Project Title: C-07-11: Bridge Cable Service Life
PIN: New Project
Responsible Unit: Office of Structures
Project Manager: Alampalli, Sreenivas

Project Goal:
Develop procedures for the evaluation of the remaining service life using probabilistic methods and fracture toughness.

Actions Proposed:
- Review of literature and existing cable strength models
- Establish statistical sampling procedure for bridge wires
- Evaluation of the strength of cracked wires based on fracture toughness
- Calculation of the cable strength using the data from Tasks 1 through 3, and probabilistic approach
- Develop procedures for the evaluation of the remaining service life using quantitative methods as a function of time and degradation mechanisms

Anticipated Work Products and Accomplishments:
Documented procedures for evaluation of the strength and safe service life of bridge cables based on fracture toughness and probabilistic methods

Proposed Budget: $312,500