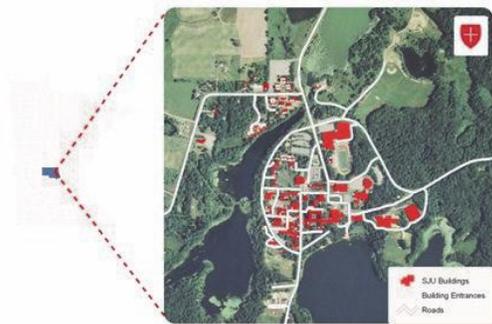


SAINT JOHN'S UNIVERSITY CASE STUDY

"The GIS maps GeoComm developed and implemented at Saint John's (Abbey, University, Preparatory School, and Liturgical Press) address one of our main on-campus issues. Through these improved maps visitors, students, employees, and emergency personnel have accurate and detailed information to locate and navigate the campus easily. Additionally, all of the roads are now named, and the campus buildings have complete addresses, the result of an addressing scheme created by GeoComm. Throughout the project GeoComm demonstrated professionalism and technical competence that aided in successfully overcoming the unique obstacles this project presented. Saint John's is especially grateful to GeoComm for their continued patience during this process to accommodate the needs of all divisions and in mapping over 150 years of history/growth."

~ St. John's Abbey, University, Preparatory School and Liturgical Press

Saint John's University (SJU) was founded in 1857 and is one of the oldest colleges in the Midwest. SJU is located approximately ten miles west of Saint Cloud, Minnesota. Its campus is adjacent to 2,700 acres of beautiful terrain that consists of lakes, wetlands, pine and hardwood forests, an oak savanna, and restored prairie, all belonging to Saint John's Abbey, a Benedictine monastic community.



CHALLENGE

SJU faced a challenge not uncommon among the United States' estimated 2,095 colleges and universities. The challenge they faced centered on finding a better way for visitors and new students to move around campus efficiently.

There were four main impediments that contributed to people not finding the campus, and once on campus, not finding the building they were looking for without asking for directions. These impediments included:

1. Roads on campus were not named
2. The campus lacked addressing

3. No Geographic Information Systems (GIS) map data

4. Inaccurate mapping available on the World Wide Web

SOLUTION

SJU partnered with GeoComm to develop and then implement a system that would address the challenge of getting people to SJU and once on campus, to more easily locate buildings. The system would ultimately result in development of GIS based maps and addressing on campus.

Key project stakeholders from SJU and GeoComm met to discuss the impediments that existed and how to best approach the challenge. From these discussions, a project plan was put into place and the project was underway.

SJU key personnel, which included members of an addressing board and Monastery representatives, identified what roads were to be named. After identifying the roads, they selected road names that were provided to GeoComm to implement an addressing system on campus.

Prior to developing an addressing system on campus, GeoComm's GIS Services Bureau began developing a campus base map that included several key map layers. These GIS map layers included:

- Roads, including fire lanes
- Buildings

- Building entrances, including primary and secondary entrances
- Athletic fields
- Parking lots
- Sidewalks
- Emergency telephones

Accuracy of the final map layers was very important. To ensure all map layers were built correctly and accurately, GeoComm's GIS Services Bureau utilized:

- Resources from SJU
- Aerial imagery
- On-site data collection and verification using Global Positioning System (GPS) technology

Once accurate maps were created, GeoComm developed options for addressing buildings on campus, including outlining the pros and cons of each system. The ultimate goal was to build several address schemes for SJU that were clear, easy to maintain, did not conflict with existing addresses on campus assigned by Stearns County, the county SJU is part of, and would make it easier for people to locate and navigate around campus. The final addressing scheme selected by SJU addressed all of these needs.

CONCLUSION

GeoComm used GIS to develop digital map layers and implement a system of addressing that will help people locate SJU. In addition, the GIS map layers will be an invaluable tool to help emergency responders not familiar with the layout of roads and buildings on campus, locate those in need of help.

RESULTS

- 100 percent of the roads were named on campus
- 36 roads were named, including fire lanes
- 147 unique addresses were assigned
- 9.38 miles of roads were mapped
- 5.69 miles of sidewalk were mapped
- 115 buildings were mapped

- 330 building entrances were mapped
- 19 emergency telephones were mapped
- 18 parking lots were mapped
- 6 athletic fields were mapped
- 10 helicopter landing zones were mapped

BENEFITS

- Better capabilities for planning and responding to emergency and non-emergency situations on campus for the on-campus Life Safety Service team
- Enhanced routing for mutual-aid response agencies who can incorporate the final map layers into mobile mapping to reduce response times during an emergency
- Accurate assistance provided to visitors and new students for locating and navigating the campus by incorporating final map layers into national map data sets to be published in handheld GPS devices, vehicle navigation systems, and the World Wide Web