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Topic: Creative GIS applications of service delivery

Title: Case Study: Lephalale Local Municipality using a Municipal Spatial Information System to improve service delivery

Having implemented a Municipal Spatial Information System (MSIS), which store all their spatial data in a central database in an OpenGIS format, allows the Lephalale LM to capture all the different departments data in this central data repository and to use this up-to-date data for improved decision making and service delivery.

The integration of the Cadastral data, financial data, the utility data as well as the IDP and SDF data allows the following:

- The Planning Department implemented processes that help them to capture Development Information faster and to get it approved by all departments
- Provision of Zoning certificates faster because the utility data is part of the MSIS
- Tracking of debtors per suburb and also ensuring that rates and taxes are billed and collected correctly
- Ensuring that clean water is supplied to all residents in informal villages and that housing projects are implemented effectively
- Capturing and monitoring of capital projects
- Keeping an asset register for all infrastructure and using the MSIS to determine the budget for maintenance

The MSIS is accessed across the Intranet for viewing, capturing and modifying data throughout the organization. This eliminates the storing of data in silos in the different service delivery departments.

A crucial component of managing council assets is the ability to distribute management information across the Intranet. The intranet permits for the centralized data to be accessed at remote offices such as maintenance depots, as well as the administrative center. One advantage is that technicians making repairs to an asset can expand the data sets by adding the results of the repairs. The additional information can then be used for analyses such as maintenance and inspections, causes of blockages or pipe bursts, and age analysis.

The central database allows for all services to be accessed by all departments with different levels of security built into the database.