



PURPOSE AND NEED STATEMENT

Local Concept Development Study for Bridge K0607 New Brunswick Road over Al's Brook Franklin Township, Somerset County

PROJECT PURPOSE

The purpose of the Bridge K0607 Project is to restore the structural integrity of the bridge in compliance with current design standards.

PROJECT NEED

As reported in the *Bridge Re-Evaluation Survey Report, Cycle No. 15* the bridge is in serious condition due to yielding of the arches, which resulted in large deformations and the installation of temporary supports to arrest further degradation of the structure. In response to its condition, the bridge is classified as Structurally Deficient and has a Sufficiency Rating of 47.1 out of 100. Installation of the temporary supports avoided the initial need to post the bridge for restricted load limits, but future rating evaluations of the structure may require posting load limits or full closure of the structure, since these supports are not considered a viable long-term solution.

Further deterioration of the structure's condition would ultimately require closure of New Brunswick Road, resulting in a loss of connectivity between its surrounding neighborhoods and the major roadways within Somerset County. According to Township Officials, New Brunswick Road is critical within the local roadway system, providing an essential transportation link for the community's residents and businesses.

Deformation of the arches, in conjunction with the installation of temporary supports, have altered the hydraulic characteristics of the structure and introduced members that impede flow and increase the potential to trap debris. Additional manpower expenditures and associated costs will be incurred by the County to remove debris, ensuring that adequate flow is maintained in the brook until the structure's original hydraulic opening is restored.

GOALS AND OBJECTIVES

In addressing the Purpose and Need, design of the project will also consider additional goals and objectives obtained via stakeholder and public outreach. While the project may not be able to fully satisfy all these additional goals and objectives, as many as possible should be addressed. The identified goals and objectives are as follows:

- Minimize impacts to vehicular traffic, pedestrians and bicyclists during construction.
- Seek to identify an economically viable method of expedited construction.
- Avoid or minimize social, economic and environmental impacts.
- Enhance bicycle and pedestrian compatibility.