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## MUNICIPALTY CENTRALIZES OPERATIONS AND SERVES ITS RESIDENTS BETTER WITH A CUSTOM GIS SYSTEM BY INTETICS

### OBJECTIVE

*To enable a city municipality manage and control the metropolitan area, including all of its departments and over 100 municipal services in a single intelligent Geo-information system.*

### CHALLENGE

The municipality needed a unified municipal system that would integrate GIS into its daily operations, such as planning and management of major city departments, establish standard format for municipal geospatial data and share geospatial data with the city's other departments, agencies and citizens.

The municipality is one of the biggest government structures in the client's country and includes 27 departments with over 15,000 employees that provide over 100 services for city residents. The municipality needed a new platform that would allow the departments to collaborate and work together in an effective way. The platform

had to enable high performance, accuracy and security, without interruption, as mistakes and delays were time consuming and costly.

### SOLUTION

The municipality turned to Intetics, which has a history of performing projects on budget and on time. Intetics took charge of the project despite its complexity and magnitude, and proposed modern and powerful solutions at a competitive price and within the shortest possible time.

In total, two integrated solution options were presented to the client, each with different types of GIS software, logical and physical system models, adaptive planning, evolutionary development, early delivery, continuous improvement, agile development approach, and a complex Enterprise GIS system design. Both options included the following components:

- Data Architecture;
- Data Governance;
- Integration with other systems using different frameworks and API's;

# NEW SYSTEM WORKS NON-STOP AND ALLOWS ALL MUNICIPALITY DEPARTMENTS TO WORK AS A CENTRALIZED TEAM

- Redundancy / disaster recovery;
- Privacy of data;
- Real-time monitoring with rich trace information for troubleshooting;
- Compliance to laws and regulations;
- Reporting (typically allowing for intelligent management).

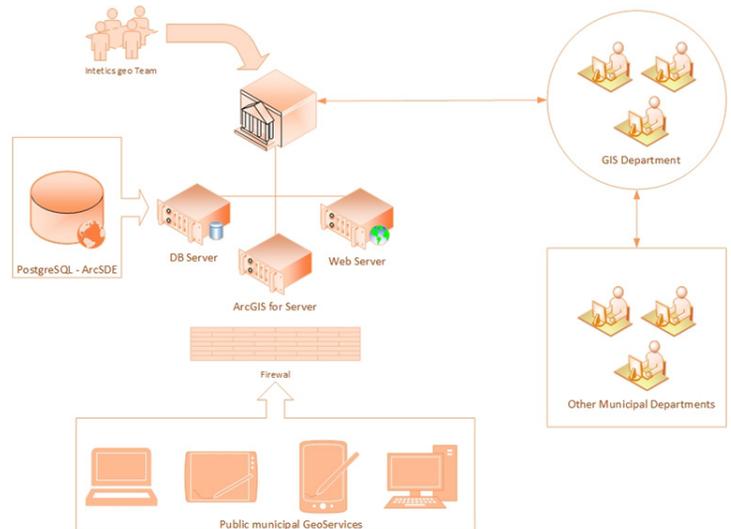
The first option was based on open source GIS solutions such as QGIS for Desktop users, GeoServer as a GIS server application for geospatial data sharing, PostgreSQL with PostGIS extension as a Geodatabase server for Spatial Data store and Spatial Data management and CentOS or Microsoft Windows Server as the server operating system.

The second option was almost entirely based on an ESRI GIS solution such as ArcGIS for Desktop for desktop users, ArcGIS for Server as a server based software for Spatial Data sharing, Microsoft SQL Server or PostgreSQL with SDE spatial extension for Spatial Data store and Spatial Data management and Microsoft Windows Server as the server operating system.

After studying both options, the client chose the second option, the ESRI-based solution. The solution was then built according to the plan and delivered to the client.

## RESULTS

Due to working with Intetics, the municipality's departments were able to start operating systematically. It ceased to be a decentralized system of individual departments, and became an effective collective effort that could tackle resident's issues quickly and effectively.



Intetics was able to quickly determine the municipality's system requirements to ensure optimal system operations. The deployed system integrated new features with existing data, making process interruption due to technology minimal.

The modern approach of data integration allowed Intetics to:

- Evaluate existing data;
- Review all native GIS layers;
- Eliminate data redundancy within municipality departments;
- Integrate all existing geo data using GIS technologies.

The municipal system works without interruption, and all municipalities operate in a single system despite its large size and previous decentralization. With Intetics' help the client was able to achieve better project management and serve their constituents better.