Can Compact Rail Transit Corridors Transform the Automobile City?
Challenges and Opportunities for More Sustainable Travel in Los Angeles

Professor Douglas Houston, Department of Planning, Policy, and Design
University of California, Irvine

Professor Houston draws insights from several studies in Los Angeles to discuss possibilities for transforming the automobile city. Studies utilizing California Household Travel Survey (CHTS) data investigate how travel patterns of Los Angeles residents living in rail corridors diverge from broader regional patterns; whether travel of near-rail residents varies across different rail transit corridors; and whether more accessible and walkable neighborhoods promote greater household gender equality in travel. People living near rail or bus corridors drive less and use public transit more than the county average. Concentrating population and employment growth near transit corridors in LA could help achieve regional sustainability goals.

Freeways offer huge mobility and economic benefits, but have high costs. Freeway usage, especially in highly populated areas, leads to congestion and pollution. Directing growth towards compact rail corridors has become a key strategy for shifting auto-oriented regions towards denser, mixed-use communities that support sustainable travel. Regional planning organizations in California have aligned their regional transportation plans with sustainable community land use and development strategies in response to Senate Bill 375’s challenge to reduce greenhouse gas (GHG) emissions by reducing sprawl and directing growth towards public transportation corridors. A variety of studies on sustainable transportation, especially rail transit corridors, suggest that these corridors are not created equally, and that transit providers and community planners should consider the social and development context of corridors in efforts to improve transit access and maximize development.

Key Findings:
✦ Residents of rail transit corridors in Los Angeles drove less and rode public transit more than the county average
✦ Evaluation of a new light rail line indicates nearby residents reduced their daily miles traveled compared to residents living farther from the new service
✦ Transit oriented development varies by transit line because of land use and socioeconomic differences
✦ The impact of rail transit on nearby land use and infill development extends beyond 0.5 mile from stations
✦ Accessible and walkable areas could promote gender equality by alleviating spatial and time constraints

Land Use Conversion Varies by Distance from Station

Implications for Policy
Cleaner vehicle technology remains important to meet federal air quality standards and state requirements to reduce greenhouse gas emissions, but clean vehicle technology will only take us so far. We must thoughtfully integrate transportation and land use planning to achieve sustainability goals. City planners should consider the social and development context of corridors in efforts to improve transit access and maximize development. Development of compact transit corridors can lead to more affordable housing, increased retail sales, higher business profits, and enhanced commercial home and real estate values. Creating transit oriented development areas should build from “what works” in a community, and avoid displacement. We should also claim opportunities to enhance accessibility and equality.