CDTC Bridge Group Report

The bridge group was formed to discuss various issues related to bridge preservation for TIP programming, and to help sort out longer-term bridge preservation and replacement needs and costs for the update of the New Visions Plan now underway.

The first meeting of the group was held on October 23rd specifically to address questions and concerns that have been raised by Planning Committee members in response to NYSDOT’s paradigm shift from bridge replacement and rehabilitation to preservation. The discussion focused on CDTC’s role in programming bridge projects under the “preservation” paradigm, and emphasized the need for technically solid scoping and good cost estimation.

Context

There are about 350 bridges in the Capital District owned and maintained by the region’s counties, cities, and towns. Based on 2010 inspection reports, roughly one-third of all structures and 40 percent of all deck area are either structurally or functionally deficient. The roughly $14 million available in the 2013-18 TIP falls far short of what is needed repair these bridges. While about half of the money available is under the NHPP Program, very few locally-owned bridges are on principal arterials or the NHS system and, therefore, are not eligible to use these funds for repairs.

Highlights of the First Meeting & Group Recommendations

There was a fair amount of discussion about preservation treatments and project scale, but most of this first meeting focused on the best way to identify preservation treatments and their costs. Preservation is not meant to be bridge rehabilitation in disguise. It is intended to be a fairly “low cost” mechanism to extend the life of a bridge with a low rating or specific deficiency. If done correctly, a preservation project will be cost-effective only if there is a proper selection of candidates that are bundled under one design/construction contract.

There was strong support to use DOT’s assessment process, which is based on a thorough and thoughtful review of bridge inspection reports. Once the reports identify candidates, the process requires qualified structures engineering knowledge and judgment as to the appropriate timing and type of treatment. Tom Hoffman, Region 1’s expert bridge engineer, reviews the inspection reports for each state-owned structure, flags preservation candidates, and identifies appropriate treatments and costs. There is no one at DOT who is available to perform the same function for local bridges. The group discussed two approaches:
On an individual basis, each bridge owner would hire a consultant to determine the type, scale, and cost of preservation treatments for candidate projects. With more than 40 different owners of local bridges in the region, there was concern with inconsistent treatments across counties and municipalities, challenges to less affluent communities, and little-to-no regional oversight.

A regional assessment would involve a single contractual arrangement with one qualified (bridge) firm or individual. The group discussed the possibility of using bridge capital funds “off the top” from the set-aside to review bridge inspection reports and undertake some limited field inspections – using guidance on preservation treatments provided by NYSDOT, the goal would be to determine appropriate type, cost, and timing of preservation treatments for all locally-owned bridges. The group believes that this could be a very cost-effective and fair way of developing a multi-year preservation plan. The analysis would feed in nicely to the development of an updated New Visions Plan. NYSDOT is following-up with FHWA to determine eligibility.

The group likes the regional approach, and has asked the staff to present the idea to the Planning Committee for consideration. Agreeing to the regional approach would mean that part or all of the bridge preservation solicitation would be delayed.