Case Study | Louisiana DOT

Customer Profile

Organization: Louisiana Department of Transportation

Responsibility: To serve the transportation and water resources needs of the public

Network: 17,680 roadway miles including 12,800 miles asphalt, 3,200 miles composite, 1,600 miles concrete and 80 miles continuous reinforced concrete pavement.

Making Essential Information Available Quickly

Highlights

Challenge: The Louisiana DOT needed to make essential information available to DOT personnel and government agencies and also wanted to enhance their asset management methods.

Solution: The department decided to take advantage of the advanced features and web-based tools in dTIMS CT Enterprise.

Outcome: The department improved their productivity and implemented new ways to distribute information quickly and easily, saving time and money.

In 2007, the Louisiana Department of Transportation was looking for ways to streamline their asset management processes. The department also wanted to find a faster, more efficient method to share essential information with all districts and DOT personnel. After researching different options, the department decided that dTIMS CT Enterprise would provide the solution they were looking for.

CHALLENGE: Making the DOT more productive

The Louisiana Department of Transportation needed to enhance the methods they were already using to manage the state's roads. They also needed to share their findings more readily and easily with all of the groups that relied on this information. Improvements in these areas would greatly benefit the state, which was still challenged by rebuilding after the devastation of Hurricane Katrina.

Improving asset management processes

Improving their current way of working and making their asset management processes more productive was a key concern. The department's goals included increasing the number of available optimization strategies and making them available to multiple users, eliminating the file size limit they were experiencing with their current database server, and increasing the speed of tasks they were currently performing, such as optimization, concurrent transformations, and data manipulation.

Providing timely data to all personnel and districts

Distributing information was a time-consuming task. Many groups rely on the department's research, including nine districts within the state, a research group, and various federal departments. The department wanted to ensure all of these groups could access the information they needed, when they needed it.

Providing reports to the various districts involved manual work and was taking up too much of the department's time. Because creating reports could take 2-3 weeks per district, the districts weren't receiving essential information quickly enough.

SOLUTION: Taking the next step with dTIMS CT Enterprise

The Louisiana DOT has been using Deighton products since 1991 and was already using dTIMS CT. After seeing the dTIMS CT Enterprise version and comparing it with products from other vendors, the department decided that converting to dTIMS CT Enterprise would help them achieve their goals. Deighton implemented the system for the department, who had accumulated a great deal of historical data that needed to be maintained.

OUTCOME: Increased productivity and quicker information sharing

With dTIMS CT Enterprise, the department accomplished their goals for improving their methods and productivity. The department also provides information to DOT personnel and government agencies much more quickly and easily.

More efficient asset management
Data analysis and routine tasks are done more quickly with dTIMS CT Enterprise. The department is also able to take advantage of features such as: a multi user environment, scalability, easy conversion and web access to data.

Empowering DOT personnel
Sharing information among Louisiana DOT personnel is no longer an issue. Using a web browser, staff have immediate access to essential data whenever they need it. Through the web site, staff can now view a visual graph showing the historical deterioration of distress indexes, helping them determine if treatments have been effective and evaluate past decisions.

Staff also have access to a wealth of information through a GIS map. The map contains reference data such as video images, bridge master structure files, NBI databases, material testing soils, asphalt/concrete databases, and pavement management indexes.

Sharing information with government agencies
Key reports are created automatically, immediately after optimization is complete. The reports are posted to a web site where the state districts and federal agencies can view them. This new process saves the department time and money, eliminating the months of work needed previously to create reports. Engineers are free to focus on other tasks instead of constantly creating reports and checking data.

In addition, the districts and agencies receive essential reports immediately, including pavement management reports (containing the current condition for the current year, indexes for past years, treatment suggestions and costs, and remaining service life) and priority list reports (containing suggestions for the next 10 years).

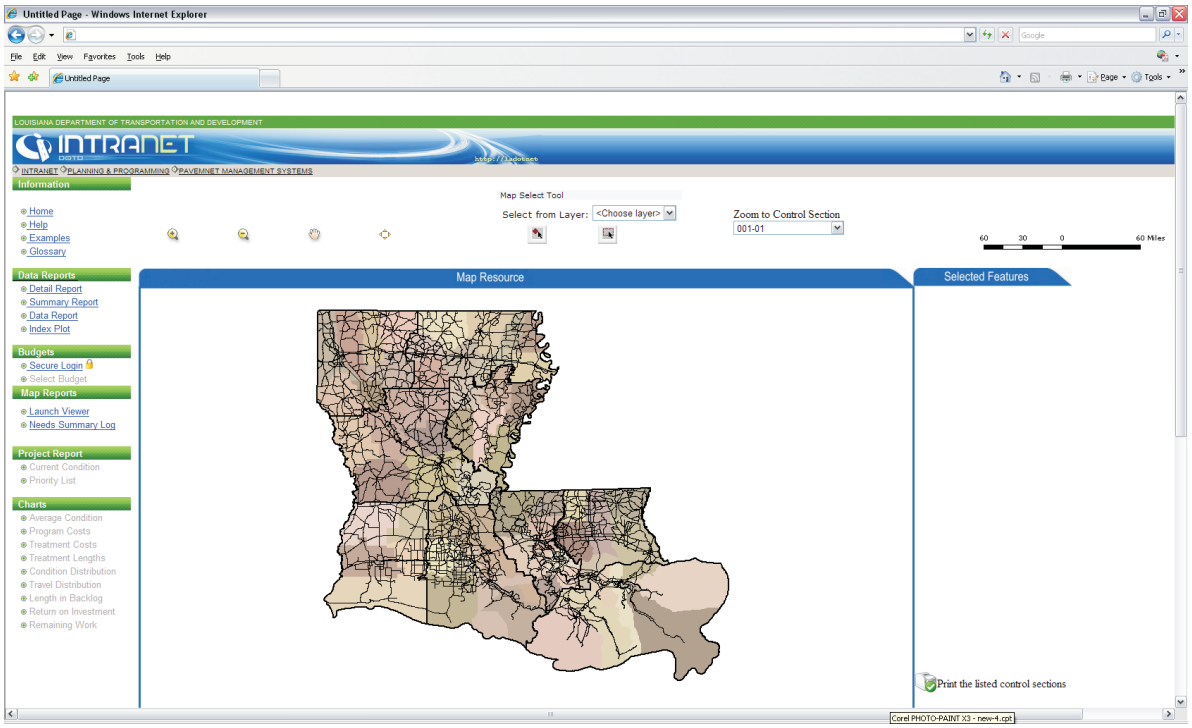
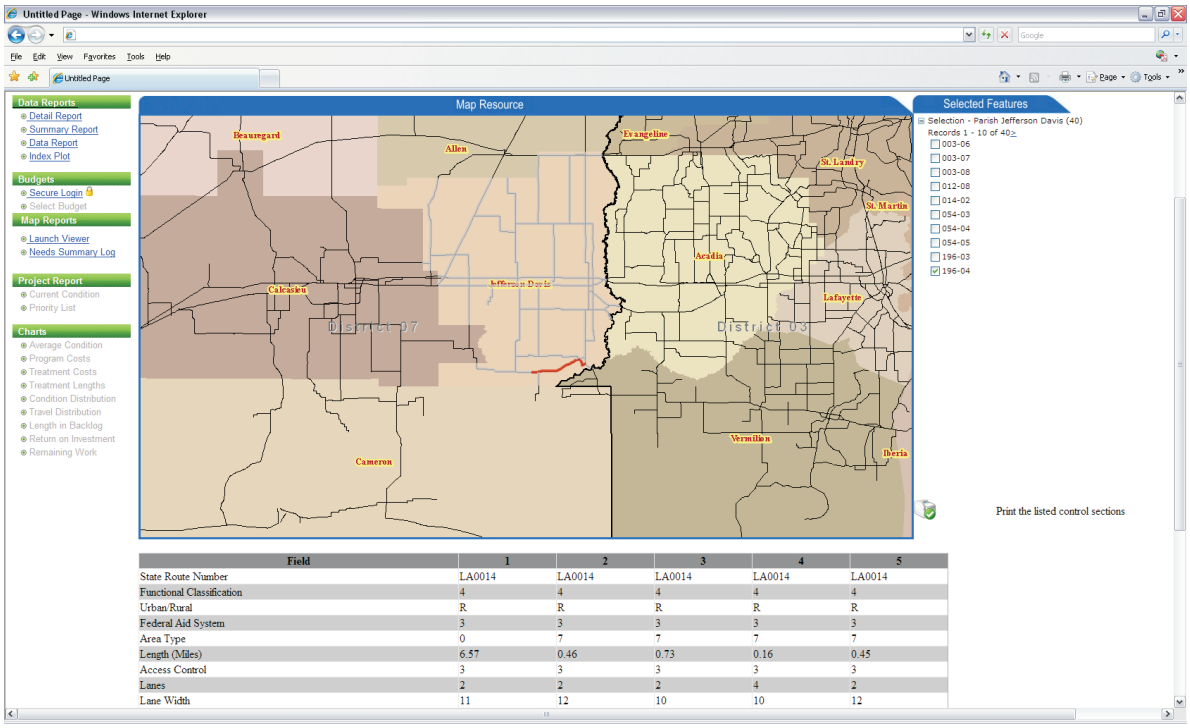


Figure 1: dTIMS reports are generated to a web site where the state districts can view them. In addition, users can access GIS data.



Field	1	2	3	4	5
State Route Number	LA0014	LA0014	LA0014	LA0014	LA0014
Functional Classification	4	4	4	4	4
Urban/Rural	R	R	R	R	R
Federal Aid System	3	3	3	3	3
Area Type	0	7	7	7	7
Length (Miles)	6.57	0.46	0.73	0.16	0.45
Access Control	3	3	3	3	3
Lanes	2	2	2	4	2
Lane Width	11	12	10	10	12

Figure 2: In this screen shot a Parish and Section have been selected to view corresponding data.

www.deighton.com

Deighton Associates Limited
112 King Street East Bowmanville, ON. CANADA
P.905.697.2644