

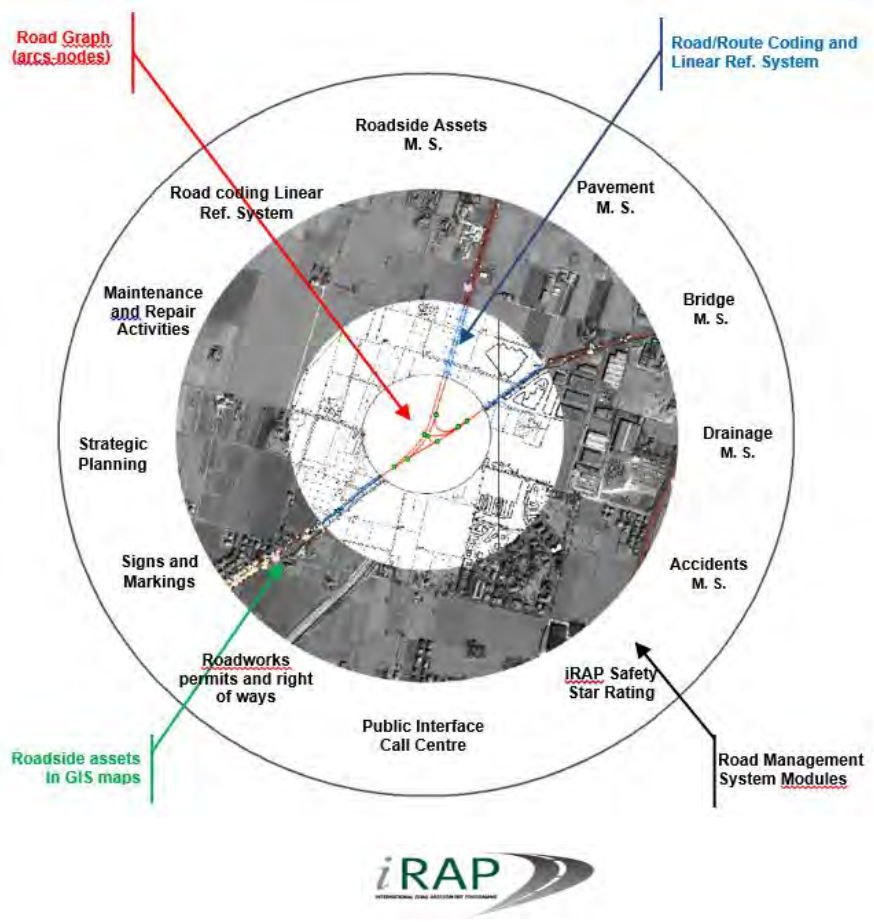
# The Road-SIT suite combines in a single work environment all the features necessary for managing the information relating to the road networks efficiently

## Asset Management

The basic environment has been developed to meet the needs of all roads operators of (public administrations, highways, Global Service). It covers all management aspects related to the road infrastructure: road inventory and signs, driveways, advertising, concessions and relating taxes, maintenance, documentation and reports. It is a GIS alphanumeric environment, which can contain any type of map and cartography or web technologies like OpenStreetMap, Google Maps or Bing.

## Mobile Mapping

Module for consultation of georeferenced images and point clouds surveyed with Road-Scanner (or other systems). It offers a wide range of specialized features that make the production and editing of CAD drawings and GIS maps very efficient and controlled. The module is also available as a plug-in for AutoCAD, ArcGIS and MicroStation, thus greatly simplifying the production of cartographic drawings in their original environment.



## Pavement Management System:

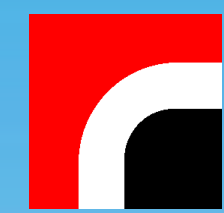
Pavement condition monitoring is the most relevant aspect of the road maintenance, from both a technical and an economical point of view. This module completes the Road-SIT suite and makes it the '360° road information system' covering all technical, administrative, bureaucratic, and mapping aspects. The module developed for the pavement analysis complies with the ASTM international standards.

The data management features include both the functional (IRI-PCI) and structural inspections such as pavement layers surveyed by GPR and bearing properties by FWD. By calculating the status Indexes and the residual life cycle of the pavement, PMS becomes a reliable decision support system for the development of maintenance planning and its management over time.

## IRAP-World Bank Certification

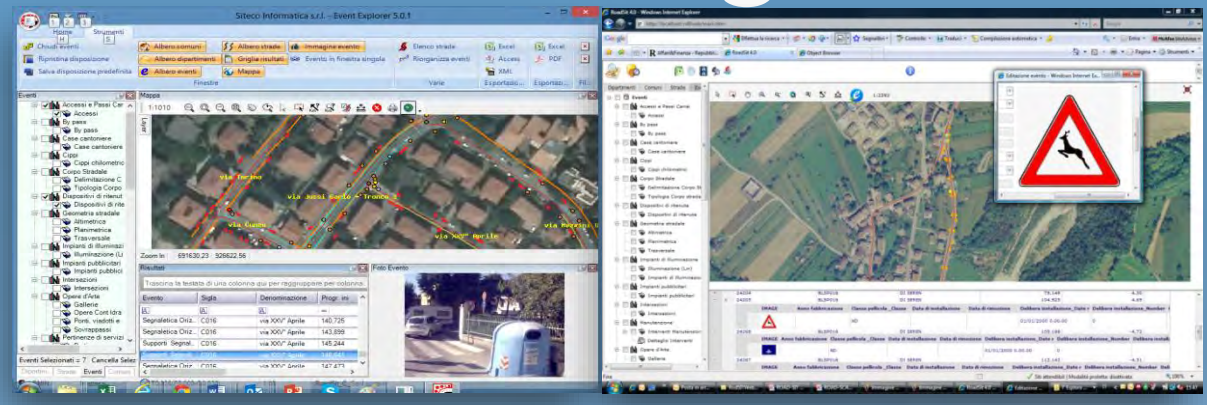
SITECO is certified as iRAP (www.irap.org) road survey supplier for road safety in compliance with the "Star Rating Code" specifications of the World Bank.

About Siteco: A unit of the Gavio Group, one of Italy's top industrial groups, Siteco was established in 1995 as a civil engineering and infrastructure, software and technical consulting. Since 2005 Siteco has developed scalable high performance mobile mapping systems and today it is the most flexible supplier on the market of roadway management mobile mappers in price, performance and software flexibility.

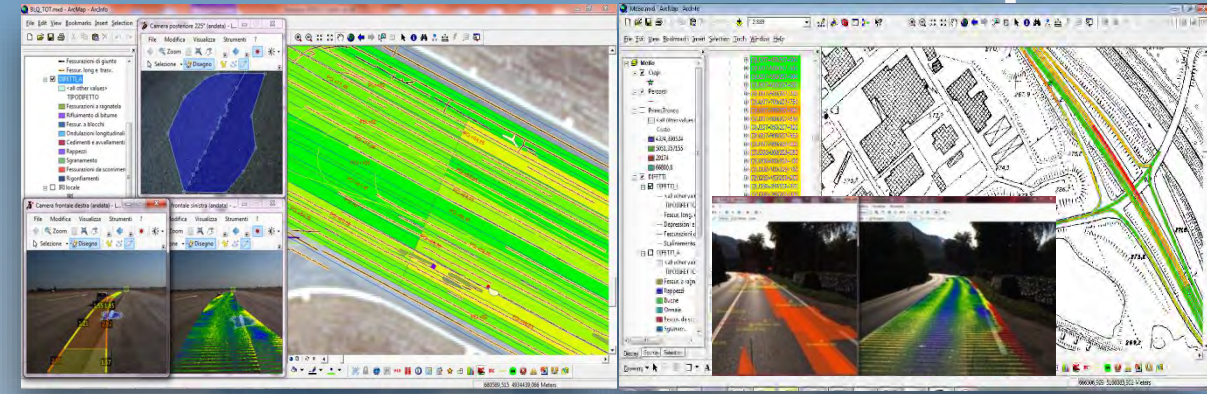


**SITECO**  
presents

# ROAD SIT Asset Management



## PMS for Roads and Airports



# The 360° Road Information System «All-in-one»

ON THE ROAD  
to Innovation

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# ASSET MANAGEMENT

GIS application for the infrastructure management

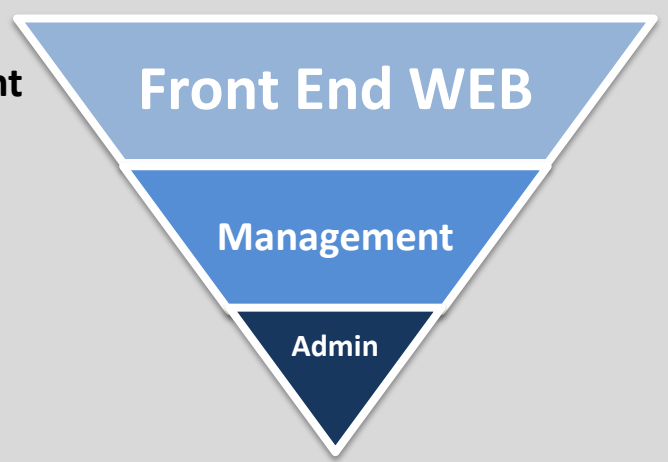
## Road SIT

General Purpose Application for the Road Inventory

Population, consultation, database updating

Report generation and document management

Maintenance management and budget



### From Mobile Mapping to Geodatabase

The road database populates with the data of the surveys carried out with the Road-Scanner technology or other Mobile Mapping Systems. Road-SIT is very flexible; thanks to its compatibility with the most popular databases, enterprise models included, and the best performing webGIS and CAD or GIS applications, you can use it as a Data Management System for structured data coming from other platforms.

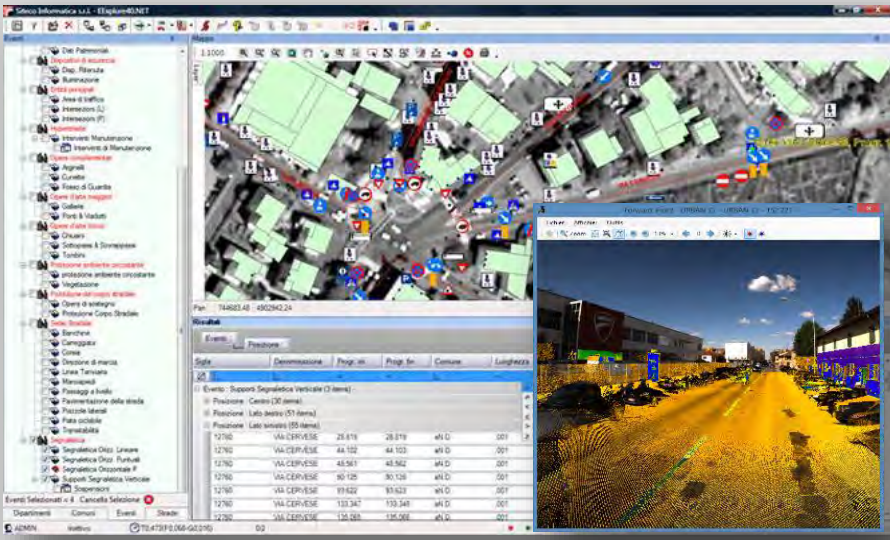
The solution is scalable and the database customizable. The completeness of the application domain is the main strength of the Road-SIT suite. In a single GIS integrated environment, the Suite allows you to manage all aspects of the road network, the relating roadside assets, as well as the periodic monitoring, infrastructure works and the road surface.

### Office Automation and Database Administration

The consultation of departments, coded lists of roads and roadside assets can be carried out through a tree-shaped search engine, immediate and easy to use. The data obtained from the searches are represented in the map window, and can be printed in complex reports based on templates that can be edited by the user. Queries can be made on the objects selected in the graphics window. The user access privileges are controlled through an administration module. The database is historicized and keeps track of all changes made. Document management functions are available to associate the roadside assets with documents, images, videos and financial reports, so to document the maintenance costs for budgets and final balance.

### Mobile Mapping Data

The Road-SIT Survey module allows you to perform all the necessary measurements, enter geometries, alphanumeric information, images and so on. The consultation of the Mobile Mapping data is an essential complement of the Road Information System and provides a comprehensive view of the infrastructure.



### Technical/Administrative Sign Management

A specific environment contains comprehensive catalogues of signs and markings and the relating JPG images and CAD blocks.

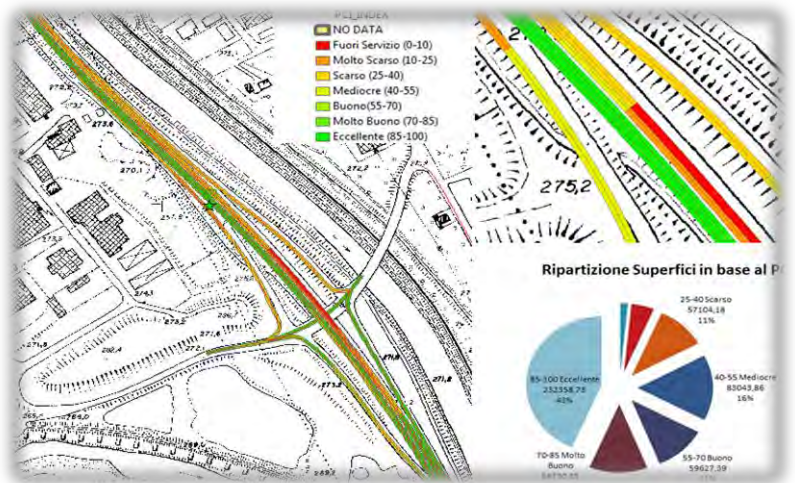
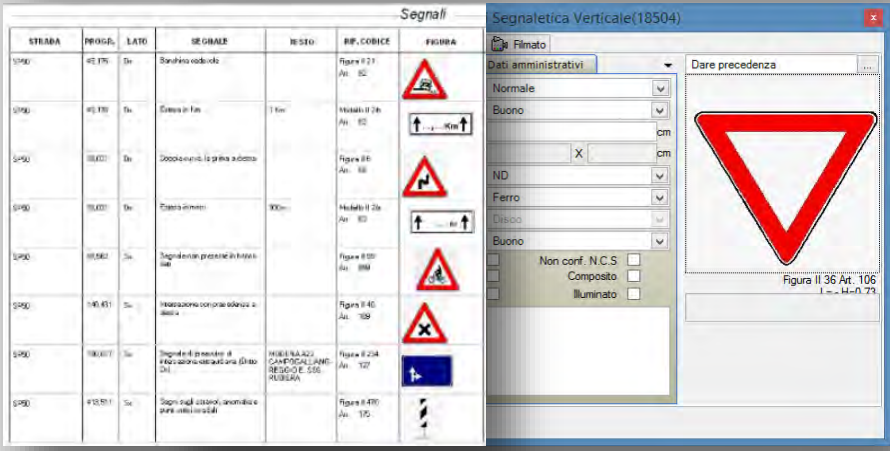
Specific functions for the administrative management allow you to associate to each sign, information about the maintenance status of plants and imagery, intervention costs, ordinances and date of installation. Reports, organized by road or area, facilitate inspections and updates.

### Management of Authorizations and Licensing

This module is used to manage all the records of permits, authorizations and licenses. For all the elements that require a tax management, a specific environment is available, including connection with cadastral information and mapping. It allows the production and release of records and documentation, including official administrative acts, and also internal reports. The specific workflow helps configure all bureaucratic stages of the process.

### Facility and Maintenance Management

The Road-SIT suite can be connected with ERP (Enterprise resource planning) platforms to manage the maintenance activities of the road asset in connection with the economic and financial management.



### Defect classification and PCI calculation in compliance with the international standards

Based on the ASTM6433 international standard, the module calculates the PCI state index (Pavement Condition Index) of the road sections, on the basis of a surface defect survey. Defects, PCI values and any other inspection (IRI, GPR and FWD) are represented both in the GIS environment and on the imagery as well.

### Organization of the infrastructure and decay curves

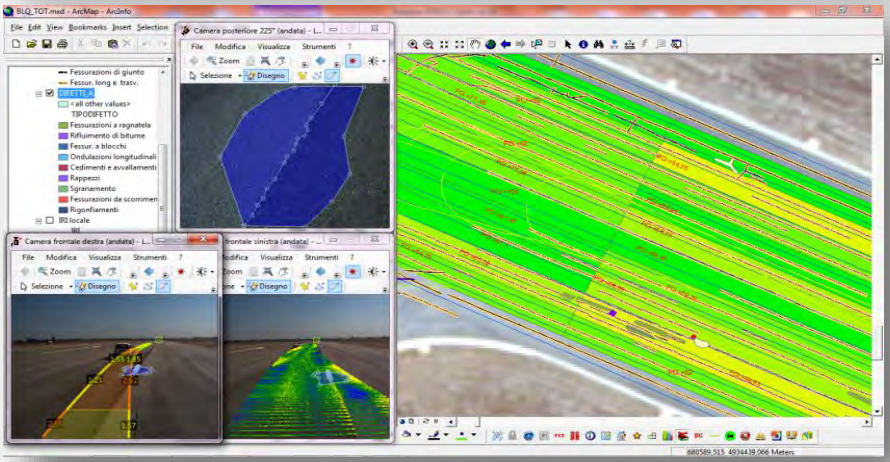
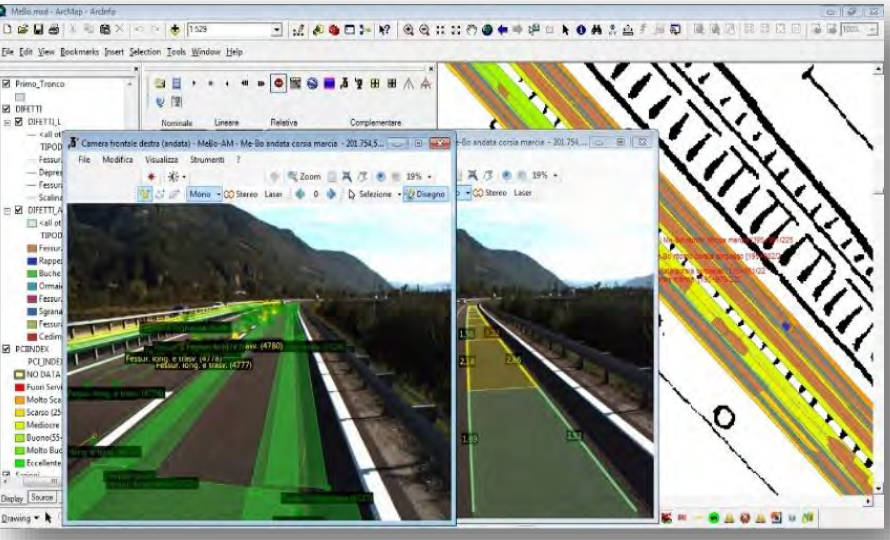
The hierarchical organization of the infrastructure (pavement grid map) is articulated in Branches, Sections and sample areas. The software automatically generates the elementary areas from the geometry of the sections. The GIS representation of the PCI assigned to each area allows evaluation of the status of degradation. The decay curves of the various areas allow you to predict the evolution of the status of maintenance and intervene in a timely manner.

### Integration with other inspection equipment and data

To evaluate the infrastructure structural aspects, you can also consult data surveyed with other equipment, such as the International Roughness Index (IRI) measured with the Profilometer, the asphalt layer thickness surveyed by means of the Ground Penetrating Radar (GPR) and the bearing capacity measured with the Falling Weight Deflectometer (FWD).

### Decision support system

The decision support system allows you to plan the management activities on the basis of user-defined catalogs, define the costs, monitor the developments and calibrate the decay curves. On the basis of the activities carried out, the maintenance status of the sample areas is automatically updated, taking into account the decay curve values.



# PAVEMENT MANAGEMENT

Pavement Management and Maintenance

## Road SIT PMS

For ROADS and AIRPORTS

Integrated with Asset Management

Compatible with any survey data set

Functional (IRI, PCI) and structural (FWD) data

### Analysis, queries and reports

Sophisticated functions are available to query the database by type of defects, PCI index, bearing capacity. The reports produced include statistics, accounting, budget forecasts and final balance.

### Road-SIT PMS AIRPORT

A system version is also available for the airports, as an ESRI ArcGIS plug-in.

