

# Active Intelligence for Road and Highway

Traffic Rules Compliance & Safety



# Overview

As the world's population grows, so does our reliance on roads. Traffic accidents are a growing problem with no end in sight. Road Safety is becoming crucial as more lives are lost due to accidents on the road due to traffic violations.

It's almost impossible to have human surveillance across highways, Real time intelligence is needed to alert authorities. Detecting incidents in real-time like road accidents, traffic jams, fallen, object and alerting the authorities in time to take action.

## Key Challenges

- **Limited Resources**  
Impossible to have human surveillance across all spots due to the rugged conditions and widespread area.
- **Prevention of Road Accidents**  
Most road accidents happen as result of traffic rules non-compliance on the highways, there are signage boards and sensors but yet its not enough.
- **Lack of continuous Vigilance**  
Roads and highways need to be monitored for crimes and detecting wanted vehicles but manually monitoring is expensive



Inspite of rules a lot of people in India still drive without seat belt and helmet



India accounts for the highest road accidents globally, 1.5 lakh people killed yearly

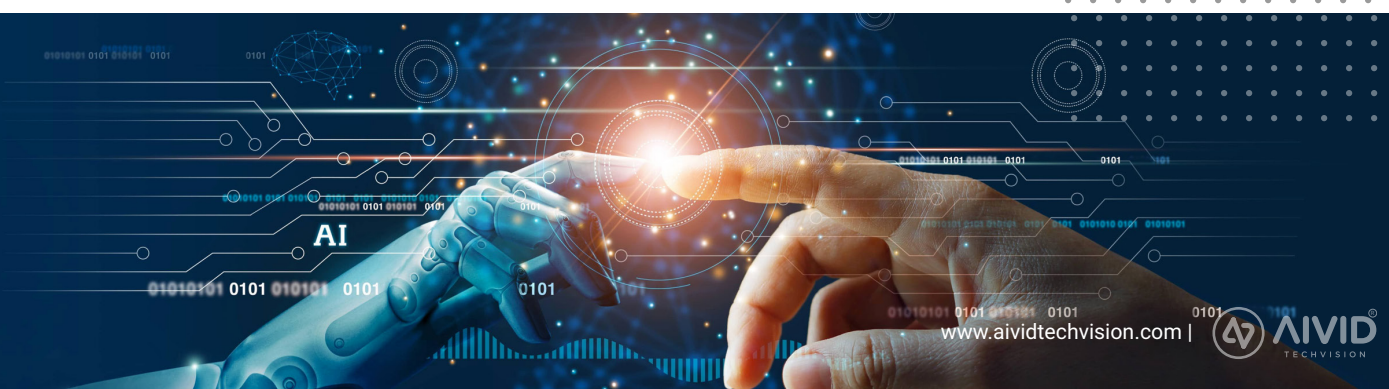


National Highways comprise only 15% of the total length of roads in India but account for 33% of the fatalities.

## Introducing AIVID

### AI Powered Visual Inspection Automation Platform

With an increase in road accidents, it's hard to keep a human eye on every corner. AIVID's AI and computer vision platform can monitor highways for you, detecting incidents in real time like road accidents, traffic jams, fallen objects and alerting the authorities to take action. The Platform analyses camera feeds from installed CCTV on Highways and Roads and actively transforms them into actionable intelligence.



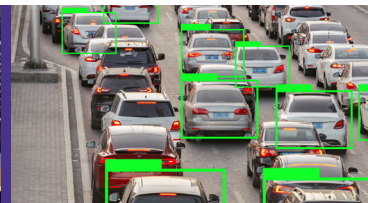
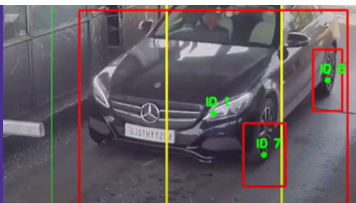
AIVID enables insight in to all activities with predefined SOP checklist for Safety, Security and Traffic rules compliance

## Video Incident Detection



- ☐ Slow moving vehicle detection
- ☐ Wrong Direction Driving
- ☐ Stationary Vehicle on road detection
- ☐ Cattle on road Detection
- ☐ Accident Detection
- ☐ Fallen Object Detection
- ☐ Two wheelers driving violation on Expressway
- ☐ Poor Visibility Detection

## Automatic Traffic Counter and Classifier



- ☐ Axle Count at Toll Plaza
- ☐ Vehicle In/Out count
- ☐ Traffic Congestion Detection
- ☐ Road Condition Monitoring
- ☐ Camera stopped Detection

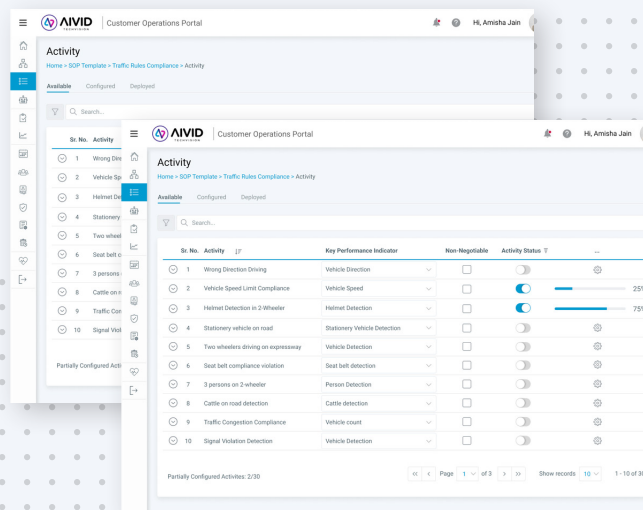
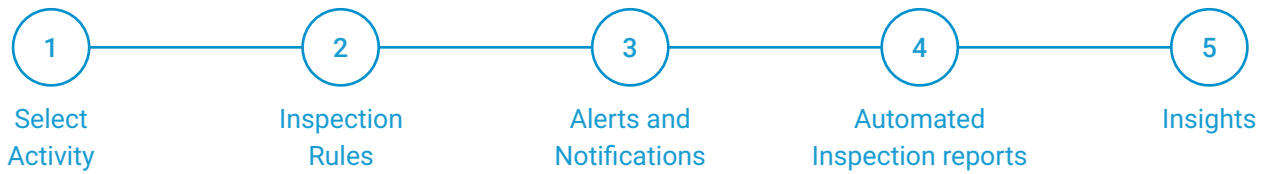
## Vehicle Speed Detection System



- ☐ Vehicle Speed Detection
- ☐ Automatic Number plate detection
- ☐ Vehicle Class

# How we do it differently

AIVID offers simple ready to deploy platform with intuitive visual interface to select from predefined activity powered by AIVID AI BOT to automate inspection at a click of a button across all locations & generates real-time insights and inspection reports visible at central location& branch level.

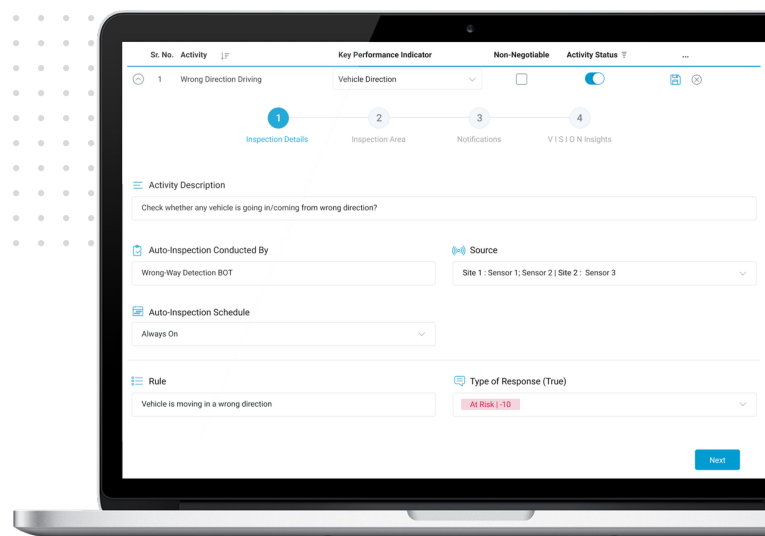


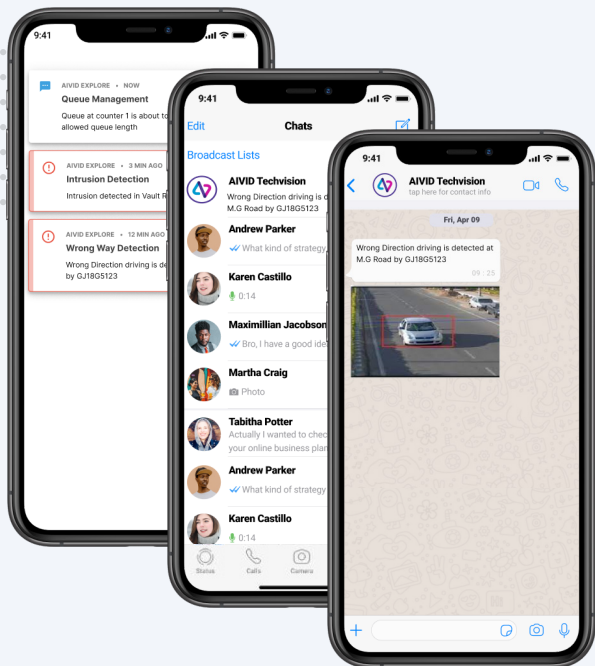
## 1 Select Activity

Easily get started with predefined activity from the AIVID customer operations portal, configure SOPs and their visual inspections to be done by AIVID BOTs.

## 2 Inspection rules for compliance & non-compliance

Put AIVID BOTS to work, add inspection rules for compliance and non-compliance, inspection zone, alerts and insights and get timely notifications.





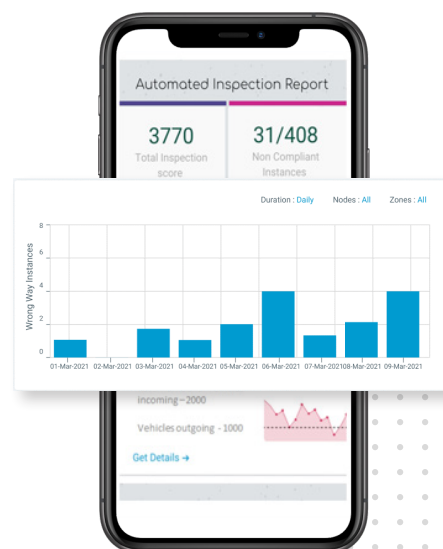
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## Get the Alerts in Real-Time.

- Timely Notifications help your team minimize the impact of a compliance breach.
- AIVID BOTS help you detect anomalies with real time & SOS notifications.

## 4 Automated Inspection Reports

Get scheduled auto inspection reports for all compliance and non-compliance activities, auto inspected by AIVID BOTs. Set up rulesto automatically email the reports to the right team members.



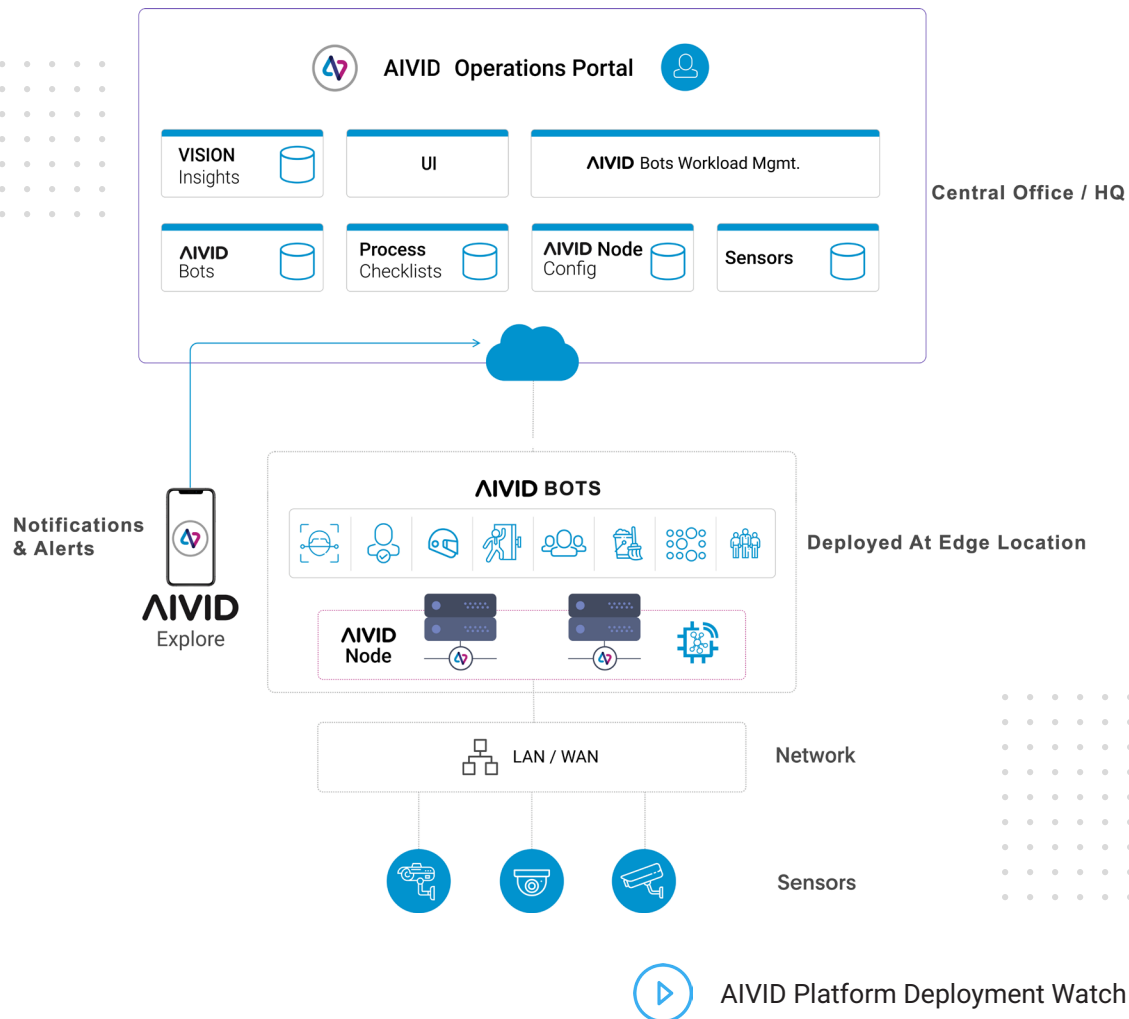
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## Derive Insights across all sites on One Platform

See Insights across all branches at a glance with ability to quickly spot sites that are low in compliance. Get visibility in real time as the inspection is conducted by AIVID bots.

# AIVID Platform

AIVID Platform leverages AI and Deep learning technology for training AIVID BOTs on specific activities. The platform based on cloud technology supports a distributed architecture, efficiently scales to multiple locations, and optimises resource utilisation across use cases.



[AIVID Platform Deployment Watch Video](#)

The platform components



## AIVID BOTS

Deep Learning Models pre-trained by AIVID TechVision for specific set of activity



## AIVID Explore

Notifications and Alerts on the move with AIVID Explore.



## AIVID Node

AIVID Node is the Deep Learning Engine - Hardware and Software deployed in the customer network, It can easily integrates with any IP camera.



## AIVID Customer Operation portal

Central customer operation portal, web based UI for management of the BOT, SOP Checklist and activity



## AIVID IoT Gateway

AIVID IoT gateway coordinates and schedule communication between AIVID Node and AIVID BOTs or user-selected third-party wireless motion, temperature or fire sensor to enable alerting system via buzzer and LED signal if any sensor deviation occurs.

# Key Features



Single integrated platform, for monitoring all zones with central control



Health Status monitoring & alerts for disconnected cameras, storage and network error



Plug & Play with IP Camera, NVR, DVR and other traffic monitoring systems



Flexible deployment – Cloud or On-Premises



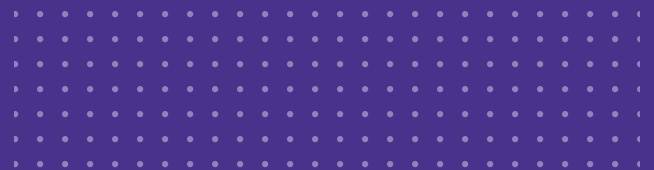
Go beyond isolated monitoring, Get an integrated view of all activities and insights.



Scale to Multiple locations - The Platform easily enables scaling to multiple locations with role based access.



Scalable storage with flexi public cloud options



## Transform Road Safety with AIVID



### Roads & Safety Department



Alerts & Notifications



Insights on Compliance & Non-Compliance



### Traffic Police



Automated Scheduled Inspection Report



Alerts & Notifications, SOS Alerts



### Traffic Control Management



Real time Alerts on the CCTV Screen



Alerts & Notifications, SOS Alerts



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