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Integrating GIS-Based Videolog and Asset Data with Commonly Used Systems Provides Major Benefits With Minimal Effort

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This presentation illustrates the ability to easily integrate GIS-based videolog and asset data with commonly used systems to provide highly accessible and powerful solutions. We will discuss integrating data with existing systems, or with systems currently being developed, while exploring specific examples including Hansen, ESRI's ArcMap, Intergraph's GeoMedia and Inform, based on three disparate project case studies.

Case Studies Will Include:

•**Georgia DOT** - Linking GIS-based Videolog with GDOT's Transportation Explorer (TREX) Software. VisiWeb™, a web-based application that provides the ability to view processed data and synchronized video images, was integrated with GDOT's agency-wide TREX program. This allows users to select road sections from the TREX program and open panoramic videolog images corresponding to that segment. Video images are rapidly being adopted by agencies interested in implementing inventory and condition assessment systems. The integration of digital imaging systems, with inertial measurement systems, global positioning and pavement data, allows users to build a sound asset management system that is easily accessible.

•**City of Hamilton** - Hansen/GeoMedia. Linking asset data and images into Hansen and Intergraph's GeoMedia GIS software. This system provides City representatives with valuable tools to answer questions from customers, Council and management. This system also provides City staff the ability to track customer complaints, while providing management with the ability to quickly view reports outlining accomplishments, costs as well as information regarding their assets -- either visually (via GIS) or in report formats.

•**Delaware DOT** – GeoDecisions. Linking pavement data with GeoDecisions' Inform GIS software in order to plot road roughness on a map in their web-based INFORM system. The system also links videolog images with roadway segments that can be opened from a map interface.

Management systems are most effective when they are populated with useful, easy to access data and images, as well as location and attribute data to provide a true picture. GIS provides the user with the ability to query and report, perform statistical analysis, while also providing the benefit of visualization and geographic analysis that is uniquely offered by maps. GIS technology allows the user to analyze data by location, thus revealing hidden patterns, relationships and trends. Once populated, a management system coupled with a GIS can be a powerful tool for querying, reporting and managing assets.

Presentation attendees will leave with a better understanding of the ability to integrate GIS-based videolog and asset data with commonly used infrastructure management and GIS systems, which will allow them to effectively manage their infrastructure needs as they grow and change over time.