Methodist services were held in Needham as far back as the 18th century, but the gatherings were small. The growth of a sustained Methodist congregation came with the influx of English knitters from the Midlands in the 1850s and 60s. The congregation was established in 1867, and initially met in people’s homes or in Highland Hall above Whetton’s Store (#5). The Methodist Episcopal Church and parsonage were built several years later on land donated by William Carter, and with funds raised in the community.

The old church was replaced by the current structure in the 1950s, and renamed in honor of the Carter family; it was expanded in the 1960s. The church continues to grow. There were significant renovations in 2013, and the incorporation of Wellesley’s Methodist congregation and church building in 2016.