

Planning, Policy,  
and Programming

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**Project Title:**

Public Transportation and Industrial  
Location Patterns in California

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## Public Transportation and Industrial Location Patterns in California

This project investigated how changes in rail transit service in California metropolitan areas (Los Angeles, the San Francisco Bay Area, and San Diego) are associated with the concentration of firms and commercial property values.

### WHAT IS THE NEED?

The relationship of public transportation to economic productivity, and spatial patterns of industrial location is understudied. How are transit locations, employment and land values interrelated in California? This research may help target public transportation improvement projects.

### WHAT WAS OUR GOAL?

This project investigated how changes in rail transit service in California metropolitan areas (Los Angeles, the San Francisco Bay Area, and San Diego) are associated with the concentration of firms and commercial property values.

### WHAT DID WE DO?

A mixed-methods approach was used that combined quantitative and qualitative analysis. The quantitative method involved first, describing location patterns by industry according to transit access, and second, quantitatively modeling the relationship of transit access to (a) employment densification by industry and (b) commercial property values. The qualitative method involved in-depth interviews with real estate professionals that were aimed at finding different possible explanations for firm location, expansion, and productivity and the role, if any, of rail passenger transport in those decisions.



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## WHAT WAS THE OUTCOME?

The quantitative models suggest that rail development does promote employment densification and increased land value, but the magnitude of the effects differs across regions. San Francisco County had the highest employment densification and land value associated with rail proximity, while the Los Angeles region also had a relatively strong relationship between rail access and both employment density and property value. However, rail development in San Diego was somewhat positively associated with employment density and negatively associated with land value appreciation. The analysis of interviews was generally consistent with these findings, and also suggested that existing land use patterns and policies may play a greater role in the varying magnitude of rail influence on employment density and land value than the availability of rail access itself, and that downtown Los Angeles and San Francisco benefit more from rail than the outlying parts of the metropolitan areas.

## WHAT IS THE BENEFIT?

To see if the proximity of rail lines increase property values, encourage firms to locate nearby and create jobs (employment). This research suggested that existing land use patterns and policies may play a greater role in the varying magnitude of rail influence on employment density and land value than the availability of rail access itself, and that downtown Los Angeles and San Francisco benefit more from rail than the outlying parts of the metropolitan areas. It provides a better understanding of how and whether public transportation has played a role in the location, expansion or startup decision of firms.

## IMAGES

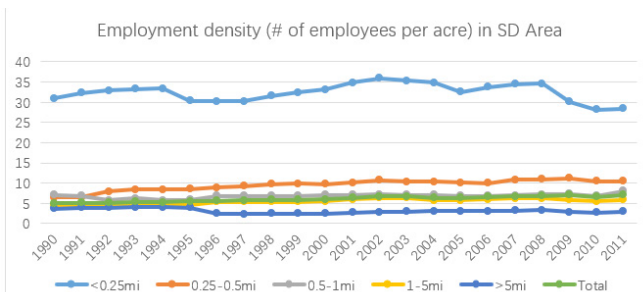


FIGURE 1: shows the average employment density (number of employees per acre) in relation to rail proximity in the San Diego region. The patterns are similar to those found in SF Bay Area and LA, where the employment density is much higher in blocks that are located within 0.25 miles from rail. And with the increasing distance to rail, employment density tends to become lower.