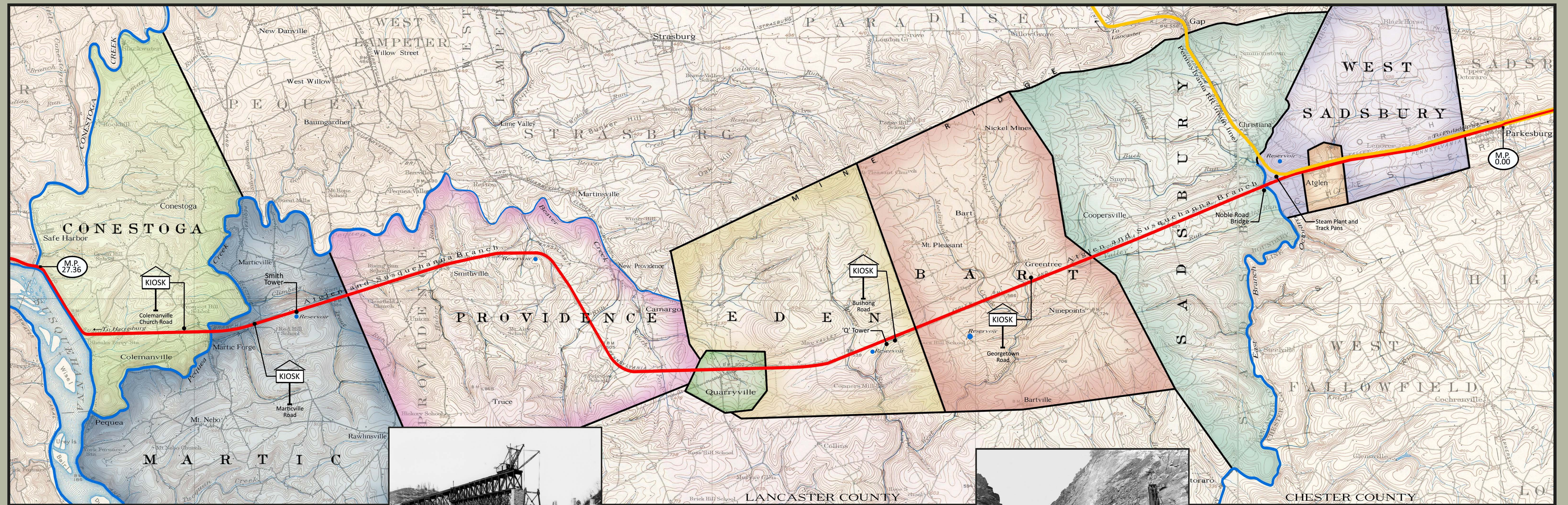
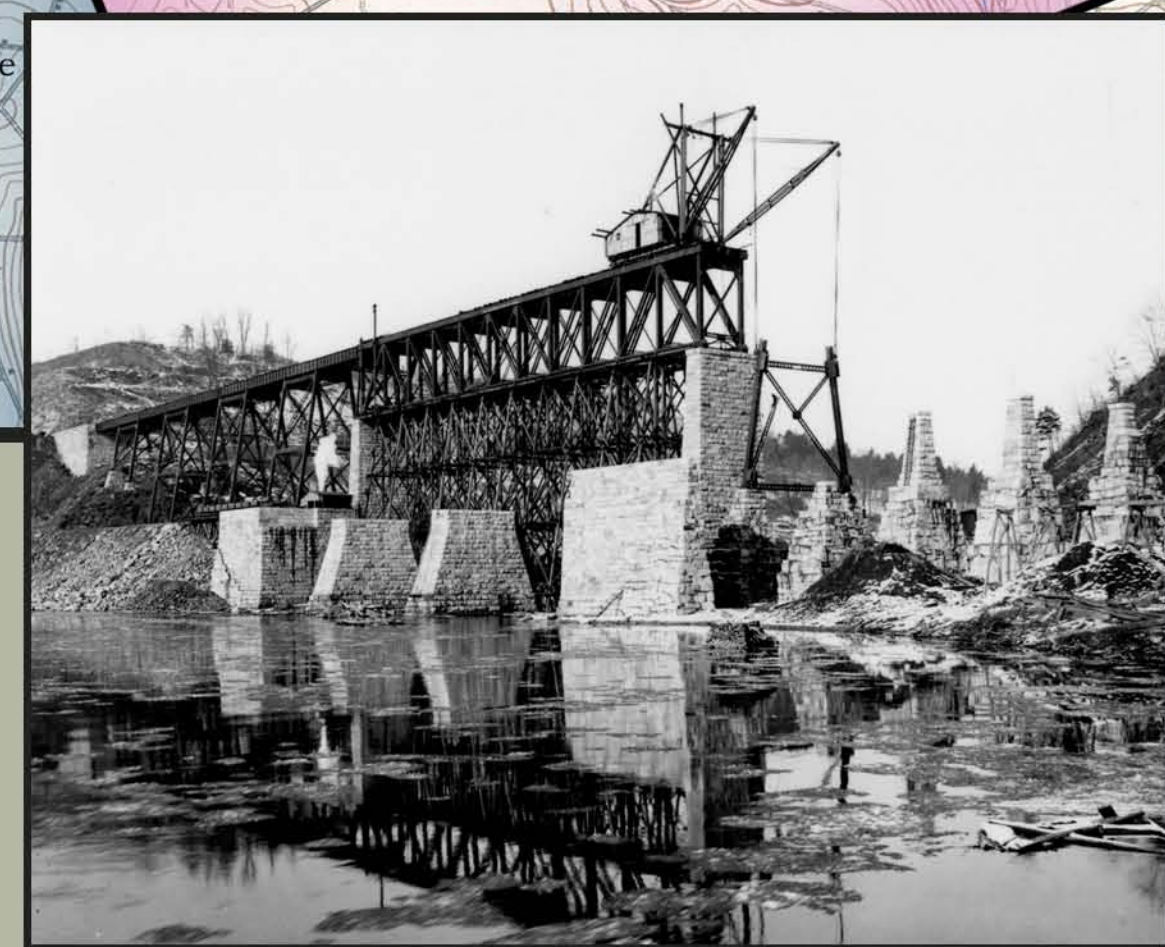


# The Atglen & Susquehanna Low Grade

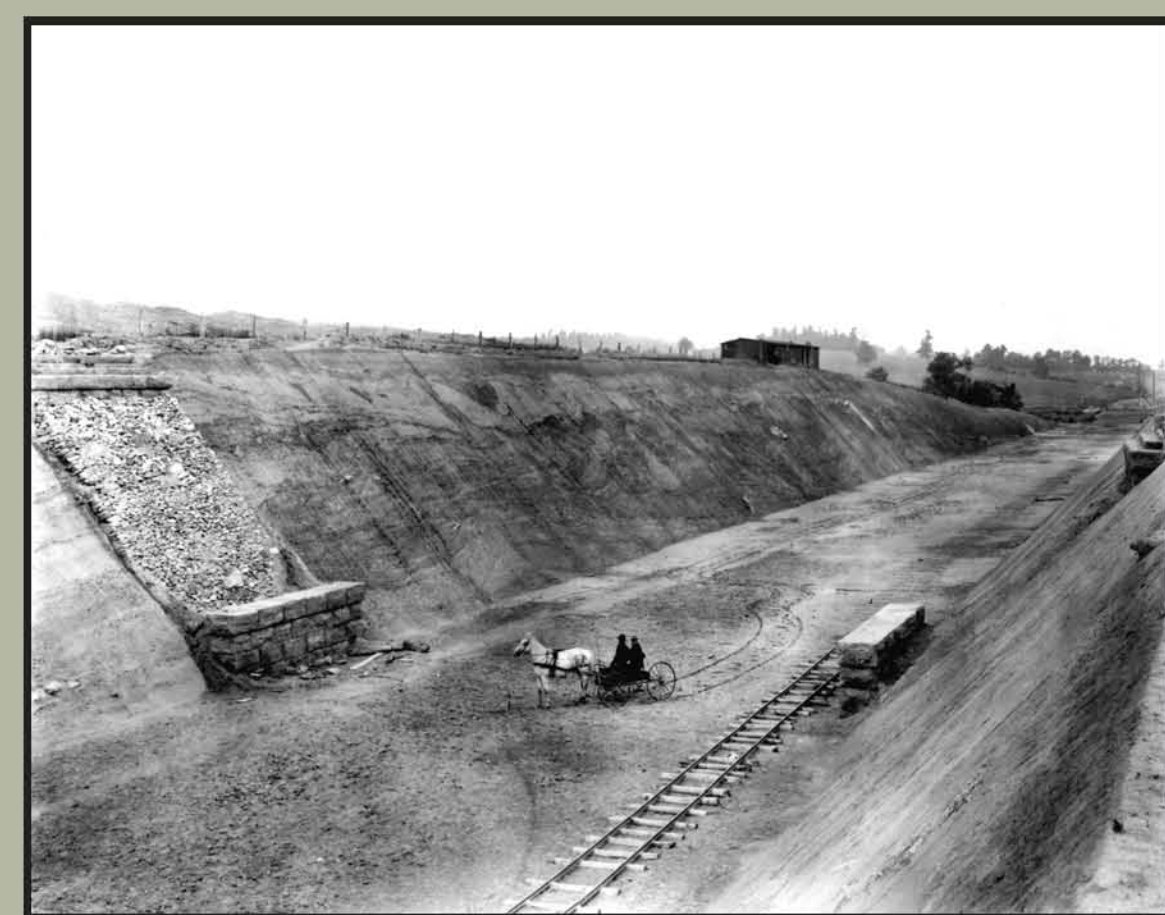
## The Pennsylvania Railroad's Dedicated Freight Road



The Atglen & Susquehanna Branch was constructed (1903-1906) by the Pennsylvania Railroad (PRR) as the middle segment of its Low Grade Line, an ambitious through-freight route that extended some 140 miles from Morrisville Yard near Trenton, N.J., to the Enola Classification Yard west of Harrisburg. Completion of the Low Grade alleviated the bottlenecking of freight approaching Philadelphia by separating heavy through-freights from passenger service and local freight on the PRR's main line through Lancaster, and by bypassing Philadelphia altogether. It was the PRR's largest construction project to that date. For its near \$20,000,000 investment and the movement of an estimated 22 million cubic yards of earth and rock, the PRR gained an unequalled freight route linking western markets to the ports of Philadelphia, New York and Baltimore. The contribution of the Low Grade Line to the subsequent growth of the PRR is almost incalculable.



Columbia Historic Preservation Society, Columbia, PA.



Columbia Historic Preservation Society, Columbia, PA.

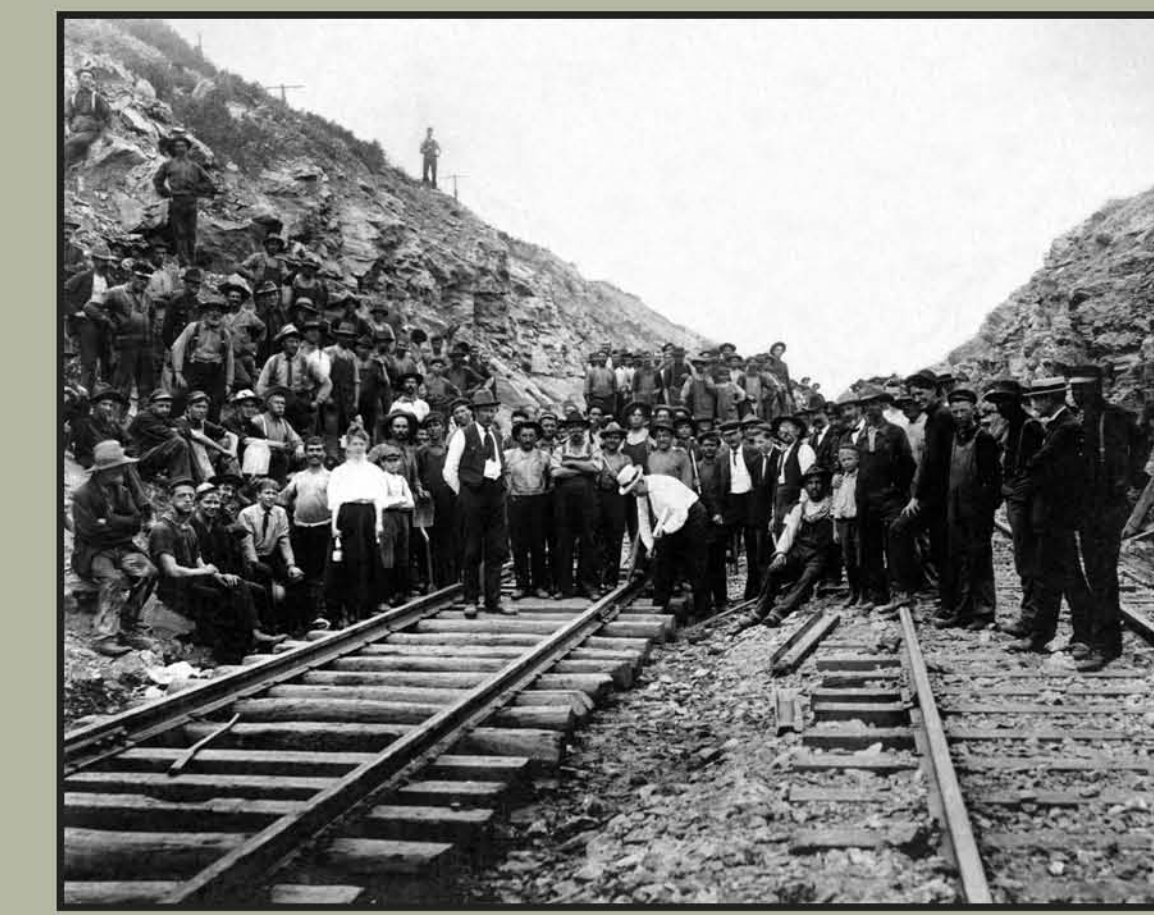


James P. Shuman photograph, Railroad Museum of Pennsylvania, PHMC.

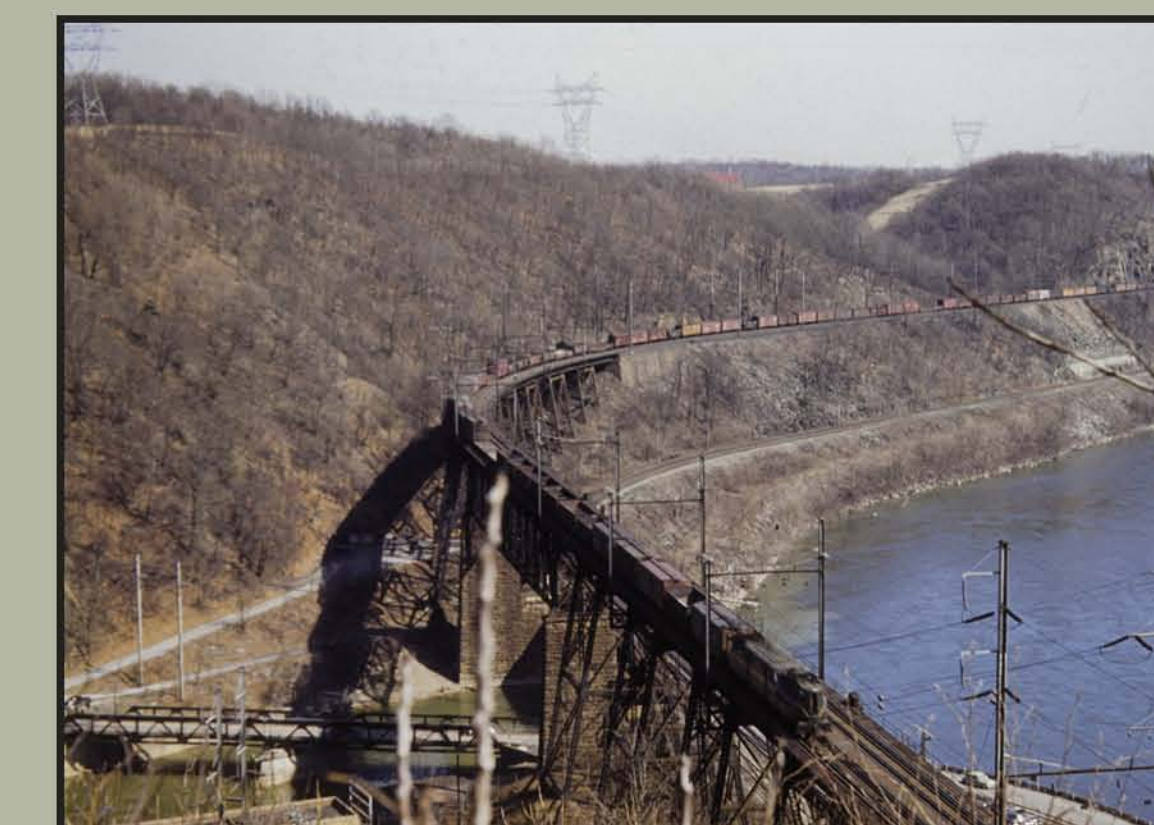
To achieve the low grades and gradual curves that were critical for through-freight operation, the PRR extended a determined line across southern Lancaster County. Westward from Parkesburg (milepost 0.00), the A&S raised an earthen road on the Chester Valley floor and etched deep canyons through the hills of the Susquehanna River Valley in order to reach Safe Harbor (milepost 27.36). Certain of its optimal route, the eastern half of the A&S (M.P. 0.00-27.36) confidently spanned valley, stream and the shoed horse's dirt road with approximately 80 bridges and culverts of masonry and steel. When dedicated for service on July 27, 1906, the A&S appeared unlike any historic path. It was a streamlined superhighway of rail that efficiently satisfied fuel and food demands of the eastern seaboard for decades.



Kline Collection, Railroad Museum of Pennsylvania, PHMC.



Courtesy of LancasterHistory.org, Lancaster, PA.



James P. Shuman photograph, Railroad Museum of Pennsylvania, PHMC.

The PRR's 1938 electrification of the A&S ushered out a century-long era of steam locomotion. Hydroelectric energy generated by the Susquehanna River at Safe Harbor Dam powered the A&S via a modern skyway of catenary and paired poles. The A&S met the freight challenges of World War II without any major changes. The national decline of rail service in the second half of the twentieth century eventually claimed the A&S. An alternate freight route to Philadelphia gained operational favor in the decade preceding the final freight on the A&S—December 19, 1988. Into the twenty-first century, a new generation of transmission mono poles have been installed along the route of the A&S. The 2011 Amtrak Transmission Line Upgrade Project continues to supply electricity from Safe Harbor to the regional grid in support of Amtrak's Northeast Corridor passenger service.