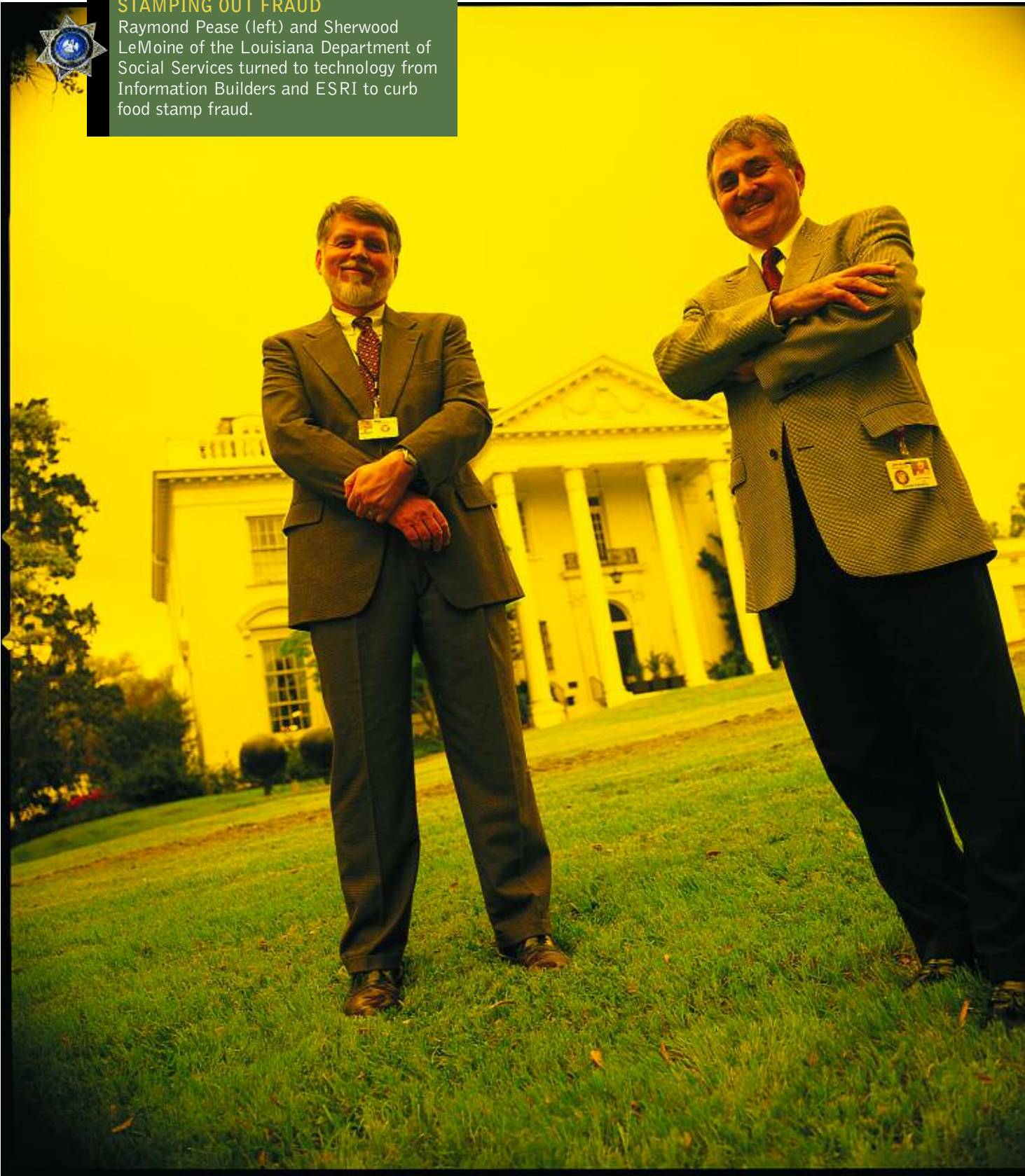




STAMPING OUT FRAUD

Raymond Pease (left) and Sherwood LeMoine of the Louisiana Department of Social Services turned to technology from Information Builders and ESRI to curb food stamp fraud.



STATE OF LOUISIANA T

It's sad but true – wherever millions of dollars change hands, you can bet that a criminal element is lurking in the shadows to try to get a piece of the pie. This phenomenon is even manifest in programs designed to benefit needy and impoverished families and citizens, such as food stamp programs. In the State of Louisiana, more than 600,000 people receive food stamps each year, representing about 600 million dollars in US Federal funding. Unfortunately, at least four percent of those funds are fraudulently received or trafficked, experts estimate. To help reduce this illegal activity, the State of Louisiana Department of Social Services deployed technology from Information Builders and ESRI to identify patterns that reveal fraudulent activity.

“We are on the lookout for people who are taking advantage of the system,” says Raymond Pease, assistant director of the Fraud and Recovery Section of the Louisiana Department of Social Services, Office of Family Support. “Our agency needed a powerful business intelligence tool to analyze trends among millions of transactions. Other reporting tools could not accurately handle our requirements. Information Builders WebFOCUS delivers results above and beyond our expectations.”

Trafficking in food stamp benefits, also known as discounting, is usually a case of food stamp recipients selling their benefits to dishonest grocers for cash rather than food. The grocers pay the recipient considerably less than the face value of the stamps, and then pocket the difference. With millions of transactions occurring over a large geographic area, detecting patterns of fraudulent activity can be difficult. It's an ideal problem for Geographic Information System (GIS) technology, which links spatial data with descriptive information to solve real-world problems.

SNAPSHOT

ORGANIZATION: Louisiana Department of Social Services Office of Family Support, Fraud and Recovery Section

THE CHALLENGE: Increase the efficiency of fraud detection within the state food stamp program

THE STRATEGY: Create a Web-based reporting tool that can access transactional data and display results in a variety of formats, including geographic map-based displays

THE RESULTS: A more accurate view of trends and patterns in food stamp benefit transactions to make illegal activity easier to detect; simplified IT structure; minimized efforts by data processing personnel

INFORMATION BUILDERS SOLUTION: WebFOCUS, Consulting

**WebFOCUS
Helps
Identify
Fraudulent
Activity in
Family
Support
Benefits
Program**

BY DAVID BAUM • PHOTOGRAPHY BY STEWART O'SHIELDS

TAKES A BITE OUT OF

ILLEGAL FOOD STAMP TRAFFIC

The Louisiana Department of Social Services uses ESRI's ArcIMS Internet mapping software to add GIS capabilities to its WebFOCUS reports. "Our partnership with Information Builders enables organizations like the Department of Social Services to take advantage of the geographical components of their existing data to help them more quickly and efficiently identify fraudulent activity," says Jack Dangermond, president of ESRI.

Thanks to the fruits of this technology partnership, the Department of Social Services can input data from its mainframe databases, transform it into valuable business information, and interpret complex relationships that might otherwise be difficult to detect. "The beauty of this technology is how it can visually display report data on a map," says Pease. "In our case, it makes it much easier to detect trends that indicate fraudulent activity. The data speaks very loudly and clearly with this system."

Spotting Trends

Years ago, food stamp benefits were mailed to recipients in the form of checks or coupons. In 1997, the Louisiana Department of Social Services adopted an electronic system for delivering and tracking food stamp benefits, in response to federal mandates for Electronic Benefit Transfer (EBT) technology. "Increased state involvement in the investigation and prosecution of food stamp traffickers was one of the things that motivated the change to EBT," Pease explains. "EBT has also helped us increase the efficiency of the information systems we use in fraud detection as we work with various law enforcement agencies to investigate suspected recipients and retailers."

Better reporting technology went hand in hand with the change to EBT. Previously, the department used the Paradox database from Borland Software to generate reports, but this relational database environment lacked the business intelligence capabilities they needed for effective data analysis. "Our old system was not providing us with the capabilities we needed to do a first-rate job," says Sherwood

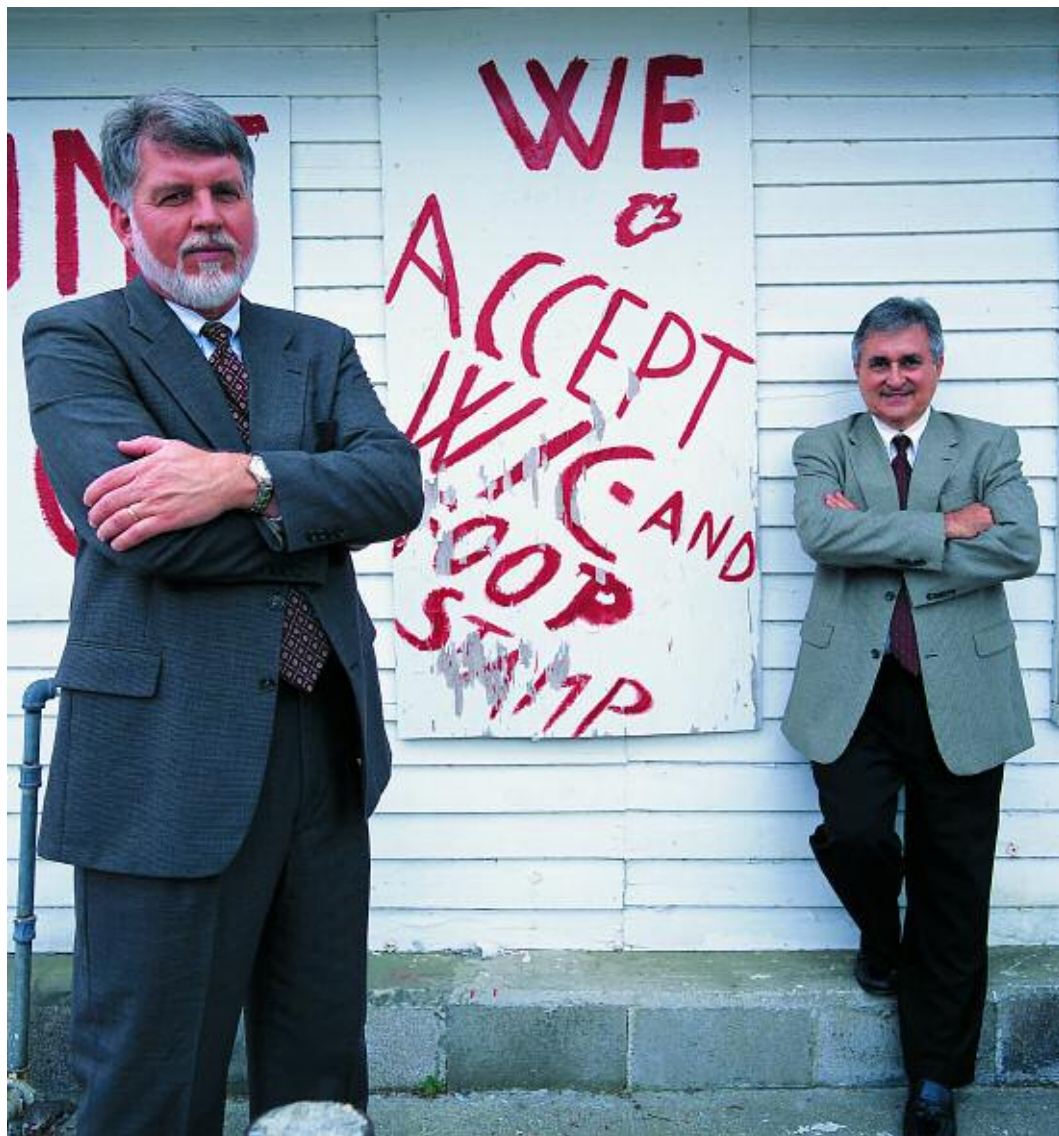
LeMoine, an internal management consultant in the IT department at the Louisiana Department of Social Services. "When we looked at WebFOCUS, we realized that it could give us the ability to easily spot trends and patterns in food stamp transactions."

With help from Information Builders Consulting, the department deployed WebFOCUS as its primary reporting tool, setting up an architecture for both real-time and staged reporting. EBT transaction data is periodically loaded into a data warehouse that allows field investigators to easily access and mine information about transaction amounts, times, and locations.

"Our investigations pointed to the need for a better reporting tool," says Pease. "WebFOCUS has assisted in our retailer/recipient investigations and we are now better able to establish relationships, trends, and patterns within the data to help us identify fraudulent activity."

Visual Analysis

Once the basic reporting infrastructure was in place, the State of Louisiana began extending its fraud detection capabilities even further by incorporating geographic



information into the system. By visualizing this same data on a map, state employees can quickly peruse anomalies in the data so they can make informed decisions. "The WebFOCUS/ArcIMS system enables us to visually depict information in numerous ways," Pease says. "We can take any geo-coded data and map it in a geographic fashion. We are very enthusiastic about these capabilities."

Geo-coding involves correlating names and addresses to locations on the map. "Once you geo-code your database, all of the applications that use that database have access to that information," Pease explains. "GIS has taken hold in government agencies because it is so valuable. Combining it with a powerful reporting environment puts two complementary technologies together. The potential of the WebFOCUS/ArcIMS system is limited only by our imagination."

For example, one WebFOCUS report reveals the average number of transactions per client in the state of Louisiana. Once that data is displayed geographically on the map, Pease can hone in on particular regions simply by drawing a circle around a certain part of the map. "The analysis

capabilities of ArcIMS highlight which customers and stores are within that circle and displays the data accordingly," Pease says.

Extending the Reach

Pease and his staff are pleased with the flexibility of WebFOCUS, saying that the technology can be applied to many different domains. "Ultimately, we hope to make the WebFOCUS/ArcIMS system the primary reporting and geographic analysis tool for the entire Department of Social Services so that they can discern trends in everything from child welfare protection cases to demographic analysis," he says. "This will help us better serve the public."

In the past, reporting against flat files on the mainframe involved time-consuming data conversions. But because WebFOCUS can read these files directly in their native formats, the department can easily combine data sources to uncover new areas of inquiry. "The sophisticated data access architecture of WebFOCUS eliminates a lot of effort by our data processing personnel," confirms LeMoine. "For example, our EBT data can be combined with the U.S.


Department of Agriculture database of retailer information. This helps us draw a clearer picture of suspicious activities."

Typical users of the system include field investigators and supervisors in the Fraud and Recovery section. Most users need only minimal training because the system is so easy to use. "Our team already understands the EBT transaction information so most of them can get up to speed within a matter of hours," says Pease. "However, there is so much functionality that it takes a while for them to completely understand the full extent of the capabilities. We can grow with WebFOCUS."

Pease believes that the investment in the system is money well spent. With at least four percent of 600 million dollars being fraudulently received every year, the system will more than pay for itself if his team can reduce illegal activity by even a small fraction of one percent.

LeMoine agrees. "WebFOCUS is a true enterprise product," he says, "a resource that can be shared throughout the organization. Anybody that has a Web browser and the right credentials can use this tool, including other departments within the Department of Social Services. It is a tremendous boon to our entire organization." ●

David Baum is a freelance business and technology writer residing in Santa Barbara, Calif.



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**-Raymond Pease,
Assistant Director of Fraud and Recovery, Louisiana
Department of Social Services,
Office of Family Support**