DRISI

Caltrans Division of Research, Innovation and System Information

Research Notes

Planning, Policy and Programming

Parking Utilization And Site Level Vehicle Miles Traveled (VMT) Database

Collect data to quantify how changing parking supply at different types of developments impacts the use of motorized vehicles.

MAY 2020

Project Title:
Parking Utilization And Site Level VMT Database

Task Number: 3291

Start Date: August 21, 2019

Completion Date: June 29, 2021

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WHAT IS THE NEED?

California Department of Transportation (Caltrans) Local Development – Intergovernmental Review (LD-IGR) program often references parking reduction as an appropriate Transportation Demand Management (TDM) measure to support infill development. The program relies on prior statewide and nationwide research that documents how the lack of parking can be a primary decision point to make a trip via transit, rail, bicycle, or pedestrian modes, rather than an automobile.

Local jurisdictions such as cities use parking research to make policy decisions about minimum and/or maximum parking requirements for developments, and provision of on-street and off-street parking in neighborhoods and around destination centers (central business district, arena, tourist attraction, etc.).

WHAT ARE WE DOING?

The two major outcomes of this research include a vehicle miles traveled (VMT)/Parking database, and a corresponding tool that will include one or more model(s) that allow practitioners and agencies to estimate how changing parking supply at a development level impacts VMT with different parking assumptions, controlling for other relevant contextual characteristics.

The tool will be derived by data collected during this project and provided in the VMT/Parking database, in addition to any existing information found, in at least four California cities. The database will be structured so that agencies and practitioners can supplement the database and tool in the future with new information as it becomes available.

WHAT IS OUR GOAL?

The goal of this study is to establish a data-driven link between parking supply at a development-level and VMT.

WHAT IS THE BENEFIT?

The parking database and tool used to estimate parking's effect on VMT (the two major outcomes of this project) can help inform policy decisions such as how much parking to require of local development projects.

WHAT IS THE PROGRESS TO DATE?

The research team reviewed existing and on-going research related to this project and defined the analysis and project goals based on available methodologies and practices. The existing research and knowledge has been summarized and several performance indicators have been proposed to the technical advisory committee to help us evaluate alternative data collection methods (e.g., cost, time, quality). These indicators will be discussed at the next technical advisory committee meeting. The research team is now formulating detailed descriptions of the alternative data collection options and developing a rubric that will compare the alternative methods across the proposed performance indicators.

The Research Technical Advisory Committee (TAC) Meeting was held in March 2020. At this meeting, the research team presented recommendations, gaps, and summaries regarding research data collection methodology strategies, context for comparison data land-use considerations, and asked questions of the TAC about research considerations. The TAC provided feedback and information to guide the research methodology strategies. Data collection is likely to be affected by COVID-19, but will continue as planned in the early Fall until further notice.

IMAGES

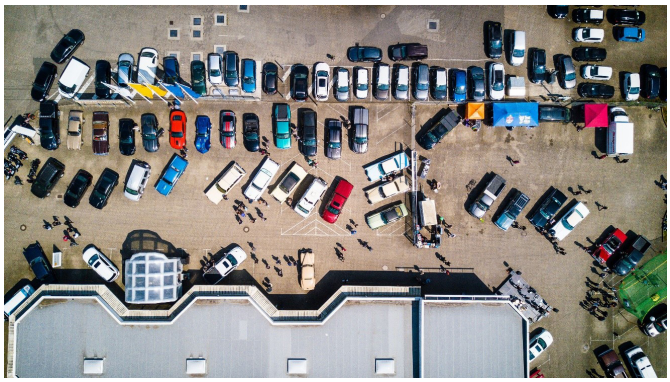

Image 1: An aerial view of a parking lot adjacent to a shopping center shows vehicles parked and people walking around. This is a stock photo.

Image 2: In a view down a long street, this photo shows a city from a residential district facing several high-rise buildings. Vehicles are parked along the street; few cars are using the roadway. This is a stock photo.