Project Title: C-05-08 : Field Evaluation of New Reflective Materials
PIN: R020.72.881
Responsible Unit: Program Support Division
Project Manager: Galarza, Patrick

**Project Goal:**
Determine if new reflective materials can be used without external illumination.

**Actions Proposed:**
Conduct field evaluations of new reflective sheeting materials in overhead signs for NYSDOT’s Region 11. Determine:

- If sufficient detection and recognition distance can be achieved with these new materials to allow their use without external illumination.
- The difference in detection and legibility distances between different materials and different manufactures.

The proposer will work with NYSDOT to coordinate sites and evaluation sessions. The level of access to the site(s) containing the sign materials to be tested will determine the scope of testing and measurements that the consultant will conduct. The Consultant will conduct lighting measurements of the test signs, the surrounding areas and the ambient light levels.

Measurements will be performed at roadside and by passengers in vehicles at several distances. These measurements will be analyzed using visibility models to determine sign performance.

The proposer will use a panel of subjects including both experts and lay people to determine the legibility distance and to provide subjective ratings of sign performance. Legibility questions will include the distances at which the sign becomes viable, readable and easy to read. Subjective ratings will include the appearance of the legend, the background and preferences. Similar ratings will be performed on lit signs for comparison.

The proposer will prepare a final report documenting the background methods and findings of this study.

**Anticipated Work Products and Accomplishments:**
Produce a technical report that can be used by NYSDOT, FHWA, AASHTO and TRB to evaluate use of new reflective materials for unlit signs.

**Proposed Budget:** $25,000