CITY OF LOS ANGELES
INTER-DEPARTMENTAL MEMORANDUM

Date: November 7, 2024

To: Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Honorable Heather Hutt, Chair, Transportation Committee

From: Laura Rubio-Cornejo, General Manager
Department of Transportation

Subject: **CITYWIDE EQUITY FRAMEWORK FOR TRANSPORTATION PROJECTS**

SUMMARY

In response to Council File (CF) 23--0935, this report identifies approaches to recommend a Citywide equity framework for transportation project prioritization and resource allocation, using a data-driven approach to identify the highest need priorities with a focus on engaging communities and increasing safety and access for people who walk, bike, and rely on transit. Based on an assessment of available tools to measure equity and inform project prioritization, Los Angeles Department of Transportation (LADOT) selected Department of City Planning's (DCP's) Community Health and Equity (CHE) Index for its capacity to offer nuanced local insights into transportation access and safety

RECOMMENDATIONS

That the City Council NOTE and FILE this report.

BACKGROUND

In October 2023, City Council directed LADOT, with support of the Chief Legislative Analyst and the Civil and Human Rights Department, to recommend a Citywide equity framework that sets standards for all transportation-related project prioritization and resource allocation. To recommend a Citywide framework to prioritize transportation infrastructure projects and investments, LADOT re-evaluated available equity metrics, including those previously considered as well as the United States Department of Transportation's (USDOT) Equitable Transportation Community (ETC) metric recently developed under the Justice40 Initiative.

Since August 2023, LADOT has used the Department of City Planning's (DCP) Community Health and Equity (CHE) Index to guide its project prioritization and standardize an equity approach across transportation projects, programs, and initiatives. To identify the most appropriate tool, LADOT consulted the City Administrative Officer's (CAO's) Office and the Bureau of Engineering (BOE) to better understand their ongoing efforts to develop Citywide equity metrics, and conducted a thorough evaluation of four commonly used indices: the LA Equity Index, CalEnviroScreen 4.0, Healthy Places Index (HPI), and DCP's CHE Index. Based on an analysis of each index's inclusion of transportation access, safety, socioeconomic, and environmental metrics, LADOT selected DCP's CHE Index for its capacity to offer nuanced local insights into transportation access and safety.

DISCUSSION

In response to direction in CF 23--0935, LADOT evaluated the following local, regional, and national metrics:

- Department of City Planning's Community Health and Equity Index
- City Administrative Officer's Measure of Access, Disparity, and Equity (MADE) Index V.1
- Bureau of Engineering Infrastructure Equity Scorecard Pilot Project
- Metro's Equity Focus Communities (EFC)
- Southern California Association of Governments (SCAG) Priority Equity Communities
- US Department of Transportation Equitable Transportation Community Explorer

To ensure compliance with CF 23--0935, Mobility Plan 2035 goals, and LADOT's 2021-2023 Strategic plan, LADOT evaluated these metrics based on their inclusion of measurements related to transportation access, safety, cost burden, sociodemographics, and environmental burden. In addition, LADOT considered the weight each metric placed on transportation-related data.

Evaluation

The CAO's MADE Index V.1, Metro's EFC, and SCAG's Priority Equity Communities offer valuable insights into socioeconomic characteristics and environmental considerations, yet have limited measurements related to transportation access and do not include transportation safety or cost data. Similarly, despite including some transportation access measurements, BOE's Infrastructure Equity Scorecard lacks specific metrics for transportation safety. For this reason, LADOT does not recommend relying on these metrics to prioritize transportation infrastructure projects or investments across Citywide departments.

Both USDOT's ETC Explorer and DCP's CHE Index not only incorporate demographic and environmental factors but also provide in-depth measurements of transportation inequality. These tools consider crucial factors specific to transportation such as cost burden, access, safety, sociodemographic characteristics, and environmental burden, making them more sophisticated metrics to prioritize transportation infrastructure projects or investments across Citywide departments. However, there are key differences in how they measure some factors.

- Cost burden: A key feature of USDOT's ETC Explorer is its inclusion of transportation cost burden, which provides valuable insights into the financial hardship that travel imposes on individuals and families. Although the CHE Index does not directly measure transportation cost burden, it similarly accounts for a broader measurement of financial hardship that considers factors such as, unemployment, poverty, housing overcrowding, age dependency, educational attainment, and income.

- Access: USDOT's ETC Explorer measures access through vehicle availability, commute times, driving or walking distances to essential services, and transit frequency. In contrast, the CHE Index focuses more specifically on non-automobile transportation access by incorporating walk and bike commuting rates, transit ridership, street connectivity, walkability, transit frequency, and bicycle infrastructure. The inclusion of transit ridership and bicycle infrastructure add a level of local nuance lacking from the ETC Explorer that highlights where investment in non-vehicular

modes of transportation is most needed.

- Safety: The ETC Explorer evaluates safety by tracking traffic fatalities regardless of mode, while the CHE Index concentrates specifically on bicycle and pedestrian collisions regardless of severity. By focusing on bicycle and pedestrian collisions, the CHE Index better aligns with Council's directive to prioritize the safety of vulnerable road users, particularly those who walk and bike.

The inclusion of transit ridership and bicycle infrastructure in the CHE Index adds a level of local nuance lacking from the ETC Explorer that highlights where investment in non-vehicular modes of transportation is most needed. By focusing on bicycle and pedestrian collisions, the CHE Index better aligns with Council's directive to prioritize the safety of vulnerable road users, particularly those who walk and bike.

LADOT recommends using the CHE Index as the equity framework for the transportation projects in Los Angeles. While USDOT's ETC Explorer is well-rounded and nuanced, the CHE Index inclusion of local transportation data and focus on pedestrian and bicyclist safety better align with the Mobility Plan 2035's policy goals and City Council direction. The CHE Index was created by DCP in 2015, updated in 2021, and can be updated by the City in the future as appropriate and given resource availability.

CHE Index

The City of LA's 2021 Health Atlas, which is the Health element of the City's General Plan, includes more information about the CHE Index. Additional details about the CHE Index methodology can be found in the 2013 Health Atlas and is summarized in Attachment C.

The CHE Index combines variables representing social and economic factors, health, land use, transportation, food, crime, and environmental health. It standardizes and weighs all metrics in the analysis to produce a score from 0 to 100, with lower scores indicating better community health and less vulnerable communities. Scores are divided into five categories, or quintiles. However, quintiles are not currently assigned in priority order.

To assist staff in applying the CHE Index to advance equitable transportation planning and investments, LADOT recommends defining the five quintiles so the highest scores are labeled "Highest Need," followed by "High Need," "Medium Need," "Low Need," and "Lowest Need." LADOT further suggests designating the top two quintiles, "Highest Need" and "High Need," as the City's Priority Transportation Equity Areas. See Attachment A-C for a map of the CHE Index, Priority Transportation Equity Areas, and CHE Index Methodology.

As the transportation planning agency for the City of Los Angeles, LADOT's adoption of the CHE Index creates a standardized equity metric for all City transportation projects and programs. Many LADOT teams already use the CHE Index for project prioritization. For example, LADOT recently integrated the CHE Index into the development of the prioritization methodology for the school speed hump program. Similarly, LADOT previously used the CHE Index to guide LADOT's on-demand mobility permit program. LADOT plans to use the CHE Index in the upcoming Transit Service Analysis (TSA). The Index is also crucial to LADOT's approach to prioritizing projects identified in the Mobility Plan 2035.

The CHE Index is used as a baseline measurement that is customizable to specific project contexts. In some instances staff may need to rely on regional, state, or federal equity metrics when applying for grant funding opportunities and for reporting and evaluation. In other instances, the CHE Index should be customized to fit the needs of a specific project. For example, a project focused on safe routes for seniors might focus on areas with higher percentages of older adults or where collision data indicates a higher rate of crashes involving older adults. Each transportation program should use discretion in applying the CHE Index equity categories. For instance, when planning first and last mile connections to transit stations, teams might give extra consideration to the top two quintiles for projects in the "Highest Need" and "High Need" transportation equity areas. In contrast, when addressing 311 requests, teams could note the quintile of each request to prioritize responses.

LADOT is using the CHE Index to develop a Mobility Action Plan, as directed in CF 19-1373. The Mobility Action Plan will establish prioritized 5- and 20-year implementation plans to deliver safety and mobility projects across the City to establish the priorities for a Citywide Transportation Capital Investment Plan. Adopting the CHE Index as the Citywide equity metric to plan transportation infrastructure and investment will ensure that communities in the highest quintiles are prioritized.

The CHE Index data is available on the internal NavigateLA platform for all City staff use. The data can also be downloaded by the public from the City's Geohub webpage. LADOT will update the data available on Navigate LA and the Geohub with the recommended quantile labels for ease of use and interpretation. LADOT will also continue socializing this data with the City's Interdepartmental MOU working group to ensure the CHE Index is made available to project managers during the project planning and scoping process.

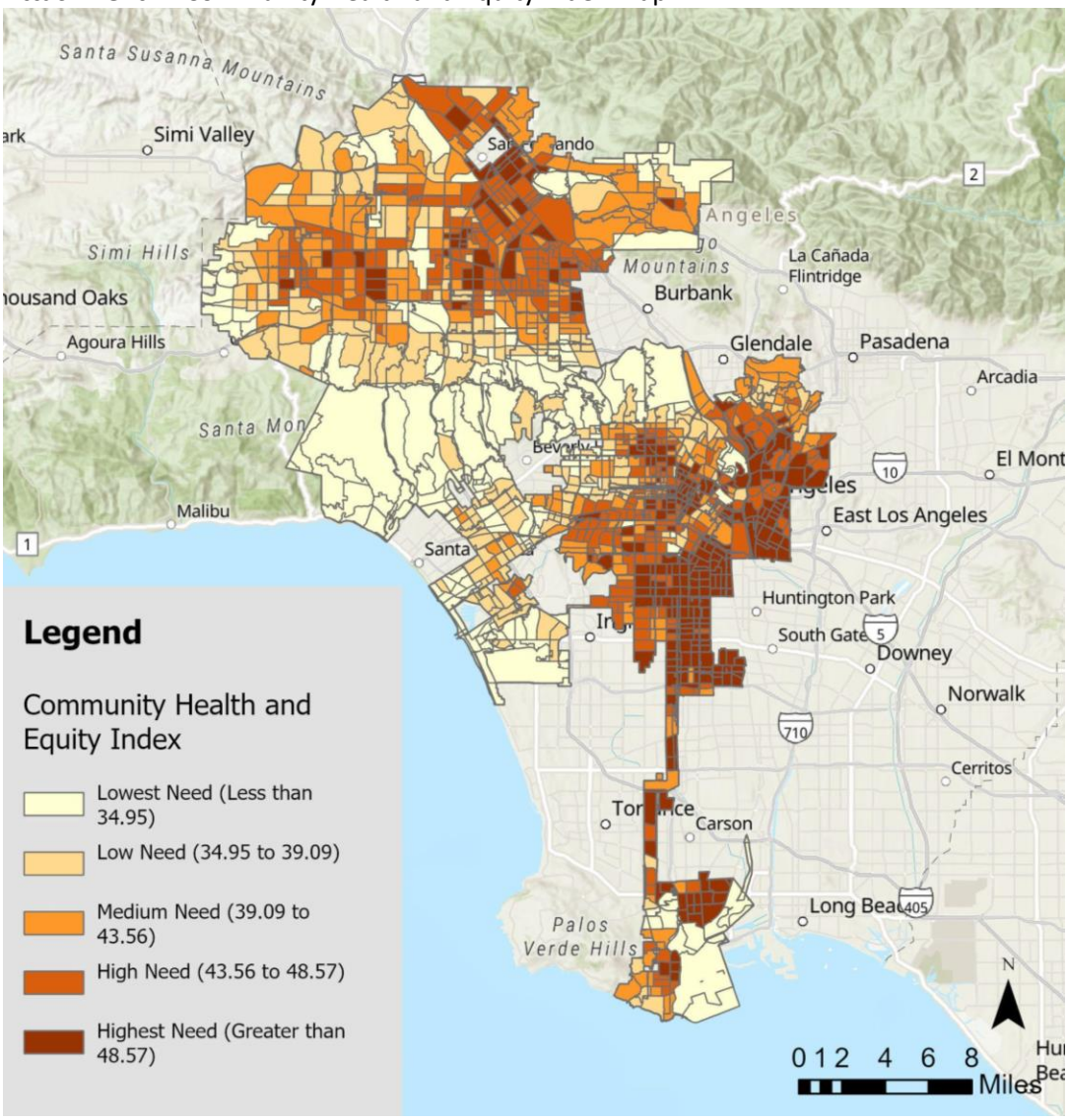
FISCAL IMPACT

There is no impact to the City's General Fund.

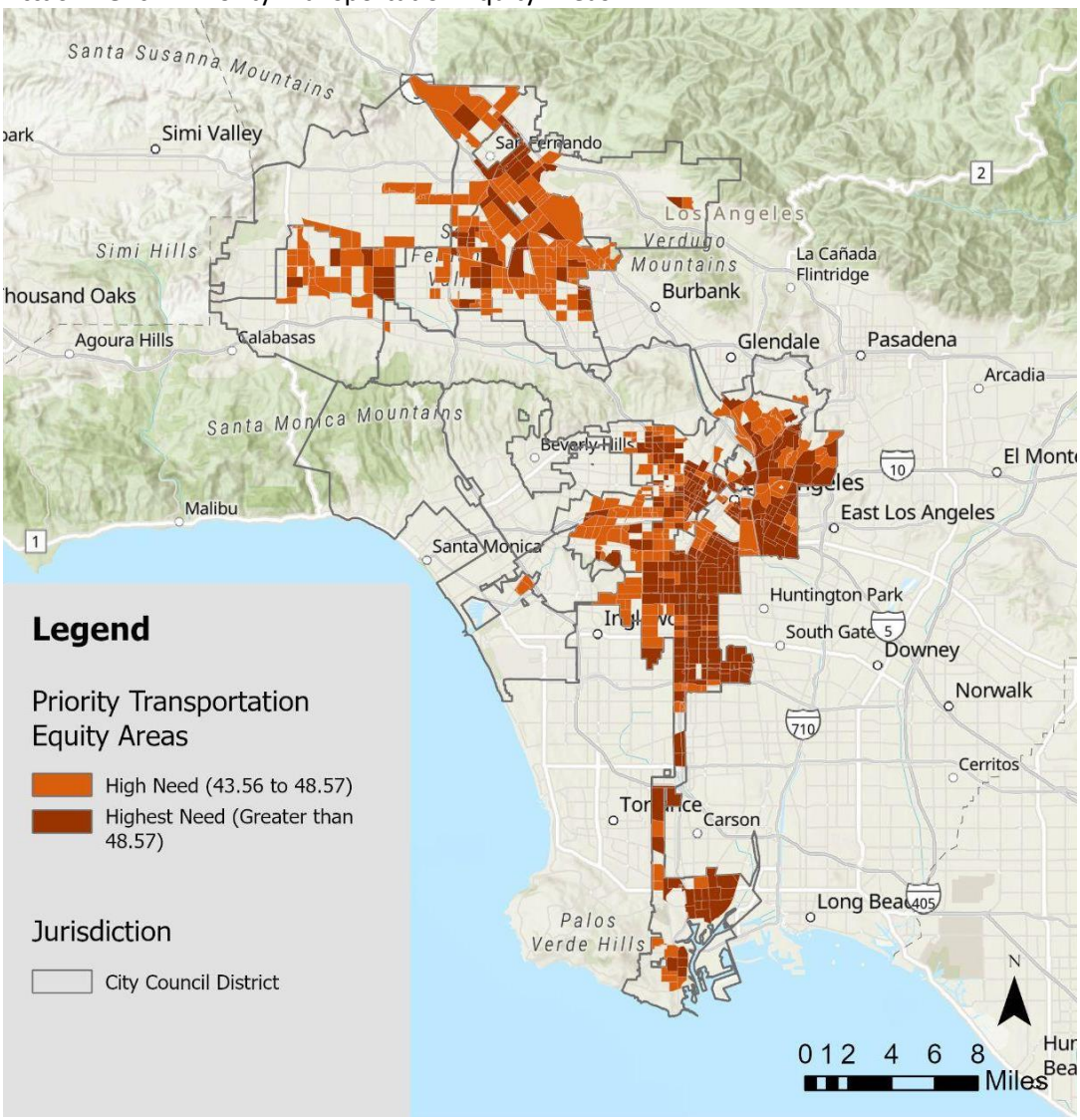
LRC:TC:rg

Attachments:
- Attachment A. Community Health and Equity Index Map
- Attachment B. Priority Transportation Equity Areas
- Attachment C: Community Health and Equity Index Methodology

Attachment A. Community Health and Equity Index Map



Attachment B. Priority Transportation Equity Areas



Attachment C: Community Health and Equity Index Methodology

Index or Variable	Topic	Weight
Hardship Index (Standardized index score for overcrowded housing, poverty, unemployment, educational attainment, age dependency, and median income)	Demographic, Economic, Housing, and Education	35
Life Expectancy at Birth	Health	15
Health Variables (Standardized index score for childhood Obesity, coronary heart disease mortality, rate of emergency department visits for heart attacks, respiratory disease mortality rate, stroke mortality rate, diabetes mortality rate, asthma related emergency department visits rate for 17 and under, and asthma related emergency department visit rates for 18 and over groups)	Health	10
Walkability Index (Standardized index score of land use mix, residential density, retail density, and intersection density variables)	Land Use	5
Complete Communities Index (Average of the number of amenities and establishments found in each census tract)	Land Use	2.5
Multi-Modal Transportation Index (Standardize index score for walk and bike commuting, transit ridership, street connectivity, bicycle facilities, high frequency transit service, collisions with bike and ped residents)	Transportation	7.5
Modified Retail Food Environment Index (Standardize index score of Healthy to Unhealthy Food Retailers)	Food	10
Crime Rate Index (Rate of violent and property crime per 1,000 residents, 2x factor for violent crime)	Crime	7.5
Pollution Burden Index (Standardize index score for PM2.5 concentrations, diesel PM concentrations, drinking water contaminants, pesticide use, toxic releases from facilities, children's lead risk from housing, traffic impacts, cleanup sites, impaired water bodies, groundwater threats, solid waste sites and facilities, and hazardous waste facilities.)	Environmental Health	7.5
Total		100