

# ADVANCED TRAFFIC MANAGEMENT SYSTEM FOR HIGHWAYS

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ITS Planners and Engineers Private Limited

# Advanced Traffic Management System for Highways

Experience effortless highway operations with our cutting-edge Advanced Traffic Management Solution. Featuring an intuitive, browser-based interface, integrated GIS maps, and a powerful rule engine, it streamlines essential tasks while delivering real-time insights. Our comprehensive dashboard, coupled with advanced Business Intelligence (BI) tools, empowers you to respond swiftly to emergencies and make informed decisions with confidence.



## FEATURES



### HIGHWAY MONITORING

The system can be used to monitor data from the devices installed along the highway and develop situational awareness. The following device types are typically integrated:

- PTZ and fixed CCTV cameras for video surveillance
- Automated Incident Detection (AID) for detecting incidents
- RFID/Bluetooth/ANPR readers for measuring travel times
- Emergency Call Boxes (ECB) for two way communication with commuter
- Automatic Traffic Counters cum Classifiers (ATCC) for obtaining traffic volumes
- Meteorological Data Stations (MET) for obtaining weather information



### MANAGING ACCIDENT RESPONSE

Once an incident has been detected, it is imperative that control centre operators act swiftly to address it. The features that are provided for managing incidents in our ATMS software are:

- Near instantaneous alerts for incidents that are automatically detected
- Configurable rule engine for configuring alerts and automating responses
- Built-in emergency response vehicle tracking and routing module
- Integrated platform to manage incidents efficiently and effectively
- Detailed incident logs to perform post-resolution analysis and improve actions during future incidents





## FEATURES



### ENFORCEMENT OF TRAFFIC RULES

Strict enforcement of traffic rules will ensure that vehicles move safely, thereby reducing chances of accidents. There are two types of rules that are typically enforced on highways:

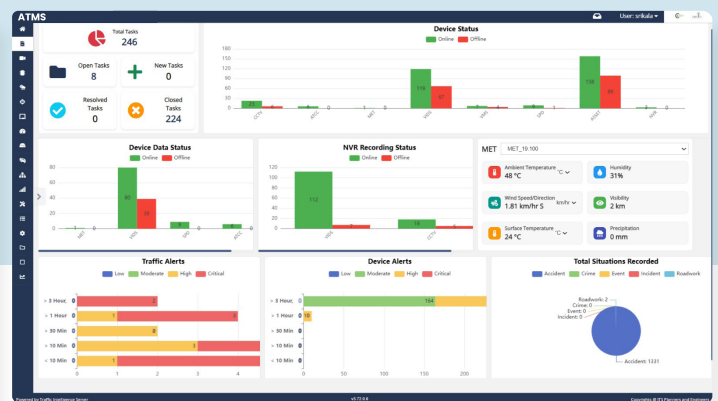
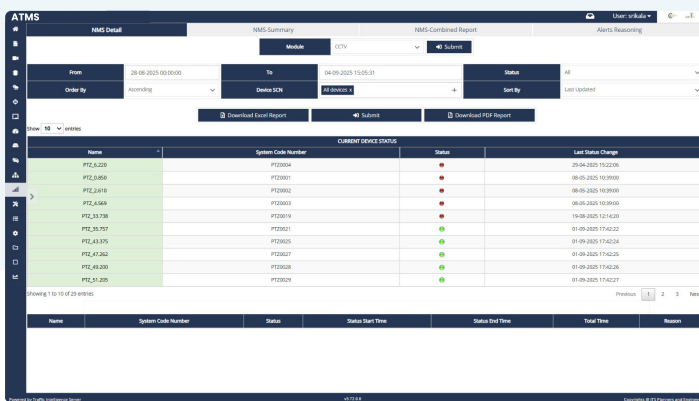
- **Speed:** Over speeding on highways is a major cause of accidents. We offer, as part of our solutions suite, RADAR based speed detection and vehicle identification using ANPR.
- **Weight:** Overweight vehicles slow down traffic and are difficult to maneuver therefore a greater risk of accident is being involved. We offer Weigh-in-motion (WIM) based over-weight detection and capture the vehicle information using ANPR.



### DISSEMINATION OF INFORMATION

Providing near real-time information to commuters helps them in making smarter and safer travel choices. Typically, information regarding incidents, accidents, for third party applications weather events, planned maintenance activities or travel time are provided using:

- Variable Message Signs (VMS)
- Highway Advisory Radio (HAR)
- Mobile and Web applications
- UTM XML APIs





## WHY USE OUR SOLUTION?

- In India, our HTMS/ATMS has been installed on more than 20+ highway stretches. Fully compliant with the latest ATMS guidelines published by NHAI
- Completely modular and customisable
- Integrated solution with role-based access to individual component.
- Centralised emergency vehicle management module for swift response to accidents
- Powerful rule engine for managing responses to incidents
- Compliant with UTM standard, thereby freeing you of costly vendor lock-ins
- Ability to integrate most devices natively or using adapters
- Integrated fault monitoring and maintenance modules



## ADVANTAGES



### Standards Compliance

The solution complies with the latest ATMS guidelines set by the National Highways Authority of India (NHAI), ensuring adherence to industry standards and regulations.



### Browser-Based GUI

Intuitive and user-friendly graphical user interface (GUI) accessible via web browsers, enabling highway managers to easily navigate and operate the system.



### Rule Engine Automation

Built-in rule engine automates tasks, reducing reaction time to incidents and enhancing operational efficiency, especially for time-critical incidents.



### Versatile

Integration with different hardware components based on project requirements, ensuring compatibility and scalability.



### Innovative

Implementation of emerging technologies such as variable speed limits, ramp metering, driver assistance, virtual variable message boards, and V2X (vehicle-to-everything) communication.



### Enhanced Incident Management

Includes an advanced SOP driven incident management system with dispatch & recording system facilitating accurate recording and reporting of accidents.



### Business Intelligence

Export of data in NHAI-compliant reporting format, streamlining reporting processes and ensuring regulatory compliance.



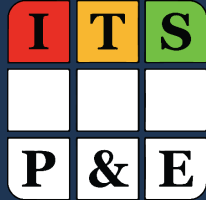
### Modelling

Built-in accident & events risk modelling capabilities, enabling proactive traffic management in special events on highways.

## Our Track Record

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- Thrissur to Angamaly
- Gorakhpur Bypass
- Farakka-Malda
- Behrampur-Farakka
- Jhansi-Vigakheth Tollway Limited
- Jhansi-Lalitpur Tollway Limited
- Madurai-Kanyakumari Tollway Limited
- Kanyakumari-Etturavattam Tollway Limited
- Nanguneri-Kanyakumari Tollway Limited
- Salaipudhpur-Madurai Tollway Limited
- Lucknow-Raebareilly Tollway Limited
- Kotwa-Muzaffarpur Tollway Limited
- Ghaziabad Aligarh Expressway Private Limited
- DBL Mangalwedha Solapur Highways Private Limited
- DBL Borgaon Watambare Highways Private Limited
- DBL Mangloor Highways Private Limited
- Farakka Raiganj Highways Limited
- KNR Shankarampet Projects Private Limited
- KNR Srirangam Infra Private Limited
- KNR Tirumala Infra Private Limited
- Western UP Tollway Limited
- Kokhraj Handia Expressway Private Limited
- Kozhikode bypass (Vengalam Jn. to Ramanattukara Jn.)



# ITS PLANNERS & ENGINEERS

An ISO 9001:2015 & ISO 14001:2015 CERTIFIED COMPANY

For more details and ordering information, CONTACT US NOW!

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