

Plymouth County, Iowa

Customer Success Story

AutoCAD® Map 3D®

Autodesk MapGuide® Enterprise

“Employees in many of our offices use the maps daily. In the past, they would have contacted us for the data and waited for a map or tried to complete tasks without detailed information. Now, with county data at their fingertips, they can use it to answer queries, schedule maintenance, or get project updates in much more quickly.”

—Shawn Olson
GIS Coordinator
Plymouth County, Iowa

Increased Productivity, Decreased Workloads

Plymouth County maintains ownership of its GIS data while sharing it with cities, citizens and agencies.



Project Summary

Located in Northwest Iowa, Plymouth County often refers to itself as the Ice Cream Capital of the World. Plymouth's county seat, the city of Le Mars, is home to Wells Dairy, which is the world's largest producer of ice cream novelties.

The county government manages public works and infrastructure assets across 864 square miles of land. County officials wanted to build an online GIS that delivers quick and easy access to county data for city governments and private citizens.

Using Autodesk solutions, Plymouth County is able to:

- Reduce phone calls and walk-in requests for paper maps
- Increase employee productivity
- Maintain ownership of their data while sharing it with cities and citizens
- Integrate data in its native format

The Challenge

Managing public works assets for an entire county is no small feat. Add the challenges of sharing project information with several city governments and adhering to budget constraints and the task grows even larger.

After migrating from AutoCAD to AutoCAD Map 3D on Autodesk's Subscription Program, Plymouth County was already creating dynamic, intelligent maps of its infrastructure assets and projects. However, the distribution of those maps proved difficult. City governments inside the county were unsure that they had the most recent maps. And, citizens had no access to the data, which meant placing a phone call or visiting the county offices to get a map of their property.

Plymouth County's GIS coordinator, Shawn Olson, explains, “With only two seats of AutoCAD Map 3D, effective data distribution was a real issue for the county. We had no way of making the maps available for county employees, city staff, and the general public to view.”

Autodesk®

The software's flexibility helps Plymouth County use our GIS data efficiently, now and in the future.

The county also feared being trapped by a consulting firm. "We didn't want to lose ownership by paying someone else to host and develop the project for us, but we didn't have the programming knowledge to complete it ourselves," said Olson.

The Solution

Autodesk partner mPower Innovations developed a plan to help Plymouth County share its maps with an online geospatial application that wouldn't require heavy consulting or vendor lock-in. "Autodesk MapGuide Enterprise was the logical step to distribute maps and GIS data throughout the county's internal and external agencies", says David Falk, Account Manager, mPower Technologies.

Olson explains, "The people at mPower Innovations looked at what we had, listened to what we wanted, and created an easy-to-use map application that still delivers the necessary content of the original AutoCAD files."

With the online GIS in full use, all departments have secure access to critical data via a simple web browser. The easy-to-use interface helps even new users to easily query the database and build reports by simply choosing criteria and clicking a computer mouse.

FDO Access

The county uses older data created with AutoCAD software and GIS software such as ESRI's ArcGIS and Intergraph's Geomedia, and

required that the online system absorb data into the system without the need for costly or error-prone data conversion.

The Feature Data Object (FDO) technology available as open source software (www.osgeo.org) and embedded in all of Autodesk's geospatial software means that the county can access native data whether in files or databases in nearly any format. "Staff using the online GIS can work with up-to-date information, ensuring everyone on a project is making decisions using the same information," adds Falk.

The Result

Employees in many Plymouth County offices use the online maps daily. "In the past, they would have contacted us for the data and waited for a map or tried to complete tasks without detailed information. Now, with county data at their fingertips, they can use it to answer queries, schedule maintenance, or get project updates much more quickly. Our staff reports being much more productive since using the system because they no longer spend time creating and sharing maps to fulfill requests," explains Olson.

Olson reports that the public is enthusiastic about having data available through their home

computers. "Sharing county data with citizens helps them to feel involved in their government. And, accessing the information means fewer trips to the courthouse – saving them time and gasoline."

Low Cost of Ownership

Plymouth County feels strongly about keeping the online solution in house, rather than paying a monthly contract fee to a commercial hosting company. "We looked at monthly hosting, but found a self-maintained, intuitive system to be a better fit for Plymouth County," Olson says. "The project paid for itself in less than two years, and it's easy to maintain." The county successfully maintains ownership of its information and Olson spends only 15 minutes per week monitoring and maintaining the system.

"Autodesk software allows us to create new users, add department sites and even make our own customizations. This flexibility helps Plymouth County use our GIS data efficiently, now and in the future," Olson says.

To learn more about how Autodesk MapGuide Enterprise is helping organizations around the world complete projects faster and more cost effectively, visit us at www.autodesk.com/mapguideenterprise.com.



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