STAKEHOLDER | PERSPECTIVES

One-Call of Wyoming to Use PHMSA Grant For Road Mapping Project

BY MARK L. RANSDELL & PAUL A. CAFFREY

Wyoming contractors, utilities, governments and members of the public will have additional access to detailed, computerized information about the state's roads as a result of a grant awarded to One-Call of Wyoming (OCW) in conjunction with the Wyoming Geographic Information Science Center (WyGISC) at the University of Wyoming.

Under the grant from the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA), OCW will coordinate a street-mapping project that will establish a computer system for the automated collection, normalization and publication of Wyoming's geospatial roads data. OCW secured the \$78,360 grant from PHMSA in a competitive process that included requests from dozens of states. Only a portion of the requests were successful.

One-Call of Wyoming is established under

Wyoming statutes to prevent damage to underground facilities. In 2010, OCW contracted with Pass Word, Inc. (PWI) to operate the One Call Center in Casper, Wyoming. It was quickly recognized that the existing street database was materially out of date.

OCW's objective under this grant award is to provide a process for updating and maintaining an accurate road database, which will improve the damage prevention process by assuring accurate communication between excavators, notification center representatives and the owners of underground facilities. This is a great cooperative effort and will be a win-win proposition for everyone involved, including a step forward for public safety.

Wyoming, like many other states, sees a lot of activity from the oil & gas industry, mining, energy, transportation and construction industries. With growth and development come ground disturbance and the possibility of damage to buried facilities. To reduce the likelihood of such damage, the updated road database will be available to a variety of users in Wyoming, including OCW.

This project addresses problems encountered by users of the One Call system where current, accurate base map street data is not available. An upto-date base map provides a basis for accurate communication between excavators and facility owners for more accurate, safer locating of pipelines and other facilities.

Imagine an excavator or homeowner planning an excavation in a relatively



new housing subdivision calls 811 to get the underground facilities located. Because updates to commercially available street maps may take several years to be published, the OCW call center representative may be looking at a map where the street does not exist, yet the excavator knows the buried utilities, streets and homes have been there for years. Lack of current street mapping makes communication between the excavator and the OCW call center very difficult or impossible.

WyGISC will assist OCW with setting up the roads data collection system and coordinating with Wyoming's 23 counties and other authoritative sources of roads data to gain access to more current and accurate geospatial data.

The new Wyoming Geospatial Hub, housed and maintained by WyGISC, the state's principal source for the discovery and delivery of publicly

accessible statewide geospatial data, will provide access to the collected local-level roads data. This cooperative project with OCW leverages and complements the work completed by WyGISC on the Wyoming Geospatial Hub. The project is intended to:

- Comply with the Wyoming geographic data clearinghouse announced by Governor Matt Mead on Dec. 6, 2013, and with data repository standards mandated by the National Science Foundation and the National Institute of Health
- Serve as an example of statewide geospatial data collection for Wyoming, and directly and indirectly aid collection of many different themes of data

• Help WYDOT comply with the U.S. Department of Transportation mandate to collect and publish public road data and minimize duplicate governmental activities

"The Wyoming Department of Transportation is excited about this project," says Martin Kidner, state planning engineer for WYDOT. "We are charged with tracking the safety on public roads and performing other studies needing the road inventory. Before, it was a manpower-intensive comparison of multiple maps and interviewing other sources, and this initiative will save a lot of time and frustration."

The project is a vehicle to facilitate a coordinated approach to the standardization of roadway data and encourage Wyoming counties and other

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authoritative sources to create and maintain their roadway data using common standards. Wyoming common roadway data standards and other related topics of interest are being addressed by the Technical Advisory Group (TAG), Transportation Subcommittee, represented by local, state, federal, and private entities having a stake in transportation data.

"With roughly 30 authoritative sources involved in creating and maintaining some portion of the spatial delineation of Wyoming's roadways, this effort to establish a collection system should provide an efficient means of sharing the data back out through the Wyoming Geospatial Hub for use to the larger public user base while reducing some of the redundant maintenance and distribution costs for the roadway geodata authoritative sources," says Paul Caffrey, WyGISC research scientist and OCW project principal investigator.

Other grant award partners include Pass Word Inc., the One-Call of Wyoming communications service provider; the University of Idaho (UI); and the Wyoming Department of Transportation (WYDOT). Pass Word Inc. will provide oversight and guidance to achieve the objectives, and UI will provide the software and support for WyGISC to duplicate Idaho's roads data collection system here in Wyoming.

"This Phase II Mapping Project is a natural outgrowth of OCW and Pass Word's Phase I 2011-2014 data gathering and processing project. In Phase I, updates of street data were collected manually by contacting counties in Wyoming. Phase II incorporates automated polling and utilization of a Wyoming Geospatial Hub to share data with a larger user base. I believe Phase II will make a significant contribution to Wyoming's geospatial infrastructure," says Rod Bacon, president of Pass Word.

Other OCW supporters include the Wyoming Public Service Commission, Wyoming Pipeline Association, Wyoming Contractors Association and Wyoming's Call-In Dig-In Safety Council.

Mark L. Ransdell is the Manager of Western Operations & Overthrust Pipeline for Questar Pipeline Company and has 40 years of experience in natural gas gathering, storage and transmission, including construction, operation and damage prevention. Mark has been President, Board of Directors of One-Call of Wyoming since 2007, and has served on the Board of Directors for One-Call of Wyoming since 2001. **Paul A. Caffrey** is with the University of Wyoming, Wyoming Geographic Information Science Center (WyGISC). He is Principle Investigator: Collaborative Roads Data Collection System for improved Damage Prevention and More Efficient One-Call Process Services grant. Paul has 20 years of experience in Geographic Information Systems science, project development and management. He has been a GIS Research Scientist & Grant Project Manager for WyGISC since 1999 and served on the Board of Directors for WyGEO from 2007 – 2014.



