



Caltrans Division of Research,
Innovation and System Information

Research

Notes

Planning
Policy
Programming

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Project Title:
UTC - Public Transportation and Industrial
Location Patterns in California, (UCCONNECT)

Task Number: 2869

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Public Transportation and Industrial Location Patterns in California

Investigate how changes in transit service in Los Angeles, the San Francisco Bay Area and San Diego are associated with firm clustering by industry and with 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 ARE WE DOING?

This project will investigate how changes in transit service in Los Angeles, the San Francisco Bay Area, and San Diego are associated with firm clustering by industry and with commercial property values. To supplement the report an article for ACCESS will be written as well as an agency briefing presentation will be prepared for Caltrans.

WHAT IS OUR GOAL?

The research results will be presented in a three-part written report. The first strand of the proposed research involves first, describing location patterns by industry according to transit access and second, quantitatively modeling the relations between transit access and a) employment densification by industry and b) commercial property values. Transit accessibility variables and measures of local agglomeration will be used. Agglomeration- people, land, industry- how it relates to transit system- does this improve jobs, the labor market and land values – to make it better for Californians to get to work and live?



DRISI provides solutions and
knowledge that improves
California's transportation system

The second section will consist of interviews in neighborhoods whether and how transit access and local agglomeration measures play a role in firm location decisions- to discover relationships between firm productivity, neighborhood density and changes in transit services over time in the same metropolitan areas.

The third and final strand (section) of the report will be reconciliation of both kinds of information, qualitative and quantitative, to synthesize whether and how transit access and transit-induced agglomerations play a role in firm location and change.

WHAT IS THE BENEFIT?

By building on the research Professor Chatman has already studied, by looking at employment more broadly (not just firm formation) and by looking specifically in California (not Dallas and Portland); and by investigating how commercial rents are correlated with changes in transit services as well as changes in industry mix and concentration.

Most importantly, it would bring a much-needed qualitative research component that can begin to provide a better understanding of how and whether public transportation have played a role in the location, expansion or startup decision of firms; and also, to help corroborate or not the Professor's inductive explanations based on observed quantitative trends.

WHAT IS THE PROGRESS TO DATE?

This project began in August 2015 when the graduate student was hired.

Preliminary figures for initial data analysis were presented at the kickoff meeting in September 2015.

The estimated work completed will be 30 percent. A third quarter report was submitted on October 30, 2015.

A literature review(task1) was delayed. A draft of the literature was submitted in early November 2015.

The number of interviews that will be conducted by the end of December 2015 for task four will be somewhat fewer than expected.