

PM3 Analytics

REPORTING & TARGET-SETTING MADE EASY

Key Dates in 2018

5/20

State DOTs submit 1st Performance Period targets

6/15

State DOTs submit 2017 PM3 data to HPMS

8/2

State DOTs submit hourly traffic volume estimates methodology for PHED calculations

10/1

State DOT Baseline Performance Report and MPO CMAQ Performance Plans (where applicable)

11/16

MPOs submit 1st Performance Period targets to respective state DOTs

EVERY STATE DOT AND MPO HAS SEVERAL NEW RESPONSIBILITIES with the May 2017 federal rule regarding congestion and freight system performance reporting requirements (“PM3”). FHWA has made the NPMRDS travel time dataset created and delivered by the INRIX/UMD CATT Laboratory team available to DOTs and MPOs at no cost. Still, there is much to do to translate this dataset to meet the PM3 reporting requirements.

INRIX and the UMD CATT Laboratory have extended our partnership beyond generating NPMRDS V2 datasets to offering tools and additional datasets that simplify PM3 target-setting, tracking, and reporting. **We are offering highly cost-effective solutions for meeting near-term deadlines as well as ongoing reporting.** The first PM3 performance period is 5 years in length, and these tools will be available and useful from day one through the entire period.

UNIQUE ADVANTAGES:

- ▶ Cloud-based service available agency wide from day 1 (data and tools)
- ▶ Delivered by the INRIX/UMD team providing the official NPMRDS Dataset and network
- ▶ Quickest possible access to NPMRDS formatted data, with data back to 2016 pre-loaded
- ▶ **FULL** TMC-network data options to increase the value of the available tools across a larger road network
- ▶ Access to a network of peer agencies via user group

Join dozens of states and over 100 MPOs already using these tools for PM3 reporting & analytics.

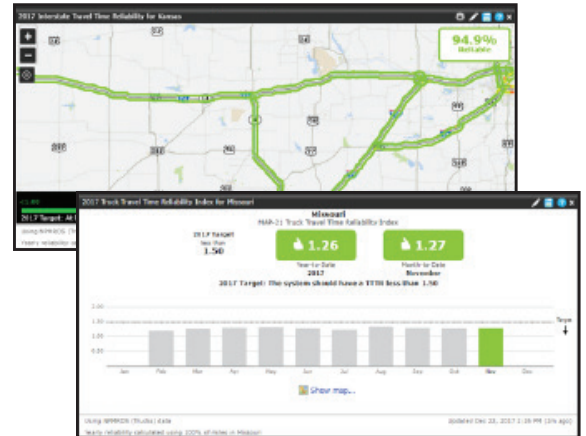
Choose from Three Service Options:

▶ **PM3 ANALYTICS—BASIC** provides UMD tools and INRIX data necessary to set and track targets for the LOTTR, TTR and PHED performance measures. It includes the ability to upload speed limits to calculate PHED where applicable and tools to export data for insertion into HPMS per FHWA guidance. Thirteen months of backfill data (from January 2016 through January 2017) for the NPMRDS/NHS road network is included—and is only available from INRIX/UMD —providing two complete years of consistent NPMRDS-formatted data for trend analysis and more informed target-setting.

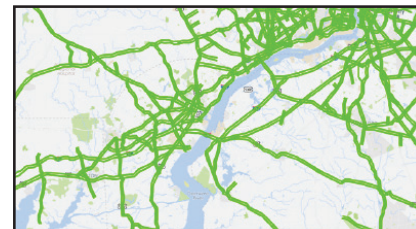
▶ **PM3 ANALYTICS—PLUS** adds several UMD analysis and visualization modules to allow for full-scale utilization of NPMRDS data. The datasets will be updated weekly or more frequently, as opposed to the standard monthly updates, enabling quicker access to data to conduct analyses.

▶ **PM3 ANALYTICS—PREMIUM** builds on 'Plus' by adding additional INRIX data in two ways: (1) providing NPMRDS data against the full national TMC network to roughly double the size of the roadway network available for analysis, and (2) adding the traditional 1-minute INRIX traffic data archive from January 2015 forward. This provides full analytics capabilities across the complete TMC network.

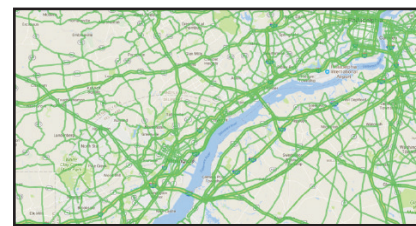
INTERACTIVE PM3 MAPS & GRAPHS



ROAD COVERAGE OPTIONS



NPMRDS/
NHS Network



Full TMC
Network

FEATURES	PM3 Analytics Service Options			
	Baseline*	Basic	Plus	Premium
Road Network	NPMRDS/NHS Network	NPMRDS/NHS Network	NPMRDS/NHS Network	+ Full TMC Network
Date Range	From February 1, 2017 (NPMRDS V2 Format)	+ From January 1, 2016 (NPMRDS V2 Format)	From January 1, 2016 (NPMRDS V2 Format)	From January 1, 2016 (NPMRDS V2 Format); + From January 1, 2015 (INRIX 1-minute archive)
Tools	Data Downloader	Data Downloader + PM3 Reporting/Analysis	Data Downloader PM3 Reporting/Analysis + Probe Data Analytics Suite	Data Downloader + PM3 + Reporting/Analysis + Probe Data Analytics Suite

* No cost to State DOTs, MPOs, & their contractors when signing the NPMRDS V2 DSA

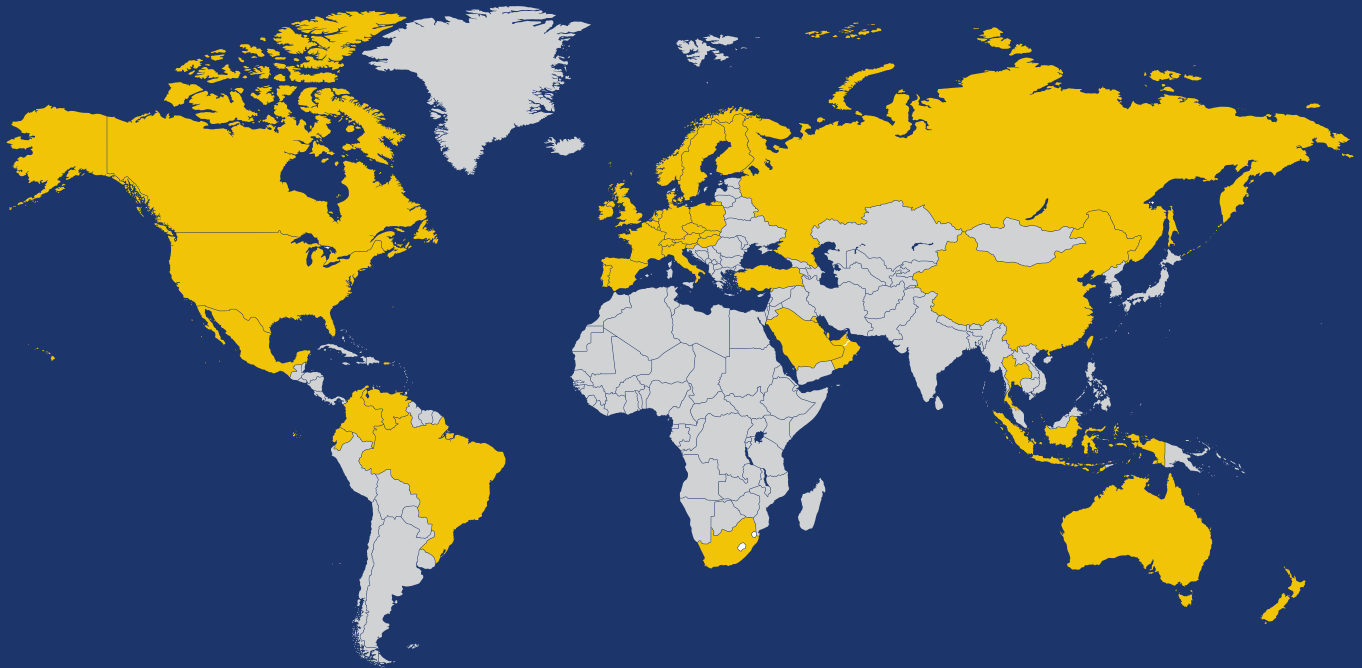
Capabilities by Service Option:

FEATURES	PM3 Analytics Service Options			
	Baseline*	Basic	Plus	Premium
0. Access NPMRDS V2 Data:				
Road selection by road, region, TMC list/set, or from a map	✗	✗	✗	✗
Date range selection	✗	✗	✗	✗
Data output selection	✗	✗	✗	✗
NPMRDS V2 data from February 2017 forward (~400K segments, 480K directional miles)	✗	✗	✗	✗
NPMRDS V1 data from October 2011 through January 2017**	✗	✗	✗	✗
Off-line processing & email notification when data request ready for downloading	✗	✗	✗	✗
Maintenance of download requests for re-running and re-downloading	✗	✗	✗	✗
1. Calculate NPMRDS-Based PM3 Performances Measures in FHWA Format:				
Level of Travel Time Reliability (LOTRR) ¾ Interstates		✗	✗	✗
Level of Travel Time Reliability (LOTRR) ¾ Non-Interstates		✗	✗	✗
Truck Travel Time Reliability (TTTR) Index		✗	✗	✗
Person Hours of Excessive Delay (PHED) for applicable MPAs		✗	✗	✗
Uploading of agency-provided speed limit data for PHED measure		✗	✗	✗
Documented PHED hourly traffic volume estimates methodology		✗	✗	✗
2. Visualize MAP-21 PM3 Performance Measures on Dashboards & Displays:				
Interactive maps and graphs		✗	✗	✗
Auto-generated FHWA compliance reports		✗	✗	✗
Addition of NPMRDS V2 consistent data from January 2016 through January 2017 for accurate trending & target setting		✗	✗	✗
3. Visualize Broader Range of Metrics for Corridors, Routes, & User-Defined Dates:				
Congestion Scan (location, duration, and severity of congestion)			✗	✗
Animated Trend Maps (comparing date ranges)			✗	✗
Performance Summary Statistics (Travel Times, TTI, PTI, BTI, etc.)			✗	✗
Performance Summary Charts (Travel Times, TTI, PTI, BTI, etc.)			✗	✗
User Delay Cost Calculations (leveraging day/time volume estimates)			✗	✗
Bottleneck Ranking (identifying & quantifying congestion for project justification)			✗	✗
4. Visualize Broader Range of Historical Metrics on Full TMC Network (Including Real-Time/Recent Data):				
Full TMC Network NPMRDS V2 formatted data from January 2016				✗
Full TMC Network INRIX 1-minute speed archive from January 2015				✗
Region Explorer (real-time & point-in-time bottlenecks, incidents, & weather)				✗
Dashboards for point-to-point travel times, bottlenecks, & more				✗
5. Utilize Additional RITIS Real-Time TSMO Tools (Integrate Sensor & Incident Feeds):***				
Integration of Agency Incident/Event data & ITS devices (DMS, CCTV, etc.)				✗
Work Zone Performance Monitoring				✗
Situational Awareness Maps (integrating DOT & non-DOT data across borders)				✗
Multi-Agency Collaborative Decision Support Tools				✗
Incident After Action Review Tools				✗
Incident Timelines				✗

* No cost to State DOTs, MPOs, & their contractors when signing the NPMRDS V2 DSA ([go to NPMRDS.RITIS.ORG](http://go.to/NPMRDS.RITIS.ORG))

** Available to State DOTs, MPOs, & their contractors if an NPMRDS V1 DSA was executed

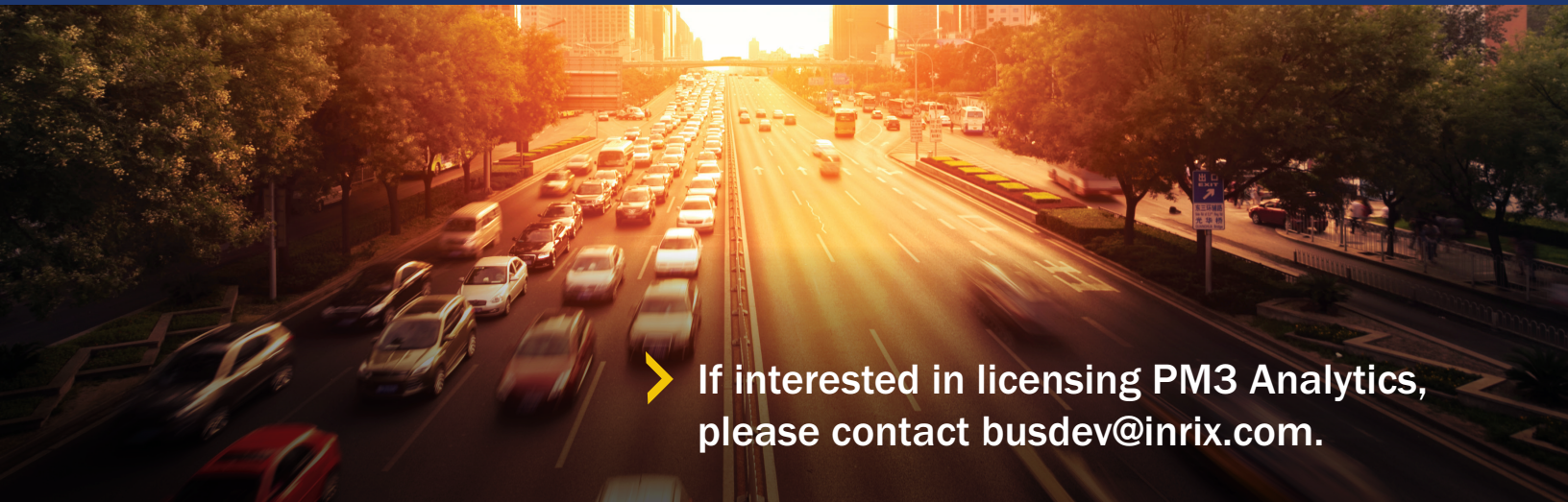
*** Feed integration may require extra fees depending on complexity



ABOUT INRIX

INRIX, a global leader of connected car services and transportation analytics, is making movement more intelligent. By leveraging vehicle connectivity, inter-modal routing, advanced parking management, dynamic data for city planning, and traffic flow optimization, we make it safer, cleaner, more convenient and more enjoyable for people to get to where they need to go.

As a leading traffic intelligence platform, INRIX delivers smart technology, data and analytics to help improve urban mobility. We believe in the power of partnership to solve the toughest transportation challenges and work across the ecosystem with automakers, governments, mobile operators, developers, advertisers and enterprises, large and small, to help move people, cities and business forward.



➤ **If interested in licensing PM3 Analytics, please contact busdev@inrix.com.**