GPRS Adds High-Speed 3D GPR to Capture Subsurface Data at Highway Speeds

3D GPR Array Additions Expected to Streamline Right of Ways and Roadway Work

MAUMEE, OH, UNITED STATES, May 21, 2025 /EINPresswire.com/ -- GPRS has expanded its subsurface data capture capabilities with the addition of high-speed 3D GPR arrays that can accurately capture utility and other underground data at speeds up to 80 miles per hour.

The high-speed 3D GPR array can capture accurate data at up to 80 mph

The 18-antenna array can be affixed to the back of a truck to achieve high-speed scans with a five-centimeter trace interval at 450MHz, the “sweet spot” for the effectiveness of ground penetrating radar. The device can utilize either real-time kinematic positioning (RTK) or robotic total station (RTS) positioning for highly accurate subsurface geolocation that exceeds global positioning system (GPS) standards, and the data can be quality controlled in the field.

GPRS expects the high-speed 3D GPR array to be a powerful tool for use on roadways in urban areas with traffic congestion, municipalities where imposing additional traffic restrictions may create hardship, or large projects where multiple right of ways or roadways with dense utility configurations need to be scanned quickly.

> “These arrays allow us to efficiently collect GPR roadway data for very large scopes at highway speeds.”
> *Jamie Althauser, GPRS Sr. Vice President of Field Support*

In a recent test of the high-speed technology, GPRS scanned densely packed utilities along roadways in Charlotte, North Carolina. They were able to accurately locate and map underground over a half mile of area in under 55 minutes. The company utilized Subsurface

Investigation Methodology in concert with the array to verify its findings. In one area, the array was able to locate abandoned tunnels 11 feet under the roadway.

Post-scan processing software allows for precision subsurface mapping under roads, right of ways, and large acreage projects

"These arrays allow us to efficiently collect GPR roadway data for very large scopes at highway speeds anywhere in the country without the need for traffic control or road closures," said Jamie Althauser, GPRS Sr. Vice President of Field Support.

As to how the data can be used by customers after it is collected, "Our in-house Mapping & Modeling Team can process the data to export into multiple formats, like 2D CAD, 3D Revit, DWG, or GeoTIFF files, to name a few, all displayed in and delivered via SiteMap," Althauser continued.

The applications for the high-speed GPR technology are nearly infinite, and include new utility and facilities installations, infrastructure improvements, safer fiber optic line installations via trenchless technology for broadband expansions, and sanitary and storm sewer mapping and monitoring, among others.

The company debuted the technology in the Columbus, Ohio market, but GPRS' nationwide footprint means that high-speed 3D GPR may already be available near you. It is part of GPRS' ongoing efforts to Intelligently Visualize The Built World® for its customers.

What can GPRS help you visualize? Visit https://www.gp-radar.com/overview/3d-gpr-high-speed-utility-mapping to learn more and schedule service today.

About GPRS: GPRS is the nation's largest company dedicated to Intelligently Visualizing the Built World for clients throughout the United States. Founded by Matt Aston in 2001 with a single ground penetrating radar unit, GPRS has grown to encompass every area of construction safety and facility management across virtually every industry with an elite team of expert Project Managers in every major U.S. market.

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