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| **Roadside Safety Pooled Fund Program** **Research Problem Statement** | State:  Minnesota (MN-90) **DRAFT**  (TTI\_MN Problem Statement Steel Post Downstream End Anchor) |
| Title:  W-Beam End Anchor  Develop a Steel Post Downstream End Anchor | |
| Problem Statement:  The Midwest States Pooled Fund Program funded the successful development and crash testing of a non-wood-post alternative for use in the thrie beam bullnose barrier system using the NCHRP Report No. 350 criteria.  That study resulted in the development of the Universal Breakaway Steel Post (UBSP) design. Based on the successful development of the UBSP for thrie beam bullnose applications, it would seem reasonable to investigate whether the new breakaway post technology could be used in other roadside safety applications.  The Midwest States Pooled Fund Program has recently funded a project to further investigate the application of this technology to other systems. The current project consisted of a series of bogie tests on both CRT and UBSP posts in the strong and weak axis in order to compare the performance of the UBSP post directly to the CRT post and to determine the feasibility of the UBSP post as a replacement for the current CRT post. The component testing for this study has been completed, and the results indicate that the UBSP post compares favorably to existing CRT posts. Strong-axis behavior of the UBSP post was nearly identical to the CRT post, while the weak-axis capacity of the UBSP post was slightly lower than the CRT post.  This performance would indicate that there is a strong potential for these posts to be utilized in other CRT post applications. Thus, a need exists to identify which applications are the most desirable for use of the UBSP post and then to design/evaluate those systems through engineering analysis and full-scale crash testing | |
| Objectives of the Study:  Development of a Universal Breakaway Steel Post, MGS downstream end terminal, as a replacement to wood CRT, or even BCT posts. | |
| Expected Benefits:  This effort would provide a non-proprietary, steel post option for the MGS system. | |
| Description of the Proposed Feature to be Tested: *(Be as detailed as possible. Include drawings and/or plans, if available.)*  Design and development of a steel post option that would replace the current wood post downstream anchor for the MGS guardrail system. This would be a new post and or system based on the UBSP design concept, or even a proprietary design post in a different configuration to meet this need. | |
| Estimated Cost *(of the feature per linear foot installed):* | Total Estimated Cost of Crash Test: |
| Contact Person: | Telephone: |