

Pavement Management System for Windows™

The integration of the Dynatest Pavement Management System (PMS) within GEOSECMA has allowed Dynatest and KORDAB to offer a highly sophisticated Highway and Infrastructure Management System.

The Dynatest PMS has been integrated into the STREETS Application within GEOSECMA consisting of:

- The Dynatest PMS application.
- A powerful inventory application.

Why Dynatest PMS?

Society is placing more emphasis on the optimal allocation of scarce resources. For the pavement sector, with increasing emphasis on preservation and less on new construction, it is vital to have a tool that objectively maximises the return on maintenance investments.

Dynatest's PMS is an internationally tested and proven system based on the **Dynatest** analytical/ empirical pavement analysis methodology. It has been in operation since 1981, being used on the road systems of municipalities, towns, counties, motorway and State authorities in Europe, the United States and Africa.

The **Dynatest PMS** makes use of performance models based on fundamental engineering principles. Reliable prediction of future pavement condition is based on actual, measured physical properties of the pavements.

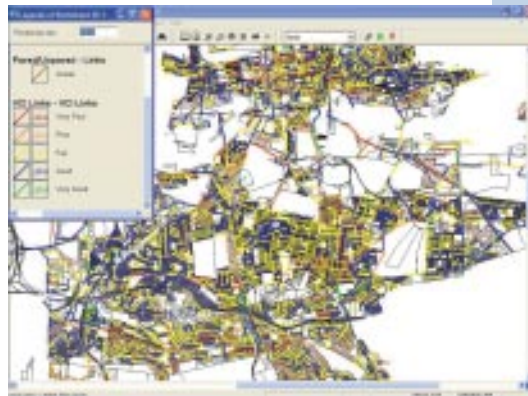
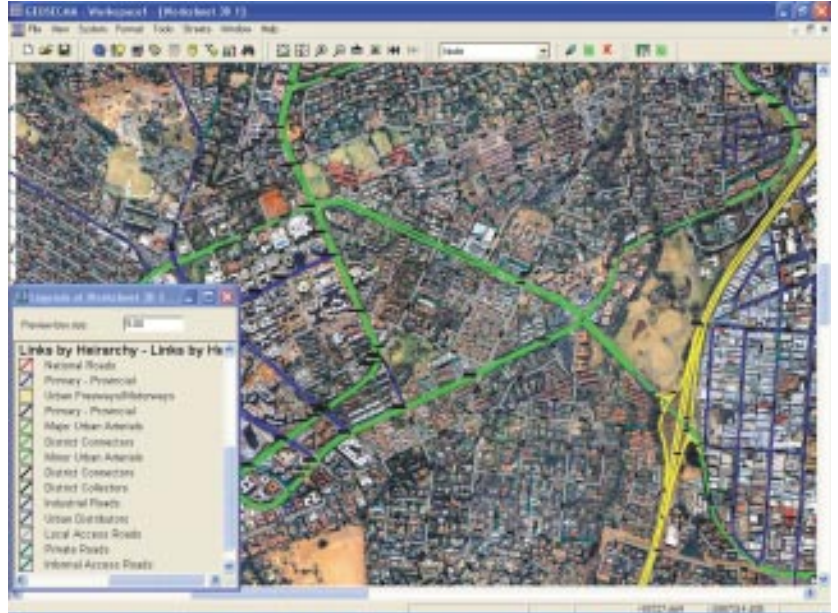
Condition data consists of structural data gathered with the Falling Weight Deflectometer (FWD) and functional data in terms of roughness and distress information collected with the Road Surface Profile (RSP). Skid data collected with the Dynatest 6850H or Dynatest 1295.

Because **Dynatest** is also the manufacturer of the data collection equipment, the system has been designed to ensure efficient data flow and usage.

The **Dynatest PMS** is completely flexible. After installation, the agency can choose to perform all PMS functions internally, or involve **Dynatest** at any desirable level, from simple data collection to complete analysis, providing reports on a regular basis. The programme runs on Windows™ operating systems with a SQL database.

The Core Function:

The Core Function links all applications within GEOSECMA to a centralised SQL database, sophisticated GIS, CAD and a web application. This highly functional and integrated system allows many disciplines within an organisation to be brought into one system, ensuring efficient use of data and resources, the removal of data duplication and the potential errors this may bring, and at the same time reducing



Why is it crucial to have a PMS?

- Rationalisation of resources over the entire network.
- Equity in levels of service.
- Accepted internationally as a management tool.
- Provides scenarios to reduce the costs to the public.
- Financial planning for rehabilitation and new construction.
- Quantify the impact of traffic.

Data Outputs of the PMS

- Recommended maintenance and rehabilitation treatment types on each pavement section.
- One to ten year work programme.
- Budgets to maintain the network at various levels of serviceability.
- Consequences of insufficient funding levels.
- Predictions of how fast the pavements will deteriorate.
- Predictions of the costs incurred by users.

education and license costs associated with many of an organisation's third party software.

For those organisations with established third party GIS, CAD and database systems, GEOSECMA has the ability to seamlessly link to many of the popular software packages.