Title

Traffic Trumps All: Examining the Effect of Traffic Impact Analyses on Urban Housing

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Publication Date

2021-08-01

DOI

10.17610/T69C79

UCLA Institute of Transportation Studies

August 2021

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Issue

Traffic impact analyses (TIA) are widely used by local governments to assess the traffic impacts of proposed land use developments. TIAs are often measured in terms of expected changes to traffic flows through nearby intersections using a metric called "level of service" (LOS). This process tends to be biased against higher-density developments in urban areas where traffic is already congested and travel alternatives are plentiful. Researchers have found that the projected traffic impacts of developments in already built-up areas tend to be overestimated, which leads to higher traffic impact fees and related costs associated with the TIA process. Often, local residents use such analyses as evidence to oppose new developments on traffic grounds. The result is that TIAs can help discourage new housing production in built-up areas where demand is greatest, which likely exacerbates the housing affordability crises in places like California.

In essence, the logic of TIAs is that the human activities and the built environment in cities should vary to keep nearby traffic flowing smoothly. The fundamental problem with LOS-based TIAs is that they measure vehicle mobility and not the more fundamental goals of economic and social accessibility. While California has been a national leader in changing the metric by which traffic impacts are evaluated under the California Environmental Quality Act, from LOS to vehicle miles of travel effects, LOS-based analyses of development proposals are still typically conducted by local governments — even in the Golden State.

This study reviewed and synthesized research on TIAs and their effects on land use planning, and found that mobility-focused transportation planning likely contributes to the housing affordability crisis plaguing many places. Further, research shows that gradually shifting away from mobility-centered metrics, like LOS, and toward more accessibility-centered evaluation tools, will enable more comprehensive assessments of development impacts, which could help ease California's housing affordability crisis.

Key Research Findings

- Conventional trip- and parking-generation analyses, central to LOS-based TIA, tend to overestimate the traffic impacts of all types of developments, though the bias is largest for higher-density developments in more urban areas.
- Overestimated traffic impacts result in higher traffic impacts fees, which tend to raise housing prices of both new and existing homes of all types and qualities (Figure 1).
- The process of TIA and related environmental reviews tends to increase risks and uncertainties for developers and raise development costs.
- LOS-based logic of TIA often results in mitigation measures that decrease development densities and increase nearby road, intersection, parking vehicle capacities, all of which support increased driving over other means of travel.

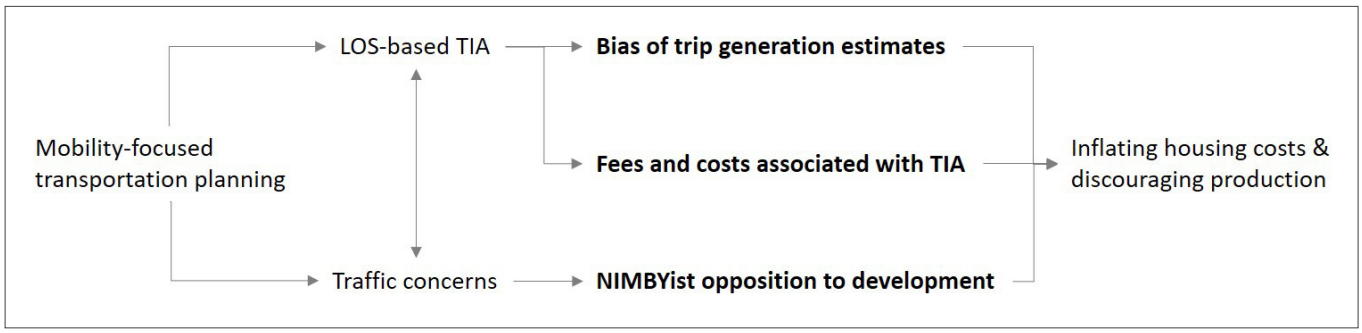

Figure 1: How mobility-focused transportation planning may impact the housing market

- The new VMT-based TIA under CEQA appears to reduce the bias against higher-density and mixed-use developments in urban areas. Even this new, improved metric, however, may still result in overestimates because a significant portion of trips attracted to new developments in central areas are likely substitutes for the longer vehicle trips to more distant destinations if the new development were in an outlying area instead.
- Local residents' concerns over traffic impacts and the need to mitigate them play important roles in NIMBYist (Not in My Backyard) opposition to new housing developments. Such concerns effectively prioritize traffic congestion above housing affordability in the hierarchy of planning goals (Figure 1). In addition, these concerns can serve as placeholders for less socially acceptable concerns, such as fears of falling property values, increased crime, or racial integration.

Conclusions

The inherent flaw of the LOS-based TIA is that it assumes travel to and from land uses is largely the same, regardless of local context. However, the number of trips generated by a new development, and the vehicle travel by those traveling to or from that new development vary significantly depending on the larger built environment context. The VMT metric adopted by California for CEQA analyses shifts the emphasis of traffic impact from vehicle flows to the amount of vehicle travel generaged, which can better gauge the environmental costs associated with vehicle travel. By shifting the focus away from LOS, the VMT metric may also reduce the bias against higher density developments in urban areas.

While the shift to VMT in CEQA is an important step in the right direction toward correcting the flaws in LOS-based traffic impact analyses, even in California, local governments can still require LOS-based TIAs focused on arriving and departing vehicles outside the CEQA framework. This research review finds great promise in the current shift toward accessibility-centered development evaluations that better integrate the transportation and land use systems by accounting for both mobility and the proximity of destinations. Such shifts will enable more holistic evaluations of development impacts by local governments across the U.S., and will reduce the bias against urban and infill housing inherent in LOS-based TIAs.

Even a complete shift to an accessibility-focused land use development evaluation framework would be unlikely to overcome local NIMBYist opposition to new developments. While concerns over traffic may become less powerful in anti-development narratives, research shows that NIMBYs can weigh in on and obstruct many other parts of the development approval process to keep locally unwanted land uses out of their neighborhoods. Moreover, in circumstances where existing residents substitute traffic and other legitimate planning concerns for unstated and less socially-acceptable motivations, dismantling the narrative of traffic congestion may help to expose more deeply embedded attitudes and biases against new housing in already established neighborhoods.

More Information:
Ding, H., & Taylor, B. D. (2021). *How does traffic, or the fear of it, affect housing affordability? Examining the effect of Traffic Impact Analysis on Housing Production and Affordability (Working Paper)*. Institute of Transportation Studies, UCLA. https://escholarship.org/uc/item/6h47h1ts

Ding, H., & Taylor B.D. (2021). Traffic Trumps All: Examining the Effect of Traffic Impact Analyses on Urban Housing. *Journal of Planning Literature*.https://doi.org/10.1177%2F08854122211023467

Research presented in this policy brief was made possible through funding received by the University of California Institute of Transportation Studies (UC ITS) from the State of California through the Public Transportation Account and the Road Repair and Accountability Act of 2017 (Senate Bill 1).
Project ID UCLA ITS-LA2039 & UC-ITS-2020-39 | DOI: 10.17610/T69C79