The LA City Equity Index

Pushing for a More Equitable City through Community-informed Indicators

CATALYST CALIFORNIA
Advancing Racial Justice

In partnership with the Make LA Whole Coalition

May 2024

To address the challenges faced by residents in the City of Los Angeles, particularly in communities that have experienced systemic divestment and exclusion from critical resources, we collaborated with the Make LA Whole (MLAW) Coalition and their constituents to identify a set of indicators that provide a framework for a more equitable city.

Equity indices for the City of LA have been developed before; in 2021, the LA City Controller's Office released the "LA Equity Index", a series of maps that examined how various socioeconomic factors impacted people's lives. However, while it highlighted key disparities across communities, it did not come with specific recommendations for how resources and investments could be pivoted to address those issues. More recently, in the Fall of 2023, the City of LA Office of the Chief Administrative Officer (CAO) launched the initial version of the Measure of Access, Disparity, and Equity (MADE) Index. Developed in partnership with Urban Institute as part of the CAO's Equity in Budgeting process, it sought to highlight equity issues in the distribution of resources in the city as well as identify areas for priority investment. The rollout of this index included a plan to utilize it as part of the City's annual Capital and Technology Investment Expenditure Plan and the 5-Year Capital and Technology Investment Plan.

Because the use of such tools has the potential to have wide-ranging and disparate impacts across communities, Catalyst California and the MLAW Coalition, consisting of Community Coalition, Inner City Struggle, Brotherhood Crusade, Black Women for Wellness, SEIU 99, and SEIU 2015, initiated a process to ensure that comprehensive community feedback would be central to the design and implementation of the index tool. Through numerous facilitated working sessions, a citywide survey conducted by the coalition membership, and research and analysis by Catalyst California staff, a series of key priorities and related indicators were identified, evaluated, and vetted.

As a result, we have developed a community-informed LA City Equity Index (the Index), which can function both as a standalone tool and as a proposed update to LA City's MADE Index and to the Equity in Budgeting process.

Our overall recommendations are as follows:

Adopt the LA City Equity Index as a whole, or integrate its indicators into Version 2.0 of the MADE Index – The LA City Equity Index is meant to be a reflection of the community's lived experiences, and any index that will have an impact on people's health and well-being should be centered on actively addressing and improving the realities they currently face. We also acknowledge that race is a critical determinant of access to resources and overall health outcomes, thus it is a key factor integrated throughout the LA City Equity Index. As a result, we recommend that the City adopt our Index in its entirety to ensure that barriers to equity are recognized and addressed comprehensively and compassionately.

Develop an on-going community engagement process in the continued refinement and implementation of an Equity Index – Community voice should be integral to any tools or processes that will have an impact on people's lives, and consistently providing effective spaces for feedback will be essential to achieving meaningful impacts. To accomplish this, we recommend that the City:

- Release updates and changes to the Index and related budgeting processes to the community for review and feedback on a regular basis;
- Identify and partner with key community-based coalitions to serve as a source of ongoing dialogue in the development and roll-out of future revisions; and,
- Develop a structured and transparent process by which to collect and integrate that feedback.

Mandate the implementation of an Equity Index throughout the broader LA City budgeting process, and release regular reports and data that demonstrates accountability and impact – Inequity is felt and experienced at many different levels, and any and all resources provided by the City of LA should take that into account; transparency will be key to ensuring that challenges are openly addressed and that successes are celebrated and replicated. To achieve this, we recommend that the City:

- Require the implementation of an Equity Index throughout the City of LA's budgeting process, at minimum with an emphasis on the programs and services that directly impact the indicators identified within the tool;
- Actively track and report on the impact an Equity Index has on the geographic areas identified by the Index as high need; and,
- Provide publicly accessible data and tools for community members to utilize in enhancing their understanding of the impacts on equity and opportunities for continued advocacy.

LA City Equity Index

We recommend that the City adopt the following LA City Equity Index as it moves forward in highlighting equity issues and determining city investments based on need. The indicators and domains proposed are informed by MLAW Coalition partners' feedback and surveys and are meant to reflect the core issues facing LA City residents most impacted by systemic inequities.

Domain Recommendations

We recommend the City structure the Index around four key domains to provide a conceptual framework for envisioning an equitable city that extends beyond individual policy issues. Each of the domains is intended to illustrate what an equitable city should provide for all its people.

- **Safe Environments**: LA City residents experience safe environments with safety from pollution, traffic injuries, and harmful policing.
- **Economy and Opportunity**: LA City residents have equitable access to engage in the economy.
- **Democracy and Power**: LA City residents equitable access to participate and influence democracy.
- **Longevity and Vitality**: LA City residents live with freedom from disease and illness and have the ability to access resources that increase community wellness.

Each domain receives its own domain score to provide a picture of need within each area of an equitable city. The proposed Index represents the average score across these four domains. It provides one summarized measure of need for each ZIP Code in LA City.

Process for Selecting Indicators

The Index includes 15 indicators with three to five indicators per domain. Indicators were first identified by gathering community input to determine what issue areas, and subsequently indicators, were important to prioritize for the index. Community input was gathered directly from MLAW Coalition partners, and from a survey that MLAW Coalition partners distributed to their respective community constituents. Over 300 responses were gathered throughout November 2023.

Based on community surveys and partner feedback, over 20 indicators were originally considered for the Index. Indicators were narrowed based on whether a data source was available, was updated on a semi-regular basis, and was available at a sub-city level. A final list of indicators was produced and vetted by the MLAW Coalition after cross-referencing the survey results, partner feedback, indicator maps, and correlations between every indicator and Black, Indigenous, and People of Color (BIPOC) populations. We prioritized indicators in a particular area that were correlated with BIPOC communities and ensured no indicator had a perfect correlation with another indicator in its domain. To review our indicator maps and correlations, please visit the MLAW Coalition's LA City Equity Index page.

Geographic Level

We calculate the Index at the ZIP Code level. This reduces the likelihood of statistical instability in indicators for population-based surveys. ZIP Codes are also an understandable geographic unit for community residents—for instance, a person will know which ZIP Code they live in, but not their census

tract. While ZIP Code boundaries frequently change across sources and approximate postal service routes, we use LA County's Internal Services Department ZIP Code boundaries as our source.[1] We include ZIP Codes that have at least a 25 percent geographic intersection with LA City boundaries.

As LA City determines its geographic unit for the Index, we encourage them to weigh data stability, precision, and community familiarity. Please visit our GitHub repository for detailed information about how we select ZIP Codes included in the Index.

Final Indicator Recommendations and Methodology by Domain

We recommend the following indicators by domain. They include a race composite score which is the average percentile of the Black, Latine, American Indian or Alaska Native (AIAN), Native Hawaiian or Pacific Islander (NHPI), and Asian populations within each ZIP Code. This indicator is included in each domain to ensure that the Index centers racial equity and acknowledges the deep-seated role racism has played in determining opportunities in the city.

All indicators are individually analyzed at the ZIP Code level by calculating the rate of each indicator for each ZIP Code. A percentile ranking is then measured for each indicator across all LA City ZIP Codes. The higher the indicator percentile ranking is for a ZIP Code, the higher the indicator rate is for that ZIP Code relative to other ZIP Codes in LA City. Most indicators are challenge-based, meaning that the higher the percentile ranking is, the higher the need is. Some Indicators are asset-based, meaning that the higher the rate is, the better the condition Is, or the lower the need. For detailed methodology on each indicator, including R Studio code for processing each, please visit our GitHub repository.

Safe Environments		
Indicator	**Data Source**	**Measure**
Particulate Matter (PM) 2.5	CalEnviroScreen 4.0, 2021.	Percentile calculated based off the average adjusted rate of PM2.5 levels in each ZIP code. Rates were adjusted from the tract to the ZIP code level using a crosswalk of census tracts to ZIP codes based on the geographic overlap between census tract and ZIP code. A higher percentile indicates a higher rate and higher need.
Proximity to Hazardous Waste Facilities	CalEnviroScreen 4.0, 2021.	Percentile calculated based off the average adjusted rate of hazardous waste facilities in each ZIP code. Rates were adjusted from the tract to the ZIP code level using a crosswalk of census tracts to ZIP codes based on the geographic overlap between census tract and ZIP code. A higher percentile indicates a higher rate and higher need.
Pedestrian and Bicyclist Fatalities and Injuries	California Statewide Integrated Traffic Records System (SWITRS), 2022.	Percentile calculated based on the number of pedestrians or bicyclists severely injured or killed in each ZIP code per 1,000 people living

[1] https://geohub.lacity.org/datasets/70748ba37ecc418891e052e800437681_5/about

		in each ZIP code.[2] A higher percentile indicates a higher rate and higher need.
Arrests	Los Angeles Police Department, Arrest Data, 2022.	Percentile calculated based on the number of arrests made in 2022 in each ZIP Code per 1,000 people. A higher percentile indicates a higher rate and higher need.
Hospitalizations for Gun Injuries	California Department of Health Care Access and Information, Patient Discharge Data, 2017-2021.	Percentile calculated based on the average rate of non-fatal gun injuries per 10,000 people living in each ZIP Code. A higher percentile indicates a higher rate and higher need.
BIPOC Race Composite Score	U.S. Census Bureau, American Community Survey 5-Year Estimates, 2018-2022, Table DP05.	Calculated as the percentile of the population in each ZIP Code that is either Black, Latine, Asian, NHPI, or AIAN. Percentile scores are calculated separately for each race group and then averaged across all five groups.

Economy and Opportunity		
Indicator	**Data Source**	**Measure**
Early Childhood Education Enrollment[3]	American Institute for Research, Early Learning Needs Assessment Tool, 2020. California Child Care Resource & Referral Network, 2021.	Percentile calculated based on the percentage of children enrolled in licensed childcare, preschool, and transitional kindergarten in the ZIP Code per 100 children under age 5 in the ZIP Code. A higher percentile indicates a higher rate and lower need.
Rent Burden	U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2018-2022, Table B25070.	Percentile calculated based off the rate of renter households that spend 30% or more of their income on rent. A higher percentile indicates a higher rate and higher need.
Evictions	LA City Control, Eviction Notices February-December 2023. U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2018-2022, Table B25003.	Percentile calculated based off the rate of evictions out of total number of renters in each ZIP code. A higher percentile indicates a higher rate and higher need.
Per Capita Income	U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2018-2022, Table B19301.	Percentile calculated based off the per capita income of each ZIP code. A higher percentile indicates a higher per capita income and a lower need.

[2] For all rates requiring a population denominator, we rely on total population estimates at the ZIP Code Tabulation Area (ZCTA) level from the U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2018-2022, Table DP05.

[3] Data purchased by Catalyst California and not available for public distribution.

BIPOC Race Composite Score	U.S. Census Bureau, American Community Survey 5-Year Estimates, 2018-2022, Table DP05.	Calculated as the percentile of the population in each ZIP Code that is either Black, Latine, Asian, NHPI, or AIAN. Percentile scores are calculated separately for each race group and then averaged across all five groups.

Democracy and Power		
Indicator	**Data Source**	**Measure**
Limited English-Speaking Households	U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2018-2022, Table S1602.	Percentile calculated based on the percentage of households in a ZIP Code reported as speaking limited-English. A higher percentile indicates a higher rate and higher need.
Voter Turnout	Los Angeles County Registrar-Recorder/County Clerk, General Election Results, November 2022. Statewide Redistricting Database, General Election Geographic Data, Consolidated Precincts, 2022.	Percentile calculated based on the percentage of registered voters who turned out to vote in LA City elections during the 2022 General Election. Map precincts are joined to ZIP Codes based on geographic overlap. A higher percentile indicates a higher rate and lower need.
BIPOC Race Composite Score	U.S. Census Bureau, American Community Survey 5-Year Estimates, 2018-2022, Table DP05.	Calculated as the percentile of the population in each ZIP Code that is either Black, Latine, Asian, NHPI, or AIAN. Percentile scores are calculated separately for each race group and then averaged across all five groups.

Longevity and Vitality		
Indicator	**Data Source**	**Measure**
Diabetes Hospitalizations	California Department of Health Care Access and Information, Patient Discharge Data, 2017-2021.	Percentile calculated based on the average rate of hospitalizations for diabetes per 10,000 people in each ZIP Code. A higher percentile indicates a higher rate and higher need.
Impervious Land Cover	Earth Resources Observation and Science Center, National Land Cover Database, 2021.	Percentile calculated based on the average or median impervious land cover by ZIP Code generated based on raster layers and zonal statistics tools in ArcGIS. A higher percentile indicates a higher rate and higher need.
Health or Mental Health Care Services	IRS Exempt Organizations Business Master File, 2024.	Percentiles calculated from the rate of mental health or health care service organizations per 10,000 people living in each ZIP code. Health or mental health care organizations were defined based on a

		subset of National Taxonomy of Exempt Entities (NTEE) codes that were manually selected for inclusion. Analysis only includes active organizations that are not public foundations. A higher percentile indicates a higher rate of organizations and lower need.
Grocery Store Access	USDA Food and Nutrition Service, SNAP Retailer Location Data, 2024.	Percentile calculated based on average access to SNAP-authorized supermarkets, super stores, and farmers markets within .5, one, and three miles of population weighted block group centroids, adjusted for population density and demand around each market. Block groups are joined to ZIP Codes based on population weighted centroid. A higher percentile indicates greater access and lower need.
BIPOC Race Composite Score	U.S. Census Bureau, American Community Survey 5-Year Estimates, 2018-2022, Table DP05.	Calculated as the percentile of the population in each ZIP Code that is either Black, Latine, Asian, NHPI, or AIAN. Percentile scores are calculated separately for each race group and then averaged across all five groups.

Domain and Index Methodology

We recommend LA City calculate domain-level percentiles and a final Index percentile to determine overall need by ZIP Code. Departments should be encouraged to heavily rely on the final Index percentile in determining allocations but may sparingly adjust for domain-level percentiles to account for nuances in the data.

To calculate domain-level percentiles, we average indicator percentiles by ZIP Code for all indicators within each domain. This average represents the domain score. We then calculate a percentile rank for each ZIP Code based on the domain score to obtain the domain percentile. For example, the Democracy and Power domain is calculated by first taking the average of the voter turnout, limited English speaking households, and race composite score percentiles within each ZIP Code to obtain the Democracy and Power domain score. A percentile ranking is then calculated on that domain score across all the ZIP Codes to obtain the Democracy and Power Domain percentile by ZIP Code. For asset-based indicators like voter turnout, we first multiply the indicator percentile by –1 to ensure all indicators measure need in the same direction in domain calculations, e.g., a lower score means lower need and a higher score means higher need.

The Index percentile represents the average percentile score across all four domains for each ZIP Code. A higher percentile indicates higher need, and a lower percentile indicates lower need. The Index percentile is calculated by averaging the four domain percentiles for a ZIP Code and then calculating a new percentile ranking across all ZIP Codes in LA City, ranking ZIP Codes from lowest to highest need (0

to 100th percentile). ZIP Codes must have estimates for at least 50% of indicators in each domain to receive domain and Index percentiles.

Recommendations for Future Exploration

The City may continue to explore indicators that represent community interests and experiences or refine indicator methodology to more accurately measure community need in one indicator. Any modifications to the Index must be guided by community feedback and engagement. For instance, MLAW Coalition partners also expressed interest in maternal health and additional democracy indicators, but data was not available. The City may explore indicators that measure maternal health at the sub-city level and other indicators in the Democracy and Power domain. Additionally, the City could expand on health and mental health care services to include city- or county-operated facilities that would not be captured in the IRS data. Lastly, food access was an interest of MLAW Coalition partners and survey respondents. While we use SNAP-authorized retailers as the best source of data of healthy food retailers, the City could explore purchasing private industry datasets that would include further detail on these stores to ensure the stores included are providing adequate access to healthy fruits and vegetables.