

The National Transportation Data & Analytics Solution is a powerful platform that provides a unique, robust, and high-quality transportation dataset combined with advanced analytics tools, enabling valuable insights to empower academic research and instruction.



With expansive coverage of over 400,000 road segments of the U.S. National Highway System, and the full Traffic Message Channel (TMC) network, this advanced platform provides field-observed travel time and speed data for both trucks and passenger vehicles collected from across the country. Providing several billions of detailed observations directly to the fingertips of researchers, this deep dive analytics platform enables users to quickly and easily retrieve, analyze, visualize, and better understand critical transportation data, leading to profound insights and advancements across the transportation and mobility industry spectrum.

Key Features and Benefits

National Transportation Data & Analytics Solution

Fueling Insights. Igniting Innovation.

- Unique and comprehensive dataset specifically designed for researchers, faculty, and students working in fields related to transportation, civil engineering, urban planning, and more.
- Offers speed and travel time temporal resolution as low as five minutes providing greater granularity and precision for enhanced insights.
- Includes data back to 2017, allowing for time series analysis, which enables researchers to identify patterns, variations and trends over time and forecast future results.
- Delivered via an advanced analytics platform with deep-dive tools that provide powerful features and visualizations, enabling custom mapping and analysis.
- Enables multidisciplinary use cases across several fields related to transportation studies and engineering, civil engineering, environmental engineering and planning, urban and economic planning, and many others.
- Trusted data source of the U.S. Federal Highway Administration (FHWA) relied upon to make investment and policy decisions that contribute to national performance goals.
- Includes 50 multi-disciplinary use cases from leading IEEE expert in transportation, mobility and related fields detailing how the platform can be used to facilitate and enhance research projects.

About NPMRDS

The National Performance Management Research Data Set (NPMRDS) is a vehicle probe-based travel time dataset relied upon by the FHWA performance measurement programs.

- Geographical Coverage: Across 400,000 road segments of the U.S. National Highway System including select Canadian and Mexican border crossings and the full U.S. TMC network
- Data Source: Vehicle probes
- Metrics: Speed, travel time
- Modal Coverage: Truck and passenger car
- **Coverage years:** Present day back to 2017
- Lowest Temporal Resolution: 5 minutes
- Data Latency: Updated monthly

Take the Road to Advanced Insights

The National Transportation Data & Analytics Solution is an advanced analytics platform with

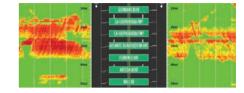
deep-dive tools that provide powerful features and visualizations such as:

	\$379.68	\$475 IK	Thursday, February 17, 2022 5:00 PM	1	\$15.76	\$1.1M
522./K	\$404.7K	5417K	Delay cost: Total: \$475.1K Per VHT: 50.34 Hours of delay: Person-hours: 19.3K hrs Vehicle-hours: 13.7K hrs Vehicle-hours: 13.7K hrs	*	SZLIK -	\$3.2M
				۲.	215.55	\$2.1M
	110.00	5108.3K		*	11146	\$1.49
	\$233.06	17.0.NK		×	2.4	\$2.1M
	\$262.4K	\$411.5K	Total: 1,201.5K miles Passenger: 1,081.4K miles	•	812.5K	53M
	\$334.00	\$431.4K	Commercial: 120.2K miles Delay per VMT: 0.8 mins / mile	×	STLER.	\$2.IN
203.5K	\$274.2K	120426	Data validity: 91.14%		\$17.6K	\$2.40

User Delay Cost Analysis Determine monetary impact of a delay on the roadway to its users.



Trend Maps Create animated maps of performance metrics over the course of time.



Congestion Scan Analyze conditions on one or more stretches of road.

A snapshot of the tools available on the **National Transportation & Analytics Solution** platform:



Dashboard

offline analysis.

Create your own personal dashboards to monitor corridor performance in regions of interest.



Congestion Scan Analyze the rise and fall of congested conditions on a stretch of road.

Massive Data Downloader



NPMRDS Coverage Map

Performance Summaries

other performance metrics.

Explore the coverage completeness of the NPMRDS on a month-by-month basis.

Report on Buffer Time Index, Planning Time Index, and



User Delay Cost Analysis

Put a dollar amount on how much a road's performance impacts its users.



Corridor Speed Bins Visualize congestion measures by time spent at each speed on a stretch of road.

Download raw probe data from our archive for



Corridor Time Comparison View congestion metrics as a function of location on a road.



Trend Map Create animated maps of roadway conditions.



Performance Charts Chart performance metrics over time.



Map-21

Tutorials

Create a dashboard widget to monitor states', MPOs', and Urbanized Areas' performances against the new MAP-21 ruling.

Learn how to use each of the tools in the suite.



Report Templates

Learn how to transform data from tools in our suite into professional storytelling reports, documents, and pamphlets.

The National Transportation Data & Analytics Solution platform is equipped with state-of-the-art analytics tools allowing users to:

- Conduct advanced analysis, research, and performance generation using probe data.
- Analyze traffic conditions across one or more stretches of road.
- Evaluate the congestion health across roadways.
- Gain insight into several statistics like speed, buffer time index, planning time index, and travel time index.
- Visualize data on maps or other interactive graphics.
- Download raw data for offline analysis and create and download reports.

