Community Assessment for Public Health Emergency Response (CASPER) addressing Tulsa County Household Preparedness

Tulsa County, OK

2018

THD

TULSA HEALTH
Department

Acknowledgements

We would like to acknowledge the following individuals for their contributions, without which, this endeavor would not have been possible.

Tulsa Health Department Staff

Oklahoma Medical Reserve Corps (OKMRC) Volunteers

Centers for Disease Control and Prevention

Jurisdictional Police Departments and Sheriff's Office

Jurisdictional Emergency Management Agencies

Community Partners

Survey Respondents

Community Assessment for Public Health Emergency Response (CASPER) addressing Tulsa County Household Preparedness – Tulsa County, OK 2018

Introduction

Oklahoma experiences a wide range of natural disasters including thunderstorms, damaging winds, tornadoes, hail, flooding, wildfires, winter storms, and earthquakes that can cause hazardous conditions. The Tulsa Health Department (THD), along with Oklahoma Medical Reserve Corps (OKMRC) volunteers, conducted a Community Assessment for Public Health Emergency Response (CASPER) in October 2018 over an eleven day period (October 9th – October 20th). Twenty-three THD and OKMRC volunteers spent over four hundred hours conducting the assessment. The CASPER was conducted to assess the potential resiliency of Tulsa County residents in the event of a disaster by strategically asking questions that can identify gaps in preparedness. Resiliency is commonly defined as the vulnerability of an individual or population plus the impact of a disaster divided by the potential capacity to recover. The household information gathered through the survey identified critical needs of Tulsa County residents in order to improve resilience when faced with a disaster. The information collected will be utilized by the Tulsa Health Department and community partners to strengthen planning efforts, as well as guide future projects, messaging, and resource allocation. Moreover, the Tulsa Health Department took the opportunity to disseminate emergency preparedness information to interviewed households, as well as information about services offered at THD. Interviewees also had the opportunity to request additional information about services offered at the Tulsa Health Department such as mosquito abatement using a confidential referral form.

Methodology

The CASPER sampling methodology was developed by the CDC (Centers for Disease Control) to rapidly assess the needs of a defined population. The CASPER methodology can be utilized either before or after a disaster. The Tulsa Health Department took a proactive approach to disaster planning by conducting the community assessment prior to a specific disaster to assess the resiliency of residents in the event of a disaster.

CASPERs are conducted using face-to-face interviews to gather household-based information. The methodology outlines a two-stage sampling process to select households for interviewing. First, using probability proportionate to size, thirty census blocks or clusters were selected covering all of Tulsa County (Figure 1). The likelihood of selection of each census block was based on the number of occupied housing units obtained from the U.S. Census. For the second stage of sampling, teams in the field randomly chose a starting point within the cluster and then systematically selected seven households to interview in each cluster for a goal of two hundred-ten total interviews. The seven households were chosen by dividing the total number of occupied units by seven to identify 'N'. Teams identified a continuous pattern through the cluster, choosing every 'Nth' household. For more information on the CASPER household selection methodology, please reference the CDC CASPER Toolkit.

Teams made three attempts to conduct an interview at a selected household before that household was systematically replaced. Teams continued around the cluster selecting households in this manner (excluding households already attempted, refused, or inaccessible) until seven successful interviews were completed or until there were no more potential households to be interviewed within the cluster. Teams in the field utilized tracking forms to detail selected households and attempts made. In addition, teams were provided maps and a reference point for each assigned cluster. A consent script, questionnaire (including a questionnaire reference guide), confidential referral form, and public health materials including disaster preparedness were also provided to teams.

The questionnaire utilized in the surveying was developed jointly by the Emergency Preparedness and Response Program and the Epidemiology Department at the Tulsa Health Department, as well as with input from various community partners and other programs within

the Tulsa Health Department, including Marketing and Service Excellence. The questionnaire (Figure 2) covered areas concerning healthcare, emergency and evacuation plans, and social connectedness. The questionnaire was written in English but interpretation services in both Spanish and Burmese were provided if necessary. The Tulsa Health Department was able to successfully complete one hundred sixty-eight interviews during the eleven day span.

A three-hour training session on interview techniques, safety issues, household selection, tracking methods, referrals, reference material, and forms was provided on October 9th to both Tulsa Health Department employees and OKMRC volunteers. The Tulsa Police Department provided a safety overview at the training session. In addition, multiple law enforcement jurisdictions provided safety tips and feedback for clusters with potential concerns. Just-in-time-training was provided to interviewers who were unable to attend the training session.

SurveyMonkey, a cloud-based survey software, was used for the data entry and IBM SPSS 23, a statistical software, was used for the data analysis. To account for the probability that the responding household was selected, we created sampling weights based on the total number of occupied houses according to the 2010 Census, the number of clusters selected, and the number of interviews completed in each cluster. This weight was used to calculate all weighted frequencies and percentages presented in this report. The contact rate was calculated by dividing the completed interview by the total number of households where contact was attempted; the cooperation rate was calculated by dividing completed interviews by the total number of households where contact was made; and the completion rate was calculated by dividing the number of completed interview by two hundred ten.

Results

The response rates for the CASPER interviews are shown in Table 1. Over the course of eleven days, the teams were able to conduct 168 interviews for an overall completion rate of 80.0%.

Household Characteristics (Tables 2-3)

The majority of households assessed were single family structures (79.8%), shown in Table 2. Multi-family unit homes were the next most reported household structure (18.5%). The largest reported age range of household members was 18 to 64 (54.4%), followed by 65+ (21.4%), then 5 to 17 (16.9%), and less than 5 (6.8%). The most common mode of transportation is by use of a personal vehicle with the majority of households reporting owning a reliable car (91.1%) (Table 3).

Household Healthcare (Tables 4-7)

Respondents reported a wide range of medical conditions in members of the household (Table 4). The most frequently reported condition was impaired vision (2.4%). Respondents were also asked if any household members require powered medical equipment (Table 5). The majority of respondents (82.7%) reported household members do not require electricity for medical equipment. For those that do require electricity for medical equipment (12.3%), only 4.0% had a backup power source for the medical equipment. Household travel-required medical needs were also assessed. Only 3.0% of households reported requiring travel for medical care. Of those that require travel, 80.0% reported that the type of travel that they utilize is self-provided (Table 6). The percentage of households that reported all members being age-appropriately vaccinated was 94.1% (Table 7). Of the households that reported having members that were not age-appropriately vaccinated (4.8%), the most frequently reported reason was personal objection (42.9%).

Household Emergency Preparedness (Tables 8-15)

The majority of respondents felt their household is prepared for an emergency with 51.6% feeling somewhat prepared and 23.8% feeling very prepared (Table 8). The most commonly reported component of a household emergency plan was having a designated area in the home for shelter (86.3%). Moreover, 64.3% reported having stored and protected copies of important documents, 59.5% had multiple evacuation routes planned from the home, and 56.6% have an emergency communications plan. It was also reported that 38.7% of households have a designated meeting place during an emergency (Table 9).

The most commonly reported type of emergency supplies was a 3-day supply of non-perishable food (85.1%). Just over half (55.7%) of households reported having an emergency supply kit and 48.2% had a 3-day supply of drinking water. For household members that require prescribed medication, 72.0% of households reported having a 7-day supply of medication (Table 10). In the event of a disaster, 94.0% of households reported that food would be able to be accessed easily (Table 11).

Households were also assessed on their plans for evacuation in the event of a disaster. The majority of respondents indicated that in the event of a large scale disaster, members of the household would evacuate to a friend's, family, or a second home outside the area (70.8%). Others reported that they would evacuate to a hotel or motel (13.1%) or an American Red Cross or community/ church shelter (1.8%). Few reported they would not evacuate (3.6%) (Table 12). Respondents were then asked what the top three reasons would be that might prevent evacuation. More than half (58.3%) of households reported that nothing would prevent them from evacuating, but the most commonly reported reason that would prevent evacuation was concern about leaving their pets (19.1%). Other reasons that would prevent household evacuation were concern about traffic jams (12.5%), concern about leaving their property (11.9%), and concern about personal safety (11.3%). Other factors that would prevent evacuation were reported at less than 10% (Table 13). Of the 56.0% of households that reported having pets, 89.0% of those households plan to bring their pets with them in the event of an evacuation (Table 14).

Households that were interviewed were also assessed on how they receive information and news (Table 15). The most commonly reported way was by cell phone (89.3%), followed by television (85.1%), internet sources excluding social media (73.2%), word of mouth (68.5%), radio (66.7%), social media (64.3%), local newspaper (31.6%), and lastly through a landline (21.4%).

Household Social Connectedness (Tables 16-17)

Respondents were asked to assess the sense of community in their neighborhood. Many reported some level of sense of community with 23.8% strongly agreeing, and 28.0% agreeing. Some households (23.2%) felt neutral about a sense of community in their neighborhood (Table 16). The majority of households reported having the ability to call contacts for help with 59.5% strongly agreeing and 33.9% agreeing (Table 17).

Recommendations

The Tulsa County Emergency Preparedness CASPER proved to be a valuable measurement of resident's preparedness in the event of an emergency situation. Based on the results of the Emergency Preparedness CASPER, the following actions should be considered.

1. **Access and functional needs resources at locations serving the public during an emergency incident based on Tulsa County residents reported medical needs.** According to CASPER results, the data shows that a significant amount of Tulsa County residents have a variety of medical needs including impaired vision and psychosocial and mental health illnesses. In order to accommodate these residents, resources for access and functional needs populations should be considered. In addition, mental health trained volunteers will be recommended for the reported population with psychosocial and mental health illnesses as well as for staff members.

2. **Consideration of backup power sources for residents that use medical equipment at home that requires electricity.** There are an estimated 45,500 households in the Tulsa County region that have at least one household member that utilizes medical equipment that requires electricity; however, it's estimated that 38,640 of those households do not have a backup power source. The recommendation would be to educate residents on the importance of identifying a safe, alternative power source including batteries, generators, chargers, etc.

3. **Provide education and resources on household disaster preparedness for Tulsa County residents.** In the Tulsa County region, many households reported feeling ill-prepared for a disaster. The recommendation is to provide education on disaster preparedness through community outreach. Examples of low cost ideas to build a supply kit including no cost preparedness measures such as establishing a designated meeting place and developing disaster plans should be provided.

4. **Include messaging about the importance of pet owners having evacuation plans for their pets when educating on disaster preparedness.** An estimated 41,671 residents would potentially not evacuate their homes over concern about leaving their pets. Messaging should be provided on how to include pets in household evacuation plans and encourage establishing pet friendly shelters during community preparedness planning.

5. **Disseminate notices and alerts through various media platforms to inform the community.** The CASPER showed that Tulsa County residents access information and news from a wide range of sources including, but not limited to; mobile devices, television, internet, and radio. The recommendation would be to ensure that information and news, like disaster alerts, intended for the public are accessible through a variety of sources. Education on information access will be included in outreach, for example, those who access news from a mobile device will be encouraged to have backup power for charging devices. Also, promoting the use of alternate forms of communication like a weather radio in the event of cell phone towers being damaged and cell phone service being interrupted.

6. **Encourage social connectedness within neighborhoods and communities.** Almost half (48.0%) of the households assessed did not agree that their neighborhood had a sense of community and some households reported not having the ability to call contacts for help. Messaging could be tailored to encourage social connectedness and the importance of building a sense of community within neighborhoods in Tulsa County.

Limitations

The time of day and the day of the week that the survey was being conducted could disproportionally select certain demographics such as age and socioeconomic status; therefore, introducing a bias and not obtaining a true cross-section of the entire population. In addition, even though interpretation services were available upon request, interpreters were not available during the initial door-to-door contact; hence, potentially resulting in a higher rate of loss to follow-up or underrepresentation of non-English speakers. Moreover, some of the randomly selected clusters for the assessment had such few households that not even seven households were accessible to attempt to conduct a survey thus limiting the number of surveys that could be obtained. Lastly, poor weather conditions and limited personnel restricted opportunity to conduct the surveys during the allotted time.

Conclusion

The Tulsa County CASPER successfully evaluated the preparedness of Tulsa County residents in the event of a disaster. The information gathered from the CASPER provides insight on how to improve the resiliency of Tulsa County residents by identifying gaps in emergency preparedness. The CASPER showed that the majority of the households assessed believe they are prepared for a disaster situation, but most lack basic preparedness tools to be resilient if faced with a disaster. This insight will influence future development of public health emergency plans and policies, as well as the focal points of education and outreach in order to improve the overall resiliency of Tulsa County.

Table 1. Questionnaire Response Rates – 2018 Tulsa County Household Preparedness CASPER

Questionnaire Response	Percent	Rate	Description
Completion Rate[1]	80.0	$\frac{168}{210}$	$\frac{\text{(Total completed)}}{210}$
Cooperation Rate[2]	60.0	$\frac{168}{280}$	$\frac{\text{(Total completed)}}{\text{(Total contact made)}}$
Contact Rate[3]	38.7	$\frac{168}{434}$	$\frac{\text{(Total completed)}}{\text{(Total selected)}}$

[1]Percent of surveys completed compared to the goal of 210.
[2]Percent of surveys completed compared to total number of contacted households that were eligible and willing to participate.
[3]Percent of surveys completed compared to all randomly selected households.

Table 2. Household (HH) Characteristics (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Structure				
Single Family	134	185,332	79.8	79.3
Mobile	1	8,058	0.6	3.4
Multi-Family Unit	31	37,987	18.5	16.3
Other	2	2302	1.2	1.0
Household Member Ages[1]				
Less Than 5	29	-	6.8	-
5-17	72	-	16.9	-
18-64	231	-	54.4	-
65+	91	-	21.4	-

[1]Estimate number of households and estimated percentage of households are not included because the information in this portion of the table represents individual household member's ages and is not indicative of the household overall.

Table 3. Household Most Common Mode of Transportation (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Household Owns Reliable Car	153	203,328	91.1	87.0
Has Access to Reliable Car[1]	6	13,814	3.6	5.9
Ride Share (Uber/Lyft)	4	5,525	2.4	2.4
Other	5	11,012	3.0	4.7

[1]Via friend/ neighbor/ non-household family member.

Table 4. Household Medical Conditions[1]

	Frequency	% of HH
Respiratory Issues	3	0.7
Diabetes	3	0.7
Developmental Disability	3	0.7
Autoimmune Disorder	3	0.7
Psychosocial/Mental illness	6	1.4
Cancer	3	0.7
HIV/AIDs	1	0.2
Seizures	3	0.7
High Blood Pressure	3	0.7
Impaired Vision	10	2.4
Impaired Hearing	1	0.2
Heart Disease	3	0.7
Dementia/Alzheimer	1	0.2
Physical Disability	3	0.7

[1]Estimate number of households and estimated percentage of households are not included because the information in the table represents individual household members and not the household overall.

Table 5. Household Powered Medical Equipment Needs (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Electricity Required for Medical Equipment				
Yes	29	45,546	12.3	19.5
No	139	188,133	82.7	80.5
Backup Power Source for Medical Equipment[1]				
Yes	1	1,151	4.0	2.8
No	23	38,640	92.0	94.4
Don't Know	1	1,151	4.0	2.8

[1]Households that require electricity for medical equipment.

Table 6. Household Travel Required Medical Needs (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Travel Required for Medical Care	5	12,662	3.0	5.5
No Travel Required for Medical Care	159	215,549	96.4	94.0
Don't Know	1	1,151	0.6	0.5
Type of Travel				
Self-Provided[1]	4	4,605	80.0	80.0
Other	1	1,151	20.0	20.0

[1]For those who require travel for medical care.

Table 7. Household Vaccination Rates (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Age-Appropriately Vaccinated				
Yes	158	219,770	94.1	94.0
No	8	11,607	4.8	5.0
Don't Know	2	2,302	1.2	1.0
If no, indicated reason:				
Personal Objection	3	3,453	42.9	37.5
Medical Reason(s)	1	1,151	14.3	12.5
Access	2	2,302	28.6	25.0
Other	2	2,302	28.6	25.0

Table 8. Household Preparedness (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Not Prepared	7	8,979	4.2	3.8
Somewhat Unprepared	20	27,608	12.0	11.8
Unsure	14	16,576	8.3	7.1
Somewhat Prepared	85	122,000	51.6	52.2
Very Prepared	40	56,213	23.8	24.1
Don't Know	2	2,303	1.2	1.0

Table 9. Household Preparedness Plans (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Communications Plan	95	138,366	56.6	59.2
Designated Meeting Place	65	93,817	38.7	40.1
Stored and Protected Copies of Important Documents	108	152,007	64.3	65.0
Multiple Evacuation Routes	100	145,599	59.5	62.3
Designated Area in Home for Shelter	145	204,287	86.3	87.4
None	7	10,053	4.2	4.3
Don't Know	1	1,151	0.6	0.5

Table 10. Household Emergency Supplies (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Emergency Supply Kit				
Yes	93	135,756	55.7	58.5
No	73	95,160	43.7	41.0
Don't Know	1	1,151	0.6	0.5
Refused	1	1,151	0.6	0.5
3-Day Supply of Drinking Water[1]				
Yes	81	110,010	48.2	52.4
No	86	122,519	51.2	47.1
Don't Know	1	1,151	0.6	0.5
7-Day Supply of Medication[2]				
Yes	121	171,768	72.0	73.5
No	12	15,809	7.1	6.8
Don't Know	3	4,317	1.8	1.8
3-Day Supply of Non-Perishable Food				
Yes	143	196,728	85.1	84.2
No	31	30,812	12.5	13.2
Don't Know	4	6,139	2.4	2.6

[1]One gallon per person per day.
[2]For household members who require prescribed medication.

Table 11. Household Food Accessibility during a Disaster (n=167)[1]

	Frequency	Estimate	% of HH	Estimated % of HH
Food Accessed Easily	157	215,088	94.0	93.1
Food Not Easily Accessed	7	11,991	4.2	5.2
Don't Know	3	3,914	1.8	1.7

[1]The number of households that answered this question was 167.

Table 12. Household Evacuation Plans (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Friend/Family/ 2nd Home	119	7,540	70.8	3.2
Hotel/ Motel	22	162,136	13.1	69.4
American Red Cross/ Community or Church Shelter	3	25,785	1.8	11.0
Would Not Evacuate	6	3,453	3.6	1.50
Don't Know	12	8,442	7.1	3.6
Other	5	1,612	3.0	0.7
Refused	1	1,151	0.6	0.5

Table 13. Household Reasons Preventing Evacuation (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Lack of Transportation	9	20,586	5.4	8.8
Concern About Leaving Property	20	26,284	11.9	11.2
Concern About Personal Safety	19	22,735	11.3	9.7
Concern About Leaving Pets	32	41,671	19.1	17.8
Health/Mobility Issues	8	16,576	4.8	7.1
Nowhere to Go	7	9,439	4.2	4.0
Inconvenient/Expensive	13	16,749	7.7	7.2
Concerns About traffic jams	21	26,361	12.5	11.3
Lack of Trust in Public Officials	5	13,986	3.0	6.0
Nothing Would Prevent from Evacuation	98	132,111	58.3	56.5
Don't Know	6	8,442	3.6	3.6
Other	5	7,290	3.0	3.1

Table 14. Household Pets (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Have Pets	94	126,375	56.0	54.1
Do Not Have Pets	74	107,304	44.1	45.9
Plans for Evacuation[1]				
Take them with you	89	120,619	94.7	95.4
Find safe place for pet(s) to go	1	1,151	1.1	0.9
Leave behind with food and water	3	3,453	3.2	2.7
Other	1	1,151	1.1	0.9

[1]For those who own pet(s).

Table 15. Household Information/News Access (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Cell Phone	150	203,404	89.3	87.0
Landline	36	47,407	21.4	20.3
Social Media	108	144,083	64.3	61.7
Other Internet Sources (excluding social media)	123	160,026	73.2	68.5
Radio	112	151,489	66.7	64.8
Television	143	187,519	85.1	80.2
Word of mouth	115	159,450	68.5	68.2
Local Newspaper	53	68,108	31.6	29.1
Other	1	1,151	0.6	0.5

**Table 16. Household's Neighborhood Sense of Community (n=168)**

	Frequency	Estimate	% of HH	Estimated % of HH
Strongly Disagree	12	15,598	7.1	6.7
Disagree	15	27,493	8.9	11.8
Neutral	39	49,537	23.2	21.2
Agree	47	71,830	28.0	30.7
Strongly Agree	40	51,091	23.8	21.9
Don't Know	15	18,130	8.9	7.8

Table 17. Household Ability to Call Contacts For Help (n=168)

	Frequency	Estimate	% of HH	Estimated % of HH
Strongly Disagree	4	11,511	2.4	4.9
Disagree	2	2,302	1.2	1.0
Neutral	3	3,914	1.8	1.7
Agree	57	76,186	33.9	32.6
Strongly Agree	100	137,464	59.5	58.8
Don't Know	2	2,302	1.2	1.0

Figure 1

CASPER Sampling
Census Blocks
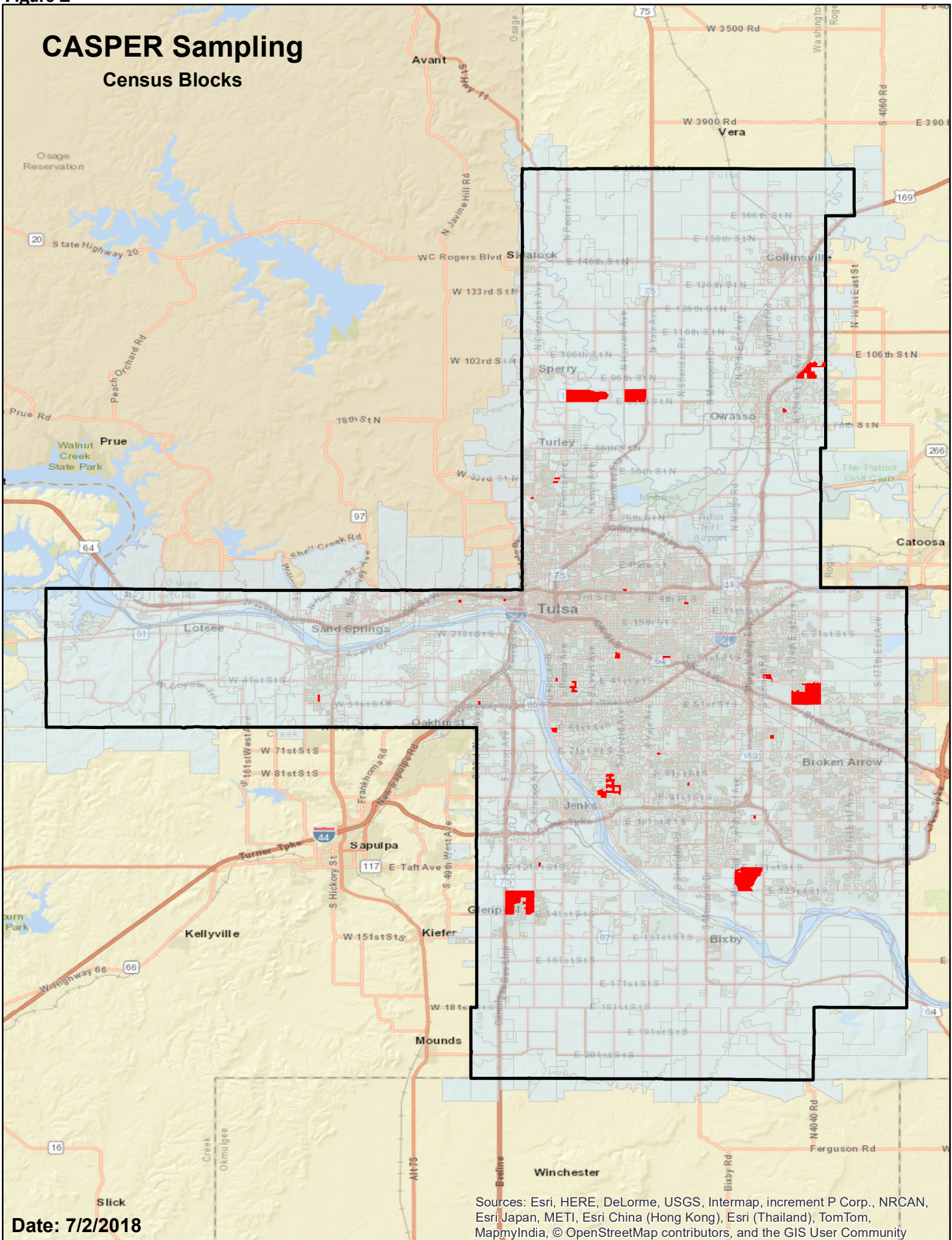
Date: 7/2/2018

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Figure 2

CASPER questionnaire

Q1. Date_____/_____/_____   Q2. Cluster number_____   Q3. Survey number_____   Q4. County name: *Tulsa*

Q5. Team name_____   Q6. Type of structure: ❏ Single family ❏ Mobile home ❏ Multi family units ❏ Other_____

Q7. How many people live and sleep in this home the majority of the time?

_____

Q8. How many people living in your household are:

Less than 5 years? _____
5–17 Years old? _____
18–64 Years old? _____
65 Years and older?_____
❏ Don't know
❏ Refused

Healthcare

Q9. Have you or a member of your household ever been told by a healthcare professional that he/she has (if yes, how many?)

___Respiratory issues
___Diabetes
___Developmental disability
___Autoimmune Disorder
___Psychosocial/Mental illness
___Cancer
___HIV/AIDs
___Seizures
___High blood pressure
___Impaired vision
___Impaired hearing
___Heart disease
___Dementia/alzheimers
___Physical disability
___Other_____
___Don't know
___Refused

Q10. To the best of your knowledge, is everyone in your household age-appropriately vaccinated?

❏ Yes
❏ No: Why Not? (check all that apply)
  ❏ Personal objection
  ❏ Religious exemption
  ❏ Medical reasons
  ❏ Cost
  ❏ Access
  ❏ Other_____
  ❏ Don't know
  ❏ Refused
❏ Don't know
❏ Refused

Q11. Do you or someone in your household require medical equipment that requires electricity

❏ Yes: Do you have a backup power source?
  ❏ Yes
  ❏ No
  ❏ Don't know
  ❏ Refused
❏ No
❏ Don't know
❏ Refused

Q12. Do you or someone in your household regularly travel to obtain medical care such as for dialysis, chemo, etc.?

❏ Yes: It is...
  ❏ Self-provided
  ❏ External transportation such as Tulsa Transit or paratransit
  ❏ Friend/family
  ❏ Ride sharing such as Uber or Lyft
  ❏ Other_____
  ❏ Don't know
  ❏ Refused
❏ No
❏ Don't know
❏ Refused

Emergency and Evacuation Plans

Q13. Does your household have any of the following emergency plans (check all that apply)?

❏ Emergency communication plan such as a list of numbers and designated out of town contacts
❏ Designated meeting place immediately outside your home or close by in your neighborhood
❏ Copies of important documents in a water proof container or stored online such as in the cloud or other digital format
❏ Multiple routes away from your home in case evacuation is necessary
❏ Designated area in your home to shelter in place (eg interior wall, tornado shelter, etc.)
❏ None
❏ Don't know
❏ Refused

Q14. How prepared do you think your family would be in a disaster such as a tornado, ice storm, etc. (check one)?

❏ Not prepared
❏ Somewhat unprepared
❏ Unsure
❏ Somewhat prepared
❏ Very prepared
❏ Don't know
❏ Refused

Q15. Does your household have an emergency supply kit with supplies like water, first aid, food, flashlights, and extra batteries that are kept in a designated place in your home?

❏ Yes
❏ No
❏ Don't know
❏ Refused

Q16. Does your household have an adequate amount of stored drinking water (bottled water or jugs of water) for 3 days (1 gallon/person/day. A family of 4 would need 36 gallons of water)?

❏ Yes
❏ No
❏ Don't know
❏ Refused

Q17. Does your household currently have a 7 day supply of medication for each person who takes prescribed meds?

❏ Yes
❏ No–don't have
❏ Don't know
❏ Refused
❏ No–don't need

Q18. Does your household have non-perishable food items (e.g. Granola bars, nuts, canned foods) for 3 days?

❏ Yes
❏ No
❏ Don't know
❏ Refused

Q19. In the event of a disaster, would your household be able to easily access food?

❏ Yes
❏ No
❏ Don't know
❏ Refused

14.06 9-2018

Q20. If your household had to evacuate due to a large scale disaster or emergency, where would members of your household go?
- ❏ Friends/family/2nd home outside your area
- ❏ Hotel or motel
- ❏ American Red Cross/community/
  church shelter
- ❏ Would not evacuate
- ❏ Don't know
- ❏ Other_____
- ❏ Refused

Q21. What are the top three reasons that might prevent you and your household from evacuating if asked to do so? (check only 3 options)
- ❏ Lack of transportation
- ❏ Concern about leaving property
- ❏ Concern about personal safety
- ❏ Concern about leaving pets
- ❏ Health/mobility issues
- ❏ Nowhere to go
- ❏ Inconvienent/expensive
- ❏ Concern about traffic jams
- ❏ Lack of trust in public officials
- ❏ Nothing would prevent me from evacuating
- ❏ Don't know
- ❏ Other _____
- ❏ Refused

Q22. Do you have pet(s) in your household?
- ❏ Yes
- ❏ No
- ❏ Don't know
- ❏ Refused

If yes, if your household was asked to evacuate due to a large scale disaster or emergency, what would you do with your pet(s)? (excluding livestock)
- ❏ Take it/them with you
- ❏ Find a safe place for pet(s) to go
- ❏ Leave behind with food/water
- ❏ Would not evacuate because of pets
- ❏ Don't know
- ❏ Other _____
- ❏ Refused

Q23. How does your household access information/news? (Check all that apply)
- ❏ Cell phone
- ❏ Landline
- ❏ Social media (facebook, twitter, etc.)
- ❏ Other internet (excluding social media)
- ❏ Radio
- ❏ Television
- ❏ Word of mouth
- ❏ Local newspaper
- ❏ Don't know
- ❏ Other _____
- ❏ Refused

Social Connectedness

Q24. My neighborhood has a strong sense of community.
- ❏ Strongly disagree
- ❏ Disagree
- ❏ Neutral
- ❏ Agree
- ❏ Strongly agree
- ❏ Don't know
- ❏ Refused

Q25. My household has people we can call when we need help.
- ❏ Strongly disagree
- ❏ Disagree
- ❏ Neutral
- ❏ Agree
- ❏ Strongly agree
- ❏ Don't know
- ❏ Refused

Demographics

Q26. What is your most common mode of transportation?
- ❏ My household owns a reliable car
- ❏ I have access to a reliable car
  (friend/neighbor/non-household
  family member car)
- ❏ Bus
- ❏ Bike
- ❏ Walk
- ❏ Ride share such as Uber or Lyft
- ❏ Other_____
- ❏ Don't know
- ❏ Refused

Q27. Please indicate below the services that you were aware of that the Tulsa Health Department provides: (check all that apply)
- ❏ Restaurant Inspections
- ❏ Food Classes and Permits
- ❏ Testing and Immunizations
- ❏ Maternal and Child Health Services
- ❏ Free Cooking Classes
- ❏ School Health Programs
- ❏ Pest Control Programs
- ❏ Environmental Water Lab
- ❏ Teen Pregnancy Prevention
- ❏ Housing and Lodging Inspections
- ❏ Emergency Preparedness and
  Response Planning
- ❏ Disease Investigation

Q28. What is your household's greatest need in order to be prepared for an emergency?

_____

_____

_____

_____

_____