



LOCUS



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Big Data Analytics

LOCUS is our Big Data transportation analytics platform that transforms location data from connected vehicles and smartphones into actionable intelligence.

Our Approach

LOCUS is purpose-built by transportation specialists, for transportation specialists. We steadfastly believe in cleaning, validating, and expanding our data with a keen focus on equity and device privacy.

This is a highly customizable and intuitive platform that visualizes complex data to help agencies make informed decisions.

Why Choose Us?

We use validated and expanded sensor data to generate ground-truthed multimodal trip data that are ready for use in planning, operational, and modeling efforts.

We are trusted advisors in the transportation industry. Our platform is designed to provide unbiased and objective assessments.

Platform Features



LOCUS Passenger:

Queries expanded and validated Origin-Destination passenger flows by mode, travel purpose, time, and more.



LOCUS Truck:

Integrates truck movements and commodity flows for a one-stop tool for freight plans and truck parking efforts.



LOCUS Performance:

Shows speeds, patterns, and volumes, external station, select-link analyses, and pass-through zones on specific event days.



LOCUS Charge:

Identifies ideal locations for public charging stations for passenger and truck EVs to help municipalities and planning agencies.



LOCUS Safe:

Indicates areas with higher exposure to crashes by linking crash data with LOCUS Passenger and Truck flows.

WE HAVE WORKED WITH OVER



DOTS, MPOS, COUNTIES, AND
CITIES ACROSS THE U.S.



OF LOCUS CLIENTS
RENEWED THEIR LICENSE



LOCUS

We have helped transportation agencies with **Model Calibration, Before/After Studies, Equity Analysis, Active Transportation Planning,** and **EV Planning Studies.**

By distilling data into a highly **accurate, user-friendly** format, we can generate **actionable insights** to address the challenges you are facing.

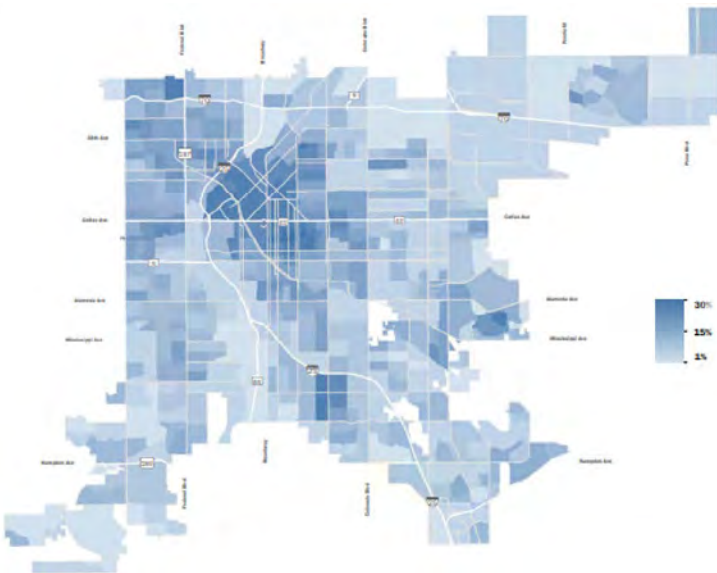


CS led the development of *Denver Moves Everyone* (DME), a Strategic Transportation Plan for the Denver Department of Transportation & Infrastructure (DOTI).

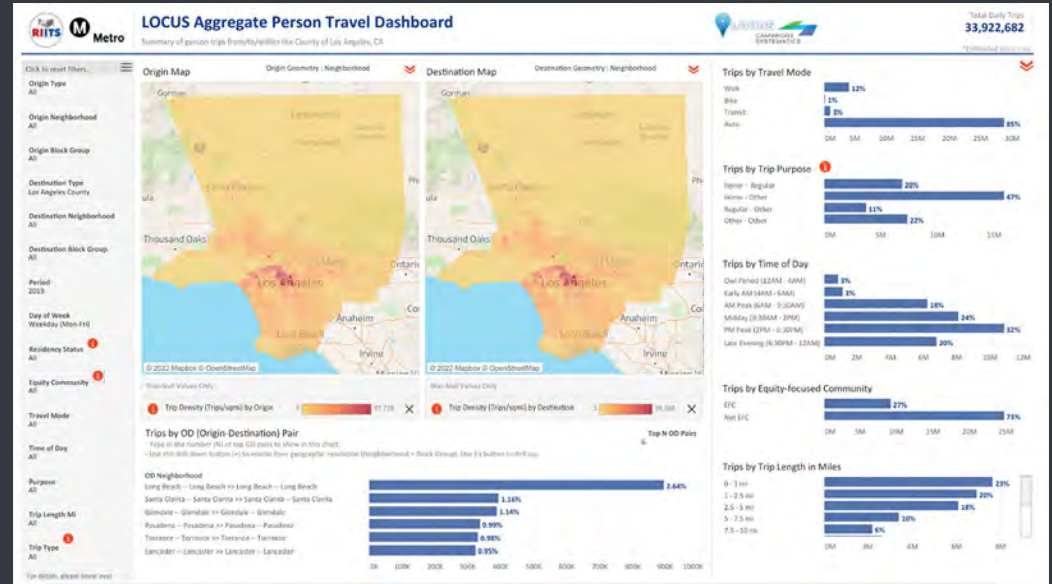
DENVER
THE MILE HIGH CITY

LOCUS data was used to quantify current travel patterns, validate a travel demand model, and prioritize programs and projects. Our approach ensured equity was integrated into every task, including public engagement and outreach, demographic trend analysis, investment prioritization, programming and implementation

The results provided DOTI with a comprehensive plan to improve Denver's transportation system while keeping equity in focus.



This snapshot from LOCUS shows walking trip data in Denver, CO. Denverites make over 220,000 walking trips on an average weekday. Walking trips are most common in and around downtown and in neighborhoods with more complete pedestrian infrastructure and more accessible community destinations.



For LA Metro, CS developed comprehensive multi-year estimates of travel flows, active transportation, mode splits, and telecommuting patterns. The project team leveraged a variety of sources for location-based datasets, including those from connected vehicles, smartphones and transit fare card transactions.

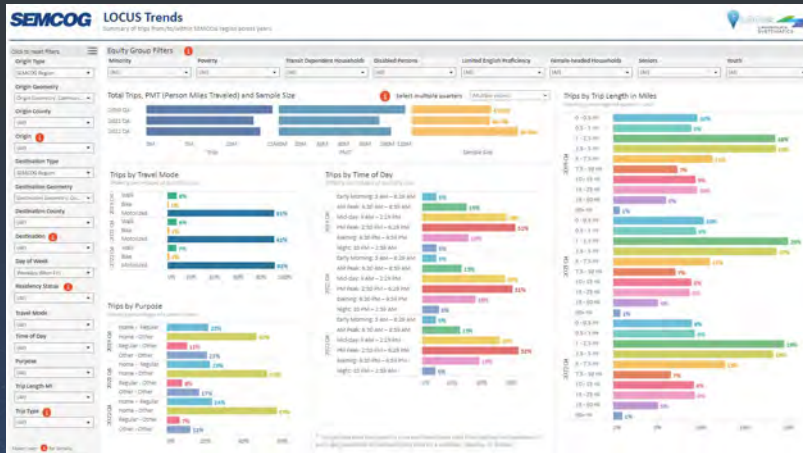
These datasets were used by LA Metro to baseline and continuously track progress towards their Vision 2028 strategic plan goal of doubling the share of non-auto modes. Now, partner organizations and their consultants – including MPOs, transit agencies, and educational institutes – can view this information via the interactive dashboard, “Measure Up! LOCUS.”

Additionally, CS conducted immersive webinars and training sessions for over 200 transportation professionals to accelerate the adoption of the products.



LOCUS data were used to understand flow patterns in the southeast Michigan region, developing metrics across years to examine the impact from the pandemic, as well as corridor demand for key projects in the region, including bike and pedestrian initiatives.

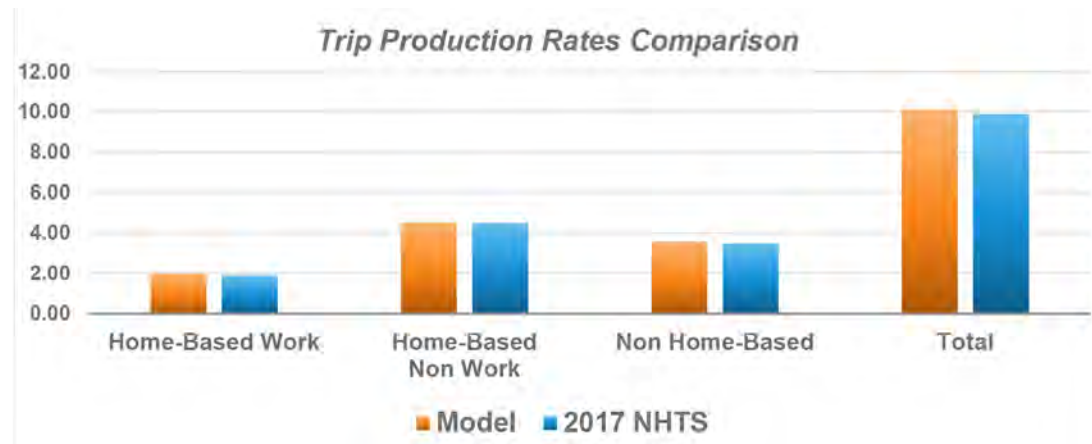
SEMCOG's partners (agencies and consultants) continue to have access to the data to ensure that regional projects begin from consistent data inputs moving forward. SEMCOG also licensed tour metrics, which they will use in calibrating and validating their regional activity model.



In Orange County, New York, evolving regional needs required a faster, adaptive travel demand model (TDM). The LOCUS

dataset and existing socioeconomic data were used in the absence of a household survey for model estimation.

We delivered a fully functional, highly accurate TDM using LOCUS data, leading to large time and cost savings. This was the **first time** location based services data had been successfully used for model estimation, replacing the need for a household travel survey!

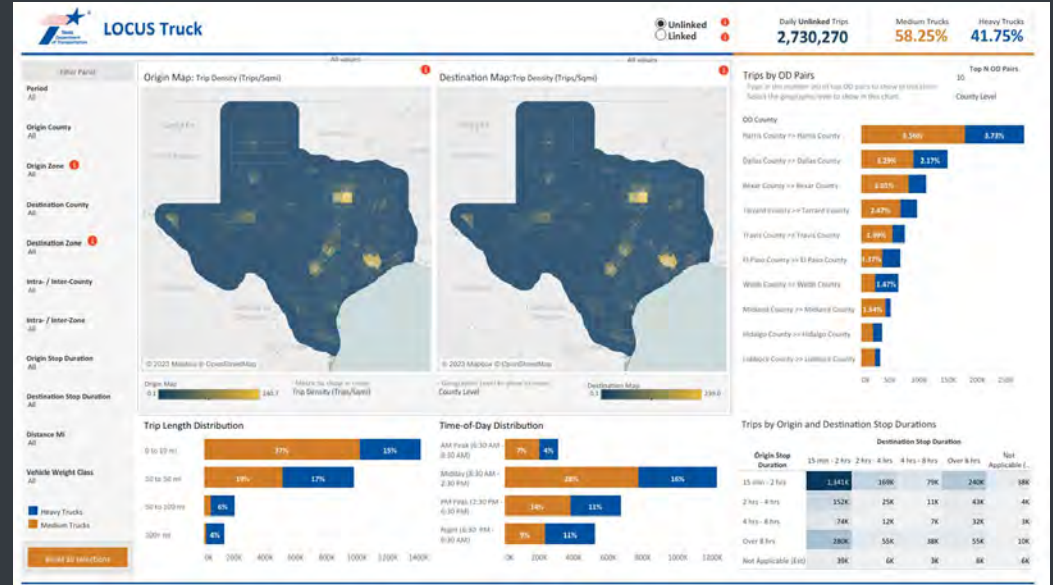




LOCUS Truck

LOCUS Truck is one of the modules within the LOCUS product suite. It shows how and where service and freight trucks are moving in a specific region by industry, vehicle class, speed, duration, trip vocation, and more.

It is an incredible tool that is powering truck parking studies, corridor evaluations, economic planning and workforce development efforts, truck modeling, and infrastructure investment prioritization.



CEC ETruc Project – RHETTA Grant

CS is part of a consortium assisting the California

Energy Commission in developing a vision for electric truck charging infrastructure. As part of this effort, CS is using a combination of LOCUS trucks and regional models to identify sites along freeways where public charging infrastructure will be beneficial for electric trucks.

CS is also pioneering a methodology to incorporate commodity flow information on the truck movements to support electricity modeling. The outcome will be the identification of charging sites for the State of California's transportation electrification strategy, spanning three horizon years.



Texas Department of Transportation

For the Texas DOT, CS led a program to utilize commercial vehicle GPS data for freight planning, truck parking, and corridor evaluations. As part of this \$10 million project, the CS team produced expanded truck flows, customized for specific corridors of interest from a safety and parking perspective.

The resulting solution, highlighted in the image below, enables statewide parking implementation studies for improved safety of truck drivers and communities.



*For more
info, contact:*



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Use the QR code below to receive additional information and occasional updates about LOCUS. We're also happy to set up a demo, informational meeting, or answer any other questions you may have!



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