



FAST, ACCURATE

data for sustainable transportation projects

There is an ongoing shift in the transportation industry to improve transportation and environmental outcomes of planning initiatives. The industry is at an impasse; advancements in the transportation network support population growth, but they have also lead to urban sprawl, increasing congestion, negative impacts to bike and pedestrian usage, and increasing air quality (AQ) and greenhouse gas (GHG) emissions.

Kimley-Horn has developed TRED Lite™, an innovative software solution that automates Vehicle Miles Traveled (VMT) calculations to allow agencies to aggregate data to address transportation and environmental-related impacts before they occur.

What is VMT?

VMT is a metric that measures the number of vehicles on the road and how far each vehicle travels. Each additional VMT directly translates into an increase in tons of Greenhouse Gas (GHG) emitted, energy consumed, and increased traffic congestion. Calculating VMT quantifies the impact that motorists have on the environment, allowing agencies to make environmentally conscious transportation network decisions and to improve local air quality and community health.

In parts of the country,
VMT is replacing Level of Service (LOS) as the DOT's measure of transportation and environmental impact.



Level Of Service

LOS measures traffic delay or congestion in a specific location. The lower the traffic levels and the greater the transportation infrastructure, the better the LOS. Restrictive LOS policies have also made infill projects, which many agencies desire to encourage, but are increasingly challenging to implement. **Improving LOS does not necessarily reduce carbon emissions.**



Vehicle Miles Traveled

VMT measures the number of vehicles on the road and how far each vehicle travels. The lower the number of vehicles on the road and the number of miles driven, the lower the VMT. **Reducing VMT often reduces carbon emissions.**

What TREDLite Can Do For You



Regulate environmental impacts

Evaluate project VMT thresholds to regulate environmental impact of your projects



Explore data quickly and easily

Easily access from your PC or tablet with the browser-based, cloud hosted platform



Predict air quality (AQ) impacts

Predict project AQ/GHG emissions to understand direct air quality impact



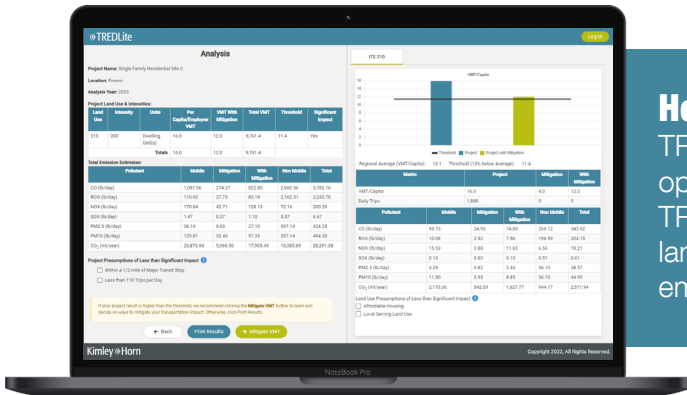
Run different scenarios

Test mitigation strategies with scenario planning if calculations exceed your project threshold



Calculate Internal Trip Capture

Automatically calculate internal trip capture using ITE rates



How TREDLite Works

TREDLite is a cloud-based application that leverages open-source data to calculate the VMT of your projects. TREDLite users can easily input data to model multiple land development scenarios and output AQ/GHG emission projections to inform local planning initiatives.

Features Include:

- + Institute of Transportation Engineers (ITE) Trip Generation
- + Transit Priority Area (TPA) evaluation
- + National Cooperative Highway Research Program (NCHRP) 684 Internal Capture Analysis
- + VMT Threshold Analysis
- + GHG Estimation of Mobile and Non-Mobile Sources
- + Criteria Pollutants Analysis
- + Transportation Demand Management (TDM) evaluation using the recent 2022 California Air Pollution Control Officers Association (CAPCOA) guidance
- + VMT Fee-Based Mitigation Analysis (VMT Banking)

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Let TREDLite Inform Your Planning Strategies

If you are taking the next step in evaluating the transportation and environmental impact of your projects, TREDLite provides the fast, accurate data that you need. The application allows you to set VMT thresholds and test the impact of proposed projects against it. If project projections exceed the threshold, TREDLite allows you to test mitigation strategies to meet your project goals, reduce VMT, and reduce Greenhouse Gas (GHG) impacts.

Partner with a Kimley-Horn professional to leverage TREDLite today!



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Expect More. Experience Better.