The Lompoc Museum is housed within a former Carnegie Library. The wealthy nineteenth century industrialist and later philanthropist Andrew Carnegie funded the construction of numerous libraries across the United States. Between 1899 and 1917, the Carnegie Corporation funded the construction of 142 libraries in 121 communities in California alone. The grants awarded by the Carnegie Corporation were for construction only. Any community applicant had to demonstrate its ability and intention to support the costs of the library’s daily operation, including the cost of employing a librarian, purchasing books, and maintaining the necessary utilities.

Lompoc received its funding of $10,000 in 1909. The library was dedicated in 1910 and completed in 1911. W.H. Weeks’ architectural design of the Lompoc library is known as “Classical Revival” or “Greek Temple”. In recognition of its social and architectural significance, the structure was listed on the National Register of Historic Places in 1990 along with 84 other California Carnegie Libraries. A plaque at the northwest corner of the property also identifies the building as Lompoc Historical Landmark No. 1.

The Carnegie Library served as Lompoc’s public library from 1911 until 1968. In 1969 Clarence Ruth donated his collection of native North American artifacts to the city of Lompoc. Lompoc Museum Associates was formed to preserve and exhibit this extensive collection. The Lompoc Museum was established within the former Carnegie Library building in 1969. Its exhibits were opened to the public in 1970.