

Syntell Crash Management System

(CMS)

Empowering Safer Roads Through Data-Driven Crash Management.

Syntell's Crash Management System (CMS) is a robust, web-based platform designed to identify critical road safety requirements by enabling authorities to accurately capture, analyse and respond to crash incident data. Through its integrated Geographic Information Systems (GIS) the CMS provides a scientific system to manage crash information, support law enforcement planning and promote safer road environments.

Already in use by various South African provinces and Metros, the CMS has proven effective in supporting authorities in data-driven decision-making for improving road safety.



Key Functionalities

Comprehensive digital visitation of crash data

- ✓ **Accessibility:** CMS offers a centralised web-based management system where crash data is digitally stored and easily accessible by authorities and law enforcement agencies.
- ✓ **User Convenience:** Members of the public can verify their identity via the payCity portal and securely purchase AR forms for crashes they were involved in. This functionality greatly enhances service delivery to the public and reduces administrative overhead for authorities.
- ✓ **Location-Based Analysis:** The system integrates with Google Maps for precise mapping of crash locations, enabling data visualisation by area—such as national, provincial or down to specific hazardous road zones or intersections.
- ✓ **Identification of High-Risk Zones:** By combining crash data with traffic volumes statistics, the CMS calculates incidents per million vehicle kilometres, assisting authorities to scientifically pinpoint high-risk areas and prioritise interventions like improved signage, road upgrades and focused deployment of law enforcement officials.

Real-Time Data Collection via Mobile Application

- ✓ **GPS-Enhanced Data Accuracy:** The CMS mobile application allows law enforcement officers to capture the exact GPS coordinates at the scene of a crash, ensuring that crash locations are recorded accurately, significantly reducing errors in location reporting.
- ✓ **Instant Data Synchronisation:** Information collected on-site is directly fed into the CMS in real time, making data available in real time for analysis and stakeholder review.

Benefits for Stakeholders

Enhanced Road Safety Management

- ✓ **Road Safety Authorities:** Access to reliable, geo-tagged data enables road and traffic authorities to develop data-informed strategies to reduce incidents, address hazardous zones and allocate resources more effectively.
- ✓ **Law Enforcement:** The CMS supports targeted enforcement by identifying hazardous locations, allowing law enforcement to concentrate efforts where they are most needed, potentially reducing accident rates and reducing the fatality rate.

Optimised Infrastructure Planning and Investment

- ✓ **Data-Driven Planning:** Accurate crash data guides authorities in prioritising road maintenance and upgrades based on accurate crash data, allowing for cost-effective infrastructure investments that address identified hazardous locations.
- ✓ **Monitoring and Evaluation:** The system provides before-and-after analysis capabilities to measure the effectiveness of safety measures like speed calming, improved road markings or targeted law enforcement deployment enabling informed, ongoing road safety strategies.



Why Choose Syntell's CMS?

With over two decades of experience in traffic counting, crashes and revenue management systems, Syntell's CMS is designed to meet the specific needs of South African authorities.

The system supports road safety initiatives while offering sustainable, funding options through public AR report purchases and partner subscriptions. Trusted by multiple provinces and Metros, the CMS provides actionable data and reporting that promotes a safer, more efficient road transport network.



**Empowering Safer Roads Through
Data-Driven Crash Management**

info@syntell.co.za | helpdesk@syntell.co.za | www.syntell.co.za