

## Fitness reports for Roads and Road Systems



## RoadMIR and RoadKPI framework

## Proposed Track reports on a road system

Road system name:

Road system Id:

SMART Meter Id:

Date of report:

Time of report:

( ) Quality levels

Details: For example “**Good/Moderate/Poor/Hazardous**” with added details

( ) Traffic volume levels

Details: For example “**Heavy/Moderate/Low volume/Controlled**” with added details

( ) Pollution levels

Details: For example “**High/Moderate/Normal/Uncontrolled**” with added details

( ) Accidents or incidence (even crimes) trends

Details: For example “**High/Moderate/Rare/Controlled**” with added details

( ) Possible route diversions

Details: For example “**Arterial arrangement/Alternate deviations/Service roads/Flyovers/Recommended by intervention diversions**” with added details

( ) Commuter comfort levels (specific to Commuter profile)

Details: For example “**High volume related stress levels/Moderate volume related stress levels/Normal volume related stress levels/Uncontrolled volume related stress levels/Repair work related stress levels/Breakdown of vehicles related stress levels/Ambulance or Emergency Response or Special need vehicles related stress levels/Climate change related stress levels/Disaster conditions related stress levels/Escalated tension related stress levels...**” with added details

( ) Availability of alternate transportation services

Details: For example **“Overhead Metro/Underground Subway/Tram”** with added details

( ) Availability of emergency response services

Details: For example **“Equipped with first aid provisions/Has clearance for air lift/Equipped with fire extinguishers/Equipped with smoke alarm systems/Equipped with sentinel sensors”** with added details

( ) Afflicted due to weather forecasts

Details: For example **“Harsh weather conditions, high ambient temperatures, poor quality of air, low visibility levels, high speed wind velocity, heavy rainfall leading to flood like situations, water logging, overflowing of sewage drains”** with added details

( ) Vital network and signal coverage

Details: For example **“Normal Votary Track connectivity/Failing Votary Track connectivity/**

**Problematic Votary Track connectivity/**

**Normal Emergency Response connectivity/**

**Failing Emergency Response connectivity/**

**Problematic Emergency Response connectivity/**

**Good quality signal strength reported for most mobile**

**services/Complaints recorded for most mobile services/**

**Poor quality signal strength due to weather forecasts”** with added details

( ) Vehicle indicators

Details: For example **“Normal for road system configuration/**

**Problematic for road system configuration/**

**Problematic for unmapped road system configuration/**

**Complaints recorded for road system configuration”** with added details

## **Proposed Ticket format for a road system**

The Risk Mitigation Desk will also register tickets that acknowledge receipt of notifications from commuters & people and also notify the higher level management entities of various problems related to a particular road, stretch, route or ring road system.

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### **IMPORTANT DETAILS**

**Ticket Id:**

**Source:**

**Ticket status:** Open/Closed/Escalated/Needs details/Not available

**Date of submission:**

**Time of submission:**

**Road system name:**

**Road system Id:**

**SMART Meter Id:**

#### **Problems faced for reasons such as:**

- ( ) Quality levels
- ( ) Traffic volume levels
- ( ) Pollution levels
- ( ) Accidents or incidence (even crimes) trends
- ( ) Possible route diversions
- ( ) Impacted Commuter comfort levels (specific to Commuter profile)
- ( ) Non-availability of alternate transportation services
- ( ) Non-availability of emergency response services
- ( ) Non-availability of drive guidance services
- ( ) Afflicted due to weather forecasts
- ( ) Faulty vital network and signal coverage
- ( ) Vehicle indicators (problems related to Commuter Health and Lifespan Dynamics)

( ) **Management of (negative influence specific) Key indicators**

- [ ] Nature of congestion
- [ ] Probable Hazards
- [ ] Lack of Signage deployment
- ( ) Repair or restoration
- [ ] Interpretations on Fuel consumption
- [ ] Lack of support for renewable energy or battery powered vehicles

( ) **Sustainable infrastructure (positive influence specific) Key indicators**

- [ ] Stabilizing aspects
- [ ] Planning behind repair or restoration
- [ ] Signage and barricade deployment
- [ ] Traffic management advisory
- [ ] Pedestrian and Commuter safety
- [ ] Associated Traffic Management
- ( ) Accident relief, Emergency response and assistance

**Details of problems faced:**

**Resolution sought:**

## **Further more**

You can ask for more details by calling the consultant on +91 9342867666 or by emailing [venkataoec@gmail.com](mailto:venkataoec@gmail.com). The proposal can be implemented via the following steps:

1. A SMART Phone RoadKPI App and RoadMIR Desk framework can record and configure road systems given that key indicator(s) for road safety information may not be available in all road inventory databases till date.

**2. The Management Index Specification for road systems can be used to design more configurability and adherence to norms and guidelines**

**3. Open call to design and implement SMART Meters or SMART RoadControllers via the inclusion of different sensor(s) that**

[ ] Fire extinguishers and fire fighting systems

[ ] Smoke alarm systems

[ ] Sensors (related to Commuter health and relevant assistance)

Details: These sensors need to measure and report the ambient temperature, quality of air, possible visibility levels, relative wind velocity & humidity levels, and relative loading (where load levels are important for flyovers, bridges and ramps)

[ ] **(Crime detection specific) surveillance sensors or Intelligent security systems that ensure fast track police control room assistance (related to Safety for women/Security for commuters and relevant assistance)**

Details: The sensors being integrated into the sentinel can include crime detection sensors and systems for intelligent security solutions, where visibility levels are improved, sound sensors are installed to relay any signs of screaming or scuffles, traffic signal violations are monitored, fast track monitoring of the sudden appearances of vehicles with commuters at unpredicted times of the day

**4. Open call to design and implement a GPS based Emergency Response network in stages that are relevant to a location/city/state. The specification is still not complete as investment is large scale.**

**5. Open call to design and implement a drone flight assisted network in stages that are relevant to a location/city/state. The specification is still not complete as investment is large scale.**