NCHRP 20-05
Proposed Research Needs Statement

Subcommittee on Right of Way, Utilities, and Outdoor Advertising Control
July 27, 2016

TITLE

Utility Relocation Incentives and Disincentives Case Studies

BACKGROUND / NEEDS STATEMENT

Utility management is a unique element of DOT project development and delivery. It can overlap both the DOT project development (design) and delivery (construction) processes, impacting both either positively or negatively in terms of cost and schedule. It also involves utility companies, whom are entities outside of the immediate project team and outside of the DOT's immediate area of influence. As owners of utility infrastructure Utilities are impacted by the DOT project. The utility work required due to the project usually does not result in new customers or revenue. Instead it draws on their resources and time, and only in certain scenarios is it reimbursed. In short, the motivation of the utility company is minimal.

The primary goal of the utility coordination process is to minimize the financial impact to the tax payer and the utility rate payer. This is accomplished by the DOT cooperatively working with these utility companies to execute the project. DOTs have limited means to motivate action by utility once conflicts are identified. The utility relocation design and construction is often perceived as a risk to efficient, prompt and cost effective highway construction project execution. Utility-related project risk is the focus of this proposal, specifically finding means to lessen the risk to the project. DOTs have found many tools to help reduce this risk, always innovative means to motivate utility company relocation design and construction.

Commented [rlw1]: This statement is pretty vague- If left in It might be a good idea to list some of the "tools" DOTs have found.

A few lesser used means to motivate action, be it design or construction, potentially exist within the DOT. One potential lies in the fact that utility company right of way access is at the discretion of the DOT. Perhaps the permitting of utility plant should consider the historical experience the DOT has with the utility owner. If a utility is predisposed to be responsive to needed utility coordination and subsequent relocations when DOT projects arise, then that DOT should consider the permitting of their facility as a minimal risk. If a utility company has been largely unresponsive to DOT needs, the installation of new facility owned by the company may be perceived a much greater risk. In addition to responsive cooperation if a utility is capable of providing accurate data, proposed and as-built in respect to location of their utility plant for the DOT to integrate into their data repositories this could be seen as a cooperative effort. By using Subsurface Utility Engineering (SUE) technology and data provided by a SUE consultant, whether it be 2D or 3D data the lower risk and history of accurate data could justify incentives for the utility for their proactive efforts.

Utility companies have limited resources in terms of funding, staff, and time, so motivating a company to act may be successfully done via incentivizing or dis-incentivizing their work. Using incentives / disincentives is a well-recognized aspect of DOT road contracts from time to time and may be an effective tool to reaching action from utility companies. Some states have taken this common technique and applied it to utility relocations, providing reimbursement for facility that may not have been reimbursed without the incentive in place. This technique is intended to assure completion by a defined and set schedule. The disincentive process would operate in a similar manner, penalizing the utility for failure to comply with the schedule. Alabama and Massachusetts are states that have tested the viability of incentives and dis-incentives for utility relocation and may be good candidates for study.

Seeking out the reduction of utility-related risk with innovative and uncommon techniques is a next step in effective utility coordination. *(what are considered common, otherwise how will you determine what is uncommon)* There is a significant need for states to share such successful and proven techniques in a report of case studies.

RESEARCH OBJECTIVE

Identify case studies where utility-related risk to a DOT project was managed using innovative and uncommon techniques; such as, historical performance for new permit approvals, incentives, and disincentives. Identify the techniques used and if there are documented and quantifiable savings to the DOT case study project in terms of time and cost.

WORK TASKS

Tasks anticipated in this project include the following:

- Interview Alabama and Massachusetts DOT.
- Survey all states and find at least two (2) other case study DOTs
- Identify any innovative or uncommonly used means of utility motivation.
- Identify restrictions DOTs experience because of different state laws.
- Follow up with the selected DOTs to identify case study projects and processes.
- Document case study project and utility coordination processes.
- Document related savings and losses to the case study projects in terms of time and cost.
- Write and publish a synthesis report.

URGENCY

Utility-related risk on transportation construction projects continually contribute to cost overruns, schedule delays, and litigation. Any means to better motivate action with the tools at hand will help to manage those risks.

FUNDING REQUESTED AND TIME REQUIRED

It is estimated that this research will take 8 months to complete and will require $80,000.

CONTACT PERSON

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