

Los Angeles: Accessing GIS data for critical decisions fast and cost-efficiently



Helping Los Angeles meet its growing information needs

During the wildfires in October 2005, the City of Los Angeles found it challenging to coordinate fire-fighting efforts, as it had problems accessing the data it needed from multiple sources. Because its existing data repository had limited space available, the City was not able to access or even store all of its geographic information system (GIS) data. In fact, during the wildfires, the City was forced to offload some of its GIS data to make room for data regarding areas outside City boundaries. Because all of the City of Los Angeles' public safety applications depend on the ability to access, manage and share ESRI data for accurate situational awareness, a new solution was needed going forward.

The City launched an Urban Area Security Initiative grant project to upgrade the citywide repository of spatial data. Because the U.S. Department of Homeland Security had designated Los Angeles to host the central data repository for all local and state data related to geographic information, an upgrade would benefit not only the City, but also the entire state of California.

Overview

■ **Business Challenge**

The City of Los Angeles was plagued with limitations in managing geographic information system (GIS) data stored on their legacy database, and had an immediate need to find an effective solution to meet their current and future business needs.

■ **Solution**

Los Angeles replaced its legacy database with IBM DB2® 9 and IBM WebSphere® Information Integrator software, allowing the City to provide a more comprehensive set of data enabling and improving critical decision-making in emergency situations.

■ **Why IBM?**

The City of Los Angeles realized that DB2 with IBM DB2 9 Spatial Extender provided superior technology for managing their growing repository of GIS data while also providing added functionality.

■ **Key Benefit**

By replacing its legacy database with the IBM solution, the City of Los Angeles saved more than US\$150,000 in annual software licensing fees.

Legacy database not up to the task

Los Angeles had been storing its spatial data in a legacy database, but licensing and maintenance costs had been rising steadily every year. In addition, the database did not provide the scalability or performance that the City needed. To facilitate data sharing and sustain spatial data growth and development, the City of Los Angeles began to look for a more robust, scalable and cost-effective database solution. Additionally, because Los Angeles was already using GIS applications from IBM Business Partner ESRI, it needed a solution capable of integrating seamlessly with ESRI technology, in addition to one that could easily migrate information from its legacy database. Because IBM consultants were able to offer Los Angeles a scalable, easy-to-integrate and more technologically advanced solution at a lower price point—and meet all of the City's requirements—the City chose IBM.

New solution offers cost-effective scalability and advanced capability

The City replaced its legacy database with a solution composed of IBM DB2 9, DB2 9 Spatial Extender, DB2 Connect™ Enterprise Edition, DB2 Performance Expert for Multiplatforms 9 and IBM WebSphere Information Integrator. ESRI ArcGIS software client solutions integrate with IBM DB2 data server. Within the database, the City is storing data for Los Angeles, Orange, Ventura, Riverside and San Bernardino counties, and it continues to load additional GIS information as it is submitted from sources beyond City limits. In addition, they are now able to expand spatial data accessibility beyond the City limits and are well positioned for future growth, all at a significant cost savings.

As the City receives updated or new information from the counties on a monthly basis, that data is stored in a mainframe database. DB2 Connect Enterprise Edition provides access to that information. To integrate its existing data into the new solution, the City uses IBM WebSphere Information Integrator.

Expanding usage

The GIS database is initially being used by several hundred internal City staff members, with access being planned for various public safety and first-responder groups for use in emergency situations. Currently, Los Angeles has used the solution to speed permitting and zoning processes, create crime analysis maps, and to revitalize its street-lighting planning.

By replacing its legacy database with the IBM solution, the City of Los Angeles saved more than US\$150,000 in annual software licensing fees. In addition, the City now has access to more data, which enables it to make critical decisions more quickly, particularly in an emergency situation. DB2 9 data server integrated seamlessly with ESRI ArcGIS, which improved overall system performance. Los Angeles personnel now have access to more data across multiple departments,

“With our new database solution, we can access all the GIS information whenever we need it – whether it is an emergency situation, or if we’re just supplying information for street-lighting purposes. And the solution is scalable, so as GIS information pours in from around the region, we’ll be able to integrate and access that data as well.”

– Jose Alvarez, information systems manager, City of Los Angeles



creating a wider, clearer, more complete view for all City staff. Further, the DB2 platform-based solution offers greater scalability than the previous solution, allowing the City to provide a more comprehensive set of data for the eventual benefit of the entire state.

For more information

To learn more about IBM, IBM database solutions and GIS technology, please contact your IBM representative, or visit us at:

ibm.com/government/esri

Key Components

- *IBM DB2 9*
- *IBM DB2 9 Spatial Extender*
- *IBM DB2 Connect Enterprise Edition*
- *IBM WebSphere Information Integrator*
- *IBM DB2 Performance Expert for Multiplatforms 9*
- *ESRI ArcGIS client solutions*

Business Benefits

- *Up-to-date citywide geographic information*
- *Improved ability to manage and facilitate City business processes*
- *Better public safety coordination, such as emergency services, disaster planning and homeland security*

Technology Benefits

- *Seamless integration*
- *Greater scalability*
- *Improved overall performance*



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