



Research Project Statement 24-028 FY 2024 Annual Program

Title:	Develop and Updated Methodology for Calculation of Reimbursement Levels for Utility Relocations
The Problem:	<p>TxDOT spends hundreds of millions of dollars on utility relocations every year. For most highway construction projects, a fundamental question that TxDOT project managers must face is whether utility relocation costs and the portion for which utility owners are eligible for reimbursement are actual and reasonable. An agreement between TxDOT and FHWA allows districts to execute utility agreements; however, the Right of Way Division remains the office responsible for ensuring compliance.</p> <p>Of the various situations in which a utility relocation is eligible for reimbursement, one of the most complex situations is when parts of the existing utility facility involve a property interest, either because the utility owner has an easement or owns the property in fee simple. For utility facilities that involve a private property interest, TxDOT uses an eligibility ratio, which is defined as the percentage of utility facilities that are reimbursable in relation to the total amount of utility facilities being relocated. The key factors affecting the eligibility ratio are the length of underground facilities and the location of the main poles inside the existing right-of-way. Guy poles, push braces, and down guys are excluded from the eligibility ratio calculations because they are considered supporting structures.</p> <p>In practice, eligibility calculations can be convoluted or complex, particularly in situations where the utility facility spans multiple property interest locations. Reimbursement eligibility also depends on factors such as betterment considerations and type of project. The complexity of the calculations is counterproductive and makes the work of utility coordinators unnecessarily difficult. A recent internal survey at TxDOT revealed that only 40 percent of district utility coordinators were comfortable with utility reimbursement and eligibility ratio calculations. Utility owners are responsible for making the calculations. In some cases, the estimates submitted are to the utility owners' advantage. In other cases, district utility coordinators end up helping utility owners with the calculations because utility owners are not sufficiently knowledgeable of the calculation methodology. Regardless of the process, reviews of agreements sometimes lead to a substantial modification of the calculations completed at the district level.</p> <p>The current methodology for calculating reimbursement eligibility criteria is, to a large degree, arbitrary. Further, the calculation is typically based on estimated relocation plans, and a procedure is not in place to validate whether the estimated ratios match the actual relocations in the field. The result is a lack of reliability in the calculation of reimbursement costs, which increases the risk for TxDOT. There is a need to develop an updated methodology that is reliable and easier to use, as well as accurate.</p> <p>A national standard does not exist for utility reimbursement eligibility criteria or calculations. Some DOTs use eligibility ratios, but the actual methodology used may vary with respect to state DOTs. State laws vary regarding what is allowed or required for utility relocations. The research should look at what other state DOTs are doing, but the updated methodology must be rooted on Texas state law and regulations.</p>
Technical Objectives:	<p>This research will develop and test an improved methodology to determine reimbursement eligibility and calculate utility reimbursement amounts. To accomplish the objectives of this project, the research team shall:</p> <ul style="list-style-type: none">• Document a significant sample of utility relocations and their associated reimbursement costs to develop a reliable baseline of practices throughout the state.• Evaluate practices in other states to determine what potential practices might be applicable in Texas.• Develop and test an updated methodology for utility reimbursement eligibility criteria and calculations.• Prepare a guidebook with examples on how to determine utility reimbursement criteria and calculate reimbursement amounts.• Prepare and test training materials to teach project managers, designers, utility coordinators, consultants, contractors, and utility owners on how to determine utility reimbursement criteria and calculate reimbursement amounts. <p>The expected technology readiness level (TRL) for this project is 8.</p>

<p>Anticipated Deliverables:</p>	<ol style="list-style-type: none"> 1. Technical memorandum for each task completed. 2. Monthly progress reports. 3. Value of Research (VoR) that includes both qualitative and economic benefits, to be included in the final research report. This is not a stand-alone deliverable. 4. Product P1: Guidebook with examples on how to determine utility reimbursement criteria and calculate reimbursement amounts. 5. Product P2: Training materials on how to determine utility reimbursement criteria and calculate reimbursement amounts. 6. Research report documenting the findings of this research, including an updated methodology for utility reimbursement eligibility criteria and calculations. 7. Project Summary Report
<p>Proposal Requirements:</p>	<ol style="list-style-type: none"> 1. Proposal Deadline: 12:00 p.m. Central Time, Monday, March 6, 2023. 2. RFP#1 Q&A Deadline: 12:00 p.m. Central Time, Wednesday, February 1, 2023. 3. Use the current “ProjAgre” and “PA Forms” templates located at the RTI Forms webpage. 4. Proposals will be considered non-responsive and will not be accepted for technical evaluation if they are not received by the deadline or do not meet the requirements stated in RTI's University Handbook. 5. Proposals should be submitted in PDF format; (1) PDF file per proposal. File name should include project name and university abbreviation. 6. This project will be tracked during the life of the project using the Technology Readiness Level (TRL) scale. 7. The 2021 Texas Legislative Session requires that universities be in compliance with Senate Bill 475 by submitting a completed and signed TxDOT Security Questionnaire (TSQ) to RTIMAIN@txdot.gov in advance of a proposal submission. Universities found to not submit a completed and signed TSQ in advance of proposal submitting will be held in non-compliance and unable to participate in the Program.