INTRODUCTION AND FINDINGS

Introduction
In early April 2020, the City of Austin Office of Sustainability reached out to Dell Medical School and UTHealth School of Public Health in Austin for assistance in identifying areas where there are unmet food needs in Austin pertaining to COVID-19. The team from the UTHealth School of Public Health analyzed 2-1-1 call data from January-July 2019 and January-July 2020 and performed geospatial analyses with 2-1-1 call data and access to food need assets to identify areas with unmet food needs related to COVID-19 in Travis County that was presented in previous reports. This work expands on those reports and analyzes August 2020 data. Through these analyses we were able to gain greater understanding of food needs among 2-1-1 callers from Travis County as well as identify areas with high volume and percentage of food need calls with limited access to food assets.

Demographics of Callers
According to the 2019 2-1-1 Trends Report from the United Way for Greater Austin, a typical caller to 2-1-1 are single mothers who are having issues with economic and food insecurity factors. The findings of from our 2020 analysis validated these findings, in that callers to 2-1-1 are most commonly women, primarily speak English or Spanish, and have called 2-1-1 previously (but there was an increase in first time users in April 2020). There is higher call volume to 2-1-1 in the Eastern Crescent of Travis County. Many of the zip codes that make up the Eastern Crescent of Travis County have higher poverty rates, have a lower median income, and are predominantly racial/ethnic minority, according to 2018 American Community Survey data as shown in Figure 1.
Figure 1: Demographics of Travis County by Zip Code Using 2018 American Community Survey Data
Overall and Food Need 2-1-1 Call Trends

In order to contextualize the seasonality and trends of 2-1-1 call data, we compared January-August 2019 call data to January-August 2020 call data. Typically call volume is high in January, then fluctuates to peak in July and reduces slightly in August, as evident in the 2019 data. However, the following occurred in August 2020:

- Decreased overall call volume in August 2020 than in 2019 (6014 vs. 6387 calls).
- There was a decrease in overall call volume from July (7008 calls) to August 2020 (6014).
- There was over 1.34 times the food need call volume in August 2020 than in 2019 (1927 vs. 1441 calls).
- There was a decline in food need call volume from July (2140 food calls) to August 2020 (1927 food calls).
- The majority of calls to 2-1-1 in August 2020 were regarding food, housing, and health/mental health issues, which was also the case in March-June 2020.
- Connectatx.org had 2034 page visits during August 2020, however what pages the user visited and the location of the determined cannot be determined at this time.

When analyzing by week as seen in Figure 2 of note:

- For a detailed discussion of the call trends for March-July 2020, please see the previously developed March/April, May, June, and July Reports.
- Overall call volume declined week to week from 7/18-8/22, and then increased during the week of 8/23.
- Food need call volume increased weekly 7/18-8/15, but then declined weekly through the end of the month.
Overall and Food Need 2-1-1 Call Trends Continued

- While it appears that call volume dramatically decreased the week of 8/30, that is only because that week consisted of only two days.
- Overall and food need call volume throughout August, are still higher than they were in early March, prior to the COVID-19 outbreak.
- Additional analysis of fall 2020 data could help shed light on how food needs are being experienced by Travis County residents during the continued COVID-19 pandemic.

Figure 2: Overall and Food Need 2-1-1 Calls in Travis County from March-August 2020 by Week
Spatial Examination of Food Need 2-1-1 Calls – August 2020

Spatial analysis of the 2-1-1 overall and food call data for Travis County required translating the 2-1-1 call data from August 2020 to be mapped by zip code and including locations of COVID-19 food assets that were listed on ConnectATX.org that were located in Travis County and open during the respective month. With this analysis there were several key trends:

- The majority of callers to 2-1-1 (overall and for food needs) were from zip codes located in the Eastern Crescent of Travis County.
- Areas with the highest proportion of their calls regarding food needs in August and locations of COVID-19 food assets are shown in Figure 3.
- There were fewer zip codes from Travis County that had residents who called 2-1-1 in August than in July.
- There was an increase in the number of zip codes that had over 30% of the calls to 2-1-1 were regarding food needs in from July (37.70%) to August (54.10%), however this was still a lower percentage than May 2020 (78.57%).
- There are pockets throughout Travis County that do not have COVID-19 food assets located within the zip code. These pockets located within the Eastern Crescent are particularly alarming given the high call volume to 2-1-1 and the historically underserved communities in these areas.
- This large increase in the number of zip codes that had over 30% of the calls to 2-1-1 regarding food needs demonstrates that food needs are still a consistent issue for Travis County residents during the COVID-19 pandemic.
Figure 3: Percent of Food Need Calls to 2-1-1 by Zip Code and COVID-19 Food Needs Assets in Travis County in August 2020
Conclusion and Recommendations

Given our analysis, zip codes with potential unmet food needs have been identified. Consistent with the previous reports, there are a couple of key zip codes of interest as areas with unmet food needs, specifically: 78754 and 78747. Both of these zip codes are located in the Eastern Crescent and are zip codes that had a high overall and food need call volume to 2-1-1 in March through August 2020, and no food assets located within the zip code as of August 2020. As of the end of September, a local non-profit will be adding emergency food delivery to the 78747 zip code. The impact of the strategic placement of this asset could potentially be measured by analyzing October 2-1-1 call data. Also, while there is one asset that was open in the 78757 zip code, this could be another zip code with unmet food needs due to their high food need call volume and the increase in the proportion of food need calls in August 2020. Future work should examine if this area needs additional emergency food resources in order to meet unmet food needs.

While there are other zip codes with a high proportion of food needs calls within zip code outside of the Eastern Crescent of Travis County, these areas have a relatively small total call volume, thus future analysis should be conducted to further examine these trends. Furthermore, the greatest call volume of food needs calls to 2-1-1 exists in other zip codes in the Eastern Crescent that do have food needs assets located within the zip code. These resources should not be shifted or removed given the high need in these areas. Continued analysis of 2-1-1 call data in fall 2020 can help further identify call trends and areas with unmet food needs during the COVID-19 pandemic.

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