them. The Wind Gap also has been used for an important road leading to the Pocono Mountains. Minor notches in the mountains—Totts Gap, Fox Gap, Smith Gap and Little Gap—have also been utilized.

**Railroads.**—Several railroad lines cross Northampton County and have aided in the industrial development of the region. The Lehigh Valley Railroad and the Central Railroad of New Jersey closely follow the Lehigh River from Easton to the Lehigh Gap and beyond. Branches of these two railroads tap the cement and slate districts. The Lehigh & New England Railroad traverses cement and slate sections and connects the anthracite fields with New England. Branches also extend to Bethlehem and Allentown. The Reading Railroad links Bethlehem to Philadelphia. The main line of the Delaware, Lackawanna & Western Railroad takes a short course through the county from Portland to the Delaware Water Gap with branches extending through the slate and cement districts.

The extensive railroad system of the county is largely due to the important slate and cement deposits and the location of the region with reference to Philadelphia and New York in one direction and to the anthracite fields, western New York and central and western Pennsylvania in the other direction. In turn, it may be said that the industrial development of the county is largely due to the fine transportation facilities.

Until recently there were several interurban trolley lines between the principal towns of the county and adjoining regions. Most of these have now been replaced by bus lines and the tracks torn up. The lines between Allentown and Philadelphia, between Allentown and Easton and between Bethlehem and Hellertown still remain. Some of these may be abandoned, entirely or in part.

A canal owned by the Lehigh Coal & Navigation Company follows the Lehigh River from Mauch Chunk to Easton and thence southward along the Delaware River to Philadelphia. Several dams were built to divert river water into the canal, and locks were constructed at these places. These are conspicuous at Allentown, Bethlehem, Island Park, Easton, etc. This canal was built in 1824 and was long used for the transportation of anthracite to Philadelphia and to towns along the route. For several seasons past no canal boats have been in operation and the only purpose of the canal is as a source of water power in a few places.

In the chapters that follow, the rocks, structures and physical features will be described; the forces and agents, both natural and human, that have operated and are still operating in the region will be examined and evaluated; and attempts made to interpret the long and eventful past as recorded in the physical make-up of the county.