

# Nexus OD

## Origin-Destination Analytics



Traffic congestion costs U.S. drivers over \$120 billion every year in lost time, wasted fuel, and emissions. Yet many agencies still rely on outdated travel surveys, siloed models, and reactive strategies that can't keep pace with the complexity of today's networks.

**Nexus OD** transforms how agencies understand travel behavior. By combining TomTom's origin-destination data with Flow Labs' advanced geospatial analytics, Nexus OD delivers a complete view of how trips begin, where they end, and how they move across a region. Planners and engineers can instantly generate reports, visualize flows, and measure volumes from a single platform. Whether you're calibrating models, planning corridors, or evaluating equity, Nexus OD gives you the clarity, speed, and intelligence you need to design smarter mobility systems.

## Key Features

### Zone, Link, and Route-Based Analyses

Study commuting flows across regions, evaluate specific corridors, or analyze defined routes—all in one tool.

### Flexible Region Selection

Upload shapefiles, import geojson data, or create custom polygons and grids to analyze the geographies that matter most.

### Multi-Modal Insights

Integrate passenger, freight, bicycle, and pedestrian flows into a single picture of mobility.

### Calibrated Volume Estimates

All OD flows are grounded in detection and count data, ensuring reliable estimates of trip volumes, durations, and lengths.

### Beautiful, User-Centric Interface

Generate and visualize insights in clear, interactive maps designed for accessibility and storytelling.

### Seamless Integration

Access OD insights from the same Nexus login and share results across planning and engineering teams.

## Use Cases & Applications

Nexus OD helps agencies see how trips start, end, and move across their networks—all in one platform. From daily operations to long-term planning, it delivers actionable insights that make decisions faster, smarter, and grounded in real-world travel patterns.

### Model Calibration

Travel demand models are only as accurate as the assumptions behind them. Nexus OD generates detailed origin-destination matrices to calibrate and validate models with real-world data. Instead of relying on surveys or outdated estimates, agencies can align forecasts with observed flows, ensuring results are accurate, reliable, and defensible.

### Corridor and Diversion Analysis

When congestion, incidents, or construction disrupts normal travel, Nexus OD reveals how travelers adapt. Agencies can identify which OD pairs rely most on a corridor, where traffic diverts, and how volumes shift across the network. These insights make it easier to design detour strategies, evaluate corridor upgrades, and improve system resilience.

### Project Performance Measurement

Infrastructure and policy changes raise the question: did it work? Nexus OD enables before-and-after analyses to show how trip patterns shift in response. Whether evaluating a new transit line, a road diet, or signal retiming, agencies can quantify impacts on volumes, durations, and diversions—and share clear evidence of outcomes.

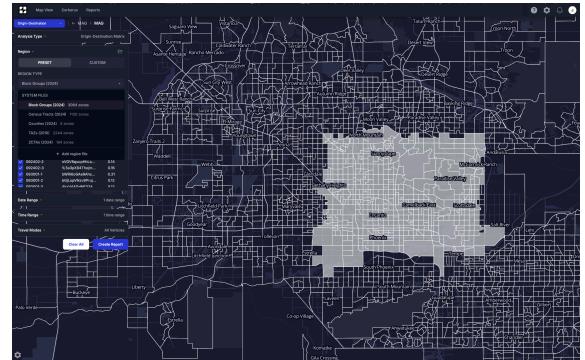
### Long-Term Planning and Trend Analysis

Nexus OD is not limited to snapshots. Agencies can track patterns across weeks, months, or years to uncover long-term trends. Seasonal variations, recurring congestion, and the effects of schools, holidays, or events all become visible. With consistent, data-rich evidence, agencies can make smarter long-range planning decisions.

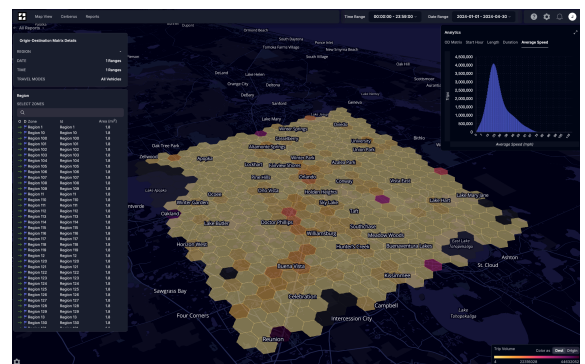
Nexus OD is just the starting point. Flow Labs is actively developing new features, expanded datasets, and advanced visualizations to give agencies even more powerful insights into how people and goods move. [Please contact our team at sales@flowlabs.ai to see a demo of Nexus OD in action.](#)

## About Flow Labs

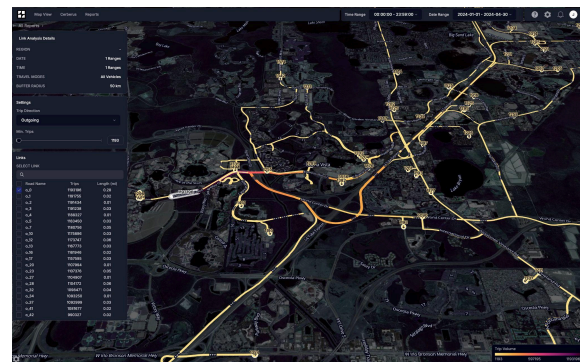
Flow Labs provides affordable, high-performance, data-driven software solutions for transportation agencies. Our AI-powered platform generates the most accurate transportation data available today, empowering traffic professionals to analyze, monitor, and optimize traffic flow across entire cities in seconds. With integrated data at their fingertips, professionals can make informed decisions, implement effective strategies, and improve transportation performance. To learn more, visit [flowlabs.ai](https://flowlabs.ai).



**Zone Customization** Create zone-based analysis for Zipcodes, TAZs, Counties, or any custom boundaries.



**Origin-Destination Analysis** Generate OD matrices, analyze trip time, trip length, and trip speed distributions and visualize regionwide flows.



**Link Analysis** Analyze trip paths from or to any link or location. Capture the details you need to understand diversions and bottlenecks.