



# City of Mesa

## Enterprise GIS Improves Workflow and Data Management

### Problem

The city government needed to create a user-friendly GIS that would update data more frequently, streamline inefficient workflows, and facilitate data sharing.

### Goals

- Increase the frequency of data updates.
- Improve daily organization of work, especially for field employees.
- Make organization-wide adjustments and updates to the GIS easier.

### Results

- Improved workflow
- Customizable maps
- Easy-to-use applications
- Better data management

*ArcGIS Server provides the platform for us to develop more robust, user-friendly, and secure enterprise GIS applications.*

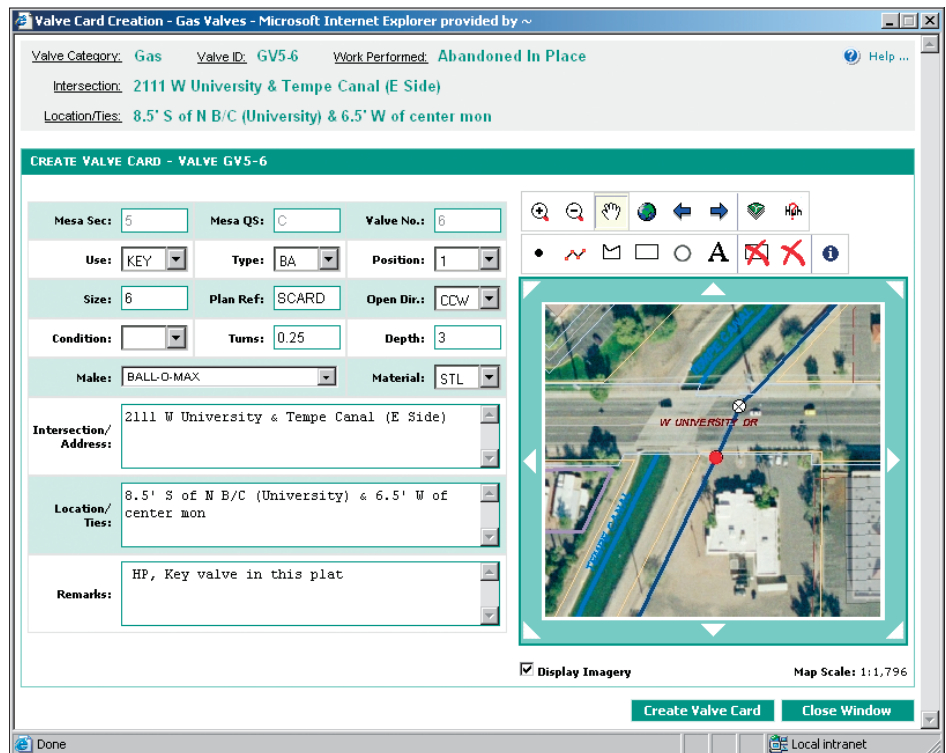
Jason Bell, IT Services Leader,  
City of Mesa, Arizona



*The City of Mesa, Arizona, with a population of more than 450,000, recently decided on an organizational strategy that would move geographic information system (GIS) functionality away from desktop software and onto the Web. This move makes the management of updates and adjustments to the GIS easier and allows more people within city government to take advantage of GIS-based applications. To meet this goal, the city has developed an enterprise GIS (EGIS) that utilizes the power of ArcGIS® Server software. Thus far, the Utilities and Development Services departments are using the system.*

### The Challenge

Before developing an EGIS, city employees faced delayed data updates and poor workflow. Field employees were often cutting and pasting address data from Accela's Tidemark Advantage government enterprise software into an Excel® or Word document to organize their work. The data in this system was updated on either a one-week or five-week cycle. Employees would also print out corresponding maps from Internet search engines to visualize the addresses. This time-consuming and inefficient process needed to be better organized, and data needed to be updated more frequently.



*With ArcGIS Server, City of Mesa utility field staff members can map the locations of gas valves and track the condition of assets.*

Learn more about ArcGIS software at [www.esri.com/arcgisserver](http://www.esri.com/arcgisserver).

# City of Mesa

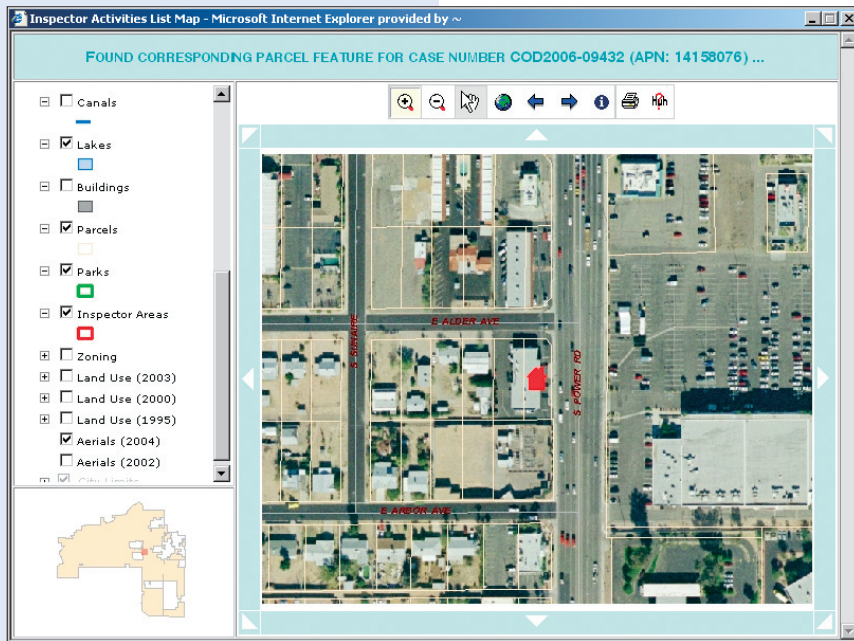
Enterprise GIS Improves Workflow and Data Management

## ESRI Software Used

ArcGIS® Server

## The Solution

To improve workflow in the Utilities and Development Services departments, the city has developed four GIS applications: Inspector Activity List, Gas Valve Maintenance, Web-based Utility Output Map Generator, and Mailing Address Report. The first two give field staff access to property and utility data, respectively. The map generator creates real-time maps of utility assets, and Mailing Address Report is used to notify residents in a selected area of upcoming construction.



An Inspector Activity List application allows code compliance inspectors to map the areas they are responsible for as well as access the history of a parcel, which includes zoning and violation data.

The ArcGIS Server implementation eases the life cycle management of the system. For example, updating the GIS through ArcGIS Server requires one adjustment as opposed to updating many workstations on which GIS desktop software is installed. It also allows more people within the city government to use GIS-based applications because, with ArcGIS Server, they don't need to have GIS desktop software installed on their computers; they simply need an Internet connection.

There are three additional reasons the City of Mesa chose ArcGIS Server software. First, the city uses C# and Microsoft® Visual Studio® for Web development, and ArcGIS Server allowed agencies to integrate current Web practices into the GIS. Second, city leaders wanted access to the ArcObjects™ library because it enables them to create a customized GIS that solves the city's unique business problems. Those solutions include allowing code compliance inspectors to "grab" their regions on maps and create activity lists from spatial queries. Third, the city leaders wanted to be able to manage map layouts so they can control and manipulate maps effectively.

## Results

The new applications make it easier for employees, in both the office and field, to access the spatial data they need to do their jobs efficiently and make sound decisions.

With the new EGIS, which integrates with Tidemark Advantage and an Oracle® database, field employees now have access to maps that are customized for their workflow. On a Panasonic® Toughbook® notebook PC, employees in the field can search on-screen maps of the areas where they are working for detailed information about, for example, utility assets. Also in the field, code compliance inspectors are able to access historical records about properties. Updates to data can be made daily and are immediately reflected on the maps.

"From an information services standpoint, it's given us much better leverage of GIS data because it can be utilized within the enterprise without any specialized skills—we find that we have users now using GIS without realizing it," says Jason Bell, IT Services leader, City of Mesa. "The GIS is transparent, and that is one of our goals: to continue to get GIS enveloped in our workflow while remaining transparent to the end user. It provides unique value to our enterprise system."

## For More Information



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Learn more about ArcGIS software at [www.esri.com/arcgisserver](http://www.esri.com/arcgisserver).