Alabama Department of Children’s Affairs and Alabama Criminal Justice Information Center
GIS Provides a Fast and Economical Way to Share Information

The Alabama Department of Children’s Affairs (ADCA) and the Alabama Criminal Justice Information Center (ACJIC) form a unique partnership that works to benefit the lives of children in Alabama. ADCA evaluates community needs and plans. It then implements solutions and brings together communities and state and federal agencies in support of children. ACJIC is the state agency responsible for gathering and providing critical information for Alabama’s law enforcement agencies and the criminal justice community. It has the key responsibility of compiling and publishing annual statistics and feedback on the nature and extent of crime in Alabama for state officials and criminal justice agencies.

The Challenge
Both agencies need to store and manage vast amounts of information in very large databases and relate the information geographically to make it useful at local, regional, and state levels. The agencies needed a way for nontechnical people to find and interact with the data that supports their needs and share this information with other stakeholders. They also needed a Web page where people could query, analyze, visualize, and map relevant information and print the results. In addition, different levels of public and private access to data were needed so that data owners could maintain control over their data security, management, and updates.

The Solution
ArcGIS® Server, which enables the sharing of large amounts of data on the Web and provides interactive and analytic capabilities, met the agencies’ needs. The software integrates data from numerous sources and makes it available through the Alabama Resource Management System (ARMS) Web site. In addition, the ArcGIS Server permission management structure allows data owners to maintain and protect their own data.

The agencies worked with consultant Teledyne Solutions, Inc., to collect and compile the data and develop report modules. ESRI business partner SICS Consultants, LLC, also provided mapping and interface development services and received assistance from the ESRI Professional Services Division to enhance the real-time connectivity between ArcGIS Server (providing geodata services) and Microsoft® SQL Server® (the relational database management system). The solution was built using ESRI’s MapObjects® in conjunction with Microsoft Visual Studio’s ADO.NET.

See more about ArcGIS Server at www.esri.com/arcgisserver.
See more about GIS for health and human services at www.esri.com/health.
The system also uses ESRI® Data to access demographic market segment datasets and identify, extract, and refine relevant social services information, such as poverty and child services data.

The ARMS Web site provides access to a vast amount of information through an easy-to-use interface and enables data visualization, as shown in this map of unemployment rates by block group in Alabama.

**The Results**

With more than 25 organizations contributing information, the ARMS Web site allows visitors to quickly search and download more than 1,500 maps from an archive, build custom maps, search a social services resource list, access county census summaries, and submit new resource information. The Reports section gives site visitors a way to interact with a broad range of data to produce dynamic charts and reports. Registered agencies can log in to their accounts to interact with their own secure data and also access shared resources. Social services and criminal justice workers can access the information they need for evaluating community needs, writing grants, and identifying available resources.

Utilizing ESRI technology, ADCA and ACJIC developed a fast, economical, and user-friendly way to make government information available to policy makers and citizens. ArcGIS Server provided a cost-effective method to organize large amounts of data and make it available in ways that create new opportunities and benefits for everyone.