



Getting Started User Guide

National Transportation Data and Analytics Solution (NTDAS)

Powered by IEEE and NPMRDS

Updated May 1, 2024



User Guide Contents

Find general information and log-in details for the National Transportation Data & Analytics Solution platform

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What is NTDAS?

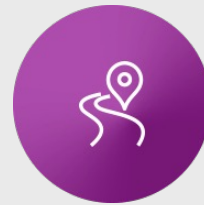
The **National Transportation Data & Analytics Solution** is a powerful platform that provides a unique, robust, and high-quality roadways transportation data set combined with advanced analytics tools, enabling valuable insights to empower academic research and instruction. The National Transportation Data & Analytics Solution platform is equipped with state-of-the-art analytics tools allowing users to:



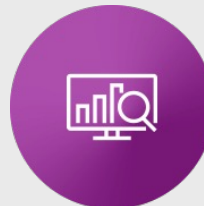
Conduct advanced analysis, research, and performance generation using probe data



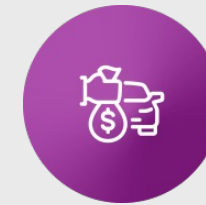
Evaluate the congestion health across roadways



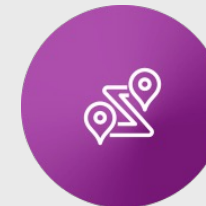
Analyze traffic conditions across multiple stretches of road



Gain insight into several statistics like speed, buffer time index, planning time index, and travel time index



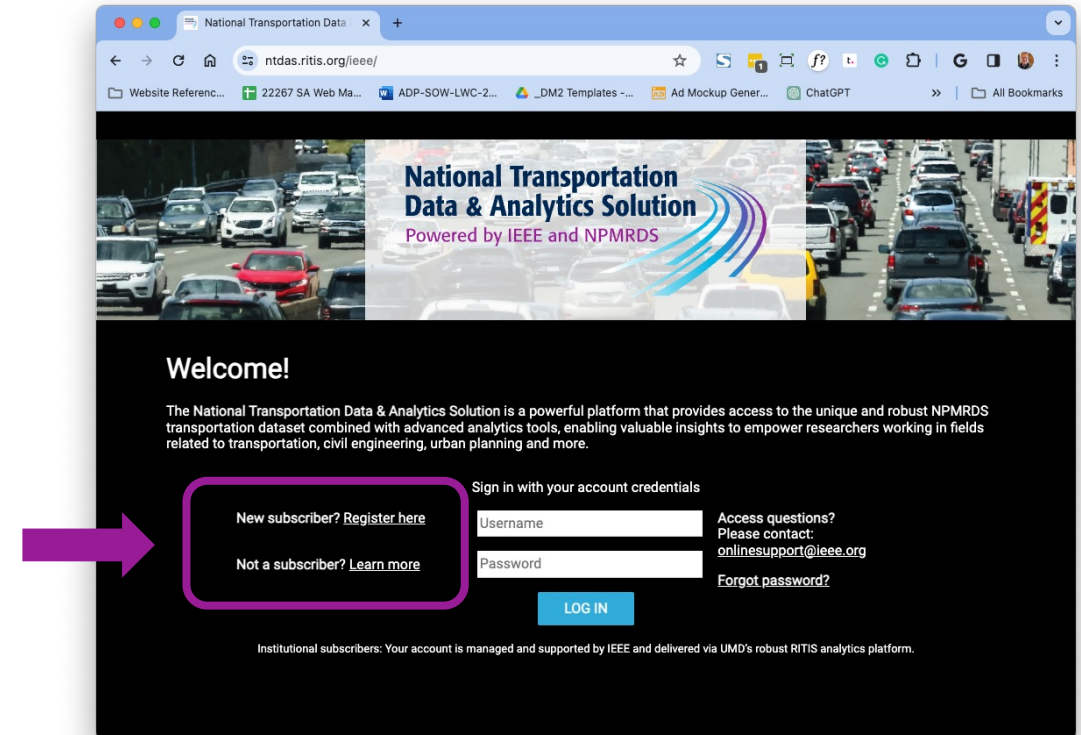
Determine monetary impact of a delay on the roadway to its users



Create animated maps of performance metrics over time and visualize data on other interactive graphic tools

How do I create an account?

1. Go to <https://ntdas.ritis.org/ieee/>
2. New subscriber? Click on the “Register here” link and follow the on-screen instructions which will take you to <https://www.ritis.org/register>.
3. Want to learn more first? Click on the “Learn more” link.



New User Registration

1. To access NTDAS, users must register an account with RITIS at <https://www.ritis.org/register>. Once an organization has purchased NTDAS, users' accounts will be automatically approved.
2. Users can register an account by using their institutional email address.
3. Set a password in Step 2 of the registration form.
4. Users may get an email with the subject ACCOUNT REQUEST from RITIS. The user should reply to this email mentioning taking part in an IEEE NTDAS trial/paid subscription
5. Users will receive an activation email, and the link will take users to <http://www.ritis.org/>
6. Out of the four options shown on the RITIS homepage, users should click <http://npmrds.ritis.org/>
7. Once activated, users can log in directly to the platform at <https://ntdas.ritis.org/ieee>
8. Every user at an organization must have their own RITIS account, and shared logins will not be permitted!
9. For questions about the product, user guide, or use cases, contact ntdas-support@ieee.org.

New User Registration

1 * Indicates required field.

United States

Business E-Mail*

Confirm E-Mail*

Title

First Name* MI Last Name*

Agency/Institution*

Agency/Office Address*

City* State* ZIP Code

Office Phone* Mobile Phone


2 Please remember your password as you will need it to complete the registration process.

Password*

Minimum of 8 characters and at least one number

Confirm Password*

Password Strength:

I'm not a robot 

reCAPTCHA
Privacy · Terms

SUBMIT

2 This approval process can take up to two business days to complete.

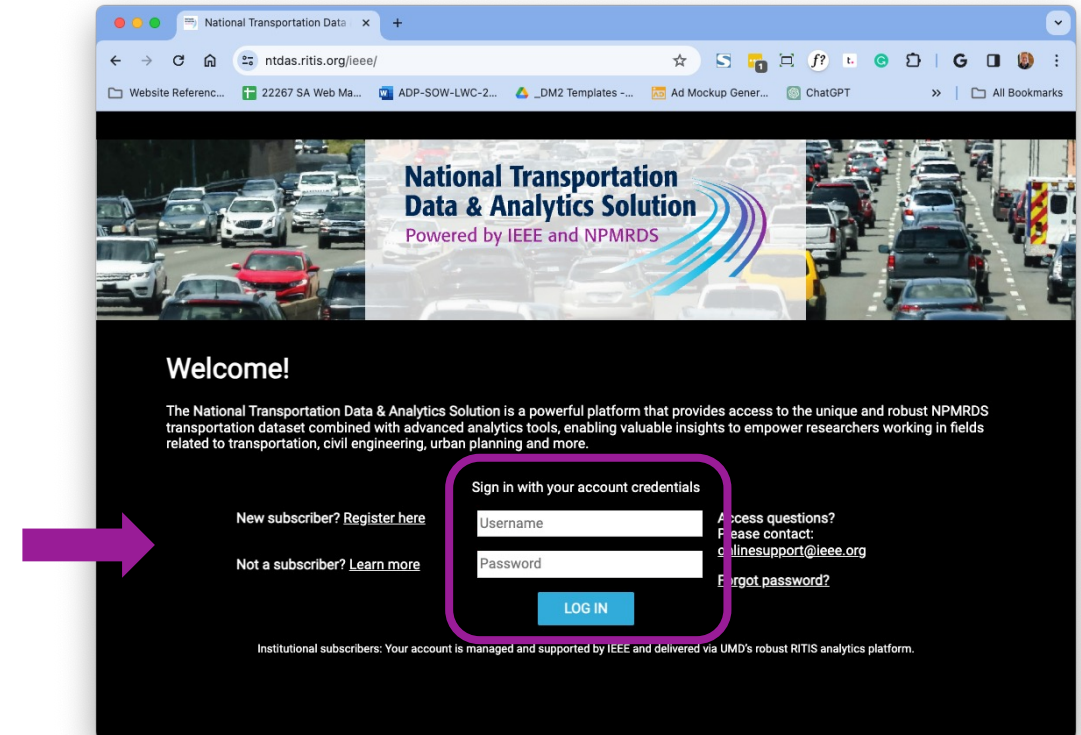
Users can put the name of their institution in the Agency Box.

How do I log in?

Go to <https://ntdas.ritis.org/ieee/> and enter your email address and password and click the Log in button.

Forgot your password?

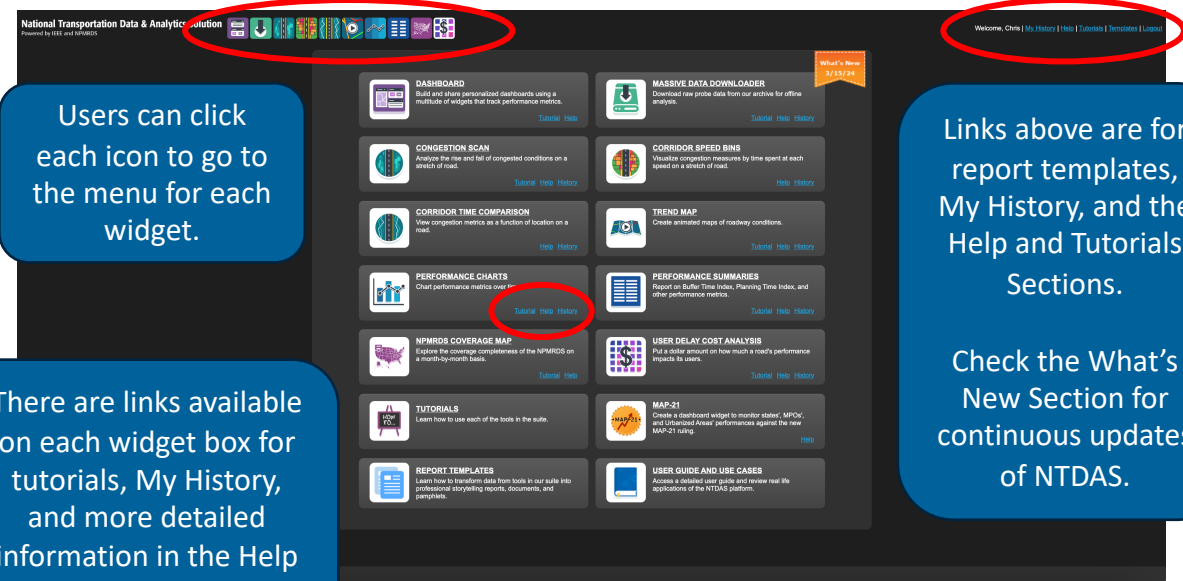
- From the login window, select the Forgot my password link, specify your registered email and select the Continue button.
- Your password will be reset, and notification of follow-up steps will be sent to you by email.



Homepage

Once you log in, you will see all 14 tools of the National Transportation Data & Analytics solution that are shown on the homepage.

- Dashboard
- Congestion Scan
- Corridor Time Comparison
- Performance Charts
- Coverage Map
- Tutorials
- Report Templates
- Massive Data Downloader
- Corridor Speed Bins
- Trend Map
- Performance Summaries
- User Delay Cost Analysis
- MAP-21
- User Guide and Use Cases



What do the different icons mean?



Dashboard

Build and share personalized dashboards using a multitude of widgets that track performance metrics.



Massive Data Downloader

Download raw probe data from our archive for offline analysis.



Congestion Scan

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



Corridor Speed Bins

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



Corridor Time Comparison

View congestion metrics as a function of location on a road.

What do the different icons mean?



Trend Map

Create animated maps of roadway conditions.



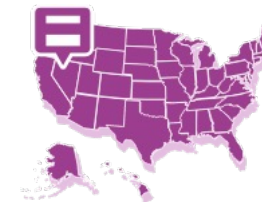
Performance Charts

Chart performance metrics over time.



Performance Summaries

Report on Buffer Time Index, Planning Time Index, and other performance metrics.



NPMRDS Coverage Map

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



User Delay Cost Analysis

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

What do the different icons mean?



Tutorials

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



Map-21

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



Report Templates

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



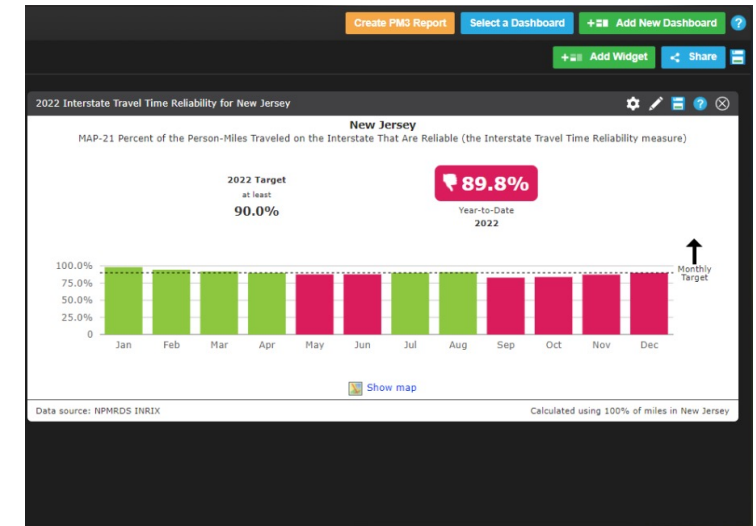
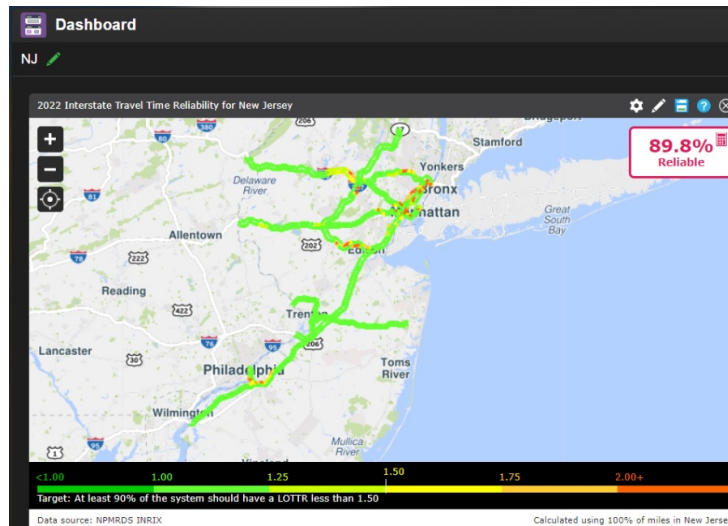
User Guide/Use Cases

Access a detailed user guide and review real life applications of the NTDAS platform.

Quick Glance at the Dashboard

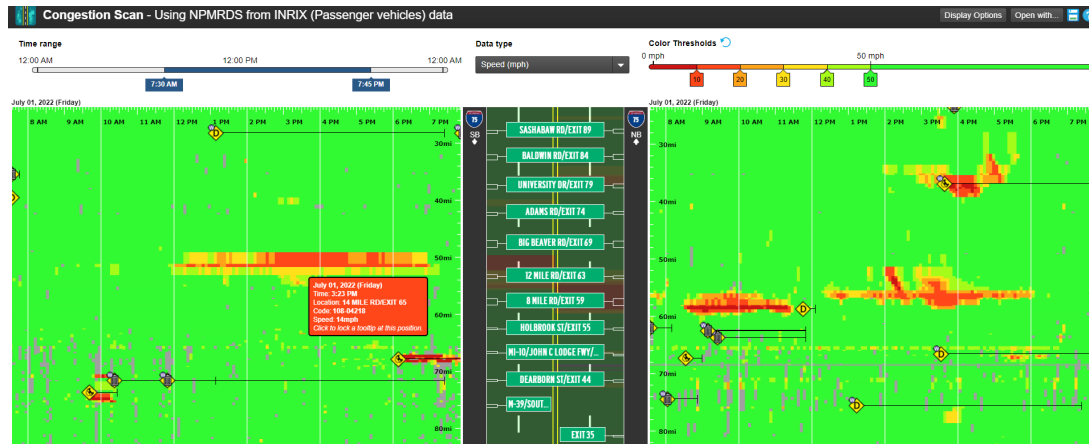
Create your own personal dashboards to monitor corridor performance in regions of interest.

1. In the drop menu, users can press the 'Create new dashboard' to bring up a blank dashboard
2. Click the 'Add Widget' button to bring up the menus for MAP-21 or User Delay Cost Analysis.
3. Go to the Dashboard tutorial for more information

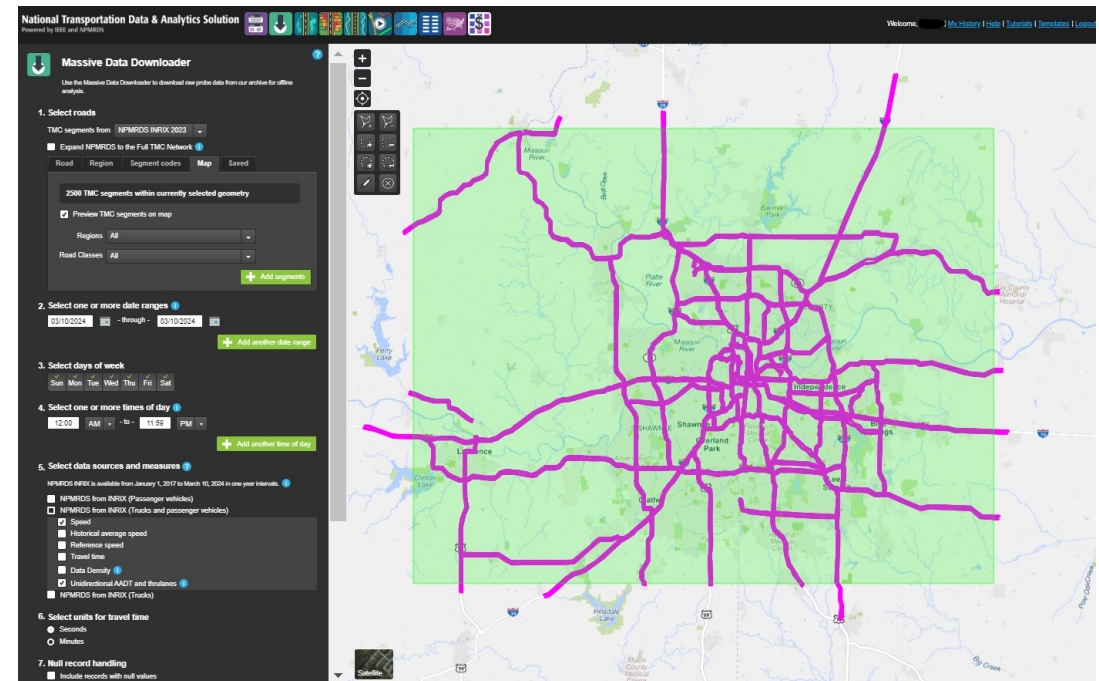


Quick Glance at the Tools

Congestion Scan:



Massive Data Downloader:



Quick Glance at the Tools

Corridor Speed Bins:



Performance Charts:

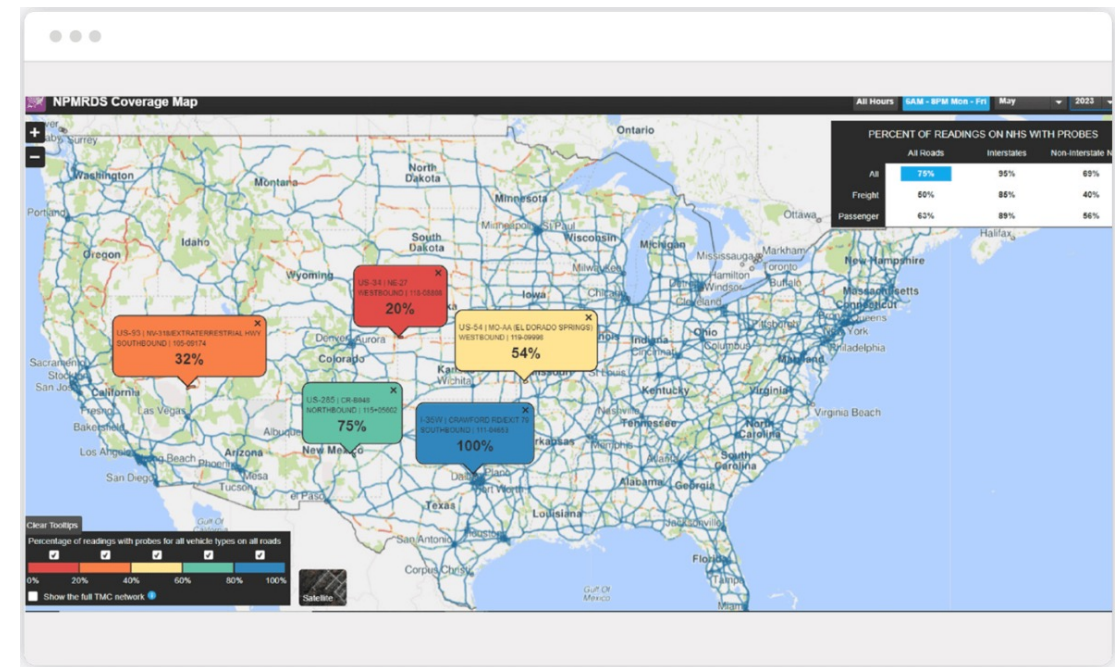


Quick Glance at the Tools

Performance Summaries:

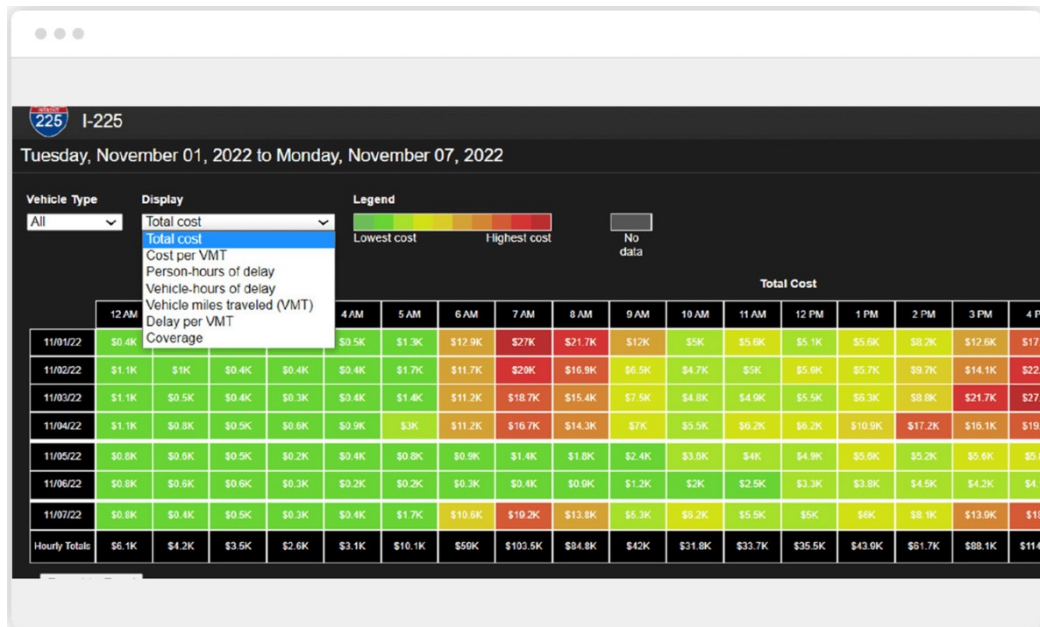
July 2022 Clockwise	August 2022 Clockwise	September 2022 Clockwise	July 2022 Counterclockwise	August 2022 Counterclockwise	September 2022 Counterclockwise			
Clockwise segments from I-465 using NPMRDS from INRIX (Trucks and passenger vehicles) data								
July 2022								
Speed (mph)	Buffer time (minutes)	Buffer index	Planning time (minutes)	Planning time index	PSL - Planning time index	Travel time (minutes)	Travel time index	PSL -
12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM	12:00 AM - 10:00 AM
Mon	59.80	13.81	0.24	68.72	1.40	1.20	52.94	1.08
Tue	56.60	23.14	0.41	80.16	1.63	1.39	55.88	1.14
Wed	56.70	23.92	0.42	80.89	1.65	1.41	55.77	1.14
Thu	54.90	30.82	0.54	88.03	1.79	1.53	57.60	1.17
Fri	53.30	30.00	0.52	87.32	1.78	1.52	59.33	1.21
Weekdays	56.00	23.91	0.42	80.69	1.64	1.40	56.46	1.15
Sat	60.10	12.75	0.24	66.09	1.35	1.15	52.64	1.07
Sun	63.40	3.39	0.06	56.21	1.15	0.98	49.93	1.02
Weekends	61.70	10.87	0.20	63.95	1.30	1.11	51.20	1.04
All Days	57.70	19.22	0.35	74.83	1.52	1.30	54.82	1.12

NPMRDS Coverage Map:



Quick Glance at the Tools

User Delay Cost Analysis:



User Guide and Use Cases:

National Transportation
Data & Analytics Solution
Powered by IEEE and NPMRDS



USER GUIDE AND USE CASES

NTDAS Platform:

<https://ntdas.ritis.org/ieee/>

For more help with the platform, please
contact IEEE at:

ntdas-support@ieee.org

Free trials are available for academic
institutions! For more information contact:

ntdas-sales@ieee.org

