geoAMPS: Technology to assist state DOTs

Software solutions to be featured at AASHTO meeting.

Dan Liggett

March 29, 2013

The capabilities to streamline outdoor advertising control is just one example of how new technology can help governments achieve fiscal austerity.

Tracking right of way, public assets and outdoor advertising along the nation's highway system poses significant challenges for state departments of transportation (DOT). Faced with limited staff and budgets, departments have attempted to meet these challenges with paper records or outdated databases and spreadsheets. That is a recipe for errors and inefficiencies, resulting in unnecessary expense of limited tax dollars.

Fortunately there are technological solutions available to help DOTs address these daunting tasks. Transportation officials can learn of these options at the meeting of the American Association of State Highway Transportation Officials (AASHTO) Subcommittee on Right of Way, Utilities and Outdoor Advertising scheduled April 14-16 at the Hyatt Regency in Savannah, Ga. Held in conjunction with this meeting is the National Alliance of Highway Beautification Agencies (NAHBA) Annual Conference on the Control of Outdoor Advertising.

Federal legislation to control outdoor advertising (ODA) was first passed in 1958. The law was an incentive to states to control ODA within 660 feet of the right of way along interstates. The Highway Beautification Act of 1965 (HBA) made it mandatory that states provide "effective control" of ODA along interstates and federal-aid primary routes within 660 feet of the right of way. A state that fails to do so can lose 10 percent of its annual apportionment of federal highway construction funds, which can amount to millions of dollars.

State laws prompted by HBA regulate virtually every aspect of ODA along controlled routes. Effective control must include size, lighting and spacing of ODA based upon "customary use" as determined by each state. These laws vary, resulting in inconsistent ODA controls from one state to the next. A constant, though, is that the effort to issue new ODA permits, renew permits and inventory billboards is a formidable one for DOTs that requires substantial public resources.

Improved technology offers effective solutions. It has been only recently that technological advances have been available to DOTs to help them meet ODA requirements. They are using surveying equipment with Global Positioning System (GPS) capabilities, laser pointers to measure sign dimensions, and databases capable of tracking ODA applications, permits, sign violations and field work.

geoAMPS, a developer of software solutions to manage land rights and infrastructure assets, will be in Savannah to offer information on its suite of products. rowAMPS helps organizations, including DOTs, manage right of way projects. rxrAMPS is designed to track railroad assets and manage new rail projects. dotAMPS offers a single solution for end-to-end management of road transportation projects. It provides effective tools to track right of way and ODA along roadways. It automates many of the processes involved in ODA control. Each of these products is Web-based software supported by a centralized database, allowing for projects to be completed in a real-time, paperless environment that enables collaboration, efficiency and error reduction.

dotAMPS features built-in automation that can help streamline the ODA permit application process, creating an end-to-end solution to manage the process from submission of the application to the agency's decision. In a number of states, the applicant must complete, fill out and mail the application. Absent the use of technology from the start, DOT staff is left to input information into a database for review, or process and file paper copies. This can be time-consuming, sometimes exceeding three hours of in-house personnel time for each application.

Efficiencies can be realized with a system that supports online submission and download of documentation. In a paperless environment, DOT staff can make an initial review of such information as square footage, height, estimated location and other specifications, such as lighting. Working from the state's ODA regulations, the software can bring attention to details in the application which may not comply. The software can greatly reduce time spent on non-conforming applications.

The benefits can also be realized by inspectors who do on-site reviews of proposed ODA areas. The process can be accomplished more efficiently with the use of mobile devices that access the centralized database. DOT staff can do on-site analysis and receive feedback in real time. This reduces time spent doing revisions. It can also reduce return trips if the inspector discovers the need for additional information once he arrives on-site. Pictures can be taken of the site location and uploaded into the case file, as well as notes about topography, land use, buildings, or distances from other ODA or the nearest intersection or interchange. Using location-based spatial analysis, the inspector can determine the exact location at which the sign should be placed to achieve compliance with requirements on proximity to existing billboards. The use of voice-to-text can greatly reduce the amount of time spent preparing notes.

Another issue for DOTs is recordkeeping of previous inquiries about ODA. Some states utilize a database, while some still rely on staff members' memory. Not having a centralized system of previous applications and inquiries for the same location causes unnecessary work which can easily be avoided. Location-specific searches can be accomplished quickly with Web-based software, accessing records not only on decisions made on previous inquiries and applications, but also the proximity of existing ODA.

Most states process renewals of existing permits. Renewals are usually processed annually, all of them at a designated time of year or individually on the anniversary of when the permit was originally approved. In either case, the process can cause significant challenges.

Technology can streamline the renewal process. dotAMPS supports an automated, comprehensive and flexible payment process. Once all information is input into the file for any particular sign, DOT staff can code the software to generate the essential permit renewal information – such as sign owner, history, cost, billing address and renewal date – automatically. The invoice can go out by mail or, if the agency

requires it or the sign owner prefers, online. The software can also track payments. DOT staff time related to a renewal is limited to updating the permit information in the database. Providing the agency has been notified, changes to the file require minimal work.

Manpower and resources also are concerns DOTs share in conducting regular, accurate ODA inventories. With mobile devices and other tools, inspectors can check the signage seen from the roadway against the Web-based system, learning instantaneously whether a sign was erected according to required specifications. Unauthorized or illegal signs are identified. Using these tools, an inspector can inventory ODA along many miles of applicable highways in an efficient manner. Information for illegal signs, such as pictures and location, can be shared electronically with agency officials for possible enforcement action, including removal.

The capabilities to streamline ODA control is just one example of how new technology can help governments achieve fiscal austerity. Attendees to the April 14-16 session in Savannah, Ga., are invited to visit geoAMPS' booth to learn more about these opportunities.

Dan Liggett is Communications and Public Relations Manager for geoAMPS, a technology company located in the Columbus, Ohio, area that specializes in software solutions to manage land rights and infrastructure assets. For more information, call 614-389-4871 or visit www.geoamps.com.

RELATED LINKS

- geoAMPS website
- dotAMPS
- rowAMPS
- rxrAMPS

geoAMPS

As the premiere provider of data management solutions for land rights and infrastructure asset management, our products bring order to complicated business processes in a suite of highly configurable software products. Industry focused,...

Home

About

Blog

Press Releases