

The New Tools & Technologies of Mobile Mapping

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Public and private organizations worldwide are facing an increasing demand to build, maintain, and manage the asset inventory of their infrastructure network. In response to these requirements, technology has progressed from the photo-logging systems of the 1970's to more efficient and economical solutions, such as the sophisticated mobile mapping systems of today.

Advanced photogrammetric techniques combined with an array of integrated sensors provides an efficient, safe and cost effective solution for large scale infrastructure that can have multiple uses. The most recent development is integrating LiDAR (laser) technology for automation. Tools have been created for the automatic detection of road signs, poles, and pavement marking, as well as the automatic calculation of road geometry. Survey projects using these technologies will be discussed in detail. Mobile mapping technology, results obtained, and the knowledge derived thereof will be examined and compared to traditional methods. Technologies such as this are being developed to increase productivity, provide users with timely and accurate enterprise data, minimize road crew exposure, and create robust information products that serve multiple uses.