The first Baptist congregation in Needham was organized in 1780. The congregation was very small, and mostly attended to by itinerant ministers. It dissolved in 1795, and for the next 40 years, Needham’s Baptists met for services in other towns, finally joining together with Baptists in Dover to form a small congregation in 1838.

By 1854, the Needham congregation was large enough to raise money and build its own church. The building was completed in 1872, on the corner of Great Plain and Highland Avenues. As the membership grew, the building was expanded and renovated to accommodate its needs. In 1901, a clock was added to the steeple, which was Needham’s first public clock.

The church needed additional space in the 1920s, but by this time the lots around it were taken and there was no more room. The church bought itself a larger parcel on Great Plain Avenue, about two blocks to the east and decided to move the building to its new lot. In 1928, the church was lifted and towed to its current location.