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-May 2019 and January-May 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 June 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

Legend

2018 Poverty Rate Over 15%
- Poverty Rate Over 15%

Racial/Ethnic Majority of Zip Code
- Predominantly Non-White Zip Code

2018 Income Under $70K
- No Calls from Zip Code
- Median Income Over $70,000
- Median Income Under $70,000

0 2.5 5 10 15 20 Miles
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-May 2019 call data to January-May 2020 call data. Typically call volume is highest in January, then fluctuates slightly from April to June, as evident in the 2019 data. However, the following occurred in June 2020:

- Increased overall call volume in June 2020 than in 2019 (6763 vs. 5742 calls).
- There was over 1.5 times the food need call volume in June 2020 than in 2019 (2147 vs. 1425 calls).
- There was a decline in overall and food need call volume from May (7141 calls and 2846 food calls) to June 2020 (6763 calls and 2147 food calls).
- The majority of calls to 2-1-1 in June 2020 were regarding health/mental health, food, and housing issues, which was also the case in March-May 2020.

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

- For a detailed discussion of the call trends for March-May 2020, please see the previously developed March/April and May Reports.
- Unlike previously identified trends, June by week call data departed in the following ways:
  - Overall call volume declined week to week from 5/3-5/30, however call volume increases slightly from 5/31-6/6, dips a bit 6/7-6/13, and then increases from 6/14-6/27*.
  - *Note - the call volume appears to drop dramatically as of 6/28, however that only demonstrates 3 days (rather than 7 days) of data, thus a more accurate analysis will be presented in the July Report.
  - Unlike the overall call volume data, food need call data decreased week to week throughout the month of June.
Overall and Food Need 2-1-1 Call Trends Continued

- This difference between rising overall call volume and falling food need call volume is likely due to the extension of stay at home orders and the rise in COVID-19 cases in Travis County during this time period.
- Additionally, the decline in food need calls to 2-1-1 could be the result of previous callers are now utilizing the open resources and thus do not need to call 2-1-1 back for this information, however more data are needed to determine the accuracy of that hypothesis.

Figure 2: Overall and Food Need 2-1-1 Calls in Travis County from March-June 2020 by Week
Spatial Examination of Food Need 2-1-1 Calls – June 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 June 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 months. 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 June and locations of COVID-19 food assets are shown in Figure 3.
- There were more zip codes in Travis County that had residents that called 2-1-1 in June 2020 than in May 2020.
- Departing from the maps presented previously in that there was a reduction in the number of zip codes that had over 30% of the calls to 2-1-1 were regarding food needs in June 2020 (32.76% in June vs. 78.57% in May 2020).
- Additionally, there were more zip codes in June 2020 that had no calls to 2-1-1 regarding food needs than in March-May 2020.
- This decreased proportion of food need calls by zip code in June 2020 could be due to the greater health/mental health call volume due to the rising number of COVID-19 cases in Travis County in June 2020.
- 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.
Figure 3: Percent of Food Need Calls to 2-1-1 by Zip Code and COVID-19 Food Needs Assets in Travis County in June 2020

Legend
- Locations of Food Assets Open in June 2020
- Travis County
  - No Calls to 2-1-1 in June 2020
  - % Food Need Calls (within zip)
    - 0.00%
    - 0.01-15.00%
    - 15.01-30.00%
    - 30.01-45.00%
    - 45.01-60.00%
    - 60.01%+
Conclusion and Recommendations

Given our analysis, zip codes with potential unmet food needs have been identified. 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 June 2020. Additionally, there are COVID-19 food assets only located in neighboring and not within the zip code as of June 2020. 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 July and August 2020 can help further identify call trends and areas with unmet food needs and can help elucidate whether these unique findings for June 2020 were the byproduct of an increase in health/mental health calls to 2-1-1 due to the rising number of COVID-19 cases during that month or due to reduced need.

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