



*All images: Moorhead Public Service solar and wind generation site*

Moorhead Public Service (MPS), a consumer-owned electric and water municipal utility serving the city of Moorhead, MN, desired to develop a GIS strategic plan based on expert industry knowledge that would create a solid foundation for GIS success in the years ahead.

When Todd Copeland was hired as MPS' GIS Coordinator, one of his main goals was to take an inventory of where, why, and how the organization was using GIS. Identifying successes, challenges, needs, gaps, and areas for improvement are foundational to guide future direction and decisions within the department. A previous GIS needs assessment had been conducted internally several years earlier and laid out five years of GIS priorities.

Instead of embarking on another internal GIS needs assessment, Copeland partnered with Pro-West & Associates to obtain objective input and encourage transparency and frank conversation.

### PHASE 1: DISCOVERY & DOCUMENTATION

Pro-West began by engaging one-on-one with 30 individuals across all three divisions of the organization to discover how they are using maps and identify how GIS can enhance what they do every day, as well as documenting departmental needs and any staff concerns about GIS.

During a two day process, Pro-West worked with MPS to document its "current state" encompassing all aspects of GIS within the organization ranging from existing data and where it was stored to staff resourcing that supports GIS.

We needed an objective, outside look at how we were using GIS in order to get the best assessment of what we were doing and make the right recommendations to keep us moving forward. We valued Pro-West's industry expertise and the process they used to conduct the needs assessment before putting together the plan. They involved the entire organization and used our time efficiently."

- Todd Copeland, GIS Coordinator

### PHASE 1 IDENTIFIED:

- Existing GIS workflows
- Existing data
- Technology being used
- Gaps in GIS support and capabilities
- Areas for improvement
- Concerns
- Departmental GIS needs
- Existing IT infrastructure supporting GIS

## PHASE 2: EVALUATION & RECOMMENDATIONS

Using the information gathered during the first strategic planning phase, Pro-West evaluated and benchmarked MPS against industry best practices and defining what would be required for long term GIS success.

MPS' three departments – water, electric and administration – were all at different stages of GIS deployment. Historically, location technology was most extensively deployed by the water department, the electric department had been using GIS for three years, and the administration department had never used GIS. Recommendations made by Pro-West recognized this disparity, and addressed how GIS could provide value to each departments' distinct needs to improve processes and provide better information.

Copeland's primary goal was to define how MPS' GIS would best deliver value to others in the organization using GIS technology. The resulting GIS strategic plan laid out priorities for the next five years, with a combination of tasks that could be performed quickly and easily as well as longer term projects that were vital to future success. Examples included:

- Deploying configurable GIS apps to make workflows more efficient
- Using GIS tools to enhance work order management - connecting data with details of jobs and updates made, and taking the process from paper to a digital platform
- Integrating GIS with other business systems such as CMMS
- Implementing Collector for ArcGIS for field data collection using an iPad
- Streamlining existing maps and apps, eliminating “clutter” and including only required data to improve load times
- Upgrading MPS' GIS to the Esri ArcGIS 10.6 platform after a long time restricted to ArcGIS 10.2 due to a connected legacy system. *Upgrading to 10.6 will have a significant impact, opening the door for many planned integrations with GIS such as CMMS, SCADA and others*

“Having quick wins in addition to more complex long-term projects will allow us to work towards a sustainable GIS that provides value for everyone at MPS. I am excited to have our electric and water departments see improvements in their daily processes using GIS technology, and to be able to make the switch to the ArcGIS 10.6 platform with the knowledge that the right architecture will be in place to support it.”

- Todd Copeland, GIS Coordinator

## MPS' GIS strategic plan evaluated and made recommendations for:

- GIS processes/workflows
- Esri software licensing and use
- Field mobility
- IT infrastructure
- GIS growth
- Resourcing
- Collaboration
- Communication
- Troubleshooting



## DELIVERING VALUE

With a GIS strategic plan in place, MPS has a practical, measurable, and affordable path to GIS success. As the plan is rolled out, it will bring value to the whole organization by providing the ability to connect business systems, use GIS to make data-driven decisions, efficiently edit data in the field, move from paper to digital workflows, and stay ahead of evolving technology.

The plan provides MPS with accountability by ensuring the GIS department is taking the necessary actions to meet organizational needs and resolve issues. Already, upon the recommendations of the GIS plan, MPS hired a GIS Analyst to ensure proper support as implementation begins.

Copeland commented, “Having a GIS strategic plan is invaluable for MPS. As well as giving us realistic goals and practical steps for supporting our team and customers with GIS, it encouraged us to reimagine how we think about GIS. It is so much more than making maps – it has the power to help users make informed decisions, to increase productivity across the workforce and efficiency in the processes that drive the business. Ultimately, it provides vital business intelligence that enhances entire organizations.”

“I realized during the strategic planning project that it was overdue; if we’d begun working on it sooner we would have been able to identify where greater GIS support was needed and start providing value earlier. However, we’ve already taken action and implemented a number of recommendations, such as adding to our GIS team to ensure the right support is in place as we expand our GIS function.”

- Todd Copeland, GIS Coordinator

## Thinking about a GIS strategic plan?

Todd Copeland, GIS Coordinator at MPS, offers the following advice:

- **It’s necessary.** If it’s been a long time since a needs assessment or strategic plan was conducted - what are you waiting for? You need to check on the pulse of the organization regularly.
- **Do it now.** The sooner a good plan is in place, the sooner you can start to see value.
- **Embrace ALL feedback** - good and bad. Are individuals across the organization getting value from GIS? Just because you’re getting value from it doesn’t mean they are.
- **Don’t assume** you know what the rest of the organization needs from GIS. Ask the right questions to find out what they need from you.
- **Consider seeking objective input.** It’s likely to produce more honest - and therefore, more valuable - feedback.

