

EXAMINATION OF CENTRAL TEXAS 2-1-1 CALLS: WINTER STORM URI

MAY 2021

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ABOUT MEASURE

MEASURE, an Austin-based nonprofit, works to empower people impacted by social disparities and the accompanying narrative. MEASURE believes that, when used strategically, data provides a common language upon which community members can meet and increase their knowledge about the causes of inequities and work together to create equitable change and increase awareness.

PURPOSE

MEASURE wants to understand the impact of Winter Storm Uri, what communities and neighborhoods were most affected, and what types of needs communities had during the winter storm. This data is intended to help create equitable future disaster preparedness. Sources date the winter storm starting February 11, 2021 through February 17, 2021. [1]

DATA COLLECTION

2-1-1 Texas is a free, anonymous social service hotline available 24 hours a day, 7 days a week, 365 days a year that connects people to resources. 2-1-1 provided a dataset with calls made from January 1, 2021 through March 3, 2021. This dataset helps to provide information on changes in the needs in the 5-county Central Texas region, including Travis, Williamson, Caldwell, Hays, and Burnet counties during Winter Storm Uri. The dataset had 26,365 calls.

DATA ANALYSIS

To conduct our analysis, we first calculated the pre-storm average weekly call volume and the weekly call volume during the week of Winter Storm Uri. Then, we segmented that data by Level 2 data needs (as categorized in the 211 data) and mapped that data by zip code. In the zip code-level view, we considered zip code population and calculated call volume per 1000 residents to remove population weighting in the data. We then filtered the zip code data by need-type to identify which zip codes had the greatest need by need-type. Finally, we calculated whether zip codes had their call volume increase or decrease during the winter storm.

Sources

1. Salinas, R., Blake, K., & Spivey, S. (2021, March 1). Timeline: How the historic winter storm, Texas blackout cold-stunned the San Antonio area. KSAT. <https://www.ksat.com/news/local/2021/02/25/timeline-how-the-historic-winter-storm-texas-blackout-cold-stunned-the-san-antonio-area/>.
2. Texas Health And Human Services Commission. (2021, March 2). About 2-1-1 Texas and our Organization: 2-1-1 Texas. About 2-1-1 Texas and Our Organization. <https://www.211texas.org/about-2-1-1/>.

LIVED- EXPERIENCE DATA & STORYTELLING

This lived-experience data was gathered by observing and recording the comments on a post with the permission from the responder. Comments were collected after a MEASURE researchers ask a the question about "how the storm is still impacting you" in a Facebook group where the target population were women of color. The 2 women who responded are recorded in this section.



"My home is fine but my children are still suffering. My three year old is more afraid of the dark and is concerned about using too much power so that it does not go out. "

- **Black Female, 42**

"My son and I have been in a hotel since March waiting for repairs to be completed on our apartment as a result of the storm. "

- **Black Female, 32**

- **Black Male, 5**

our experience
makes us

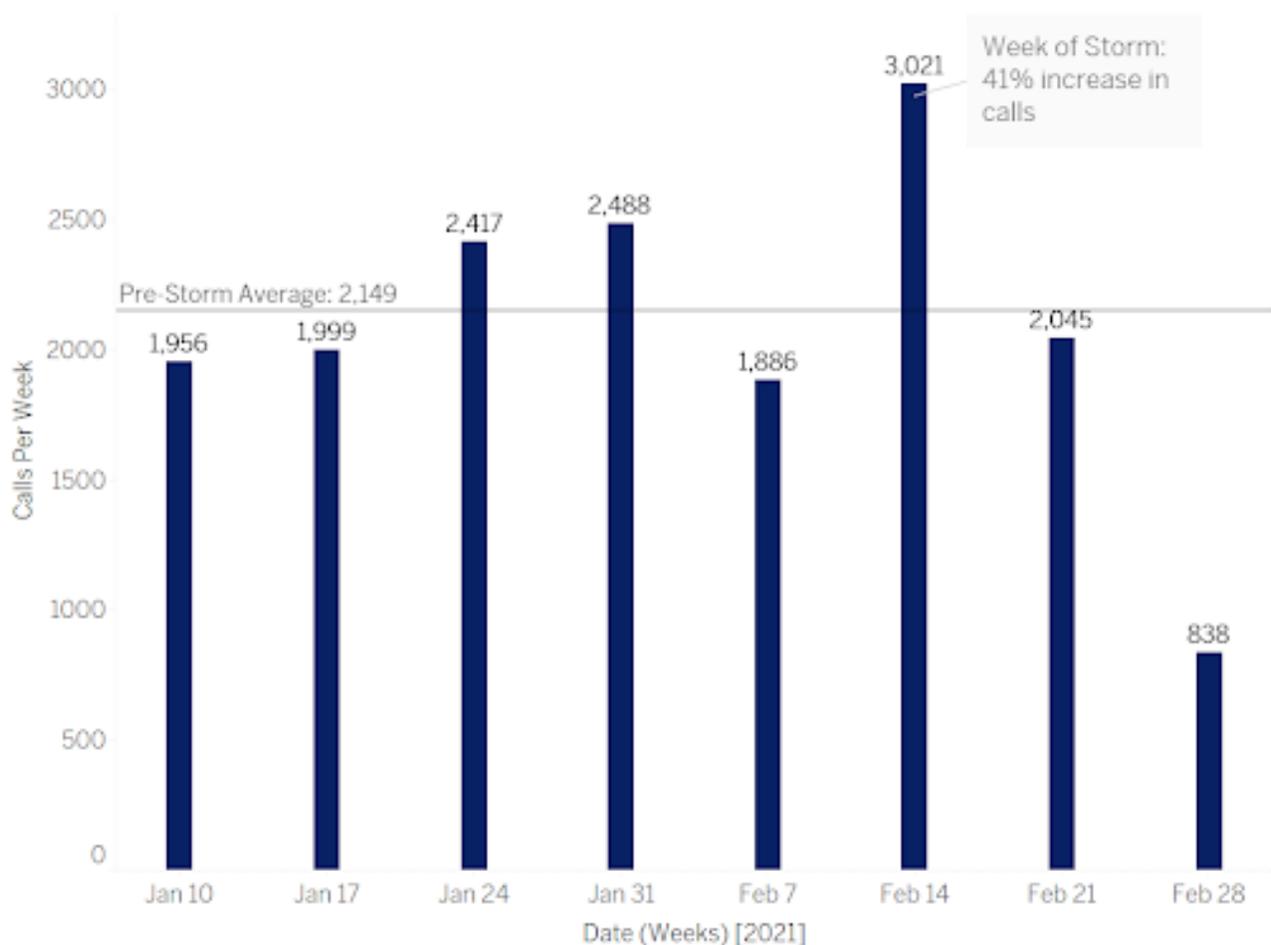
EXPERTS

BASELINE COMPARISON: 2,149 AVERAGE CALLS PER WEEK

During the week of Winter Storm Uri, 211 calls increased by 41% versus the pre-storm period, indicating a notable need for services from across the Austin area. A day-by-day analysis shows that the increases occurred on February 16-18. This suggests that **Austin-area residents didn't use 211 as much in the first few days of the storm.** The cause of this is unknown but could be because residents were trying to “wait out” the storm or because they didn't have access to phone lines to make calls. Pre-storm dates: January 11-Feb 12, 2021. Storm dates: Feb 13-Feb 21, 2021

Figure 1. Weekly Call Volume Before and After Winter Storm Uri

Calls Per Week



TYPES OF NEEDS DURING WINTER STORM URI

During the days of the winter storm, disaster services, food, and housing/shelter were the top needs following the storm and power outages. Disaster services includes calls for access to warming centers and emergency food needs.

Figure 2. Top 5 Call Needs Before Winter Storm Uri

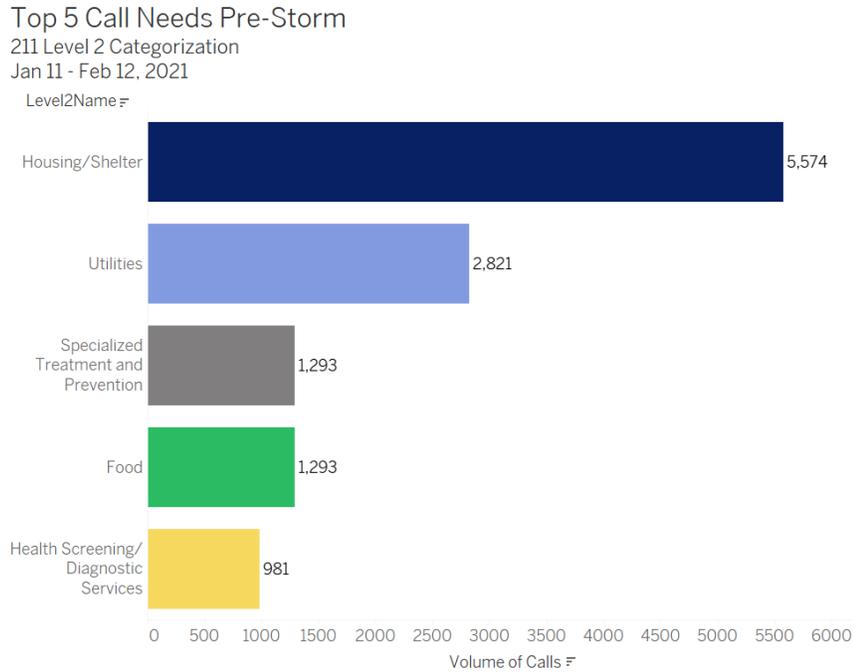
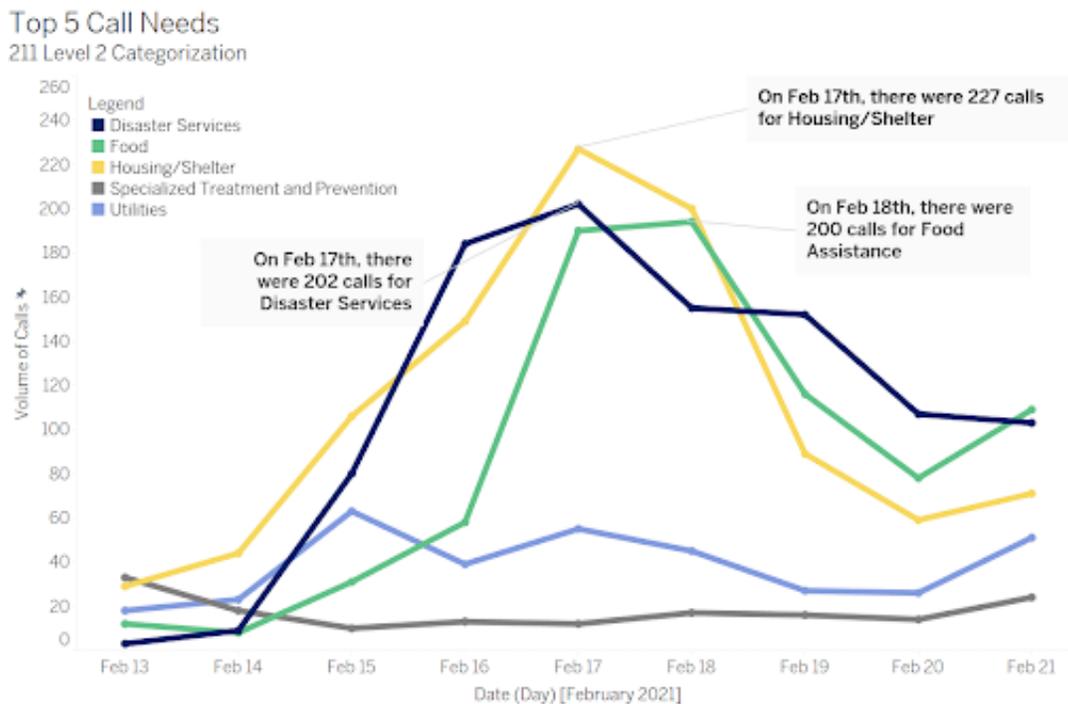


Figure 3. Top 5 Call Needs During Winter Storm Uri

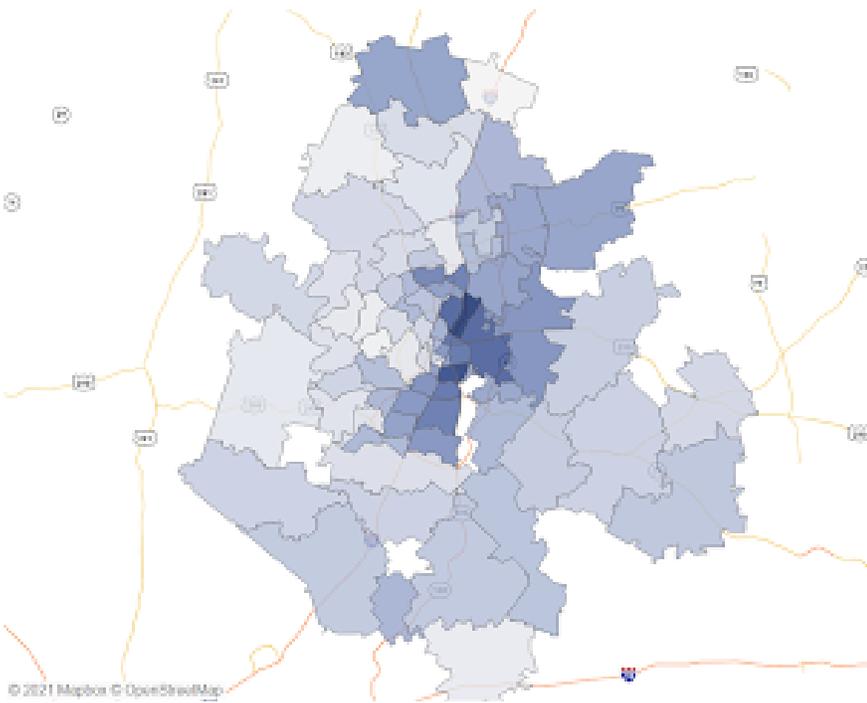


ZIP CODE ANALYSIS

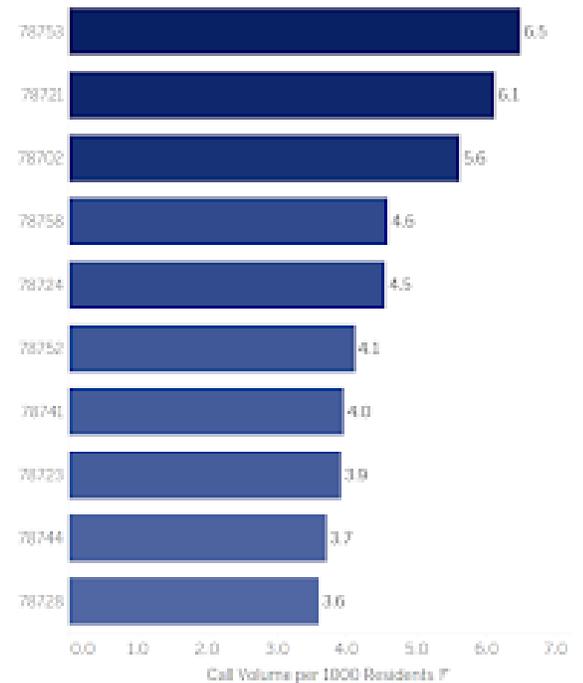
Housing/Shelter: North Central Austin and Far Northeast Austin Had the greatest call volume per capita for housing and shelter. East Austin had the greatest call volume per capita for food and Northeast Austin and South Central Austin had the greatest call volume for overall Disaster Services, per capita.

Figure 4. Geographic Map of Call Needs During Winter Storm Uri

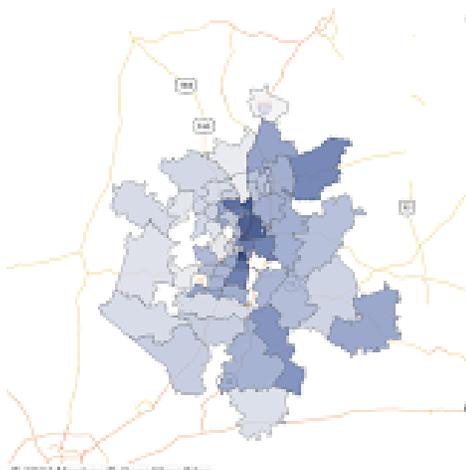
Map of Call Volume by Zip Per 1000 Residents
Feb 13-Feb 21, 2021



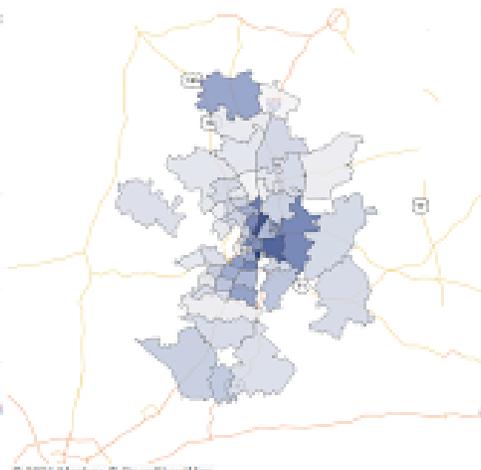
Call Volume per 1000 Residents by Zip Top 10
Feb 13-Feb 21, 2021



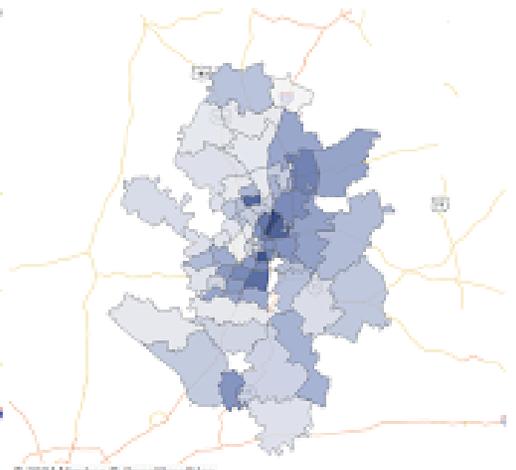
Map of Housing Call Volume by Zip Per 1000 Residents
Feb 13-Feb 21, 2021



Map of Food Call Volume by Zip Per 1000 Residents
Feb 13-Feb 21, 2021



Map of Disaster Services Call Volume by Zip Per 1000 Residents
Feb 13-Feb 21, 2021



AVERAGE WEEKLY CALL VOLUME BY ZIP CODE

When looking at changes in geographic call volumes, 2-1-1 calls increased in some Austin area zip codes, while other zip codes saw a decrease during the storm. It is not clear why these variations may have occurred.

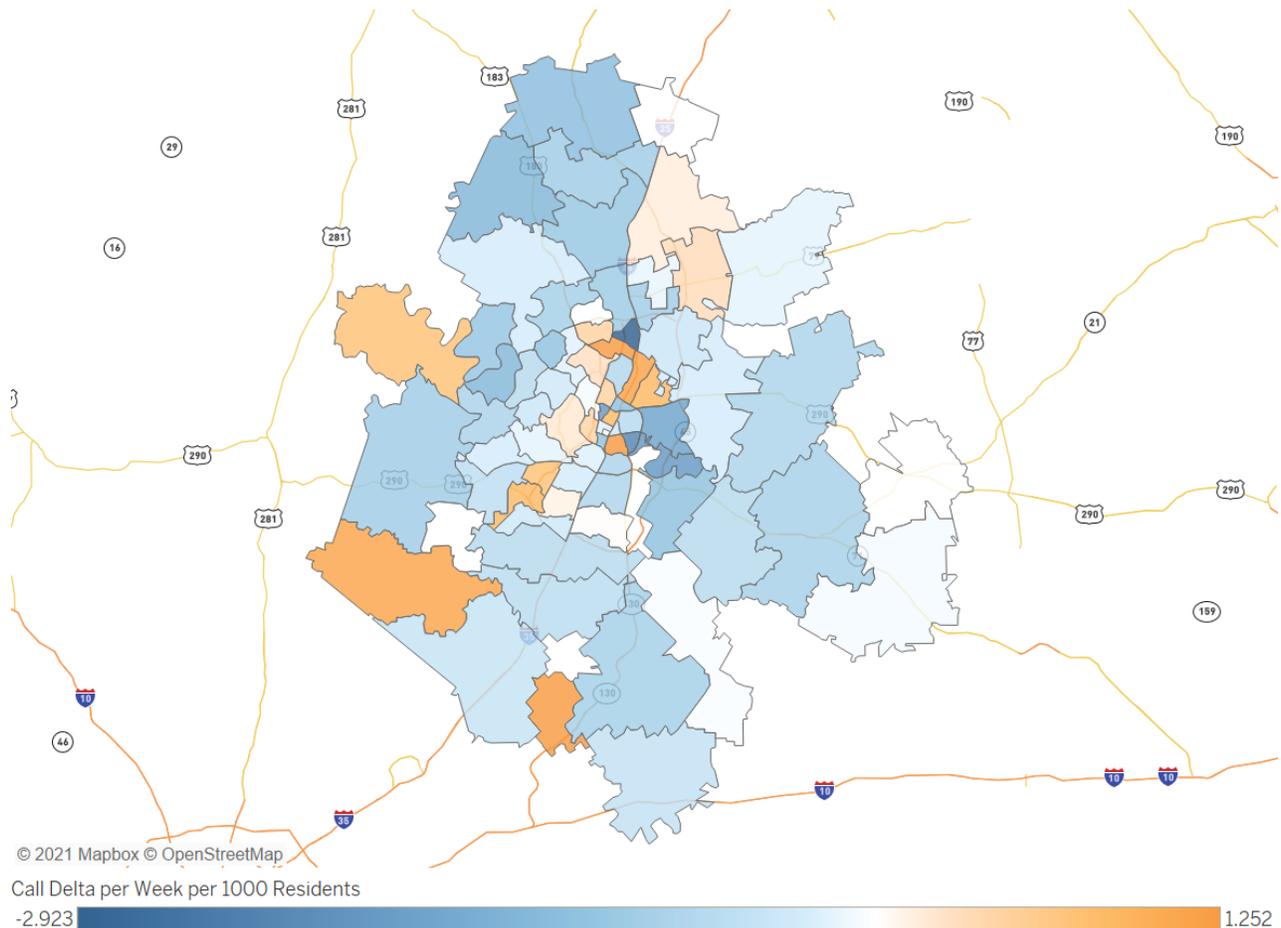
Figure 5. Geographical Changes in Call Volume by Zip Code

Average Weekly Call Difference During Winter Storm Uri by Zip Code per 1000 Residents

Orange means the zip code had more calls than usual during the week of winter storm Uri. Blue means the zip code had fewer calls than usual.

Pre-storm dates: January 11-Feb 12, 2021

Storm dates: Feb 13-Feb 21, 2021



CONCLUSION/OUR EXPERIENCE MUST INFORM CHANGE

This data suggests that there were deep needs across all of the Austin areas during storm Uri. However, it is also clear that the east side of the city experienced greater needs during the storm, in housing, food, and water. This reinforces observed and anecdotal conclusions drawn from people experiencing the storm and in public reporting. This data points to a concerning reality for many east austinites. The need for housing, food, and water was documented as higher in east Austin in the 2-1-1 call data. This parallels a clear history of disproportionately low infrastructure investment in east Austin.

Using this 2-1-1 data can help identify areas of the city where greater preparation can be targeted for city resources to support community members in need.

