

City of Indianapolis, Indiana

Enterprise GIS at a City Level

Problem

 Needed to more efficiently manage citizen requests at the city level

Goals

- Allow agencies to better target resources.
- · Improve communications to citizens.
- Resolve problem calls quickly.

Results

- City can now view and analyze citizen requests and complaints by location.
- Decision makers have the information they need to allocate funds based on location.
- Service crew labor costs have been reduced by decreasing assignment of multiple trouble tickets to the same problem.

City of Indianapolis

2005 Total Population	792,943
2005 Median Age	34.37
2005 Total Households	326,887
2005 Median Household Income	\$45,054
2005 Median Home Value\$	110,606

Demographic data available through ESRI

For More Information



ESR

380 New York Street Redlands, CA 92373-8100 Phone: 800-447-9778 Fax: 909-307-3082 Web: www.esri.com

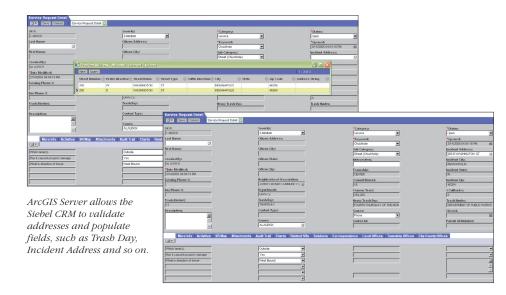
Woolpert Inc.

409 E. Monument Avenue Dayton, OH 45402-1261 Phone: 937-461-5660 Fax: 937-461-0763 Web: www.woolpert.com The city of Indianapolis/Marion County GIS (IndyGIS) is a mature software system that has been in existence since 1986. Over the course of time, the geographic information system (GIS) has evolved from a decentralized team of individuals in separate departments to a centralized division called the Geospatial Information Services division. As the division grew, more and more layers of information were included in the GIS. As a result, more staff in various city departments including public works, planning, and parks began using the system. No longer an on-demand map shop, IndyGIS evolved into an enterprise-wide system, providing 150 data layers to more than 500 GIS users throughout the city.

The Challenge

In 2004, the Mayor's Action Center (MAC) implemented Siebel's Customer Relationship Management (CRM) system. MAC is the city's main call center and accepts approximately 1,300 calls per day, or approximately 300,000 calls per year. The new system needed to increase responsiveness to requests while providing improved visibility into the status of those requests. For example, residents needed to be able to quickly request services or information regarding pothole repairs, snow removal, zoning violations, stray animals, and trash pickup. MAC needed CRM to better track citizen requests and coordinate information and action between other departments. In addition, the city wanted to enable citizens to submit and view their service requests online and be notified via e-mail.

The city's GIS was needed to provide an integration with CRM using a Master Address Database (MAD), which was vital to the overall success of the CRM implementation. MAC needed a very fast intranet application that connected data from several departments with the county's ArcSDE® geodatabase environment, allowing the customer representatives to enter an address and verify if the property exists. In addition, MAC wanted to minimize the average time it takes to complete a service request.



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ESRI Software Used

- ArcGIS® Server (1 server) running on Windows Server 2003 with IIS 6.0 and .NET ADF
- ArcSDE 9 (2 servers) with Oracle9i on Sun Solaris
- ArcIMS® Application Server (1 server) on Windows Server 2003 with IIS 6.0
- ArcIMS Spatial Server (2 servers) on Sun Solaris
- ArcInfo® 9 on Windows XP

Additional Software Used

• Siebel CRM 7.5

"Without ArcGIS Server, the integration with CRM would not have been a success. GIS played a very important role in the entire project."

Pat Holdsworth, Administrator, Mayor's Action Committee, City of Indianapolis

For More Information



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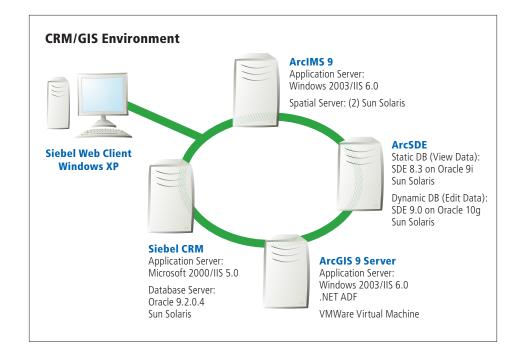
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The Solution

The city contracted with Woolpert Inc., based in Dayton, Ohio, to implement ESRI's ArcGIS Server, a comprehensive platform for delivering full-featured enterprise GIS applications that are centrally managed and support multiple users. ArcGIS Server is the first GIS product to directly allow for the utilization of Services Oriented Architecture (SOA). This allowed the city to directly integrate their enterprise geodatabases with Siebel's CRM system, currently being used at the call center.

The city's ArcGIS Server implementation leverages an impressive enterprise geodatabase. The IndyGIS data center integrates six Oracle databases operating within a Storage Area Network (SAN). The GIS integration uses two SOAP/XML Web services. One provides geocoding, which forces a valid address to be used, and the other uses point-in-polygon spatial analysis functionality to automatically populate required fields within Siebel. The use of a SOAP/XML Web service means that this functionality can be used in other applications as well with no modification.

An additional application being developed using ArcGIS Server will provide an interactive map within the Siebel interface. This application will allow MAC staff members to better manage their daily work flow by quickly displaying where existing calls have been recorded as new ones are being entered. This will greatly assist the staff in grouping calls so repeat tickets are not generated for the same problem. This implementation will also give the city a vastly improved method to target its existing resources and cut down on redundancy.



Results

The success of ArcGIS Server being implemented with Siebel's CRM has allowed the city to better manage and accurately facilitate calls and determine how they were resolved. The city has also seen an overall increase in management efficiency. For example, the Department of Public Works, Division of Compliance, Marion County Health and Hospital Corporation, and Animal Care and Control can now better target their resources, improve communications in fielding calls, and provide better response to problems.