

LEAD STATES TEAM SYNOPSIS

Automated Machine Guidance (AMG) Team



AMG computer software guides construction equipment such as this bulldozer for improved speed and accuracy.

Activity Period

2007-2010

Cost of LST Effort

\$23,185

Proven Benefits of AMG:

- Improves the speed and accuracy of highway construction processes
- Eliminates the need for much of the skilled manual control and labor involved in traditional methods
- Improves worker safety by placing fewer workers in dangerous work zones
- Improves the accuracy of planning and construction, and results in fewer changes and less reengineering and rework
- Allows greater flexibility in the work schedule
- Increases communication and credibility in the environmental process
- Produces better ride quality in the roadway and fewer traffic interruptions for drivers
- Saves agencies and contractors time and money

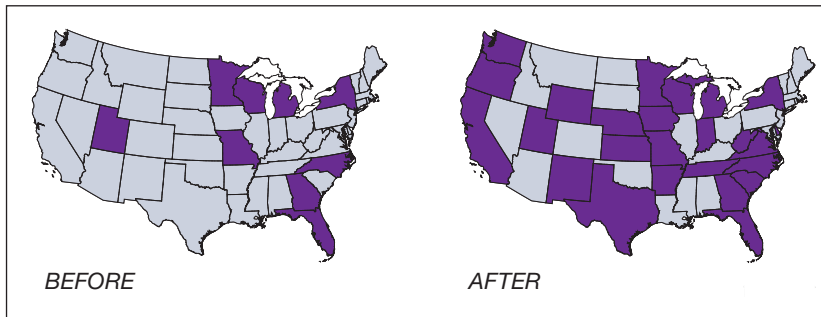
What the LST Did

Automated machine guidance (AMG) uses software to direct the operation of construction equipment. Computer models analyze construction data to create an accurate picture of the terrain and conditions, then track the performance of each action. Because of AMG's many benefits, the lead states team (LST) aimed to evaluate and encourage its use by contractors and its specification by state agencies. The LST's ultimate goal is to produce best-practice guidelines to encourage specification of AMG in appropriate contracts.

Over a four-year period, the LST performed several major tasks:

- identified a core group of prospective adopter states by creating information resources, presenting AMG at meetings, and evaluating target states;
- measured contractor use of AMG before and after the LST project to measure any increase in AMG use;
- enlisted the assistance of AASHTO to adopt a data standard to help states streamline and make consistent the data collection process for AMG implementation; and
- established a liaison with relevant allied organizations and committees to enlist their support/coordination in accelerating AMG adoption by state agencies.

What the LST Accomplished



The shaded states on the maps are the lead states and those known to have experience using AMG before and after the lead states team period of activity.

LST Members

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