

Water District Improves Design and Management of Infrastructure

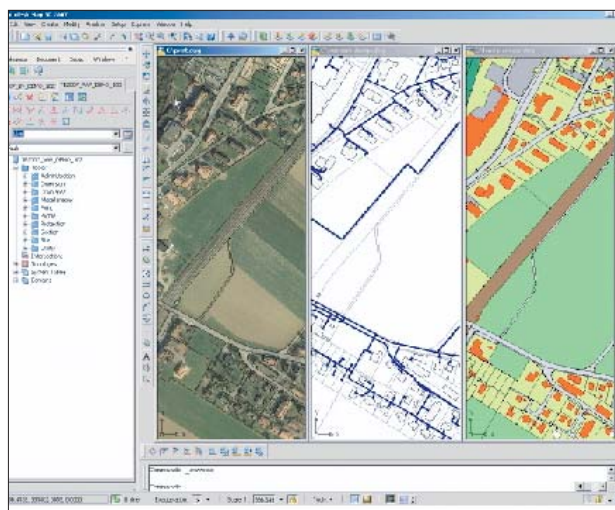
Utilities leverage and share valuable CAD, GIS, and asset information

The Las Vegas Valley Water District (LVVWD) is a not-for-profit agency that began providing water to the Las Vegas Valley in 1954. It is the largest water purveyor in Southern Nevada, serving more than one million people each day. Regional growth has generated a soaring number of developer and construction projects, challenging the LVVWD to keep its water network asset data and documentation up-to-date. As the water provider for one of America's fastest growing regions, the LVVWD must design, inspect, and approve new infrastructure to keep pace with development in and around Las Vegas, which has experienced six percent annual growth over the last decade. A key to the LVVWD's success was to make greater use of its engineering design and GIS data by improving its accuracy and accessibility to internal departments such as customer service, operations, and finance.

The LVVWD has successfully expanded its enterprise software systems with Autodesk Topobase software (www.autodesk.com). The district can now apply precise, real-time spatial data in key business processes, such as design, as-built documentation, and maintenance work in the field to make better decisions and help increase overall productivity and operational efficiency.

Topobase's flexible architecture allows the LVVWD to quickly implement efficient GIS data management systems and

maintain and share highly accurate spatial information throughout its organization, regardless of format. Before implementing the software, the LVVWD had to convert data formats when moving and managing CAD asset and spatial data across multiple software applications used by various work teams—a process that was both time-intensive and error-prone. Synchronizing design and GIS data was inefficient and not always maintained in real time. Now, a wide range of users can employ a common spatial data source for their varied business processes,



regardless of whether they have engineering or GIS expertise.

“Autodesk Topobase complements our existing enterprise systems, including ESRI ArcSDE [www.esri.com] and allows linkages with Hansen [www.hansens.com] asset management and PeopleSoft [www.peoplesoft.com] with a single interface,” said Jonathan

Pickus, manager, AM/FM/GIS Division, LVVWD. “Within a five-month period, we were able to incorporate the software into our system—start to finish.”

The LVVWD was also able to use the Topobase flexible data model, workflows, and business rules to speed up common tasks, improve consistency, and support higher-quality data by minimizing scattered, redundant data creation and maintenance processes. For example, when creating as-built documents, the software display models visually confirm whether new lines are connected to the network properly while employing business rules so that the database reflects the appropriate connectivity. The software's long transaction capability is also used to highlight the areas of the network that are undergoing work, so that two engineers do not work on the same part of the network at the same time.

“When customers such as the LVVWD need to perform maintenance on an underground water line, it is important to know how many feet from the curb it is, how many feet down, and what else is around it,” says Chris Bradshaw, vice president, Autodesk Infrastructure Solutions. “Topobase enables customers to use the high precision information created during the engineering construction phase of their projects to improve efficiency in the ongoing management of their infrastructure assets.”

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