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Caltrans Division of Research, Innovation and System Information

Research Notes

Planning, Policy & Programming

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Project Title:
PSR 039 The Implications of Freeway Siting in California: An Equity, Geospatial, and Case Study Approach

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Task Manager:
Angela Fredericks
Associate Transportation Planner
angela.fredericks@dot.ca.gov

The Implications of Freeway Siting in California: An Equity, Geospatial, and Case Study Approach

This project will examine four case studies of freeway construction impacts on minority neighborhoods

WHAT IS THE NEED?

Freeway siting continues to have profound health, employment, educational, and social consequences decades later, so uncovering its history is vital to addressing one of the state's most significant spatial inequities.

WHAT ARE WE DOING?

Conducted in parallel between researchers at the University of California, Los Angeles (UCLA) and the University of California, Davis (UC Davis), this multidisciplinary project will examine four consequences of freeway construction on minority neighborhoods:

1. Direct disruption, including disinvestment and loss of housing, local businesses, and local institutions,
2. Increasing segregation, such as facilitating suburban white flight and hardening of racial boundaries,
3. Diminished access to job or education opportunities because of spatial mismatch, and
4. Health impacts because of increasing mobile sources of pollution.

The research consists of two major parts:

1. A macro review of the unequal spatial-temporal patterns created by freeways, using quantitative geospatial analysis of historical data, and
2. A micro look in the form of intense case studies, using archival research and interviews with a diverse set of stakeholders, to provide more detail about the present and long-term effects of freeway siting.

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WHAT IS OUR GOAL?

The final report will conclude by putting the findings in the context of current efforts to more equitably deliver transportation investments across the state and redress past decisions. This report and its accompanying communications will not only analyze the implications of freeway siting quantitatively and qualitatively, but also offer a roadmap to Caltrans and other policymakers for redressing past harms and avoiding future ones when delivering transportation investments.

WHAT IS THE BENEFIT?

The methodology exploring the history and impacts of the five-freeway siting case study areas can be applied to additional freeway siting locations throughout California. Furthermore, findings from this study can contribute to strategizing policies, investments, and projects advancing equity and livability.

WHAT IS THE PROGRESS TO DATE?

A kickoff meeting occurred in February 2021. At a meeting following the kickoff, representatives from the research team, Caltrans District staff, Caltrans Office of Race and Equity, and Caltrans Division of Research, Innovation and System Information attended and selected five case study locations of San Jose, Sacramento, Stockton, Pasadena, and Pacoima. The research team has completed an index and categorization of relevant literature and accounts of freeway construction effects on neighborhoods and are well into the work of creating geospatial shapefiles of historic demographics near target freeways.

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