### OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

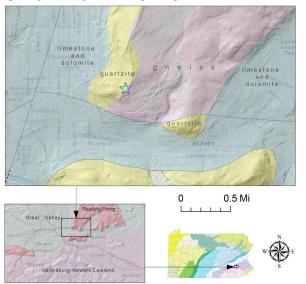
# MOUNT PENN SCENIC LOOKOUT, BERKS COUNTY



Stuart O. Reese, 2016

#### Location

Mount Penn, Berks Co., Reading, lat: 40.33623, lon: -75.90552 (parking); Reading 7.5-minute quadrangle





## Geology

The Mount Penn scenic lookout at the southern end of what is now called Skyline Drive in Reading is situated on some of the oldest and structurally most complicated rocks in the state. These rocks are part of the Reading Prong section of the New England physiographic province. They include Middle Proterozoic gneissic rocks (both "felsic to mafic" and "hornblende" types), which are over a billion years old. The gneisses were eroded and overlain by Cambrian sands that were lithified to sandstone and then metamorphosed to quartzite (Hardyston Formation). Together these rocks were folded and thrusted over the area from the southeast during the Taconic mountain-building event about 450 million years ago. Thus, the Reading Prong rocks are considered a "nappe"—a package of rolled and transported rocks. In this area, the nappe was moved over carbonate rocks (limestone and dolomite) of the Great Valley. Further deformation occurred about 150 million years later during the Alleghanian mountain-building episode, which added more structural features for geologists to untangle. The quartzite is erosion resistant, and the gneiss a little less so, but both rock types stand as high islands above the surrounding softer sedimentary rocks.

Left: Dedication plaque for Skyline Boulevard mounted on a boulder of quartzite. Below: Panoramic view from Skyline Drive. In the distance to the south, Triassic diabase and sandstone of the much younger Gettysburg-Newark Lowland physiographic section also stand above the Great Valley. Photographs by Kevin Tarbert, Pennsylvania Geological Survey intern.



#### **Recommended Reading**

MacLachlan, D. B., 1983, Geology and mineral resources of the Reading and Birdsboro quadrangles, Berks County, Pennsylvania: Pennsylvania Geological Survey, 4th ser., <u>Atlas 187cd</u>, scale 1:24,000.

Pagoda Skyline website.



