Community **H**ealth **A**ssessment
Community **As**sessment for **P**ublic **H**ealth **E**mergency **R**esponse
Travis County, April 7-8, 2017

Final Report

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Background

Every five years, Austin Public Health and key community partners collaborate to carry out the Community Health Assessment (CHA). This is used to inform a three year Community Health Improvement Plan (CHIP). The CHA engages community members and local public health partners to collect and analyze health-related data from many sources. Three critical tasks are accomplished through the Community Health Assessment. These include informing community decision-making, prioritizing health problems, and assisting in the development and implementation of community health improvement plans.

The Health Equity and Community Engagement Division alongside the Epidemiology and Public Health Preparedness Division at Austin Public Health (APH) decided to conduct a community survey using the principles of Community Assessment for Public Health Emergency Response (CASPER) to help inform the Community Health Assessment about household perceptions of health needs, themes and strengths.

APH was interested in assessing perceptions of health needs and strengths, deepen understanding of access to healthcare, healthy food, and transportation in the community, and evaluating the special medical needs of Travis County households during a non-emergency setting. The specific objectives of this CASPER were to:

1. Describe community perceptions of health needs and strengths in Travis County
2. Quantify community perceptions of qualify of life in Travis County
3. Evaluate access and barriers to healthcare, access to healthy food, and transportation options
4. Describe basic household preparedness planning and type of medical special needs households need in a non-disaster setting (e.g. daily medication, oxygen supply, wheelchair/cane/walker, etc.)

Information gathered in this report will aid APH and key community stakeholders improve public health resources and response in Travis County. This report will also aid in the development of the next Community Health Assessment and Community Health Improvement Plan 2017/2018.

Methods

To accomplish these goals, APH staff alongside volunteers from the City of Austin, Texas Department of State Health Services, University of Texas at Austin, and Texas A&M University convened to conduct a CASPER in Travis County on April 7 and 8, 2017. The CASPER tool is an effective method to assess public health needs in both disaster and non-disaster situations to initiate public health action[1]. CASPER is an epidemiologic technique designed to provide quick, cost-effective household-based information in a representative manner.

[1] Community Assessment for Public Health Emergency Response (CASPER) Toolkit https://www.cdc.gov/nceh/hsb/disaster/casper/resources.htm

APH staff collaborated with key community stakeholders to develop a two-page data collection tool with 29 questions. The survey tool was developed in English and Spanish versions. The survey tool included household level questions related to: (1) quality of life in Travis County, (2) perceptions of community strengths and needs, (3) access and barriers to healthcare, healthy foods, and transportation use, (4) assess basic preparedness and medical special needs in the community. The survey tool was pilot-tested prior to finalization.

For our sampling frame, we used a multistage stratified cluster sampling technique to select a representative sample of 210 households to interview in Travis County. For the first stage, we stratified our sampling frame into City of Austin (urban) and Travis County (rural) areas based on 2010 US Census data, containing 344,049 and 77,296 housing units respectively. City of Austin clusters were defined as census blocks within the City of Austin boundary. The remaining clusters were assigned to Travis County clusters. Census blocks that crossed the City of Austin boundary were assigned to the area based upon the centroid of each census block. For example, if a census block centroid fell outside of the City of Austin boundary, it was considered a Travis County cluster in our sampling frame. For the second stage, we selected 30 clusters total with 20 clusters in the City of Austin and 10 clusters in Travis County utilizing the Geographic Information Systems CASPER tool (Figure 1). The clusters were selected with a probability proportional to the number of households within the cluster. In other words, the more households a cluster has, the greater chance of it being chosen once. Two clusters within Travis County and two clusters within City of Austin were selected twice.

For the third stage of sampling, interview teams randomly selected seven households from each of the 22 clusters and fourteen households from 4 clusters that were selected twice. The interview teams were instructed to go to a pre-determined random starting point and go to every n^{th} housing unit to select seven or fourteen housing units to interview. The n^{th} house was determined by the total number of housing units in the cluster divided by seven based upon 2010 US census data. The n^{th} house ranged from 2 to 54. Interview teams were instructed to follow the roadway left through their cluster following the roadway and cluster boundary to select each n^{th} house.

Interview teams were comprised of two- or three-people. Teams were provided a three-hour just-in-time training on the overall purpose of the CASPER, household selection, tracking sheet, questionnaire, interview techniques, safety and logistics on April 7th, 2017. There were a total of 15 teams, which consisted of an APH employee and community partner and/or university student. Each team attempted to conduct 7 or 14 interviews, based upon cluster assignment, with the overall goal of completing 210 interviews. Interview teams were deployed to the field April 7 and 8, 2017. Interview teams were instructed to complete confidential referral forms whenever they encountered urgent medical, mental health, or an unmet public health need. All respondents verbalized consent, were at least 18 years old, and resided in the selected household. All respondents approached were provided educational materials from APH and community organizations regarding health-related information and community resources (Appendix 1).

Data from the completed questionnaires were entered into a database and analyzed using EpiInfo Version 7.2.1. A weighted cluster analysis was conducted to estimate the percent of households with a certain response in our sampling frame. The calculation of the weight for City of Austin

and Travis County areas took into account the number of households in each area respectively. Data analysis calculated unweighted and weighted frequencies, percentages, and 95% confidence intervals.

Results

Fifteen interview teams attempted interviews at 743 households and completed 168 interviews with a completion rate of 80% (Table 1). Teams completed interviews at 22.6% of households approached during the two-day period. Of households with an eligible and consenting respondent, 49.7% of interviews were completed. One hundred eight interviews were completed in the City of Austin clusters and 60 interviews were completed in Travis County clusters. Of households interviewed, 88.7% were single family homes, 7.1% were multiple unit homes (apartment, duplex, etc.), and 5.0% were mobile homes (Table 2).

Quality of Life Statements

The majority of households rated the health of Travis County to be healthy (51.4%), somewhat healthy (21.4%), and very healthy (12.6%) (Table 3). Households reported that access to healthcare (31.0%) improves the quality of life in Travis County the most, followed closely by physical activity (22.3%), affordable housing (16.6%), access to healthy food (15.1%), and transportation options (9.4%) (Table 7).

Respondents were asked to rate on an agreement scale various quality of life statements related to household and community health. The agreement scale included strongly agree, agree, neutral, disagree, and strongly disagree. Of those surveyed, respondents strongly agreed (66.2%) and agreed (18.9%) when asked if their household could buy affordable, healthy food near their home (Table 4.). Respondents also strongly agreed (68.4%) and agreed (16.4%) when asked if there were places to be physically active near their home. Households were asked if they had enough financial resources to meet basic needs. A majority strongly agree (66.5%) with this statement. In addition, respondents also strongly agreed (42.3%) that their household felt prepared for an emergency. In contrast, respondents strongly disagreed (47.3%) and disagreed (21.8%) when asked if extreme heat prevented their household from completing daily activities (Table 4). Only 7.6% of respondents strongly agreed with this extreme heat related statement.

Household responses indicated tremendous public health success with respect to decreased community exposure to secondhand smoke, as 66.9% strongly disagreed when asked if a member of their household had been bothered by cigarette or electronic cigarette smoke in the last month. However, still 13.1 % of households reported that they strongly agreed or agreed that a member of their household had been bothered by cigarette or electronic cigarette smoke in the last month (Table 5).

When asked if Travis County was a good place to raise children, the most common responses were strong agreement (50.5%) and agreement (32.2%) (Table 5). Households agreed (30.5%) or strongly agreed (31.3%) that Travis County is a good place to grow old and retire. Households also strongly agree that they feel safe in Travis County (49.3%). Conversely, there were mixed responses when asked if there were good transportation options in Travis County: 22.4% strongly agreed, 23.7% agreed, 18.9% neutral, 18.6% disagreed, and 13.1% strongly disagreed.

Although 16.1% of households strongly disagreed, most respondents agreed (26.8%) or were neutral (21.8%) when asked if every person in Travis County is treated fairly (Table 6).

Finally, households were asked about their perceptions on health services in Travis County (Table 6). The vast majority of households agreed (40.5%) or strongly agreed (31.8%) that there are a sufficient number of health services in Travis County; and a smaller majority agreed (31.4%) or strongly agreed (19.8%) that there are a sufficient number of social services in Travis County. Respondents also agreed (36.7%) or strongly agreed (26.4%) that there were affordable vaccination services available in Travis County. Both statements related to vaccination services and sufficient social services had higher "don't know" responses, 22.1% and 21.1% respectively, compared to all other quality of life statements asked.

Perspectives on Health Needs and Strengths

Two opened ended questions were asked to assess perspectives of health needs and strengths. The first asked respondents what their household felt the most important factor that makes Travis County healthy is. Three major themes emerged from this question; they were access to health care, access to healthy foods, and outdoor spaces for physical activity (Table 8). Less mentioned factors were clean water and air, education, sustainability/recycling, and safety.

The second open-ended question asked households what the biggest problem in Travis County is. Two major themes are clear: traffic and allergies/air quality (Table 8). Respondents also expressed concerns about chronic disease issues such as cancer, obesity and diabetes, cost of living or health services, illegal drug use, poor eating habits, and smoking.

Access and Barriers to Healthcare

Respondents were asked where members of their household go when they are sick. A majority of Travis County residents go to their doctor's office (74.7%), followed by urgent care center (5.8%), hospital (5.3%), emergency room (4.2%), pharmacy/retail minute clinic (4.0%), other place (3.1%), health department (2.1%), and workplace nurse (0.6%) (Table 9). Eighty eight percent (88.1%) of households expressed that members of their household did not have a problem getting health care in the last 12 months. Of households that had a problem getting health care in the last 12 months (11.2%), respondents reported other reason (6.5%), doctor would not take insurance or Medicaid (3.2%), insurance didn't cover needed care (2.5%), couldn't get an appointment (2.3%), cost (deductible/co-pay) was too high 1.7%), the wait was too long (1.3%), no health insurance (1.3%), and hospital would not take insurance (1%). The other reasons included availability of specialists, cost of urgent care, couldn't get medication, misdiagnosis, switched insurance, and too many people at facility.

Transportation Use

Households were asked what modes of transportation they used. The majority responded they walk (52.7%), bike (38.9%), took a taxi (or other vehicles for hire) (37.3%), use the bus (29.0%), and share rides/carpool/vanpool (25.4%) (Tables 10-12). Respondents who utilized these modes of transportation were strongly confident/confident walking (73.2%), biking (61.9%), taking a taxi (69.7%), using the bus (86.5%) and sharing rides/carpool/vanpool (92.7%).

Other less used modes of transportation reported include the train (12.9%), carshare (such as Zipcar or Car2Go) (5.4%), and bikeshare (such as Austin B-cycle) (1.8%). Respondents that utilized these modes of transportation also reported that they felt strongly confident/confident using the train (96.8%), carshare (82.2%), and bikeshare (74.5%).

Access to Healthy Food: Grocery Shopping Behaviors and Reasoning

When asked where households purchase the majority of their groceries, the bulk of respondents reported a retail grocery store (92.8%) (Table 13). Less frequented places reported include superstore (5.5%), different source (1%), corner store/convenience store/gas station (0.7%), and ethnic food store (0.2%). Most households report that their primary mode of transportation to purchase groceries is to drive or ride in their family vehicle (97.4%). Some households report getting a ride (not from family vehicle) (1.1%), walking (0.8%) or biking (0.8%) to purchase their groceries as well.

Of households surveyed, the main reason households shop at their primary source for groceries is a convenient location (40.8%), followed by price/low cost (19.4%), other reason (12.9%), 1 stop shop (11.0%), selection of foods (9.5%), and freshness of foods (5.7%). The other reasons primary identify all of the options as their reasons for shopping at their primary source for groceries. An "above all" selection was not included as a response for this question.

Household Preparedness and Special Medical Needs

Seventy eight percent (78.8%) of households reported that they had a working smoke detector in every bedroom in their household (Table 14). Fifty one percent (51.5%) of households reported that they did not have an emergency supply kit that included supplies such as water, food, flashlights, and extra batteries kept in a designated place in their home.

Respondents were asked if they or members of their household need daily medications, special care or treatments, or medical equipment (e.g. oxygen supply, wheelchair/cane/walker). Sixty percent (60%) need daily medication, 4.3% need home health care, 1.1% need oxygen supply, 6.8% need wheel chair/cane/walker, and 2.8% need other type of special care (Table 15). No households indicated that they need dialysis when surveyed.

Discussion

Data presented in this report represents a snapshot of the community's perceptions of health strengths and needs from CASPER surveys conducted on April 7 and 8, 2017. One hundred sixty eight interviews were completed despite the challenges of many people not home during the two-day data collection period, interview refusals, or unsafe/inaccessible households. Five confidential referral forms were completed and were directed to the appropriate City of Austin department to follow-up within one business day.

Three topics formed the basis of this CASPER: (1) community perceptions of health needs and strengths, (2) access to health care, healthy foods, and transportation options, and (3) basic emergency preparedness and household medical special needs in a non-emergency setting.

We attempted to describe community perceptions of health needs and strengths in Travis County by asking a series of quality of life statements and two open-ended response questions. The

majority of respondents rate Travis County as a healthy place to live. This sentiment is also reflected by the quality of life statements that were asked. Most statements had agreeable responses, particularly to households' ability to buy affordable, healthy food near their home, places to be physically active near their home, and households have enough financial resources to meet basic needs.

Great progress has been made with respect to protecting the public from exposure to secondhand smoke, as reflected by the large percentage of households reporting that they had not been bothered by cigarette or electronic cigarette smoke in the last 12 months. Still, some of the responses that were received for the biggest problem in Travis County identified smoking and air quality.

Respondents provided many answers to the two-open ended questions that identified important factors to health and biggest health problems in Travis County. Themes identified for important health factors included access to health care, access to healthy food, and outdoor spaces for physical activity. These themes were expressed when respondents were asked to select the biggest factor to improve quality of life in Travis County, which the top two responses were access to health care and physical activity. Themes identified for health problems were traffic and air quality/allergies. Respondents also perceived chronic health conditions, cost of health care/living, and poor eating habits as major contributors to health problems in Travis County.

The majority of households in Travis County accessed health care from their doctor's office. Only a small portion of households expressed that they had a problem preventing their household from receiving necessary health care. Those barriers were doctor's office did not take insurance, couldn't get an appointment, and insurance didn't cover the needed care.

Respondents agreed that there were a sufficient number of health and social services and affordable vaccination services in Travis County. Although in agreement, a larger portion of households did not know if there were a sufficient number of social services or affordable vaccination services available in Travis County. This survey did not define over-arching terms such as social services and may explain this higher portion of "don't know" responses. In addition, since most households visit their doctor's office, households may not know about various vaccination programs offered outside of their doctor's office.

Access to healthy foods is perceived as an important factor to quality of life in Travis County. Households in Travis County primarily purchase the majority of their groceries from a retail grocery store. Most households drive or ride in their family vehicle to get to their preferred grocery store. Although most households shop at their primary source for groceries due to convenient location, reasons for shopping at their preferred grocery source generated varied responses since there is a wide variety of sources to purchase groceries in Travis County. Distance to stores from a household was not assessed.

Modes of transport had varied responses to usage. All modes of transport assessed in this survey that were utilized by households expressed high confidence in using them. Some of the lesser used services, such as the train, carshare, or bikeshare programs, may not be easily accessible for households that reside outside the City of Austin. Our survey did not ask if households utilize a

personal vehicle; our survey sought to assess transportation use available to the public. We also did not assess which services were readily available to households or their nearby communities.

We assessed basic preparedness and medical special needs in a non-emergency setting. A majority of households report that they have a smoke detector in every bedroom; however, this figure may be elevated due to the question wording "in every bedroom." Interview teams reported that respondents may have missed or ignored this wording or were confused by this part of the question.

Since Travis County is susceptible to many potential disasters, such as flooding, tornadoes and wildfires, it's important for households to plan for emergency situations. Household emergency supply kits (including water, food, flashlights, and extra batteries that are kept in a designated place), a basic household preparedness function, was assessed and a majority of households report that they do not have this prepared. We also sought to describe medical special needs in a non-emergency setting. Most households take daily medication and some require home health care, oxygen supply, wheel chair/cane/walker, or other type of special care. The information for the projected number of households with these special medical needs can help staff, officials, and emergency planners to ensure through disaster planning and resource allocation that these special medical needs are met when community shelters or evacuations are necessary.

This assessment had several limitations. We utilized the 2010 US Census data to estimate the number of housing units in the City of Austin and Travis County clusters. Since 7 years have passed since the last census, data presented in this report may not account for new housing developments, neighborhoods, or influx and efflux in population. We also achieved a minimum response rate for generalizability to all households in Travis County. It is important to note that some of the responses for transportation use and barriers to health care are small and should be interpreted with caution. Finally, selection bias could have been present since households that were inaccessible or refused participation may have been different from those residing in homes that were interviewed.

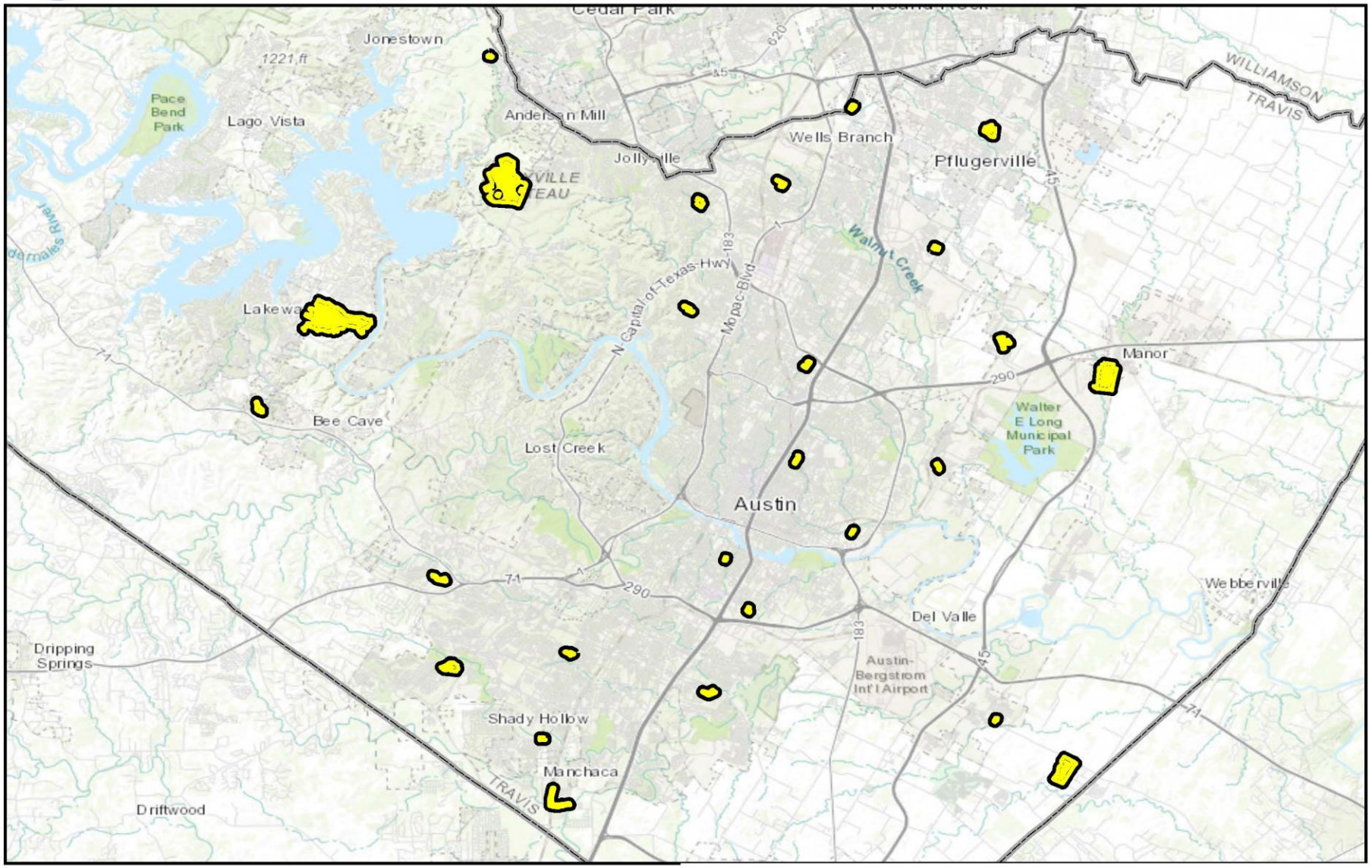
Even with these limitations, this assessment successfully gathered important information to aid APH and key community stakeholders to improve public health resources and response in Travis County. Conclusions from this report indicate that Travis County is a healthy place to live but there are areas that need improvement. First, themes identified in this report, including access to health care, places for physical activity, and affordable housing, contribute to the quality of life of Travis County households the most and focus should still be to maintain and improve quality of these over-arching issues. Second, many health needs were identified that need improvement in our community and should be considered for the CHA/CHIP process, including transportation options, traffic problems, addressing barriers to health care and household preparedness.

Finally, it is believed that using the CASPER methodology to assess household perceptions of health in our community gave additional perspective and value to the CHA/CHIP process. By using the CASPER tool for the third time (e.g. 2013 Halloween Flood, 2016 Zika, and 2017 CHA), APH has demonstrated its competency and expertise in conducting community assessments in disaster and non-disaster settings.

This report makes the following recommendations:

1. Distribute this report to APH leadership and key community partners as part of the ongoing CHA/CHIP process and post on the APH website.
2. Continue efforts to maintain and improve access to health care, places for physical activity, and affordable housing that are perceived to contribute to quality of life of Travis County residents.
3. Explore opportunities to improve transportation options, address traffic problems and barriers to health care, and improve household preparedness.
4. Encourage households to have an emergency supply kit in their home.
5. Encourage households to have a working smoke detector in every bedroom.

Community Health Assessment - CASPER 2017



Cluster County line

Source: Austin Public Health, Epi-Surv Unit, tlh

Table 1: Questionnaire Response Rates

Questionnaire response	Percent % (n=168)	Rate
Completion*	80.0	168/210
Cooperation†	49.7	168/338
Contact‡	22.6	168/743

*Percent of surveys completed in relation to interview goal of 210.
†Percent of contacted households that completed an interview
‡Percent of randomly selected households that completed an interview

Table 2: Housing Structure Type

	Frequency (Percentage)
Single family home	149 (88.7)
Multiple unit (duplex, apartment, etc.)	12 (7.1)
Mobile home	5 (3.0)
Other	2 (1.2)

Table 3: Perceived Health of Travis County

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Very healthy	29	17.6	51,770	12.6 (21.3-21.6)
Healthy	76	46.1	210,362	51.4 (51.2-51.5)
Somewhat healthy	39	23.6	87,758	21.4 (21.3-21.6)
Unhealthy	5	3.0	10,930	2.7 (2.6-2.7)
Very unhealthy	1	0.6	690	0.2 (0.2-0.2)
Don’t know	14	8.5	44,816	10.9 (10.9-11.0)

Table 4: Quality of Life Statements in Travis County, Part 1

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Household can buy affordable, healthy food near their home				
Strongly agree	103	61.3	278,986	66.2 (66.0 – 66.4)
Agree	34	20.2	79,781	18.9 (18.8 – 19.1)
Neutral	14	8.3	31,086	7.3 (7.3 – 7.5)
Disagree	3	1.8	3,451	0.8 (0.8 – 0.9)
Strongly disagree	13	7.7	24,855	5.9 (5.8 – 6.0)
There are places to be physically active near their household				
Strongly agree	105	63.6	282,715	68.4 (68.3 – 68.6)
Agree	30	18.2	67,554	16.4 (16.2 – 16.5)
Neutral	14	8.5	27,575	6.7 (6.6 – 6.8)
Disagree	7	4.2	14,345	3.5 (3.4 – 3.5)
Strongly disagree	7	4.2	17,088	4.1 (4.1 – 4.2)
Household has enough financial resources to meet basic needs				
Strongly agree	103	61.3	280,344	66.5 (66.4 – 66.7)
Agree	35	20.8	72,750	17.3 (17.1 – 17.4)
Neutral	16	9.5	38,485	9.1 (9.1 – 9.2)
Disagree	8	4.8	19,156	4.6 (4.5 – 4.6)
Strongly disagree	5	3.0	7,879	1.9 (1.8 – 1.9)
Household feels prepared for an emergency				
Strongly agree	73	43.5	178,300	42.3 (42.2 – 42.5)
Agree	45	26.8	121,235	28.8 (28.6 – 28.9)
Neutral	28	16.7	68,096	16.2 (16.1 – 16.3)
Disagree	10	6.0	30,239	7.2 (7.1 – 7.3)
Strongly disagree	8	4.8	17,081	4.1 (4.0 – 4.1)
Extreme heat has prevented household from completing daily activities				
Strongly agree	16	9.5	32,112	7.6 (7.5 – 7.7)
Agree	25	14.9	58,285	13.8 (13.7 – 13.9)
Neutral	14	8.3	37,173	8.8 (8.7 – 8.9)
Disagree	41	24.4	91,630	21.8 (21.6 – 21.9)
Strongly disagree	70	41.7	199,067	47.3 (47.1 – 47.4)

Table 5: Quality of Life Statements in Travis County, Part 2

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Household has been bothered by cigarette/electronic cigarette smoke in last month				
Strongly agree	12	7.1	26,451	6.2 (6.2 – 6.4)
Agree	13	7.7	28,913	6.9 (6.8 – 6.9)
Neutral	11	6.6	21,806	5.1 (5.1 – 5.2)
Disagree	27	16.1	59,803	14.2 (14.1 – 14.3)
Strongly disagree	104	61.9	281,983	66.9 (66.8 – 67.1)
Household feels safe in Travis County				
Strongly agree	89	53.0	207,902	49.3 (49.1 – 49.5)
Agree	54	32.1	162,487	38.6 (38.4 – 38.7)
Neutral	17	10.1	35,680	8.5 (8.4 – 8.6)
Disagree	8	4.8	15,276	3.6 (3.6 – 3.7)
Strongly disagree	0	0.0	0	0
There are good transportation options in Travis County				
Strongly agree	29	17.4	93,441	22.4 (22.3 – 22.6)
Agree	35	21.0	98,793	23.7 (23.6 – 23.9)
Neutral	36	21.6	78,839	18.9 (18.8 – 19.0)
Disagree	32	19.1	77,843	18.6 (18.6 – 18.8)
Strongly disagree	27	16.2	54,726	13.1 (13.0 – 13.2)
Travis County is a good place to raise children				
Strongly agree	85	51.0	211,664	50.5 (50.3 – 50.7)
Agree	50	30.0	134,724	32.2 (32.0 – 32.3)
Neutral	11	6.6	25,576	6.1 (6.0 – 6.2)
Disagree	8	3.6	10,735	2.6 (2.5 – 2.6)
Strongly disagree	6	2.4	10,930	2.6 (2.6 – 2.7)
Travis County is a good place to grow old and retire				
Strongly agree	57	34.3	130,982	31.3 (31.2 – 31.5)
Agree	39	23.5	127,587	30.5 (30.4 – 30.7)
Neutral	28	16.9	59,897	14.3 (14.2 – 14.4)
Disagree	16	9.6	36,001	8.6 (8.5 – 8.7)
Strongly disagree	17	10.2	44,761	10.7 (10.6 – 10.8)

Table 6: Quality of Life Statements in Travis County, Part 3

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
There are a sufficient number of health services in Travis County				
Strongly agree	61	36.3	134,122	31.8 (31.7 – 32.0)
Agree	62	36.9	170,716	40.5 (40.4 – 40.7)
Neutral	19	11.3	56,211	13.3 (13.2 – 13.4)
Disagree	11	6.5	24,380	5.8 (5.7 – 5.9)
Strongly disagree	5	3.0	12,322	2.9 (2.9 – 3.0)
There is a sufficient number of social services in Travis County				
Strongly agree	38	22.8	82,792	19.8 (19.7 – 19.9)
Agree	39	23.4	131,428	31.4 (31.3 – 31.5)
Neutral	32	19.2	82,066	19.6 (19.5 – 19.7)
Disagree	10	6.0	19,897	4.8 (4.7 – 4.8)
Strongly disagree	5	3.0	13,460	3.2 (3.1 – 3.3)
Affordable vaccination services are available in Travis County				
Strongly agree	56	33.3	154,674	36.7 (36.6 – 36.9)
Agree	43	25.6	111,030	26.4 (26.2 – 26.5)
Neutral	21	12.5	48,502	11.5 (11.4 – 11.6)
Disagree	3	1.8	7,527	1.8 (1.7 – 1.8)
Strongly disagree	1	0.6	2,731	0.7 (0.6 – 0.7)
Every person in Travis County is treated fairly				
Strongly agree	29	17.4	61,306	14.7 (14.5 – 14.8)
Agree	42	25.2	112,198	26.8 (26.7 – 26.9)
Neutral	32	19.2	91,217	21.8 (21.7 – 21.9)
Disagree	20	12.0	49,732	11.9 (11.8 – 12.0)
Strongly disagree	30	18.0	67,317	16.1 (16.0 – 16.2)

Table 7: Improve Quality of Life in Travis County

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Access to health care	44	26.5	129,550	31.0 (30.9 – 31.1)
Access to healthy foods	27	16.3	63,350	15.1 (15.1 – 15.3)
Transportation options	13	7.8	39,421	9.4 (9.3 – 9.5)
Affordable housing	28	16.9	69,517	16.6 (16.5 – 16.8)
Physical activity	45	27.1	93,240	22.3 (22.1 – 22.4)

Table 8: Perceptions of Health Strengths and Needs in Travis County

Selection of responses that identify what is the most important factor that makes Travis County healthy:
Access to health care
Access to healthy foods
Access to physical activities
Clean water
Environment
Green spaces, nature, clean air
Lakes, trails, nature
Outdoor spaces, parks and pools
Safety
Weather, lets you get outside, be active
Selection of responses that identify what is the biggest health problem in Travis County:
Air quality
Allergies, pollen
Cancer
Cigarette smoking
Drug use
Expensive insurance plans
Health literacy
Obesity
Traffic problems
Transportation

Table 9: Access and Barriers to Health Care

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Where does household go when sick				
Doctor's office	122	73.1	313,626	74.7 (74.6 – 74.9)
Emergency room	7	4.1	17,528	4.2 (4.1 – 4.2)
Health department	3	1.8	8,647	2.1 (2.0 – 2.1)
Hospital	9	5.4	22,137	5.3 (5.2 – 5.3)
Pharmacy/Retail minute clinic	9	5.4	16,651	4.0 (3.9 – 4.0)
Urgent care center	9	5.4	24,171	5.8 (5.7 – 5.8)
Workplace nurse	1	0.6	2,389	0.6 (0.6 – 0.6)
Other	6	3.6	12,993	3.1 (3.0 – 3.1)
Problem getting health care in the last 12 months				
Yes	20	11.9	371,301	88.1 (88.0 – 88.2)
No	147	87.5	47,313	11.2 (11.1 – 11.3)
Don't Know	1	0.6	2,730	0.7 (0.6 – 0.7)
Problems preventing household from accessing healthcare (Y)				
Dentist would not take insurance/Medicaid	0	0	0	0
Doctor would not take insurance/Medicaid	6	3.6	13,455	3.2 (3.1 – 3.3)
Hospital would not take insurance	2	1.2	4,323	1.0 (1.0 – 1.1)
Pharmacy would not take insurance/Medicaid	0	0	0	0
Cost (deductible/co-pay) was too high	3	1.8	7,054	1.7 (1.6 – 1.7)
Couldn't get an appointment	4	2.4	9,827	2.3 (2.3 – 2.4)
Didn't know where to go	0	0	0	0
Insurance didn't cover needed care	5	3.0	10,482	2.5 (2.4 – 2.5)
The wait was too long	3	1.8	5,486	1.3 (1.3 – 1.3)
Language barrier	0	0	0	0
No health insurance	1	0.6	5,461	1.3 (1.3 – 1.3)
No way to get there	0	0	0	0
Other	11	6.6	27,477	6.5 (6.5 – 6.6)

Table 10: Transportation Use and Perceived Confidence in Transportation Services in Travis County, Part 1

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Use Bus				
Yes	37	22.2	120,849	29.0 (28.9 – 29.1)
No	130	77.8	295,718	71.0 (70.9 – 71.1)
Confidence in using bus services				
Strongly confident	16	47.1	41,170	36.5 (36.3 – 36.8)
Confident	13	38.2	56,287	50.0 (49.7 – 50.3)
Neutral	3	8.8	9,284	8.2 (8.1 – 8.4)
Not confident	2	5.9	5,916	5.3 (5.1 – 5.4)
Not at all confident	0	0	0	0
Use Train				
Yes	14	8.4	53,674	12.9 (12.8 – 13.0)
No	152	91.0	359,706	86.3 (86.3 – 86.5)
Confidence in using train services				
Strongly confident	7	53.9	15,817	31.9 (31.5 – 32.3)
Confident	5	38.5	32,396	65.3 (64.9 – 65.7)
Neutral	0	0	0	0
Not confident	0	0	0	0
Not at all confident	0	0	0	0
Walking				
Yes	83	49.7	219,587	52.7 (52.6 – 52.9)
No	83	49.7	193,794	46.5 (46.4 – 46.7)
Confidence in walking as mode of transport				
Strongly confident	34	44.7	89,933	44.0 (43.7 – 44.2)
Confident	22	29.0	59,652	29.2 (29.0 – 29.4)
Neutral	14	18.4	42,176	20.6 (20.4 – 20.8)
Not confident	4	5.3	9,898	4.8 (4.7 – 4.9)
Not at all confident	1	1.3	1,593	0.8 (0.7 – 0.8)

Table 11: Transportation Use and Perceived Confidence in Transportation Services in Travis County, Part 2

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Bicycling				
Yes	51	30.7	160,816	38.9 (38.7 – 39.0)
No	113	68.1	247,104	59.7 (59.6 – 59.9)
Confidence in biking as mode of transport				
Strongly confident	11	23.9	39,759	26.5 (26.3 – 26.7)
Confident	14	30.4	53,154	35.4 (35.2 – 35.6)
Neutral	9	19.6	26,585	17.7 (17.5 – 17.9)
Not confident	9	19.6	24,203	16.1 (15.9 – 16.3)
Not at all confident	3	6.5	6,500	4.3 (4.2 – 4.4)
Sharing rides/carpool/vanpool				
Yes	39	23.9	103,734	25.4 (25.3 – 25.5)
No	121	74.2	296,749	72.7 (72.5 – 72.8)
Confidence in sharing rides/carpool/vanpool services				
Strongly confident	22	56.4	47,408	44.8 (44.5 – 45.1)
Confident	13	33.3	50,606	47.9 (47.6 – 48.2)
Neutral	1	2.6	690	0.7 (0.6 – 0.7)
Not confident	0	0	0	0
Not at all confident	2	5.1	5,461	5.2 (5.0 – 5.3)
Use taxi (or other vehicles for hire)				
Yes	53	32.1	153,775	37.3 (37.2 – 37.5)
No	109	66.1	250,130	60.7 (60.6 – 60.9)
Confidence in using taxi services				
Strongly confident	20	41.7	50,718	36.1 (35.8 – 36.3)
Confident	16	33.3	47,284	33.6 (33.4 – 33.9)
Neutral	9	18.8	35,300	25.1 (24.9 – 25.3)
Not confident	3	6.3	7,243	5.2 (5.0 – 5.3)
Not at all confident	0	0	0	0

Table 12: Transportation Use and Perceived Confidence in Transportation Services in Travis County, Part 3

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Carshare (such as Zipcar or Car2Go)				
Yes	10	6.1	22,436	5.4 (5.4 – 5.5)
No	150	90.9	378,811	91.7 (91.6 – 91.8)
Confidence in using carshare services				
Strongly confident	5	50.0	10,262	45.7 (45.1 – 46.4)
Confident	3	30.0	8,192	36.5 (35.9 – 37.1)
Neutral	2	20.0	3,982	17.8 (17.3 – 18.3)
Not confident	0	0	0	0
Not at all confident	0	0	0	0
Bikeshare (such as Austin B-cycle)				
Yes	4	2.5	7,296	1.8 (1.8 – 1.8)
No	155	95.1	390,772	95.7 (95.6 – 95.7)
Confidence in using bikeshare services				
Strongly confident	2	33.3	2,283	21.3 (20.5 – 22.1)
Confident	3	50.0	5,704	53.2 (52.3 – 54.2)
Neutral	1	16.7	2,731	25.5 (24.7 – 26.3)
Not confident	0	0	0	0
Not at all confident	0	0	0	0

Table 13: Access to Healthy Foods: Grocery Shopping Behavior and Reasoning

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Where do households purchase most of their groceries				
Retail grocery store	150	89.3	390,817	92.8 (92.7 - 92.8)
Superstore	13	7.7	22,997	5.5 (5.4 – 5.5)
Ethnic food store	1	1	690	0.2 (0.2 – 0.2)
Farmer's market/road side stand	0	0	0	0
Corner store/convenience store/gas station	1	1	2,731	0.7 (0.6 – 0.7)
Other	3	1.8	4,111	1.0 (1.0 – 1.0)
Mode of transportation to purchase groceries				
Drive/ride in family vehicle	163	97.0	410,173	97.4 (97.3 – 97.4)
Get a ride (not from family vehicle)	3	1.8	4,801	1.1 (1.1 – 1.2)
Walk	1	0.7	3,186	0.8 (0.7 – 0.8)
Bike	1	0.7	3,186	0.8 (0.7 – 0.8)
Public transportation/bus	0	0	0	0
Other	0	0	0	0
Main reason shopping at their primary source for groceries				
Price/low cost	33	19.6	81,768	19.4 (19.3 – 19.5)
Convenient location	68	40.5	171,695	40.8 (40.6 – 40.9)
Freshness of foods	12	7.1	24,182	5.7 (5.7 – 5.8)
Selection of foods	17	10.1	40,128	9.5 (9.4 – 9.6)
1 stop shop	17	10.1	46,237	11.0 (10.9 – 11.1)
Other	20	11.9	54,150	12.9 (12.8 – 13.0)

Table 14: Basic Household Preparedness

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Household has working smoke detector in every bedroom				
Yes	129	77.2	329,925	78.8 (78.7 – 78.9)
No	37	22.1	85,959	20.5 (20.4 – 20.7)
Household has an emergency supply kit in home				
Yes	77	46.1	203,202	48.5 (48.4 – 48.7)
No	99	53.9	215,412	51.5 (51.3 – 51.6)

Table 15: Household Special Medical Needs and Equipment

	Frequency (n=168)	% of households	Projected number of households	Weighted % (95% CI)
Daily medication				
Yes	97	57.7	252,515	60.0 (59.8 – 60.1)
No	69	41.1	162,913	38.7 (38.5 – 38.8)
Dialysis				
Yes	0	0	0	0
No	163	98.8	408,833	98.6 (98.5 – 98.6)
Home health care				
Yes	9	5.4	18,238	4.3 (4.3 – 4.4)
No	156	94.0	396,056	94.9 (94.8 – 94.9)
Oxygen supply				
Yes	2	1.2	4,601	1.1 (1.1 – 1.2)
No	159	98.2	401,488	98.1 (98.1 – 98.1)
Wheel chair/cane/walker				
Yes	11	6.8	27,970	6.8 (6.8 – 6.9)
No	150	92.6	378,119	92.4 (92.3 – 92.5)
Other type of special care				
Yes	6	3.7	11,547	2.8 (2.8 – 2.9)
No	156	95.8	396,474	96.4 (96.4 – 96.5)

o be completed by team BEFORE the interview:		
Q1. Date (MM/DD/YY):	**Q2.** Cluster Number:	**Q3.** Survey Number:
Q4. Team Name:	**Q5.** Interviewer Initials:	

Answer to the following question should be completed by observation:

Q6. Type of structure: □ Single family □ Multiple unit (duplex, apartment, etc.) □ Mobile home □ Other _____

First, we are going to ask about community health and quality of life

Q7. How would your household rate the health of Travis County? *Read all options aloud. Pick only one option.*

□ Very Unhealthy □ Unhealthy □ Somewhat healthy □ Healthy □ Very healthy □ DK □ Refused

Q8-Q21. Please rate the following statements from 1 to 5, where "1" means strongly disagree and "5" means strongly agree.
1=Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree DK=Don't know

These first statements have to do with your household:

Q8. From 1 to 5, how would your household rate the following statement, "Your household can buy affordable, healthy food near your home."

1 2 3 4 5 DK Refused

Q9. From 1 to 5, how would your household rate the following statement, "There are places to be physically active near your home."

1 2 3 4 5 DK Refused

Q10. From 1 to 5, how would your household rate the following statement, "Your household has enough financial resources to meet basic needs."

1 2 3 4 5 DK Refused

Q11. From 1 to 5, how would your household rate the following statement, "Your household feels prepared for an emergency."

1 2 3 4 5 DK Refused

Q12. From 1 to 5, how would your household rate the following statement, "Extreme heat has prevented your household from completing daily activities."

1 2 3 4 5 DK Refused

Q13. From 1 to 5, how would your household rate the following statement, "You or a member of your household has been bothered by cigarette or electronic cigarette smoke in the last month."

1 2 3 4 5 DK Refused

Now the second section has to do with Travis County

Q14. From 1 to 5, how would your household rate the following statement, "Your household feels safe in Travis County."

1 2 3 4 5 DK Refused

Q15. From 1 to 5, how would your household rate the following statement, "There are good transportation options in Travis County."

1 2 3 4 5 DK Refused

Q16. From 1 to 5, how would your household rate the following statement, "Travis County is a good place to raise children."

1 2 3 4 5 DK Refused

Q17. From 1 to 5, how would your household rate the following statement, "Travis County is a good place to grow old and retire."

1 2 3 4 5 DK Refused

Q18. From 1 to 5, how would your household rate the following statement, "There is a sufficient number of health services in Travis County."

1 2 3 4 5 DK Refused

Q19. From 1 to 5, how would your household rate the following statement, "There is a sufficient number of social services in Travis County."

1 2 3 4 5 DK Refused

Q20. From 1 to 5, how would your household rate the following statement, "Affordable vaccination services are available in Travis County."

1 2 3 4 5 DK Refused

Q21. From 1 to 5, how would your household rate the following statement, "Every person in Travis County is treated fairly."

1 2 3 4 5 DK Refused

Q22. For your household, what is the most important factor that makes Travis County healthy? *Open ended response.*

Q23. For your household, which of the following options improves the quality of life in Travis County the most? *Read all options aloud. Pick only one option.*

□ Access to health care □ Access to healthy foods □ Transportation options □ Affordable housing □ Physical activity □ DK □ R

Q24. For your household, what is the biggest health problem in Travis County? *Open ended response.*

We would now like to ask you about your household's access to healthcare, transportation and food

Q25. Where do you and members of your household go most often when they are sick? *Read all options aloud. Pick only one option.*

□ Doctor's office □ Emergency room □ Health department □ Hospital □ Pharmacy/ Retail minute clinic □ Urgent care center
□ Workplace nurse □ Other, specify: _____ □ DK □ R

Q26. In the past 12 months, did you or a member of your household ever have a problem getting the health care you/they needed?

□ Yes **(→ Q26a)** □ No **(→ Q27)** □ DK **(→Q27)** □ R **(→Q27)**

Q26a. What problem(s) prevented you or a member of your household from getting the necessary healthcare? *Don't read responses aloud. Multiple options can be selected if the respondent indicates more than one reason.*

□ Dentist would not take my/our insurance or Medicaid	□ Couldn't get an appointment	□ Language barrier
□ Doctor would not take my/our insurance or Medicaid	□ Didn't know where to go	□ No health insurance
□ Hospital would not take my/our insurance	□ Insurance didn't cover what I/we needed	□ No way to get there
□ Pharmacy would not take my/our insurance or Medicaid	□ The wait was too long	□ DK □ R
□ My/our share of cost (deductible/co-pay) was too high	□ Other: specify_____	

Q27(a-h). Do you and members of your household use the following transportation options? If the answer is "yes" to a transportation option, we will ask how confident you and members of your household are using that option. Please reply 1 through 5, where 1 means "not at all confident" and 5 means "strongly confident."

1=Not at all confident 2=Not confident 3=Neutral 4=Confident 5=Strongly confident DK=Don't know R=Refused

Q27a. Bus	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27b. Train	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27c. Walking	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27d. Bicycling	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27e. Sharing rides/ carpool/ vanpool	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27f. Taxi (or other vehicles for hire)	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27g. Carshare (such as Zipcar or Car2Go)	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R
Q27h. Bikeshare (such as Austin B-cycle)	□ Yes	□ No	□ DK	□ R	If Yes, how confident using this option?	1	2	3	4	5	DK	R

Q28. Where does your household buy most of your groceries? *Read all options aloud. Pick only one option.*

□ Retail grocery store (HEB, Fiesta, Randall's, Whole Foods, etc.) □ Superstore (Walmart, Target, Sam's, Costco, etc.)
□ Ethnic food store (La Hacienda, La Michoacana, MT Supermarket, etc.) □ Farmer's market/ Road side stand
□ Corner store/ convenience store/ gas station □ Other: specify _____
□ DK □ R

Q29. How does your household get there? *Read all options aloud. Pick only one option.*

□ Drive/ ride in family vehicle □ Get a ride (not from family vehicle) □ Walk □ Bike □ Public transportation/ Bus
□ Other: specify _____ □ DK □ R

Q30. What is the main reason your household chooses to shop there? *Read all options aloud. Pick only one option.*

□ Price/ low cost □ Convenient location □ Freshness of foods
□ Selection of foods (e.g., prepared foods, organic, local product, culturally appropriate foods, etc.)
□ 1 stop shop (e.g. able to purchase meat, produce, diapers, paper goods, etc. at one place)
□ Other: specify _____ □ DK □ R

Now we would like to ask you about your household's emergency preparedness

Q31. Does your household currently have a working smoke detector in every bedroom? □ Yes □ No □ DK □ R

Q32. Does your household currently have an Emergency Supply Kit with supplies like water, food, flashlights, and extra batteries that is kept in a designated place in your home? □ Yes □ No □ DK □ R

Q33. Do you or a member of your household need:

Daily medication	□ Yes	□ No	□ DK	□ R	Oxygen supply	□ Yes	□ No	□ DK	□ R
Dialysis	□ Yes	□ No	□ DK	□ R	Wheel chair/ cane/ walker	□ Yes	□ No	□ DK	□ R
Home health care	□ Yes	□ No	□ DK	□ R	Other type of special care	□ Yes	□ No	□ DK	□ R

Before we finish, there are is one more question we'd like to ask you

Q34. If there is anything you or members of your household want to say to Austin Public Health, what would it be?

Thank you for taking the time to complete this survey. Your answers will allow us to better serve you in the future.

DK: Don't know R: Refused

Appendix 1

Educational materials provided by:
Austin 311
Austin Fire Department
Austin Public Health
Austin Water
CapMetro
Central Health
City of Austin, Office of Mobility Management
City of Austin, Office of Sustainability
City of Austin Vision Zero
City of Austin, Neighborhood Housing and Community Development
Integral Care
Texas Poison Center Network
Texas Department of State Health Services, Health Assessment and Toxicology Program
Texas Department of State Health Services, Public Health Emergency Preparedness and Response Section
Texas Department of State Health Services, Environmental and Injury Epidemiology and Toxicology Unit

Appendix 2