Role of Positioning Infrastructure and Location Services in Commercial Markets

Road Safety Assessment Use Case

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ROAD SAFETY… WE HAVE A DREAM

“By 2020, halve the number of global deaths and injuries from road traffic accidents.”

SDG target 3.6 (Road Safety)

Reference 2010: 18.1 per 100,000 population road traffic injuries
Road Safety… still a long way to go!

**Each Year on the World’s Roads**
- DEATHS: 20-50 million
- NON-FATAL INJURIES: +1.3 million

**Low and Middle-Income Countries Account For**
- 93% ROAD FATALITIES
- 60% GLOBAL VEHICLES

**More Than Half of Global Road Fatalities Are**
- +50% YOUNG ADULTS AGED 15-44
- +50% PEDESTRIANS, CYCLISTS AND MOTORCYCLE STANDARDS

Targets demand Road Safety Assessment

Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.

Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.
Star Ratings for all Road Users

Research shows that a person’s risk of death or serious injury is approximately halved for each incremental improvement in star rating.

Source: iRAP

Star Ratings by road user type based on a 358,000 km sample of roads across 54 countries
Road Safety Assessment

>50 road attributes

Source: iRAP
Most driven roads calculation using FCD

Sydney All Roads - 25,335 kms

Sydney - 75% of Travel – 3,110 kms

12.3% of the total road network carries 75% of all travel/vehicle movements in Sydney
Most driven roads calculation using FCD

Vietnam All Roads - 133,335 kms

Vietnam - 75% of Travel - 13,888 kms

10.4% of the total road network carries 75% of all travel/vehicle movements in Vietnam
Attributes derived from the TomTom maps
AI/ML extraction from LiDAR data
Anditi’s RoadViewer is a web portal based accredited iRAP Inspection System.

RoadViewer is unique in that it allows users to inspect and code Star Rating attributes for roads to iRAP accreditation standards using a combination of 3D mobile LiDAR data and 360-degree imagery. The mobile LiDAR is captured continuously and 360-degree imagery is captured approximately every 8 metres. This means that full 3D cover is achieved with no gaps in the data along the road network.

Anditi accesses this ‘off the shelf’ MoMa data from TomTom archives providing access to millions of kms of unique road data globally through our web portal at www.RoadViewer.market.

In addition to manual coding of Star Rating attributes, the RoadViewer system has been designed to facilitate the transition from video-based manual iRAP coding to Ai-RAP accredited automated Star Rating attribute extraction and coding using mobile LiDAR and 360-degree imagery. RoadViewer and the MoMa data it accesses can also be used in developing Safer Road Investment Plans, as well as for other purposes such as the automatic identification of road assets and the calculation of bridge clearances.

To find out more about how to access road data globally or for help using RoadViewer, please contact us at RoadViewer@anditi.com or visit our website www.RoadViewer.market.
Collaborative landscape for road safety assessment

- Mobility Clubs
- Multilateral Organisations
- Road and Transportation Agencies
- Research Institutes
- Local Road Assessment Programs (RAPs)
- Technology Partners
- (Big) Data Providers
- Map data
- LiDAR data
- Imagery
- AI/ML Modeling
- Map data
- LiDAR data
- Imagery
THANK YOU!

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