



Planning, Policy  
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**Project Title:**

Mobility, Accessibility and  
Disadvantaged Neighborhoods:  
Assessing Diversity in Transportation-  
Related Needs and Opportunities

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## Mobility, Accessibility and Disadvantaged Neighborhoods: Assessing Diversity in Transportation- Related Needs and Opportunities

Utilizes spatial-transportation mismatch (STM) to examine mobility and opportunities among disadvantaged neighborhoods in urbanized and agricultural counties.

### WHAT WAS THE NEED?

The project produces insights that assist California to meet climate-change and social-justice goals, as articulated in Senate Bill 535 and other legislation. Racial equity has recently become more pressing. Both the office of California's Secretary of Transportation and California Air Resources Board (CARB) are committed to policies, programs, and investments that promote social equity, including prioritizing efforts to assist the most disadvantaged neighborhoods. This project contributes those efforts by providing empirical information to assist state agencies to develop analytical methods that strengthen equity knowledge in transportation and land-use planning.

### WHAT WAS OUR GOAL?

The project's goal was to understand the nature, pattern, and magnitude of commonalities and differences among neighborhoods in mobility and access to employment, quality elementary schools, and primary health care opportunities. By focusing on one urban county (Los Angeles) and one rural county (San Joaquin), the project would assist key decision makers and community stakeholders better understand a neighborhood's transportation problems and identify effective strategies that address each neighborhood's specific needs.



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knowledge that improves  
California's transportation system

## WHAT DID WE DO?

To maximize real-world application, the research team adopted two policy-based indicators to create three classes of neighborhoods: disadvantaged, partially disadvantaged and not disadvantaged (See table below for characteristics by neighborhood type.).

The project uses bivariate tabulations to describe the variation in accessibility among policy-based definitions of disadvantaged neighborhoods. The project has five tasks: (1) access, assess, geocode, clean, and assemble data research dataset; (2) utilize and test alternative STM indicators; (3) quantitatively examine diversity among neighborhoods; (4) make non-proprietary components of the dataset available; and (5) produce a final report, policy brief and a paper to submit to an academic or professional journal.

## WHAT WAS THE OUTCOME?

The project's empirical findings are consistent with the existing literature: residents of disadvantaged neighborhoods suffer from STM in multiple arenas, especially those in rural areas. The analysis also finds considerable heterogeneity in the magnitude of inaccessibility between the two regions. Residents in disadvantaged San Joaquin places tend to fare worse.

There is noticeable heterogeneity in the magnitude of inaccessibility within each of the two regions. For example, residents in disadvantaged San Joaquin fare worse in employment outcomes, and young students fare worse in reaching quality education. Both of these outcomes are partially the product of larger structural factors: a relative lack of geographic compactness and density, as well as a lower-wage and less stable labor market and lower performing school system.

Households in San Joaquin respond to the more dispersed opportunities by relying more on car ownership and more vehicle miles traveled. The finding points to a reality that a "one-size-fits-all" approach is not sufficient to address the transportation needs and investment opportunities of disadvantaged communities.

## WHAT IS THE BENEFIT?

The findings also point to a singular unescapable commonality, which is that our society is spatially stratified. Disadvantaged places are disproportionately inhabited by low-income households and people of color, a consequence of market forces and discriminatory practices that create and reinforce neighborhood stratification. While it is too daunting to dismantle the whole structure of inequality and systemic racism, the transportation field can ameliorate some STM's negative outcomes.

Public-sector agencies can do so by incorporating the project's approach to analyzing disadvantaged neighborhoods through detailed and geographic-specific data, indicators, and metrics. Doing this will enable CARB and Caltrans to better identify, prioritize and customize policies, programs, and investments. The information will enable the two agencies to know how urban neighborhoods are different from rural ones, as well as those in suburbs and exurbs.

This will enhance the state's ability to fulfill its commitment to equity as a part of its ambitious climate-change initiative (e.g., SB 535 and AB 617). To be effective, it is equally important to have Metropolitan Planning Organizations adopt this approach. The technical report will include sufficient information for others to reproduce the metrics and indicators for the entire state.