## NH Route 101 Improvements - Keene 41590 Purpose and Need

<u>Project Area Description:</u> The NH Route 101 project begins east of Optical Avenue and continues approximately one mile east to Branch Road in the city of Keene, NH. The existing roadway width is approximately 28 feet wide with narrow shoulders and much of the project's corridor parallels, or is in the proximity of, the Branch River and the Otter and Minnewawa Brooks. According to 1933 as-built plans, the roadway base includes a 20-foot-wide reinforced concrete pavement. The project area further includes Bridge No. 166/050 which carries NH Route 101 over the Branch River. This bridge, built in 1933, is in poor condition and is on the State's Red List. The project corridor serves as one of the gateways into the City of Keene, and the abutting properties reflect the diverse zoning along NH Route 101, which includes the City's industrial, commerce, high density, and rural zones.

<u>Project Purpose:</u> The purpose of the project is to provide safety improvements, improve accessibility for bicyclists and pedestrians, and improve roadway and bridge conditions along NH Route 101 and Swanzey Factory Road while minimizing environmental and right-of-way impacts to the greatest extent practical. One of the primary design considerations is to improve the intersection sight distance deficiencies at the intersection of Swanzey Factory Road and NH Route 101 where the geometric deficiencies are attributed to multiple crashes over the years.

**Project Need**: NH Route 101 is one of two major east-west routes in southern New Hampshire and has an average daily traffic (ADT) of 11,000 vehicles based on 2023 traffic counts. The roadway's safety and state of good repair is critical for state commerce, commuting, and tourism. The project is needed to correct the following deficiencies throughout the project's corridor: the existing pavement requires regular maintenance and repairs due to the failing underlying concrete slab; the roadway's untreated drainage discharges to the Branch River which does not meet current water quality treatment standards; roadway geometric deficiencies which are attributed to multiple crashes at the intersection of Swanzey Factory Road; the NH Route 101 bridge over the Branch River is structurally deficient, placing it on the State's Red List; the bridge width is narrower that the approaching roadway, and; the width of NH Route 101 and Swanzey Factory Road limit safe pedestrian and bicycle usage.