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# Locating and Mobile Mapping Techniques for Forestry Applications

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## **Abstract**

Forest management activities include locating and mapping management boundaries, transportation networks, streams, landscape topography, forest resources, and special management areas. Locating and mapping tasks associated with forest management have traditionally been performed using manual measurement techniques with varying degrees of precision, accuracy, and efficiency. This paper examines the use and capabilities of contemporary digital measurement tools including laser range finders, global positioning systems (GPS), and total stations, in combination with geographic information systems (GIS), to digitally capture and map data associated with forestry activities. The potential contributions of these digital approaches over traditional data collection techniques are discussed. In addition, digital location-based technology advancements that might benefit forest management and planning are identified.

## **Keywords**

forest measurements, GPS, total station, GIS, and range finder

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