Knowing where you are is all the rage in 2011. From GPS units in your car that update the path to your destination based on real-time traffic to smart phones identifying the closest hospital or Chinese restaurant to social media sites identifying the names and pictures of people within a block or two of you who have similar likes and dislikes, location-based services are a huge growth industry. And behind the scenes of each of these examples (and infinitely more) are Geographic Information Systems (GIS). GIS comprise the hardware, software, data and processes that allow users to take one's location, determined on-the-fly using Global Positioning Systems (GPS), and combine it with the location of other features (roads, hospitals or Chinese restaurants) to answer spatial questions and solve spatial problems.

Of course, governments and businesses have known the power and the utility of GIS for some time. The ability to take maps of two completely different phenomena (say crime incidents and derelict houses) and overlay them so that you can see where the two phenomena relate in space has existed commercially since the late 1970s. Because that ability to overlay different maps can be combined with real-time locations from GPS-enabled devices, the opportunity for decision makers to have extremely pertinent information from which to make decisions is greatly enhanced.

However, not all organizations have seized that opportunity, particularly on Maryland's Eastern Shore. While Google Earth may be free to consumers, a professional GIS and the precision data it requires are expensive, complicated and technical. Hiring someone in your organization with the necessary skill set to leverage the organization’s investment in GIS technology and data involves a significant commitment of time and resources. Many local governments and small businesses of the type we have on the Eastern Shore simply don’t have that level of resources individually.

To help solve this problem and bring the power of GIS to local governments, Salisbury University launched the Eastern Shore Regional GIS Cooperative (ESRGC) in 2004. The ESRGC was the brainchild of Michael S. Scott, Ph.D., GISP, a professor of geography and geoscience at SU. Having grown up just outside of Salisbury, Dr. Scott observed the dichotomy between the metropolitan core of Maryland and its rural hinterland. While earning his doctoral degree, he worked closely with local Councils of Government in South Carolina. These CoGs used collective resources from both state government and local governments to provide technical services to rural counties and municipalities that they could not afford individually. Upon returning to his Alma Mater, SU, in 1998, he realized that the counties of the Shore could benefit greatly from a regional cooperative approach to GIS. Once the Maryland General Assembly approved the formation of regional councils in the mid- and lower Eastern Shore in 2003, he proposed that the two new councils use GIS as an important value-added service that could be provided regionally. Thus, the ESRGC was funded by and continues to be partially funded by grants from the MidShore Regional Council and the Tri-County Council of the Lower Eastern Shore of Maryland.

In the ESRGC’s over seven years of operation, it has completed over 100 GIS grants and contracts, taking in nearly $5 million in revenue for the University. Every county and nearly every municipality on Maryland’s Eastern Shore have taken
advantage of the seven full-time staff that operate the sophisticated GIS and mapping technology that the ESRGC makes available at a fraction of the commercial cost. And rather than compete with local businesses, the ESRGC has partnered with nearly a dozen large and small private firms to leverage the capabilities and cost of the ESRGC for their own clients. Beyond the value of the GIS services that the ESRGC provides, and the information that it generates for use by Eastern Shore decision makers, the ESRGC has conducted a number of innovative research projects that have advanced our knowledge about everything from wetland mapping to flood vulnerability to the availability of high-speed Internet service to the path of Captain John Smith’s voyages in the Chesapeake Bay in 1608!

But perhaps one of the greatest contributions that the ESRGC has made to GIS regionally is the commitment to training the next generation of the GIS workforce. It is estimated that nearly 100 SU students, primarily majoring in geography, have held intern, graduate assistant or technician positions with the ESRGC since it was founded. The students in these positions have accomplished everything from capturing the location of sewer manholes and stormwater drains with GPS, discovering the land use along the Nanticoke River in the 1840s, mapping violent crime in the City of Salisbury, or sampling the strength of mobile wireless broadband signals across the State of Maryland. Many of these SU students work at the University, but some are placed on-site with local governments. Nearly all of our ESRGC alumni have gone on to fruitful careers in GIS, either on the Eastern Shore or elsewhere. In fact, all members of the ESRGC technical staff are SU alumni!

As the ESRGC looks forward to helping to fulfill SU’s public service mission in the coming years, there will continue to be ever-present challenges. As the technical sophistication of our clients has grown, so have our capabilities. The ESRGC now has two full-time GIS programmers who create custom Web-mapping applications as well as mobile GIS-enabled apps. The race to stay one step ahead of the accelerating pace of technology continues. As more small businesses realize the predictive power of GIS modeling, the ESRGC will find creative ways to serve our entrepreneur community while continuing to support local governments. Finally, the ESRGC is being asked to take a statewide leadership role regarding GIS standards and innovative research initiatives. While such attention seems rarely paid to those who choose to serve the resource-challenged periphery, rather than the prosperous metropolitan core, the consummate GIS professionals at the Eastern Shore Regional GIS Cooperative are up to the task.

For more information on the ESRGC and the services it provides, please see www.esrgc.org.