face of increasing prescription costs and other costs of living, most [older adults] have no way to supplement their income. Retirement plans may be vulnerable to fluctuations in the stock market as well; the increasing reliance of retirees on stock market—based retirement plans may explain why more [older adults] nationwide are now slipping into poverty."<sup>32</sup>
- The Native Hawaiian and Pacific Islander, American Indian and Alaska Native, Black, and Hispanic populations have the highest rates of poverty. These groups have median household incomes below the overall county value and/or higher percentages of the population living in poverty than the overall population of Williamson County. "Income inequality is the largest factor contributing to higher poverty rates." 33

The findings in this section provide evidence for increased efforts to reduce poverty among high-risk groups.

# C3. Health Resource Availability

Indicators in this section include the availability of healthcare providers and Federally Qualified Health Centers (FQHCs), preventable hospitalizations, and health insurance coverage. Deficiencies in these areas of the healthcare system may cause delayed or missed care, leading to serious and potentially fatal health outcomes.

#### **Provider Access**

Why is this important?

Access to healthcare providers — specifically primary care physicians, mental health providers, and dentists — increases the likelihood that individuals will receive preventive care that mitigates long-term health complications. Increasing healthcare provider access is an important step in reducing health disparities.

<sup>&</sup>lt;sup>29</sup> "Frequently Asked Questions."

<sup>30 &</sup>quot;Persons With a Disability."

<sup>31 &</sup>quot;Children Living Below Poverty Level."

<sup>32 &</sup>quot;People 65+ Living Below Poverty Level."

<sup>33 &</sup>quot;Quick Facts."

Table 10: Provider Access in Williamson County and Texas

#### **Provider Access in Williamson County and Texas**

Indicator	Williamson County	Texas
Primary Care Provider Ratio <sup>1</sup>	1,430:1	1,640:1
Dentist Ratio <sup>2</sup>	1,770:1	1,680:1
Mental Health Provider Ratio <sup>3</sup>	830:1	830:1

Data Sources: <sup>1</sup>County Health Rankings, 2018; <sup>2</sup>County Health Rankings, 2019; <sup>3</sup>County Health Rankings, 2020

#### Findings based on Table 10:

- For every primary care provider in Williamson County, there are 1,430 residents, which is lower than the ratio in Texas (1,640:1).
- For every dentist in Williamson County, there are 1,770 residents, which is higher than the ratio in Texas (1,680:1).
- For every mental health provider in Williamson County, there are 830 residents, which is equal to the ratio in Texas (830:1).

#### **Federally Qualified Health Centers**

#### Why are these important?

Federally Qualified Health Centers (FQHCs) "provide comprehensive health care services to underserved communities. Many of the Texans they serve are indigent, uninsured and underserved. Increasingly more FQHCs offer additional services, such as dental, mental health and/or substance use disorder treatment. Services are provided to Medicare, Medicaid, CHIP, Insured and Uninsured individuals. Patients may be eligible for discounted services on a Sliding Fee Scale based on their family size and income. Additionally, FQHCs cannot deny services due to an inability to pay."<sup>34</sup>

#### Local Spotlight: Lone Star Circle of Care

In Williamson County, Lone Star Circle of Care (LSCC) is the local Federally Qualified Health Center with many locations across the county. In 2020, LSCC served 38,414 residents in Williamson County. Out of 133,735 encounters, one in three was related to pediatrics and one in five was related to each of family practice and mental health (Table 11).

About half of LSCC's patients were Hispanic (51.5%) (Table 12), and almost two in three were White, Hispanic or Non-Hispanic (Table 13). About one in three was uninsured (29.3%), and two in five had Medicaid or the Children's Health Insurance Program (CHIP) (44.2%) (Table 14). The top medical conditions treated were overweight and obesity, followed by depression and anxiety (Table 15).

Table 11: Total Number of Encounters for Williamson County Patients by Service Line at Lone Star Circle of Care, 2020

Total Number of Encounters for Williamson County Patients by Service Line at Lone Star Circle of Care, 2020

Service Line	Count	Percent
Mental Health	24,060	18.0%
Pediatrics	45,151	33.8%
Convenient Care	1,769	1.3%
Senior	4,739	3.5%
Family Practice	27,820	20.8%
OBGYN	21,579	16.1%
Dental	7,254	5.4%
Optometry	1,373	1.0%
Total	133,745	100%

Data Source: Lone Star Circle of Care, 2020

<sup>34 &</sup>quot;Texas Primary Care Office (TPCO) - Federally Qualified Health Centers."

Table 12: Ethnicity of Lone Star Circle of Care Patients in Williamson County, 2020

Ethnicity of Lone Star Circle of Care Patients in Williamson County, 2020

Ethnicity	Count	Percent
Not Hispanic or Latino	16,500	43.0%
Hispanic or Latino	19,802	51.5%
Unreported/Refused To Report	2,112	5.5%
Total	38,414	100%

Data Source: Lone Star Circle of Care, 2020

Table 13: Race of Lone Star Circle of Care Patients in Williamson County, 2020

Race of Lone Star Circle of Care Patients in Williamson County, 2020

Race	Count	Percent
Black or African American	3,925	10.2%
American Indian or Alaska Native	436	1.1%
White	23,936	62.3%
Native Hawaiian/Other Pacific Islander	84	0.2%
Unreported/Refused To Report	7,711	20.1%
More Than One Race	931	2.4%
Asian	1,391	3.6%
Total	38,414	100%

Data Source: Lone Star Circle of Care, 2020

Table 14: Insurance Status of Lone Star Circle of Care Patients in Williamson County, 2020

Insurance Status of Lone Star Circle of Care Patients in Williamson County, 2020

Insurance	Count	Percent
Uninsured	11,263	29.3%
Medicaid	14,867	38.7%
CHIP	2,129	5.5%
Commercial	8,193	21.3%
Medicare	1,962	5.1%
Total	38,414	100%

Data Source: Lone Star Circle of Care, 2020

Table 15: Medical Conditions Treated by Lone Star Circle of Care in Williamson County, 2020

Medical Conditions Treated by Lone Star Circle of Care in Williamson County, 2020

Condition	Patient Count	<b>Encounter Count</b>
Asthma	1,858	2,902
	,	,
Chronic obstructive pulmonary diseases	404	660
Diabetes	2,599	6,416
Heart Disease	506	838
Hypertension	4,672	9,691
Overweight and Obesity	14,101	25,199
Depression	3,557	16,888
Anxiety	3,056	14,937
Other Mental Disorders	2,615	8,725

Data Source: Lone Star Circle of Care, 2020

Between August 2020 and July 2021, LSCC evaluated social determinants of health (basic and mental health needs) of their patients through the PRAPARE survey tool (Table 16). Lone Star Circle of Care surveyed 9,116 individuals and identified 8,424 needs. Most surveys were collected through clinics in Round Rock, followed by Georgetown and Cedar Park. The top identified needs for all survey participants were mental health needs: social isolation (30.9%) and stress (26.7%). Following those were basic needs: financial (8.9%), housing (8.7%), and transportation (5.6%).

Table 16: Mental Health and Basic Needs Identified through PRAPARE Survey, 2020-2021

	Georgetown		Georgetown Round Rock Hutto		Taylor		Cedar Park		Total			
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Mental Health Needs												
Social Isolation	826	29.3%	1,265	32.0%	2	22.2%	163	30.2%	346	31.2%	2,602	30.9%
Stress	770	27.4%	1,037	26.2%	4	44.4%	138	25.6%	298	26.8%	2,247	26.7%
Basic Needs												
Transportation	171	6.1%	217	5.5%	1	11.1%	27	5.0%	56	5.0%	472	5.6%
Housing	244	8.7%	337	8.5%	-	0.0%	56	10.4%	93	8.4%	730	8.7%
Financial	234	8.3%	358	9.1%	-	0.0%	58	10.8%	103	9.3%	753	8.9%
Food	110	3.9%	141	3.6%	1	11.1%	15	2.8%	42	3.8%	309	3.7%
Phone	86	3.1%	97	2.5%	-	0.0%	15	2.8%	28	2.5%	226	2.7%
Utilities	102	3.6%	135	3.4%	1	11.1%	21	3.9%	41	3.7%	300	3.6%
Clothing	93	3.3%	120	3.0%	-	0.0%	14	2.6%	35	3.2%	262	3.1%
Healthcare	139	4.9%	199	5.0%	-	0.0%	25	4.6%	52	4.7%	415	4.9%
Childcare	40	1.4%	45	1.1%	-	0.0%	7	1.3%	16	1.4%	108	1.3%
Total Identified Needs	2,815		3,951		9		539		1,110		8,424	
Total # Surveys	2,996		4,236		5		676		1,203		9,116	

Data Source: Lone Star Circle of Care PRAPARE Social Determinants of Health Survey, August 2020–July 2021

#### **Preventable Hospitalizations**

Why is this important?

"Hospitalization for ambulatory-care sensitive conditions, diagnoses usually treatable in outpatient settings, suggests that the quality of care provided in the outpatient setting was less than ideal. This measure may also represent a tendency to overuse emergency rooms and urgent care as a main source of care." 35

In 2018, there were 3,776 preventable hospital stays per 100,000 fee-for-service Medicare enrollees in Williamson County, which is lower than the rate in Texas (4,793 per 100,000 fee-for-service Medicare enrollees) (Figure 18). Annual reported preventable hospital stays for Medicare enrollees in Williamson County have remained lower than Texas rates from 2012 to 2018. Furthermore, both Williamson County and Texas have seen an overall decrease in preventable hospital stays.

<sup>35 &</sup>quot;Preventable Hospital Stays."

Preventable Hopital Stays in Williamson County and Texas, 2012–2018 -Williamson County Preventable Hospital Stays per 100,000 Medicare Enrollees Year Data Source: County Health Rankings, 2018

Figure 18: Preventable Hospital Stays in Williamson County and Texas, 2012-2018

#### Health Insurance

#### Why is this important?

Health insurance is important to improving access to care. In the United States, medical costs are exceptionally high, so "people without health insurance may not be able to afford important medical treatments or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill, they will not seek treatment until the condition is more advanced and therefore more difficult and costly to treat." People often receive health insurance through their employer, but "many small businesses are unable to offer health insurance to their employees due to rising health insurance premiums." <sup>36</sup>

Figure 19 displays the percentage of the population that is without health insurance in Williamson County (9.3%) and Texas (17.2%). When stratified by race/ethnicity, 15.7% of the Hispanic population in Williamson County did not have health insurance, as compared to 9.4% of the White population, 7.1% of the Asian population, and 10% of the Black population.

Figure 20 displays the percentage of the population under age 18 that is without health insurance in Williamson County (6.1%) and Texas (10.9%).

<sup>36 &</sup>quot;Adults with Health Insurance."

Figure 19: Percentage of Population without Insurance by Race/Ethnicity in Williamson County and Texas, 2015–2019

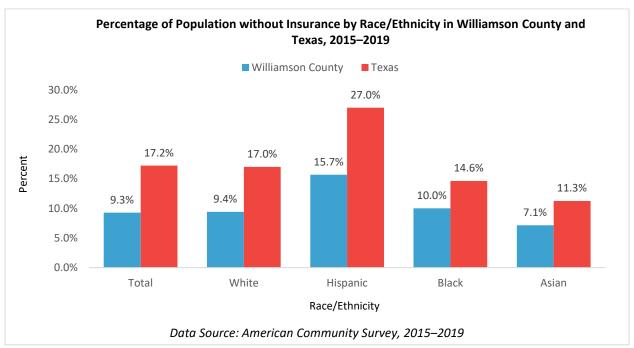


Figure 20: Percentage of Population without Insurance for Children and Persons in Williamson County and Texas, 2015–2019

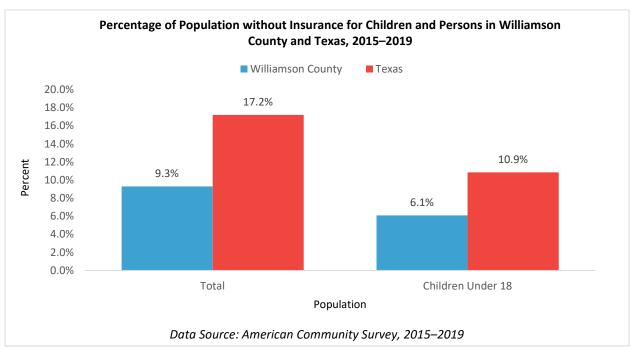


Figure 21 examines the total population without health insurance across various income levels in Williamson County and Texas. In Williamson County, 20% of households with an income below \$25,000 do not have health insurance, compared to 26.1% in Texas. The percentage of the population that is uninsured increases as household income decreases.

Figure 21: Percentage of Households without Insurance by Household Income in Williamson County and Texas, 2015–2019

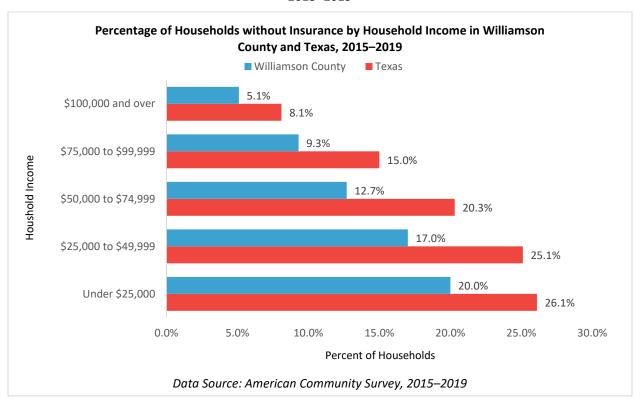
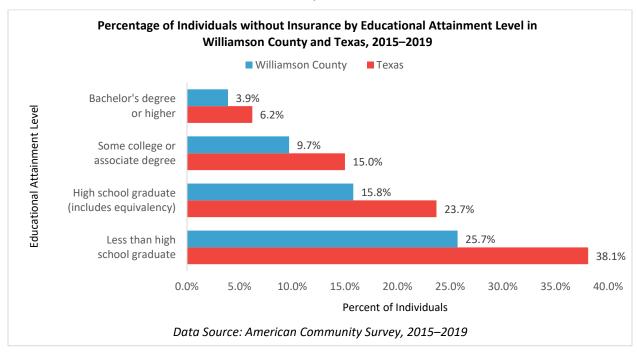


Figure 22 examines the adult population (ages 26 and older) without health insurance across various educational attainment levels in Williamson County and Texas. Of those with less than a high school diploma in Williamson County, 25.7% do not have health insurance, compared to 38.1% in Texas. Percent uninsured increases as educational attainment level decreases.

Figure 22: Percentage of Individuals without Insurance by Educational Attainment Level in Williamson County and Texas, 2015–2019



## **Key Findings**

When the CHA Task Force examined healthcare resource availability in Williamson County, multiple gaps stood out. These should be addressed by stakeholders within the healthcare system as well as those who develop policies regarding healthcare and health insurance.

- The ratio of dental providers is worse in the county than in Texas. "Oral diseases—which range from cavities to gum disease to oral cancers—cause pain and disability for millions of Americans." "Professional dental care helps to maintain the overall health of the teeth and mouth and provides for early detection of pre-cancerous or cancerous lesions. People living in areas with low rates of dentists may have difficulty accessing the dental care they need." 38
- Hispanic residents are the most uninsured group in the county. The Hispanic population has the highest uninsured rate (16%), followed by Black (10%) and White (9%) residents. Those with a high school diploma as their highest level of educational attainment and who are living in poverty are more likely to lack health insurance.
- The top medical conditions treated by the local Federally Qualified Health Center are overweight and obesity, followed by depression and anxiety. Federally Qualified Health Centers (FQHCs) "provide comprehensive health care services to underserved communities. Many of the Texans they serve are indigent, uninsured and underserved. Increasingly more FQHCs offer additional services, such as dental, mental health and/or substance use disorder treatment." 39

Williamson County should celebrate these successes in improving population health:

- The ratio of primary care providers is better than the state average. "Sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care." 40
- The county has 21% fewer preventable hospital stays than the state. Since 2012, the county has consistently had a
  lower rate, suggesting that the quality of outpatient care is strong and that emergency rooms and urgent care are
  not used for primary care. These are indicators of decent quality of and access to healthcare in Williamson County.<sup>41</sup>
- The county has significantly lower rates of uninsured residents than the state. The percentage of persons and children without insurance increases as household income decreases.

# C4. Quality of Life

According to the Centers for Disease Control and Prevention, health-related quality of life (HRQoL) is defined as "an individual's or group's perceived physical and mental health over time...On the individual level, HRQoL includes physical and mental health perceptions (e.g., energy level, mood) and their correlates—including health risks and conditions, functional status, social support, and socioeconomic status. On the community level, HRQoL includes community-level resources, conditions, policies, and practices that influence a population's health perceptions and functional status."<sup>42</sup> Although health is one of the important domains of overall quality of life, there are other domains, such as jobs, housing, schools, and neighborhood.

The data in this section describe individual-level quality of life indicators (health status and physical/mental health perceptions) and community-level quality of life indicators (disability, transportation, housing, social/civic engagement, and Head Start facilities).

### Self-Reported Health

Why is this important?

Self-reported health status is based on survey responses to the question "In general, would you say that your health is excellent, very good, good, fair, or poor?"

<sup>&</sup>lt;sup>37</sup> "Division of Oral Health at a Glance."

<sup>38 &</sup>quot;Dentist Rate."

<sup>39 &</sup>quot;Texas Primary Care Office (TPCO) - Federally Qualified Health Centers."

<sup>&</sup>lt;sup>40</sup> "Primary Care Physicians."

<sup>41 &</sup>quot;Preventable Hospital Stays."

<sup>42 &</sup>quot;HRQoL Concepts."

Poor Physical Health Days is based on survey responses to the question "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Poor Mental Health Days is based on survey responses to the question "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Together, these measures determine health-related quality of life. "Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population." <sup>43</sup>

Table 17: Self-Reported Health of Adults in Williamson County and Texas, 2018

Self-Reported Health of Adults in Williamson County and Texas, 2018

Indicator	Williamson County	Texas
Poor or fair health <sup>1</sup>	15%	19%
Poor physical health days <sup>2</sup>	3.3	3.8
Poor mental health days <sup>2</sup>	3.7	3.8

Data Source: <sup>1</sup>Behavioral Risk Factor Surveillance System, 2018; <sup>2</sup>County Health Rankings, 2020

### Findings based on Table 17:

- Adults in Williamson County reported a better health status than adults in Texas. Approximately 15% of adults in the county rated their health as poor or fair as compared to 19% in the state.
- Adults in Williamson County reported an average of 3.3 poor physical health days in the past 30 days, while adults in Texas reported an average of 3.7 days.
- Adults in Williamson County reported an average of 3.7 poor mental health days in the past 30 days, while adults in Texas reported an average of 3.8 days.

#### Disability

Why is this important?

"People with a disability have difficulties performing activities due to a physical, mental, or emotional condition. The extent to which a person is limited by a disability is heavily dependent on the social and physical environment in which he or she lives. Without sufficient accommodations, people with disabilities may have difficulties living independently or fulfilling work responsibilities." 44

From 2009 to 2019, the percentage of individuals with a disability was constant at around 9.5% (Figure 23). From 2015 to 2019, the percentage of Williamson County's population with a disability was 10%, compared to 11.5% in Texas (Figure 24).

The percentage of individuals with a disability increases as age increases, as seen in Figure 24. Residents ages 75 and older had the highest percentage of disability (47.8%), followed by those ages 65 to 75 years (22.8%) and those ages 35 to 64 years (9.4%).

In Williamson County, the American Indian and Alaska Native (AI/AN) population had the highest percentage of disability (14.6%), followed by the Black population (12.5%) and White population (11.2%) (Figure 25). Moreover, these populations had percentages of disability higher than the overall county value.

<sup>43 &</sup>quot;Poor or Fair Health."

<sup>44 &</sup>quot;Persons With a Disability."

Figure 23: Percentage of Individuals with a Disability by Five-Year Rolling Average in Williamson County, 2009–2019

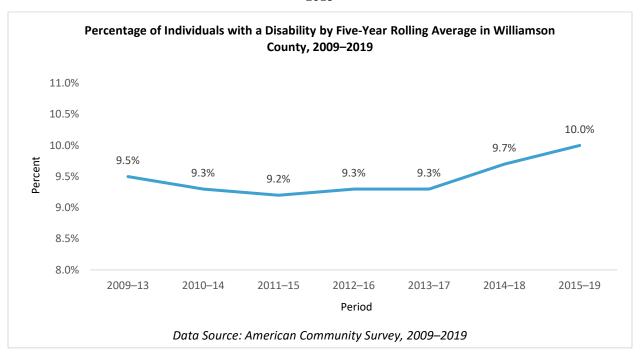


Figure 24: Percentage of Individuals with a Disability by Age in Williamson County and Texas, 2015–2019

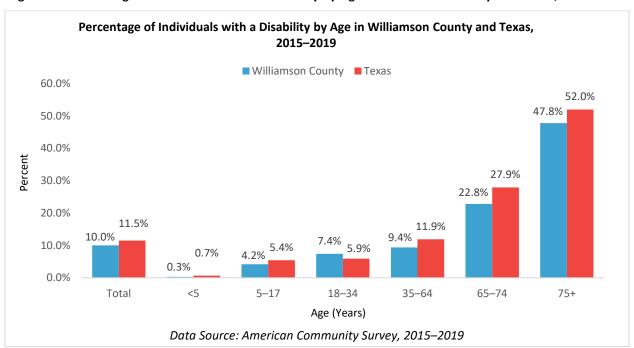
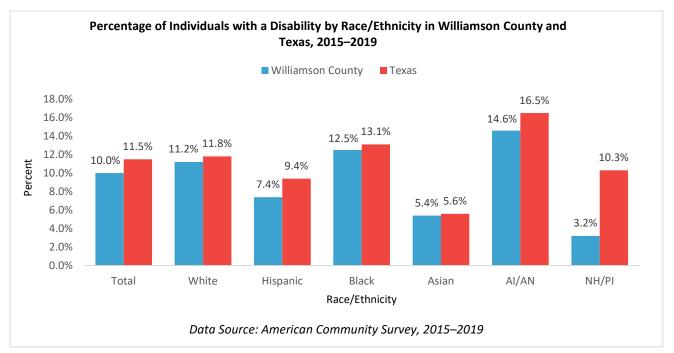


Figure 25: Percentage of Individuals with a Disability by Race/Ethnicity in Williamson County and Texas, 2015–2019



## **Transportation**

#### Why is this important?

There are many options for travel to work. The most common include driving alone in a personal vehicle, walking, or using public transportation. Driving alone increases traffic congestion and air pollution, especially in areas of greater population density, and causes "decreased levels of physical activity and cardiorespiratory health, and increased BMI and hypertension." Additionally, "lengthy commutes to work cut into workers' free time and can contribute to health problems such as headaches, anxiety, and increased blood pressure. Longer commutes require workers to consume more fuel which is both expensive for workers and damaging to the environment."

Alternatively, public transportation and walking to work offer more benefits. "Public transportation offers mobility to U.S. residents, particularly people without cars." All modes of public transportation are safer than personal modes of transportation. "Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation is also beneficial because it reduces fuel consumption, minimizes air pollution, and relieves traffic congestion." 47

"Walking to work is a good way to incorporate exercise into a daily routine. In addition to the health benefits, walking helps people get in touch with their communities, reduces commute costs, and helps protect the environment by reducing air pollution from car trips. Furthermore, studies have shown that walking to work improves employees' overall attitude and morale, and reduces stress in the workplace." <sup>48</sup>

Many households do not have a vehicle, which "is directly related to the ability to travel...In general, people living in a household without a car make fewer than half the number of journeys compared to those with a car. This limits their access to essential local services such as supermarkets, post offices, doctors' offices, and hospitals. Most households with above-average incomes have a car while only half of low-income households do."<sup>49</sup>

<sup>&</sup>lt;sup>45</sup> "Solo Drivers With a Long Commute."

<sup>46 &</sup>quot;Mean Travel Time to Work."

<sup>&</sup>lt;sup>47</sup> "Workers Commuting by Public Transportation."

<sup>48 &</sup>quot;Workers Who Walk to Work."

<sup>&</sup>lt;sup>49</sup> "Households without a Vehicle."

Table 18: Transportation Indicators in Williamson County and Texas, 2015–2019

Transportation Indicators in Williamson County and Texas, 2015-2019

Indicator	Williamson County	Texas
Mean Travel Time to Work (minutes)	28.4	26.7
Percentage of Workers Who Drive to Work Alone	79.4%	80.5%
Percentage of Workers Who Walk to Work	0.9%	1.5%
Percentage of Workers Who Commute to Work by Public Transportation	0.9%	1.4%
Percentage of Workers Who Worked from Home	8.5%	5.0%
Percentage of Households without a Vehicle	2.3%	5.3%

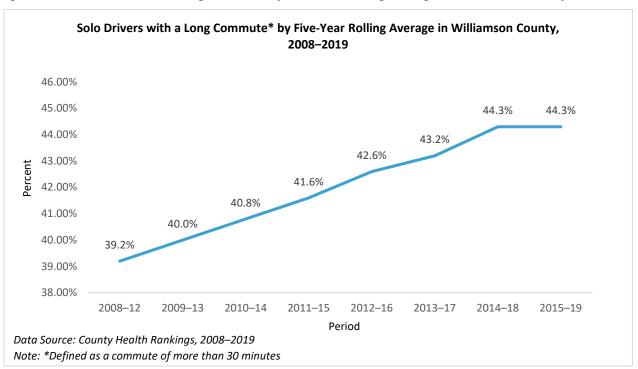
Data Source: American Community Survey, 2015-2019

### Findings based on Table 18:

- In Williamson County, average daily travel time to work for workers ages 16 and older is 28.4 minutes, which is longer than the average in Texas (26.7 minutes).
- The percentage of workers ages 16 and older who drive alone to work in Williamson County is 79.4% or roughly 487,000 persons, compared to 80.5% or roughly 23.8 million persons in Texas.
- The percentage of workers ages 16 and older who walk to work in Williamson County is 0.9% or roughly 5,500 persons, compared to 1.5% or roughly 444,000 persons in Texas.
- The percentage of workers ages 16 and older who commute to work by public transportation in Williamson County is 0.9% or roughly 5,500 persons, compared to 1.4% or roughly 414,000 persons in Texas.
- The percentage of workers ages 16 and older who work from home in Williamson County is 8.5% or roughly 52,000 persons, compared to 5.0% or roughly 31,500 persons in Texas.
- The percentage of households without a vehicle in Williamson County is 2.3% or roughly 4,144 households, compared to 5.3% or roughly 513,657 households in Texas.

As Figure 26 shows, the percentage of solo drivers with a long commute (more than 30 minutes) increased from 39.2% (2008–2012) to 44.3% (2015–2019).

Figure 26: Solo Drivers with a Long Commute by Five-Year Rolling Average in Williamson County, 2008–2019



Many Williamson County residents commute to Travis County for work. Figure 27 shows that as of the third quarter of 2020, 96,704 Williamson County residents commuted to Travis County for work, while 155,763 residents worked and lived in Williamson County.

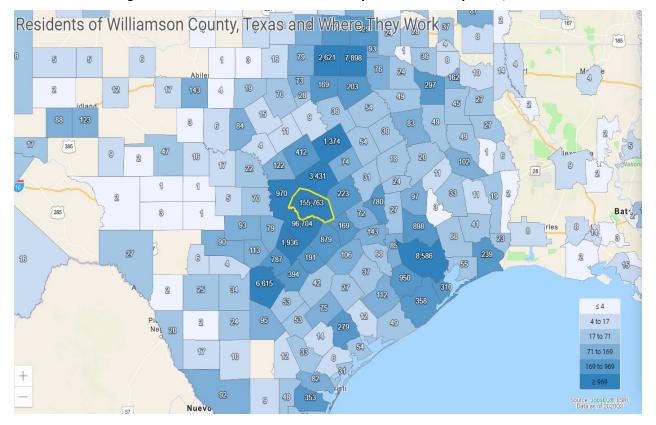


Figure 27: Residents of Williamson County and Where They Work, 2020

### Housing

### Why is this important?

Housing is "one of the best-researched social determinants of health." <sup>50</sup> Individuals and families can be affected by many factors, including housing instability, housing quality, housing affordability, and neighborhood surroundings. Housing instability is associated with increased risk of teen pregnancy, early drug use, and depression among youth. Housing foreclosures are associated with depression, anxiety, increased alcohol use, psychological distress, and suicide. Researchers have found that "the availability of resources such as public transportation to one's job, grocery stores with nutritious foods, and safe spaces to exercise are all correlated with improved health outcomes." <sup>51</sup> Spending a high percentage of household income on housing may result in less income available for basic needs, such as food, clothing, transportation, medicine, and healthcare.

Between 2015 and 2019, household income increased by 15% in Williamson County and 13.5% in Texas (Figure 28). Rent in Williamson County increased by 18.5%, compared to 14.7% in Texas. However, Williamson County had a higher increase in home values compared to Texas, at 25.3% and 20.9%, respectively.

Housing prices have soared over the past year. According to the Austin Board of Realtors, the median sales price of houses in Williamson County has increased 47% to \$450,000 as of June 2021. The number of closed sales has increased 11%, the average number of days on the market has decreased by 41 days, and the total sales dollar volume has increased 62% to \$764 million (Figure 29).

<sup>&</sup>lt;sup>50</sup> "Housing and Health: An Overview of the Literature."

<sup>&</sup>lt;sup>51</sup> Ibid.

Figure 28: Percent Increase in Household Income, Rent and Home Values in Williamson County and Texas, 2015–2019

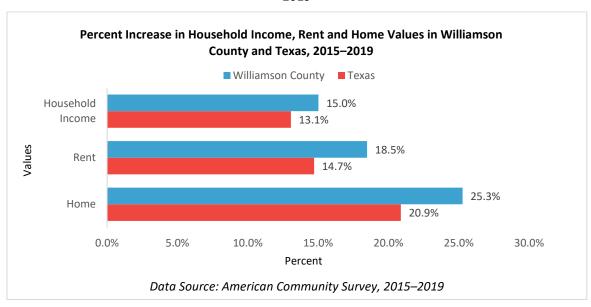
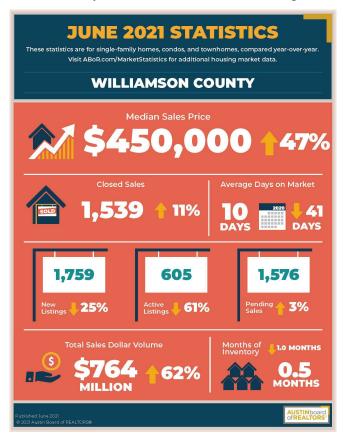
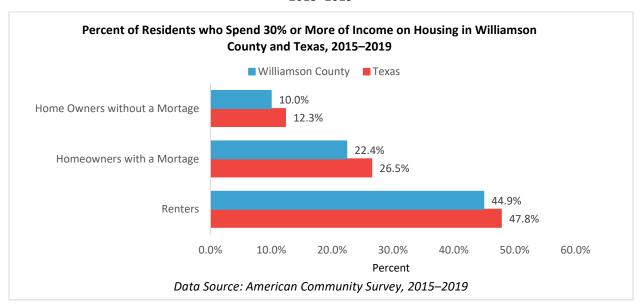


Figure 29: Williamson County Austin Board of Realtors Housing Statistics, June 2021



Compared to Texas, a smaller proportion of renters and homeowners in Williamson County spend 30% or more of their household income on housing costs (Figure 30). Almost half (44.9%) of renters in Williamson County spend 30% or more of their income on housing, which is much higher than the percentages among homeowners with a mortgage (22.4%) and homeowners without a mortgage (10%).

Figure 30: Percent of Residents Who Spent 30% or More of Income on Housing in Williamson County and Texas, 2015–2019



## **Residential Segregation**

Why is this important?

County Health Rankings describes residential segregation and its effects:

Although most overtly discriminatory policies and practices promoting segregation, such as separate schools or seating on public transportation or in restaurants based on race, have been illegal for decades, segregation caused by structural, institutional, and individual racism still exists in many parts of the country. The removal of discriminatory policies and practices has impacted acts of racism, but has had little effect on structural racism, like residential segregation, resulting in lingering structural inequalities. Residential segregation is a key determinant of racial differences in socioeconomic mobility and, additionally, can create social and physical risks in residential environments that adversely affect health. Although this area of research is gaining interest, structural forms of racism and their relationship to health inequities remain under-studied.

Residential segregation remains prevalent in many areas of the country and may influence both personal and community well-being. Residential segregation of Black [or non-White] and White residents is considered a fundamental cause of health disparities in the US and has been linked to poor health outcomes, including mortality, a wide variety of reproductive, infectious, and chronic diseases, and other adverse conditions. Structural racism is also linked to poor-quality housing and disproportionate exposure to environmental toxins. Individuals living in segregated neighborhoods often experience increased violence, reduced educational and employment opportunities, limited access to quality health care and restrictions to upward mobility. 52

Describing how residential segregation is measured, County Health Rankings also writes:

Racial/ethnic residential segregation refers to the degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (Black [or non-White] residents and White residents, in this case) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case).

The residential segregation index ranges from 0 (complete integration) to 100 (complete segregation). The index score can be interpreted as the percentage of either Black [or non-White] or White residents that would have to move to different geographic areas in order to produce a distribution that matches that of the larger area. 53

<sup>52 &</sup>quot;Residential Segregation - Black/White."

<sup>53</sup> Ibid.

Table 19: Residential Segregation in Williamson County and Texas

**Residential Segregation in Williamson County and Texas** 

Indicator	Williamson County	Texas
Residential Segregation – Black/White	32	53
Residential Segregation – Non-White/White	25	40

Data Source: American Community Survey, 2015-2019

### Findings based on Table 19:

- On the index of dissimilarity "where higher values indicate greater residential segregation between Black and White county residents," Williamson County had a score of 32, compared to a score of 53 for Texas. According to the County Health Rankings, top U.S. performers had a score of 26.<sup>54</sup>
- On the index of dissimilarity "where higher values indicate greater residential segregation between non-White and White county residents," Williamson County had a score of 25, compared to a score of 40 for Texas. According to the County Health Rankings, top U.S. performers had a score of 14.55

### Social and Civic Engagement

Why is this important?

Poor or no social interaction between people in a community is associated with increased morbidity and early mortality. Research has found that "people living in areas with high levels of social trust [trust between people] are less likely to rate their health status as fair or poor than people living in areas with low levels of social trust." <sup>56</sup>

Civic engagement is also important for communities. "Voting is one of the most fundamental rights of a democratic society. Exercising this right allows a nation to choose elected officials and hold them accountable. Voting ensures that all citizens can voice their opinions on issues such as the use of tax dollars, civil rights and foreign policy. By voting, individuals shape their communities and influence the next generation of society. A high level of turnout indicates that citizens are involved and interested in who represents them in the political system." 57

Table 20: Social and Civic Engagement in Williamson County and Texas

Social and Civic Engagement in Williamson County and Texas

Indicator	Williamson County	Texas
Presidential Voter Turnout <sup>1</sup>	76.22%	66.73%
Number of social associations per 10,000 population <sup>2</sup>	6.4	7.5

Data Sources: <sup>1</sup>Texas Secretary of State, 2020; <sup>2</sup>County Business Patterns, 2021

### Findings based on Table 20:

- The number of social associations per 10,000 population is 6.4 in Williamson County, compared to 7.5 in Texas. Associations include civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.
- Compared to Texas, Williamson County had higher voter turnout in the most recent presidential election. In the 2020 presidential election, 76.22% of registered voters in Williamson County voted, compared to 66.73% in Texas.

# **Key Findings**

Challenges to monitor and address through surveillance and interventions:

 The percentage of individuals who are affected by a disability will likely continue to increase as the population over age 65 grows. The aging population, as well as racial and ethnic groups with higher percentages of disability, should be considered when implementing policies, distributing funds, and developing programs for those with disabilities.

<sup>&</sup>lt;sup>54</sup> Ibid.

<sup>55 &</sup>quot;Residential Segregation - Non-White/White."

<sup>56 &</sup>quot;Social Associations."

<sup>&</sup>lt;sup>57</sup> "Voter Turnout: Presidential Election."

- Transportation indicators in Williamson County are comparable to Texas. Alternatives to driving alone to work, such as public transportation and walking, should be promoted and prioritized to decrease traffic congestion, air pollution, and risk of chronic disease. Increasing public transportation options will also assist households who do not own a vehicle as well as commuters who may not currently have convenient access to public transportation.
- Home and rent values are increasing faster than incomes. Household incomes but also rent and home values increased faster in the county than in the state from 2015 to 2019. The price of housing has increased almost 50%. The continued trend of increases in cost of living outpacing increases in income poses challenges not only for housing, but also for other determinants of health. More affordable housing options for low-income residents should be offered.
- The county lacks social associations and needs to develop more. This includes physical places, like sports clubs and
  recreation centers, as well as civic, political, religious, labor, business, and professional organizations. Opportunities
  to engage socially increase social interaction and improve health outcomes.

Williamson County should be proud of its accomplishments:

- Self-reported health status as well as physical and mental health perceptions of Williamson County residents indicate
  that individual-level quality of life is above satisfactory. According to the CDC, health-related quality of life
  indicators make it possible to scientifically demonstrate the impact of health on quality of life and are a valid measure
  of unmet needs and intervention outcomes.<sup>58</sup>
- The county's level of civic engagement in presidential elections is higher than the state's level. Active citizenship is associated with better morbidity and mortality outcomes.

### C5. Behavioral Risk Factors

Certain health-related behaviors, known as behavioral risk factors, contribute to injury and chronic disease, resulting in increased risk of morbidity and mortality. This section outlines significant risk factors, which include obesity and overweight, physical inactivity, tobacco use, excessive drinking, and cancer screening.

# **Obese and Overweight Adults**

Why is this important?

"The percentage of overweight and obese adults is an indicator of the overall health and lifestyle of a community." <sup>59</sup> Overweight individuals have a body mass index (BMI) of 25.0 to 29.9, while obese individuals have a BMI greater than or equal to 30.0. "Being overweight or obese affects quality of life and puts individuals at risk for developing many diseases, especially heart disease, stroke, diabetes, and cancer. Losing weight helps to prevent and control these diseases. Being overweight or obese also carries significant economic costs due to increased healthcare spending and lost earnings." <sup>60</sup>

The proportion of adults in Williamson County who are obese has increased, from 26.8% in 2010 to 31.1% in 2017 (Figure 31). While the percentage of obese adults in Williamson County was lower than that in Texas for most of this period, Williamson County's value matched Texas' at 30.9% in 2013. As of 2018, both Williamson County and Texas had high percentages of adults who are overweight or obese, at 66.0% and 69.5%, respectively.

<sup>58 &</sup>quot;HRQoL Concepts."

<sup>59 &</sup>quot;Adults Who Are Overweight or Obese."

<sup>&</sup>lt;sup>60</sup> Ibid.

Percentage of Adults Obese by Year in Williamson County and Texas, 2010-2017 Williamson County Texas 35.0% 33.6% 32.4% 33.0% 31.9% 33.3% 30.9% 30.4% 31.0% Percent 31.1% 31.1% 29.2% 30.9% 28.6% 29.0% 30.0% 29.8% 28.5% 27.0% 27.6% 26.8% 25.0% 2010 2011 2012 2013 2014 2015 2016 2017 Year

Figure 31: Percentage of Adults Obese by Year in Williamson County and Texas, 2010-2017

# **Physical Inactivity**

Why is this important?

Adults who are physically inactive (i.e., "get no physical activity beyond that of daily living") are at an increased risk of many serious health conditions. <sup>61</sup> "These conditions include obesity, heart disease, diabetes, colon cancer, and high blood pressure. In addition, physical activity improves mood and promotes healthy sleep patterns. The American College of Sports Medicine (ACSM) recommends that adults perform physical activity three to five times each week for 20 to 60 minutes at a time to improve cardiovascular fitness and body composition. The ACSM also recommends that you include strength and flexibility training in your exercise program." <sup>62</sup>

Data Source: CDC Diabetes Interactive Atlas, 2010–2017

The percentage of adults in Williamson County and Texas who are physically inactive has remained relatively stagnant from 2011 to 2017 (Figure 32). As of 2017, 19.1% of adults in Williamson County and 25.2% of adults in Texas do not participate in any physical activity or exercise.

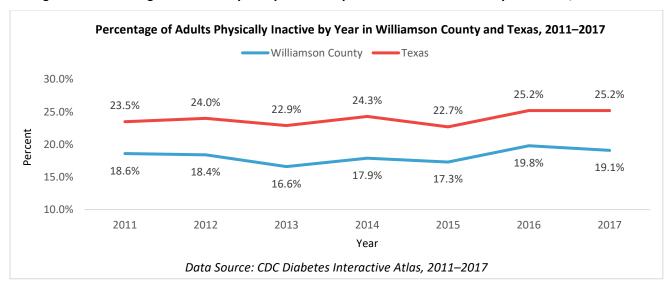


Figure 32: Percentage of Adults Physically Inactive by Year in Williamson County and Texas, 2011–2017

<sup>61 &</sup>quot;Lack of Physical Activity."

<sup>62 &</sup>quot;Adults 20+ Who Are Sedentary."

### Tobacco Use

Why is this important?

Describing the health effects of tobacco use, Healthy Williamson County writes:

Tobacco is the agent most responsible for avoidable illness and death in America today. According to the Centers for Disease Control and Prevention, tobacco use brings premature death to almost half a million Americans each year, and it contributes to profound disability and pain in many others. The World Health Organization states that approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects such as cancer, respiratory infections, and asthma.<sup>63</sup>

Adults ages 18 and older in Williamson County had lower rates of smoking (11.7%) compared to Texas (14.2%) (Figure 33). Both Texas and Williamson County have smoking rates that surpass the Healthy People 2030 target of 5.0%.

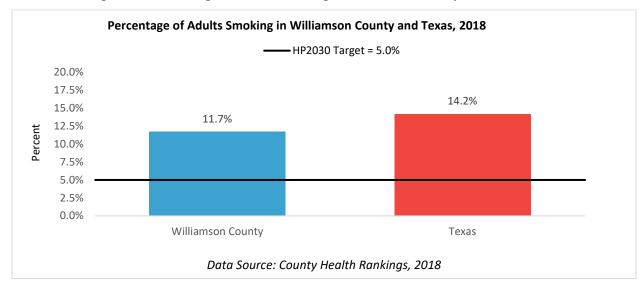


Figure 33: Percentage of Adults Smoking in Williamson County and Texas, 2018

### **Drinking Excessively**

Why is this important?

Healthy Williamson County explains the risks associated with excessive drinking, writing:

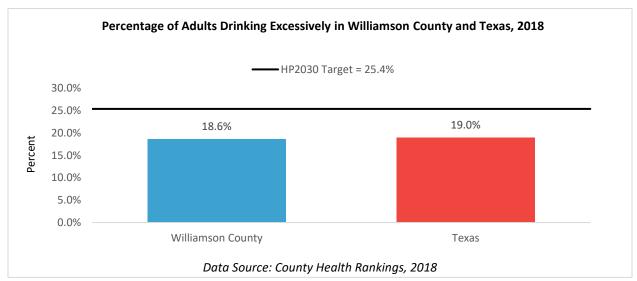
Drinking alcohol has immediate physiological effects on all tissues of the body, including those in the brain. Alcohol is a depressant that impairs vision, coordination, reaction time, judgment, and decision making, which may in turn lead to harmful behaviors. According to the Centers for Disease Control and Prevention, excessive alcohol use, either in the form of heavy drinking (drinking more than 15 drinks per week on average for men or more than eight drinks per week on average for women), or binge drinking (drinking more than five drinks during a single occasion for men or more than four drinks during a single occasion for women), can lead to increased risk of health problems, such as liver disease and unintentional injuries. Alcohol abuse is also associated with a variety of other negative outcomes, including employment problems, legal difficulties, financial loss, family disputes, and other interpersonal issues.<sup>64</sup>

In 2018, the percentage of adults ages 18 and older who drink excessively was lower in Williamson County (18.6%) compared to Texas (19.0%) (Figure 34). Both Texas and Williamson County have excessive drinking rates that are below the Healthy People 2030 target of 25.4%.

<sup>63 &</sup>quot;Adults Who Smoke."

<sup>64 &</sup>quot;Adults Who Drink Excessively."

Figure 34: Percentage of Adults Drinking Excessively in Williamson County and Texas, 2018



# **Cancer Screening**

### Why is this important?

According to the Centers for Disease Control and Prevention (CDC), colorectal cancer — cancer of the colon or rectum — is one of the most diagnosed cancers and the second leading cancer killer in the United States. The CDC estimates that if all adults ages 50 and older had regular screening tests for the disease, as many as 60% of colorectal cancer deaths could be prevented. The U.S. Preventive Services Task Force recommends that people receive screenings from age 50 until age 75. Certain factors, however, indicate that testing may need to start earlier or be more frequent, including a family history of colorectal cancer and a previous diagnosis of inflammatory bowel disease. 65

Additionally, the CDC states that "breast cancer is the second most common type of cancer among women in the United States." <sup>66</sup> A mammogram is an X-ray picture of the breast which can help catch abnormalities early and reduce the chances of developing breast cancer. <sup>67</sup> The U.S. Preventive Services Task Force recommends that females receive mammograms from age 50 until age 74. Certain factors, however, indicate that a person may benefit from starting mammograms earlier, such as a mutation in either of two specific genes or a family history that indicates a person is at higher risk for breast cancer. <sup>68</sup>

Table 21: Routine Cancer Screening in Williamson County and Texas

**Routine Cancer Screening in Williamson County and Texas** 

Indicator	Williamson County	Texas
Colonoscopy <sup>1</sup>	70.2%	61.6%
Mammogram Among Female Medicare Enrollees <sup>2</sup>	46%	37%

Data Sources: <sup>1</sup>Texas Behavioral Risk Factor Surveillance System, 2018; <sup>2</sup>Centers for Medicare and Medicaid Office of Minority Health, 2018

#### Findings based on Table 21:

- The percentage of adults ages 50 and older in Williamson County who have ever had a colonoscopy is 70.2%, which is higher than Texas (61.6%).
- Approximately 46% of female Medicare enrollees ages 65 to 74 in Williamson County received an annual mammogram, compared to 37% in Texas.

<sup>65 &</sup>quot;Colon Cancer Screening."

<sup>66 &</sup>quot;Breast Cancer Statistics."

<sup>67 &</sup>quot;What Is a Mammogram?"

<sup>68 &</sup>quot;Recommendation: Breast Cancer: Screening."

### **Kev Findings**

Research shows that unhealthy behaviors significantly increase the likelihood of injury, disease, and death. Fortunately, behavioral risk factors are modifiable with corrective action. The most concerning behavioral risk factors in Williamson County are discussed below, as well as recommendations for future data collection.

- Nearly one-third of adults are obese, with an obesity trend that has continued to rise since 2004. Limited data are
  available to examine correlated factors, such as high cholesterol and high blood pressure. Additionally, there is a
  lack of obesity and overweight data stratified by age, race/ethnicity, and social/economic factors. Increased
  surveillance and data collection are needed to identify long-term solutions to decrease the rate of adults who are
  overweight or obese in Williamson County.
- One-fifth of adults are physically inactive, with no improvement trend for almost a decade. Interventions should be designed and evaluated to target the physically inactive population.
- Smoking among adults has surpassed the Healthy People 2030 goal by more than double. Additionally, the use of electronic cigarettes (e-cigarettes) has been increasingly popular since their introduction to the market in the mid-2000s. With the launch of the JUUL brand of e-cigarette in 2015, e-cigarette use increased greatly, especially among youth. <sup>69</sup> More data are needed to examine this emerging trend among the youth population since the habit of smoking is usually established during teenage years.
- The rate of excessive drinking among adults in Williamson County is comparable to the rate in Texas. "The Community Preventive Services Task Force recommends several evidence-based community strategies to reduce harmful alcohol use." These strategies include regulation of alcohol outlet density, increasing alcohol taxes, dram shop liability, maintaining limits on days and hours of sale, electronic screening and brief intervention, and enhanced enforcement of laws prohibiting sales to minors. To Ultimately, increased monitoring of excessive drinking is necessary to learn more about at-risk populations, such as underage adults and youth.
- It should be noted that Williamson County's rates of colonoscopies (general population) and mammograms (Medicare population) are significantly higher than those of the state.

### C6. Environmental Health Indicators

Environmental health indicators "impact a wide range of health, functioning, and quality of life outcomes." These indicators are part of the built environment and include the location and number of recreational facilities, fast-food restaurants, grocery stores, Supplemental Nutrition Assistance Program (SNAP) retailers, and alcohol retailers. The built environment in a community will increase or decrease the likelihood of certain health behaviors, such as physical activity, healthy eating, and excessive drinking.

## **Access to Exercise Opportunities**

Why is this important?

"Proximity to exercise opportunities, such as parks and recreation facilities, has been linked to an increase in physical activity among residents. Regular physical activity has a wide array of health benefits including weight control, muscle and bone strengthening, improved mental health and mood, and improved life expectancy. Furthermore, exercise reduces the risk of cardiovascular disease, type 2 diabetes and metabolic syndrome, and some cancers." <sup>72</sup>

From 2016 to 2020, Williamson County and Texas experienced similar trends regarding access to exercise opportunities (Figure 35). For both the county and the state, the percentage of individuals who live reasonably close to a physical activity location decreased from 2016 to 2020. As of 2020, Williamson County had a higher percentage of individuals with access to exercise opportunities (87%) compared to Texas (81%).

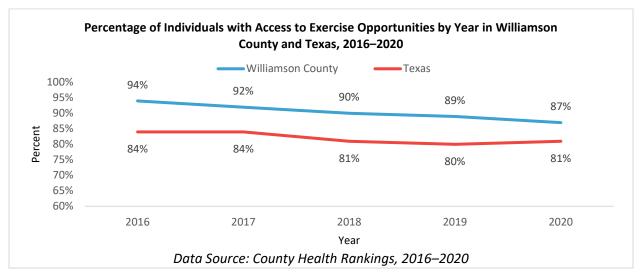
<sup>69 &</sup>quot;JUUL and Youth: Rising E-Cigarette Popularity."

<sup>70 &</sup>quot;Preventing Excessive Alcohol Use."

<sup>71 &</sup>quot;Determinants of Health."

<sup>72 &</sup>quot;Access to Exercise Opportunities."

Figure 35: Percentage of Individuals with Access to Exercise Opportunities by Year in Williamson County and Texas, 2016–2020



## **Healthy Eating Environment**

Why is this important?

Discussing the health impacts of the quality of food options available in communities, Healthy Williamson County writes:

The accessibility, availability, and affordability of healthy and varied food options in the community increase the likelihood that residents will have a balanced and nutritious diet. A diet composed of nutritious foods, in combination with an active lifestyle, can reduce the incidence of heart disease, cancer, and diabetes, and is essential to maintain a healthy body weight and prevent obesity. Low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast-food outlets...Fast-food outlets are more common in low-income neighborhoods and studies suggest that they strongly contribute to the high incidence of obesity and obesity-related health problems in these communities.<sup>73</sup>

The Supplemental Nutrition Assistance Program (SNAP), "previously called the Food Stamp Program, is a federal-assistance program that provides low-income families with electronic benefit transfers...that can be used to purchase food. The purpose of the program is to assist low-income households in obtaining adequate and nutritious diets. According to the program, over 45 million people from over 20 million households [in the U.S.] receive SNAP benefits." Retail stores must either stock multiple varieties of staple foods or derive most of their sales from staple foods to be authorized as a SNAP retailer. In areas where SNAP clients have very limited food access, stores that do not meet these requirements can still be authorized.<sup>75</sup>

Table 22: Healthy Eating Environment Indicators in Williamson County and Texas, 2018

Healthy Eating Environment Indicators in Williamson County and Texas, 2018

Indicator	Williamson County	Texas
Food Insecurity <sup>1</sup>	11.2%	15.0%
Child Food Insecurity <sup>1</sup>	16.0%	21.6%
SNAP Authorized Retailer Rate*2	40.9	63.9
Fast Food Restaurants Rate*2	67.6	61.6
Grocery Store Rate*2	7.8	12.4

Notes: \*per 100,000 population

Data Sources: <sup>1</sup>Feeding America, 2018; <sup>2</sup>U.S. Department of Agriculture – Food Environmental Atlas, 2018

<sup>73 &</sup>quot;Fast Food Restaurant Density."

<sup>74 &</sup>quot;SNAP Certified Stores."

<sup>75 &</sup>quot;Is My Store Eligible?"

### Findings based on Table 22:

- 11.2% of the population in Williamson County experiences food insecurity, compared to 15.0% in Texas.
- About one in six (16.0%) children in Williamson County experiences food insecurity, compared to about one in five children (21.6%) in Texas.
- In Williamson County, there are 40.9 Supplemental Nutrition Assistance Program (SNAP) retailers per 100,000 population, which are fewer than in Texas (63.9 per 100,000 population). Moreover, almost all SNAP retailers in Williamson County reside within convenience stores, gas stations, mini-marts, fast-food restaurants, and pharmacies.
- Williamson County has 67.6 fast-food restaurants per 100,000 population, which is higher than in Texas (61.6 per 100,000 population).
- Compared to Texas, which has a grocery store rate of 12.4 per 100,000 population, Williamson County has a lower grocery store rate (7.8 per 100,000 population).

If an individual resides in an urban area of the county and lives more than one mile from a grocery store, the individual is considered to have low grocery store access. The same is true for an individual residing in a rural area of the county and living more than ten miles from a grocery store.

Table 23: Grocery Store Access in Williamson County, 2015

Grocery Store Access in Williamson County, 2015

Indicator	Williamson County
People with Low Grocery Store Access	33.7%
People with Low Income and Low Access to Grocery Store	8.0%
Households with No Car and Low Grocery Store Access	1.3%

Data Source: U.S. Department of Agriculture – Food Access Research Atlas, 2015

#### Findings based on Table 23:

- As of 2015, about one-third (33.7%) of Williamson County residents live far from a grocery store or supermarket.
- Approximately one out of ten (8.0%) people in Williamson County lives far from a grocery store and has low income.
- A small percentage (1.3%) of households in Williamson County live far from a grocery store and do not have a vehicle.

Census tracts near Round Rock and Taylor have the highest proportions (40.5% to 51.1%) of the population with low income and low grocery store access (Figure 36). Near Taylor and Georgetown, 6.6–11.9% of households have no car and low grocery store access (Figure 37).

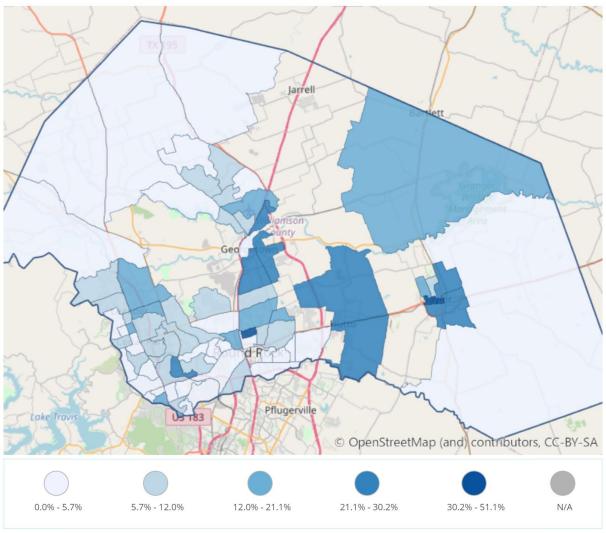
Figure 36: Percentage of Population with Low Income and Low Access to a Grocery Store by Census Tract in Williamson County, 2019

Low-Income and Low Access to a Grocery Store

Census Tract

Measurement Period: 2019

Data Source: U.S. Department of Agriculture - Food Environment Atlas



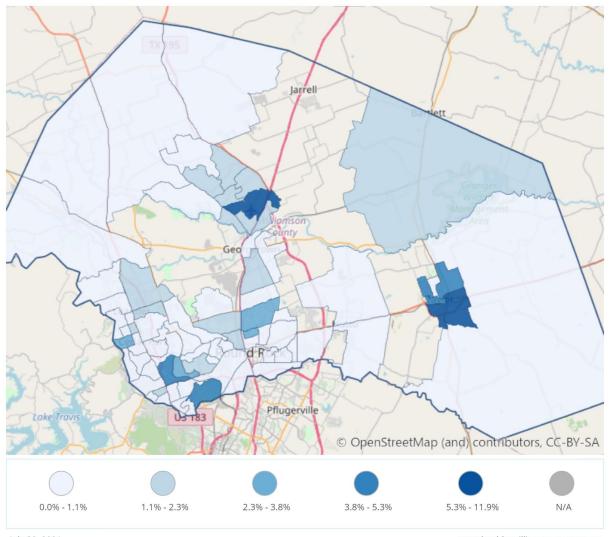
July 30, 2021 www.healthywilliamsoncounty.org

Figure 37: Percentage of Households with No Car and Low Access to a Grocery Store by Census Tract in Williamson County, 2019

Households with No Car and Low Access to a Grocery Store
Census Tract

Measurement Period: 2019

Data Source: U.S. Department of Agriculture - Food Environment Atlas



July 30, 2021

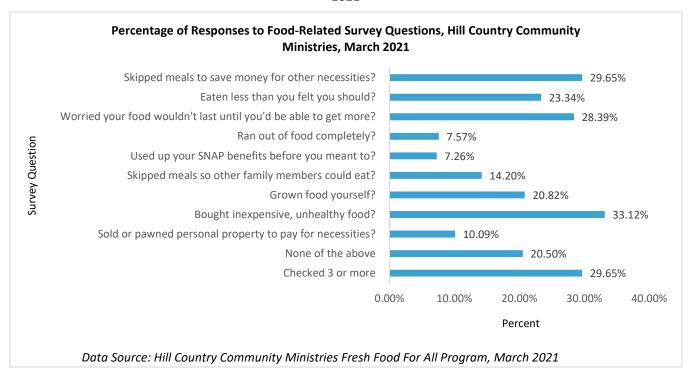
www.healthy will iam son county.org

# Local Spotlight: Hill Country Community Ministries

Hill Country Community Ministries (HCCM) is a local nonprofit dedicated to serving Williamson County residents most in need, providing food, clothing, and other assistance. Those who received assistance from HCCM's Fresh Food for All program in Williamson County ZIP codes were surveyed regarding food-related behaviors, perceptions, and barriers (Figure 38).

- 33.12% of respondents (n=317) reported that in the past three months they had bought inexpensive, unhealthy food
- 29.65% of respondents reported that they skipped meals to save money for other necessities.
- 28.39% of respondents reported that in the past three months they worried their food would not last until they would be able to get more.
- 23.34% of respondents reported that in the past three months they had eaten less than they felt they should.

Figure 38: Percentage of Responses to Food-Related Survey Questions, Hill Country Community Ministries, March 2021



### **Alcohol Retailers Rate**

Why is this important?

Healthy Williamson County discusses the significance of alcohol outlet density in communities:

Studies have shown that neighborhoods with a high density of alcohol outlets are associated with higher rates of violence, regardless of other community characteristics such as poverty and age of residents. High alcohol outlet density has been shown to be related to increased rates of drinking and driving, motor vehicle-related pedestrian injuries, and child abuse and neglect. In addition, liquor stores frequently sell food and other goods that are unhealthy and expensive. Setting rules that mandate minimum distances between alcohol outlets, limiting the number of new licenses in areas that already have a high number of outlets, and closing down outlets that repeatedly violate liquor laws can all help control and reduce liquor store density.<sup>76</sup>

In 2019, Williamson County had a rate of 7.3 liquor stores per 100,000 population (Figure 39), which is higher than Texas' (6.9 per 100,000 population).<sup>77</sup>

<sup>&</sup>lt;sup>76</sup> "Liquor Store Density."

<sup>77</sup> Ibid.

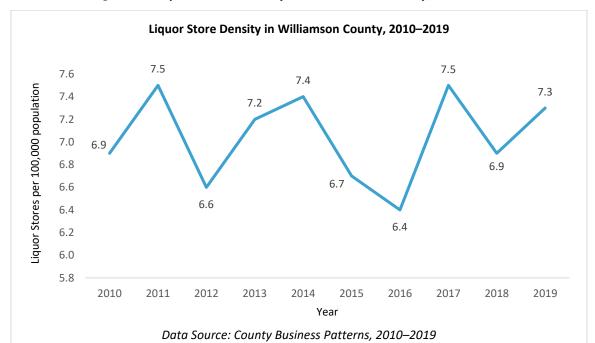


Figure 39: Liquor Store Density in Williamson County, 2010-2019

## **Key Findings**

Many factors contribute to a healthy built environment in Williamson County. Nearly nine out of ten residents live in proximity to a recreational facility, creating an environment that promotes physical activity. However, improving the healthy eating and exercise environment in Williamson County remains a crucial element in decreasing outcomes such as obesity, heart disease, and diabetes. Gaps that should be addressed in reforming healthy food access in Williamson County include:

- Increase grocery store access for low-income populations and households with no vehicle.
  - People of all ages in Williamson County may experience food insecurity, which is defined by the U.S. Department of Agriculture as "limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways." Moreover, "low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast-food outlets." Food insecurity is associated with chronic diseases such as diabetes, heart disease, high blood pressure, high blood cholesterol, and obesity, as well as mental health issues like major depression.
  - "Vehicle ownership is directly related to the ability to travel [e.g., to a grocery store]. In general, people living in a household without a car make fewer than half the number of journeys compared to those with a car."
- Increase the number of Supplemental Nutrition Assistance Program (SNAP) retailers within grocery stores and farmer's markets. Most SNAP retailers in Williamson County reside within convenience stores, gas stations, minimarts, fast-food restaurants, and pharmacies, rather than grocery stores and farmer's markets. Fast food often lacks nutritional value but is rich in fat and calories, so "frequent consumption of these foods and an insufficient consumption of fresh fruits and vegetables increase the risk of overweight and obesity. Individuals who are overweight or obese are at increased risk for serious health conditions, including coronary heart disease, type-2 diabetes, multiple cancers, hypertension, stroke, premature death, and other chronic conditions." Research suggests

<sup>78 &</sup>quot;Food Insecurity Rate."

<sup>79 &</sup>quot;Food Environment Index."

<sup>80 &</sup>quot;Households without a Vehicle."

that the greater density of fast-food outlets in low-income neighborhoods contributes substantially to the "high incidence of obesity and obesity-related health problems in these communities." 81

### C7. Social and Mental Health

"Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood." 82

#### Mental Health Indicators

Table 24: Mental Health Indicators in Williamson County and Texas

#### Mental Health Indicators in Williamson County and Texas

Indicator	Williamson County	Texas
Alcohol Impaired Driving Deaths <sup>1</sup>	27.4%	25.7%
Drug Overdose Mortality Rate*2	5.8	10.4
Child Abuse Rate <sup>†3</sup>	4.7	9.1
Violent Crime Rate*4	165.0	420.0
Firearm Fatality Rate⁵	10.0	12.0
Homicide Rate <sup>6</sup>	1.0	5.0
Depression Among the Medicare Population <sup>7</sup>	18.9%	18.2%

Notes: \*per 100,000 population; †per 1,000 children

Data Sources: ¹County Health Rankings, 2015–2019; ²CDC Compressed Mortality File, 2016–2018; ³Texas Department of Family and Protective Services, 2020; ⁴Uniform Crime Reporting-FBI; CDC WONDER, ⁵2014–2018, 62012–2018; <sup>7</sup>Centers for Medicare and Medicaid Services, 2018

#### Findings based on Table 24:

- In Williamson County, 27.4% of motor vehicle crash deaths involved alcohol, compared to 25.7% in Texas.
- Williamson County had a drug overdose mortality rate of 5.8 per 100,000 population, which was lower than the rate in Texas (10.4 per 100,000 population).
- In Williamson County, there were 4.7 children under age 18 who experienced abuse or neglect per 1,000 children. This rate is lower than Texas' rate of 9.1 per 1,000 children.
- Violent crime includes homicide, forcible rape, robbery, and aggravated assault. The total violent crime rate per 100,000 population in Williamson County was 165.0 crimes, which is significantly lower than the rate in Texas (420.0).
  - The rate of firearm deaths per 100,000 population in Williamson County was 10.0, compared to 12.0 in Texas.
  - The rate of homicide deaths per 100,000 population in Williamson County was 1.0, compared to 5.0 in Texas.
- Medicare is the federal health insurance program for persons ages 65 and older, persons under age 65 with certain disabilities, and persons of any age with end-stage renal disease. As of 2015, an estimated 18.9% of Medicare beneficiaries in Williamson County were treated for depression, which is higher than in Texas (18.0%).

#### Suicide Mortality

## Why is this important?

Suicide is a leading cause of death and a major, preventable public health problem in the United States. According to the Centers for Disease Control and Prevention, more than 47,500 people in the U.S. died by suicide in 2019. Suicide deaths are

<sup>81 &</sup>quot;Fast Food Restaurant Density."

<sup>82 &</sup>quot;What Is Mental Health?"

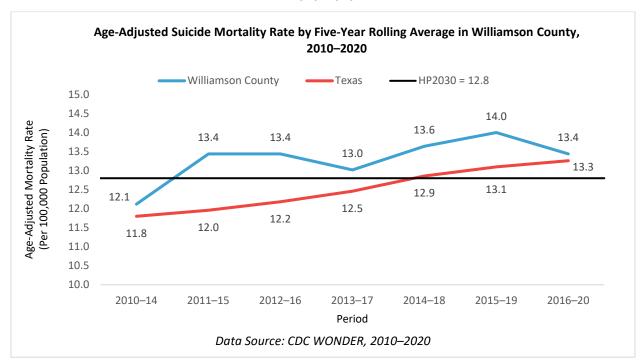
only one part of the problem; for every suicide death in 2019, there were approximately 29 suicide attempts.<sup>83</sup> On suicide deaths, impacts, and distribution in the United States, Healthy Williamson County writes:

[T]hose who survive suicide may have serious injuries, in addition to having depression and other mental problems. Other repercussions of suicide include the combined medical and lost work costs on the community, totaling to over \$30 billion for all suicides in a year, and the emotional toll on family and friends. Men are about four times more likely than women to die of suicide, but three times more women than men report attempting suicide. Suicide occurs at a disproportionately higher rate among adults 75 years and older.<sup>84</sup>

Between 2010 and 2020, the age-adjusted suicide mortality rate rose in Williamson County and Texas (Figure 40).

Age-adjusted suicide mortality in Williamson County was higher among males (20.1 deaths per 100,000 population) than females (5.9 per 100,000 population) (Figure 41). While the overall age-adjusted suicide mortality rate in Williamson County (12.7 deaths per 100,000 population) met the Healthy People 2030 target (12.8 per 100,000 population), the overall rate in Texas (13.4 per 100,000 population) did not.

Figure 40: Age-Adjusted Suicide Mortality Rate by Five-Year Rolling Average in Williamson County and Texas. 2010–2020



<sup>83 &</sup>quot;Facts About Suicide."

<sup>84 &</sup>quot;Age-Adjusted Death Rate Due to Suicide."

Age-Adjusted Suicide Mortality Rate by Gender in Williamson County and Texas, 2019-2020 Williamson County Texas HP2030 = 12.8 30.0 Age-Adjusted Mortality Rate 25.0 (Per 100,000 Population) 21.5 20.1 20.0 13.4 15.0 12.7 10.0 5.9 5.6 5.0 0.0 Male Total Female Gender

Figure 41: Age-Adjusted Suicide Mortality Rate by Gender in Williamson County and Texas, 2019

## Mental Health Hospitalizations

Why is this important?

"According to the National Center for Health Statistics, treatment for mental disorders is a major cause of hospitalization for children and adolescents between the ages of 10 and 21 years." 1st is important to recognize and address potential psychological issues before they become critical, particularly because the greatest opportunity for prevention is among young people."

Data Source: CDC WONDER, 2019-2020

Healthy Williamson County discusses the factors influencing mental health and the burden of mental illness in the United States, writing:

Mental disorders are one of the leading causes of disability in the United States. In any given year, approximately 13 million American adults have a seriously debilitating mental illness. Furthermore, unstable mental health can lead to suicide...An individual's mental health is affected by a combination of factors, including biology (genes/brain chemistry), life experiences (trauma/abuse), and family history regarding mental health problems. Due to the complex interplay between so many factors, it is especially important to recognize early warning signs, such as too much or too little sleep, rapid weight loss or weight gain, lack of energy and motivation in talking to people or participating in usual activities, or feelings of helplessness.<sup>87</sup>

Table 25: Mental Health Hospitalizations in Williamson County and Texas, 2017–2019

Mental Health Hospitalizations in Williamson County and Texas, 2017–2019

Age-Adjusted Hospitalization Rate per 10,000	Williamson County	Т	exas
Due to Adult Mental Health		21.6	36.1
Due to Pediatric Mental Health		43.8	45.0

Notes: Hospitalizations include adjustment disorders; anxiety disorders; attention deficit conduct and disruptive behavior disorders; delirium, dementia, amnestic and other cognitive disorders; disorders usually diagnosed in infancy, childhood, or adolescence; mood disorders; personality disorders; schizophrenia and other psychotic disorders; and impulse control disorders not elsewhere classified.

Data Source: Texas Department of State Health Services, 2017–2019

<sup>&</sup>lt;sup>85</sup> "Age-Adjusted Hospitalization Rate Due to Pediatric Mental Health."

<sup>&</sup>lt;sup>86</sup> "Age-Adjusted Hospitalization Rate Due to Adult Mental Health."

<sup>87</sup> Ibid.

### Findings based on Table 25:

- From 2017 to 2019, there were 21.6 mental health—related hospitalizations per 10,000 population ages 18 and older in Williamson County. This age-adjusted rate is lower than Texas' rate of 36.1 mental health—related hospitalizations per 10,000 population.
- From 2017 to 2019, there were 43.8 pediatric mental health–related hospitalizations per 10,000 population under age 18 in Williamson County. This age-adjusted rate is lower than Texas' rate of 45.0 pediatric mental health–related hospitalizations per 10,000 population.

### Local Spotlight: Bluebonnet Trails Community Services

In Williamson County, the largest mental health provider is Bluebonnet Trails Community Services (BTCS). Below is an overview of BTCS which includes the number of services provided by category and the most diagnosed mental health disorders in 2020.

In 2020 at BTCS, two in three encounters were for mental health, followed by intellectual and developmental disability and early childhood intervention and autism (Table 26). BTCS served almost 4,000 persons experiencing a major depressive disorder, almost 2,000 experiencing bipolar disorder, and about 1,700 individuals with autism or an intellectual disability (Figure 42).

Table 26: Total Numbers of Encounters for Williamson County Patients Served at Bluebonnet Trails Community Services, 2020

Total Numbers of Encounters for Williamson County Patients Served at Bluebonnet Trails Community Services, 2020

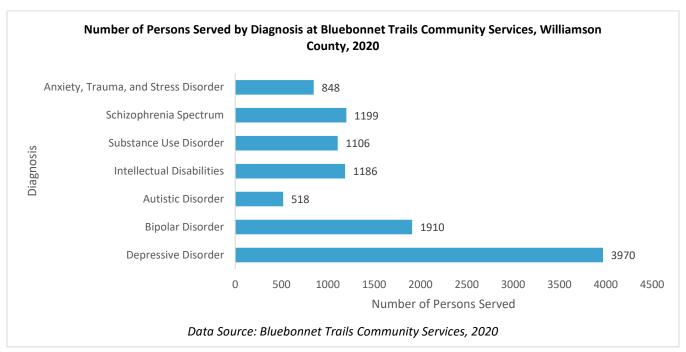
Service Category	Count	Percent
Mental Health	98,296	64.1%
Substance Use	8,462	5.5%
Intellectual and Developmental Disability	24,306	15.8%
Early Childhood Intervention and Autism	22,318	14.6%
Total	153,382	100%

Data Source: Bluebonnet Trails Community Services, 2020

#### Findings based on Table 26:

- In 2020, there were 98,296 mental health encounters for Williamson County patients served at Bluebonnet Trails Community Services. Mental health accounted for 64.1% of all encounters.
- In 2020, there were 8,462 substance abuse encounters for Williamson County patients served at Bluebonnet Trails Community Services. Substance abuse accounted for 5.5% of all encounters.
- In 2020, there were 24,306 intellectual and developmental disability encounters for Williamson County patients served at Bluebonnet Trails Community Services. Intellectual and developmental disability accounted for 15.8% of all encounters.
- In 2020, there were 22,318 Early childhood intervention and autism encounters for Williamson County patients served at Bluebonnet Trails Community Services. Early childhood intervention and autism accounted for 14.6% of all encounters.

Figure 42: Number of Persons Served by Diagnosis at Bluebonnet Trails Community Services, Williamson County, 2020



## **Key Findings**

Certain mental health indicators stood out for having mortality rates that are not only high, but higher than the overall Texas value. These indicators are described in full detail with future recommendations:

- Alcohol-impaired driving death rates are higher in the county than in the state. Evidence-based efforts should be made to decrease the number of alcohol-related motor-vehicle deaths in Williamson County.
- Suicide mortality has risen over time in Williamson County, though the most recent rate was below the Healthy
  People 2030 target and the state's rate. Males die from suicide at disproportionately high rates as compared to
  females. Preventing suicide involves everyone in the community, including the state, healthcare systems, employers,
  communities, schools, media, and individuals. When public health departments bring together community partners
  to solve this issue, the likelihood of preventing suicide is greater. <sup>88</sup> However, additional data are needed to
  determine the specific attributes of at-risk groups in Williamson County.
- Williamson County has drug overdose mortality rates, child abuse rates, violent crime rates, and adult mental health hospitalization rates that are significantly lower than the state's rates.

# C8. Maternal and Child Health

The prenatal care a mother receives heavily determines health outcomes of infants and children, who make up an especially vulnerable population. "Safe motherhood begins before conception with proper nutrition and a healthy lifestyle. Planned pregnancy, appropriate prenatal care, prevention of complications when possible, and early and effective treatment of complications when they occur are all essential elements of maternal care." Prioritizing maternal health can help ensure full-term pregnancies without complications, delivery of a healthy infant, and a positive environment of support for the needs of mothers, infants, and families.

#### Low Birth Weight

Why is this important?

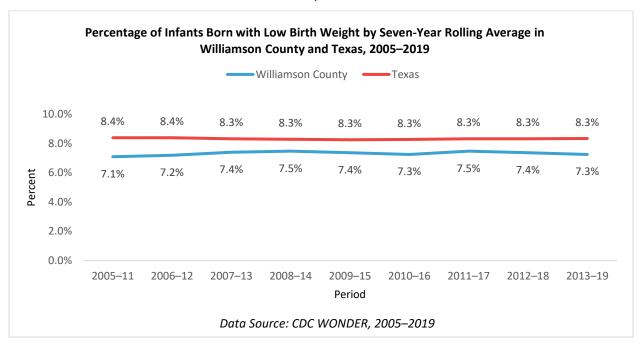
"Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. Low birth weight is typically caused by premature birth and fetal

<sup>88 &</sup>quot;Suicide Rising Across the US."

<sup>89 &</sup>quot;The New Public Health."

growth restriction, both of which are influenced by a mother's health and genetics." 90 From 2005 to 2019, Williamson County and Texas experienced similar trends in infants born with low birth weight (Figure 43).

Figure 43: Percentage of Infants Born with Low Birth Weight by Seven-Year Rolling Average in Williamson County and Texas, 2005–2019



#### **Preterm Birth**

Why is this important?

"A full-term pregnancy lasts about 40 weeks, giving the baby the time it needs to fully develop. In some pregnancies, women go into labor too early, a complication known as 'preterm' or premature labor. Labor is considered preterm if it starts before 37 weeks of pregnancy." "Babies born premature[ly] are likely to require specialized medical care, and oftentimes must stay in intensive care nurseries. While there have been many medical advances enabling premature infants to survive, there is still risk of infant death or long-term disability." 92

From 2010 to 2017, Williamson County experienced a varying trend in percentage of preterm births, while Texas experienced a fairly consistent trend (Figure 44). The percentage of preterm births in Williamson County decreased marginally from 12.2% in 2010 to 11.0% in 2017. Both Williamson County and Texas have consistently had rates of preterm birth above the Healthy People 2030 target (9.4%).

In 2017, the percentages of preterm births across the White, Black, and Hispanic populations in Williamson County were higher than in Texas (Figure 45). The Black population had the highest percentage (15.1%), followed by the Hispanic population (11.8%) and the White population (10.2%). The percentages of preterm births among the Black and Hispanic populations were higher than the overall county value (11.0%).

<sup>90 &</sup>quot;Babies With Low Birth Weight."

<sup>91 &</sup>quot;Preterm Labor & Preterm Birth."

<sup>92 &</sup>quot;Preterm Births."

Figure 44: Percentage of Preterm Births in Williamson County and Texas, 2010–2017

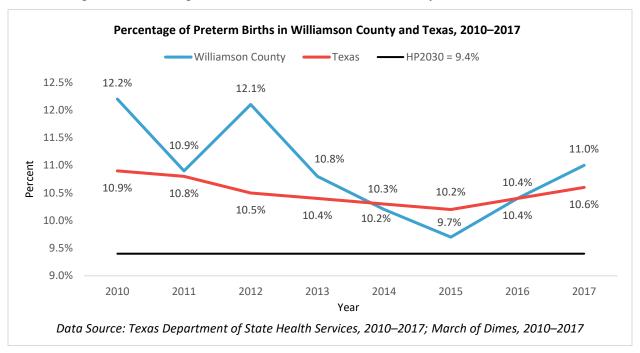
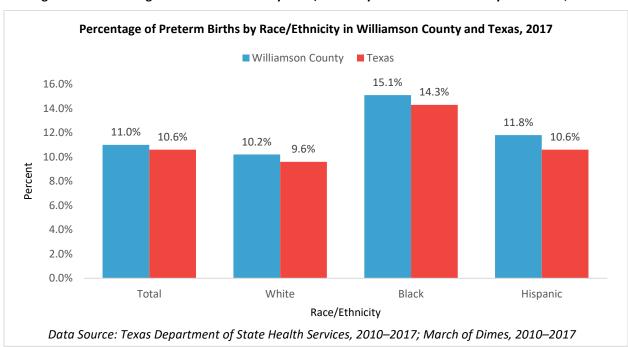


Figure 45: Percentage of Preterm Births by Race/Ethnicity in Williamson County and Texas, 2017



# **Infant and Child Mortality**

Why is this important?

"Infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. The leading causes of death among infants are birth defects, preterm delivery, low birth weight, sudden infant death syndrome (SIDS), and maternal complications during pregnancy."93

<sup>93 &</sup>quot;Infant Mortality Rate."

Unintentional injury is the leading cause of death for children and youth in the U.S. Among children, the leading causes of unintentional injury are motor-vehicle traffic, poisoning, drowning, suffocation, burns, and falls.<sup>94</sup> Because it occurs at an early age, child mortality has a large impact on years of potential life lost, a measure that estimates the average number of additional years a person would have lived had the person not died prematurely.<sup>95</sup>

Table 27: Child and Infant Mortality in Williamson County and Texas

**Child and Infant Mortality in Williamson County and Texas** 

Indicator	Williamson County	Texas
Infant Mortality Rate*1	4.2	5.5
Child Mortality Rate <sup>†2</sup>	30.0	50.0

Notes: \*per 1,000 live births; †per 100,000 children

Data Source: ¹CDC WONDER, 2017–2018; ²County Health Ranking, 2016–2019

## Findings based on Table 27:

- Among infants less than 1 year old, the mortality rate in Williamson County (4.2 per 1,000 live births) is lower than both the Texas rate (5.5 per 1,000 live births) and the Healthy People 2030 target (5.0 per 1,000 live births).
- Among children ages 1 to 17, the mortality rate in Williamson County (30.0 per 100,000 population) is lower than the Texas rate (50.0 per 100,000 population).

#### Teen Birth Rate

## Why is this important?

"Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities...Teenage women who bear a child are much less likely to achieve an education level at or beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress." <sup>96</sup>

For both Williamson County and Texas, the birth rate among women ages 15 to 19 decreased greatly from 2014 to 2019 (Figure 46). In 2019, the teen birth rate in the county was 28.8 per 1,000 females, which is a 23% decrease from the rate in 2014 (37.5 per 1,000 females ages 15 to 19).

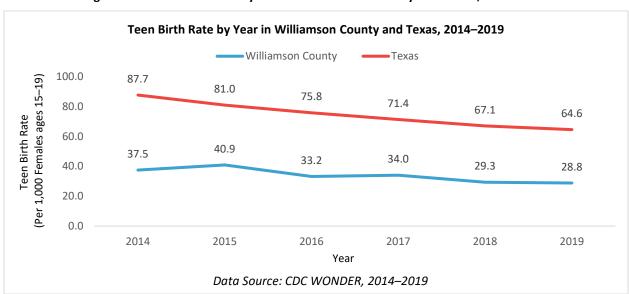


Figure 46: Teen Birth Rate by Year in Williamson County and Texas, 2014-2019

<sup>&</sup>lt;sup>94</sup> West et al., "Unintentional Injury Deaths in Children and Youth, 2010–2019."

<sup>95 &</sup>quot;Child Mortality."

<sup>96 &</sup>quot;Teen Births."

Among the White and Hispanic populations, Williamson County has lower teen birth rates than Texas; among the Black population, Williamson County's rate is higher than Texas' (Figure 47). However, the teen birth rates of the White (29.6 per 1,000 females ages 15 to 19), Black (75.2 per 1,000), and Hispanic (47.9 per 1,000 females) populations in Williamson County are higher than the overall county rate (28.8 per 1,000).

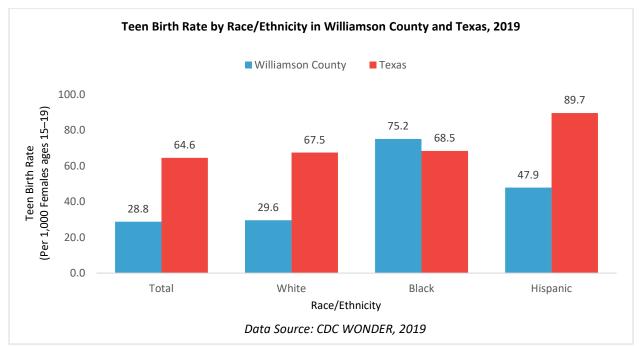


Figure 47: Teen Birth Rate by Race/Ethnicity in Williamson County and Texas, 2019

### **Prenatal Care**

#### Why is this important?

"Babies born to mothers who do not receive prenatal care are three times more likely to have a low birth weight and five times more likely to die than those born to mothers who do get care. Early prenatal care (i.e., care in the first trimester of a pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems and health-compromising behaviors that can be particularly damaging during the initial stages of fetal development." <sup>97</sup>

In Williamson County, the percentages of teen and adult mothers who received early prenatal care was higher than in Texas across all racial/ethnic groups (Figure 48 and Figure 49). Among teens in Williamson County, the percentages of White (63.9%) and Black (57.5%) mothers who received early prenatal care were below the overall county value (65.3%) (Figure 48). A similar trend is seen among adult mothers in Williamson County: the percentages of White (85.2%), Hispanic (83.0%), and Black (79.1%) mothers who received early prenatal care were lower than the overall county value (85.7%) (Figure 49). In addition, the percentage of teen mothers who received early prenatal care was lower than that of adult mothers across all racial/ethnic groups.

<sup>97 &</sup>quot;Mothers Who Received Early Prenatal Care."

Figure 48: Percentage of Teens who Received Early Prenatal Care by Race/Ethnicity, 2019

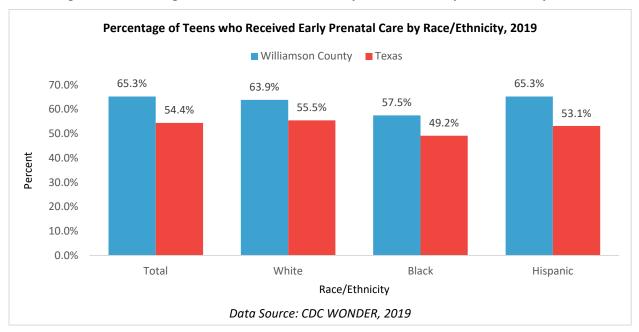
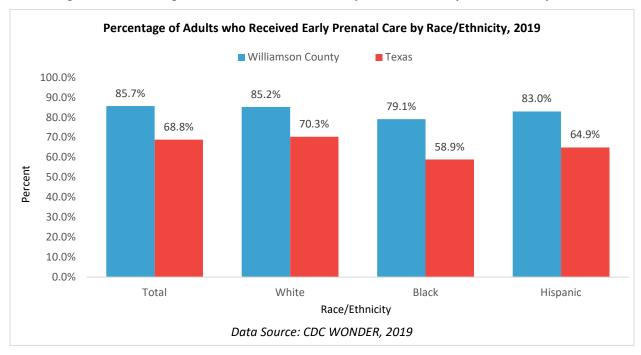


Figure 49: Percentage of Adults who Received Early Prenatal Care by Race/Ethnicity, 2019



# **Key Findings**

Williamson County has many notable strengths regarding maternal and infant health. These include low rates of low birth weight and child mortality and a declining teen birth rate.

In contrast, these trends in maternal, infant, and child health outcomes demand greater attention:

- The Black and Hispanic populations in Williamson County have preterm and teen birth rates that are higher than the county's overall.
- The Black population has the highest percentage of preterm and teen births and the lowest percentage of teens
  and adults who received prenatal care. Increasing prenatal care among teen and adult mothers can improve birth
  outcomes such as low birth weight and infant mortality.

• **Preterm births have increased since 2015**, surpassing the state rate and remaining higher than the Healthy People 2030 goal. Preterm birth is more likely to increase healthcare costs and health challenges.

# C9. Death, Illness, and Injury

Mortality (rates of death within a population) and morbidity (rates of incidence and prevalence of disease) measure health status in a community. In 2020, the top ten causes of death in Williamson County were 98:

- 1. Heart diseases
- 2. Cancer
- 3. Alzheimer's disease
- 4. Coronavirus disease (COVID-19)
- 5. Cerebrovascular diseases

- 6. Unintentional Injuries
- 7. Chronic lower respiratory diseases
- 8. Parkinson's disease
- 9. Suicide
- 10. Influenza and pneumonia

This section examines the relationship between gender, race/ethnicity, and mortality among the top causes of death in Williamson County.

Figure 50 displays age-adjusted mortality rates for the top ten causes of death in Williamson County and Texas in 2020. For all causes of death, Williamson County had a lower age-adjusted mortality rate (656.3 deaths per 100,000 population) than Texas (862.1 deaths per 100,000 population). <sup>99;100</sup> Compared to Texas, Williamson County had higher age-adjusted mortality rates for Alzheimer's disease (44.6 for Texas and 46.2 for Williamson County per 100,000 population) and Parkinson's disease (11.3 and 13.9 per 100,000 population, respectively). Coronavirus disease (COVID-19) became the third leading cause of death in Texas and the fourth leading cause of death in Williamson County in 2020, the first year of the ongoing global pandemic. In 2020, the leading cause of death in both Williamson County and Texas was heart diseases.

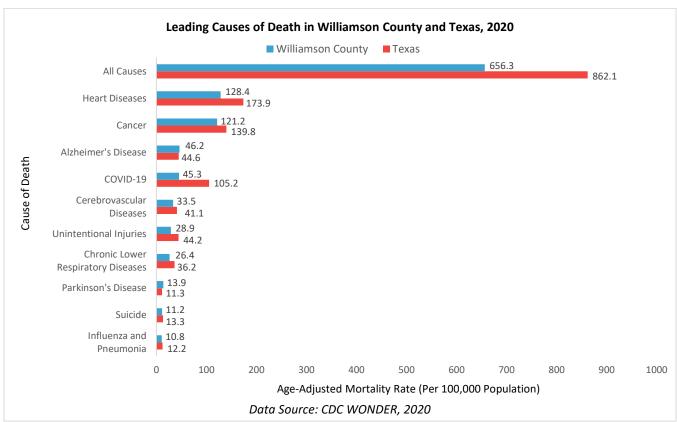


Figure 50: Leading Causes of Death in Williamson County and Texas, 2020

<sup>98 &</sup>quot;Underlying Cause of Death 1999-2020: 15 Leading Causes of Death: Williamson County, TX on CDC WONDER Online Database."

<sup>99 &</sup>quot;Underlying Cause of Death 1999-2020: Williamson County, TX on CDC WONDER Online Database."

<sup>&</sup>lt;sup>100</sup> "Underlying Cause of Death 1999-2020: Texas on CDC WONDER Online Database."

### Cancer

### Why is this important?

"The National Cancer Institute (NCI) defines cancer as a term used to describe diseases in which abnormal cells divide without control and are able to invade other tissues. According to the NCI there are over 100 different types of cancer, but breast, colon, lung, pancreatic, prostate, and rectal cancer lead to the greatest number of annual deaths. Risk factors of cancer include but are not limited to age, alcohol use, tobacco use, a poor diet, certain hormones, and sun exposure." Certain risk factors (i.e., age) are unavoidable, but reducing exposure to others, such as alcohol use and sun exposure, may decrease the risk for some cancers. <sup>101</sup>

The age-adjusted cancer incidence rate, which describes newly diagnosed cases, was higher in Williamson County (444.4 per 100,000 population) than in Texas (411.2 per 100,000 population) (Figure 51). Of all cancer types, breast cancer had the highest incidence rate in Williamson County (143.0 per 100,000 females), followed by prostate cancer (117.2 per 100,000 males). The incidence rate of each was higher in Williamson County than in Texas (114.2 newly diagnosed breast cancer cases per 100,000 females and 97.6 newly diagnosed prostate cancer cases per 100,000 males). In contrast, both lung and colorectal cancer incidence rates were lower in Williamson County than in Texas.

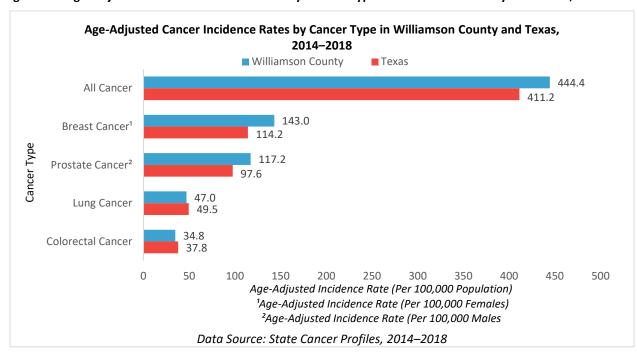


Figure 51: Age-Adjusted Cancer Incidence Rates by Cancer Type in Williamson County and Texas, 2014–2018

The age-adjusted cancer mortality rate was lower in Williamson County (132.6 deaths per 100,000 population) than in Texas (146.5 per 100,000 population) (Figure 52). In Williamson County, lung cancer had the highest mortality rate (28.0 per 100,000 population), followed by breast cancer (19.0 per 100,000 females).

<sup>101 &</sup>quot;Adults with Cancer."

Age-Adjusted Cancer Mortality Rates by Cancer Type in Williamson County and Texas, 2015-2019 Williamson County Texas 132.6 All Cancer 146.5 28.0 Lung Cancer 32.5 Cancer Type 19.0 Breast Cancer<sup>1</sup> 16.6 Prostate Cancer<sup>2</sup> 11.6 Colorectal Cancer 13.9 0 20 60 80 100 140 160 Age-Adjusted Mortality Rate (Per 100,000 Population) <sup>1</sup>Age-Adjusted Mortality Rate (Per 100,000 Females) <sup>2</sup>Age-Adjusted Mortality Rate (Per 100,000 Males)

Figure 52: Age-Adjusted Cancer Mortality Rates by Cancer Type in Williamson County and Texas, 2015-2019

From 2010 to 2020, the age-adjusted all-cancer mortality rate in Williamson County was relatively consistent, while the rate in Texas steadily decreased (Figure 53). In Williamson County, the 2010–2014 rate was 134.8 deaths per 100,000 population and the 2016–2020 rate was 127.8 per 100,000 population.

Data Source: State Cancer Profiles, 2015–2019

Males and females in Williamson County had lower age-adjusted all-cancer mortality rates (150.7 and 107.6 deaths per 100,000 population, respectively), compared to males and females in Texas (168.5 and 119.5 deaths per 100,000 population, respectively) (Figure 54). Only the age-adjusted all-cancer mortality rates for females in Williamson County and Texas were below the Healthy People 2030 target of 122.7 deaths per 100,000 population.

Williamson County and Texas had slightly differing trends in age-adjusted all-cancer mortality rate based on race/ethnicity (Figure 55). The White population had the highest mortality rate in Williamson County (129.9 deaths per 100,000 population), followed by the Black population (126.2). In Texas, the Black population had the highest rate (169.9), followed by the White population (141.1). In both Williamson County and Texas, the Hispanic population had the second lowest rates (87.6 in Williamson County and 111.5 in Texas), and the Asian population had the lowest rates (62.5 and 83.6). The rates for both the Hispanic and Asian populations in Williamson County and in Texas were below the Healthy People 2030 target of 122.7 deaths per 100,000 population.

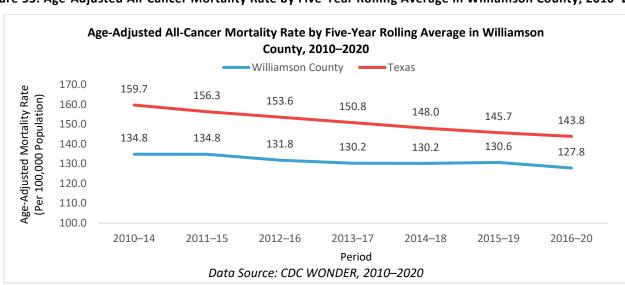


Figure 53: Age-Adjusted All-Cancer Mortality Rate by Five-Year Rolling Average in Williamson County, 2010–2020

Figure 54: Age-Adjusted All-Cancer Mortality Rate by Gender in Williamson County and Texas, 2019–2020

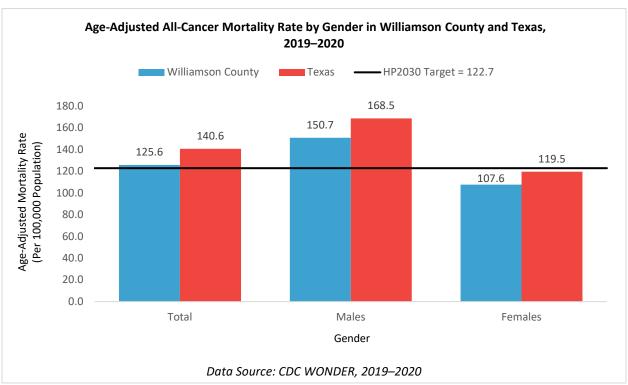
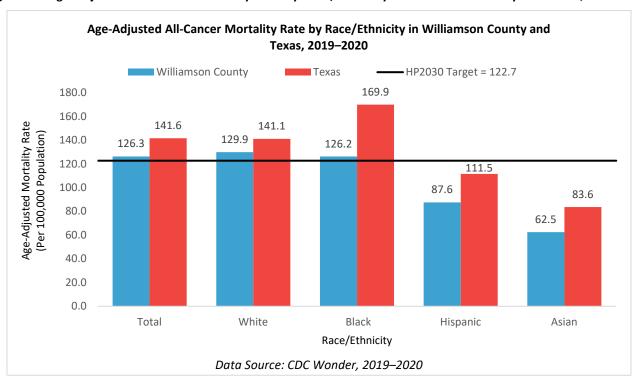


Figure 55: Age-Adjusted All-Cancer Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020



### **Heart Diseases**

Why are these important?

"Cardiovascular diseases, including heart disease and stroke, account for more than one-third of all U.S. deaths and a leading cause of disability. Heart disease is a term that encompasses a variety of different diseases affecting the heart. The most common type in the United States is coronary artery disease, which can cause heart attack, angina, heart failure, and

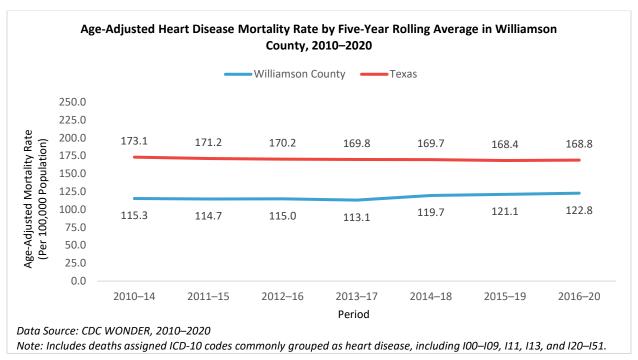
arrhythmias. There are many modifiable risk factors for heart disease and stroke including tobacco smoking, obesity, sedentary lifestyle, and poor diet. Controlling high blood pressure and cholesterol are also important prevention strategies." <sup>102</sup> Note that the data in this subsection include only those for heart diseases and exclude those for other circulatory system diseases, like stroke.

From 2010 to 2020, Williamson County consistently had a lower age-adjusted heart disease mortality rate than Texas (Figure 56). However, while the mortality rate in Texas decreased over the 11-year period, the mortality rate in Williamson County increased from 115.3 per 100,000 population in 2010–2014 to 122.8 per 100,000 population in 2016–2020.

Males and females in Williamson County had lower age-adjusted heart disease mortality rates compared to males and females in Texas: 161.5 and 94.1 per 100,000 population for males and females, respectively, in Williamson County, as compared to 214.9 and 130.5 per 100,000 population for males and females, respectively, in Texas (Figure 57).

Williamson County and Texas had similar profiles regarding age-adjusted heart disease mortality rate based on race/ethnicity (Figure 58). The Black population had the highest mortality rate (157.9 deaths in Williamson County and 217.0 deaths in Texas per 100,000 population), followed by the White (126.0 and 168.0, respectively), Hispanic (100.2 and 135.8, respectively), and Asian (60.8 and 75.1, respectively) populations.

Figure 56: Age-Adjusted Heart Disease Mortality Rate by Five-Year Rolling Average in Williamson County, 2010–2020



<sup>102 &</sup>quot;Adults Who Experienced Coronary Heart Disease."

Figure 57: Age-Adjusted Heart Disease Mortality Rate by Gender in Williamson County and Texas, 2019–2020

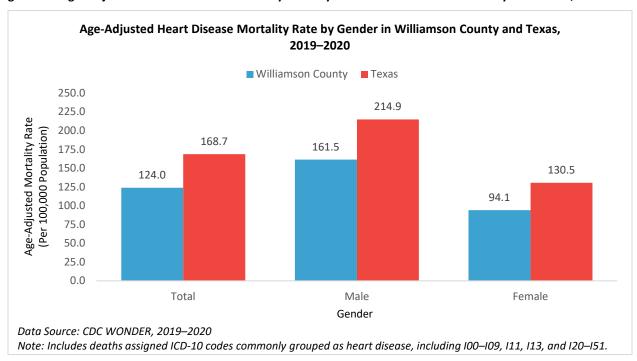
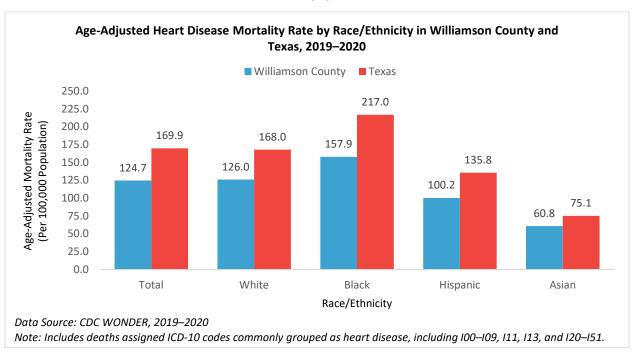


Figure 58: Age-Adjusted Heart Disease Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020



#### Alzheimer's Disease

Why is this important?

Healthy Williamson County describes Alzheimer's disease and its toll:

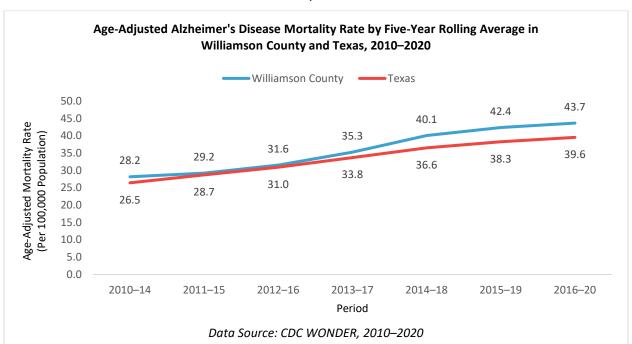
Alzheimer's disease is the most common form of dementia among older people. It is a progressive and irreversible disease that impairs memory and affects thinking and behavior, to the point of eventually interfering with daily tasks. The greatest risk factor currently known is increasing age. After age 65, the likelihood of developing the disease doubles every five years; the risk is nearly 50% after age 85. Alzheimer's imposes heavy emotional and financial

burdens on families. While there is currently no cure, there are treatments that can slow the progression of Alzheimer's and improve the quality of life for people with Alzheimer's and their caregivers. <sup>103</sup>

From 2010 to 2020, Williamson County and Texas experienced similar trends in age-adjusted Alzheimer's disease mortality rate, with both increasing during the 11-year period (Figure 59).

In Williamson County, the age-adjusted Alzheimer's disease mortality rate was higher among females (48.6 deaths per 100,000 population) compared to males (34.0 per 100,000 population) (Figure 60). Moreover, the rate among females was higher than the overall county value (43.2 per 100,000 population). The White population in Williamson County had the highest age-adjusted Alzheimer's disease mortality rate (44.8 per 100,000 population), followed by the Black (33.8 per 100,000 population) and Hispanic (28.7 per 100,000 population) populations (Figure 61). Note that the age-adjusted Alzheimer's disease mortality rates by gender and race/ethnicity are based on data from 2015–2020, while the mortality rates for the other causes of death in this section are based on data from 2019–2020. This is due to a lack of reliable data for the Alzheimer's disease mortality reporting categories from 2019–2020 data alone.

Figure 59: Age-Adjusted Alzheimer's Disease Mortality Rate by Five-Year Rolling Average in Williamson County and Texas, 2010–2020



<sup>&</sup>lt;sup>103</sup> "Age-Adjusted Death Rate Due to Alzheimer's Disease."

Figure 60: Age-Adjusted Alzheimer's Disease Mortality Rate by Gender in Williamson County and Texas, 2015–2020

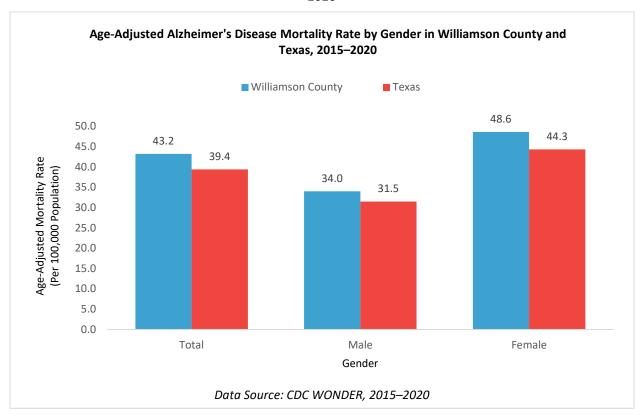
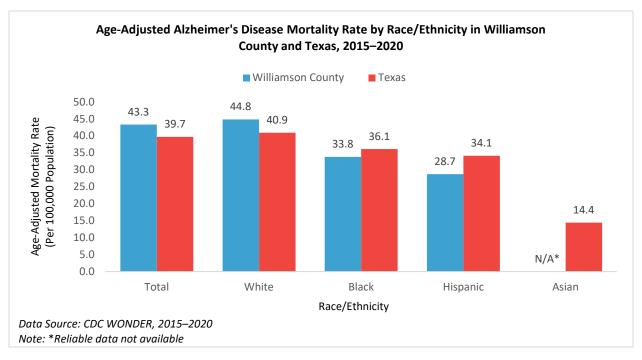


Figure 61: Age-Adjusted Alzheimer's Disease Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2015–2020



# **Unintentional Injuries**

Why are these important?

Injuries affect everyone regardless of age, economic status, or race. According to the Centers for Disease Control and Prevention, "In the first half of life, more Americans die from injuries...than from any other cause, including cancer, HIV, or

the flu." Unintentional injuries — including unintentional poisoning (e.g., drug overdose), motor-vehicle crashes, unintentional drowning, and unintentional falls, among others — are the leading cause of death for Americans ages 1 to 44. <sup>104</sup>

From 2010 to 2020, Williamson County and Texas experienced similar trends in unintentional injury mortality rate (Figure 62).

In Williamson County, the age-adjusted unintentional injury mortality rate was lower among females (19.2 deaths per 100,000 population) compared to males (40.9 per 100,000 population) (Figure 63). Moreover, the rate among males was higher than the overall county value (29.6 per 100,000 population). The Black population in Williamson County had the highest age-adjusted unintentional injury mortality rate (45.6 deaths per 100,000 population), which also exceeded the overall county value (29.8 per 100,000 population) (Figure 64).

Figure 62: Age-Adjusted Unintentional Injury Mortality Rate by Five-Year Rolling Average in Williamson County and Texas, 2010–2020

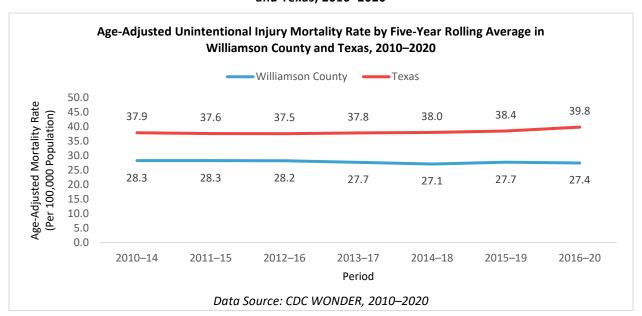
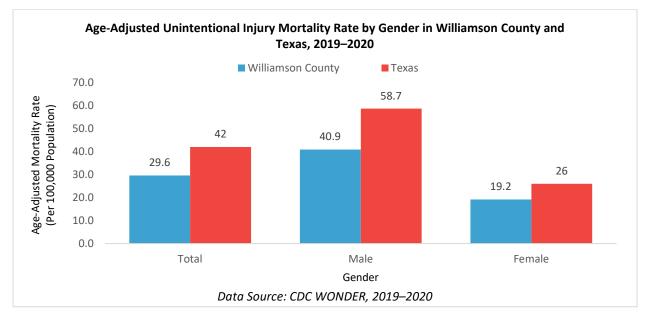


Figure 63: Age-Adjusted Unintentional Injury Mortality Rate by Gender in Williamson County and Texas, 2019–2020



<sup>104 &</sup>quot;Injuries and Violence Are Leading Causes of Death."

Age-Adjusted Unintentional Injury Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019-2020 ■ Williamson County Texas 50.0 45.6 43.4 42.3 45.0 **Age-Adjusted Mortality Rate** (Per 100,000 Population) 40.0 34.6 31.6 35.0 31.3 29.8 30.0 25.0 18.7 20.0 15.1 15.0 10.0 5.0 N/A\* 0.0 Total White Black Hispanic Asian Race/Ethnicity

Figure 64: Age-Adjusted Unintentional Injury Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020

# **Key Findings**

Although Williamson County has lower rates of mortality compared to Texas for most of the leading causes of death, there are specific populations that carry a higher burden of disease and should be considered when developing interventions, programs, and services.

- Cancer incidence rates are overall higher than the state's rates. Cancer screening should be prioritized to diagnose
  cancer during early stages before it becomes fatal. Recent incidence data are needed to inform early cancer
  detection and prevention activities in Williamson County.
- Since heart diseases and cancer are the leading causes of death in Williamson County, program and service planning should consider high-risk populations, which include Black, White, and Hispanic males.
- Alzheimer's disease is the third leading cause of death in Williamson County, with increasing mortality rates that are higher in the county than in Texas. The female, Black, and White populations have disproportionately high rates of death from Alzheimer's disease.
- Unintentional injuries are the sixth leading cause of death in Williamson County, with higher rates in males. However, unintentional injury mortality rates in the county are lower than in Texas.

Notably, Williamson County has heart disease mortality rates that are substantially lower than the state's rates.

# C10. Communicable Disease

Data Source: CDC WONDER, 2019–2020 Note: \*Reliable data not available

Communicable diseases, which include sexually transmitted infections and tuberculosis, pose a significant public health concern worldwide. Fortunately, there are ways to mitigate the spread of communicable diseases. Persons with these diseases — including, but not limited to, syphilis, chlamydia, gonorrhea, human immunodeficiency virus (HIV), and acquired immunodeficiency syndrome (AIDS) — can prevent the spread of infection by practicing abstinence or using proper protection during sexual intercourse. <sup>105</sup> Individuals with tuberculosis should avoid physical contact with others, practice frequent handwashing, and take prescribed medicine as directed by a health professional. <sup>106</sup>

Most of the data in this section come from a passive disease surveillance system which collects diseases from the "Texas

<sup>105 &</sup>quot;STD Prevention."

<sup>106 &</sup>quot;Tuberculosis-How TB Spreads."

Notifiable Conditions 2021" list. Texas law requires that healthcare providers, hospitals, laboratories, and others report select conditions to local health departments, who then submit data to the Texas Department of State Health Services, and ultimately to the Centers for Disease Control and Prevention (CDC). Since this surveillance system only captures diseases reported to health departments, there are cases that go undetected or unreported. Consequently, the data in this section may not completely represent the actual burden of disease but still offer insight regarding disease trends and affected population groups.

# **Syphilis**

# Why is this important?

Syphilis is a sexually transmitted infection that, if untreated, can cause serious health problems. Syphilis is divided into stages, which include primary and secondary (P&S, mild signs and symptoms), latent (no signs or symptoms), and tertiary (associated with severe medical complications). <sup>107</sup>

Pregnant women with untreated syphilis can pass the infection to the unborn baby. The infection can lead to a low-birth-weight baby and make it more likely that the woman will deliver her baby too early or stillborn (born dead). "An infected baby may be born without signs or symptoms of disease. However, if not treated immediately, the baby may develop serious problems within a few weeks. Untreated babies can have health problems such as cataracts, deafness, or seizures, and can die." 108 Women should be tested for syphilis at least once during pregnancy and receive immediate treatment if they test positive.

Annual reported syphilis diagnosis rates in Williamson County, which include P&S and total (all stages), remained lower than Texas rates from 2011 to 2018 (Figure 65 and Figure 66). However, the reported total syphilis diagnosis rate in Williamson County almost doubled between 2015 (7.5 infections per 100,000 population) and 2016 (14.6 infections per 100,000 population) (Figure 65). Moreover, reported P&S syphilis diagnosis rates in Williamson County rose from 1.4 infections per 100,000 population in 2011 to 3.7 infections per 100,000 population in 2018 (Figure 66).

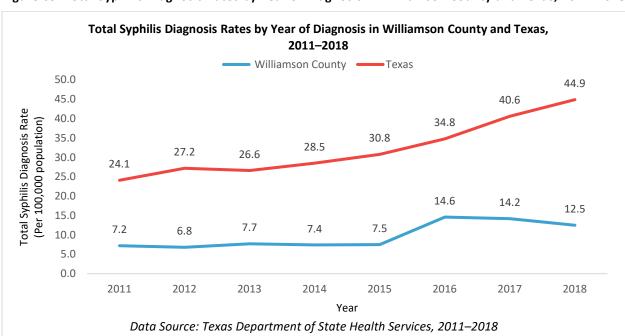
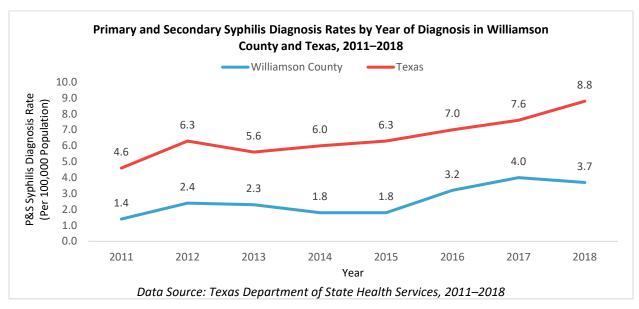


Figure 65: Total Syphilis Diagnosis Rates by Year of Diagnosis in Williamson County and Texas, 2011–2018

<sup>107 &</sup>quot;STD Facts- Syphilis."

<sup>&</sup>lt;sup>108</sup> Ibid.

Figure 66: Primary and Secondary Syphilis Diagnosis Rates by Year of Diagnosis in Williamson County and Texas, 2011–2018



# Chlamydia

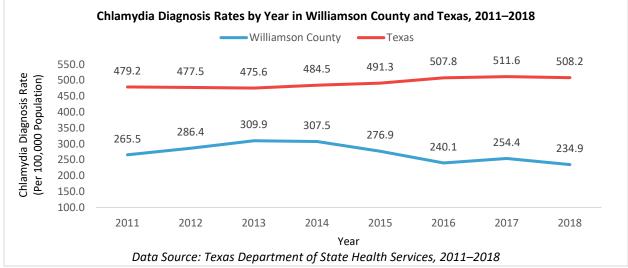
Why is this important?

According to the CDC, chlamydia is the most frequently reported bacterial sexually transmitted infection in the U.S. <sup>109</sup> Although chlamydia can infect both men and women, it is most common in women ages 15 to 24. Most individuals with chlamydia do not display symptoms, but for those who do, it might not be for several weeks after infection. This may result in many cases going unreported. Lack of screening to identify the infection may result in serious complications, "including pelvic inflammatory disease (PID), tubal factor infertility, ectopic pregnancy, and chronic pelvic pain." <sup>110</sup> Pregnant women can pass the infection to the baby during delivery, which can cause an eye infection or pneumonia in the newborn. Chlamydia also makes it more likely that the baby will be born prematurely.

From 2011 to 2018, reported chlamydia diagnosis rates in Williamson County remained lower than rates in Texas (Figure 67). Chlamydia diagnosis rates in Williamson County have mostly declined since a peak in 2013.

Figure 67: Chlamydia Diagnosis Rates by Year in Williamson County and Texas, 2011–2018

Chlamydia Diagnosis Rates by Year in Williamson County and Texas, 2011–2018



<sup>109 &</sup>quot;Chlamydia Statistics."

<sup>110 &</sup>quot;Chlamydia Basic Fact Sheet."

# Gonorrhea

# Why is this important?

Gonorrhea is a very common sexually transmitted infection that occurs most often among men and women ages 15 to 24.<sup>111</sup> "Gonorrhea has progressively developed resistance to the antibiotic drugs prescribed to treat it." <sup>112</sup> If untreated, gonorrhea can cause serious complications, such as infertility in both men and women. Additionally, there can be serious complications for a pregnant woman's baby during childbirth if the woman does not seek treatment in a timely manner.

Reported diagnosis rates of gonorrhea between 2011 and 2018 were lower in Williamson County compared to Texas (Figure 68). However, Williamson County rates have increased over this seven-year period, from 45.9 per 100,000 population to 58.2 per 100,000 population.

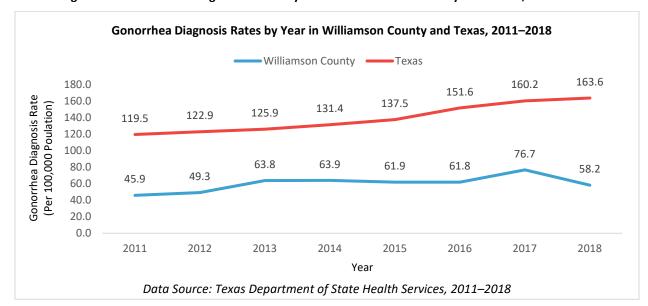


Figure 68: Gonorrhea Diagnosis Rates by Year in Williamson County and Texas, 2011–2018

# **HIV and AIDS Diagnosis**

Why is this important?

Describing HIV and AIDS, Healthy Williamson County writes:

The human immunodeficiency virus (HIV) damages the immune system, eventually leading infected individuals to develop acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition. People infected with HIV may develop mild infections or chronic symptoms like fever, fatigue, shortness of breath, and weight loss. If left untreated, HIV typically progresses to AIDS in about 10 years, at which point the immune system is weakened to the point of being unable to fight infections. Men who have sex with men of all races, African Americans, and Hispanics/Latinos are disproportionately affected by HIV. 113

More people than ever before are living with HIV or AIDS because today's better treatments enable people with HIV or AIDS to live longer than they did in the past. "While the total number of people living with HIV in the U.S. is increasing, the number of annual new HIV infections has remained stable in recent years." 114

From 2011 to 2018, reported rates of newly diagnosed HIV infection and AIDS were lower in Williamson County compared to Texas (Figure 69 and Figure 70). In Williamson County, the rate of HIV diagnoses peaked at 7.9 per 100,000 population in 2013 (Figure 69). During the same period, AIDS diagnoses in Williamson County remained stable (Figure 70).

<sup>111 &</sup>quot;STD Facts- Gonorrhea."

<sup>112 &</sup>quot;Gonorrhea-Antibiotic Resistance."

<sup>113 &</sup>quot;HIV Diagnosis Rate."

<sup>114</sup> Ibid.

Figure 69: HIV Diagnosis Rate by Year in Williamson County and Texas, 2011-2019

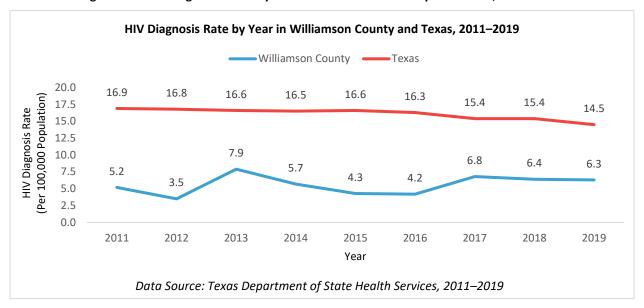
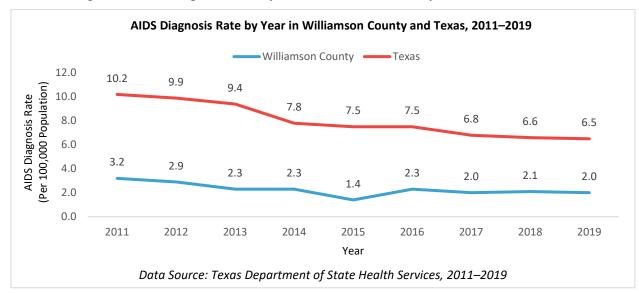


Figure 70: AIDS Diagnosis Rate by Year in Williamson County and Texas, 2011-2019



# **Tuberculosis**

Why is this important?

Tuberculosis (TB) is a bacterial disease that usually affects the lungs but can also affect other parts of the body (e.g., the brain and kidneys. The TB bacteria are spread through the air from person to person when someone with untreated pulmonary TB coughs, speaks, or sneezes. Tuberculosis is not spread by shaking someone's hand, sharing food or drink, touching bed linens or toilet seats, sharing toothbrushes, or kissing. "People with TB disease are most likely to spread it to people they spend time with every day," including family members, friends, and coworkers or schoolmates. 116

Compared to Texas, Williamson County had lower reported TB diagnosis rates from 2012 to 2019 (Figure 71). Reported rates of TB in Williamson County peaked at 2.8 per 100,000 population in 2015 but decreased to 1.0 per 100,000 population in 2019.

<sup>115 &</sup>quot;Basic TB Facts."

<sup>116 &</sup>quot;Tuberculosis-How TB Spreads."

Tuberculosis Diagnosis Rate by Year in Williamson County and Texas, 2012–2019 -Williamson County 6.0 **Fuberculosis Diagnosis Rate** 4.9 (Per 100,000 Population) 4.7 4.6 4.7 4.5 5.0 4.0 4.0 3.9 4.0 2.8 3.0 2.4 2.3 1.8 1.7 1.6 1.4 2.0 1.0 1.0 0.0 2012 2013 2014 2015 2016 2017 2018 2019 Year Data Source: Texas Department of State Health Services, 2012–2019

Figure 71: Tuberculosis Rate by Year in Williamson County and Texas, 2012–2019

# **Key Findings**

Rates of communicable diseases in Williamson County are lower than statewide rates. Still, the data reveal areas of concern, particularly syphilis. Despite a decrease from 2017 to 2018, primary and secondary syphilis rates were significantly higher in 2018 than before 2017. HIV and AIDS diagnosis rates have remained relatively stable, with slight decreases.

These findings are encouraging:

- Syphilis rates in Williamson County have been continually lower than in the state.
- Chlamydia rates in Williamson County were the lowest in 2018 compared to the previous eight years.
- Gonorrhea rates sharply decreased from 2017 to 2018, while the state rates continue to climb.
- Tuberculosis rates have decreased in the county since 2017.

# C11. Sentinel Events

The data in this section highlight vaccine-preventable diseases, which include measles, mumps, rubella, tetanus, and pertussis. Each of these diseases is classified as a sentinel event, which is "a preventable disease, disability, or untimely death whose occurrence serves as a warning signal that the quality of preventive and/or therapeutic medical care may need to be improved." <sup>117</sup> Additionally, this section provides immunization data for adults and children as well as the trend of conscientious exemptions in Williamson County and Texas.

# Vaccine-Preventable Diseases

# Why are these important?

The Centers for Disease Control and Prevention (CDC) recommend that people get the MMR (measles-mumps-rubella) vaccine to protect against measles, mumps, and rubella. This is especially important for children, who should get one dose of MMR vaccine at age 12 to 15 months and the second dose at age 4 to 6 years. "One dose of MMR vaccine is 93% effective against measles, 78% effective against mumps, and 97% effective against rubella. Two doses of MMR vaccine are 97% effective against measles and 88% effective against mumps." 118

Additionally, recommendations for tetanus and pertussis include DTaP (diphtheria, tetanus, and acellular pertussis) vaccines for children younger than seven and Tdap (combined tetanus, diphtheria, and acellular pertussis) vaccines for adolescents and adults.<sup>119</sup>

<sup>&</sup>lt;sup>117</sup> Rutstein et al., "Sentinel Health Events (Occupational)."

<sup>&</sup>lt;sup>118</sup> "Measles, Mumps, and Rubella (MMR) Vaccination: What Everyone Should Know."

<sup>119 &</sup>quot;Vaccine Safety-Diphtheria, Tetanus, and Pertussis Vaccines."

Table 28: Cases of Vaccine-Preventable Diseases in Williamson County, 2010–2020

Cases of Vaccine-Preventable Diseases in Williamson County, 2010–2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Measles	0	0	0	0	0	0	0	0	0	0	0
Mumps	0	1	0	0	0	0	3	1	6	12	3
Rubella	0	0	0	0	0	0	0	0	0	0	0
Tetanus	0	0	0	0	1	0	0	0	0	0	0
Pertussis	725	92	85	94	74	44	60	59	22	18	0

Data Source: Texas Department of State Health Services, 2010–2017; WCCHD, 2018–2020

#### Findings based on Table 28:

- Measles: There have been no confirmed cases of measles in Williamson County since 1999, when two cases were
  reported.
- Mumps: In 2011, Williamson County had one reported case of mumps, after which no new cases were reported until 2016. Three cases of mumps were reported in 2016 and again in 2020.
- Rubella: From 2010 to 2020, there were no confirmed cases of rubella in Williamson County.
- **Tetanus**: In 2014, one case of tetanus was reported in Williamson County.
- **Pertussis:** Rates of pertussis in Williamson County were stable until 2010, when WCCHD detected 725 cases. Since then, pertussis rates have decreased, reaching zero cases as of 2020.

# **Adult Immunizations**

# Why are these important?

Influenza — also known as flu — is a "contagious respiratory illness caused by influenza viruses." Groups at high risk of developing serious flu-related complications include "people 65 years and older, people of any age with certain chronic medical conditions (such as asthma, diabetes, or heart disease), pregnant women, and children younger than 5 years." Complications of flu can include "bacterial pneumonia, ear infections, sinus infections and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes." The CDC estimates that in the U.S., 5 to 20% of the population on average gets the flu. <sup>120</sup> The CDC also estimates that influenza "has resulted in 9 million – 41 million illnesses, 140,000 – 710,000 hospitalizations and 12,000 – 52,000 deaths annually between 2010 and 2020." <sup>121</sup> The seasonal influenza vaccine can prevent serious illness and death. The CDC recommends annual vaccinations for everyone ages 6 months and older to prevent the spread of influenza. <sup>122</sup>

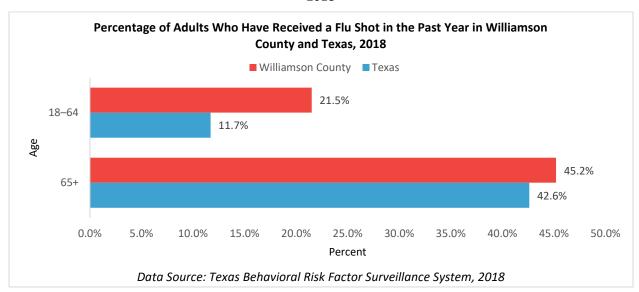
In 2018, 21.5% of adults ages 18 to 64 in Williamson County reported that they had received a flu shot in the past year, which is nearly double the rate in Texas (11.7%) (Figure 72). The percentage of adults ages 65 and older in Williamson County who had received a flu shot in the past year (45.2%) was slightly higher than in Texas (42.6%).

<sup>120 &</sup>quot;Key Facts About Influenza (Flu)."

<sup>121 &</sup>quot;Burden of Influenza."

<sup>122 &</sup>quot;Who Needs a Flu Vaccine."

Figure 72: Percentage of Adults Who Have Received a Flu Shot in the Past Year in Williamson County and Texas, 2018



# **Child Immunizations**

Why are these important?

"Most parents vaccinate their children according to the CDC's recommended immunization schedule, protecting them from 14 potentially serious diseases before their second birthday. Vaccinating children on time protects them and anyone around them with a weakened immune system." <sup>123</sup> Completion of all doses of a vaccine on the recommended vaccine schedule provides the best protection for young children against harmful disease outbreaks.

The data in Figure 73 are reported from ImmTrac2, the Texas immunization registry maintained by the Texas Department of State Health Services. ImmTrac2 is an opt-in registry that is free to use and provides a secure and confidential way to store vaccine information electronically for Texans of all ages. <sup>124</sup> Healthcare providers are required to report childhood immunizations to ImmTrac2 but must obtain parental consent before doing so. However, children are often not registered for ImmTrac2 until they enter kindergarten, when schools require verification of a complete vaccination history. Due to this delay in entry and the incompleteness of vaccine records for children in ImmTrac2, the Community Health Assessment team retrospectively examined vaccination rates of five-year-old children to assess their status at age two years.

In the period from 2019 to 2020, the percentage of kindergartners in Williamson County with a completed vaccine was lower for each of the measured vaccines than that of Texas kindergarteners overall. Additionally, the number of administered vaccines registered in ImmTrac2 was lower in all months of 2020 than in 2019 (Figure 74).

<sup>123 &</sup>quot;Follow Immunization Schedule."

<sup>124 &</sup>quot;ImmTrac2 Registry Home."

Figure 73: Percentage of Vaccine Completion Rates in Williamson County and Texas Kindergarteners, 2019–2020

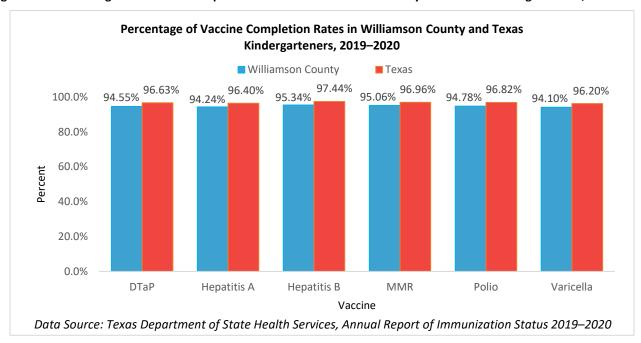
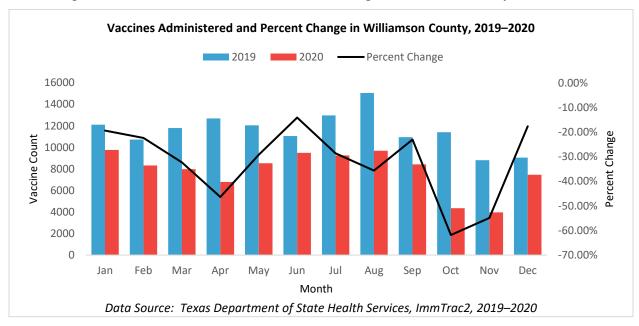


Figure 74: Vaccines Administered and Percent Change in Williamson County, 2019–2020



# **Conscientious Exemptions**

Why are these important?

"In accordance with Texas Administrative Code §97.62, Texas law allows for an exemption from immunizations for reasons of conscience, including a religious belief." <sup>125</sup> As the percentage of conscientious exemptions increases, the percentage of individuals at risk for disease also increases. In contrast, when a large percentage of the population is vaccinated, it indirectly offers a protective effect (herd immunity) to individuals who cannot be vaccinated for medical reasons or because vaccination was not successful. "Herd immunity occurs when a large portion of a community (the herd) becomes immune to a disease, making the spread of disease from person to person unlikely." A percentage of the population often must be susceptible to an infectious disease for the disease to spread. If the percentage of the population that is immune to the disease exceeds this

<sup>125 &</sup>quot;Statistics on Conscientious Exemptions to School Immunizations."

threshold, the spread of the infectious disease will decline. The percentage of a community that needs to be immune to achieve herd immunity varies from disease to disease and depends on factors such as how contagious a disease is. "As a result [of herd immunity], the whole community becomes protected — not just those who are immune." 126

From 2011 to 2021, the percentages of conscientious exemptions among students in kindergarten to 12th grade (K–12) were consistently higher in Williamson County compared to Texas (Figure 75).

Student Conscientious Exemptions by Year in Williamson County and Texas, 2011–2021 -Williamson County Texas 3.50% 3.18% 2.87% 3.00% 2.66% 2.68% 2.33% 2.50% 2.12% 2.11% 1.83% 1.79% Percent 2.00% 1.58% 1.55% 1.35% 1.20% 1.50% 1.07% 0.97% 0.84% 0.79% 0.76% 1.00% 0.64% 0.57% 0.50% 0.00% 2011-12 2012-13 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 Year Data Source: Texas Department of State Health Services, 2011–2021

Figure 75: Student Conscientious Exemptions by School Year in Williamson County and Texas, 2011–2021

# **Key Findings**

Although many vaccine-preventable diseases have been contained in Williamson County, it is crucial that immunization efforts focus on the key findings below to maintain progress and reduce the risk of future disease transmission.

- Increase the number of adults who receive an annual flu shot, especially for adults ages 65 and older. This population has the highest flu-related mortality of all age groups since the human immune system becomes weaker with age. 127 People ages 65 and older had twice the vaccination rate of those ages 18 to 64. Interventions should target all populations to increase vaccination so that transmission decreases throughout the community.
- Decrease the number of conscientious exemptions among K–12 students. Williamson County has lower kindergartener vaccination rates than the state. Children of all ages should receive vaccinations to help ensure their own long-term health as well as the health of their classmates, teachers, and others in the community.
- Launch vaccine reminder and confidence campaigns. The number of vaccines administered in Williamson County significantly decreased from 2019 to 2020. This is likely due to the COVID-19 pandemic, which limited healthcare access and preventive care. Extra efforts are now needed to encourage residents to seek preventive care and all recommended vaccinations, particularly as socialization increases.

# C12. COVID-19

Coronavirus Disease 2019 (COVID-19) is a disease caused by a novel coronavirus named SARS-CoV-2, discovered in December 2019 in Wuhan, China. It is very contagious and has quickly spread around the world. COVID-19 most often causes respiratory symptoms that can feel much like a cold, flu, or pneumonia. This section examines the impact COVID-19 had on Williamson County through case counts, death counts, and cluster-associated cases in schools. Additionally, this section will provide

<sup>126 &</sup>quot;Herd Immunity."

<sup>127 &</sup>quot;Flu & People 65 Years and Older."

COVID-19 immunization data as well as breakthrough cases that occurred in individuals after they were fully vaccinated. Only laboratory-confirmed cases were included in these data. 128

# Impact on Community

"The coronavirus pandemic has had unprecedented, widespread impacts on households across America, raising concerns about our ability to weather long-term health and financial harms." <sup>129</sup> Williamson County and Cities Health District assessed the impact of COVID-19 on the Williamson County community's mental health status and ability to access basic needs. Findings are shown in Appendix H: Social Determinants of Health and COVID-19 Vaccine Survey.

#### **Case Count**

#### Why is this important?

Public health surveillance collects data on over 120 diseases and conditions nationally. <sup>130</sup> The goal of this surveillance is to protect the public from infectious diseases and other health threats, and it is especially important for new diseases such as COVID-19. <sup>131</sup> The information collected helps identify similarities and differences among cases based on information like demographic characteristics, clinical factors, epidemiologic characteristics, exposure and contact history, and the courses of clinical illness and care received. Hospitals, healthcare providers, and laboratories collect data and report them to public health departments as required by state disease reporting laws.

As of October 15, 2021, a total of 64,186 confirmed cases of COVID-19 were reported in Williamson County (Figure 76). The daily seven-day average incidence rate in Williamson County reached a high of 77.72 infections per 100,000 population on September 1, 2021, while Texas reached its highest incidence rate of 65.69 infections per 100,000 population on January 17, 2021 (Figure 77). Figure 78 displays the total number of cases by age group.

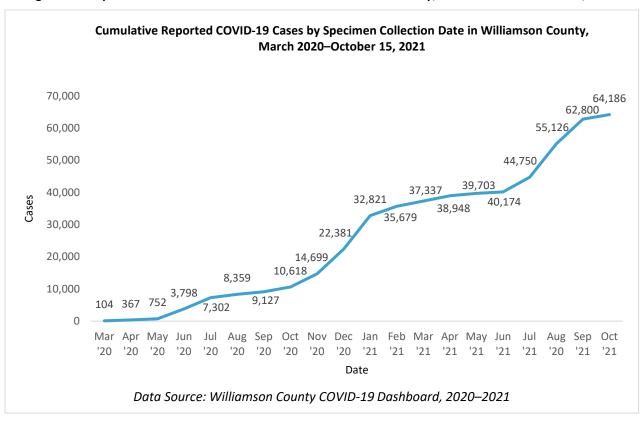


Figure 76: Reported COVID-19 Cases Over Time in Williamson County, March 2020-October 15, 2021

<sup>128 &</sup>quot;Basics of COVID-19."

<sup>129 &</sup>quot;The Impact of Coronavirus on Households Across America."

<sup>130 &</sup>quot;FAQ: COVID-19 Data and Surveillance."

<sup>131 &</sup>quot;Estimated COVID-19 Burden."

Figure 77: COVID-19 Daily Seven-Day Average Incidence Rate in Williamson County, March 12, 2020–October 15, 2021

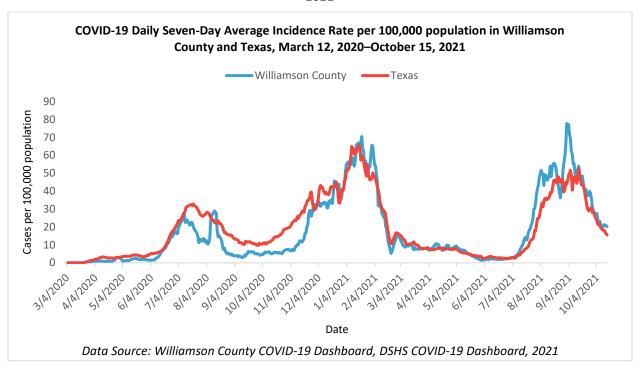


Figure 78: Reported Confirmed COVID-19 Cases by Age Group in Williamson County, March 12, 2020–October 15, 2021

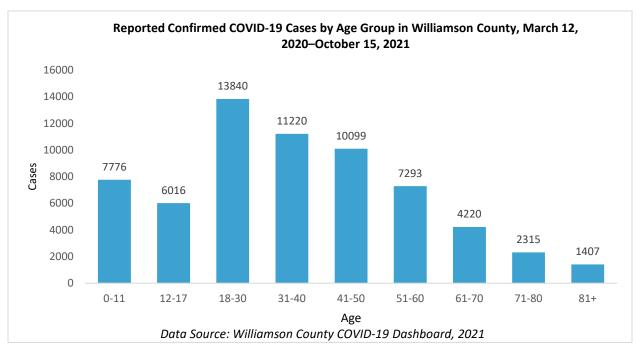
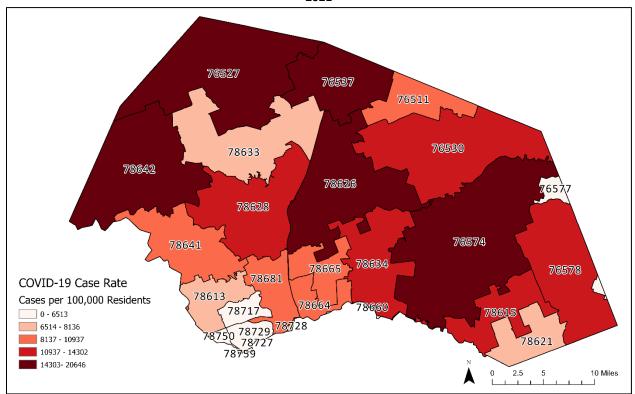


Figure 79 displays the COVID-19 infection rate in each ZIP code in Williamson County. Table 29 displays the five ZIP codes with the highest COVID-19 infection rates and the five ZIP codes with the lowest rates. Only ZIP codes with a population over 1,000 in Williamson County were included. The ZIP codes highlighted in blue also have one of the five highest vaccination rates in the county, while the ZIP codes highlighted in red have one of the five lowest vaccination rates.

Figure 79: COVID-19 Case Rate per 100,000 Population by ZIP Code in Williamson County, March 12, 2020–October 15, 2021



Data Source: Texas Department of State Health Services, 2021

Date Created: 10/29/2021

Table 29: Williamson County ZIP Codes with Lowest and Highest COVID-19 Infection Rates, 2020–2021

Williamson County ZIP Codes with Lowest and Highest COVID-19 Infection Rates, 2020–2021

ZIP Code	Cases per 100,000 residents	ZIP Code	Cases per 100,000 residents
78750	4,345	76537	20,646
78717	5,789	78626	15,589
78729	6,513	76574	15,390
78728	7,264	76527	15,019
78613	7,612	78642	14,718

Data Source: Williamson County COVID-19 Dashboard and Texas Department of State Health Services, ImmTrac2, 2020–2021

# **Death Count**

Why is this important?

Mortality data are monitored and routinely used to detect cases of infectious diseases that might signal a larger public health emergency, monitor specific preventable deaths, raise awareness of issues, and inform the creation of public health responses to prevent additional deaths. <sup>132</sup> It is important to record deaths from COVID-19 for several reasons: COVID-19 has become a leading cause of death; the risk of death from COVID-19 differs based on age and comorbidities; deaths from COVID-19 will prolong the stagnant trend in life expectancy in the United States; and many, if not most, COVID-19–related deaths

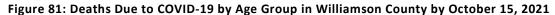
<sup>&</sup>lt;sup>132</sup> Koh, Geller, and VanderWeele, "Deaths From COVID-19."

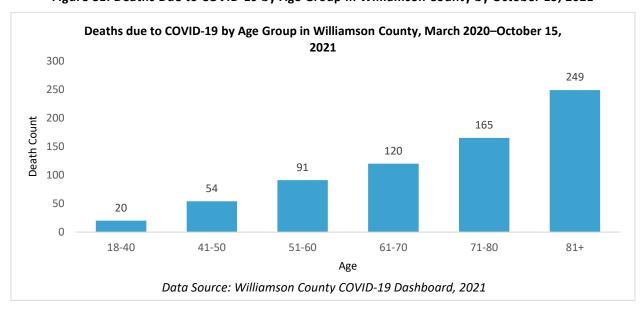
could have been prevented, showing that critical public health strategies must remain in society's focus during and after the COVID-19 pandemic. 133

Figure 80 displays the COVID-19 daily average case-fatality rate per 100 cases. The highest daily average case-fatality rate for Williamson County was 9.4 deaths per 100 cases and occurred on April 10, 2020. The overall average case-fatality rate was 1.3 deaths per 100 cases. As of October 15, 2021, there were 699 deaths from COVID-19 in Williamson County, with more deaths (249) occurring in people ages 81 and older than in any other age group (Figure 81).

COVID-19 Daily Average Case-Fatality Rate per 100 cases in Williamson County, March 2020-October 15, 2021 10 9 8 Deaths per 100 Cases 7 6 5 4 3 2 1 0 20-20-20 20,1184.20 20-Jun-20 20,111,20 20589720 20.00.20 20,404.20 20.Dec.20 20.141.22 20:120:22 20,1/21,27 20-201-22 20.1184.2.2 20-Jun-22 Data Source: Healthy Communities Institute, 2021

Figure 80: COVID-19 Daily Average Case-Fatality Rate in Williamson County, March 2020-October 15, 2021





 $<sup>^{133}</sup>$  "Surveillance Strategy Report — Modernizing Mortality Reporting."

-

# **School Clusters**

# Why are these important?

Early in the COVID-19 pandemic, children and adolescents were not commonly identified as index cases for clusters, meaning they were not often known to spread COVID-19 to others. However, outbreaks among adolescents and children attending daycare, schools, and extracurricular activities have demonstrated that children and adolescents can transmit SARS-CoV-2 to others. Multiple studies have shown that transmission within school settings is typically lower than, or at least similar to, levels of community transmission when prevention strategies are in place in schools. <sup>134</sup> Epidemiologists from Williamson County and Cities Health District worked closely with school nurses and staff at the public schools, private schools, and daycares in the county to ensure proper mitigation strategies and reporting methods were in place.

Through May 2021, there were a total of 262 COVID-19 cases associated with clusters in schools. Clusters were defined by five or more linked cases. The school district with the highest number of school cluster cases (78) was Round Rock (Figure 82).

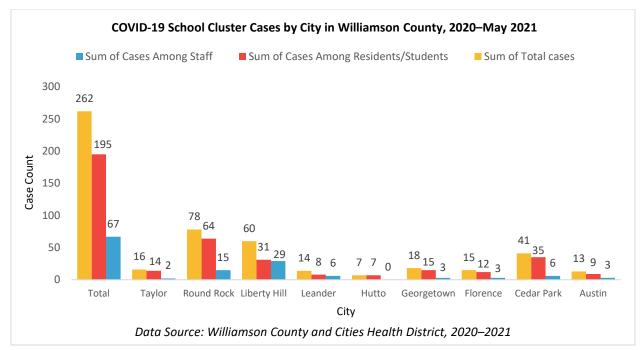


Figure 82: COVID-19 School Cluster Cases by City in Williamson County, 2020–2021

# **Vaccines**

Why are these important?

"The COVID-19 global pandemic has greatly impacted society and every part of life. As a way to transition out of this global pandemic and protect people from serious illness, hospitalization, or death, the COVID-19 vaccination has been made available. According to the Centers for Disease Control and Prevention (CDC), vaccination is an act of introducing vaccine into the body to produce immunity. By showing and tracking percentage of vaccinations, communities can monitor trends across counties and allocate resources as needed." 135

There are currently three authorized vaccines in the United States that prevent COVID-19. The Pfizer-BioNTech and Moderna mRNA COVID-19 vaccines and Johnson & Johnson's Janssen viral vector vaccine can all lower the risk of contracting and spreading the virus that causes COVID-19 and may help keep people from getting seriously ill even if they do get COVID-19. Being fully vaccinated against COVID-19 allows people to resume many activities they did before the pandemic, and the CDC

<sup>134 &</sup>quot;Science Brief: Transmission of SARS-CoV-2 in K-12 Schools and Early Care and Education Programs – Updated."

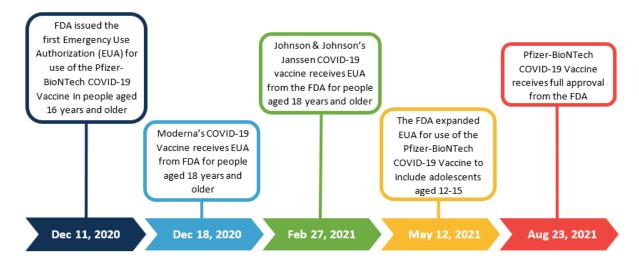
<sup>135 &</sup>quot;Persons Fully Vaccinated Against COVID-19."

lists vaccination as a key component for population immunity against COVID-19. <sup>136;137</sup> As of November 3, 2021, the CDC recommends vaccination against COVID-19 for everyone ages 5 years and older. <sup>138</sup>

COVID-19 vaccine distribution in Texas followed a phased approach set by the Texas Department of State Health Services. 139

- December 14, 2020: Phase 1A (frontline healthcare workers and residents at long-term care facilities)
- **December 29, 2020:** Phase 1B (people 65+ or people 16+ with a health condition that increases risk of severe COVID-19 illness)
- March 3, 2021: School and licensed childcare personnel
- March 15, 2021: Phase 1C (people 50 to 64 years of age)
- March 29, 2021: Everyone 16 years old and older
- May 12, 2021: Everyone 12 years old and older
- November 3, 2021: Everyone 5 years old and older<sup>140</sup>

Figure 83: Authorization and Approval Timeline for COVID-19 Vaccines in the United States



# **Vaccination Rates**

As of October 15, 2021, 69.32% of Williamson County's COVID-19 vaccine—eligible population (then people ages 12 years and older) had been fully vaccinated, and 78.10% had received at least one dose (Figure 84). Williamson County has a higher percentage of the population fully or partially vaccinated than Texas overall. Vaccination rates in Williamson County are broken down by percentage of the eligible population by ZIP code, as shown in Figure 85.

<sup>136 &</sup>quot;Benefits of Getting a COVID-19 Vaccine."

<sup>&</sup>lt;sup>137</sup> "Science Brief: SARS-CoV-2 Infection-Induced and Vaccine-Induced Immunity."

<sup>138 &</sup>quot;Key Things to Know About COVID-19 Vaccines."

<sup>139 &</sup>quot;COVID-19 Vaccine Information."

<sup>&</sup>lt;sup>140</sup> "How CDC Is Making COVID-19 Vaccine Recommendations."

Figure 84: Percentage of Eligible Population that is Vaccinated against COVID-19 in Williamson County and Texas, 2020–2021

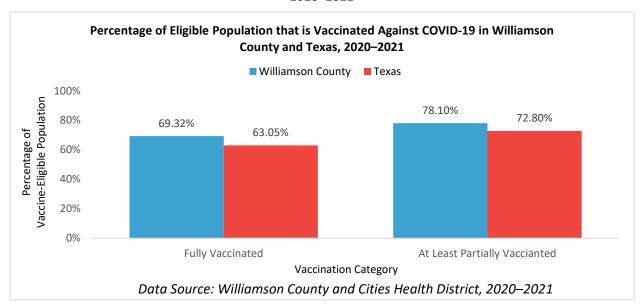
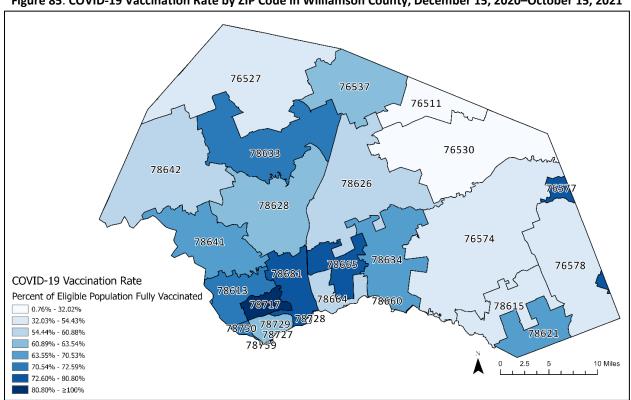


Figure 85: COVID-19 Vaccination Rate by ZIP Code in Williamson County, December 15, 2020-October 15, 2021



Data Source: Texas Department of State Health Services, ImmTrac2, 2021

Date Created: 10/29/2021

# Vaccine Breakthrough Cases

Why are these important?

Although all three vaccines are proven highly effective at preventing COVID-19, no vaccine is 100% protective, meaning that infection can still occur in people who are fully vaccinated. Breakthrough cases are cases that occur in individuals who are fully vaccinated. These cases typically cause mild or moderate illness, rarely resulting in hospitalization or death due to severe COVID-19. Increased case counts and the increasing presence of the Delta coronavirus variant led to an increase in breakthrough cases. As of October 15, 2021, there were 3,414 confirmed breakthrough COVID-19 cases in Williamson County (Figure 86 and Figure 87).

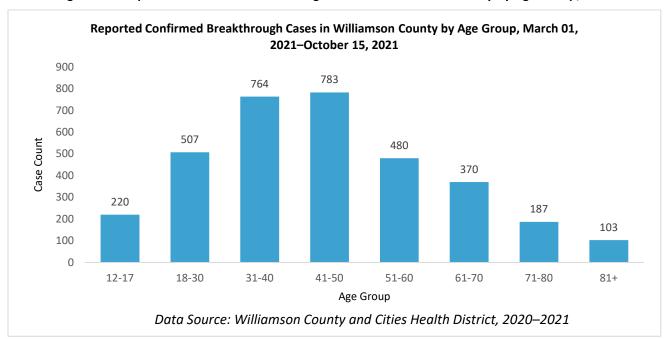
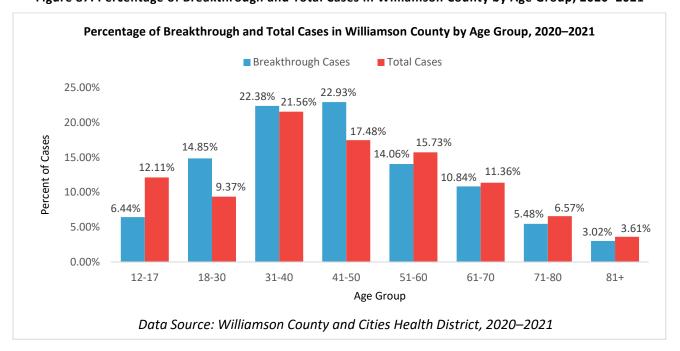


Figure 86: Reported Confirmed Breakthrough Cases in Williamson County by Age Group, 2021





<sup>141 &</sup>quot;COVID-19 Vaccine Effectiveness."

# COMMUNITY THES AND STRENGTHS ASSESSMENT



# QUESTIONS ANSWERED IN THIS ASSESSMENT

What community barriers affect quality of life?

How is quality of life perceived in the community?

What assets are available to improve community health?

# Overview

The Community Themes and Strengths Assessment (CTSA) identifies current community concerns, perceptions about quality of life, and community strengths and assets through feedback from community stakeholders and the public. The questions listed to the left are valuable for multiple reasons. First, community members become invested in the community health improvement process when they have a sense of ownership and responsibility for the outcomes. This occurs when their concerns are genuinely considered and visibly affect the process. Additionally, the themes and issues identified by asking these questions offer insight into the information and statistics from the other assessments. Furthermore, communities must leverage their strengths and assets to improve health.

# Community Strengths and Assets

Through the CTSA process, residents and stakeholders identified the following strengths and assets.

Communication and collaboration between agencies that provide community resources

Discussing collaboration between Williamson County agencies in its report

(Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute), Texas Health Institute (THI) writes:

When asked to describe the assets and strengths of Williamson County, participants frequently mentioned that the community has a strong sense of altruism and members often come together to help each other. One key informant expressed their gratitude for the reliability of nonprofit agencies within the community. Another key informant expressed excitement about emerging diversification efforts that are promoting growth opportunities and resources for underrepresented populations. Key informants and focus group participants also emphasized the tremendous support and impact of strong school districts promoting social emotional learning and trauma-informed care as a strength. In addition, participants mentioned a strong network of churches with resources for food distribution, utility support, COVID-19 support, dental care, and other social services.

# Availability of quality healthcare services

Williamson County is home to a network of hospitals, clinics, a Federally Qualified Health Center, a local mental health authority, and health professions universities. According to the Community Health Survey, access to healthcare was ranked as the fourth greatest strength in the county.

Availability of community programs and services

"I'm grateful that we do have in our community some nonprofit agencies that we can call and who we have good relationships with." — Focus Group Participant

There are many community programs and services (e.g., support groups, senior centers, nonprofits) in Williamson County which are accessible via navigation platforms such as findhelp (formerly Aunt Bertha) and United Way of Williamson County's 2-1-1 hotline.

# Availability of fresh food

Community stakeholders identified the availability of fresh foods through farmers' markets and the Meals on Wheels program as an important strength in the community. Through Photovoice, youth discussed healthy eating habits, such as consuming fruits and vegetables and drinking water.

# Availability of parks, green spaces, and opportunities for exercise

According to the Community Health Survey (CHS), parks and recreation was ranked as the second greatest strength in the county. Community members and stakeholders highlighted walking trails, vast park spaces, outdoor exercise equipment, splash parks/playgrounds, and open spaces as strengths in the community. Youth participated in community sports and exercised using school gyms.

# Low crime/safe neighborhoods

According to the CHS, low crime/safe neighborhoods was ranked as the greatest strength in the county, with nearly half of survey participants believing it to be a top strength.



Through the CHS, residents indicated that the county was considered a good place to raise children. Furthermore, the West and South indicated that good schools were top strengths in each region. "Key informants and focus group participants also emphasized the tremendous support and impact of strong school districts promoting social emotional learning and traumainformed care as a strength," as well as many school-based behavioral health services and clinics.



#### Mental health awareness

Since the COVID-19 pandemic exacerbated mental health challenges, community members recognized the importance of building resilience in improved mental health efforts. Through Photovoice, youth expressed greater awareness and consideration of complex mental health topics. Youth learned self-regulation techniques (e.g., walks, runs, movies) and self-care methods (e.g., being outside in the open by oneself while listening to music or lying in the grass), which they use to improve their mood and support their mental health.

Some youth found growth opportunities in social distancing during the COVID-19 pandemic. They benefited from practicing mental health improvement behaviors, such as adapting and learning through isolation. Youth photographers also recognized social interaction as a basic need and that without it, people may experience stress or anxiety in unfamiliar social situations.

# Local assets and wealth

Williamson County has a median household income of \$87,337, which is about \$25,000 more than the median household income in Texas (\$61,874). According to the Community Health Survey, 51.4% of survey respondents indicated that they were prepared with at least three months of emergency funds for rent, utilities, groceries, and supplies. According to a nationwide 2021 survey, more than half of Americans have less than three months' worth of expenses prepared for an emergency. <sup>142</sup>

Some youth felt very grateful to have financial stability, as they had observed people they knew living with financial limitations. For example, a youth photographer who saw multiple families with broken refrigerators reported finding it difficult to understand such living conditions and gaining perspective on their own privilege.

# Concerns Identified and Solutions Proposed

Through the Community Themes and Strengths Assessment process, residents and stakeholders identified the following concerns, which can be grouped into four categories: access to healthcare, social and structural determinants of health, community health needs, and children's health.

<sup>&</sup>lt;sup>142</sup> Foster, "Survey: More Than Half Of Americans Couldn't Cover Three Months of Expenses With Emergency Savings."

# Access to Healthcare

Affordable healthcare for publicly insured or uninsured patients

"When they're enrolled in the county program, we don't have a lot of providers that accept the WilCo Care card. Similar to Medicaid, we don't have a lot of providers."

— Key Informant

#### According to the THI report:

Community members frequently indicated an insufficient [number] of primary and specialty care providers creates a barrier to accessing health care, particularly as it relates to providers that accept public insurance. One focus group participant said that despite having four Federally Qualified Health Centers in Taylor, Round Rock, Cedar Park, and Georgetown, appointments are limited to certain days of the week, especially during the pandemic. Some Taylor residents travel to Round Rock and Georgetown to receive primary care services or x-rays. Medicaid beneficiaries lack [enough] primary care or specialty providers that accept their insurance, and people enrolled in WilCo Care (WCCHD's indigent care program) struggle to find physicians, particularly specialists. As a result, residents tend to over-utilize emergency rooms. One key informant stated that one of her recent clients enrolled in WilCo Care was referred to surgery after an emergency room visit but could not have the procedure due to the unavailability of specialty surgeons [who are participating administrators]. In addition, focus group participants recalled the difficulties in locating local mental health providers such as psychiatrists or psychologists who accept insurance to provide mental health care.

Stakeholders also highlighted this challenge in the IBM Watson Health report (Appendix J: Community Focus Group and Key Informant Results — IBM Watson Health), in which limited access to dental care and to primary healthcare providers for uninsured and underinsured patients ranked as the second and fifth most important challenges, respectively, within Williamson County.

**Proposed solutions:** "Offer a free or discounted hospital program annually so that people who are unable to see a physician can schedule a visit at least once a year. Another option would be providing a low-cost community health clinic."

Awareness of resources and support for navigating healthcare system

"It's hard for the average person to navigate those systems, and then you're asking people that are disadvantaged to navigate systems." — Key Informant

Texas Health Institute describes this concern, writing:

Community participants frequently mentioned the lack of awareness and support for navigating through the health care system as a barrier to accessing care. Many underrepresented populations with cultural and language barriers, such as Hispanic/Latinx and AAPI [Asian American and Pacific Islander] low-income residents, do not know about health facilities that provide services at a minimal cost. This lack of awareness of available resources also makes it difficult for patients, family members, and caregivers to advocate for their needs. In addition, strict HIPAA-related requirements on who can...contact providers on behalf of the patient [increase] barriers to access, especially among non-English-speaking patients. While health navigators at...WCCHD [Williamson County and Cities Health District] can provide assistance, office closures prevented them from helping clients with documentation support during the COVID-19 pandemic, and many clients were unenrolled from support programs as a result.

**Proposed solutions:** "Facilitate access to services including primary care, dental care, and mental health services in a single location. Other examples included providing case management services, increasing hospital social workers, and providing health care concierge services."

# Lack of medical insurance

"Worrying about insurance, worrying about co-pays...obviously, the transportation.

I think all of the above would stop me from going unless I had to." — Focus Group
Participant

"Participants frequently shared challenges that residents have due to not having health insurance and not qualifying for the Medical Access Program. One focus group participant emphasized the large gap in health care services when residents cannot afford to pay privately. For example, without insurance, residents cannot receive access to preventive care or specialty services such as endoscopies or colonoscopies."

Culturally and linguistically appropriate care and services

"There's a huge Hispanic population that's underrepresented, and they don't have the means to get the information translated into Spanish to help them better understand how they can get services that are available to them." — Key Informant

# According to the THI report:

Participants shared that health care services often feel inaccessible because they are not culturally or linguistically appropriate. Key informants and focus group participants shared barriers regarding language, noting an insufficient number of Spanish-speaking or Korean-speaking providers. For example, Hispanic/Latinx and Asian American [and] Pacific Islander (AAPI) populations in Williamson County often encounter language barriers due to the lack of interpreters and translated material. In addition, children and grandchildren often feel pressured to provide interpretation and assist senior populations with complex paperwork, because health care language, including language used on pamphlets or educational materials, is confusing and difficult to understand or apply. Furthermore, participants described how the inability to adapt to the predominant culture or navigate the health care system as an immigrant is a source of ongoing stress. Participants noted that many also [forgo] both health care services and other services due to the fear of deportation based on immigration laws.

This challenge also appeared in the IBM Watson Health report. Stakeholders noted that cultural competence, language barriers, fear or distrust of the healthcare system, and lack of diversity among healthcare and service providers were barriers to accessing services.

# **Proposed solutions:**

- "Language and translation services: Hire Spanish and Korean [and other language] translators and interpreters. Provide dual-language websites, social media, pamphlets, etc.
- "Culturally competent workforce: To increase compassionate and non-judgmental care, community members
  recommended expanding cultural sensitivity training for all providers and hospital staff to better equip them to serve
  underrepresented and minority populations. Participants also recommended [diversifying] the workforce by hiring
  additional providers from underrepresented populations."

# Social and Structural Determinants of Health

# Housing and homelessness

"We don't even have emergency and transitional housing in Williamson County. When someone calls us and needs emergency shelter, we have to send them to Travis County or Bell County." — Key Informant

On housing and homelessness, THI writes:

Recent economic development and population growth [have] caused housing prices to skyrocket in Williamson County over the last few years. Key informants and focus group participants revealed that the lack of affordable housing available within the county is probably one of the most complicated issues for the community. Despite the existence of local housing authorities and Section 8 housing vouchers, people in need of low-income housing often experience long waiting lists. In addition, participants shared that emergency and transitional housing is unavailable in Williamson County. Furthermore, there is a growing population of people experiencing homelessness with untreated mental health issues.

Community Health Survey respondents ranked affordable housing as the area of greatest need for additional or improved services in the county.

# **Transportation**

"I couldn't find someone that was willing to serve [my son's] needs [in Taylor] without traveling literally an hour and a half...for a 15-minute appointment. I also had to take a whole day off work to do that, and it came with a specialty co-pay...I know my family needs this support. I know they need this care, but I can't get there." — Focus Group Participant

The THI report discusses transportation, writing:

Participants frequently mentioned transportation as one of the leading structural barriers to health in Williamson County. Residents often have to travel many miles to get to the doctor, pharmacy, the grocery stores, or farmers' markets. Even with personal vehicles, the lack of money to pay for gas prevents some residents from accessing services in Round Rock, Georgetown, or eastern Williamson County. Furthermore, participants also described how the lack of transportation inhibits access to good employment opportunities or higher education and training, which ultimately affects overall health outcomes.

Community Health Survey respondents ranked transportation as the second greatest area of need for additional or improved services in the county.

**Proposed solutions:** "Provide patients with transportation to appointments by collaborating with public transportation services and volunteers. Another option included providing mobile clinics with primary care services, mental health services, and dental care, especially in rural areas of Taylor."

Cost of living, affordability, and low socioeconomic status

"Not having money really affects your mental health. You are trying to figure out, how I am going to pay this water bill, this gas bill, this light bill. I got electric due. I got car insurance. It's all rolling through your head, and there is no sleep, because you're trying to figure out how you're going to do it...I'm in a survival mode, and I need finances to just keep my head above water." — Focus Group Participant

Texas Health Institute describes the effects of low socioeconomic status in Williamson County:

Low-income communities within Williamson County face the most barriers to accessing various services. Participants noted that Hispanic/Latinx residents tend to have higher rates of poverty, and wages for those with less than a high

school education or GED are much lower and do not support the cost of living in the county. Furthermore, due to strict income eligibility criteria, even low-income families still may not qualify for WilCo Care. Having low or no income inhibits families' ability to afford healthy food options, medications, or transportation and fuel. The quality of health care and therapeutic services also declines when residents are not able to provide private-pay.

Furthermore, high cost of living has affected quality of life in the county, especially for people living in poverty, people of color, older adults, and people with disabilities. According to United for ALICE, one out of three households in the county (especially east of Interstate 35) is considered an ALICE (asset limited, income constrained, employed) household, which means it cannot afford to fulfill basic needs such as housing, rent, utilities, and food. 143

# Broadband or internet access

"You don't have access to a computer. How can you do a virtual doctor's appointment?" — Key Informant

On challenges associated with the lack of broadband or internet access, THI writes:

Participants described barriers associated with lack of access to broadband or internet, particularly for families in more rural areas of Williamson County. One key informant discussed frequent technical difficulties when attending virtual doctor's appointments including poor video quality, poor Wi-Fi, and poor phone reception. Participants noted how senior populations, AAPI [Asian American and Pacific Islander] populations, Hispanic/Latinx populations, and low-income families are often more disadvantaged when it comes to internet access. In addition, when organizations transitioned to remote services amid the pandemic, it became even more difficult for residents to access services due to the closure of public libraries—previously a primary point of access for many lower-income community members. Some people, including seniors, may also be less comfortable using technology or may not be computer literate.

# Ethnic and racial segregation

"They don't want to come be around certain people: African Americans, and I'm just going to really be honest." — Key Informant

### According to the THI report:

A number of key informants and focus group participants noted that Williamson County is ethnically and racially segregated. Participants noted specific residential areas have large populations of Hispanic/Latinx residents, and in general, people of color do not have equal access to community resources or culturally sensitive education about health. One participant pointed to the investment of resources in one area and not another: While public parks in affluent neighborhoods received adequate renovations, public parks within neighborhoods with higher populations of color did not receive equal renovations. Sometimes these neighborhoods are only a few miles apart, divided by a bridge.

Furthermore, Community Health Survey respondents identified efforts to address racism as the fifth greatest area of need for improvement in Williamson County.

<sup>&</sup>lt;sup>143</sup> "Households That Are Asset Limited, Income Constrained, Employed (ALICE)."

# **Community Health Needs**

# Challenges related to aging

Through the Community Health Survey, residents identified problems related to aging as the second greatest challenge in the community. Community members living in the North ranked aging as their top concern and services for older adults as the fourth greatest area of need for additional or improved services. Key informants also identified an aging population and high cost of medications as important challenges within Williamson County.

# Chronic disease and chronic disease risk factors

Discussing chronic diseases and their contributing factors in Williamson County, THI writes:

Hypertension, diabetes, obesity, and cancer were the most common health conditions mentioned among key informants and focus group participants, noting that diabetes and hypertension are common in Hispanic/Latinx and African American communities. Participants identified several factors that contribute to diabetes and obesity: (a) lack of access to healthy food options and exercise facilities due to transportation barriers, (b) inability to afford healthy food options or medications due to low socioeconomic status, (c) unhealthy nutrition habits, (d) lack of nutrition education, (e) [forgoing] doctor visits due to lack of insurance, (f) cultural values related to food in Hispanic/Latinx and Black/African American communities, and (g) lack of physical activity. In addition, participants mentioned the common occurrence of cancer among AAPI residents, including ovarian cancer, lung cancer, and liver cancer.

Community Health Survey respondents identified obesity as the third greatest challenge and lack of exercise as the fifth greatest challenge in the community.

Through Photovoice, youth expressed concern for healthy eating and exercise. Unhealthy food options, like baked goods, are readily available and less expensive than healthy food options like produce, making it difficult to eat healthily. Youth indicated that unhealthy food is "widely marketed" and "offered at unbeatably low prices" in the community, which contributes to obesity rates. Consequently, youth felt they would benefit from information about food labels and marketing, as they believed these can be manipulative.



Youth also emphasized the importance of eating disorder resources for all genders. One youth photographer shared his experience with anorexia and the importance of overcoming eating disorders for health.

**Proposed Solutions:** "Provide free or affordable recreation and exercise activities for community residents in southeast Taylor. One key informant recommended revamping currently vacant community buildings to host dance classes, karate classes, or nutrition education classes."

#### Dental care

"Even the free places...a lot of times, they will still only work on one tooth, or they won't offer certain things like root canals." — Focus Group Participant

"Participants also mentioned the need for and lack of access to affordable dental care in Williamson County. When seeking care, low-income, uninsured, and underinsured residents frequently travel from rural areas to find affordable dental care in Round Rock, Austin, or other urban areas. Participants also mentioned lack of awareness about where to seek low- or no-cost dental care within the county, the lack of availability of more complex dental services at low-cost clinics, and limitations of services per patient (e.g., services limited to one tooth per visit)."

# Mental health, isolation, and substance use

"There are hoops that people have to jump through...I think it makes a lot of people, especially if they're having mental health and comprehension issues...It can be a little bit more difficult for them to the point where they just give up, especially if they're not moving." — Key Informant

The THI report describes concerns for mental health, isolation, and substance use in Williamson County:



Community members identified the increasing need for and lack of affordable and available mental health services within Williamson County. Common mental illnesses discussed included stress, anxiety, and depression. Participants noted that low-income families, Medicaid recipients, or families seeking services on a sliding fee scale often struggle the most with navigating resources to address mental health concerns, because very few psychiatrists and psychologists accept insurance. One community member mentioned community crime has also increased due to stress as "people are crying and screaming for help and don't know how to go about getting it." Participants also indicated the need to address negative stigma associated with mental illness through community education and advocacy. Increased substance use and alcoholism was highlighted as a concern in the community as well. In addition to the lack of treatment providers available, community participants mentioned that it is very difficult to find recovery support services such as Alcoholics Anonymous, Narcotics Anonymous, or other support groups.

Through the Community Health Survey, mental health was ranked as the greatest challenge in Williamson County and counseling, mental health services, and support groups as the third greatest area of need for additional or improved services in the county.

COVID-19 has had a major impact on mental health. From the Social Determinants of Health and COVID-19 Vaccine Survey, the top four responses regarding the impact of COVID-19 on the respondent and on household members were anxiety (86.2% of respondents reported that they had experienced anxiety since the COVID-19 pandemic began; 78.6% of respondents reported that a member of their household had experienced anxiety since the pandemic began), stress (84.6%; 78.4%), depression (50.8%; 55.9%), and isolation (47.3%; 48.6%). "Other" responses included having had job hours and/or salaries reduced, feeling frustrated, and having had difficulty focusing and concentrating. Stakeholders also identified social isolation as a concern for older adults living in rural areas.

# Children's Health

# Child abuse

"These kids have been through significant abuse. They're always on a waitlist, which is not how you want to treat kids that have been sexually abused, physically abused, gone through, you know, the most horrible, horrific things. But it's what happens when you are limited on your free counseling services." — Key Informant

# According to the THI report:

Participants mentioned the high prevalence of child abuse, including physical abuse and sexual abuse within Williamson County. They described how sexual abuse affected all children regardless of race, ethnicity, or

socioeconomic status of the family, physical abuse tended to affect low-income families more, and noted that physical abuse usually peaks during the summer months and has significantly increased amid the pandemic due to higher unemployment rates. Due to limited free counseling in Williamson County, child abuse victims are often placed on long waiting lists for mental health providers. Additionally, participants mentioned the need for more training and awareness about adverse childhood experiences (ACEs) for all health care providers. Although Williamson County Juvenile Services provides advocacy for child abuse, intervention services, and ACEs education, limited grant funding only allocates those opportunities to residents in specific areas, such as Eastern Williamson County.

# Physical and intellectual disabilities

"I know a lot of our parents, especially with medically fragile children end up spending a lot more time in Austin." — Focus Group Participant

Texas Health Institute describes concerns for physical and intellectual disabilities among youth, writing:

Participants also mentioned the need to increase special programs for youth with physical and intellectual disabilities such as cerebral palsy, deafness, blindness, autism, Down syndrome, and dyslexia. Participants noted that there are few to no public programs available that facilitate talk therapy with autistic youth in Williamson County. They also mentioned that [some behavioral health facilities in Williamson County do] not accept youth with intellectual disabilities for treatment. As a result, most families in Williamson County need to travel to Austin to access services. In addition, participants mentioned that local respite services or music therapy are not available in Williamson County to decrease burnout among families.

#### Mental health

"A lot of hospitals forget that if a parent has a child in a [mental health] crisis, that parent is in crisis too. They forget that they need to help the family navigate and advocate...It is not a rush-through system. Help them learn how to help their family member or their child." — Focus Group Participant

### On mental health in youth, THI writes:

Participants highlighted the need to make both mental health services and education available, accessible, and destigmatized for youth. Not only is there a lack of resources for child and youth mental health services, but parents also lack the knowledge and awareness of their child's mental illness. Common youth mental illnesses mentioned among participants included suicidal ideation, attention deficit hyperactivity disorder, anxiety, depression, and bipolar disorder. Additionally, amid the pandemic, participants noted an increase in severe mental health concerns among younger children, along with the difficulty of accessing mental health facilities and assistance for children under the age of thirteen. Although key informants expressed the benefits of integrating social emotional learning into the academic curriculum, they also underlined the school districts' opposition and resistance to providing platforms to discuss youth suicide prevention and social emotional learning.

Through Photovoice, youth expressed that they had experienced a decline in mental health from 2020 to 2021 because they were socially isolated, unable to interact with peers through social gatherings and group sports. Students were frustrated that hybrid education platforms required teachers to attend to the whole class, as the diminished attention to individual students resulted in students feeling alone and left behind. As a result, youth felt stressed and anxious in academic and social settings both at home and elsewhere. Youth indicated a need for increased availability and accessibility of mental health resources because high stress — not always recognized by adults — can result in insomnia.

# **Overarching Themes**

The concerns the Community Themes and Strengths Assessment found reveal four common themes: 1) the importance of engaging the community to improve health, 2) the connection to mental health, which was found to be woven throughout all the health concerns, 3) the impact of disparities, which exist in health across the county, and 4) effects of the COVID-19 pandemic, which has changed people's lives and opportunities to achieve health in many ways.

# Community Engagement and Outreach

One important theme identified through the data was the need to improve health by "increasing community visibility" and engaging "with community members and grassroots organizations to understand their perspectives. For example, [focus group participants suggested hosting] a town hall meeting to share the community's insight with municipal/county leadership, funders, and hospital administrators."

#### Connection to Mental Health

Mental health is connected to all health concerns identified through the Community Themes and Strengths Assessment, including access to healthcare, ethnic and racial segregation, chronic disease, and child abuse. To improve mental health for all residents of Williamson County, all these concerns need to be addressed.

# Impact of Health Disparities

A major theme of stakeholders' and residents' comments was disparity. Differences in income, wealth, access, and resources lead to highly varied lived experiences and health outcomes in the county. Members of vulnerable and underserved populations — such as people with low income, people with disabilities, people of color, uninsured/underinsured people, older adults, and people experiencing homelessness — tended to have less access to community resources and services.

# Effects of the COVID-19 Pandemic

"A lot of them, because they're in multi-generational homes and stuff, a lot of people really got affected with the spread of COVID. A lot of them were afraid to go out there. I think a lot of them didn't have all the information they needed once vaccination things came out. They were afraid there might be consequences. They didn't know that you don't need any documentation to go get your vaccine or even the testing." — Key Informant

The THI report describes the effects of the COVID-19 pandemic in Williamson County:

The COVID-19 pandemic has had a multi-faceted impact on Williamson County residents. Issues such as stress, anxiety, depression, and fear associated with social isolation and the spread of COVID-19 have significantly affected the lives of all community members, irrespective of gender, age, socioeconomic status, or race. Key informants and focus group participants noted the disproportionate effects of COVID-19 on minority populations in Williamson County, including residents with lower educational attainment. For example, participants described how layoffs from restaurants and retail at the beginning of the pandemic significantly and disproportionately affected low-income residents, most of whom had a high school diploma or less and limited employment options. Because of increasing unemployment, many residents struggled to pay rent or housing fees and had to move in with family members. Participants also described how Hispanic/Latinx and Black/African American populations experienced higher rates of COVID-19 diagnoses and death. Food insecurity worsened, and many school-aged children lacked breakfast, lunch, and snacks due to school closures. At the same time, some participants noted how the pandemic has had a bit of a "silver lining" for some for some school-aged children. For example, in some cases, the pandemic has allowed parents and the school community to see a struggling child up-close, leading to students receiving the help they have needed for a long time. In addition, participants noted an increase in access to counseling, as many school counselors opened up private virtual counseling practices to meet the needs of students and families.

# TOP HEALTH PRIORITIES AND HEALTH EQUITY ZONES



# PRIORITY AREAS AND ISSUES

With so many competing needs in the community, determining health priorities will help direct resources and collaborative efforts to the issues that matter most to the community and that will have the greatest impact on health status.

# Top Health Priorities and Health Equity Zones

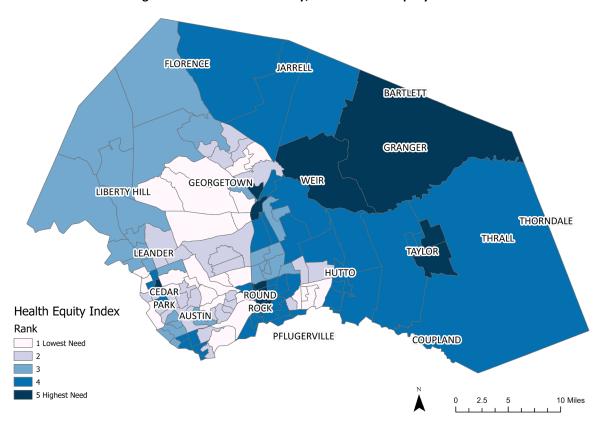
The Community Health Assessment (CHA) Task Force used the qualitative and quantitative data collected and analyzed by the two Mobilizing for Action through Planning and Partnerships assessments — the Community Health Status Assessment and the Community Themes and Strengths Assessment — to identify health equity zones and health priorities.

# **Health Equity Zones**

The 2021 Health Equity Index is a measure of socioeconomic need that is correlated with poor health outcomes. In Williamson County, census tracts are ranked from 1 (low need) to 5 (high need) based on their index value relative to similar locations within the county. 144 Using the index, five health equity zones (HEZs) were identified in Williamson County. These are census tract areas that tend to have higher-than-average health risks and burdens. The HEZs in Williamson County include census tracts in the following areas (Figure 88):

- Northern rural Williamson County (Bartlett/Granger/Weir)
- Taylor
- Georgetown
- Round Rock
- Cedar Park

Figure 88: Williamson County, Texas Health Equity Zones



<sup>144 &</sup>quot;2021 Health Equity Index."

# **Health Priorities**

Through the two Mobilizing for Action through Planning and Partnerships assessments and prioritization by residents and stakeholders, the Community Health Assessment (CHA) Task Force identified health priorities to improve health and wellness in Williamson County from 2023 to 2025. This section summarizes the task force's analysis of the health issues and determination of priority areas.

# **CHA Task Force Sensemaking Session**

On December 9, 2021, the CHA Task Force members, Texas Health Institute, and stakeholders from past key informant interviews and focus groups participated in a partners sensemaking session facilitated by Alpinista Consulting to discuss themes, strengths, and challenges. Participants in the sensemaking session were sent a copy of the Community Themes and Strengths Assessment prior to discussion.

The purposes of the sensemaking session were to:

- 1. Bring together various groups that have contributed data to the CHA and/or will localize the results to their specific context, community, or organization,
- 2. Notice implications and make sense of patterns embedded within the CHA datasets, and
- 3. Begin to prioritize the health needs of Williamson County.

Participants in the sensemaking session identified the following themes from the CHA datasets:

- 1. Developing solutions to health disparities not only across the whole county, but also in the individual communities, neighborhoods, and regions,
- 2. Addressing the rural-urban divide despite limited resources,
- 3. Changing policy and directing resources to solve health issues upstream, and
- 4. Supporting holistic healthcare that includes mental health and basic needs, like transportation and housing.

The CHA Task Force did not determine rankings of the health topics (how priorities are typically determined) during the sensemaking session. The sensemaking session did, however, help the task force make sense of the data to guide future decision making at each agency.

# **Determination of Priorities**

Priorities were determined using the four datasets:

- Residents' responses to the Community Health Survey,
- Overarching themes from the key informant interviews and focus groups conducted by Texas Health Institute (THI),
- Overarching themes from the key informant interviews and focus groups conducted by IBM Watson Health, and
- The Conduent Healthy Communities Institute (HCI) Data Scoring Tool, which processes quantitative health data to produce a ranking of indicator scores.

The priority matrix (Table 30) displays the topic areas as ranked from each of the four datasets.

**Table 30: Priority Matrix** 

COMMUNITY		COMMUNITY/STAKEHOLDERS		QUANTITATIVE DATA
Community Health Survey		THI Focus Groups (FG) and Key Informant Interviews (KII)	IBM Watson FG and KII	Conduent HCI Data Scoring Tool
Health Challenges (Ranked)	Need for Additional or Improved Services (Ranked)	Overarching Themes (Not Ranked)	Overarching Themes (Not Ranked)	Topic Scores (Ranked)
#1: Mental health problems	#1: Affordable housing	Access to Healthcare  • Affordable healthcare and Access to Primary and Specialty Care for Publicly Insured or Uninsured  • Insurance		#1: Physical Activity
#2: Problems related to aging	#2: Transportation options	<ul> <li>Culturally and Linguistically Appropriate Care</li> <li>Support for Navigating the Healthcare System</li> </ul>	Transportation	#2: Mental Health & Mental Disorders
#3: Obesity	#3: Counseling/ mental health services/ support groups	Social and Structural Determinants of Health      Low Socioeconomic Status     Housing and Homelessness     Transportation     Broadband or Internet     Access     Ethnic and Racial     Segregation	Housing	#3: Older Adults
#4: Feeling isolated or alone	#4: Road safety	Priority Health Needs  • Mental Health and Substance Use • Chronic Disease • Dental care	Access to Healthcare	#4: Women's Health
#5: Lack of exercise	#5: Efforts to address racism	Children's Health		#5: Children's Health

Considering all the rankings in the matrix, four priorities were identified:

- Social and structural determinants of health: Focus on improving basic needs (housing, transportation, broadband or internet access, and living wages) for all and eliminating ethnic and racial segregation
- **Mental health and well-being:** Focus on building resilience by improving mental health for children and youth and mitigating the impact of the COVID-19 pandemic
- Chronic disease and chronic disease risk factors: Focus on increasing healthy food access and physical activity
- Access to healthcare: Focus on increasing access to culturally and linguistically appropriate care and dental care for vulnerable populations (e.g., older adults, people of color, and people experiencing homelessness)

Unlike the top health priorities in the past two Community Health Assessments, these are not ranked, as doing so would neglect their intertwined nature. Quantitative and qualitative data show the importance of taking a whole-person- and whole-community-centered approach to improving health, for example, supporting holistic healthcare that includes mental health and basic needs, like transportation and housing. Furthermore, data show that the needs of the neighborhoods, communities, cities, and regions in Williamson County differ. In developing solutions to health disparities, groups should focus not only on countywide efforts, but also on efforts targeted to each region, community, and neighborhood.

# CONCLUSION AND IMPLICATIONS FOR WILLIAMSON COUNTY



### Conclusion and Implications for Williamson County

The 2022 Community Health Assessment (CHA) provides an updated analysis of available data to describe how the health and quality of life of Williamson County residents have changed since the last assessment in 2019. Throughout the 2022 assessment process, the CHA Task Force engaged with residents and stakeholders, who were active participants. Along with quantitative data, their feedback describes the status of and shared perceptions about the health and well-being of Williamson County, Texas.

The 2022 CHA is the evidence-based foundational document for Williamson County and Cities Health District, community partners, decision makers, and — most importantly — residents to develop health-related policy. The assessment will be used to educate and mobilize community partners and residents, guide strategy, gather resources, and plan actions to improve health. The top health priorities for future improvement efforts are defined in Table 31.

Table 31: Top Health Priorities for 2023–2025 in Williamson County, Texas

# Social and structural determinants of health Focus on improving basic needs (housing, transportation, broadband or internet access, and living wages) for all and eliminating ethnic and racial segregation. Mental health and well-being Focus on building resilience by improving mental health for children and youth and mitigating the impact of the COVID-19 pandemic. Chronic disease and chronic disease risk factors Focus on increasing healthy food access and physical activity. Access to healthcare Focus on increasing access to culturally and linguistically appropriate care and dental care for vulnerable populations (e.g., older adults, people of color, and people experiencing homelessness).

The determination of priorities is the first step in improving the health of the community. Future steps involve developing action plans with the community during the Community Health Improvement Plan process to address each of these priorities. This collaborative effort provides a common agenda the county will use to improve the health of all residents. Additionally, the 2022 CHA and recommendations can be used in developing the following:

- Community health changes and trends
- Hospital-based community benefit and implementation strategy plans
- Organizational strategic plans
- Evidence for grant applications

The CHA Task Force hopes this CHA will spur engagement in supporting the health of the people of Williamson County and aid efforts to become the healthiest county in Texas. Sustained and broad community involvement is necessary to strategically address the health issues in Williamson County, and the solutions will require the combined resources and efforts of partners from all sectors. This shared ownership of community health among diverse stakeholders improves the deployment of resources to achieve our goals. Together, we can make Williamson County a healthy place for residents to live, learn, work, play, worship, and age.

### **Appendices**

### Appendix A: Works Cited

United Way of Williamson County. "211 Is Here for Texas Information," 2021. https://www.unitedway-wc.org/211-here-texas-information; https://www.unitedforalice.org/.

Healthy Williamson County. "2021 Demographics: Williamson County," n.d.

http://www.healthywilliamsoncounty.org/index.php?module=DemographicData&controller=index&action=index.

Healthy Williamson County. "2021 Health Equity Index," 2021.

https://www.healthywilliamsoncounty.org/indexsuite/index/healthequity.

Healthy Williamson County. "Access to Exercise Opportunities," 2018.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2363&localeId=2820.

Healthy Williamson County. "Adults 20+ Who Are Sedentary," 2020.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=1065&localeId=2820.

Healthy Williamson County. "Adults Who Are Overweight or Obese," 2020.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=56&localeId=2820.

Healthy Williamson County. "Adults Who Drink Excessively," 2021.

http://www.healthywilliamsoncounty.org/index.php?module=indicators&controller=index&action=view&indicatorId=1066 &localeId=2820.

Healthy Williamson County. "Adults Who Experienced Coronary Heart Disease," n.d.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2819&localeTypeId=39.

Healthy Williamson County. "Adults Who Smoke," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=8&localeId=2820.

Healthy Williamson County. "Adults with Cancer," n.d.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=5669&localeTypeId=39.

Healthy Williamson County. "Adults with Health Insurance," 2020.

https://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=8287&localeId=2820.

Healthy Williamson County. "Age-Adjusted Death Rate Due to Alzheimer's Disease," 2019.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=93&localeId=2820.

Healthy Williamson County. "Age-Adjusted Death Rate Due to Suicide," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=120&localeId=2820.

"Age-Adjusted Hospitalization Rate Due to Adult Mental Health," 2021.

https://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2848&localeId=2820.

Healthy Williamson County. "Age-Adjusted Hospitalization Rate Due to Pediatric Mental Health," 2021.

http://www.healthywilliamsoncounty.org/?module=indicators&controller=index&action=view&comparisonId=&indicatorId =2851&localeTypeId=2&localeId=2820.

Healthy Williamson County. "Aunt Bertha Searches," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=8635&localeId=2820.

Healthy Williamson County. "Babies With Low Birth Weight," 2015.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=172&localeId=2820.

Centers for Disease Control and Prevention. "Basic TB Facts," 2016. https://www.cdc.gov/tb/topic/basics/default.htm.

Centers for Disease Control and Prevention. "Basics of COVID-19," November 4, 2021. https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19/basics-covid-19.html.

Centers for Disease Control and Prevention. "Benefits of Getting a COVID-19 Vaccine," November 18, 2021.

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html.

Centers for Disease Control and Prevention. "Breast Cancer Statistics," 2021.

https://www.cdc.gov/cancer/breast/statistics/index.htm.

Centers for Disease Control and Prevention. "Burden of Influenza," January 7, 2022.

https://www.cdc.gov/flu/about/burden/index.html.

Healthy Williamson County. "Child Mortality," 2019.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=325&localeId=2820.

Healthy Williamson County. "Children Living Below Poverty Level," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=189&localeId=2820.

Centers for Disease Control and Prevention. "Chlamydia Basic Fact Sheet," 2021. https://www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm.

Centers for Disease Control and Prevention. "Chlamydia Statistics," 2021.

https://www.cdc.gov/tb/publications/factsheets/statistics/tbtrends.htm.

Healthy Williamson County. "Colon Cancer Screening," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2335&localeTypeId=39.

County Health Rankings. "County Health Rankings Model," 2014. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model.

County Health Rankings. "County Health Rankings: Texas," 2021.

https://www.countyhealthrankings.org/app/texas/2021/rankings/williamson/county/outcomes/overall/snapshot.

Centers for Disease Control and Prevention. "COVID-19 Vaccine Effectiveness," November 10, 2021.

https://www.cdc.gov/vaccines/covid-19/health-departments/breakthrough-cases.html.

Texas Department of State Health Services. "COVID-19 Vaccine Information," November 3, 2021.

https://www.dshs.texas.gov/covidvaccine/.

Healthy Williamson County. "Dentist Rate," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=1064&localeId=2820.

Office of Disease Prevention and Health Promotion. "Determinants of Health," 2020.

https://www.healthypeople.gov/2020/about/foundation-health-measures/Determinants-of-Health.

Centers for Disease Control and Prevention. "Division of Oral Health at a Glance," 2021.

https://www.cdc.gov/chronicdisease/resources/publications/aag/oral-health.htm.

Centers for Disease Control and Prevention. "Estimated COVID-19 Burden," November 16, 2021.

https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/burden.html.

Centers for Disease Control and Prevention. "Facts About Suicide," 2021. https://www.cdc.gov/suicide/facts/index.html.

Healthy Williamson County. "Families Living Below Poverty Level," 2021.

http://www.healthywilliamsoncounty.org/?module=indicators&controller=index&action=view&comparisonId=&indicatorId =240&localeTypeId=2&localeId=2820.

Centers for Disease Control and Prevention. "FAQ: COVID-19 Data and Surveillance." 2021-07-23. Accessed November 17, 2021. FAQ: COVID-19 Data and Surveillance.

Healthy Williamson County. "Fast Food Restaurant Density," 2016.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=242&localeId=2820.

Centers for Disease Control and Prevention. "Flu & People 65 Years and Older," August 26, 2021.

https://www.cdc.gov/flu/highrisk/65over.htm.

Centers for Disease Control and Prevention. "Follow Immunization Schedule: 6 Reasons," February 25, 2020.

https://www.cdc.gov/vaccines/parents/schedules/reasons-follow-schedule.html.

Healthy Williamson County. "Food Environment Index," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2362&localeId=2820.

Healthy Williamson County. "Food Insecurity Rate," 2019.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2107&localeId=2820.

Foster, Sarah. "Survey: More Than Half Of Americans Couldn't Cover Three Months of Expenses With Emergency Savings." Bankrate, 2021. https://www.bankrate.com/banking/savings/emergency-savings-survey-july-2021/.

United Way of Williamson County. "Frequently Asked Questions," 2021. https://www.unitedway-wc.org/frequently-asked-questions.

Centers for Disease Control and Prevention. "Gonorrhea-Antibiotic Resistance," 2021.

https://www.cdc.gov/std/gonorrhea/arg/default.htm.

Office of Disease Prevention and Health Promotion. "Healthy People 2030," n.d. https://health.gov/healthypeople.

Mayo Clinic. "Herd Immunity," n.d. https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/herd-immunity-and-coronavirus/art-20486808.

Healthy Williamson County. "HIV Diagnosis Rate," 2018.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=1584&localeId=2820.

Healthy Williamson County. "Households That Are Asset Limited, Income Constrained, Employed (ALICE)," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=8481&localeId=2820.

Healthy Williamson County. "Households without a Vehicle," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=281&localeId=2820.

"Housing and Health: An Overview of the Literature," 2018. https://www.healthaffairs.org/do/10.1377/hpb20180313.396577/full/.

Centers for Disease Control and Prevention. "How CDC Is Making COVID-19 Vaccine Recommendations," November 15, 2021.

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations-process.html.

Centers for Disease Control and Prevention. "HRQoL Concepts," 2021. https://www.cdc.gov/hrqol/concept.htm#3.

Texas Department of State Health Services. "ImmTrac2 Registry Home," n.d.

https://dshs.texas.gov/immunize/immtrac/default.shtm.

Healthy Williamson County. "Infant Mortality Rate," 2015.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=289&localeId=2820.

Centers for Disease Control and Prevention. "Injuries and Violence Are Leading Causes of Death," 2019.

https://www.cdc.gov/injury/wisqars/animated-leading-causes.html.

U.S. Department of Agriculture Food and Nutrition Service. "Is My Store Eligible?," June 16, 2021.

https://www.fns.usda.gov/snap/retailer/eligible.

"JUUL and Youth: Rising E-Cigarette Popularity." Campaign for Tobacco-Free Kids, 2021.

https://www.tobaccofreekids.org/assets/factsheets/0394.pdf.

Centers for Disease Control and Prevention. "Key Facts About Influenza (Flu)," August 26, 2021.

https://www.cdc.gov/flu/about/keyfacts.htm.

Centers for Disease Control and Prevention. "Key Things to Know About COVID-19 Vaccines." Accessed November 17, 2021. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/keythingstoknow.html.

Koh, Howard, Alan Geller, and Tyler VanderWeele. "Deaths From COVID-19." *Journal of the American Medical Association*, December 17, 2020. https://jamanetwork.com/journals/jama/article-abstract/2774464.

Centers for Disease Control and Prevention. "Lack of Physical Activity," March 9, 2021.

https://www.cdc.gov/chronicdisease/resources/publications/factsheets/physical-activity.htm.

Healthy Williamson County. "Linguistic Isolation," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=297&localeId=2820.

Healthy Williamson County. "Liquor Store Density," 2019.

http://www.healthywilliamsoncounty.org/?module=indicators&controller=index&action=view&comparisonId=&indicatorId =298&localeTypeId=2&localeId=2820.

Healthy Williamson County. "Mean Travel Time to Work," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=314&localeId=2820.

Centers for Disease Control and Prevention. "Measles, Mumps, and Rubella (MMR) Vaccination: What Everyone Should Know," 2021. https://www.cdc.gov/vaccines/vpd/mmr/public/index.html.

Healthy Williamson County. "Median Household Income," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=315&localeId=2820.

United States Census Bureau. "Median Income in the Past 12 Months (in 2020 Inflation-Adjusted Dollars)," 2022.

 $https://data.census.gov/cedsci/table? q=United \% 20 States \& t=Income \% 20 and \% 20 Earnings \& g=0400000 US48\_0500000 US48\_491 \& tid=ACSST5Y2020.S1903.$ 

Healthy Williamson County. "Mothers Who Received Early Prenatal Care," 2017.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=325&localeId=2820.

Healthy Williamson County. "People 65+ Living Below Poverty Level," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=343&localeId=2820.

Healthy Williamson County. "Persons Fully Vaccinated Against COVID-19," November 12, 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=11663&localeId=2820.

Healthy Williamson County. "Persons With a Disability," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=6057&localeId=2820.

National Association of County and Cities Health Officials. "Phase 3: Collecting and Analyzing Data," n.d.

https://www.naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp/phase-3-the-four-assessments.

County Health Rankings. "Poor or Fair Health," 2021.

https://www.countyhealthrankings.org/app/texas/2018/measure/outcomes/2/description.

Prasad, S., B. Sung, and B. B. Aggarwal. "Age-Associated Chronic Diseases Require Age-Old Medicine: Role of Chronic Inflammation." *Preventive Medicine*, 2013. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3340492/.

Healthy Williamson County. "Preterm Births," 2017.

http://www.healthywilliamsoncounty.org/?module=indicators&controller=index&action=view&comparisonId=&indicatorId =380&localeTypeId=2&localeId=2820.

Texas Children's Hospital. "Preterm Labor & Preterm Birth," 2021. https://women.texaschildrens.org/program/high-risk-pregnancy-care/conditions/preterm-labor-birth.

County Health Rankings. "Preventable Hospital Stays," 2021.

https://www.countyhealthrankings.org/app/texas/2021/measure/factors/5/description.

Centers for Disease Control and Prevention. "Preventing Excessive Alcohol Use," 2020. https://www.cdc.gov/alcohol/fact-sheets/prevention.htm.

County Health Rankings. "Primary Care Physicians," 2021.

https://www.countyhealthrankings.org/app/texas/2021/measure/factors/4/description.

Health and Human Services. "Profile: Asian Americans," 2021.

https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=63.

State of Working America. "Quick Facts," n.d. http://stateofworkingamerica.org/fact-sheets/poverty/.

- U.S. Preventive Services Task Force. "Recommendation: Breast Cancer: Screening," January 11, 2016. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening#fullrecommendationstart.
- County Health Rankings. "Residential Segregation Black/White," 2021. https://www.countyhealthrankings.org/app/texas/2021/measure/factors/141/description.
- County Health Rankings. "Residential Segregation Non-White/White," 2021. https://www.countyhealthrankings.org/app/texas/2021/measure/factors/141/description.
- Rutstein, D D, R J Mullan, T M Frazier, W E Halperin, J M Melius, and J P Sestito. "Sentinel Health Events (Occupational): A Basis for Physician Recognition and Public Health Surveillance." *American Journal of Public Health* 73, no. 9 (September 1983): 1054–62
- Centers for Disease Control and Prevention. "Science Brief: SARS-CoV-2 Infection-Induced and Vaccine-Induced Immunity," October 21, 2021. https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/vaccine-induced-immunity.html.
- Centers for Disease Control and Prevention. "Science Brief: Transmission of SARS-CoV-2 in K-12 Schools and Early Care and Education Programs Updated," November 16, 2021. https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission\_k\_12\_schools.html.
- Healthy Williamson County. "SNAP Certified Stores," 2020.

https://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=412&localeId=2820.

County Health Rankings. "Social Associations," 2021.

http://www.countyhealthrankings.org/app/texas/2018/measure/factors/140/description.

Office of Disease Prevention and Health Promotion. "Social Determinants of Health," n.d. https://health.gov/healthypeople/objectives-and-data/social-determinants-health.

Healthy Williamson County. "Solo Drivers With a Long Commute," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=2367&localeId=2820.

- Texas Department of State Health Services. "Statistics on Conscientious Exemptions to School Immunizations," June 1, 2021. https://www.dshs.texas.gov/immunize/coverage/Conscientious-Exemptions-Data.shtm.
- Centers for Disease Control and Prevention. "STD Facts- Gonorrhea," 2021. https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm.
- Centers for Disease Control and Prevention. "STD Facts- Syphilis," 2021. https://www.cdc.gov/std/syphilis/stdfact-syphilis.htm.
- Centers for Disease Control and Prevention. "STD Prevention," 2021. https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm.
- Centers for Disease Control and Prevention. "Suicide Rising Across the US," 2018. https://www.cdc.gov/vitalsigns/suicide/index.html.
- Centers for Disease Control and Prevention. "Surveillance Strategy Report Modernizing Mortality Reporting," March 27, 2019. https://www.cdc.gov/surveillance/initiatives/tracking-deaths.html.
- Syed, S. T., B. S. Gerber, and L. K. Sharp. "Traveling towards Disease: Transportation Barriers to Health Care Access." *J. Community Health YR 2013*. Accessed December 31, 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265215/.
- County Health Rankings. "Teen Births," 2019. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/health-behaviors/sexual-activity/teen-births.
- Texas Department of State Health Services. "Texas Primary Care Office (TPCO) Federally Qualified Health Centers," 2021. https://dshs.texas.gov/TPCO/fqhc/.
- Robert Wood Johnson Foundation. "The Impact of Coronavirus on Households Across America," 2021.

https://www.rwjf.org/en/library/research/2020/09/the-impact-of-coronavirus-on-households-across-america.html.

- "The New Public Health," 2015. https://www.sciencedirect.com/book/9780124157668/the-new-public-health.
- World Health Organization. "Tuberculosis-How TB Spreads," 2019. https://www.who.int/news-room/facts-in-pictures/detail/mental-health; https://www.cdc.gov/tb/topic/basics/howtbspreads.htm.
- Centers for Disease Control and Prevention, National Center for Health Statistics. "Underlying Cause of Death 1999-2020: 15 Leading Causes of Death: Williamson County, TX on CDC WONDER Online Database," 2021. https://wonder.cdc.gov/controller/saved/D76/D280F767.
- Centers for Disease Control and Prevention, National Center for Health Statistics. "Underlying Cause of Death 1999-2020: Texas on CDC WONDER Online Database," 2021. https://wonder.cdc.gov/controller/saved/D76/D281F617.
- Centers for Disease Control and Prevention, National Center for Health Statistics. "Underlying Cause of Death 1999-2020: Williamson County, TX on CDC WONDER Online Database," 2021. https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=96DBE9015CE5A81EBC919DA52B48.
- Healthy Williamson County. "Unemployed Workers in Civilian Labor Force," 2021.
  - http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=520&localeId=2820.
- Centers for Disease Control and Prevention. "Vaccine Safety-Diphtheria, Tetanus, and Pertussis Vaccines," 2020. https://www.cdc.gov/vaccinesafety/vaccines/dtap-tdap-vaccine.html.

Healthy Williamson County. "Veterans With a High School Degree or Higher," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=5331&localeId=2820.

Healthy Williamson County. "Voter Turnout: Presidential Election," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=526&localeId=2820.

West, Bethany A., Rose A. Rudd, Erin K. Sauber-Schatz, and Michael F. Ballesteros. "Unintentional Injury Deaths in Children and Youth, 2010–2019." *Journal of Safety Research* 78 (September 1, 2021): 322–30. https://doi.org/10.1016/j.jsr.2021.07.001.

Centers for Disease Control and Prevention. "What Is a Mammogram?," 2020.

https://www.cdc.gov/cancer/breast/basic\_info/mammograms.htm.

Robert Wood Johnson Foundation. "What Is Health Equity?," 2017. https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html.

"What Is Mental Health?," 2020. https://www.mentalhealth.gov/basics/what-is-mental-health.

Centers for Disease Control and Prevention. "Who Needs a Flu Vaccine," October 27, 2021.

https://www.cdc.gov/flu/prevent/vaccinations.htm.

"Work, Stress, Health and Socioeconomic Status," n.d. https://www.apa.org/pi/ses/resources/publications/work-stress-health.aspx. Healthy Williamson County. "Workers Commuting by Public Transportation," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=529&localeId=2820.

Healthy Williamson County. "Workers Who Walk to Work," 2021.

http://www.healthywilliamsoncounty.org/indicators/index/view?indicatorId=531&localeId=2820.

## Appendix B: Lists of Tables and Figures

### List of Tables

Table 1: Total Surveys Collected in Williamson County	11
Table 2: Demographic Characteristics of Williamson County and Texas, 2021	18
Table 3: Population Change in Williamson County and Texas, 2010–2020	18
Table 4: Population Projection by Demographic Characteristics in Williamson County, 2021 and 2050	20
Table 5: Language Spoken at Home (Ages 5 and Over) in Williamson County and Texas, 2021	21
Table 6: Percent of Residents Living Below the Federal Poverty Line (FPL) in Williamson County and Texas, 2016–2020	23
Table 7: Percentage of Civilian Workforce Unemployed in Williamson County and Texas, 2021	24
Table 8: Top 2-1-1 Needs in Williamson County, 2021	27
Table 9: Most Common Search Terms in findhelp, 2021	28
Table 10: Provider Access in Williamson County and Texas	31
Table 11: Total Number of Encounters for Williamson County Patients by Service Line at Lone Star Circle of Care, 2020	31
Table 12: Ethnicity of Lone Star Circle of Care Patients in Williamson County, 2020	32
Table 13: Race of Lone Star Circle of Care Patients in Williamson County, 2020	32
Table 14: Insurance Status of Lone Star Circle of Care Patients in Williamson County, 2020	32
Table 15: Medical Conditions Treated by Lone Star Circle of Care in Williamson County, 2020	32
Table 16: Mental Health and Basic Needs Identified through PRAPARE Survey, 2020–2021	33
Table 17: Self-Reported Health of Adults in Williamson County and Texas, 2018	38
Table 18: Transportation Indicators in Williamson County and Texas, 2015–2019	41
Table 19: Residential Segregation in Williamson County and Texas	45
Table 20: Social and Civic Engagement in Williamson County and Texas	45
Table 21: Routine Cancer Screening in Williamson County and Texas	49
Table 22: Healthy Eating Environment Indicators in Williamson County and Texas, 2018	51
Table 23: Grocery Store Access in Williamson County, 2015	52
Table 24: Mental Health Indicators in Williamson County and Texas	57
Table 25: Mental Health Hospitalizations in Williamson County and Texas, 2017–2019	59
Table 26: Total Numbers of Encounters for Williamson County Patients Served at Bluebonnet Trails Community Services, 2020	60
Table 27: Child and Infant Mortality in Williamson County and Texas	64
Table 28: Cases of Vaccine-Preventable Diseases in Williamson County, 2010–2020	82
Table 29: Williamson County ZIP Codes with Lowest and Highest COVID-19 Infection Rates, 2020–2021	88
Table 30: Priority Matrix	108
Table 31: Top Health Priorities for 2023–2025 in Williamson County, Texas	111
Table 32: Race/Ethnicity of Community Health Survey Respondents, 2021	127
Table 33: Resident Perceptions of Strengths of Williamson County	127
Table 34: Resident Perceptions of Top Challenges in Neighborhoods and Communities in Williamson County	128

Table 35: Resident Perceptions of Need for Additional or Improved Services in Williamson County	129
Table 36: Resident Expectations of COVID-19's Effect on Households in Williamson County	130
Table 37: Residents' Emergency Savings in Williamson County	131
List of Figures Figure 1: Map of Williamson County, Texas	8
Figure 2: MAPP Framework	9
Figure 3: Electronic and Paper Surveys Collected by Williamson County Region	11
Figure 4: Expected (Williamson County) versus Observed (Survey) Collection by Williamson County Region	11
Figure 5: Population Change by ZIP Code in Williamson County, 2010–2021	19
Figure 6: Population Pyramid of Williamson County by Age and Sex, 2019	20
Figure 7: Population Pyramid of Williamson County by Age and Sex, 2050	21
Figure 8: Median Household Income by Race/Ethnicity in Williamson County, 2016–2020	22
Figure 9: Household Income Distribution in Williamson County, 2016–2020	23
Figure 10: Household Income Distribution in Texas, 2016–2020	23
Figure 11: Percentage Living Below the Federal Poverty Line by Race/Ethnicity in Williamson County and Texas, 2016–2020	24
Figure 12: Percentage of Unemployed Workers in Williamson County and Texas, 2015–2020	25
Figure 13: Educational Attainment of Population Ages 25 and Older in Williamson County and Texas, 2016–2020	26
Figure 14: Households that are Asset Limited, Income Constrained, Employed (ALICE), 2018	27
Figure 15: 2-1-1 Calls by ZIP Code in Williamson County, 2020	28
Figure 16: Findhelp Searches by ZIP Code in Williamson County, 2018–2020	29
Figure 17: Findhelp Searches by Category in Williamson County, 2021	29
Figure 18: Preventable Hospital Stays in Williamson County and Texas, 2012–2018	34
Figure 19: Percentage of Population without Insurance by Race/Ethnicity in Williamson County and Texas, 2015–2019	35
Figure 20: Percentage of Population without Insurance for Children and Persons in Williamson County and Texas, 2015–2019	35
Figure 21: Percentage of Households without Insurance by Household Income in Williamson County and Texas, 2015–2019	36
Figure 22: Percentage of Individuals without Insurance by Educational Attainment Level in Williamson County and Texas, 201	
Figure 23: Percentage of Individuals with a Disability by Five-Year Rolling Average in Williamson County, 2009–2019	39
Figure 24: Percentage of Individuals with a Disability by Age in Williamson County and Texas, 2015–2019	39
Figure 25: Percentage of Individuals with a Disability by Race/Ethnicity in Williamson County and Texas, 2015–2019	40
Figure 26: Solo Drivers with a Long Commute by Five-Year Rolling Average in Williamson County, 2008–2019	41
Figure 27: Residents of Williamson County and Where They Work, 2020	42
Figure 28: Percent Increase in Household Income, Rent and Home Values in Williamson County and Texas, 2015–2019	43
Figure 29: Williamson County Austin Board of Realtors Housing Statistics, June 2021	43
Figure 30: Percent of Residents Who Spent 30% or More of Income on Housing in Williamson County and Texas, 2015–2019	44
Figure 31: Percentage of Adults Obese by Year in Williamson County and Texas, 2010–2017	47
Figure 32: Percentage of Adults Physically Inactive by Year in Williamson County and Texas 2011–2017	47

Figure 33: Percentage of Adults Smoking in Williamson County and Texas, 2018	48
Figure 34: Percentage of Adults Drinking Excessively in Williamson County and Texas, 2018	49
Figure 35: Percentage of Individuals with Access to Exercise Opportunities by Year in Williamson County and Texas, 2016–2020	51
Figure 36: Percentage of Population with Low Income and Low Access to a Grocery Store by Census Tract in Williamson County	
Figure 37: Percentage of Households with No Car and Low Access to a Grocery Store by Census Tract in Williamson County, 201	.954
Figure 38: Percentage of Responses to Food-Related Survey Questions, Hill Country Community Ministries, March 2021	55
Figure 39: Liquor Store Density in Williamson County, 2010–2019	56
Figure 40: Age-Adjusted Suicide Mortality Rate by Five-Year Rolling Average in Williamson County and Texas. 2010–2020	58
Figure 41: Age-Adjusted Suicide Mortality Rate by Gender in Williamson County and Texas, 2019	59
Figure 42: Number of Persons Served by Diagnosis at Bluebonnet Trails Community Services, Williamson County, 2020	61
Figure 43: Percentage of Infants Born with Low Birth Weight by Seven-Year Rolling Average in Williamson County and Texas, 2019	
Figure 44: Percentage of Preterm Births in Williamson County and Texas, 2010–2017	63
Figure 45: Percentage of Preterm Births by Race/Ethnicity in Williamson County and Texas, 2017	63
Figure 46: Teen Birth Rate by Year in Williamson County and Texas, 2014–2019	64
Figure 47: Teen Birth Rate by Race/Ethnicity in Williamson County and Texas, 2019	65
Figure 48: Percentage of Teens who Received Early Prenatal Care by Race/Ethnicity, 2019	66
Figure 49: Percentage of Adults who Received Early Prenatal Care by Race/Ethnicity, 2019	66
Figure 50: Leading Causes of Death in Williamson County and Texas, 2020	67
Figure 51: Age-Adjusted Cancer Incidence Rates by Cancer Type in Williamson County and Texas, 2014–2018	68
Figure 52: Age-Adjusted Cancer Mortality Rates by Cancer Type in Williamson County and Texas, 2015–2019	69
Figure 53: Age-Adjusted All-Cancer Mortality Rate by Five-Year Rolling Average in Williamson County, 2010–2020	69
Figure 54: Age-Adjusted All-Cancer Mortality Rate by Gender in Williamson County and Texas, 2019–2020	70
Figure 55: Age-Adjusted All-Cancer Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020	70
Figure 56: Age-Adjusted Heart Disease Mortality Rate by Five-Year Rolling Average in Williamson County, 2010–2020	71
Figure 57: Age-Adjusted Heart Disease Mortality Rate by Gender in Williamson County and Texas, 2019–2020	72
Figure 58: Age-Adjusted Heart Disease Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020	72
Figure 59: Age-Adjusted Alzheimer's Disease Mortality Rate by Five-Year Rolling Average in Williamson County and Texas, 2010-	
Figure 60: Age-Adjusted Alzheimer's Disease Mortality Rate by Gender in Williamson County and Texas, 2015–2020	74
Figure 61: Age-Adjusted Alzheimer's Disease Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2015–2020	74
Figure 62: Age-Adjusted Unintentional Injury Mortality Rate by Five-Year Rolling Average in Williamson County and Texas, 2010-	
Figure 63: Age-Adjusted Unintentional Injury Mortality Rate by Gender in Williamson County and Texas, 2019–2020	75
Figure 64: Age-Adjusted Unintentional Injury Mortality Rate by Race/Ethnicity in Williamson County and Texas, 2019–2020	76
Figure 65: Total Syphilis Diagnosis Rates by Year of Diagnosis in Williamson County and Texas, 2011–2018	77
Figure 66: Primary and Secondary Syphilis Diagnosis Rates by Year of Diagnosis in Williamson County and Texas, 2011–2018	78

Figure C7: Chlamadia Diagnasia Batas hu Vasa in Williamsean County and Taylor 2011, 2010	120
Figure 67: Chlamydia Diagnosis Rates by Year in Williamson County and Texas, 2011–2018	
Figure 68: Gonorrhea Diagnosis Rates by Year in Williamson County and Texas, 2011–2018	
Figure 69: HIV Diagnosis Rate by Year in Williamson County and Texas, 2011–2019	80
Figure 70: AIDS Diagnosis Rate by Year in Williamson County and Texas, 2011–2019	80
Figure 71: Tuberculosis Rate by Year in Williamson County and Texas, 2012–2019	81
Figure 72: Percentage of Adults Who Have Received a Flu Shot in the Past Year in Williamson County and Texas, 2018	83
Figure 73: Percentage of Vaccine Completion Rates in Williamson County and Texas Kindergarteners, 2019–2020	84
Figure 74: Vaccines Administered and Percent Change in Williamson County, 2019–2020	84
Figure 75: Student Conscientious Exemptions by School Year in Williamson County and Texas, 2011–2021	85
Figure 76: Reported COVID-19 Cases Over Time in Williamson County, March 2020–October 15, 2021	86
Figure 77: COVID-19 Daily Seven-Day Average Incidence Rate in Williamson County, March 12, 2020–October 15, 2021	87
Figure 78: Reported Confirmed COVID-19 Cases by Age Group in Williamson County, March 12, 2020–October 15, 2021	87
Figure 79: COVID-19 Case Rate per 100,000 Population by ZIP Code in Williamson County, March 12, 2020–October 15, 2021	88
Figure 80: COVID-19 Daily Average Case-Fatality Rate in Williamson County, March 2020–October 15, 2021	89
Figure 81: Deaths Due to COVID-19 by Age Group in Williamson County by October 15, 2021	89
Figure 82: COVID-19 School Cluster Cases by City in Williamson County, 2020–2021	90
Figure 83: Authorization and Approval Timeline for COVID-19 Vaccines in the United States	91
Figure 84: Percentage of Eligible Population that is Vaccinated against COVID-19 in Williamson County and Texas, 2020–2021	92
Figure 85: COVID-19 Vaccination Rate by ZIP Code in Williamson County, December 15, 2020–October 15, 2021	92
Figure 86: Reported Confirmed Breakthrough Cases in Williamson County by Age Group, 2021	93
Figure 87: Percentage of Breakthrough and Total Cases in Williamson County by Age Group, 2020–2021	93
Figure 88: Williamson County, Texas Health Equity Zones	106
Figure 89: Age Distribution of Community Health Survey Respondents	126
Figure 90: Gender Distribution of Community Health Survey Respondents	126
Figure 91: Resident Perceptions of Strengths in Williamson County by Region	128
Figure 92: Resident Perceptions of Top Challenges in Neighborhoods and Communities in Williamson County by Region	129
Figure 93: Resident Perceptions of Need for Additional or Improved Services in Williamson County by Region	130
Figure 94: Resident Expectations of COVID-19's Effect on Households in Williamson County by Region	131
Figure 95: Residents' Emergency Savings in Williamson County by Region	132

### Appendix C: List of Abbreviations

AAPI: Asian American and Pacific Islander

ACE: Adverse Childhood Experience

AI/AN: American Indian and Alaska Native

**BTCS: Bluebonnet Trails Community Services** 

CDC: Centers for Disease Control and Prevention

CHA: Community Health Assessment

CHIP: Community Health Improvement Plan

CHS: Community Health Survey

CHSA: Community Health Status Assessment

CTSA: Community Themes and Strengths Assessment

**HCCM: Hill Country Community Ministries** 

**HEZ: Health Equity Zone** 

LSCC: Lone Star Circle of Care

MAPP: Mobilizing for Action through Planning and Partnerships

NACCHO: National Association of County and City Health Officials

NH/PI: Native Hawaiian and Pacific Islander

THI: Texas Health Institute

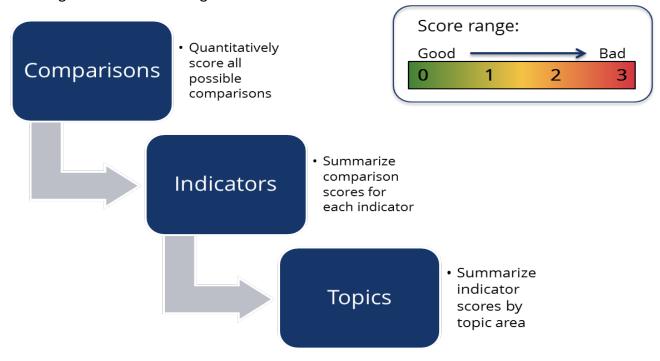
WCCHD: Williamson County and Cities Health District

Appendix D: Conduent Healthy Communities Institute Data Scoring Tool Methodology and Results

### **Conduent Healthy Communities Institute Data Scoring Tool - Methodology**

### **Scoring Method**

Data Scoring is done in three stages:



For each indicator, county is assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. Indicators are categorized into topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the comparisons of all indicators within the topic.



County: Williamson Williamson County and Cities Health District

Total indicators: 193

Friday, 7th of January 2022

Торіс	Indicators	Score
Physical Activity	18	1.58
Mental Health & Mental Disorders	10	1.44
Older Adults	29	1.43
Women's Health	5	1.43
Children's Health	8	1.42
Environmental Health	28	1.38
Cancer	18	1.36
Alcohol & Drug Use	7	1.25
Health Care Access & Quality	10	1.24
Oral Health	4	1.21
Other Conditions	7	1.21
Immunizations & Infectious Diseases	15	1.17
Heart Disease & Stroke	17	1.16
Respiratory Diseases	19	1.12
Prevention & Safety	7	1.08
Sexually Transmitted Infections	4	1.06
Community	26	0.98
Wellness & Lifestyle	6	0.94
Economy	33	0.90
Diabetes	8	0.89
Mortality Data	20	0.89
Maternal, Fetal & Infant Health	7	0.85
Education	5	0.83

### Appendix E: Community Health Survey

Please take a few minutes to complete the survey below. The purpose of this survey is to get your opinions about health in Williamson County. The Williamson County Community Health Assessment (CHA) Task Force will use the results of this survey and other information to identify the most pressing problems which can be addressed through community action. If you have previously completed a 2022 CHA survey, please ignore this. Remember... your opinion is important! Thank you and if you have any questions, please visit our website at www.healthywilliamsoncounty.org/cha.

1. What are the three "streng	g <b>ths"</b> in your neighborhood or d	community? Select o	nly three.		
☐ Access to health care (e.g., f	amily doctor)	☐ Good sch	nools		
☐ Access to public transportation			☐ Health behaviors and lifestyles		
☐ Affordable housing			It death and disease rates		
☐ Arts and cultural events			ne/safe neighborhoods		
☐ Clean environment			☐ Low infant deaths		
	nonprofits, libraries, food panti				
☐ Good jobs and healthy econ		•	l for natural and man-made disasters and		
- Good Jobs and Healthy econ	Office	•	nergencies		
☐ Good place to raise children			_		
☐ Good relationships between			<ul><li>☐ Religious or spiritual values</li><li>☐ Other</li></ul>		
	amerene race, etimo groups				
2. What are the three most im	portant "challenges" in your no	eighborhood or com	munity? Select only three.		
$\square$ Access to basic needs	☐ High blood pressure		☐ Rape/sexual assault		
☐ Cancers	☐ HIV/AIDS		☐ Respiratory/lung disease		
☐ Child abuse	☐ Other infectious diseas	ses (e.g., Hepatitis,	$\square$ Sexually Transmitted Diseases		
	ТВ)		(STDs)		
☐ Dental problems	$\square$ Infant death		☐ Sex Trafficking		
☐ Diabetes	☐ Lack of exercise		☐ Suicide/Intentional Harm		
☐ Domestic violence	$\square$ Mental health problem	ns (e.g., anxiety,	☐ Teenage pregnancy		
	stress, depression, etc.				
☐ Drug use	☐ Motor vehicle crash in	juries	$\square$ Tobacco use		
☐ Excessive drinking	☐ Obesity		$\square$ Violent crime and deaths		
☐ Feeling isolated or alone	☐ Poor eating habits		☐ Other		
$\square$ Heart disease and stroke	$\square$ Problems related to ag	ging			
3. Which <u>three services</u> would	you like to see more of or impr	roved in your neighbo	orhood or community? Select only three		
☐ Affordable housing		☐ More jobs			
☐ Childcare options		$\square$ Parks, trails, com	nmunity centers		
☐ Communication and service	s from officials during	☐ Positive youth a	ctivities		
emergencies		$\square$ Road safety			
☐ Counseling/mental health se	ervices/support groups	☐ Services for peo	ple with disabilities		
☐ Culturally appropriate healt	h services	☐ Services for peo	ple who are homebound		
☐ Efforts to address racism		☐ Services for seni	ors		
☐ Healthy food choices		☐ Transportation of	options		
☐ Help finding services		☐ Other			
$\square$ Low-cost health services					
4. How do you expect COVID-1	.9 to affect you or your househo	old in the future? <b>Se</b>	lect all that apply.		
☐ Wages and employment		☐ Expenses or abili	ty to meet basic needs		
☐ Health and ability to seek ca	re (feeling hopeless,		, 		
stressed, getting medical carrefilled)		□ Not sure			

$\square$ School and education	☐ I do not expect COVID-19 to affect me or my household in the future.
5. In case of an emergency, my household has enough money groceries, basic supplies)?	saved up for how many months of expenses (rent, utilities,
$\square$ Do not have enough saved for one month	☐ Three months
☐ One month	☐ More than three months
☐ Two months	☐ Not sure
We strive to create programs and services that represent the f following questions about ZIP code, age, race, and ethnicity to	ull diversity of the Williamson County community. We are asking the ensure that we are meeting this goal.
6. What ZIP code do you live in?	
7. What is your age?	
8. Which of the following best describes you? <b>Select one answ</b>	ver.
☐ Woman	☐ Agender
☐ Man	☐ Gender fluid
☐ Transgender woman	☐ Gender queer
☐ Transgender man	Prefer to self-describe
☐ Non-binary	☐ Prefer not to answer
9. Which of the following best describes you? <b>Select all that a</b>	pply.
☐ African American or Black	☐ Native Hawaiian or Pacific Islander
☐ Asian or Asian American	☐ White or Caucasian
☐ Hispanic or Latino	☐ Prefer to self-describe
<ul><li>☐ Middle Eastern or North African</li><li>☐ Native American or Alaska Native</li></ul>	☐ Prefer not to answer
10. Are you interested in becoming a health leader in your neigniterested.	shborhood or community? Please enter email or phone number if
Name:	
Phone Number/Email:	

### Appendix F: Community Health Survey Results

### **Demographics**

The CHA Task Force focused on collecting surveys from individuals 18 years and older (Figure 89). The average age of survey respondents was 53.8 years old, compared to the overall county average of 37.4 years old. The average age among participants who reside in Northern Williamson County was highest at 59.6, and the average age among participants who reside in Southern Williamson County was lowest at 47.6 years old. Three out of four survey respondents were female (Figure 90). The majority of respondents identified as White or Caucasian (Table 32).

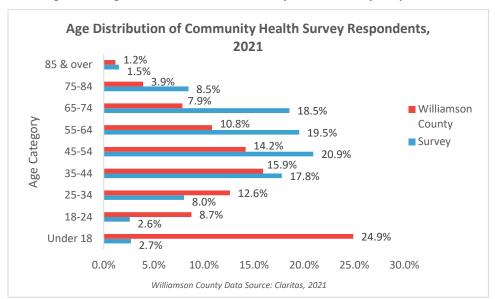


Figure 89: Age Distribution of Community Health Survey Respondents



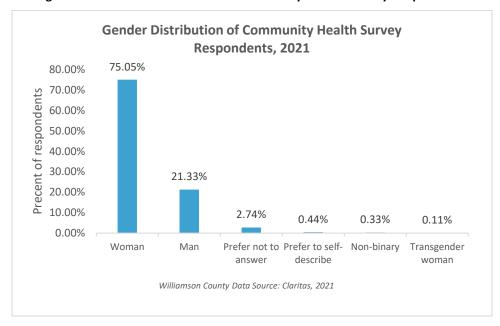


Table 32: Race/Ethnicity of Community Health Survey Respondents, 2021

RACE / ETHNICITY	COUNT
White or Caucasian	646
Hispanic or Latino	135
Prefer not to answer	57
African American or Black	40
Asian or Asian American	34
Prefer to self-describe	29
Native American or Alaska Native	8
Native Hawaiian or Pacific Islander	5
Middle Eastern or North African	0

Note: 39 respondents identified as multiple races/ethnicities.

10 respondents did not indicate race/ethnicity.

913 respondents reported their race/ethnicity.

### Responses

### **Strengths of Williamson County**

Survey respondents were asked, "What are the three 'strengths' in your neighborhood or community?" and 918 residents responded. Nearly half of survey respondents ranked low crime and safe neighborhoods as a top strength. Respondents ranked the following strengths almost equally: parks and recreation, good place to raise children, access to healthcare, and arts and cultural events (Table 33). Resident perceptions of top strengths in Williamson County are broken down by region in Figure 91.

Table 33: Resident Perceptions of Strengths of Williamson County

RANK	STRENGTHS IN COMMUNITY	COUNT	PERCENT
1	Low crime / safe neighborhoods	440	47.9%
2	Parks and recreation	333	36.3%
3	Good place to raise children	330	35.9%
4	Access to healthcare	325	35.4%
5	Arts and cultural events	325	35.4%

Figure 91: Resident Perceptions of Strengths in Williamson County by Region

	<u>North</u>	
	1. Low crime / safe neighborhoods	
	2. Parks and recreation	
	3. Access to healthcare	
	4. Community resources	
	5. Clean environment	
<u>West</u>	Williamson County	<u>East</u>
1. Good place to raise children	1. Low crime / safe neighborhoods	1. Low crime / safe neighborhoods
2. Good schools	2. Parks and recreation	2. Good place to raise children
3. Low crime / safe neighborhoods	3. Good place to raise children	3. Access to healthcare
4. Access to healthcare	4. Access to healthcare	4. Parks and recreation
5. Parks and recreation	5. Arts and cultural events	5. Clean environment
	<u>South</u>	
	1. Good place to raise children	
	2. Low crime / safe neighborhoods	
	3. Good schools	
	4. Parks and recreation	
	5. Prepared for natural & manmade	
	disasters & other emergencies	

### **Community Challenges**

Survey respondents were asked, "What are the three most important 'challenges' in your neighborhood or community?" and 918 individuals responded. The #1 challenge identified in the community survey, by far, was mental health problems (Table 34). Resident perceptions of health problems in Williamson County are broken down by region in Figure 92.

Table 34: Resident Perceptions of Top Challenges in Neighborhoods and Communities in Williamson County

RANK	CHALLENGES IN COMMUNITY	COUNT	PERCENT
1	Mental health problems	363	39.5%
2	Problems related to aging	244	26.6%
3	Obesity	200	21.8%
4	Feeling isolated or alone	196	21.4%
5	Lack of exercise	177	19.3%

Figure 92: Resident Perceptions of Top Challenges in Neighborhoods and Communities in Williamson County by Region

### North 1. Problems related to aging 2. Mental health problems 3. Obesity 4. Feeling isolated or alone 5. Lack of exercise West **Williamson County** Mental health problems 1. Mental health problems 1. Mental health problems 1. 2. Feeling isolated or alone Problems related to aging Poor eating habits 3. Obesity 3. Obesity 2. Access to basic needs 4. Problems related to aging 4. Feeling isolated or alone 3. Drug use 5. Lack of exercise 5. Other **Excessive drinking South** 1. Mental health problems 2. Poor eating habits 3. Lack of exercise 4. Obesity 5. Feeling isolated or alone

### Need for Additional or Improved Services in Williamson County

Survey respondents were asked, "Which three services would you like to see more of or improved in your neighborhood or community?" and 916 individuals responded. The leading service in need of improvement or additions was affordable housing (Table 35). Resident perceptions of need for additional or improved services in Williamson County are broken down by region (Figure 93).

Table 35: Resident Perceptions of Need for Additional or Improved Services in Williamson County

RANK	SERVICE	COUNT	PERCENT
1	Affordable housing	284	31.0%
2	Transportation options	239	26.1%
3	Counseling / mental health services / support groups	232	25.3%
4	Road safety	210	22.9%
5	Efforts to address racism	192	21.0%

Figure 93: Resident Perceptions of Need for Additional or Improved Services in Williamson County by Region

### North

- 1. Transportation options
- 2. Road safety
- 3. Affordable housing
- 4. Services for seniors
- 5. Counseling / mental health services / support groups

### West

- 1. Affordable housing
- 2. Counseling / mental health services / support groups
- 3. Transportation options
- 4. Parks, trails, community centers
- 5. Services for seniors

### **Williamson County**

- 1. Affordable housing
- 2. Transportation options
- 3. Counseling / mental health services / support groups
- 4. Road safety
- 5. Efforts to address racism

### **East**

- 1. Low-cost health services
- 2. Counseling / mental health services / support groups
- 3. More jobs
- 4. Positive youth activities
- 5. Healthy food choices

### South

- 1. Affordable housing
- 2. Counseling / mental health services / support groups
- 3. Efforts to address racism
- 4. Parks, trails, community centers
- 5. Transportation options

### **COVID-19 Impact on Household**

Survey respondents were asked, "How do you expect COVID-19 to affect you or your household in the future?" and 922 individuals responded. The leading answer, indicated by 31% of residents, was that there was no expectation for COVID-19 to affect their households, followed by expected impacts on school and education, as well as health and ability to seek care (Table 36). Resident expectations of COVID-19's effect on households in Williamson County are broken down by region (Figure 94).

Table 36: Resident Expectations of COVID-19's Effect on Households in Williamson County

RANK	EXPECTATION	COUNT	PERCENT
1	I do not expect COVID-19 to affect me or my household in the future	283	30.7%
2	School and education	259	28.1%
3	Health and ability to seek care	234	25.4%
4	Not sure	222	24.1%
5	Wages and employment	214	23.2%

Figure 94: Resident Expectations of COVID-19's Effect on Households in Williamson County by Region

### North

- 1. I do not expect COVID-19 to affect me or my household in the future
- 2. Not sure
- 3. Health and ability to seek care
- 4. Wages and employment
- 5. Schol and education

### West

- 1. School and education
- 2. Health and ability to seek care
- 3. Wages and employment
- 4. I do not expect COVID-19 to affect me or my household in the future
- 5. Not sure

### **Williamson County**

- 1. I do not expect COVID-19 to affect me or my household in the future
- 2. School and education
- 3. Health and ability to seek care
- 4. Not sure
- 5. Wages and employment

### East

- 1. I do not expect COVID-19 to affect me or my household in the future
- 2. Health and ability to seek care
- 3. Wages and employment
- 4. School and education
- 5. Not sure

### South

- 1. School and education
- 2. Wages and employment
- 3. Health and ability to seek care
- 4. I do not expect COVID-19 to affect me or my household in the future
- 5. Expenses or ability ot meet basic needs

### **Financial Emergency Preparedness**

Survey respondents were asked, "In case of an emergency, my household has enough money saved up for how many months of expenses (rent, utilities, groceries, basic supplies)?" and 922 individuals responded. Slightly more than half of respondents reported having more than three months of expenses saved for an emergency (Table 37). Resident's emergency savings in Williamson County are broken down by region (Figure 95).

Table 37: Residents' Emergency Savings in Williamson County

RANK	EMERGENCY SAVINGS FOR:	COUNT	PERCENT
1	More than three months	474	51.4%
2	Three months	108	11.7%
3	Two months	90	9.8%
4	Do not have enough saved for one month	89	9.7%
5	One month	89	9.7%

Figure 95: Residents' Emergency Savings in Williamson County by Region

			П	
N	n	r	н	n

- 1. More than three months
- 2. Three months
- 3. One month
- 4. Not sure
- 5. Do not have enough saved for one month

### West

- 1. More than three months
- 2. Three months
- 3. Do not have enough saved for one month
- 4. One month
- 5. Two months

### **Williamson County**

- 1. More than three months
- 2. Three months
- 3. Two months
- 4. Do not have enough saved for one month
- 5. One month

### **East**

- 1. More than three months
- 2. Do not have enough saved for one month
- 3. Three months
- 4. Two months
- 5. Not sure

### **South**

- 1. More than three months
- 2. Two months
- 3. One month
- 4. Three months
- 5. Do not have enough saved for one month

### Appendix G: "Youth with Cameras" Photovoice Results

The three youth photographers from Catalyst Collective will begin 10<sup>th</sup> grade at the end of summer. Of the five youth photographers from The Georgetown Project and Boys and Girls Club of Georgetown, one will be in 8<sup>th</sup> grade, two will be 9<sup>th</sup> grade, and two will be in 11<sup>th</sup> grade for the 2021–2022 school year. Gender and race data were not collected.

The descriptions accompanying each picture are paraphrased remarks each photographer shared about their photo submissions. The word clouds for each section were created with the descriptions' text.

Results from the focus groups concluded the following overarching challenges and themes:



### **Mental Health and Isolation**

- Stress and anxiety, stemming from home and school
- Body image and unrealistic beauty expectations
- Social isolation during the COVID-19 pandemic
- Social anxiety
- Insomnia
- Access to mental health resources



### **Healthy Eating and Exercise**

- Unhealthy food options
- Expense of healthy foods
- Understanding food labels and marketing
- Water consumption
- Pollution
- Eating disorder resources
- Weightlifting and walking



### **Basic Needs**

- Life skills not taught in school
- Financial challenges
- Food and utility expenses
- Exercise
- Social interaction

Two additional themes were introduced during focus groups with the youth photographers.

- Safety and trust: Youth lacked trust in most people due to stories that have made them feel unsafe. Multiple youth expressed concerns about the dangers of public transportation, from Uber to public buses. Fears of kidnapping were expressed, as well as concerns regarding public transportation sanitation and health safety.
- **Respect:** Youth expressed the need for people to share respect for others, citing COVID-19-related tensions as an example. Youth photographers recognized the importance of acceptance, open minds, and education to have constructive, meaningful, fact-based conversations in respectful manners.

Theme 1: Mental Health and Isolation



### **Scattered Brain** (Photo by Catalyst Collective youth photographer)

Journaling is a stress outlet. Objects in this picture surrounding the journal represent topics that cause stress or anxiety. Beauty standards are a source of major stress for girls who feel extensive pressure to "fit into unrealistic standards" just because they're popular. Other primary sources of stress are sports, family, and school. Students are frustrated that teachers must tend to the whole class and not just one student, resulting in students feeling alone and left behind. Students recognize that teachers earn low salaries and do not blame teachers for causing them to feel left behind. Students recognize a need for more time and learning accommodations. Students also feel that school only teaches them some necessary life skills. Bible verses can be a source of solace.

### **Isolation** (Photo by Catalyst Collective youth photographer)

One method of self-care and boosting spirits is be outside in the open by oneself, sometimes while listening to music. Many youth have experienced a decline in mental health from 2020 to 2021, because they were isolated and unable to interact with peers. Social media is to blame for this decline in mental health; youth get "trapped in their phones and do not realize the world surrounding them."





### **Release** (Photo by Catalyst Collective youth photographer)

When stressed or feeling sad, laying in the grass, face-down, can boost moods. This photographer put a dead flower in her hair to emphasize the sad mood. The beginning of quarantine was full of sudden, big changes, which was tough at first. Since then, youth have adapted and learned the importance of isolation to "pick up your thoughts and keep moving." Self-regulation techniques to improve moods and mental health that youth learned during quarantine include walks, runs, and movies. Some youth view learning mental health improvement skills and behaviors as a major benefit of quarantine during the COVID-19 pandemic.

Isolation (Photo by Boys & Girls Club of Georgetown youth photographer)

This teddy bear is alone in the room to represent the sadness and challenges that come with isolation when people are blocked from interaction with the world.





**Social Anxiety** (Photo by Boys & Girls Club of Georgetown youth photographer)

Social anxiety is a mental illness that is not commonly spoken about, yet frequently experienced. Those with social anxiety feel a constant spotlight on them and sense that people always talk about them everywhere they go, which can cause their minds to go into a swirl. This condition is not easy to deal with, even with help and support. Since COVID-19 quarantine has limited social interaction, people are no longer acclimated to group settings and the associated pressures that may come with such circumstances.

Insomnia
(Photo by Boys & Girls Club of Georgetown youth photographer)

Insomnia is a condition that affects some youth and adults. Difficulty sleeping can be caused by stress, high emotions, or restlessness that youth and adults both experience. The high levels of stress that youth experience is not always recognized by adults. To cope with insomnia and related stresses, youth try to be calm or do an activity or technique to make them feel happy and lift their mood.





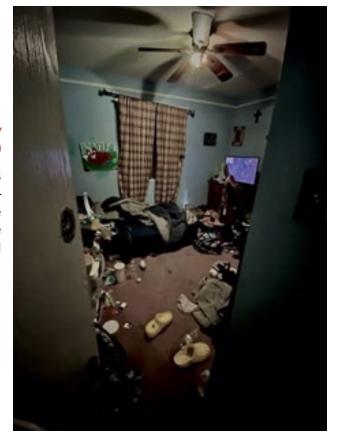
# **A Helping Hand** (Photo by Boys & Girls Club of Georgetown youth photographer)

In this photo, youth are at a farm doing a teamwork exercise where a mouse is passed from person to person, exhibiting the importance of **trust**. A lot of people do not like mice, but this exercise taught the youth and animal alike the importance of trust for connecting with others to execute a task and grow stronger independently and as a team. This exercise was very eye-opening to youth so that they could learn what building trust feels like and looks like.

When it comes to mental health, a lack of confidence to trust is a key reason people struggle. When someone does not trust people, they inadvertently push away human contact, which "breeds loneliness" and exacerbates existing challenges in one's life.

# **Behind Every Door, There's a Different Story** (Photo by Boys & Girls Club of Georgetown youth photographer)

One's bedroom is representative of their mental health. This room is clean, but also dirty. Every person has challenges that they deal with – regardless of how they present themselves – and a lot of youth struggle with achieving good mental health. If more help and resources were available and easier to access, more people would attain stable mental health. Mental health is largely dependent upon one's surroundings.



### Theme 2: Healthy Eating and Exercise



### **America's Health Grows on Trees**

(Photo by Catalyst Collective youth photographer)

Junk food is widely marketed, available almost everywhere, and is offered at unbeatably low prices, making it a contributing factor to high obesity rates. Healthy foods tend to be much more expensive than unhealthy food. It is difficult to eat healthy when unhealthy foods, such as donuts and cake, are cheaper than healthy food, such as apples. The apples hung in the picture represent the last item this youth photographer saw at the store.

Food labels are confusing and can be quite manipulative, which make it difficult to understand what you are consuming. Some people chose to eat unhealthy food because they believe working out is sufficient to be healthy. It can be super challenging to eat healthy for those who want to, especially for those with limited to no healthy food options, and more options to eat unhealthy food.



This youth photographer says that weightlifting with their school's soccer team really improved their health. The pandemic has changed the way group sports, like soccer, are offered to students. Fortunately, students can still use the weight room at the school gym. Additionally, the green grass can boost moods.





### **Drink Up** (Photo by Catalyst Collective youth photographer)

Water is very important for people, and a great prompt for exercise. This youth photographer loves water and believes water is the most important thing that one can have.

### **Cheetos Trash**

### (Photo by Boys & Girls Club of Georgetown youth photographer)

Empty food bags are left lying around frequently. Trash in the community and environment has a negative impact on people, and youth do not usually want to be outside where there is lots of trash, which they often see in their community.



# Apple

(Photo by Boys & Girls Club of Georgetown youth photographer)

Apples are an example of healthy food. Mangoes are this student's favorite fruit, followed by apples, but she prefers vegetables over fruit. This student eats fruit a couple of times a week, but it is hard.



### **Eating Watermelon Like It's Water**

### (Photo by Boys & Girls Club of Georgetown youth photographer)

This youth photographer thought their friend who chose healthy watermelon over the unhealthy choices available to them was a fantastic example of discipline and self-control to better herself. This friend inspired the photographer to make a healthy choice amidst a breadth of unhealthy food and showed the photographer that you can be social and healthy (since many social events center around food). That said, being healthy is about more than food; it is about feeling nice, exercising and feeling confident.





# Just Because There's a Bow Doesn't Mean It's Perfect (Photo by Boys & Girls Club of Georgetown youth photographer)

This student had overcome anorexia, which has provided them with an enlightened perspective on youth mental health. For one, the image of healthy is based on pure looks, not internal/biological health, which can quickly foster physical and mental toxicity. It is important for society to recognize that mental health, body image, and eating disorders are challenges for people other than just women. Health and eating habits cannot be evaluated by how one's body appears. The youth photographer's finger on the tape-measure bow tassel portrays their desire to pull the bow away, yet they keep looking at it.

### Theme 3: Basic Needs

# **Hidden Education** (Photo by Catalyst Collective youth photographer)

Young adults feel they face major challenges due to a lack of basic education (need) for real-world topics, like car maintenance, investments, and taxes. Every single student would benefit from semester-long high school classes on these topics; it would be wise to make such courses mandatory.





**Equal** (Photo by Catalyst Collective youth photographer)

Money is a big issue for a lot of people, largely caused by inequality in pay. This picture represents how everyone wants to be treated equally. Money is not often talked about. There are sometimes micro-aggressions about money-related topics.

# **Struggle** (Photo by Catalyst Collective youth photographer)

Money is one of the biggest struggles that people have with regards to basic needs. People struggle to keep up with paying the bills. The background of this photo is filled with disappointment, stress, and struggle. The money on the table represents having little, despite large efforts. This youth photographer feels very grateful to have enough money, after seeing homeless people and friends who have suboptimal lifestyles due to financial limitations.





# **Equal** (Photo by Boys & Girls Club of Georgetown youth photographer)

Social interaction is a basic need. Without it, people may experience stress and/or anxiety in social situations since they are not used to it. The pandemic has changed how people interact. In general, people who lack basic needs early in life tend to value such needs more later on and use them more wisely.

### It's Not Easy to Get Basic Needs

(Photo by Boys & Girls Club of Georgetown youth photographer)

Food is necessary for survival, as it provides energy and nutrients throughout the day. Not every household has electricity, food, or a fridge full of food. Some people have to eat fast food because they cannot afford fresh food. This youth photographer has seen inoperable fridges a few times and found it quite difficult to process because it puts their privilege to basic needs into perspective. It is not easy to get basic needs.





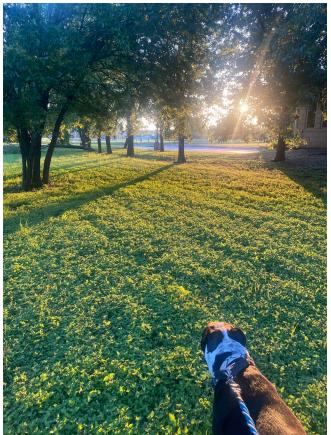
With Every Drop, There's a Light (Photo by Boys & Girls Club of Georgetown youth photographer)

Some people are half-empty spirits; others are half-full. Some people do not have water, enough food, or other basic needs. For some people, basic needs are really hard to attain. Some peers' parents work multiple jobs just to pay the rent – which can cause other issues outside of having a place to live.

Another aspect of this photograph is the negative health impacts and quality of life issues that pollutants, like trash, play in our environment.

Once Something Becomes a Daily Habit, It Becomes a
Basic Need (Photo by Boys & Girls Club of Georgetown youth
photographer)

Basic needs are more extensive than just food, water, and shelter; they also include components to maintain positive mental health, which can look different for everyone. For this student, a daily walk with their dog in fresh air, out in the open, is a necessity for both his physical and mental health.



### Successes, Limitations, and Moving Forward

### Successes

The youth photographers provided high levels of feedback and grassroots perspectives of their age demographic. The youth varied in home life, education, and geography, providing well-rounded feedback on most areas within Williamson County. Their feedback serves to inform WCCHD and stakeholder efforts throughout the region, aiming to keep Williamson County the 3<sup>rd</sup> healthiest county in Texas. The study design required minimal financial investment, thereby making it easy to repeat in the future.

### Limitations

The sample size of youth photographers only provided 10 perspectives. If data collection using Photovoice were to be repeated, WCCHD would recommend that a greater sample size is selected, with a wider age range (including younger ages) and geographic span.

### **Moving Forward: The Wish List**

After the youth photographers shared their photographs, they were asked to brainstorm ideal solutions to the challenges they discussed. The word cloud on the right highlights common themes presented in the wish list.

The mental health solution wish list was comprised of:

- Beauty Standards: Eliminate socially-established beauty standards that teens compare themselves with, on social media and other sources.
- **Free Therapy**: Access to no-cost and stigma-free therapy; help families and schools talk about therapy with a positive connotation.



The healthy eating and exercise solution wish list included:

- **Food Education:** Teach reality of healthy/unhealthy foods and how to discern deceptive food marketing and "fad diets"; advertise more healthy food.
- **Healthy Options**: Offer more healthy food options and provide healthy alternatives when junk food is offered; regular access to healthy food for every meal would make a big difference.
- **It Takes Two:** Teach people from a young age that being healthy entails a nutritious diet *and* exercise; exercise is not justification to eat unhealthily, and vice-versa.
- **Clean, Safe Environment**: Create or maintain safe public spaces for recreation; install more streetlights and other safety measures; and provide more trash cans to avoid litter and pollution.
- Eating Disorders: Raise awareness and provide more resources for all genders experiencing eating disorders.
- Removing Ideals: Not allow media and society to dictate the "ideal" body type, which poorly affects mental health and causes insecurities.
- Affordable Health: Make healthy food less expensive and easier to access; do not let unhealthy food be the most viable
  option.

The basic needs solution wish list had the following suggestions:

- **Redefine Basic Education:** Provide mandatory classes that teach real-life basic skills to high schoolers, including car maintenance, taxes, and investments/finances.
- **Self-Defense**: Teach students how to walk safely by themselves and equip them with basic self-defense skills. Some students requested pepper spray keychains.
- **Easier Access:** Facilitate and advertise easier access to basic need resources; remove barriers (including turnaround time), provide transportation to resources, and reduce stigma about accepting assistance.

# Appendix H: Social Determinants of Health and COVID-19 Vaccine Survey

#### **OVERVIEW**

Two of the top five health priorities for Williamson County, as a result of the 2019 Community Health Assessment (CHA), were behavioral health, stress, and well-being, and the social determinants of health:

#### What are the Top Five Health Priorities?

- 1. Behavioral Health, Stress, and Well-being
  - 2. Chronic Disease Risk Factors
- 3. Social Determinants of Health (Housing, Transportation, and Workforce Development)
  - 4. Access and Affordability of Healthcare
  - 5. Building a Resilient Williamson County

To gain additional data to have a deeper understanding of how these factors affect the community's health status due to the COVID-19 pandemic, WCCHD published the Social Determinants of Health and COVID-19 Vaccine Survey. The survey aimed to assess the COVID-19 impact on the Williamson County community's ability to access basic needs, as well as mental health status. According to the World Health Organization and Healthy People 2030, the social determinants of health are, "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels, such as the safety and affordability of housing, discrimination, job opportunities or job security, and access to nutritious foods. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries." The survey also aimed to capture this community's perceptions about the COVID-19 vaccine to help WCCHD plan vaccination education and communication campaigns.

#### **METHODS**

WCCHD staff designed the survey in conjunction with Austin Public Health (APH). To ensure that the survey was accessible for various literacy levels, WCCHD and APH collaborated to write survey questions at a 6th grade reading level. Once the survey questions (see Appendices B and C) were finalized, WCCHD staff translated the survey into Spanish. Staff imported two versions of the survey— English and Spanish—into SurveyMonkey. Austin Public Health shared the survey on their social media pages, leaving the survey open from October 1st, 2020 – December 1st, 2020. To increase the response rate among Williamson County residents, WCCHD posted the survey on our respective Facebook and Twitter pages, leaving the survey open from January 21st, 2020 – February 12th, 2021 (Appendices D and E).

#### **RESULTS**

Through Facebook, the survey post received 5,558 views and 705 clicks. On Twitter, the survey post had 400 impressions and 25 engagements. In total, 370 surveys were collected for Williamson County. Only surveys in which participants indicated they reside in Williamson County were used for analysis. Analysis was performed on the first three questions of the survey and results are presented below in Figures 1-3.

For Question 1 (regarding COVID-19's impact on one's mental health), the top three responses among participants were anxiety (86.2%), stress (84.6%), and depression (50.8%) (Figure 1). In reviewing "Other" responses for Question 1, survey participants stated they had job hours and/or salaries reduced, felt frustrated, and had difficulty focusing and concentrating. The top three responses for Question 2 (regarding COVID-19's impact on a household member's mental health) were anxiety (78.6%), stress (78.4%), and depression (55.9%) (Figure 2). Examples of "Other" responses for Question 2 are weight gain, anger, and excessive alcohol intake. Anxiety, stress, and depression were found to be the most reported at both the individual and household level. Results from Question 3 (regarding one's willingness to get the COVID-19 vaccine) show that 75% of the survey participants in Williamson County would definitely get a COVID-19 vaccine if available (Figure 3). 11% of participants indicated they would probably or possibly get a COVID-19 vaccine if available (Figure 3).

Figure 1. Question 1. Check all that apply. Since March 2020, I have experienced:

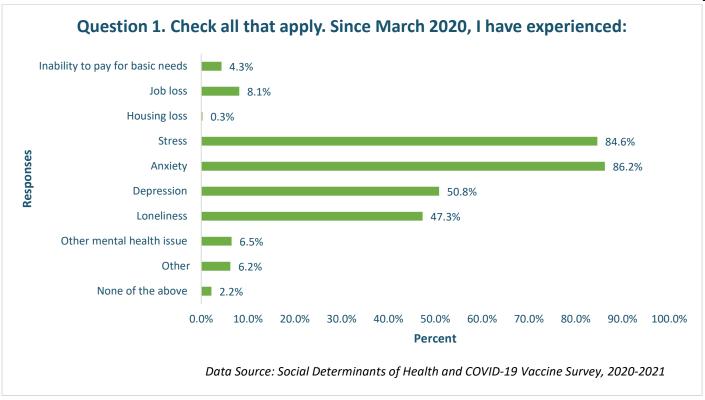


Figure 2. Question 2. Check all that apply. Since March 2020, a member of my household has experienced:

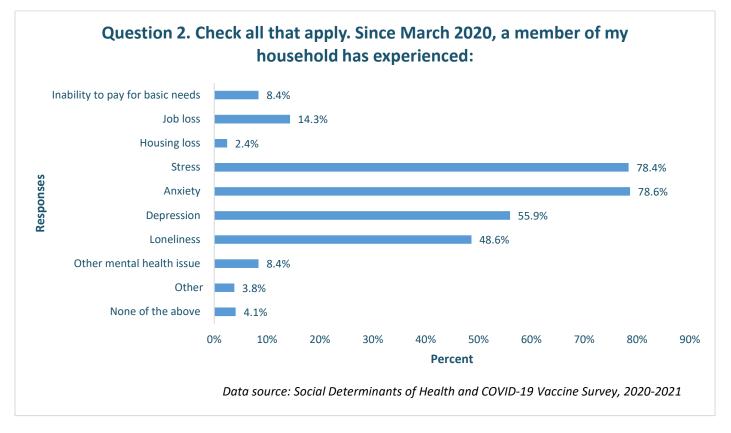
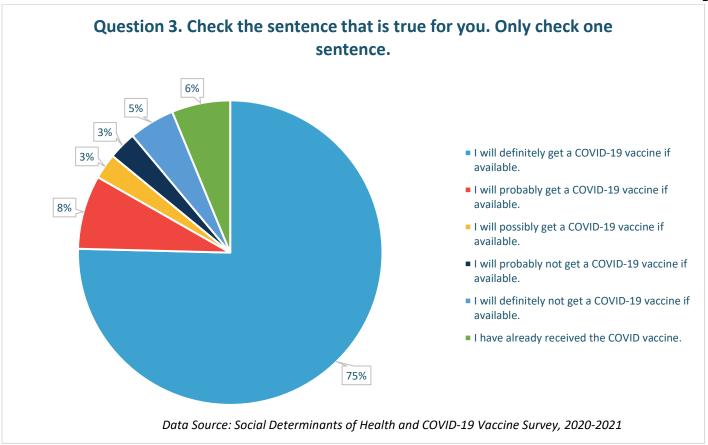


Figure 3. Question 3. Check the sentence that is true for you. Only check one sentence.



#### **CONCLUSIONS**

When comparing the impact of COVID-19 on the community's access to basic needs versus the impact on mental health, participants indicated that COVID-19 had a higher impact on their mental health or the mental health of a member of their household. Vaccine education and misinformation efforts should be targeted towards the 11% of participants who selected that they would probably or possibly get a COVID-19 vaccine if available. Research shows that addressing vaccine confidence and misinformation among the "moveable middle" (i.e., those who are concerned, cautious, or disengaged) is more effective than focusing on those who are doubtful or dismissive.

One limitation of this survey is the use of convenience sampling; this survey was promoted to individuals who follow WCCHD social media accounts and may see public health efforts in a more favorable light compared to the general public. The survey was only accessible electronically and no paper surveys were administered, which excludes participants with technological barriers and/or no internet access. Another limitation of the survey is the small sample size (n=370). The sample size of 370 only accounts for 0.06% of the county's population (population size=613,104) and falls between 90-95% confidence. To achieve 95% confidence with a 5% margin of error, the ideal sample size would have been 384 surveys. For 90% confidence and a 10% margin of error, the sample size needed to be 271. Overall, the results from this survey highlight the need for mental health support and educational interventions that target vaccine confidence and misinformation among those considering getting a COVID-19 vaccine.

#### **APPENDICES**

#### **Appendix A: Works Cited**

- 1. Social Determinants of Health [Internet]. World Health Organization [cited 2021]. Available from: <a href="https://www.who.int/gender-equity-rights/understanding/sdh-definition/en/">https://www.who.int/gender-equity-rights/understanding/sdh-definition/en/</a>
- 2. Social Determinants of Health [Internet]. Healthy People 2030 [cited 2021]. Available from: <a href="https://health.gov/healthypeople/objectives-and-data/social-determinants-health">https://healthypeople/objectives-and-data/social-determinants-health</a>

# Appendix B: Social Determinants of Health and COVID-19 Vaccine Survey-English Version

Phone Number: \_\_\_\_\_

Please help us better understand the impact of COVID-19 on your ability to access basic needs and mental health, and your perceptions

about the COVID-19 vaccine. Your opinion is important to us! Participation in this survey is completely voluntary. Individual re will be kept confidential. Thank you!
1.) Check all that apply. Since March of 2020, I have experienced:  Inability to pay for basic needs  Job loss  Housing loss  Stress  Anxiety  Depression  Loneliness  Other mental health issue  Other:  None of the above
2.) Check all that apply. Since March of 2020, a member of my household has experienced:  Inability to pay for basic needs  Job loss  Housing loss  Stress  Anxiety  Depression  Loneliness  Other mental health issue  Other:  None of the above
<ul> <li>3.) Check the sentence that is true for you. Check only one sentence.</li> <li>I will definitely get a COVID-19 vaccine if available.</li> <li>I will probably get a COVID-19 vaccine if available.</li> <li>I will possibly get a COVID-19 vaccine if available.</li> <li>I will probably not get a COVID-19 vaccine if available.</li> <li>I will definitely not get a COVID-19 vaccine if available.</li> <li>I have already received the COVID vaccine.</li> </ul>
<ul> <li>4.) Which County do you currently reside in?</li> <li>Williamson</li> <li>Travis</li> <li>Bastrop</li> <li>Other:</li> </ul>
5.) Would you like Williamson County and Cities Health District to contact you to help you or a member of your household Yes/No
<b>6.)</b> If you answered yes to the previous question, please provide some contact information.  First and Last Name:  Email Address:

Appendix I: Community Focus Group and Key Informant Results — Texas Health Institute

# COMMUNITY INPUT SUMMARY REPORT:

Williamson County
2021-22 Community Health Needs Assessment



# **ABOUT TEXAS HEALTH INSTITUTE**

Texas Health Institute is a nonprofit, nonpartisan public health institute with the mission of advancing the health of all. Since 1964, we have served as a trusted, leading voice on public health and health care issues in Texas and the nation. Our expertise, strategies, and nimble approach makes us an integral and essential partner in driving systems change. We work across and within sectors to lead collaborative efforts and facilitate connections to foster systems that provide the opportunity for everyone to lead a healthy life. For more information, visit texashealthinstitute.org and follow us on Twitter, Facebook, and LinkedIn.

# **ACKNOWLEDGEMENTS**

Rachelle Johnsson Chiang, DrPH, MPH – Project Lead Emily Peterson Johnson, LMSW Calandra Jones, MPH Cody Price, MPH

# **TABLE OF CONTENTS**

Background and Methods	I
Methods	I
Health Equity	2
Themes	3
Access to Health Care	4
Social and Structural Determinants of Health	7
Priority Health Needs	10
Children's Health	12
Impact of COVID-19	14
Community Assets and Strengths	14
Proposed Solutions and Actions for Hospitals	16
Improve Health Care Access	16
Increase Culturally Competent Health Care	17
Reduce Silos and Increase Collaboration	17
Limitations	18
Conclusion	19
Tables	20
Appendix A: Key Informant Interview Guide	23
Appendix B: Focus Group Guide	26

THI	Texas Health Institute
SDF	St. David's Foundation
WCCHD	Williamson County and Cities Health District
AAPI	Asian American Pacific Islander
CHNA	Community Health Needs Assessment
СВО	Community-Based Organization
ACE	Adverse Childhood Experience

# **BACKGROUND AND METHODS**

As part of a collaboration of local hospital systems, St. David's Foundation (SDF) contracted with Texas Health Institute (THI) to conduct the qualitative research for the 2021-22 Community Health Needs Assessments (CHNAs) in Bastrop, Caldwell, Hays, and Williamson counties. The qualitative research and report are designed to meet the community input requirements of a CHNA for 501(c)(3) hospitals under the Affordable Care Act. As part of the CHNAs, THI staff used key informant interviews and focus groups to explore critical health issues in the four counties and how these issues are affected by COVID-19, structural factors, underlying causes, and community assets.

In addition to SDF, Ascension Seton, Baylor Scott & White, Georgetown Health Foundation, and Williamson County and Cities Health District (WCCHD) were key collaborators in the Williamson County CHNA process. Each of the collaborating organizations will also be using this summary report to support the development of their respective CHNAs.

# **METHODS**

Between August and October 2021, THI virtually conducted nine key informant interviews and two community focus groups with Williamson County residents. A THI staff member served as the facilitator for all virtual interviews and focus groups. Audio recordings of the sessions were automatically transcribed using Otter.ai, and staff verified and cleaned transcripts for accuracy. Transcripts were coded and analyzed using Atlas.ti qualitative software.

#### **Key Informant Interviews**

SDF and other collaborating organizations helped identify potential key informants based on their leadership roles and experience working with medically underserved, low-income, and minority populations served by the hospital system. THI contacted and recruited key informants via email with an explanation of the project. The key informants for this project (Table I) included representatives from health care organizations, youth support organizations, and community-based organizations (CBOs).

The key informant interview guide for organizational leaders covered critical health issues in the county, the impact of COVID-19 on these issues, structural factors that contribute to the critical health issues, community assets, strengths of the community, and possible solutions to address these health issues (Appendix A). Each key informant interview lasted one hour.

## **Focus Groups**

For the focus groups, THI identified people from low-income, medically underserved, and minority populations in Williamson County by working with Sacred Heart Community Clinic and identified school counselors that served these populations by working with WCCHD. Sacred Heart Community Clinic initially notified community members about the community focus groups and the overall purpose of the CHNA. Prior to working with Sacred Heart Community Clinic, THI unsuccessfully reached out to a number of other agencies and organizations in the county regarding recruitment for the community focus groups (Limitations).

After community members or school counselors expressed an interest in participating, THI coordinated with the participants to arrange meeting details. Each focus group participant—other than school counselors who serve these communities—self-identified as fitting one or more descriptions: medically underserved, low income, minority, or living with chronic disease needs (Table 2). Upon the conclusion of each focus group, THI compensated participants with a \$25 electronic gift card to a store of their choice.

The focus group guide covered participants' health concerns, underlying root causes of health issues that they see in their communities, community assets, proposed solutions, and specific strategies for addressing critical health needs (Appendix B). Community focus groups lasted approximately 75-90 minutes each.

# **HEALTH EQUITY**

THI applied a health equity lens to the focus groups and key informant interviews. This was done by incorporating specific questions into the interview guides, including the following:

Key informant interview guide:

- Who do the top most critical health issues affect the most? (e.g., age groups, racial and ethnic groups, socioeconomic groups, geographic subsets, etc.)
- What factors contribute to the critical health issues?
- How does the critical health issue identified specifically impact low-income, underserved, or uninsured populations?
- What are some of the community's greatest strengths and assets? How could these be leveraged to address the health issues identified?
- What are your suggestions for ways to engage and build trust with community members, particularly low-income, underserved populations, ethnic and racial minorities, and limited English proficient residents to address the critical health issues of the county?

#### Focus group guide:

- What makes it easy or difficult to be healthy in your community and what factors, such as racism or discrimination, impact your ability to be healthy?
- Are there health services that you need but do not receive currently?
- What are some resources in the community that seem to be working to address healthrelated issues?

Additionally, THI used the following reflective questions to frame the analysis of the transcripts in order to draw out considerations of health equity:

- Who is disproportionately affected and impacted by critical health issues and by potential solutions?
- Who is included and excluded?
- What are the root causes and causal factors contributing to the community health needs?
- Are there assumptions taking place? If so, what are they?
- Who is potentially benefiting and who is being harmed?
- What are the interviews and focus groups telling us about what data might be missing?
   About who is and is not at the decision-making table?
- What changes are needed and what could be done differently?

# **THEMES**

Among the focus groups and key informant interviews, four primary thematic categories emerged. The order presented below does not indicate priority or frequency of needs.

- Access to health care
- Structural and social determinants of health
- Priority health needs
- Children's health

Interview and focus group participants identified barriers within the health care system that inhibit their ability to receive accessible, affordable, and culturally appropriate care that includes specialty services. The participants also identified various social and structural barriers community members face that influence their wellness. Priority health needs emerged as participants described the most commonly occurring chronic illnesses present in Williamson County. Finally, participants frequently described the conditions that have a tremendous effect on children's health.

# **ACCESS TO HEALTH CARE**

Key informants and focus group participants identified several factors that prevent access to health care in Williamson County including provider shortages for residents who are either publicly insured or uninsured, lack of culturally and linguistically appropriate care, and lack of medical system navigation support.

## Access to Primary and Specialty Care for Publicly Insured or Uninsured

Community members frequently indicated an insufficient amount of primary and specialty care providers creates a barrier to accessing health care, particularly as it relates to providers that accept public insurance. One focus group participant said that, despite having four Federally Qualified Health Centers in Taylor, Round Rock, Cedar Park, and Georgetown, appointments are limited to certain days of the week, especially during the pandemic. Some Taylor residents travel to Round Rock and Georgetown to receive primary care services or x-rays.

Medicaid beneficiaries lack a sufficient number of primary care or specialty providers that accept their insurance, and people enrolled in WilCo Care (WCCHD's indigent care program) struggle to find physicians, particularly specialists. As a result, residents tend to over-utilize emergency rooms. One key informant stated that one of her recent clients enrolled in WilCo Care was referred to surgery after an emergency room visit but could not have the procedure due to the unavailability of specialty surgeons that accept the public insurance program. In addition, focus group participants recalled the difficulties in locating local mental health providers such as psychiatrists or psychologists who accept insurance to provide mental health care.

"When they're enrolled in the county program, we don't have a lot of providers that accept the WilCo Care card. Similar to Medicaid, we don't have a lot of providers."

Key Informant

#### Sub-themes:

- The wait times for appointments with providers at Lone Star Circle of Care who accept Medicaid or uninsured people are long (sometimes multiple months long).
- There are not enough options for health care in general, so many community members will use the emergency room for non-emergent health care.
- The types of specialty care or care for complex conditions that participants described needing included surgery, psychiatric services, affordable prescription dispensaries, optical care, podiatrists that can treat foot-related conditions for people with diabetes, and dental care.
- Many community members travel to Round Rock or Austin to receive specialty care and for primary care at free or low-cost clinics.

"If you are impoverished and only have Medicaid or no insurance, we have one Lone Star Circle of Care. That's it for the entire county."

Focus Group Participant

#### **Insurance**

Participants frequently shared challenges that residents have due to not having health insurance and not qualifying for the Medical Access Program. One focus group participant emphasized the large gap in health care services when residents cannot afford to pay privately. For example, without insurance, residents cannot receive access to preventive care or specialty services such as endoscopies or colonoscopies.

"Worrying about insurance, worrying about co-pays ... obviously, the transportation. I think all of the above would stop me from going unless I had to."

Focus Group Participant

# **Culturally and Linguistically Appropriate Care**

Participants shared that health care services often feel inaccessible because they are not culturally or linguistically appropriate. Key informants and focus group participants shared barriers regarding language, noting an insufficient number of Spanish-speaking or Korean-speaking providers. For example, Hispanic/Latinx and Asian American Pacific Islander (AAPI) populations in Williamson County often encounter language barriers due to the lack of interpreters and translated material.

In addition, children and grandchildren often feel pressured to provide interpretation and assist senior populations with complex paperwork, because health care language, including language used on pamphlets or educational materials, is confusing and difficult to understand or apply. Furthermore, participants described how the inability to adapt to the predominant culture or navigate the health care system as an immigrant is a source of ongoing stress. Participants noted that many also forego both health care services and other services due to the fear of deportation based on immigration laws.

"There's a huge Hispanic population that's underrepresented, and they don't have the means to get the information translated into Spanish to help them better understand how they can get services that are available to them."

Key Informant

#### Sub-themes:

- Immigrant communities are distrusting of health care providers, fearing deportation or risks for their citizenship process.
- Many community members are not proficient in speaking or reading English but most health care information and services are only in English.
- Available interpretation services are limited and cannot assist non-English speaking patients with completing paperwork.
- Providers do not usually understand the needs or cultural priorities of Hispanic/Latinx communities and therefore the treatment is not accommodating or appropriate.

"A lot of times we do get calls of people who need food stamps, but because of the status of their immigration paperwork, they're afraid that if they apply for these benefits, then then they're not going to be able to become US citizens."

Key Informant

## Support for Navigating the Health Care System

"Picking up the phone, knowing who to call, being intimidated or not even knowing where to start. You just don't even try."

Focus Group Participant

Community participants frequently mentioned the lack of awareness and support for navigating through the health care system as a barrier to accessing care. Many underrepresented populations with cultural and language barriers, such as Hispanic/Latinx and AAPI low-income residents, do not know about health facilities that provide services at a minimal cost. This lack of awareness of available resources also makes it difficult for patients, family members, and caregivers to advocate for their needs. In addition, strict HIPAA-related requirements on who can actually contact providers on behalf of the patient increases barriers to access, especially among non-English speaking patients.

While health navigators at the Williamson County City Health District can provide assistance, office closures prevented them from helping clients with documentation support during the COVID-19 pandemic, and many clients were unenrolled from support programs as a result.

"It's hard for the average person to navigate those systems, and then you're asking people that are disadvantaged to navigate systems."

Key Informant

# SOCIAL AND STRUCTURAL DETERMINANTS OF HEALTH

Multiple compounding social and structural determinants of health cause poor health outcomes for Williamson County residents. Key informants and focus group participants acknowledged several factors including low socioeconomic status, housing and homelessness, lack of transportation, limited broadband or internet access, and community silos.

#### **Low Socioeconomic Status**

Low-income communities within Williamson County face the most barriers to accessing various services. Participants noted that Hispanic/Latinx residents tend to have higher rates of poverty, and wages for those with less than a high school education or GED are much lower and do not support the cost of living in the county. Furthermore, due to strict income eligibility criteria, even low-income families still may not qualify for WilCo Care. Having low or no income inhibits families' ability to afford healthy food options, medications, or transportation and fuel. The quality of health care and therapeutic services also declines when residents are not able to provide private-pay.

"Not having money really affects your mental health. You are trying to figure out, how I am going to pay this water bill, this gas bill, this light bill. I got electric due. I got car insurance. It's all rolling through your head, and there is no sleep, because you're trying to figure out how you're going to do it...I'm in a survival mode, and I need finances to just keep my head above water."

Focus Group Participant

#### Sub-themes:

- Residents who are uninsured or underinsured often avoid preventative care due to high co-pays or high overall costs.
- Dental care is expensive, and many community members have significant dental needs but do not have dental insurance.
- Mental health services are expensive, counselors often do not accept insurance, and many community members cannot afford counseling.

# **Housing and Homelessness**

Recent economic development and population growth has caused housing prices to skyrocket in Williamson County over the last few years. Key informants and focus group participants revealed that the lack of affordable housing available within the county is probably one of the most complicated issues for the community. Despite the existence of local housing authorities

and Section 8 housing vouchers, people in need of low-income housing often experience long waiting lists. In addition, participants shared that emergency and transitional housing is unavailable in Williamson County. Furthermore, there is a growing population of people experiencing homelessness with untreated mental health issues.

"We don't even have emergency and transitional housing in Williamson County. When someone calls us and needs emergency shelter, we have to send them to Travis County or Bell County."

Key Informant

#### Sub-themes:

- Population growth due to the influx of Austin residents is making property values, cost of housing, and general cost of living rise, pushing out long-time Williamson County residents.
- Due to increased housing costs, multiple generations often live together in one home.
- Residents seeking housing vouchers experience 2-3 year waitlists.
- The Cedar Park area near the 183 corridor has a large population of people who are homeless.

## **Transportation**

Participants frequently mentioned transportation as one of the leading structural barriers to health in Williamson County. Residents often have to travel many miles to get to the doctor, pharmacy, the grocery stores, or farmers markets. Even with personal vehicles, the lack of money to pay for gas prevents some residents from accessing services in Round Rock, Georgetown, or eastern Williamson County. Furthermore, participants also described how the lack of transportation inhibits access to good employment opportunities or higher education and training, which ultimately affects overall health outcomes.

"I couldn't find someone that was willing to serve [my son's] needs [in Taylor] without traveling literally an hour and a half ... for a 15-minute appointment. I also had to take a whole day off work to do that, and it came with a specialty co-pay.... I know my family needs this support. I know they need this care, but I can't get there."

Focus Group Participant

#### Sub-themes:

• The lack of public transportation services inhibits residents' ability to get to grocery stores, jobs, and health care appointments.

- For residents in more rural areas, doctors' offices can be 15-20 miles away in Round Rock and Georgetown, limiting much of the county's access to services due to the lack of transportation options to get there.
- There are many neighborhoods in Williamson County that are geographically isolated, especially within Hispanic/Latinx and senior communities.

"People forget that to go from one end of Williamson to the other is probably over an hour, and that's just not feasible."

Focus Group Participant

#### **Broadband or Internet Access**

Participants described barriers associated with lack of access to broadband or internet, particularly for families in more rural areas of Williamson County. One key informant discussed frequent technical difficulties when attending virtual doctor's appointments including poor video quality, poor Wi-Fi, and poor phone reception. Participants noted how senior populations, AAPI populations, Hispanic/Latinx populations, and low-income families are often more disadvantaged when it comes to internet access. In addition, when organizations transitioned to remote services amid the pandemic, it became even more difficult for residents to access services due to the closure of public libraries—previously a primary point of access for many lower-income community members. Some people, including seniors, may also be less comfortable using technology or may not be computer literate.

"You don't have access to a computer. How can you do a virtual doctor's appointment?"

Key Informant

#### Sub-themes:

- Williamson County residents who lack access to a computer are unable to participate in virtual doctor's appointments.
- Senior populations in Williamson County may lack computer literacy.
- Remote areas of Williamson County often have poor internet and Wi-Fi connectivity.

#### **Ethnic and Racial Segregation**

"They don't want to come be around certain people: African Americans, and I'm just going to really be honest."

Key Informant

A number of key informants and focus group participants noted that Williamson County is ethnically and racially segregated. Participants noted specific residential areas have large populations of Hispanic/Latinx residents, and in general, people of color do not have equal access to community resources or culturally sensitive education about health. One participant pointed to the investment of resources in one area and not another: While public parks in affluent neighborhoods received adequate renovations, public parks within neighborhoods with higher populations of color did not receive equal renovations. Sometimes these neighborhoods are only a few miles apart, divided by a bridge.

"Instead of y'all just updating certain parks, you should be updating all the parks in the city."

-Key Informant

# PRIORITY HEALTH NEEDS

Key informants and focus group participants acknowledged several top health priorities to address within Williamson County including treatment for chronic health conditions, behavioral health needs—assistance with mental health and substance use—and dental care.

#### **Chronic Disease**

Hypertension, diabetes, obesity, and cancer were the most common health conditions mentioned among key informants and focus group participants, noting that diabetes and hypertension are common in Hispanic/Latinx and African American communities. Participants identified several factors that contribute to diabetes and obesity: (a) lack of access to healthy food options and exercise facilities due to transportation barriers, (b) inability to afford healthy food options or medications due to low socioeconomic status, (c) unhealthy nutrition habits, (d) lack of nutrition education, (e) foregoing doctor visits due to lack of insurance, (f) cultural values related to food in Hispanic/Latinx and Black/African American communities, and (g) lack of physical activity.

In addition, participants mentioned the common occurrence of cancer among AAPI residents, including ovarian cancer, lung cancer, and liver cancer.

## Sub-themes:

- Hispanic/Latinx and Black/African American populations have higher rates of diabetes, obesity, and hypertension possibly due to the lack of physical activity and poor nutrition.
- The high cost of healthy food is a barrier for many community members, as quantity is prioritized over quality when resources are tight.
- Medications to treat chronic diseases such as diabetes are very expensive.

#### **Mental Health and Substance Use**

Community members identified the increasing need for and lack of affordable and available mental health services within Williamson County. Common mental illnesses discussed included stress, anxiety, and depression. Participants noted that low-income families, Medicaid recipients, or families seeking services on a sliding fee scale often struggle the most with navigating resources to address mental health concerns, because very few psychiatrists and psychologists accept insurance. One community member mentioned community crime has also increased due to stress as "people are crying and screaming for help and don't know how to go about getting it." Participants also indicated the need to address negative stigma associated with mental illness through community education and advocacy.

Increased substance use and alcoholism was highlighted as a concern in the community as well. In addition to the lack of treatment providers available, community participants mentioned that it is very difficult to find recovery support services such as Alcoholics Anonymous, Narcotics Anonymous, or other support groups.

"There are hoops that people have to jump through.... I think it makes a lot of people, especially if they're having mental health and comprehension issues ... it can be a little bit more difficult for them to the point where they just give up, especially if they're not moving."

Key Informant

#### Sub-themes:

- The prevalence of mental illnesses seems to have increased largely due to the effects of the COVID-19 pandemic.
- Mental health is associated with a negative stigma that often discourages individuals and families from seeking treatment and support.
- Younger community members, including children and teens, are experiencing depression and anxiety at very high rates.
- Homeless populations often struggle the most with mental health and substance use disorders.

#### **Dental Care**

Participants also mentioned the need for and lack of access to affordable dental care in Williamson County. When seeking care, low-income, uninsured, and underinsured residents frequently travel from rural areas to find affordable dental care in Round Rock, Austin, or other urban areas. Participants also mentioned lack of awareness about where to seek low- or no-cost dental care within the county, the lack of availability of more complex dental services at low-cost clinics, and limitations of services per patient (e.g., services limited to one tooth per visit).

"Even the free places ... a lot of times, they will still only work on one tooth, or they won't offer certain things like root canals."

Focus Group Participant

# **CHILDREN'S HEALTH**

Childhood experiences have a tremendous influence on development and growth. Key informants and focus group participants acknowledged several key issues affecting Williamson County children and youth including child abuse, intellectual disabilities, and mental health.

#### **A**buse

Participants mentioned the high prevalence of child abuse, including physical abuse and sexual abuse within Williamson County. They described how sexual abuse affected all children regardless of race, ethnicity, or socioeconomic status of the family, physical abuse tended to affect low-income families more, and noted that physical abuse usually peaks during the summer months and has significantly increased amid the pandemic due to higher unemployment rates. Due to limited free counseling in Williamson County, child abuse victims are often placed on long waiting lists for mental health providers. Additionally, participants mentioned the need for more training and awareness about adverse childhood experiences (ACEs) for all health care providers. Although Williamson County Juvenile Services provides advocacy for child abuse, intervention services, and ACEs education, limited grant funding only allocates those opportunities to residents in specific areas, such as Eastern Williamson County.

"These kids have been through significant abuse. They're always on a waitlist, which is not how you want to treat kids that have been sexually abused, physically abused, gone through, you know, the most horrible, horrific things. But it's what happens when you are limited on your free counseling services."

Key Informant

#### Sub-themes:

- Child abuse cases have increased amid the pandemic due to higher rates of stress, unemployment, and isolation.
- Victims of child abuse are often placed on long waiting lists due to limited treatment providers available.

#### Intellectual Disabilities

Participants also mentioned the need to increase special programs for youth with physical and intellectual disabilities such as cerebral palsy, deafness, blindness, autism, Down's syndrome, and dyslexia. Participants noted that there are few to no public programs available that facilitate talk therapy with autistic youth in Williamson County. They also mentioned that Rock Springs Behavioral Health Care in Georgetown frequently does not accept youth with intellectual disabilities for treatment. As a result, most families in Williamson County need to travel to Austin to access services. In addition, participants mentioned that local respite services or music therapy are not available in Williamson County to decrease burn out among families.

"I know a lot of our parents, especially with medically fragile children end up spending a lot more time in Austin."

Focus Group Participant

#### **Mental Health**

Participants highlighted the need to make both mental health services and education available, accessible, and destignatized for youth. Not only is there a lack of resources for child and youth mental health services, but parents also lack the knowledge and awareness of their child's mental illness. Common youth mental illnesses mentioned among participants included suicidal ideation, attention deficit hyperactivity disorder, anxiety, depression, and bipolar disorder.

Additionally, amid the pandemic, participants noted an increase in severe mental health concerns among younger children, along with the difficulty of accessing mental health facilities and assistance for children under the age of thirteen. Although key informants expressed the benefits of integrating social emotional learning into the academic curriculum, they also underlined the school districts' opposition and resistance to providing platforms to discuss youth suicide prevention and social emotional learning.

"A lot of hospitals forget that if a parent has a child in a [mental health] crisis, that parent is in crisis too. They forget that they need to help the family navigate and advocate...It is not a rush-through system. Help them learn how to help their family member or their child."

Focus Group Participant

# **IMPACT OF COVID-19**

The COVID-19 pandemic has had a multi-faceted impact on Williamson County residents. Issues such as stress, anxiety, depression, and fear associated with social isolation and the spread of COVID-19 have significantly affected the lives of all community members, irrespective of gender, age, socioeconomic status, or race. Key informants and focus group participants noted the disproportionate effects of COVID-19 on minority populations in Williamson County, including residents with lower educational attainment. For example, participants described how layoffs from restaurants and retail at the beginning of the pandemic significantly and disproportionately affected low-income residents, most of whom had a high school diploma or less and limited employment options.

Because of increasing unemployment, many residents struggled to pay rent or housing fees and had to move in with family members. Participants also described how Hispanic/Latinx and Black/African American populations experienced higher rates of COVID-19 diagnoses and death. Food insecurity worsened, and many school-aged children lacked breakfast, lunch, and snacks due to school closures.

At the same time, some participants noted how the pandemic has had a bit of a "silver lining" for some for some school-aged children. For example, in some cases, the pandemic has allowed parents and the school community to see a struggling child up-close, leading to students receiving the help they have needed for a long time. In addition, participants noted an increase in access to counseling, as many school counselors opened up private virtual counseling practices to meet the needs of students and families.

"A lot of them, because they're in multi-generational homes and stuff, a lot of people really got affected with the spread of COVID. A lot of them were afraid to go out there. I think a lot of them didn't have all the information they needed once vaccination things came out. They were afraid there might be consequences. They didn't know that you don't need any documentation to go get your vaccine or even the testing."

Key Informant

# **COMMUNITY ASSETS AND STRENGTHS**

When asked to describe the assets and strengths of Williamson County, participants frequently mentioned that the community has a strong sense of altruism and members often come together to help each other. One key informant expressed their gratitude for the reliability of

nonprofit agencies within the community. Another key informant expressed excitement about emerging diversification efforts that are promoting growth opportunities and resources for underrepresented populations. Key informants and focus group participants also emphasized the tremendous support and impact of strong school districts promoting social emotional learning and trauma-informed care as a strength. In addition, participants mentioned a strong network of churches with resources for food distribution, utility support, COVID-19 support, dental care, and other social services.

"I'm grateful that we do have in our community some nonprofit agencies that we can call and who we have good relationships with."

Focus Group Participant

Participants named the following organizations as valuable resources for the community:

# **Health Care Organizations**

Ascension Medical Group Lone Star Circle of Care

Austin Child Guidance Center National Alliance on Mental Illness

Austin Public Health Resilient WilCo

Austin Regional Clinic (e.g., Round Rock Springs Behavioral Health in

Rock, Georgetown Georgetown

Baylor Scott & White Health Sacred Heart Community Clinic

Bluebonnet Trails Community Services STARRY Counseling in Georgetown

Child Mind Institute Texas Health and Human Services

Early Childhood Intervention Services WellMed Clinics

Georgetown Behavioral Health Institute Williamson County and Cities Health

Hana Care Texas District

LifeCare (The Source) Williamson County Mobile Outreach

Lifepath Pharmacy Team

#### **Churches and Faith-Based Organizations**

Gateway Church (food pantry)

St. William Catholic Church in Round

God's Way Christian Baptist Church Rock (Sacred Heart Clinic)

Samaritan Health Ministries Ministerial Alliance (Georgetown,

St. Vincent DePaul Catholic Church Taylor)

#### **Nonprofits and Community-Based Organizations**

(utility support and resource navigation)

Any Baby Can

Boys and Girls Club of East Williamson

County

County

Child Protective Services
Community Action Inc. Central Texas
Community Resource Coordination
Groups

Court Appointed Special Advocates Eastern WilCo Collaboration Easterseals Central Texas Faith in Action

Food Pantries (e.g., The Caring Place in Georgetown, Shepherd's Heart in Taylor, Round Rock Area Serving Center)

Georgetown Chamber of Commerce Georgetown Literacy Council The Georgetown Project Healthy Williamson County Hutto Resource Center Independent school districts Korean Community Services
Law enforcement
Local housing authorities (e.g., Granger
Housing Authority)
Opportunities for Williamson-Burnet
Counties
Texas Parent to Parent
Texas Workforce Commission Child
Care Services
The Arc of Texas
Williamson County Children's Advocacy
Center
Williamson County Juvenile Justice
Alternative Education Program
Williamson County Meals on Wheels

Women, Infants, and Children Youth

Behavioral Health Task Force

"There's a huge sense of community, of wanting to help each other."

- Focus Group Participant

# PROPOSED SOLUTIONS AND ACTIONS FOR HOSPITALS

Participants were asked to identify potential solutions for the challenges discussed during the interviews and focus groups. Recommendations for hospitals are listed below:

# **IMPROVE HEALTH CARE ACCESS**

**Transportation:** Provide patients with transportation to appointments by collaborating with public transportation services and volunteers. Another option included providing mobile clinics with primary care services, mental health services, and dental care, especially in rural areas of Taylor.

**Navigation support:** Facilitate access to services including primary care, dental care, and mental health services in a single location. Other examples included providing case management services, increasing hospital social workers, and providing health care concierge services.

**Affordable health care:** Offer a free or discounted hospital program annually so that people who are unable to see a physician can schedule a visit at least once a year. Another option would be providing a low-cost community health clinic.

**Community education and recreational activities:** Provide free or affordable recreation and exercise activities for community residents in southeast Taylor. One key informant recommended revamping currently vacant community buildings to host dance classes, karate classes, or nutrition education classes.

# INCREASE CULTURALLY COMPETENT HEALTH CARE

**Language and translation services:** Hire Spanish and Korean translators and interpreters. Provide dual-language websites, social media, pamphlets, etc.

**Culturally competent workforce:** To increase compassionate and non-judgmental care, community members recommended expanding cultural sensitivity training for all providers and hospital staff to better equip them to serve underrepresented and minority populations. Participants also recommended a need to diversify the workforce by hiring additional providers from underrepresented populations.

# REDUCE SILOS AND INCREASE COLLABORATION

**Partnerships:** Build stronger relationships with faith-based organizations, independent school districts, nonprofits, and community-based organizations to provide holistic care. For example, utilize churches or schools to provide health fairs and health education to congregants and community members. Some key stakeholders and organizations mentioned by community participants included: local politicians, Williamson County and Cities Health District, the Ministerial Alliance, independent school districts, Austin Community College, and Community Action Inc. of Central Texas.

Community engagement and outreach: Increase community visibility and constantly engage with community members and grassroots organizations to understand their perspectives. For example, host a town hall meeting to share the community's insight with municipal/county leadership, funders, and hospital administrators. Distribute flyers to faith-based organizations, independent school districts, nonprofits, and community-based organizations.

**Health data:** Coordinate with other health care providers to establish a universal electronic health record database to streamline data access and enhance patient-centered treatment plans.

"I'd love to see some of those major players step in and see some of the silos come down and start seeing joint efforts with these large entities."

Focus Group Participant

# **LIMITATIONS**

There are several limitations to consider in the development of this report. First, THI conducted this project during the surge of COVID-19 cases related to the Delta variant, which occurred during the late summer and early fall of 2021. For the safety of staff and participants, all key informant interviews and focus groups were conducted virtually. This presented a challenge with both recruitment and facilitation of the interviews. Many of the community leaders who helped recruit participants, or who served as key informants, were overwhelmed by responsibilities related to the pandemic. For example, some organizational leaders were coordinating clinical duties or responding to urgent needs from community members, limiting their capacity to assist with this project. Similarly, community members were experiencing fatigue from the pandemic, including fatigue regarding inquiry into their needs and the effects of COVID-19.

THI staff did extensive outreach to various CBO leaders in Williamson County and potential participants, and organizational leaders and residents alike frequently declined participation for a variety of reasons, including research fatigue and fear of exploitation. In addition, THI staff experienced challenges with getting in contact with potential participants, even though multiple channels of communication were used (email, call, and text).

Furthermore, to participate virtually in focus groups, participants had to have access to a device that would allow them to use Zoom (a computer, tablet, or cell phone with data). While not a barrier for the majority of key informant interviews, this requirement likely inhibited some potential focus group participants from joining. In addition, although focus group participants could join Zoom by phone (dial-in), participants familiar with the video aspect of Zoom were frequently confused by the dial-in option, and consequently declined participation or did not show up to the focus group. Finally, virtual key informant interviews and focus groups could more easily be confounded by office or in-home distractions compared to in-person settings.

# CONCLUSION

Between August and October 2021, THI conducted nine virtual key informant interviews and two virtual community focus groups with people in Williamson County who identified either as stakeholders or representatives of medically underserved, low-income, and minority populations. Community members collectively identified the following categories as top health priorities:

- Access to health care: Examples included provider shortages for residents that are either publicly insured or uninsured, lack of culturally and linguistically appropriate care, and lack of support for navigating the health care system.
- Social and structural determinants of health: Examples included low socioeconomic status, housing and homelessness, lack of transportation, limited broadband or internet access, and community silos.
- **Priority health needs:** Top health needs included chronic conditions (e.g, diabetes, hypertension, obesity, and cancer), dental care, and mental health, behavioral health and substance use.
- **Children's health:** Top priorities for youth included child abuse, intellectual disabilities, and mental health.

To address these top health priorities, participants recommended increasing community engagement and outreach and establishing stronger partnerships with municipal and county leadership, faith-based organizations, independent school districts, nonprofits, and community-based organizations to provide community-centered holistic care. The insight and recommendations shared in this report prioritize the perspectives of underserved communities within Williamson County and may be leveraged to develop an efficient action plan to address the discussed top health needs.

# **TABLES**

The following table identifies each key informant and details how their role in the community satisfied one of the IRS requirements for participation.

#### Table 1

# **Description of Key Informants**

Key Informant	Community Input Sector
Cara DiMattina-Ryan Chief Strategy Officer Workforce Solutions Rural Capital Area	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> </ul>
Jennifer Harris President Dickey Museum & Multipurpose Center	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> </ul>
Carlos Hernandez Leader of Hispanic Owned Business Circle Georgetown Chamber of Commerce	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> </ul>
Dawn Jennings Special Education Parent Liaison Georgetown Independent School District	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> </ul>
Yumi Kang Korean Community Health Navigator Austin Asian Community Health Initiative	<ul> <li>Person with special knowledge or expertise in public health</li> <li>Leader, representative, or member of medically underserved, low-income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> <li>Federal, tribal, regional, state, or local health or other department or agency, with current data or other information relevant to the health needs of the community served by the hospital facility</li> </ul>

Key Informant	Community Input Sector		
Aurora Maldonado Program Navigator Williamson County Indigent Care Program	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> <li>Federal, tribal, regional, state, or local health or other department or agency, with current data or other information relevant to the health needs of the community served by the hospital facility</li> </ul>		
Jessica Morales Program Navigator Supervisor Williamson County Indigent Care Program	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> <li>Federal, tribal, regional, state, or local health or other department or agency, with current data or other information relevant to the health needs of the community served by the hospital facility</li> </ul>		
Gloria Roberson Director Harris-Ross Head Start	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> </ul>		
Kerrie Stannell Chief Executive Officer Williamson County Child Advocacy Center	<ul> <li>Leader, representative, or member of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</li> <li>Federal, tribal, regional, state, or local health or other department or agency, with current data or other</li> </ul>		

information relevant to the health needs of the

community served by the hospital facility

The following table describes the focus group participants in aggregate:

Table 2

Description of Focus Group Participants

Focus Group	Community Input Sector	Description	Number	Language
I	Leaders, representatives, or members of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility	Participants included female residents of ZIP codes 78634 and 78628 with ages ranging from 30-65.  Participants self-identified as Black/African American, White, and Not Hispanic/Latinx.	4	English
2	Leaders, representatives, or members of medically underserved, low income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility	Participants included male and female residents of ZIP codes 78729, 78681, and 78634 with ages ranging from 40-65+.  Participants self-identified as Mexican, Mexican American or Chicano, Hispanic/Latinx and Spanish origin, White, Not Hispanic/Latinx and Black/African American.	5	English

# **APPENDIX A: KEY INFORMANT INTERVIEW GUIDE**

# 2021-22 Williamson County SDF CHNA Key Informant Interview Guide

- I. Please briefly describe your role in [organization] and who [organization] serves in Williamson County.
- 2. Please describe how you are connected to St. David's Foundation, any of the St. David's Hospitals, Ascension Seton, Baylor Scott & White Health. If you are not connected, just indicate that.
  - a. Do you meet any of these criteria? [Note: Participant does not necessarily have to meet any of these to participate.]
    - i. Persons with special knowledge of or expertise in public health
    - ii. Federal, tribal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility
    - iii. Leaders, representatives, or members of medically underserved, low-income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility.
- 3. What do you think are Williamson County's three most critical health issues? (Examples if needed: heart disease, diabetes, substance use, mental health, cancer, asthma, STIs, HIV, etc.)
  - a. PROBE: Why are these the top priorities?
  - b. PROBE: Who do these health issues affect the most? (e.g., age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)
- 4. The top health issues identified in the 2019 Community Health Needs Assessment were [list top needs in previous CHNA]. How important are these issues today?
- 5. How has COVID-19 impacted the three critical health issues you identified?
  - a. PROBE: Are there some groups that have been more affected by COVID-19 than others in your community?
- 6. Now I am going to ask you about the factors that contribute to each of the top priority health issues you identified and how the issue impacts specific populations. (Prompt: Note that a "factor" could be a health behavior like physical activity, SDOH such as food insecurity, insurance status, physical environment, etc.)
  - a. Starting with [Name #1 critical health issue identified by interviewee]
    - i. What are the factors that contribute to making this a critical health issue?
    - ii. Which populations does the issue impact the most?
    - iii. How does this critical health issue specifically impact low-income, underserved/uninsured populations in Williamson County?

- iv. Are there organizations already addressing these issues in the county? If so, which ones? How do they address it?
- b. Now thinking about [Name #2 critical health issue identified by interviewee]
  - i. What are the factors that contribute to making this a critical health issue?
  - ii. How does this critical health issue specifically impact low-income, underserved/uninsured populations in Williamson County?
  - iii. Which populations does the issue impact the most?
  - iv. Are there organizations already addressing these issues in the county? If so, which ones?
- c. Now thinking about [Name #3 critical health issue identified by interviewee]
  - i. What are the factors that contribute to making this a critical health issue?
  - ii. How does this critical health issue specifically impact low-income, underserved/uninsured populations in Williamson County?
  - iii. Which populations does the issue impact the most?
  - iv. Are there organizations already addressing these issues in the county? If so, which organizations?
- 7. Based on your knowledge and expertise, what are the most effective strategies to address the top three health issues that you identified?
  - a. PROBE: What are some specific strategies that could help to address disparities between different populations for these health issues?
- 8. Beyond the top three health issues you've identified, what are the other critical health issues that are important to address?
- 9. How could St. David's Hospitals, Ascension Seton, Baylor Scott & White Health possibly partner with or enhance the efforts of organizations that are working to address the issues that you identified?
- 10. What are some of your community's greatest assets and strengths? (Prompt: These often include social and human service agencies, community based organizations, nonprofit organizations, churches, but can also be cultural qualities).
  - a. How do you think these strengths could be leveraged to address the top health issues in Williamson County?
- 11. What are your suggestions for ways to engage and build trust with community members, particularly low-income, underserved populations, ethnic and racial minorities, and limited English proficient residents of Williamson County to address these critical health issues?
- 12. Is there anything else you would like to share about the top health issues in Williamson County?
- 13. Now I want you to think a little about a broader range of factors that could affect health. What do you think are the social and economic concerns facing your community? (Prompt: affordable housing, unemployment, access to quality daycare, poverty).

- a. Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?
- b. PROBE: Are there organizations or available resources already addressing these needs? If so, which ones? How do they address the needs?
- c. PROBE: How important do you think it is that hospitals and health care systems work to connect patients with resources to support these factors affecting health? Why?
- 14. How could St. David's and local hospitals and Ascension Seton, Baylor Scott & White Health possibly partner with or enhance the efforts of these organizations to support factors affecting health?
- 15. Where do members of your community go to access primary health care?
  - a. What about specialty care?
  - b. What about access to emergency rooms or urgent care centers?
  - c. And mental and behavioral health care?
- 16. What challenges/barriers do low-income, underserved, and uninsured populations in your community face in access to health care?
  - a. What are two things that St. David's and local hospitals and St. David's Hospitals, Ascension Seton, Baylor Scott & White Health could do to address these challenges?

Those are all of the questions I have for you today. Is there anything else you would like to add before I turn off the recorder? [Allow time for comments]

# **APPENDIX B: FOCUS GROUP GUIDE**

## 2021-22 Williamson County SDF CHNA Focus Group Guide

- 1. When you think of the word "community," what is the first thing that comes to mind?
- 2. What does health mean to you?
- 3. What do you do to stay healthy?
- 4. What are the things that **help you to be healthy** in your community? (e.g., places to buy healthy food, safe places to walk and to exercise, community services and events, access to health care, affordable housing)
- 5. What makes it **difficult to be healthy** in your community? (e.g., lack of access to affordable health care, few grocery stores with fresh fruits and vegetables, affordable food, lack of transportation, language barriers, substance use, etc.)
- 6. How does your race or ethnicity impact your ability to be healthy?
- 7. What do you think are the **two most important health issues** facing your community? Why? (e.g., diabetes or cancer, unhealthy food or drug abuse, mental health, violence, or access to care)
- 8. What are the **top two things that could be done** to fix these issues? (e.g., What would it look like to fix the issues?)
  - a. Who should be involved (people or organizations)?
- 9. Are there health services that you need but do not receive currently? If so, which services?
- 10. Where do you go for help when you need health services and cannot find them?
- 11. What are the strengths of the health services available in your community?
- 12. What resources do you have in the community that seem to be working to address the health-related issues that we talked about?
- 13. What could the hospital systems do to improve health and quality of life in the community?
- 14. What impact has the COVID-19 pandemic had in your life and in the community?
  - a. How has it affected your health, including your mental health?
  - b. How did COVID-19 impact the health challenges that we discussed earlier?
  - c. Are there community resources or agencies that have helped to support you during the pandemic? If so, which organizations have been helpful?
- 15. Are there any other issues that impact your physical or mental health that you would like to discuss?

# Appendix J: Community Focus Group and Key Informant Results — IBM Watson Health



# IBM Watson Health.



# WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT COMMUNITY HEALTH NEEDS ASSESSMENT FOCUS GROUP SUMMARY: WILLIAMSON COUNTY, TEXAS



# PART A. OVERVIEW

Williamson County and Cities Health District collaborated with Baylor Scott & White Health to engage IBM Watson Health to conduct a series of focus groups to facilitate and assess the perception of the health needs in the Texas communities they serve, specifically Williamson County, Texas.

Participants were invited based on their involvement with public health or their work with medically underserved, chronic disease, low-income or minority populations. Participation was also sought from community leaders, other healthcare and social service providers and representatives of vulnerable and underserved populations.

A team from IBM Watson Health facilitated a focus group for the larger health community that included Williamson County and conducted it in three parts. The session started with the entire group providing a description of the community and determining an overall health score. During the second part, participants were divided into two smaller groups for more detailed discussions.

- 1. Describe the community and score the current health status on a scale of 1-5 (1 worst 5 best).
- 2. Identify the factors for the score and separate into strengths and weaknesses.
- 3. Discuss the underlying barriers to health that contribute to the weaknesses.
- 4. Discuss community strengths that can create opportunities for improving health.
- 5. Identify and rank the criteria for prioritization.

The Williamson County in-person focus group was held on June 15, 2021 and included thirteen (13) participants representing Williamson County. In addition to the in-person focus group, IBM Watson Health

gathered additional input from key informant interviews (2) and surveys (5). The group included representatives from county government, church organizations, providers, local non-profits, and other community-based organizations. Most of the participants work with at-risk populations; the group at-large serve low-income populations, minorities, the medically under-served and homeless populations.

The unprecedented public health emergency of COVID-19 impacted these communities and their community health leaders requiring them to develop innovative solutions to address new and inflated health and resource needs.

#### PART B. COMMUNITY HEALTH NEEDS DISCUSSION SUMMARY

This focus group, key informant interviews and surveys included organizations serving Williamson County. Even though the participants described Williamson County as beautiful and a great place to call home, they scored the health of its residents slightly below average. Outdoor recreational amenities are plentiful in Williamson County with many public parks, miles of trails, outdoor exercise equipment, splash parks and child playgrounds.

The participants agreed that the community was growing in population but that the growth outpaced the ability to integrate the community or provide enough health resources. The COVID pandemic brought forward and increased the awareness that inequity existed in the community. Programs like Aunt Bertha are helping to connect people in need to community resources and programs.

The top health barriers in the community described by the focus group participants and key informants were organized into three major areas: transportation, housing and access to healthcare. The participants collaborated on opportunities to address each of these areas as well.

#### **Transportation**

Historically and currently the number one barrier in the county is transportation. The county is large and transportation resources and services are scattered and insufficient, with many areas lacking public transportation. Many don't drive and can't afford the cost of maintaining or owning a vehicle of their own. In rural communities, freedom of travel was described as the biggest problem. In addition to rural residents, the most affected included senior citizens and people with disabilities. Participants cited efforts were made to provide vouchers for those willing to drive those who need rides to healthcare providers or to get groceries. However, this was not sufficient for the growing need for transportation, which was also exacerbated by the pandemic.

#### Housing

As housing prices in Williamson County increased each year, affordable housing for current residents was a challenge. Gentrification occurred with people being priced out of homes they had been living in for a long time. The participants cited that there was no visible plan across the county to provide affordable housing. They stated that there were people living in tents in many parts of the community and that the county had no plan to deal with the situation, claiming some affordable housing had a six-year waiting list. In addition, restrictions requiring all residents over 18 to have good credit made it more difficult for many to find housing. Other requirements, such as criminal background checks that prohibit people with a history of substance abuse rehabilitation or incarceration added to the housing challenge. Participants felt strongly that there was an opportunity to advocate locally for more affordable housing.

#### Access to Healthcare

According to the group, despite the fact that the community had a core of innovative health systems in the area, the county lacked sufficient numbers of mental health, specialist and primary health providers to adequately serve the population. Some of the access was tied to transportation but even those that could access it could not afford it even with health insurance. Affordability was a problem especially for those seeking preventative care. Emergency behavioral health calls increased as well as opioid overdose rates and adult suicides. There was simply a low ratio of healthcare professionals to people in need. To make matters worse, the huge turnover rates of hospital resources caused a disconnect on information to help patients in need. An innovative opportunity suggested by one key informant was to run patient resources as a business, and offer free or reduced rent to service providers in a resource center on or near the hospital campus. The resource center would offer patients the ability to walk over to receive follow up services immediately upon their discharge from inpatient care. In addition, it would likely increase the patient's ability to comply with hospital caseworker's discharge recommendations designed to reduce readmissions.

#### PART C. FOCUS GROUP DISCUSSION DETAIL

These are additional details and comments captured during the in-person focus group participant discussions by each exercise topic.

#### **EXERCISE 1A: HOW WOULD YOU DESCRIBE THIS COMMUNITY?**

Participants described the community as follows:

#### **WILLIAMSON COUNTY:**

Isolated and needy

- Fast growing/uncontrollable growth- many people moving to Williamson County
- Rural meets suburban, has small-town community living
- Inequitable and changing
- Ample job opportunities
- Burgeoning, beautiful and a great place to call home
- Water deficits/water deprived
- Governments not cohesive
- Extreme disparities within the county

# EXERCISE 1B: HOW DO YOU SCORE THE HEALTH OF THIS COMMUNITY ON A SCALE OF 1-5 (1 WORST - 5 BEST)?

The overall community health score given by the group was 2.8 for Williamson County.

#### **WILLIAMSON COUNTY SCORE:**

Score	5	4	3	2.5	2	1
Participant Response	0	1	6	2	2	0

# EXERCISE 2: IDENTIFY THE FACTORS YOU CONSIDERED FOR THE SCORE YOU GAVE AS STRENGTHS AND CHALLENGES.

Participants were asked to identify the factors they considered when scoring the community as strengths and challenges:

# **WILLIAMSON COUNTY STRENGTHS:**

#### Access

- o Good support groups available (GAPS Program).
- Opportunities to improve self-care are free and available.
- o Good number of specialty care providers no need to drive to Austin for care.
- Good core of innovative health systems that in the area
  - Some innovative programs don't last for example in Taylor, there was a provider who
    offered excellent mental health programs for under-insured but he left and became
    private.

# Healthy Living

- o Public parks are a place to be active with no entrance fees
  - Miles of trails, outdoor exercise equipment, splash parks, playgrounds.

o Senior center is popular within certain communities.

#### Government

- Lots of personal resources such as funds/schools/buildings that can address community needs. If people see something working they can get behind it.
- Some elected leadership are very positive influencers of health decisions, especially with
   COVID vaccination.

# Transportation

- On demand service in Taylor area CARTS (Capital Area Rural Transit Services) provides buses and vans with a 15-minute turn around.
- Ride Health was piloted in Taylor and some other sites which is a good way to get people home after services from hospital.

# Education

- School-based behavioral health worked well.
  - Seven school districts, west side districts invest in staff to provide school based mental health (Pre-K-12).
  - Have a family therapist as well.
- School-based clinics were a successful model Once every 3 weeks, practitioner comes that can see kids and prescribe medication. However recent loss of funding has made it challenging to continue.

# Food

- o Farmers markets in town available.
- o Meal on wheels programs available.

# **WILLIAMSON COUNTY CHALLENGES:**

# Transportation

- People don't have access to cars:
  - High cost of maintaining cars.
  - High cost of gas.
  - High number of people who don't drive.
- There is no access to any transportation in some areas and/or very limited public transportation.

- People did not use the transportation services available. It takes a long time to change community behavior. For example, Taylor got a grant for CARTS to run this route but no one got on the bus. It was discontinued after six months.
- In Georgetown, ridership on buses was poor because the bus didn't go where most people lived nor did it go where they needed to go.
- Poor road infrastructure.
  - Long commutes because there are no expressways for many to get to work.

# Access to resources for services/ access to services

- Lack of healthcare providers.
  - Growth outpacing supply of physicians and causing lack of physician access.
  - Preventative screenings down/delayed due to lack of access and unwillingness to seek care.
- Lack of behavioral health resources- professionals to people ratio is "ridiculous."
  - Challenges with behavioral health and addiction.
  - Once they come to the hospital it's hard to find placement for services.
- Navigating services is a barrier to access to care/resources.
  - Hard for people to navigate online resources to find providers or services -- don't have skills to find those things
  - Huge turnover rates of hospital case workers means that information gets lost.
- Health inequity by insurance status.

# Government

- Disinterested leadership.
  - Leaders don't care about the poor.
- o 2020-2021 municipality restrictions exposed the lack of concern for the disadvantaged.

# Digital Divide

- People assume that everyone can access the internet, but rural communities don't all have access.
- Digital divide is due to lack of connectivity.
  - Poor connections as people may not have equipment to access internet or not able to pay for internet.

#### Food

Poor food choices are abundant and inexpensive.

- Food deserts especially in rural parts.
- Eastern Williamson County is worse for food insecurity.

#### Social issues

- Housing
  - Homelessness- there is no shelter for those that are unhoused.
  - Lack of affordable housing.
- Mental health is on the decline, more violence in the home, drug abuse increasing, child abuse increasing.
  - Increase in substance abuse and OPIOD overdoses.
- Youth suicide rates are increasing.
- o Large senior population.
  - Social isolation (for seniors) especially in rural parts.
- Literacy is an issue.
- Racism, especially in Georgetown.
- Spiritual health is poor.
- Limited childcare options/affordability.

### Education

- Need more than a high school degree to earn enough cover living expenses.
  - If you have resources you can go to school, but if you don't have resources, it's difficult.

#### Housing

- Housing affordability/housing options.
- Growth outpaces ability to integrate community.

#### **EXERCISE 3: WHAT ARE THE BARRIERS TO GOOD HEALTH IN THIS COMMUNITY?**

Participants discussed the barriers to good health in the community:

# **WILLIAMSON COUNTY BARRIERS:**

# Social

- Lack of affordable housing.
  - High numbers of people in extended stay, camp sites, homelessness.
- o Social isolation (especially due to COVID).
  - Lack of activities during COVID had profound negative impact on children.

# Digital Divide

Many with no internet access because they can't afford equipment and service.

#### Food

Food deserts/lack of food stores.

# Education

o Lack of structure/activities at school had a profound negative impact on kids.

# • Transportation

o Limited public transportation.

#### • Financial

 Many can't earn a living wage (39% of population are not able to earn enough to support themselves).

#### Access

- Navigating services is a barrier to access to care/resources.
- o Time is a barrier.
  - Not enough after-hours services to meet need of working people.
  - Often difficult for working parents to find time to access preventative services for themselves.
- Fewer resources/ volunteers (fear of COVID).
  - Shortage of funding for staff.
- o Lack of knowledge about services available for uninsured and how to access them.

Each person voted for what they consider to be the 3 greatest BARRIERS. Results are listed below, ranked according to votes.

# **WILLIAMSON COUNTY BARRIERS RANK:**

WILLIAMSON BARRIERS	Score
Lack of affordable housing	11
Access to transportation	11
Shortage of funding for staff	6
Digital access	6
Lack of living wage	3
Lack of structure/activities had profound impact on kids	3

#### **EXERCISE 4: WHAT ARE THE OPPORTUNITIES TO IMPROVE HEALTH IN THIS COMMUNITY?**

Participants discussed opportunities to improve health in the community:

#### Government

- Lobby state government to pick up more responsibility/provide more resources to help community health efforts.
- Encourage health systems and organizations to collaborate more when offering services.

# Digital Divide

Increase and improve communication methods/access/proximity.

#### Food

- o Incentivize developers of healthier choices versus fast food/unhealthy options.
- Encourage barter system at farmers' market.

#### Access

- Increase use of telemedicine, but don't rely on it exclusively.
- Leverage collaborative efforts to bring more resources in.
- o Pursue joint grants for healthcare needs (referencing prior success with joint grant submissions).

# **WILLIAMSON COUNTY OPPORTUNITIES:**

# Access

- o Build stronger connections to bridge clinical and social services.
  - Add resources to address person not just issues.
  - Hire more community health workers (don't even need a high school diploma for community health workers) who are trusted to walk alongside people in their communities and help direct them to available services.
  - Expand nursing services within faith-based organizations similar to the Wesleyan program and Parish Nurses Group seeing patients within the church.
  - Expand phone referral services since connecting with a live person is best way to help someone navigate the system.

- Enhance combination of engagement and education to improve health.
- o Increase telepsychology and telehealth service offerings.
- o Provide more community based mental health and cancer support.
- o Model programs using best practices/successful ones such as Aunt Bertha and 211.

#### Government

- Use Community Task Force approach for new coalitions/create cross section coalitions to address barriers to health.
- o Increase support for existing programs that work well.
- Keep goals clear as a key to success.

#### Food

- o Provide more online groceries and delivery volunteers.
- o Increase rural food distribution.

# Digital Divide

- o Improve digital access within rural communities.
- o Provide education, training and support for digital access.
- Subsidize device and linkage costs.
- o Provide Wi-Fi along with support at senior housing.

### Faith Based

o Work with faith-based support groups to increase services in community.

# Housing

o Advocate locally for more affordable housing.

Each person voted for what they consider to be the 3 greatest OPPORTUNITIES. Results are listed below, ranked according to votes.

# **WILLIAMSON COUNTY OPPORTUNITIES RANK:**

WILLIAMSON OPPORTUNITIES	Score
Increase telehealth – especially psych by improving digital access &	
maintain CMS standards	10
Advocate locally for more affordable housing	9
Increase staffing/social workers/admin	
Online grocery delivery using volunteers/ rural food distribution	

# **EXERCISE 5: RANK THE CRITERIA FOR PRIORITIZATION**

Each person voted for the top criteria to be used for prioritization of this communities identified needs.

# **WILLIAMSON COUNTY PRIORITIZATION VOTE:**

Prioritization Criteria	Definition	Vote:
Magnitude (Size of Problem)	How many persons does the problem affect, either actually or potentially?	5
Severity (Outcome if Ignored)	What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community, such as economic or social burdens?	1
Feasibility/ Cost	Is the problem amenable to interventions? What technology, knowledge, or resources are necessary to effect a change? Is the problem preventable? Is it too expensive for the community to tackle?	1
Community Capacity or Strengths	Does the community have the capacity to act on the issue, including any economic, social, cultural, or political consideration? Extent to which initiatives that address the health issue can build on the community's existing strengths and resources? Availability of local expertise regarding the health need	5
Root Cause	Is the issue a root cause of other problems - thereby possibly affecting multiple issues?	10
Quick Success	The probability of quick success. Is the problem "low-hanging fruit"?	3
Social Justice	Is the problem more concentrated to a specific vulnerable population? Does addressing this issue lead to unfair social benefit? Are we equitable to all vulnerable populations in our approach?	5

# PART D. PARTICIPATING ORGANIZATIONS

Representatives from the following organizations participated in the focus group:

# **WILLIAMSON COUNTY PARTICIPATING ORGANIZATIONS:**

- Baylor Scott & White Health
- City of Taylor
- Faith in Action Georgetown
- Georgetown Health Foundation
- Interagency Support Council of Eastern Williamson County, Inc.
- Lone Star Circle of Care
- Mobile Outreach Team Williamson County Emergency Services
- Partners in Hope
- Pavilion Clubhouse of Williamson County
- The Caring Place
- United Way of Williamson County
- Williamson County and Cities Health District

# PART E. ADDITIONAL KEY INFORMANT/PARTICIPANT INPUT

The COVID-19 pandemic forced the team to think creatively about collecting community feedback because standard approaches, such as conducting in-person focus groups, were not feasible throughout the Community Health Needs Assessment project due to social distancing guidelines during the pandemic. As a result, there was a need to conduct virtual focus groups, web-based video interviews, telephone interviews and to expand outreach through a web-based survey. Even with these additional efforts, many key informants were unable to participate due to the later surge of COVID cases (including Delta variant cases) requiring their management attention and time.

- Seven additional surveys and interviews representing Williamson County were obtained from representatives of:
  - Bluebonnet Trails Community Services
  - City of Taylor
  - Baylor Scott & White Health
  - o Community Resource Centers of Texas
  - LifePark Center
  - Sacred Heart Community Clinic

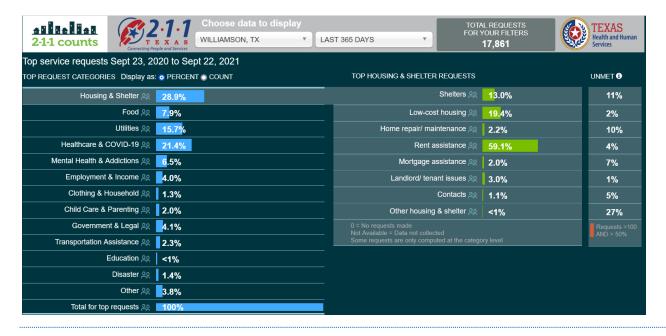
- United Way for Greater Austin
- The participants rated the health of the community as a 4 out of 5.
- The participants named the same strengths of the community as the larger group:
  - Walking trails/parks
  - Community pride
  - o Local leadership or local government
  - o Telehealth/telemedicine
  - Quality healthcare/providers
  - Agencies willing to work together
  - Availability of fresh food
  - Community clinics
  - Emergency services
  - Communication
- The participants' community challenges, which were similar to those from the focus group, are listed below in descending order of importance:
  - Limited affordable housing options
  - Limited access to dental care for uninsured or underinsured
  - Limited access to mental/behavioral health care (for uninsured or underinsured)
  - Lack of affordable childcare
  - Limited access to primary health care providers (for uninsured or underinsured)
  - Lack of public transportation
  - Aging population
  - High cost of medications
  - Limited access to mental/behavioral health care (for whole community)
  - o Limited access to specialty health care
  - Lack of diversity among healthcare providers
  - Poor high speed internet coverage
  - Limited access to primary health care providers (for whole community)
  - No county hospital/health department
  - Lack of coordination among agencies who serve those in need
  - No county services for crisis intervention
  - Limited access to healthy food options

- The barriers causing the challenges faced by community members that the participants cited included the following in descending order of importance:
  - o Lack of knowledge about services available for uninsured and how to access them
  - Access to primary health care (for uninsured)
  - Lack of reliable and affordable transportation
  - Lack of health care knowledge/low health literacy such as importance of preventative care, nutrition
  - Poverty
  - Cultural influence on health behaviors in community
  - Access to mental/behavioral health care(for uninsured)
  - Lack of health insurance
  - Social isolation
  - Access to primary health care (for whole community)
  - Access to mental/behavioral health care(for whole community)
  - Access to specialty health care services
  - Access to affordable care after hours
  - Fear/distrust of healthcare system
  - Language barriers
- The participants identified the following opportunities in the community in descending order of importance.
  - Coordination of efforts across agencies (improved communication between agencies)
  - Expand poverty definitions to increase funding for indigent care
  - Education on resources (increase community education how to access available community resources)
  - o Leverage rideshares for community services (secure creative funding such as vouchers)
  - Hire/recruit volunteer community health advocates to provide trustworthy education and referral to services
  - Greater access to internet connectivity and technology
  - Expand hours of social services availability (after hours, etc.)
  - o Improve access to healthy foods (perhaps in coordination with local food stores)
  - Centralized/integrated Resources (one stop shop for individuals to obtain services)
  - Diversify health profession and social work forces (add diversity to workforce to mirror communities)

- Telehealth/Telemedicine (increase usage and reimbursement)
- The top criteria (in descending votes) that the participants suggested should be used when prioritizing the various opportunities for improving the health of people in the community were:
  - Community Capacity or Strengths
  - Feasibility/Cost
  - Quick Success
  - Social Justice
  - Magnitude (Size of Problem)
  - Severity (Outcome if Ignored)
  - Root Cause
- According to the participants' opinion, the largest impacts that COVID had on the community the past
  year were as follows: lack of access; finding new ways to deal and solve issues (i.e. internet, zoom, etc.);
  heightened political/social divisions; fear (of interacting with others); and it caused people to stay indoors
  and away from trusted connections, leaving them vulnerable to depression, overeating, falls and other
  health and spiritual challenges.

# PART F. ADDITIONAL INFORMATION

Participants cited 2-1-1 throughout many of the focus groups, interviews and surveys. People in the United States dial 2-1-1 for help with basic needs like food and shelter or emergency services. In Williamson County, Housing & Shelter along with Healthcare & COVID-19 were the top requested categories from September 2020 to September 2021.



Source: 2-1-1 Counts, Texas Health and Human Services, 2021.

# Appendix K: Acknowledgments

The following organizations and individuals graciously supported the 2022 Williamson County Community Health Assessment (CHA).

# 2022 CHA Task Force

#### Name

Amy Brandes Kelli Lovelace Ingrid Taylor Ann-Marie Price Tara Stafford

Andrea Richardson Suzy Pukys Tracy Angelocci

Jim Ellis Kori Ince Becky Pastner Jesse Simmons Jodee O'Brien Kelli McGuire

Melissa Tung

Victoria Epstein

Ryan Huffman

Orin Heintschel

Commissioner Terry Cook Commissioner Valerie Covey

# Organization

Ascension Seton Ascension Seton Ascension Seton

Baylor Scott & White Health Baylor Scott & White Health

Bluebonnet Trails Community Services Georgetown Health Foundation

Lone Star Circle of Care

Opportunities for Williamson and Burnet Counties Opportunities for Williamson and Burnet Counties

St. David's Foundation St. David's Foundation

United Way of Williamson County Healthy Williamson County Coalition

Williamson County and Cities Health District

Healthy Williamson County Coalition

Williamson County and Cities Health District

Healthy Williamson County Coalition

Williamson County and Cities Health District

Healthy Williamson County Coalition

Williamson County and Cities Health District Williamson County and Cities Health District

Williamson County Precinct One Williamson County Precinct Three

# 2022 CHA Support Team

#### Name

Elisabeth Clymer Monica Marroquin Emily Hayes Zeal Gandhi Zhuoran Guo Michael Smith Caroline Hilbert Shelbi Davis Mehgan Murray Marcela Abrego Jevone' Mayes George Strebel

#### Organization

Williamson County and Cities Health District
Williamson County Geographic Information Systems

# Healthy Williamson County Coalition Leadership Team

# **Working Group**

Community Partnerships Manager Healthy Williamson County Coordinator Support Staff Support Staff Support Staff

#### Name, Organization

Kelli McGuire, Williamson County and Cities Health District Victoria Epstein, Williamson County and Cities Health District Deb Strahler, Williamson County and Cities Health District Emily Hayes, Williamson County and Cities Health District Melissa Tung, Williamson County and Cities Health District Behavioral Health Task Force Child & Youth Behavioral Health Task Force Alan's Hope Substance Use Collaborative Kathy Pierce, Williamson County Precinct Two Matt Smith, Williamson County Juvenile Services Tammy Smith, Williamson County Precinct Two Kelly McCaffrey, LifeSteps Council on Alcohol and Drugs Rosana Sielaff, LifeSteps Council on Alcohol and Drugs

# Organizations that Participated in Data Collection Methods

Asian American Community Health Initiative

**Baylor Scott and White Health** 

**Bluebonnet Trails Community Services** 

Boys and Girls Club Catalyst Collective City of Taylor

Community Resource Centers of Texas Dickey Museum & Multipurpose Center

Faith in Action Georgetown

Georgetown Chamber of Commerce (Hispanic Owned

**Business Circle)** 

Georgetown Health Foundation

Georgetown Independent School District Hill Country Community Ministries

Interagency Support Council of Eastern Williamson County,

Inc.

LifePark Center

Lone Star Circle of Care

Opportunities for Williamson and Burnet Counties

Partners in Hope

Pavilion Clubhouse of Williamson County

Sacred Heart Community Clinic

The Caring Place

The Georgetown Project United Way for Greater Austin

United Way of Williamson County (now merged with United

Way for Greater Austin)

Williamson County and Cities Health District Williamson County Children's Advocacy Center Williamson County EMS Mobile Outreach Team

Williamson County Juvenile Services Workforce Solutions Rural Capital Area