Road infrastructure Audits

Automated end-to-end signage asset audit solution
AI-powered asset mapping solution for city councils, dealing with roads and transportation development.

Cost effective and extremely portable
Extremely easy-to-use at affordable cost.
Expand the coverage to all areas

Maintenance
Solution shall ensure safe and informed driving for citizens and commuters.

"Enter the data-fusion evolution, *we use lightweight machine learning-capable devices and power our solutions with software that streamlines the extraction of hyper-accurate data, both statically or in motion, on urban arterial roads and motorways by combining high-resolution cameras, multi-spectral vision, GPS and video analytics.*"

Subhash Challa, CEO - SenSen Networks

ADELAIDE
CITY COUNCIL

"Maintaining infrastructure audit is important to provide better experience to the commuters."

Adelaide city council, Australia

Why Road Infrastructure Audits
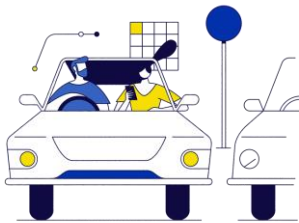

Solution Overview

Solution will capture photographs of the assets and infrastructure, recording such as detects road condition, road painting, traffic pole, electric poles signages, etc. and alerting anomalies against existing data recorded. accurately within city councils' location and generate data for import into City council's Geographic Information System (GIS) package.

HARDWARE DESIGN

- Unique roof mounted enclosure (POD), which is compatible with every vehicle
- Centimetre accuracy GPS with RTK corrections.
- High resolution cameras which can operate in day and night.

EDGE FEATURES

- SenSen's inhouse road asset detection software
- Patented state of the art road asset GPS estimation
- Recorded high-res videos
- Seamless integration with SenSen's cloud hosted back office (BOS)

BOS FEATURES

- Secured relational Database for central management of assets
- Review interfaces for asset audits
- Survey of assets by precise location
- Drawing enforcement zones with business rules
- APIs to export the audited data to GIS systems

KEY FEATURES

- Gathers exact data on the condition of the road asset (parking sign, road condition, painting etc).
- Maintain a database of the assets in order to have them in functional condition.
- Reducing revenue leakage for council because of ill maintained assets.
- Identifying the location and Zone ID using a combination of GPS and database of reference images stored
- Generate real time alerts when objects other than vehicles are blocking the spaces managed by city council or land transport authorities

ALL-IN-ONE SOLUTION

- Low cost, rapid deployment, operation ready
- Fully automatic, end-to-end solution
- Edge processing, and cloud data central management

PRODUCTIVITY & SAFETY

- Automate monotonous, laborious tasks
- Minimize time to conduct surveys
- Eliminate the need for foot patrol