

Quarterly Report – Public Page

Date of Report: April 30, 2020
Contract Number: 693JK31810009
Prepared for: DOT/PHMSA
Project Title: Improved Tools to Locate Buried Pipe in Congested Undergrounds
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For quarterly period ending: April 30, 2020

Project Scope

The purpose of this project will be to mitigate third-party pipeline damage and cross bores at the earliest stages through the development and commercialization of a geospatial probe to map existing buried utilities by being inserted inside of a live gas pipelines. This probe will be capable of mapping live underground pipes 3-dimensionally and give accurate locations of utilities. Additionally, a cloud-based data collection system will be created in order to effortlessly collect and store data, so it is easily accessible to the utilities.

Technical Status

During the seventh quarter, the team continued to add enhancements to the system. The team added a software widget to improve the 3D visualization features of the mapping tool. An additional spring and egg compartment were incorporated to the design to improve the minimum bend radius of the unit and ease insertion. The diameter of the probe was also decreased during some internal spatial optimization evaluations. A demonstration with a local gas distribution company was performed. During the demonstration, the GTI team collected valuable feedback on the system and is working with Reduct and Condux to incorporate these changes.

Results and Conclusions:

User-centric feedback from demonstrations will be pivotal to continue enhancing the system. The team will be working with more local distribution companies to perform additional demonstrations. This particular demonstration identified a new feature that the project team is working diligently to incorporate. This feature will help the users identify locations from the surface and validate data with geospatial data produced from the mapping probe technology.

Plans for Future Activity:

During the next quarter, the following activities will be conducted:

- Task 6 will continue by working with gas utility companies to demonstrate the performance of the live gas mapping system.