



Research Project Statement 20-104 FY 2020 Annual Program

Title:	Quantify the Valuation of Right-of-Way
The Problem:	<p>TxDOT manages over one million acres of right-of-way associated with over 80,000 centerline roadway miles on the state highway system. A variety of third parties utilize TxDOT right-of-way to install facilities such as utilities, salt water pipelines, and small cell nodes. There are two types of third parties that utilize TxDOT right-of-way, including common carriers and private parties. Common carriers install facilities for public usage such as, but not limited to, water lines, electric lines, and telecommunication lines. Common carriers access TxDOT right-of-way via permit, for which TxDOT does not have the authority to charge a fee. Private parties install facilities for private usage such as, but not limited to, saltwater pipelines for oil and gas exploration and small cell nodes. Private parties lease right-of-way from TxDOT, and associated fees are meant to cover administrative costs and the value of the right-of-way. Previous research determined administrative costs associated with processing permits and leases, but there is a need to determine the value of TxDOT right-of-way for permits and leases.</p> <p>TxDOT is not capturing the true value of the right-of-way when executing leases with private parties. There is a need to determine the value of the right-of-way for various applications; e.g., point leases for small cell nodes, intermediate length longitudinal leases for temporary pipelines, and long length leases for buried pipelines and fiber. Even though TxDOT does not have the authority to charge a fee for common carriers, the right-of-way is encumbered by these facilities, and knowing the value of these permits would be beneficial. In addition, the differentiation between common carriers and private parties is not as straightforward as in the past. There is evidence that some common carriers are taking advantage of their permits by installing additional facilities and leasing them to other companies.</p> <p>TxDOT does not have the resources to inspect every installation and prohibit the installation of non-permitted facilities. There is a need to classify companies that are common carriers and identify those who are leasing facilities that were installed by permit.</p>
Technical Objectives:	<p>The objective of this research is to explore the development of short-term crash prediction models to predict the safety performance of rural roadways for specific geometric, operational, and exposure characteristics.</p> <p>The researchers shall address the following:</p> <ol style="list-style-type: none"> 1. Quantify the value of TxDOT right-of-way for several types of permits and leases, including point leases, intermediate distance leases, and long distance leases. This will allow TxDOT to structure leases to accurately capture the value of their right of way. Previous research quantified costs associated with processing leases and permits for private parties and common carriers. 2. Determine if common carriers are violating their permits by installing additional facilities and leasing them to private parties. This will require interviews with maintenance staff about any violations they are aware of as well as field data collection to verify installations. <p>The expectation of this project is that the end product will obtain a TRL level 8.</p>
Desired Deliverables:	<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. 4. Research report documenting the findings of the research, including a matrix detailing the value of TxDOT right of way on a linear basis for various geographical regions; i.e., city or county, and an assessment of whether or not common carriers are violating their leases and if any of their operations should be considered private usage. 5. Project Summary Report.

Proposal Requirements:	<ol style="list-style-type: none">1. Utilize the “Proj/Agre” and “PA_Form” templates located at the TxDOT RTI website.2. 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, which is also located at the RTI website.3. Proposals should be submitted in PDF format, 1 PDF file per proposal. File name should include project name and university abbreviation.4. This project will be tracked during the life of the project using a Technology Readiness Level (TRL) scale. For more information about the use of a TRL, click.
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