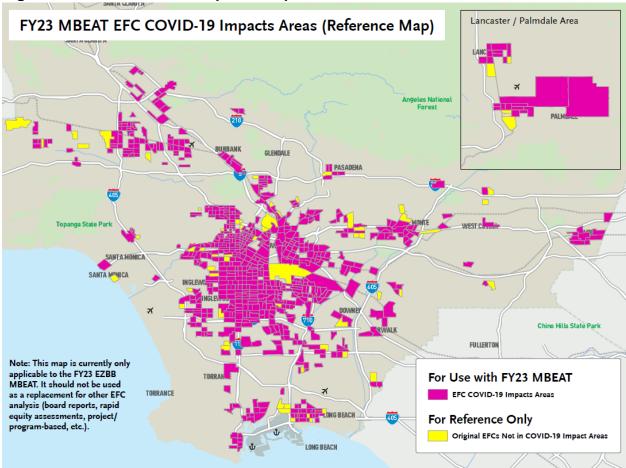
#### Timeline and Maps

The 2022 EFC Update data analysis was completed between August 2021 and April 2022. Over the course of these nine months, staff created two products: (1) an EFC Covid-19 Impacts map and (2) a final 2022 EFC Update Map. Each map required different considerations and data analysis, summarized below.

#### EFC COVID-19 Impacts Data Analysis

As part of the 2022 EFC Update, between December 2021 and January 2022, staff from the Office of Equity and Race (OER) developed an interim EFC COVID-19 Impacts map (Figure 1). The census tracts identified as "EFC COVID-19 Impacts Areas" (shown in pink in Figure 1) overlapped with 91% of Original EFC census tracts. The map was used in the FY23 budget process' Metro Budget Equity Assessment Tool (MBEAT).



# Figure 1 – EFC COVID-19 Impacts Map

### Data Utilized

Due to a pandemic-related delay in data availability, the EFC COVID-19 Impacts data analysis used older American Community Survey 2015-2019 (ACS 2015-2019) data,

available as of December 2020, to update the Original EFCs, defined by income (Table B19001), race/ethnicity (Table B03002), and vehicle ownership (Table B08201). The analysis also combined additional indicators and data from several other sources:

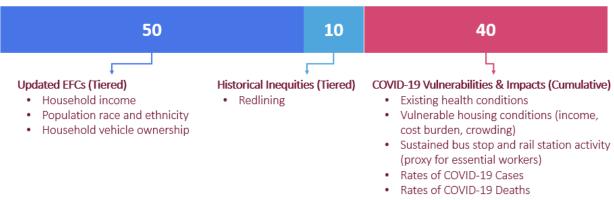
- Home Owners Loan Corporation maps showing grading system scores for areas of Los Angeles County (1939);
- Centers for Disease Control (CDC) Population Level Analysis and Community Estimates (PLACES) data for rates of underlying health conditions at the census tract level (2020);
- ACS 2015-2019 census tract data on household overcrowding (Table B5014), household income (Table S1901), and renter and owner housing cost burden (Tables B25070 and B25091), to identify census tracts with high concentrations of vulnerable housing conditions;
- Rail and bus stop activity data from LA Metro (2019-2021) to assess sustained transit activity and proxy presence of essential workers; and
- Rates of cumulative COVID-19 Cases and Deaths at the census tract level from the start of the pandemic through December 2021, from LA County, Pasadena, and Long Beach departments of public health.

# Analysis and Findings

While ACS 2012-2016 data, used to identify the Original EFC census tracts in 2019, resulted in 30 percent of the Los Angeles County population being identified as living in a low-income census tract (where 40% of households earned less than \$35,000 annually), the ACS 2015-2019 data saw a reduction of that share of the population to less than 18 percent. In an effort to meet the 30 percent share of LA County population in EFCs, staff increased the household income threshold to less than \$40,000 annually, which resulted in identification of census tracts that encompassed 28 percent of the county population.

Historical inequities and COVID-19 vulnerability & health impacts indicators were combined with EFC indicators, creating an index scoring methodology that assigned a score to each census tract based on three categories (Figure 2). Census tracts that met the updated EFC thresholds received 50 points; those that were Original EFCs and no longer met the thresholds received 30 points. Census tracts that were previously redlined and currently met EFC thresholds were assigned 10 points, while previously redlined tracts that did not meet current EFC thresholds were assigned 5 points. Lastly, census tracts were assigned a combined score between 0 to 40 points, depending on the scores for each individual indicator outlined in Figure 2.





# Application

The EFC COVID-19 Impacts map was used in the FY23 MBEAT to track FY23 investments in COVID-19 impacted areas. Staff will begin analysis after approval of the FY23 Metro Budget.

### 2022 EFC Update Map Data Analysis

### Data Utilized

The final 2022 EFC Update Map includes only the three factors from the Original EFC definition (household income, race/ethnicity, and vehicle ownership) and uses ACS 2016-2020 data (tables identified above), available as of March 2022.

#### Analysis and Findings

In order to create an index that is flexible and easy to change over time while maintaining the use of the priority factors of low-income, BIPOC, and zero-car households, staff created a percentile-based index. The percentile score allows for the grouping of each census tract into tiers so that various levels of need can be identified for different equity planning purposes. Furthermore, it allows one to normalize for income when considering additional variables and aligns with other equity indices such as California's Office of Environmental Health Hazard Assessment's *CalEnviroscreen*<sup>1</sup> and the Public Health Alliance of Southern California's *Healthy Places Index*.<sup>2</sup>

The consultant team calculated and removed outlier data in two steps:

- Eliminated census tracts with low population numbers that may skew the results<sup>3</sup>
  - Removed census tracts in LA County with a population of 1500 or less
    - The average census tract population in LA County is 4,020

<sup>&</sup>lt;sup>1</sup> <u>https://oehha.ca.gov/calenviroscreen</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.healthyplacesindex.org/</u>

<sup>&</sup>lt;sup>3</sup> The Healthy Places Index also follows a similar methodology to eliminate outliers. https://www.healthyplacesindex.org/

- o Removed census tracts with less than 100 households
  - The average number of households in a census tract in LA County is 1,369

The consultant team then calculated percentile rankings for each of the three indicators and thresholds, then combined these into a final EFC percentile ranking that could be divided into five equity tiers:

- Very High Need Above 80<sup>th</sup> percentile
- High Need 60<sup>th</sup> to 79<sup>th</sup> percentile
- Moderate Need 40<sup>th</sup> to 59<sup>th</sup> percentile
- Low Need 20<sup>th</sup> to 39<sup>th</sup> percentile
- Very Low Need below 20<sup>th</sup> percentile

One notable change is the decision to increase the income threshold from "less than \$35,000" to "less than \$60,000." This better aligns the EFC with Metro's other programs which are using the California Dept of Housing and Community Development's definition of "very low income" being \$59,100 household income for a family of four.<sup>4</sup> The resulting map is shown in Figure 3 and the household and population characteristics of census tracts in each tier are summarized in Table 1.

Equity Tier	Population	Households	Low Income Households	BIPOC Population	Zero Vehicle Households
Very High	1,900,280	570,319	347,495	1,771,969	105,564
High	2,131,122	682,121	339,075	1,814,469	81,798
Moderate	2,072,962	686,858	268,137	1,591,754	51,567
Low	1,826,317	642,768	194,558	1,236,540	32,847
Very Low	2,026,834	728,717	151,466	971,795	18,564
Total*	9,957,515	3,310,783	1,300,731	7,386,527	290,340

### Table 1. Household and Population Characteristics of Equity Tiers

### Application

The 2022 EFC Update will use the "Very High Need" and "High Need" tiers (top 40% of census tracts) to identify EFCs, covering roughly 40% of the population of LA County. The "Moderate," "Low," and "Very Low" tiers will be identified as non-EFCs.

<sup>&</sup>lt;sup>4</sup> https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits.shtml

# Figure 3 – 2022 EFC Update Map

