



U.S. Department of Transportation
Federal Highway Administration

IMPROVED
CONSTRUCTION
AND
MAINTENANCE

Avoiding Utility Delays: Making the Effort Works

Utility-related problems are a leading cause of delays that occur during the construction phase of highway projects, according to a recent National Cooperative Highway Research Program study. This comes as no surprise, as it is well known to highway engineers that uncoordinated utility relocation activities often cause expensive delays and disruptions. What can be done to alleviate this problem? To start, the proper use of information obtained using subsurface utility engineering (SUE) can help engineers avoid the need to relocate many utility lines. When utility relocations cannot be avoided, early and frequent coordination, cooperation, and communication (CCC) result in more timely and efficient relocation activities.



A new video available from the Federal Highway Administration (FHWA), *CCC: Making the Effort Works!*, outlines ways in which State transportation departments can reduce utility-related disruptions, minimize costs, and accelerate construction. Studies have shown that SUE, for example, typically costs less than 0.5 percent of the total project construction cost, saves more than \$4 for every \$1 spent, and may reduce project delivery time by as much as 20 percent. SUE uses surface geophysical techniques to identify the presence and approximate position of underground utilities. The utility lines can then be exposed so that precise measurements can be taken and other data collected.



When relocating utilities can't be avoided, the three "C's" become important. Early and frequent coordination, cooperation, and communication among State highway agencies and utility personnel will result in smoother and more timely utility relocation activities. "It takes a lot of preplanning," says Scott Greene, Assistant State Utility Engineer for Georgia DOT. "We try to coordinate 5 or 10 years in advance. It starts at the public hearing stage. We invite utilities to the public hearing. We're also inviting the local agencies."



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“It's important to set up meetings with utilities throughout the planning and design process, so we can avoid conflicts,” adds Melinda Peters of the Maryland State Highway Administration. “I'd like to see more of an effort placed on inviting utilities to participate on the front-end stage of a development project,” notes James J. Neal, Relocation Coordinator for Bell South. If telephone cables have to be moved, for example, it may take up to a year to carry out the transfer, making planning ahead crucial. One State placing an emphasis on CCC is Wisconsin, which has passed legislation mandating communication and coordination throughout projects and setting up a timeframe for interaction. South

Carolina also believes in CCC, scheduling at least weekly meetings with utility companies and contractors to coordinate projects.

A Viewing and Discussion Guide is available for use with the video. The Guide provides an overview of the video content, key points that may be copied and distributed to use as an ongoing reference, discussion questions, facilitator tips for leading discussions, and additional resources.

To learn more about CCC and SUE or to obtain copies of the video and viewing guide, contact your local FHWA division office or Roger McClellan at FHWA, 202-366-6765 (fax: 202-366-3988; email: roger.mcclellan@fhwa.dot.gov). The Viewing Guide is also available on the Web at www.fhwa.dot.gov/programadmin/viewer.htm.