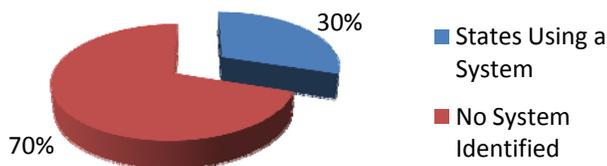


Improving Resource Management and Operations in Right of Way Offices

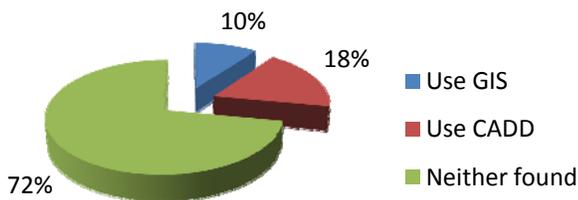
With Right-of-Way Information Management Systems

A well designed and implemented information management system can substantially improve management of resources – **personnel, money, information, and time** – which is critically important to successfully meeting state performance goals and budgets. Adding geospatial capabilities (GIS) to the system to replace hardcopy maps and tabular information and to give additional management and analysis functions can significantly increase its usefulness.

State Use of ROW Information Management Systems



State ROW Office Use of GIS/CADD



In the Right-of-Way office, this is particularly important because of the resources required to deliver real property for transportation improvements and manage state-owned land.

BENEFITS

- ◆ Improved on-time delivery of project real property
- ◆ Expedited project award
- ◆ Reduced staffing and/or improved staff efficiency
- ◆ Improved scheduling
- ◆ Improved access to information both internally and by the public
- ◆ Improved customer service and public relations
- ◆ Improved documentation and reporting uniformity
- ◆ Reduced time to perform tasks
- ◆ Reduced redundancy, primarily in data entry
- ◆ Increased management flexibility
- ◆ Improved oversight capabilities
- ◆ Improved integration, use, and sharing of information

DOCUMENTED SAVINGS

- ***A return on investment of more than 21%***

Pennsylvania invested \$829,000 on a ROW information system that **reduced annual operating** costs by nearly \$680,000 while providing **greater convenience** to users. Because the system integrates with their financial system, the time to process payments **reduced from several days to several minutes.**

- **Staffing reductions and improved on-time performance**

In Virginia, the ROW information system provides over 500 staff and contractors all information on ROW projects, providing **exceptional customer service**. Information is entered only once, **eliminating duplication of effort**. **Clear project tracking** provides staff with a comprehensive understanding of the status of each project including resource allocation.

In Maryland, **research staff has been reduced by half** because parcel and other geospatial information is available through the intranet. **In-person courthouse research and travel time have been eliminated**.

New Mexico uses GIS to generate summaries on excess property for sale to the public, **reducing the time required** to provide this information from several hours to several minutes. The information includes a map with an aerial photograph image background resulting in **dramatically reduced questions from the public**.

Using GIS, the San Antonio district of Texas provides its staff with electronic access to project drawings, thus **eliminating the manual locating and reviewing of large drawing sets**. Drawings are accessed by simply clicking on a desired section of road.

- **One-person project oversight and management of real estate activities**

In Illinois, a multi-million dollar airport project is managed by a single person who has desktop **access to near real-time information** about the project.

RISKS OF NOT IMPLEMENTING A SYSTEM

A primary purpose of this type of information management system is to facilitate standard business operations and support information and decision making by providing easy access to both internal and external information relevant to meeting the goals and operational needs of the transportation agency and the real estate office.

Without such a system, decision makers are limited in their ability to monitor performance and identify opportunities quickly and make strategic adjustments to resource allocation as needed. The real estate office will be limited in its ability to respond to the rapidly increasing reliance on digital information exchange to perform its functions.

Expectations in the current technological environment are for faster, more accurate information with fingertip access to on-line maps. Without a geospatially enabled system, these expectations cannot be met for staff or the public.

FOR MORE INFORMATION

This document is part of the National Cooperative Highway Research Project 8-55A "Developing a Logical Model for a Geo-Spatial Right-of-Way Land Management System". The project is managed by Ed Harrigan EHARRIGA@nas.edu and is being performed under Kathleen Hancock hancockk@vt.edu at Virginia Tech and was completed in 2/11.

Results of the first phase, 8-55 "Integrating Geo-Spatial Technologies into the ROW Data-Management Process", including the documented savings reported here, are available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_310.pdf and http://www.trb.org/news/blurbs_detail.asp?id=7308