PRO WEST & ASSOCIATES

Building Smart Cities
Location-based solutions to enhance and engage

COLLABORATION
Working with other local governments and external organizations to benefit from GIS capabilities and discover cost sharing opportunities.

DATA THAT WORKS
Creating data that is accurate, centralized, easily accessible, meaningful, and shareable.

INNOVATION
Mobile-first apps that are easily created and used by the public or internal departments.

EFFICIENCY
Using GIS technology to minimize the time required to complete key business processes while improving accuracy and consistency through automation, integration, and configuring off-the-shelf easy-to-use apps.

TRANSPARENCY
Using open data to support the needs of the City, the public, and businesses operating in the community without the need to spend time responding to individual queries.

PUBLIC SERVICE
Meet and exceed citizens' expectations and enhance public safety by providing valuable, easy-to-find information via interactive maps and apps on mobile devices.

DATA-DRIVEN DECISIONS
Make better decisions more easily with greater accessibility to valuable data via integrated systems.

Spotlight: City of St Cloud, MN

St Cloud is delivering smarter, more transparent, efficient, and engaging GIS-enabled services through its Public Works, Fire, IT, and Planning Departments. Secure mobile and desktop solutions, data development and conversion, and integration with business systems have made St Cloud, its staff, and citizens, more connected, more productive, and empowered to access accurate information easily.

Smart means the ability to respond rapidly; Pro-West and St Cloud worked together to develop a sanitary asset and maintenance management system for all City departments in less than eight weeks. Field-to-office workflows streamline the daily asset management process across departments and office locations.

CITY OF ST.CLOUD
MINNESOTA

A GIS-based hydrant reporting system enabled the City to slash four weeks of staff time in the preparation and printing of reports. Business processes were further streamlined with the integration of a one-call application that automatically assigns tickets and sends responses to the State One Call Center, and with the development of reporting and data entry tools to efficiently track inspections and maintenance.

A public map gallery enhances transparency and engagement with the community, and ensures citizens receive timely information in seconds on their mobile devices.

Spotlight: City of Fargo, ND

Pro-West has been supporting the City of Fargo for 15 years, empowering the City with the right geospatial data in a format that supports data-driven decisions, and mobile and web-based applications that engage and inform citizens and enhance internal efficiency for a range of business functions.

Collaboration with Cass County and Fargo Park District has been an important component of Fargo's smart city status. Together these organizations have generated GIS data and applications that serve all three organizations' internal staff and the public. The alliance significantly alters the landscape of how these organizations function by creating libraries of information and distributing powerful map-based functions via GIS web-based technology, bringing more efficient governmental communications, shared data standards, consistent mapping products seen by the public, and cost sharing opportunities.

Integration with critical business systems has incrementally increased the value of the data already in existence at the City. Connecting GIS with systems such as utility billing and permitting, tax, sales, document imaging, special assessments, and records management provides more information on which to base decisions, improves productivity and efficiency, and reduces incoming queries from the public.

Being a smart city is not just about becoming a smart city, but also about staying smart. Pro-West has ensured Fargo's GIS applications have been scaled based on the City's needs as Esri platform technology has evolved. The web-based GIS applications run on top of Esri's ArcGIS Server technology. Since the initial web application, Pro-West has developed additional ArcGIS Server applications including

flood modeling, crime analysis applications, public property/tax portals, lane closure applications, and web-based special assessment tools.

Pro-West worked with Fargo to develop an ArcGIS Online mobile application to support tracking key infrastructure, such as pumps and plugs, during the Red River flooding events, allowing City staff to efficiently enter and edit data in the field. Additional mobile projects have been developed and are planned due to the success of this project.

To better inform and serve the public, the city extended and scaled its public interactive map offerings to include a branded, mobile-based interactive map gallery. The map gallery serves as a centralized location for all interactive mapping sites and utilizes existing map services and publicly available map services, making management of the sites seamless with other internal web GIS sites.
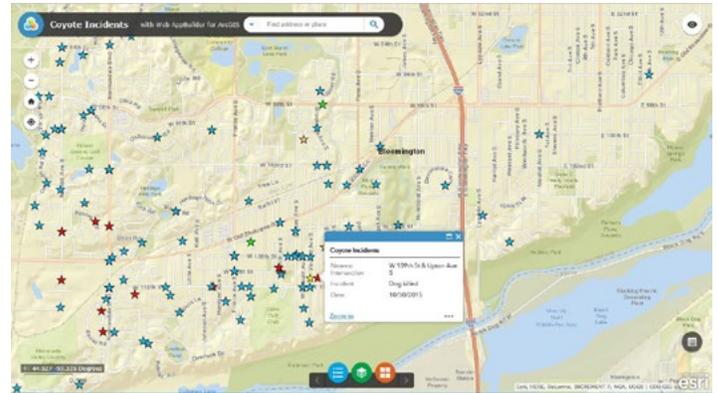
Spotlight: City of Bloomington, MN

Located 10 miles south of Minneapolis, the metro area had benefitted from Bloomington's innovate approach to GIS for almost 20 years before advances in technology prompted it to switch to Esri's enterprise GIS tools. Enlisting Pro-West's expertise, the City set about taking advantage of web and mobile-enabled location technology to better inform the public, enhance collaboration within the City, and build a more comprehensive information picture for making decisions.

A staffing plan embedded GIS experts in many departments across the organization, while Pro-West implemented the full suite of elements that make up a complete enterprise GIS, ranging from system architecture design and setting data conversion standards to configuring ArcGIS Portal, integrating systems, and providing training,

Bloomington's vision largely depended on creating apps that were easy to build and use and would communicate information instantly to users, whether internal or public. Using ArcGIS Online and Portal for ArcGIS, the City implemented over 20 solutions in just a year. Public maps and apps consist of specific internal and public-facing applications including a planning interactive map, coyote incidents map, and public works maintenance map. Internal apps included a Police Viewer: Patrol app linking to building maps, a utilities viewer providing field capabilities, and surface water, engineering, and planning web apps. All have in common the ability to rapidly access the right information and enhance efficiency and service provision.

Centralized data, task-driven solutions, interactive maps and apps, out-of-the-box app development, and offline capabilities have enabled Bloomington to embrace fully the benefits of becoming a smart city. With the right enterprise GIS tools, Bloomington has delivered on its vision for user-friendly solutions, superior customer service, improved efficiency, transparency, and mobile-first apps.

Coyote Incidents interactive public map

Police Viewer: Patrol interactive map (internal)

Planning WebGIS (internal)

"Almost all divisions at the City are now using GIS, we have over 20 web GIS solutions, and GIS experts embedded throughout the organization. Rapid and straightforward app configuration has made us much more efficient internally and allows us to better service the citizens of the area by providing instant, interactive information on their phones. It was clear to me from the start that Pro-West understood our vision – that's a big part of the reason we hired them – and they proved this by identifying and delivering the solutions that would allow us to achieve that vision. Those solutions have exceeded our expectations and taken us further than we thought we could go."

- Bob O'Neill, GIS Analyst, City of Bloomington