POLICY BRIEF

Not So Fast: Traffic Delays, Access, and Economic Activity in Greater Los Angeles and the San Francisco Bay Area

Andrew Mondschein, Taner Osman, Brian D. Taylor, & Trevor Thomas — 2015

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RESEARCH TOPIC

Traffic congestion, it is argued, is a major economic threat for American cities because it wastes commuters' time and inhibits business growth. This argument is used to support the construction or expansion of roads, and to impede development because of traffic concerns. But how important are high travel speeds in the ability of workers to access jobs and in the locational choices of new firms? Previous studies have measured the effect of travel speeds on job access, or have considered how proximity affects job access, but little research examines how the two—travel speeds and distance—combine, across a large region like Los Angeles or the Bay Area, to determine overall accessibility. To address this gap in knowledge, researchers from UCLA and UVA recently examined the relative effect of average travel speeds and proximity upon job access and new firm formations in Greater Los Angeles and the San Francisco Bay Area.

Image from Mondschein et al., 2015

Image from Wikimedia Commons, Daniel R. Blume, 2008

RECOMMENDATIONS

- Policymakers should be wary of claims that congestion woes in California's two largest metropolitan regions are hurting business. High housing prices and overly long commutes are the more likely culprits.
- Rejecting new developments that put more residents close to jobs—or more jobs close to residents—because of traffic fears may be short-sighted; people's access to jobs, goods and services increases with such developments, even if nearby congestion increases.
- Planners should move away from measuring project impacts using "Level of Service" metrics. Such metrics, which grade roadways based upon their amount of delay, privilege high travel speeds, not access. Planners should instead measure and analyze how developments could change the level of access for residents.

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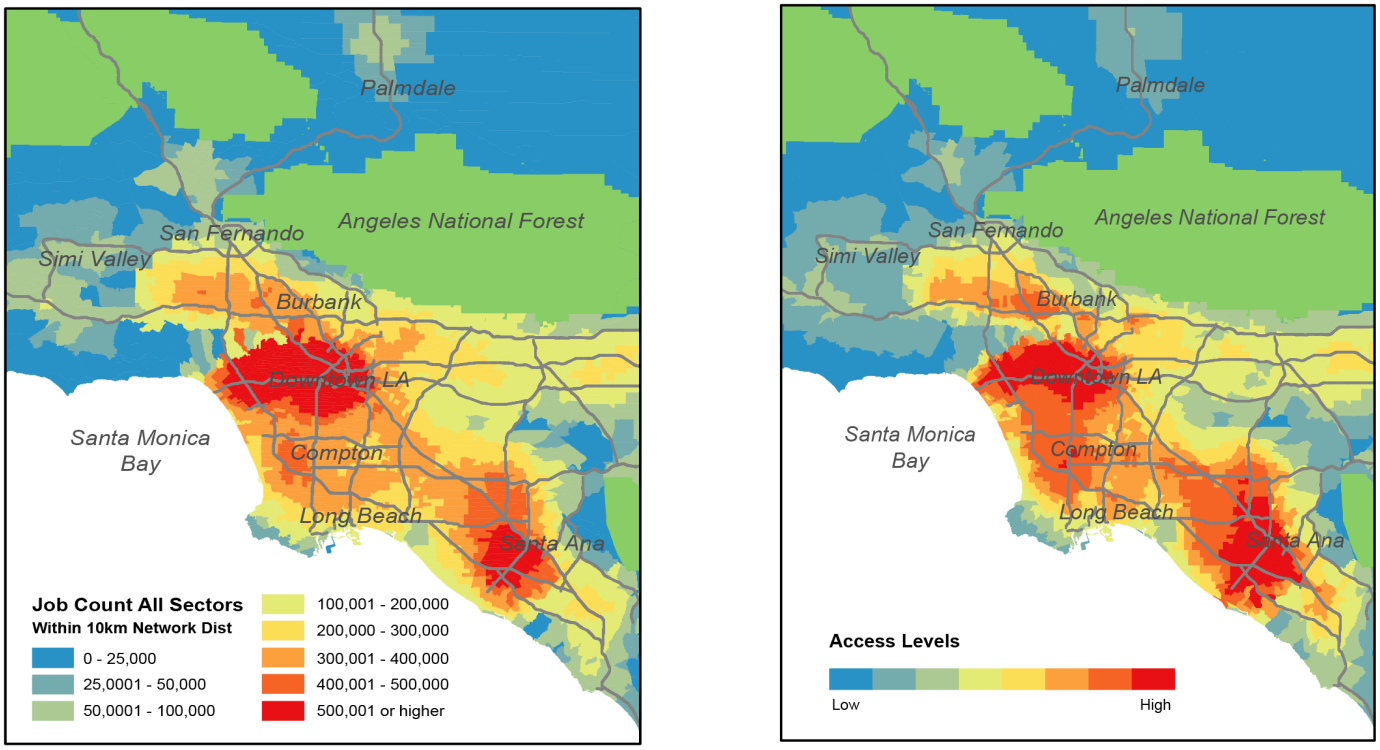
STUDY

Researchers utilized travel speed data from the Southern California Association of Governments and the Metropolitan Transportation Commission, combined with employment data from the National Establishment Time Series. To determine mobility levels, researchers broke up each region into traffic analysis zones (TAZs) and determined peak-hour speeds between zones at different distance thresholds. To determine job proximity levels, they counted the number of jobs within those same distance thresholds. Researchers then combined the two measures into a gravity-weighted accessibility score. Finally, researchers tallied business openings per TAZ in five different industries: IT, entertainment, advertising, securities, and groceries.



As can be seen, the map showing job proximity scores (on the left) corresponds closely to the map showing access scores. From Mondschein et al., 2015, 33

MAIN FINDINGS

- **Employment accessibility is powerfully associated with employment proximity, while it is *inversely related to higher speeds.*** Even with slower speeds in the center city areas of each region, the proximity of large numbers of jobs means that one can reach dramatically more jobs and destinations there than in more suburban areas. When we account for both speed and proximity together, speed is positively related to accessibility, but its explanatory power is low.

- **Proximity to other similar firms played a more powerful role than travel speeds**, suggesting that businesses cluster tightly together to benefit from interactions. In Greater Los Angeles, none of the five sectors showed a significantly positive relationship between average travel speeds and firm openings, while in the San Francisco Bay Area, only two of the five industries showed this relationship.

Mondschein, Andrew, Tamer Osman, Brian D. Taylor, and Trevor Thomas. 2015. **"Congested Development: A Study of Traffic Delays, Access, and Economic Activity in Metropolitan Los Angeles"** and **"Not So Fast: A Study of Traffic Delays , Access, and Economic Activity in the San Francisco Bay Area."** Studies available at: http://www.lewis.ucla.edu/publications/

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