

Frank Winters, GIS Unit director, NYS Department of Transportation

The GIS Capital Program Viewer was developed by the NYS Department of Transportation (DOT) as a way to provide executives with up-to-date information on department activities throughout the state. Whether it's pinpointing plans to alleviate where traffic is congested in Albany or the status of a bridge resurfacing project in Buffalo, the system uses geographical positions as a way to access data. The department spent about a year developing the system, which was rolled out May 3.

Frank discussed the user interface functions of the program viewer. DOT started out with a commercial software package (ArcView). He then built a user interface into the software and customized it to meet DOT's needs. The program viewer is easy for executives to read and use because all the vital information is presented on one page. The program also has a limited number of controls designed to aid in the ease of use. "We just provide some base mapping and some hooks to these positional identifications. It dynamically takes tabular data and applies it to the map," Frank said. DOT officials can access maps of the entire state and query by such elements as project cost, assembly district, and date. "Just being able to zoom around and tell someone what DOT projects are going on in an area is a powerful tool for our executives," Frank said.

DOT's GIS program viewer was constructed by following a modular development strategy. The viewer is not a new data system. "We're tapping into and exploiting existing systems. People can take their information and plug it into GIS, so it's not changing data ownership," Frank said.

The flow of data is an integral component of the program viewer. The system allows DOT executives to pull up reports on department activity at any time. This is much quicker and easier than the old method, which involved requesting a report, pulling data, cleaning the data, and then putting it together in hard copy format. With the program viewer, the data is cleaned at the point of input. While this is much more efficient, it also represents a change for the organization. "That's a culture shift in our department," Frank said. Ultimately, "The data is only as good as it's explicitly entered, and only as useful as our common understanding of it."

The DOT's new GIS Capital Program Viewer is a flexible and dynamic system that enables department executives and other staffers to easily access information about projects.