**Project Title:** C-01-51: Bridge Element Deterioration Rates  
**PIN:** R020-43-881,.882  
**Responsible Unit:** Structure Design And Construction Division  
**Project Manager:** Lagace, Scott  

**Project Goal:**  
In the Department’s quest to better understand the way bridges perform, element level deterioration information would be very helpful. Therefore, implement a bridge, in-depth, element level deterioration study. This research is conducted in two stages:

Phase I focuses on developing a reusable computer program to analyze condition based NYSDOT inspection information and translate results into element level deterioration rates/charts. The intent of this research is also to better understand what variables impact deterioration, such as bridge type, material, etc.

Phase II would implement a concrete bridge deck condition study. This research would involve combining the analysis of bridge deck condition ratings from Phase I with a study of specifications and guidelines related to bridge decks, to establish what variables are significant with regard to deck cracking and service life.

**Actions Proposed:**  
Develop a reusable computer program to analyze condition based NYSDOT inspection information and translate results into element level deterioration rates/charts.

**Anticipated Work Products and Accomplishments:**  
Better understanding of variables impacting deterioration of bridges in general and bridge decks, to improve their durability.

**Proposed Budget:** $268,627