

NORTHUMBERLAND COUNTY
HISTORY
HISTORIC SITE INVENTORY

June 1976

Prepared by: Northumberland County Planning Commission

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Map of the State of New York
in 1779

1779



PART I

HISTORY

INTRODUCTION

The purpose of this study is to provide an historical basis for the development and expansion of Northumberland County founded on the premise that history plays an important role for man. In history making man is actually making himself and, by making himself man is merely sustaining his desire to become other than what he is. This desire to change is the basis of the historical process that provokes man to create and mold, to develop and expand that which preceeded him. By understanding his past, man is able to gain a better perspective of the future.

Northumberland County's development began when the American Indian first left his mark on the land. He built trails to connect his villages; then these simple paths were expanded to connect tribes often located hundreds of miles away. Soon an elaborate communication system led to trade and commerce that caused an increase in the size of Indian towns. By the beginning of the 18th century an elaborate governmental system had been established with one of the leading Indian towns at Shamokin, now Sunbury. When the white man arrived in Northumberland County in the middle of the 18th century, he found a cohesive Indian government that began to erode when the white man began to intrude on Indian ground.

Like the Indians the early settlers made their way along the Susquehanna River and, like the Indians, the river greatly

influenced the location of these early towns and villages. Now the river that had once seen Indian bark canoes was to see canal boats in the 19th century and motor boats in the 20th. The Indian paths of the 18th century were transposed into the road system of the 19th century and many of these in turn were transformed into the superhighways of today. Railroads that coursed their way through the valleys and hills often followed Indian trails and streams. But throughout Northumberland County's historical growth one outstanding feature remains: the contour of the land and the flow of the Susquehanna River provided the early natural routes that were to become the standard routes of today. The Susquehanna River that had established early Indian settlements at Shamokin and Shikellamy's Town grew into today's boroughs of Sunbury and Milton. The canal system increased the growth of the small Indian settlement at Northumberland and Milton as well as increased development in Watson-town. The development of the railroad sparked the expansion of the anthracite industry that promoted the growth of Shamokin, Kulpmont, and Mt. Carmel. Each of these economic factors provides an insight into the development of the county.

Today man's ability to surpass what were originally natural restrictions has made man almost limitless in scope. The universal appeal of the automobile coupled with the completion of Interstate 80 through the northern section of the county has mobilized an industrial boom as industry moves in to take ad-

vantage of easy highway access. The rapid growth in this area has increased planned developments in what was originally agricultural areas; today the trend continues as new developments spring up to accommodate this expanse in industry.

The river and streams that had originally influenced Northumberland County's early development will undoubtedly continue to influence the future, but with man now in control. Man's potential growth is infinite; by following the proper historical signals, his historical future is assured. And by assuring his historical future man is also assuring himself the proper direction for adequate growth, proper land use, and increased economic development for Northumberland County. Development is not limited to the professional planners; if history is accurate and if the historical process is to be assured, every citizen in Northumberland County should at least be aware of her future development, its significance, and its consequence, each based on the historical background of the county.

NORTHUMBERLAND COUNTY - Mother of Counties

Northumberland County's role in the development of Pennsylvania began on March 21, 1772 as the tenth county to be organized in Pennsylvania. From the 3 original Pennsylvania counties - Chester, Philadelphia, and Bucks founded in 1682 the same year as the establishment of Pennsylvania - the number of counties would grow to sixty-seven. Northumberland County, originally created from an 8000 square mile tract of land lying northwest of Lancaster, Cumberland, Berks, Northampton, and Bedford, would swell to a land size of 15,000 square miles covering all the land west of the Lehigh to the Allegheny River and all of the land south of the New York State border to the Juniata; twenty-nine counties would stem from this tract of land until Northumberland County would reach its present size of 454 square miles, distinguishing Northumberland County as the "Mother of Counties".

Northumberland County's existence originated after the French and Indian War when settlers and soldiers began migrating along the Susquehanna River seeking new land. On November 6, 1768 an Indian Treaty was signed at Fort Stanwix, New York bringing not only the area now known as Northumberland County but also the entire area of the North Branch and all the Valley into the white man's hands. This treaty, known as the "New Purchase", superseded the Albany Treaty made on July 5, 1754 when delegates from the Six Nation's Indian tribes met with John Penn, Richard Peters, Isaac Harris and Benjamin Franklin at

Albany, New York. The purpose of this treaty was two-fold: first, the Indians intended to clarify their wish that the English colonists be confined to the areas in Pennsylvania already purchased by William Penn through treaties. To seal their bargain the Indians sold a large tract of land that covered practically all of Pennsylvania west of the Susquehanna River. But they added two restrictions: they desired that "as long as the Sun and Moon lasts their children be treated as brothers of the white man" and they stipulated that the land at Wyoming and at the Indian town of Shamokin in what is now Sunbury never be sold because, in their words, "Our bones are scattered there, and on this land there has always been a great Council Fire". Penn, Peters, Harris and Franklin agreed because their purpose, the second reason for this treaty, was multifaceted; by maintaining a peaceful accord with the Indians through land treaties, they assured themselves of maintaining the necessary Indian support in their confrontation with the French. The design worked; the Indians backed the English during the French and Indian War, thereby insuring the defeat of the French and the establishment of the Englishman's role in Pennsylvania history.

Earlier William Penn had set an example in maintaining a peaceful relationship with the Indians. Although granted the province of Pennsylvania by King Charles II, Penn instructed William Markham, his deputy director who landed on the American continent in 1680 with two boatloads of settlers, to purchase land from the Indians and conduct surveys for the land purchases.

When Penn arrived on the ship "Welcome" in 1682 at Upland, now Chester, he had already assured the white man of peaceful negotiations with the Indians.

If Penn could be classified as an expert in Indian detente, he could also be classified as one of the greatest real estate developers of all times. Before leaving for America, Penn had published and distributed thousands of pamphlets in England, Germany, Switzerland, Scotland, and Wales advertising new and cheap land in a country free from religious persecution. Between 1709 and 1760 thousands of people from the Rhine county and Great Britain swarmed into the Piedmont and Appalachian Vallemont regions seeking freedom and land. The Indians' fate was sealed. With the French advancing from the Ohio country in the west and White immigrants arriving from the east, the Indians were pressed into a sieve and finally eschewed by the victorious English as more of their land was taken by treaty after the French and Indian War.

As the influx of settlers continued, the need for more land, and consequently more treaties, developed. The land purchase of 1768 insured more settlers moving into the North and West Branch regions of the Susquehanna River. With the seats of civil administration in Reading-Berks County, Lancaster-Lancaster County and Carlisle-Cumberland County, the inhabitants of this new region demanded closer facilities for governmental control. The result was the establishment of Northumberland County in 1772 with the following original boundaries:

Beginning at the mouth of Mahantango creek, on the west side of the river Susquehanna; thence up the south side of said creek, by the several courses thereof, to the head at Robert Meeter's spring; thence west by north to the top of Tussey's mountain, thence southwesterly along the summit of the mountain to Little Juniata to the head thereof; thence north to the line of Berks county; thence northwest along the said line to the extremity of the Province; thence east along the north boundary to that part thereof which is due north from the most northern part of the great swamp; thence south to the most northern part of the swamp aforesaid; thence with a straight line to the head of the Lehigh on Middle creek; thence down the said creek so far that a line run west-southwest will strike the forks of Mahantango creek where Pine Crest Falls into the same, at the place called Spread Eagle, on the east side of Susquehanna; thence down the southerly side of said creek to the river aforesaid; thence down and across the river to the place of beginning.

At the conclusion of the Revolutionary War another treaty was signed on October 23, 1784 at Fort Stanwix, New York. Known as the "Last Purchase", this treaty released the Six Nations rights to all of northwestern Pennsylvania except the Erie Triangle, thus increasing the size of Northumberland County to 15,000 square miles. This placed all of the land east of the Conewango creek and Allegheny river within its limits. The county had now reached its greatest domain, extending from the northern line at the New York State Border from Conewango

creek to the line of Wayne County and from the Lehigh River to the Allegheny, a width equal to nearly two-thirds of the State.

However the enormous size of Northumberland County was to be quickly and drastically reduced. On September 25, 1768 Luzerne County was the first to gravitate from Northumberland County taking with it almost the entire vast area of Wyoming Township leaving only Bloomsburg and Berwick in the county. Mifflin County, west of the Susquehanna was taken, in part, from Northumberland in September 1789. Centre County was created in February 1800 from parts of Mifflin and other counties.

Meanwhile the upper West Branch Valley of the Susquehanna River, forty miles northwest of Sunbury, was increasing rapidly in population and settlers were placing more demands on local administration, thus increasing the need for a more accessible local government. On March 12, 1795 a proposal was sent to Philadelphia requesting that a new county be created; after several failures Lycoming County was finally established, taking from Northumberland County not only the entire West Branch Valley of the Susquehanna but also the vast and unpopulated area north and westward that had been acquired under the purchase of 1784, an area encompassing over 10,000 square miles.

From 1775 until 1813 Northumberland County's size was reduced from 15,000 square miles to the present 454. By 1800 she had become an interior county, no longer bordered on the

north by New York, on the west by the Allegheny, or on the east by the Delaware. Instead she had become centrally located, bordered on the east by Luzerne, on the west by Centre, on the north by Lycoming, and on the south by Mifflin. The rural areas were growing; settlements and small towns sprang up as the area began to prosper. Yet communication between these small towns and settlements could not compete with the growth in population; the Susquehanna River that had originally dictated the development of the Susquehanna Valley and Northumberland County was now dictating its own decline by severing towns and settlements from the county seat - Sunbury.

Sunbury, originally the Indian town of Shamokin, was laid out as the county seat in 1772. Because of its natural site at the forks of the Susquehanna River, Sunbury, by the beginning of the nineteenth century, was the hub of the county. As more settlers arrived and different portions of Northumberland County grew, new demands were placed on county government. The natural setting that had initially dictated the location of the county seat now demanded that a new county seat be designated because of the settler's inability to ford the Susquehanna River. This incompatibility of the settlers needs with the river, coupled with the jealousy emanating from the newly created towns competing among themselves for the role of county seat that guaranteed prestige and prosperity, generated additional excitement as the move to create new counties from Northumberland County had reached its present area when Columbia and Union Counties

were created.

Today Northumberland County is 454 square miles. Her southern boundary along Mahantango creek has not changed since the county was erected in 1772, and her northern border has been static since Lycoming county was created in 1795. Her county seat, Sunbury, is no longer centrally located yet it has remained the county seat since its creation in 1772. The seven original townships that were erected in 1772 included Bald Eagle, Buffalo, Penn's, Turbutt, Augusta, Wyoming, and Muncy. These townships have been divided and subdivided into new townships and counties as areas grew in population and the need for local government increased. Yet Northumberland County is unique because of the role the Susquehanna River played in her development and expansion as well as in her decline and ultimate dismemberment.

The following is a list of the Counties formed, either in part or totally from Northumberland County.

<u>County</u>	<u>Date Formed</u>
Armstrong	1800
Bradford	1810
Cameron	1860
Centre	1800
Clarion	1839
Clearfield (Part)	1804
Clinton	1839

<u>County</u>	<u>Date Formed</u>
Columbia	1813
Elk	1843
Forest (Part)	1848
Indiana (Part)	1803
Jefferson	1804
Lackawanne	1878
Luzerne	1786
Lycoming	1795
McKean	1804
Mifflin	1789
Montour	1800
Northumberland	1772
Potter	1804
Sckuylkill	1811
Snyder	1855
Sullivan	1847
Susquehanna	1810
Tioga	1804
Union	1813
Venango (Part)	1800
Warren (Part)	1800
Wyoming	1842

Local Municipalities

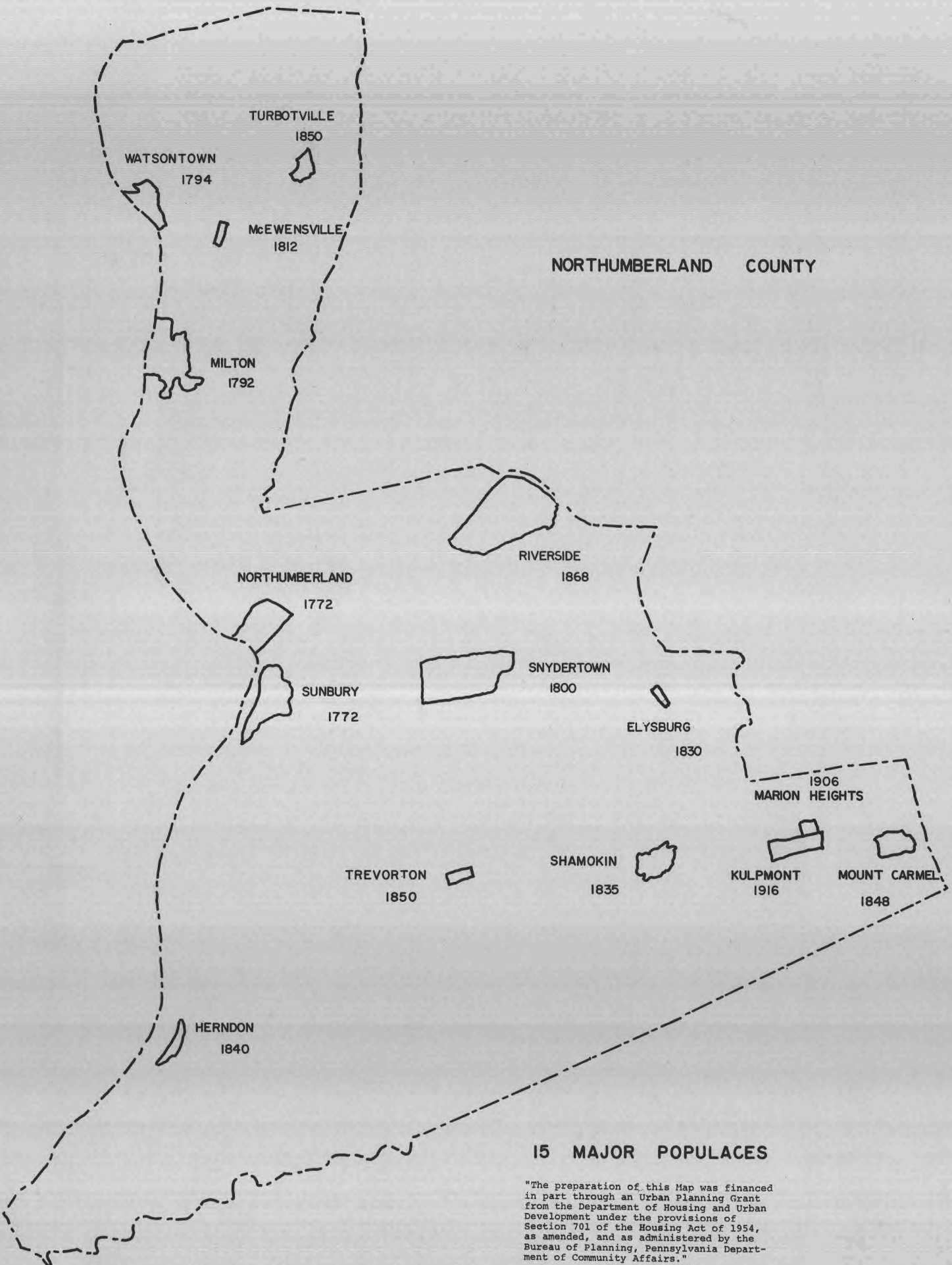
From the seven original townships, parts of other counties and townships were formed. In 1772, the seven original townships that were included in Old Northumberland County were Bald Eagle, Buffalo, Penn's, Turbut, Augusta, Wyoming, and Muncy that encompassed 15,000 square miles. Of these seven, only Turbut and Augusta were located in what is now Northumberland County, each separated by the north branch of the Susquehanna River. As these large sections of land began to develop and more settlers poured into the region, pressure for localized government was exerted until new townships and counties were formed. By 1785 Turbut Township had been split in half to form Turbut and Mahoning. Augusta was split into Augusta, Catawissa, and Mahoning. By 1813, a newly erected Union County encompassed most of Northumberland County west of the Susquehanna River; Columbia County maintained most of the land east of Northumberland County's present boundaries as well as most of the land north of the north branch of the Susquehanna River, including a newly established Turbut and Chillisquaque township. In 1813 Northumberland County had reached her smallest size, extending north only to what is now Point Township and south to the present boundary of Mahantango Creek. Her townships included Point, Augusta, Shamokin, Lower Mahony, and Upper Mahony. From these townships, 24 new ones emerged; today twenty-three are still in existence. In 1950 Gearhart Township,

originally created from Rush Township in 1890, was consolidated with Riverside Borough and passed out of existence.

The following is a list of townships as they were created:

Turbot	1772
East Chillisquaque	1786
West Chillisquaque	1786
Point	1786
Shamokin	1789
Little Mahanoy	1813
Rush	1819
Jackson	1836
Lower Mahanoy	1836
Coal	1837
Delaware	1843
Lewis	1843
Upper Augusta	1846
Lower Augusta	1846
Zerbe	1851
West Cameron	1851
East Cameron	1851
Jordan	1852
Mt. Carmel	1854
Washington	1856
Upper Mahanoy	1856

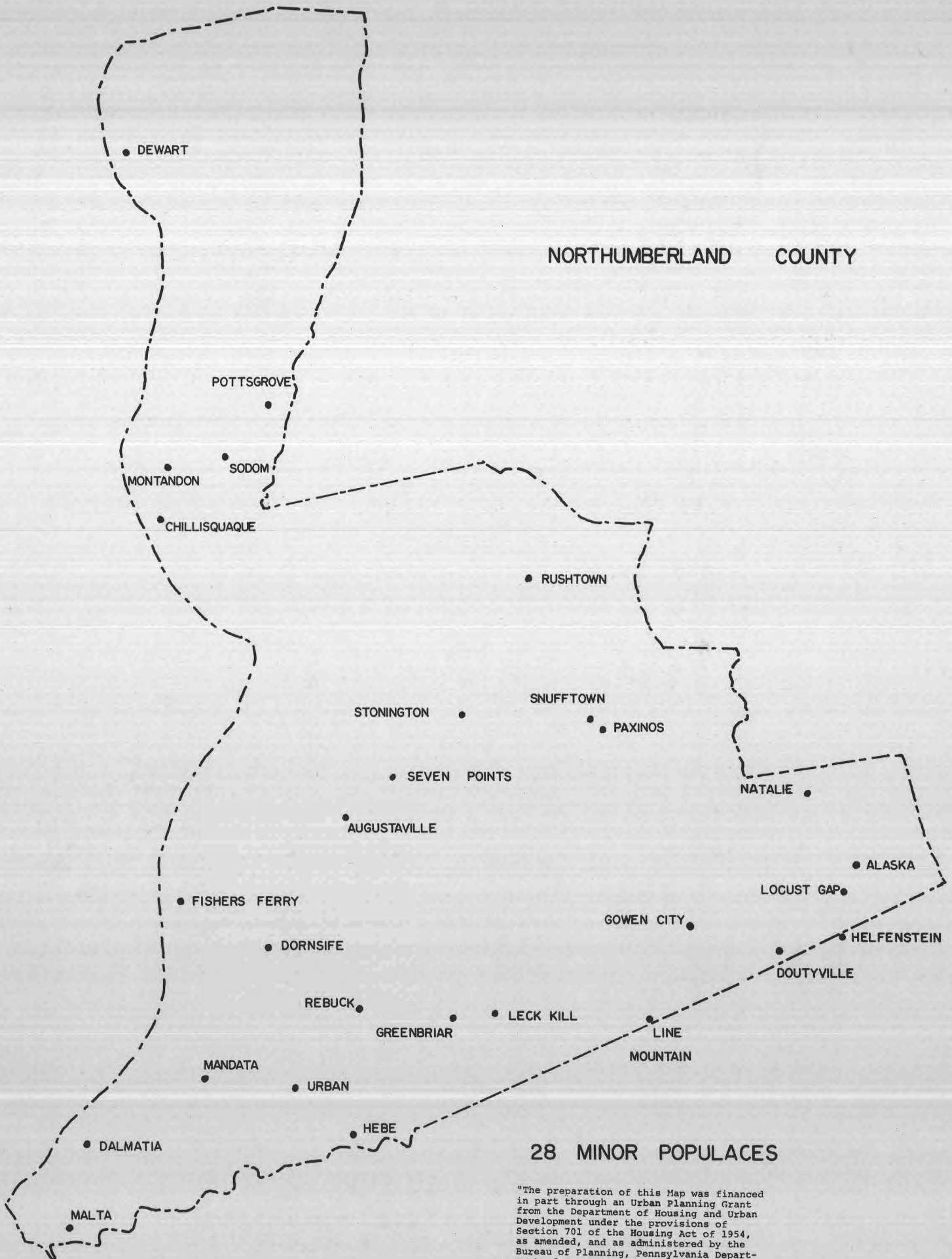
NORTHUMBERLAND COUNTY



15 MAJOR POPULACES

"The preparation of this Map was financed in part through an Urban Planning Grant from the Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954, as amended, and as administered by the Bureau of Planning, Pennsylvania Department of Community Affairs."

NORTHUMBERLAND COUNTY



28 MINOR POPULACES

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Rockefeller	1880
Ralpho	1883
Gearhart	1890

East and West Chillisquaque Townships, Upper Augusta and Lower Augusta Townships, and East Cameron and West Cameron Townships were formed by splitting earlier larger townships.

Northumberland County also contained a maximum of 13 boroughs. In 1950, Shamokin and Sunbury were chartered as 3rd class cities so that there are presently 11 boroughs, 2 cities, and 23 townships in Northumberland County. The boroughs were incorporated as follows:

Sunbury	1797
Northumberland	1828
Milton	1817
Watson town	1867
Snydertown	1871
McEwensville	1857
Shamokin	1864
Herndon	1901
Mt. Carmel	1862
Turbotville	1859
Riverside	1871
Marion Heights	1906
Kulpmont	1916

The Development of an Internal Road System in Northumberland County

INDIAN PATHS

The economic development and expansion of Northumberland County is based on the quality of the transportation system that connects towns and cities with major centers of commerce. Many of these arteries that pulsate with the flow of trucks and cars transporting commodities and people originated over the same routes as Indian paths. Generally Indian towns and villages were established near streams and rivers since water served the Indian as both a means of transportation and a simple means of providing water for personal use. Indian trails radiated from these towns, generally following the natural contour of the land, to arrive at other Indian villages often located hundreds of miles away. Trade and culture were diffused over these trails, sometimes from distances as far south as the Gulf of Mexico to distances as far north as Canada. The Indians of the Susquehanna Valley were no exception; corn, tobacco, potatoes, and other plants can be traced to the Mayan civilization. How long Indians have been in the Susquehanna Valley is speculative; current theory supports the existence of Indians here for at least 10,000 years. But new data and new theories evolve constantly. As long as new Indian sites are discovered and skillfully excavated, the search for man's existence in the evolutionary process will continue in Northumberland County easily providing a primary

source of information.

The migration of Indian tribes began in the 17th century when white colonists began arriving in the new world. The red man was forced to emigrate north and west, away from the area being rapidly settled in what is now Virginia, Maryland, and the Carolinas in an attempt to escape the white man's encroachment on Indian land. When William Penn began purchasing land by treaty in Pennsylvania the Indians were pushed even further north as they followed the natural flow of the Susquehanna River. By the beginning of the 18th century, Northumberland County and particularly the area at the forks of the Susquehanna River was fairly well inhabited by many diverse tribes. When tribal customs and language were analyzed, three unique Indian languages emerged, each based on linguistic relationships that represent separate tribes: the Algonquian, the Iroquois, and the Siouan. The Algonquian was comprised of two tribes: the Lenni Lenape (original people), also called the Delaware by the English and the Shawnee, both immigrants from what is now Delaware, South Carolina, Maryland and Virginia. The Lenape, already established as the most populous Indian nation in Pennsylvania, signed the original treaty with William Penn. However, because this tribe was made up of an extremely independent and fierce people who lacked a cohesive government, they also lacked the unity necessary to have defeated the migrating Iroquois in the early eighteenth century. With this defeat, the Lenape were allowed to continue their

normal life style, maintaining their culture and language but refraining from all land rights. These land rights were retained by the Five Nations Confederacy.

This confederacy, established by different Indian tribes or self-protection and preservation from the white man was dominated by the Iroquois, a group of tribes comprised of the Susquehannocks, remnants of the Andastes tribe who were prevalent in the Susquehanna Valley before the 18th century and the Cherokee, the Erie, and the Neuter Indians. These tribes united with, or were possibly forced into a coalition with the victorious Mohawks, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora tribes who were forced to emigrate when the white man invaded what is now New York and North Carolina. Finally the Siouan tribe, originally located in the Carolinas and Virginia, was comprised of the Tutelaw and Catawa tribes. Although their claims to land in the Susquehanna Valley were limited by their own small population, they too were conquered by the Six Nations and forced to live within the bounds of the confederacy. Instead of diverse tribes living in the Susquehanna Valley, the white man discovered a powerful and unified Indian coalition originally known as the Six Nations Indian tribes who were dedicated to establishing a peaceful but tenable relationship with the white man. As these tribes converged on Northumberland County and retained all land rights of conquered tribes, they established a domain that extended from the Vermont border to Lake Erie and Ontario and included the headwaters of the Allegheny,

Susquehanna, and Delaware Rivers. The Six Nations center of government, or council fire, was located at Onondaga, now Syracuse, New York. But despite their extensive domain, their political concepts emphasized tolerance rather than tyranny. Having attacked and conquered their enemies, the Iroquois allowed each conquered tribe to maintain its own standard of living and continue its home rule, but forced them to give up all land rights. By maintaining all land rights, the Iroquois refused to recognize any treaty that was signed on lands they now owned; for this reason, the Iroquois refused to recognize the treaty signed between William Penn and Chief Tammany of the Lenape tribe for land rights to Pennsylvania. The English and French realized that to retain a foothold in the new country, had to deal with a more unified and wholly cohesive Indian government that would only tolerate the white man's existence in their domain. Had the white man arrived even 100 years later, he probably would have found an eastern portion of the United States ruled exclusively by a powerful and unified Iroquois nation.

The Lenape or Delaware were allowed to continue to live at the Forks of the Susquehanna River at what they called Shamokin, then an area encompassing both banks of the Susquehanna River. In 1725 Shikellamy was appointed Viceroy to the Iroquois nation in charge of the Lenape tribe at Shamokin. From a small Lenape Indian village in the 17th century, by 1725 the village of Shamokin, now called Sunbury, was firmly

established at the intersection of the North and West branches of the Susquehanna River as a major Indian town is Pennsylvania. From here the Iroquois could travel up the north branch of the Susquehanna, through the Wyoming valley to Otsego Lake, where the west branch of the Susquehanna originates. From here to their council fire at Onondaga required only a short overland trip. Traveling up the West branch, the Iroquois could easily reach the Ohio valley through Canoe Place, now Cherry Tree in Indiana County. By traveling south, the Indians could reach the Chesapeake Bay at what is now Harve de Grace, Maryland, only a 115 mile canoe trip from Shamokin. From there tribes traveled as far south as Virginia, the Carolinas, and even Florida.

During the later portion of the 17th century and elaborate system of early roads began to evolve from simple Indian trails that would eventually evolve into today's elaborate system of super highways. But this evolution came slowly. The Indian trail that allowed for the passage of man on foot was widened and improved to allow for the passage of early missionaries and traders on horseback. When these bridle paths were widened and improved, wagons passed through the county, bringing settlers and soldiers. With the development of modern vehicles, many of man's highways still follow the old wagon paths. But much of man's modern highway progress was initiated more than 250 years ago by Indians who carefully planned and developed a series of paths that provided dry, level, and direct routes

through thickly wooded and often mountainous areas. Their paths remained dry because they followed river terraces above flood level or because they followed well-drained ditches. Their roads were as level and as direct as possible by following modest elevations through valleys, if possible, or at gentle inclines. But these roads were not easy hiking trails. Fords and creeks still had to be crossed and travel seasons still had to be determined since creeks and streams generally would flood in the spring.

Yet the complexity of the Indian path system usually allowed the traveler several routes to the same destination just as today's highway system allows. Both involved the same alternatives: time needed to complete the trip and distance covered. For instance a man setting out from the Indian town of Shamokin at the Forks of the Susquehanna for the Indian town of Tioga, now Athens, Pa., on the North Branch had a choice of 3 main paths: the Great Warrior's Path, the Shes-
equin Path, and the Towanda Path. Perhaps a fourth could be added, the Wyalusing Path, but according to early documentation, this path involved 36 crossings of Munch creek and could be recommended only in summer months. Yet each path provided a unique journey; the Great Warrior's Path often used by Conrad Weiser in his attempt to acquire land treaties from the Indians, ran up the north bank of the Susquehanna to the Wyoming Valley, crossed the Susquehanna at the mouth of the Lackawanna, passed under Campbell's Ledge, followed the east bank past Tunkhannock

and Wyalusing, recrossed the river to Queen Esther's Flats and entered Tioga at the junction of the Chemung and Susquehanna River. On this route the traveler passed many settlements and Indian villages that provided him with food and shelter - as well as talk with the principle men of the village - thus ensuring a leisurely route, longer than the other 2 but easier.

The Sheshequin Path followed Rt. 147 north to Otstonwakin (Montoursville). After crossing Loyalsock Creek, the traveler moved northwest from Montoursville to Lycoming Creek near Hepburnville. Following the creek to its source, then to Towanda Creek, north to Sugar Creek an Indian town of Sheshequin, now Ulster, a few miles below Tioga. The Towanda Path followed the West Branch of the Susquehanna to Muncy, then over the Allegheny Mountain to Hillsgrove, up Elk Creek and over the Burnet Hills to Powell, Monroe, Towanda, and Tioga. This was the shortest path and possibly was used by Susquehannock runners between Tioga and Muncy.

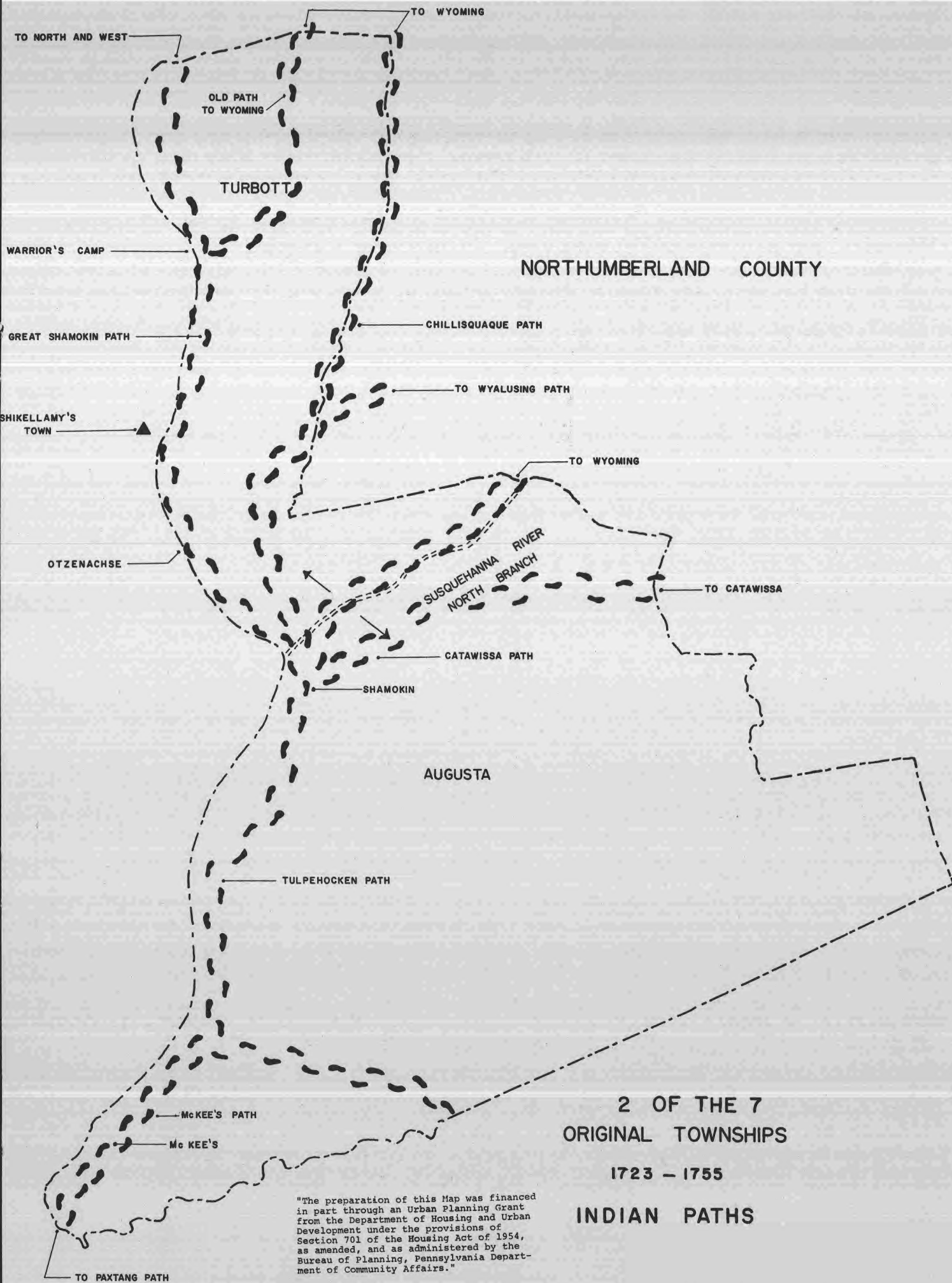
But despite this elaborate network of paths, few are possible to find. Most have been obliterated by farming, lumbering, present-day road making, housing, strip mining, and railroad building. This study merely attempts to define and generally estimate what paths existed, how they were used, and if present day roads were affected by them. However the Bureau of Land Records at Harrisburg can provide reliable information about Indian paths, since a tract of land was usually specified by the closest Indian path. But common sense also

applies; the Indians chose good trail country, such as the neutral ground between stream level, easy ascents up mountains, and avoidance of swampy ground. At first the early trails were used by chiefs, warriors, and hunting expeditions. But as the white man began to settle in Northumberland County, the trails that had originally been designed to establish trade and communication among Indian towns, now served as both the Indian's migratory routes and the white man's exploratory routes. As the Indians moved westward over the Alleghenies and into the Ohio valley, Moravian missionaries, traders, soldiers and settlers moved north and west into the Susquehanna Valley and Northumberland County in search of new land and new territory.

But before the Indian began his westward migration he had established as elaborate system of trade routes that connected much of Northumberland County. Besides using a canoe for travel on the river and streams, the Iroquois had designed overland routes that followed the natural contour of the land, covering natural stream beds, flat lands, and gently sloping grade levels over mountains. Many of these trails were 12 to 18 inches wide and about a foot deep. Indian runners were believed to be able to cover 100 miles in one day.

Generally Indian trails can be divided into 3 types of trails:

1) Trader's Paths 2) Warrior's Paths 3) Hunter's Paths. The Trader's Paths moved in an east-west direction, thereby providing natural routes for early settlers as they crossed



Pennsylvania's mountains. The Warrior's Paths traveled in a north-south direction; these were the common routes used by the Six Nations in traveling from central New York to the Carolinas. The Hunter's Paths were trails of lesser importance frequently used to intersect more heavily traveled routes.

Indian Paths Of Northumberland County

The Chillisquaque Path or the Hunter's Path

This path, although only a few miles long, ran from what is now the town of Northumberland over Montour Ridge to what is now Comly. Local tradition indicates this road existed quite early; a Reading Howell's map of Pennsylvania, 1792, indicates its existence. Furthermore this path served as a boundary when Montour county came into existence. Today a modern highway follows this course.

Charles Snyder, a noted Northumberland County historian, calls this "The Hunter's Path" and indicates that in early records it was referred to as the "Strawbridge Road" and adds, "Nothing of importance is associated with this path, as far as I can learn, except that by horse, or afoot, it was a shortcut into that region lying between the forks of the North and West branches of the Susquehanna."¹ Paul A. W. Wallace, in his Indian Paths of Pennsylvania, indicates approximate

¹Charles Fisher Snyder, "The Great Shamokin Path and Other Indian Trails which Radiated from the Forks of the Susquehanna", North'd. County Historical Society, XIV, (1944), 33-34.

route numbers so motorists can follow to retrace these paths.

From Northumberland, follow LR 49051 north over Montour Mountain to Chillisquaque Creek where the road detours one-half mile to the east. Within one mile, you will cross the creek and turn north. After crossing Limestone Ridge, drive in a north-northeast direction along the county line to Schuylers and north again to Comly.²

Named for the Indian town of Catawissa also known as Lapachke on's town, this village existed in 1756. Located at the mouth of Catawissa Creek near a ford across the Susquehanna River, the Catawissa trail connected Shamokin with Catawissa; from here Indian travelers could turn north and west by fording the Susquehanna River at the mouth of Catawissa Creek and continue up the Great Warrior's Path at the crossing of Fishing Creek to reach the Wyoming area now known as Kingston and Wilkes-Barre, giving the Catawissa Trail its nickname, "Short Trail to Wyoming". Settlers entered Northumberland County from the east: Presbyterians migrating into Rush Township and Methodists into the Augusta area near Kline Grove. Today the path in Northumberland County can be closely followed by traveling east along the Mile Hill Road, LR 49041 to Kline Grove. From here take LR 49045 to Union Corner and Pa. 242.

²Paul A. W. Wallace, Indian Paths of Pennsylvania, The Pennsylvania Historical and Museum Commission, Harrisburg, 1965, p. 34.

Great Shamokin Path

The Great Shamokin Path carried the Indian traveler north from the area known as Shamokin, in what is now Northumberland, along the east bank of the West branch of the Susquehanna River to what was then called Shawnee Creek, now called Chillisquaque Creek. Here Otzenachse, a Shawnee Town, was located at the mouth of the creek on the north shore; this town was abandoned in 1728 when the tribe moved west, establishing their town, Otzenachse, in Ohio, Indiana, Missouri, and Oklahoma. Pa. Route 14 now closely follows this path. The path continues north, to the place where Shikellamy formerly lived, just south of present-day Milton near Montandon and passed through Milton, continuing up the east side of the West branch of Pa. 405 to what is now Watsontown. Here the Warrior's Camp was located at the mouth of Warrior Run. Here the path forked; one branch continued to follow the river to a point outside of what is now Northumberland County to Montgomery; the other ran north along the river and Rt. 405 to Delaware Run and its headwaters. The motorist should take LR 49062 to the Lycoming-Northumberland County borders. From these points, the path headed west to Chinklacamoose (Clearfield); from here the path continued west to the Allegheny River at Kittanning.

Great Warrior's Path

This path carried the Indian traveler north-east from Shamokin (Sunbury), through Wyoming (Wilkes-Barre), Tunkhannock,

Wyalusing, Towanda, to Tioga (Athens). As the traveler moves south from Tioga to Shamokin, he comes to the mouth of Mahoning Creek at Danville and follows the north branch of the Susquehanna to Northumberland. The path closely follows Rt. 11.

Tulpehocken Path

The Tulpehocken Path runs between Shamokin (Sunbury) and Weiser's at what is now Womelsdorf on Tulpehocken Creek. Used by almost every traveler until the time of the Revolutionary War, the route served as the principle trail between the Delaware Nation's Council Fire at Shackamaxon, along the Schuylkill River and Shamokin. After the Delaware were conquered by the Six Nation's, the Tulpehocken Path served as the principle trail for English envoys who journeyed between Philadelphia and Shamokin in an attempt to secure signed treaties from the Six Nation's confederacy; for this reason the trail is often called the Shamokin Trail. This trail also brought Conrad Weiser to Shamokin in 1737, Count Zinzendorf in 1742, Spangenberg in 1745, and John Bartram and Lewis Evans in 1745 to the forks of the Susquehanna River. Beginning in Shamokin, the Tulpehocken Path crossed Shamokin Creek, ascended Shamokin Hill, ran south for about six miles over the highlands thereby keeping about a 2 mile distance between the trail and the Susquehanna River, to Mahonoy Mountain. The path is thought to have traveled towards the river by using Boile Run to ford

Mahonoy Creek, ascended the creek for several miles and descended to the Valley of Mouse Creek and continued to a point near Urban. The road ran east, along the slope of Hooflander Mountain, then turned sharply south at the east end of Fisher Ridge and crossed the Mahantango Creek to Klingerstown, in Dauphin County. Today the motorist can closely follow this trail by driving on Pa. 147 south from Sunbury to 225. Pick up LR 49009 at Urban to LR 49008 to LR 49007 to Klingerstown.²

McKee's Path

McKee's Path was established by Thomas McKee who then operated a trading post in what is now Dalmatia to connect his trading post with the Tulpehocken Trail and his land and second trading post in what is now McKee's Half Falls on the western side of the Susquehanna River in what is now Snyder County.

Other Paths that generated from the Indian Town of Shamokin Include:

Path along Shamokin Creek to Schuylkill Region

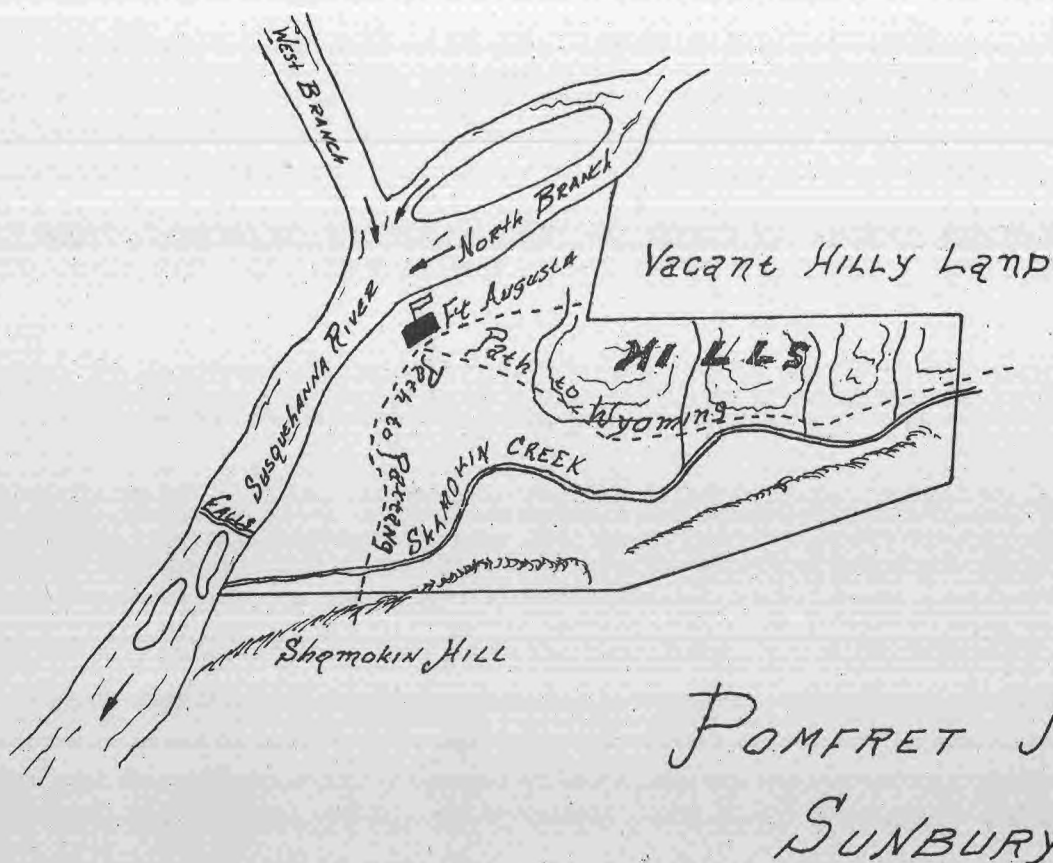
This path transported the Indian traveler to Schuylkill County and Philadelphia; this path is believed to have later been covered by the early King's highway and the Centre Turnpike that connected at Bear Gap. However this trail did not carry the traveler through any notable Indian towns or villages.

²Wallace, p. 163.

Paxtang Path

This path intersected the Tulpehocken Path outside of Shamokin and followed it to McKee's Path where it diverged to continue along the eastern side of the Susquehanna River to what is now Harrisburg.

Original sketch by Charles F.
Snyder



Charles Fisher Snyder, "The Great Shamokin Path and Other Indian Trails which Radiated from the Forks of the Susquehanna," Northumberland County Historical Society, XIV, (1944), p. 40.

ROADS

As the white man moved north and west over the Indian trails into the Susquehanna Valley, he displaced the Indian who was forced to move west, over the trails that had originally been designed to connect other villages and towns with his tribe. When the "New Purchase" in 1754 brought more settlers, missionaries, and soldiers into the Susquehanna Valley the Six Nations Confederacy attempt to halt this white migration by limiting available land proved useless. When the "Last Purchase" in 1784 procured all available land in the new territory, settlers poured into the county bringing with them wagons carrying their families and household furnishings. The Indian trails that had easily linked the Indian civilization in Shamokin with the white man civilization in Philadelphia no longer provided fast and efficient methods of travel for settlers arriving on horseback and in wagons. These walking paths were at first replaced by bridle paths for travel by horseback, next the King's highway for transportation of wagons and herds of animals, in the 19th century and finally highways for the mass transportation of cars and trucks in the 20th century. Each new type of road construction provided an even more efficient and faster method of travel than the previous one. But before any road improvement occurred, William Penn had visualized his new world as having well-built, efficient roads as far back as the late 17th century.

. . . surveyors shall consider what roads on highways shall be necessary to the cities, towns, or through the lands. Great roads from city to city, not to contain less than 40 feet in breadth, shall first be laid out and declared to be highways, before the dividing of the acres to be laid out for the purchaser, and the like observation to be had for streets in towns, and cities, that there may be convenient roads and streets, preserved, not to be encroached upon by any planter or builder, that none may build irregularly, to the damage of another. In this custom governs.

The earliest attempt at road construction was noted in 1757 at Fort Augusta by Colonel Burd, then the commanding officer stationed at Fort Augusta. In his journal he noted that he, Captain Shippen and a party of men had laid out and cleared a route around Shamokin hill in order to facilitate the transportation of provisions to the fort; Later he noted that the road was extended to the top of the hill. Although the road lead only a few miles from the fort and did ease the transportation problem, the increase was insignificant since the thick foliage of Penn's Woods prevented a speedy trip for settlers and their provisions. As more settlers streamed into the territory, better roads were necessary to transport the ever-increasing flow of traffic. In January 1769, some twelve years after the completion of Fort Augusta, the first legally established road by the provincial council was initiated. Originating in Reading, then the farthest outpost from Philadelphia, this road ran to Fort Augusta by incorporating the portion of the Tulpehocken Trail that was located about one mile north of Herndon. At Herndon provisions for the fort could be loaded on rafts and transported up the Susquehanna.

Beginning in Reading the road was to progress through Sinking Springs, Tulpehocken, Pine Grove, Hegins, and Klingerstown to the mouth of Mahoning Creek, about one mile above Herndon. Later this road came to be known as the Tulpehocken Road.

However, in 1757 the English did not possess this part of the territory. The Albany Treaty of 1754 that allowed the white man access to new land in the west had only recently been signed and the "Last Purchase" that placed all the lands along the Susquehanna River in the white man's hands had yet to be signed. Therefore in 1769 the land at Fort Augusta still belonged to the Six Nations since it had not been included in the "New Purchase". During the French and Indian War the Six Nations had only authorized the construction of a fort at the forks of the Susquehanna, not the purchase of that tract to the English. Consequently the Indians refused to permit the construction of a road from the end of the Tulpehocken Road above Herndon to Fort Augusta, a refusal probably based on their fear that a road would only increase the settlement of their territory.

When the French and Indian War ended in 1760 in Montreal, Fort Augusta's use as a military outpost was ended. Instead the fort served two purposes: 1) as a trading post for the Indians still residing at Shamokin, and 2) as a place of safety for the settlers from the hostile Indians who insisted the white man return to his own territory. The trading post concept was designed by the Provincial Assembly and passed as

the Indian Trade Bill in 1757 to protect the Indians from abuses in trade such as selling them supplies at an unfair price. This action proved to be a feeble attempt by the early government to gain the Indians confidence and trust, a rouse that worked because, in 1759, Teedyuscung, the Delaware Indians' King, agreed to the proposal of laying out a road from the inhabited parts of the province to Fort Augusta, an agreement ill-made since the Delaware Indian tribe had given up all claims to the Susquehanna Valley to the Five Nations long before the arrival of the English. As the construction of the road progressed, wampum, a belt made of shells, was sent to Chief Shikellamy's son John, who was viceroy to the conference of Six Nations that was held at Onondaga requesting permission to construct a road under the pretext of supply goods for the Indians at the fort. The government project was refused. What was to become the Tulpehocken Road was not begun until after the "New Purchase" in 1769.

1) Tulpehocken Road and Sunbury-Harrisburg Road. The road began at the east end of Penn Street in Reading and followed the old Tulpehocken Indian trail from Shamokin to the head of the Delaware bay where it passed through Tulpehocken. This road was not completed until 1785, one year after the "Last Purchase". Six years later, in 1791 the Provincial Council approved all navigable waters and roads, including the construction of bridges between Sunbury and Reading. They declared this road to be a King's Highway,

thereby publicly declaring it as a first class highway capable of accommodating all people, as opposed to a turnpike that accommodates only those capable of paying a fee, and wide enough to accommodate all kinds of traffic, including heavy wagons and stage coaches.

Earlier in August 1782, the court of Northumberland County approved the connection of Sunbury with Reading by incorporating the Tulpehocken Road built in 1769 between Reading and Herndon, with a new bridle path leading from the Mahantango to Sunbury. When the road was confirmed in the May sessions of Northumberland County court, it originated at the jail door in Sunbury, crossed Shamokin creek, passed through what is now Augustaville, over Mahony Mountain, through present-day Dornsife, crossed Queen Briar creek and ended at the Tulpehocken Road. Because of dissenting opinions, the road was not confirmed although a road from Harrisburg eventually intersected this route. It came to be known as the Sunbury-Harrisburg Road. In 1820 the Legislature appointed commissioners to lay out a state road from Lancaster to Sunbury. This road entered Northumberland County near Pilow, passed through Dalmatia and Dornsife and followed the original road of 1782 into Sunbury. Eventually this road came to be known as the Tulpehocken Road.

2) The Great Road: a King's Highway

Meanwhile, in 1770, a good wagon road was being planned that connected Ellis Hughws' saw mill, located on the navigable

part of the Schuylkill River about 30 miles above Reading, with Fort Augusta. The petition, devised in 1767 by such men as Ellis Hughes, Benjamin Loxley, Edward Shippen, Jr., Samuel Wallis, and William Scull, suggested the opening of this land communication by providing a short and easy land access to the navigable waters of the Schuylkill River that flows through Philadelphia. A board consisting of George Webb, Jonathan Lodge, Henry Miller, Issac Wallis, and Job Hughes was appointed allowing any 4 of them to layout the road. Under the guidance of Benjamin Lightfoot, the road began at Ellis Hughes' sawmill, entered Northumberland County near Locust Summit near the Merriam colliery, crossed Locust mountain opposite Mt. Carmel, passed through the southern part of Alaska cemetery and forded Shamokin creek, where it met the present road from Shamokin to Mt. Carmel. It followed this route to Maysville, down Coal Run Hill near the corner of Commerce and Pearl Streets in Shamokin where it ran diagonally across two blocks to the corner of Sunbury and Shamokin streets, then followed the present highway between Sunbury and Shamokin. At Tharptown the road followed the right bank of the creek to Weigh Scales where it forded the creek and entered Irish Valley in order to remain on dry ground. It followed the valley and then began the ascent of Bear Hill. From the top of the ridge it followed Fiery Run Hollow to Stonington, where it continued along the present highway. At Sunbury it again forded Shamokin Creek, near the foot of Reagan Street, and followed the hill

to the bank of the Susquehanna near the northwestern corner of Fort Augusta.

This road came to be known as the Great Road, often indicated in original land surveys, and provided access to the land included in the "New Purchase" for the many emigrants. As a King's Highway, the Great Road merely indicated its reliability for all types of traffic, as opposed to a bridle path that would prove inappropriate for wagons. But mostly the term "King's Highway" suggested an easy access between frontier outposts for soldiers, much like the road between Fort Augusta and Reading. The rapid influx of settlers, as well as soldiers who traveled along this route from the time of its completion in 1771 to one year later in 1772 provided for the erection of Northumberland County.

3) Centre Turnpike

The Great Road established communications between Sunbury and Philadelphia throughout the remainder of the 18th century. By the beginning of the 19th century the Act of the Legislature provided for the construction of the Centre Turnpike, an alternate route to the Great Road that connected Reading with Sunbury. The Legislature, by Act of March 25, 1805, authorized the formation of a company entitled "The President, Managers and Company of the Centre Turnpike Road, leading from Reading to Sunbury, to receive subscriptions to the stock of the company and to build the road, which was to be 18' in width, except

on mountains, where it shall be not less than 14' in width. The Turnpike was reported to be completed by its superintendent, Thomas Grant, on August 4, 1811, and in 1885, the last toll was collected in this county on the section between Paxinos and Mt. Carmel. For the first time a road was to be composed of wood, gravel, pounded stone, or some other hard substance in order to insure an evenly compacted surface for travel. In addition bridges were built and, like the road, guaranteed to be maintained for all forms of travel. These requirements were stipulated by the original stockholders who included: Joseph Priestley and John Cowden of Northumberland, Charles Hall of Sunbury, Dr. James Dougal of Milton, Daniel Montgomery of Danville and Willima Hepburn of Williamsport.²

The cost for the use of the road varied with whatever was being transported; tolls were paid at five mile intervals at a cost of: 1) a score of sheep = four cents; 2) score of hogs = six cents; 3) horse with no rider - twelve cents; 4) horse with rider = three cents; 5) 2 wheeled cart with 1 horse = six cents; 6) cart with 2 horses = nine cents; 7) 4 wheeled stagecoach, 1 light wagon with 4 horses = twenty cents; 8) sleigh 1 seat = 2 cents; 9) sled with horse on wagon with wheels not exceeding 4" = four cents; 10) any cart or wagon pulled with oxen - 2 oxen - 1 horse and rate applied as above; 11) with ass (1 Mule) or 1 horse and rate applied as above. Road signs were placed at all intersections of public roads to insure direct routes and milestones were placed to indicate distance covered. The

²Charles Bell, History of Northumberland County, (Chicago: Brown, Runk & Co., 1891), p. 306. Reprinted 1975.

road was guaranteed to be started 4 years after its inception and work was completed within 10 years. By the end of its construction, the Centre Turnpike was the longest road to be chartered and completed in Pennsylvania as well as the most expensive because of the large number of miles covered over mountains. The actual cost of over 27 miles of mountaneous terrain amounted to \$3500 per mile.

The course of this road can still be determined by milestones that are still standing. Beginning on Penn Street near Fourth in Reading on the Schuylkill River to Pottsville, a distance about 35 miles. To New Castle, at the foot of Broad Mountain, west along the northside of the mountain to Fountain Springs. Today this section of the road can be seen by the motorist between Fountain Springs and Frackville on the northside of the mountain. The road then entered Ashland, passed over Locust Mountain and entered Mt. Carmel at the southeast corner of the borough. The road proceeded through Mt. Carmel in a northwest direction to Shamokin Creek at Vine Street, then over Red Ridge, over the southside of Big Mountain to Bear Gap where the first toll house in Northumberland County was located. From there the road ran over Shamokin Creek, through Paxinos, then over the present Rt. 61 to Sunbury where another toll house was located. In Sunbury the road passed over the present Highland Avenue, over Market Street. Square milestones were located in Northumberland County and numbered 50-75. Between Sunbury and Shamokin #64-72 can

be still seen on the right hand side of the road going toward Sunbury.

Although travel on the Centre Turnpike was heavy, the road did not prove to be a money-maker. The cost for its construction, including toll houses was \$208,000. This initial cost, plus the annual cost for maintenance, proved to be too expensive to compete with two new modes of transportation: the Pennsylvania Canal and the railroads. The opening of the Pennsylvania Canal in 1829 and the advent of the steam engine on the Danville and Pottsville Line in August 1838 superseded the necessity of rough travel over roads. By 1885 canals and railroads had been constructed often paralleling the Turnpike, thereby removing much of the heavy, bulky freight, especially items such as lumber and coal that had been hauled on the Turnpike in wagons pulled by 4-6 horses. But these wagons were slow, especially in difficult weather; on good days they would only average 10-20 miles per day, usually stopping at such noted inns in Northumberland County as the Weaver Hotel, Sunbury; Daniel Stambach's, Paxinos; Phillip Stambach's, Bear Gap; Riffert's, Mt. Carmel; and Fountain Springs on Broad Mountain.

But before new modes of transportation threatened the decline of the Centre Turnpike, its beginnings had been bright. Originally Joseph Priestley, Thomas Cooper, and John Binns, all leading 18th and 19th century political activists and all living in Northumberland, had generated the idea of securing the State

Capital of Pennsylvania in Northumberland. To do so, Theodore Burr had completed a bridge linking Northumberland with Sunbury; by doing so they had established a great highway linking Northumberland with the well-populated areas of Reading and Philadelphia. In 1810 the Legislature, then in session in Lancaster, was taking action on changing the location of the Capital. When the contest was finally narrowed to two towns, Northumberland and Harrisburg, the support for both was evenly distributed. In the final vote, Northumberland lost by one vote, the member from Sunbury having voted for Harrisburg, undoubtedly an indication of the rivalry that persisted then and probably continues to this day. Even a stagecoach line, one of the first in the county, had not influenced the capital decision; on May 4, 1808, Daniel Lebo advertised in the Republican Argus:

Daniel Lebo, begs leave to inform the public, that after the first day of October next, his Stage will leave Reading every Wednesday afternoon and arrive in Hamburg, alias Carterstown, the same evening; from whence it will proceed on Thursday morning, and arrive in Sunbury, on Friday at 12 o'clock. On the Saturday following, it will return to Reading, to arrive there on Sunday afternoon. Passengers going to Philadelphia are requested to take notice, that Mr. Coleman's Stage will leave Reading every Monday morning for that city. September 23.²

But even with the loss of the state Capital in Northumberland County, the need for the establishment of communication between this part of the county and the rest of the country

²Republican Argus, Wednesday May 4, 1808, Vol. 1, No. 29, p. 4, Col. 4.

was even more apparent. Still other roads were to make an impact in opening up the Susquehanna Valley to settlers.

Minor Roads

Soon after the completion of the Centre Turnpike in 1811, another turnpike was incorporated on January 21, 1813 to connect the county seat of Danville in Montour County with Reading by intersecting the Centre Turnpike near Bear Gap. Other roads that originated in the 18th century and criss-crossed Northumberland County in the 19th century included:

1. Sunbury to opposite Mahoning Creek, November 1774.
2. Catawissa to Gravel Run at Klingerstown, May 1774.
3. Northumberland to Lycoming Creek, May 1787.
4. Starrett's mill to Lycoming, May 1786.
5. Ft. Augusta to Mahoning narrows, May 1773.
6. Wallis' Mill to Northumberland, August 1786. This road also provided the boundary line between Northumberland and Montour Counties.
7. Muncy to Montgomery's Mill, August 1785.

Unique Methods of Transportation

Pennsylvania Canal

The construction of the Pennsylvania canal heralded a new means of transportation that might have displaced all earlier methods of transportation and, had it been successful, might have retarded all modern means of transportation. The canal was undertaken by the act of April 9, 1827 when the canal commissioners located and put under contract a canal they envisioned would form part of the longest chain of canal navigation in the world. Looking at the Susquehanna River in a rather unique light, the commissioners saw the Susquehanna to be

. . . in nature, what is known as the Chesapeake Bay, is merely a continuation of the Susquehanna and in strictness, James River, York River, Rappahannock River, and the Potomac, are its tributaries. In this view the Susquehanna River is 65,000 square miles, including a portion of the richest lands, and the most populous and, historically cultivated land in the United States.¹

With this concept firmly impounded, the commissioners believed that "there will be through the heart of the two great states of Pennsylvania and New York an unbroken line of internal navigation uniting the Chesapeake Bay with Lake Erie, Lake Ontario, Lake Champlain and the Hudson River."² The Pennsylvania Canal had to be unbeatable.

¹Report of the Committee of Ways and Means Relative to the Completion of the North Branch Canal, Harrisburg, Pa., L.G. McKinley & M.G. Lesaire, Printers, 1949.

²Ibid.

The Canal commission had been appointed in 1789 as an Act of Assembly to determine if the Delaware, Schuylkill and Susquehanna Rivers could be made navigable. Timothy Matlack, John Adlum and Samuel Maclay were appointed to work along the Susquehanna, Reading Howell, Frederick Antes and William Dean on the Lower Susquehanna and Schuylkill Rivers. The dream to connect these interior waterways with the sea had been a dream visualized by William Penn in 1690, a dream that led to Pennsylvania's attempt to establish a system of inland waterways that would be more elaborate and more comprehensive than any other state, even Europe. This feeling of competition, especially of New York's Erie Canal, led to the sudden incorporation of: 1) Susquehanna and Lehigh (Nescopeck), Columbia, Northumberland and Luzerne Counties on March 25, 1826 2) the Northumberland Canal and Water Right Company, Northumberland County on April 5, 1826 3) the Sunbury Canal, Northumberland County on April 10, 1826 4) the Shamokin Creek, Northumberland County on April 14, 1827. But not all of these projected canal systems were built. Many proved to be impractic , most lacked financing, and the extensive railroad construction that began in the middle of the 19th century wiped out the idea of an elaborate water route almost before it began.

The Pennsylvania Canal was the first canal to be constructed entirely by public funds. With its inception, citizens in the northern and interior counties of Pennsylvania placed many of their hopes for economic improvement with the completion

of the canal system along the Susquehanna River that would provide easy access to urban areas for selling of natural products like:

- 1) Anthracite coal from the Wyoming, Lackawanna and Northumberland Counties,
- 2) Iron - pig iron and cast iron furnaces from the Susquehanna and Juniata Valleys,
- 3) Bituminous coal,
- 4) Lime,
- 5) Merchandise - produce and miscellaneous freight,
- 6) Descending tonnage
 - a) Lumber - from northern counties of Pennsylvania, including Northumberland, and those of New York bordering on the Chemung, Conchocton and Canisteo Rivers,
 - b) Gypsum - plaster from Cayuga and salt from Syracuse, Salina, et al.,
 - c) Miscellaneous freight, produce, merchandise based on natural and artificial resources of the country through which the canal passes and the immense chain of inland navigation of which it forms a central and uniting link.

This need for a means of transportation in order to establish an economic base for these previously separated counties that had only primitive means of distributing their products, led to the establishment of six divisions of the Pennsylvania canal:

1) Eastern division

Traveled from Columbia to Duncan's Island, a distance of $42 \frac{3}{4}$ miles. This division had ten lift locks, two guard locks, each 100 feet long and $17\frac{1}{2}$ feet wide. At Clark's Ferry a dam 1998 feet long and 332 feet above tide was constructed, as well as a wooden bridge with double towing path.

2) Susquehanna Division

This division stretched 39 miles along the west side of the river to the end of the bridge at Northumberland with 3 miles of slackwater. The Shamokin Dam, located directly below Sunbury, was 9½ feet high, 2783' in length, chute was 650 feet long and 62 feet wide to allow for the passage of rafts, arks, and river boats. The original cost of the dam alone was \$82,500. In this division 2 branches existed:

- a) North Branch - connected Northumberland with Nanticoke, a distance of 55½ miles with 7 lifts and one guard lock.
- b) West Branch - Connected Northumberland with Muncy, a distance of 23¼ miles.

3) Lycoming Division

Traveled from the head of Muncy Dam to Bald Eagle Creek, a distance of 31 canal miles with 10 miles of slackwater made up of 7 dams, 12 locks, and a lockage of 80'.

4) Juniata Division

Traveled from Huntingdon to 352' above Philadelphia, a distance of 89 miles. This division coursed over a difficult mountaneous section, for that reason 35 lifts, 3 guarss, 1 outlet, 3 river locks - each 15 x 90' plus lockage of 251¼' were required. The cost of this division was \$2,490,290. 13½.

5) Frankstown Division

Traveled from Huntingdon to Hollidaysburg a total distance of 38 miles - 22 miles of canal and 16 miles of slackwater with 14 dams, 6 aqueducts, 43 liftslocks, and 331' lockage.

6) Portage Rail Division

This division represented a proposal made to tunnel through mountains for a distance of 4 miles. The idea was abandoned since tunneling was not an economically feasible solution. Instead a method had to be devised to transfer boats to railroad cars and then hoist these cars over 10 inclined planes from Hollidaysburg on the Juniata River over the mountain to Johnstown on the Conemaugh River, a distance of 37 miles. At the crest of the mountain, canal boats were 2332' above the tide. This unique and enormous project was completed in 1883.

A description of such an ark journey over a mountain remains:

In October 1834, this portage was actually the means of connecting the waters of Eastern Pennsylvania with those of the Mississippi: Jesse Chrisman from the Lackawanna area, a tributary of the North Branch of the Susquehanna, loaded his boat named "Hit or Miss" with his wife, children, beds, and family accommodations, with pigeons and other livestock and started for Illinois. At Holidaysburg, where he expected to sell his boat, it was suggested by John Dougherty, of the Reliance Transportation Line, that the whole concern could be safely hoisted over the mountain, and set afloat again in the canal. Mr. Dougherty prepared a railroad car calculated to bear the novel burden. The boat was taken from its proper element and placed on wheels, and under the superintendence of Major C. Williams (first man to run a boat over the Allegheny Mountains), the boat and cargo at noon the same day began their progress over the rugged Allegheny. All this was done without disturbing the family, arrangements of cooking, sleeping, or any other normal daily habits. They nested at night on the top of the mountain, like Noah's Ark on the Ararat, and descended the next morning into the Conemaugh River, and passed into the Mississippi and sailed for St. Louis.³

Of these six divisions, the Susquehanna Division refers primarily to Northumberland County. Simon Guilford was directed as engineer, to estimate the cost of construction on the Susquehanna Division. He estimated that the cost on the eastern shore of the Susquehanna was \$1,018,758 while along the western shore the cost was only \$472,298, a factor that undoubtedly influenced canal construction of the western shore. The Shamokin Dam, located at "The Shamokin R ffles" directly below Sunbury, was constructed in 1829 when this division of the canal was also constructed. 9½ feet high and 2783 feet long, the dam also provided a chute 6.2 feet wide which provided a

³Edwin Charles, Canals and Canal Lore, Northumberland County Historical Society. Proceedings, I, May 1, 1929, p. 106.

channel for such downriver traffic as rafts, arks and river boats. Shamokin Dam was only one of a series of dams located at 30, 40, and sometimes 60 mile intervals that provided the water necessary to fill the canals and float the boats. The dams also provided slackwater so that canal boats could be towed across the river by using either mules walking over a walkway of the bridge, such as at Northumberland and Clark's Ferry or steam boats of Sunbury.

The operation of the canal included a series of locks for the transfer of canal boats. At Northumberland, for instance, boats were loaded for trips at the "basin" that extended south and west of Water Street from the outlet lock, just off the West Branch bridge near Duke Street. Here the weigh-lock, located parallel to the outlet lock measured the amount of water displaced to arrive at the cost. Official tolls, established by the Board of Canal Commissions on December 18, 1829 included

<u>per ton - per mile</u>	<u>cents - Mills</u>
On flour & fish, salted beef & pork butter & cheese, beer & cider	2.0
On farm products which are not separately specified	2.0
On carts, wagons, sleds, plows, & farm implements, tools for the personal use of the owner if they accompany the owner	1.5
On household furniture	2.0
On plaster of Paris	2.0

<u>per ton - per mile</u>	<u>cents - Mills</u>
On salt	2.0
On iron ore	1.0
On bar iron & broken casting	1.5
On casting, Blooms & guaged iron	2.5
On bars, rolled & cut iron	3.0
On sand, loam, ground, gravel, bleached ashes, & manure	0.7½
On bricks, chalk & stone, in the rough on partly cut	1.0

After a boat was weighed and the toll paid, it was towed across the West Branch by mules walking along the mule-way, a kind of walkway over the bridge with an outer rail to prevent the mule from being pulled into the river. After leaving the bridge the driver and the pilot had to maneuver the boat behind and to the right of the stone headwall, known to the river men as "the nigger head," a term referring to the way in which a headwall is constructed. After turning to the northern end of the berm bank, the mules continued towing the boat on the west side of the canal for another mile and a half to Winding Bridge where the Ferry House was located. Here a break along the berm bank allowed boats to enter and leave the canal to Sunbury. The driver heading downstream had to drop his tow line to allow the mules to cross the bridge on the east side, walk over the rope and under the bridge to continue down the tow path on the east side of the canal.

In addition to the exterior problems of canal boating, the actual day-to-day living accommodations also had to be dealt with. Edwin Charles gives a rather unique view of daily living habits on a canal boat. Rings, cleats, chocks, and rudder all made up the boat proper. The boat itself was furnished with rigging that consisted of towing line, stern line, poles, pumps, feed and provision chests, water barrels, buckets, feed troughs, nose baskets, splasher, fenders, headlight, and cabin equipment. Some boats operated with steam power, but most used mules and horses that traveled about 2-3 miles per hour. The crew consisted of two men and one boy. The captain, usually the boat owner, was the sole authority, taking charge of both the crew and the paper-work. He issued the orders and maintained the boat's business. The bowsman was the second mate; the boy was the driver of the mule team. Often the captain's family made the trip and acted as bowsman and boy. Living quarters on the canal boat consisted of about a 12' square floor space.

A typical day on a canal boat started early; at about 2:30 A.M. the captain and crew started for the stables to feed and curry the mule team. After they were harnessed, the driver hitched them to a tow-line about 75-90 yards in length. The bowsman lighted the "nighthawk" (light), cast-off the moorings and took his place at the helm to guide the boat. The "go ahead" was given and the driver and team began to walk. At

daylight breakfast was served. The one crew member who remained on board prepared breakfast and ate first. The steerman ate next and finally the driver, who cleaned up the breakfast mess and nested. In the early days of the canal, the mule team usually stopped to feed; later feed bags were adapted. When passing boats each team took its own left. The outside team stopped to allow the inside team to walk over the tow lines. When passing a lock a horn signal was given about a quarter of a mile from the lock. When the lock was ready the boat was towed into it and the chamber closed. The boat was then lowered or elevated, depending on the depth of the canal; the gates were opened and the boat moved on. At about 9:30 P.M. the boats were moored and the mules unharnessed and stable.

After eating the crew retired until the next day. But despite the romantic life on the canal, a trip was long and hard. The Schamokin Canalboat, a Sunbury local newspaper, printed a story of a typical trip. The canalboat "Sunbury" left its anchorage in the basin at Sunbury for a trip to Philadelphia on July 29, 1830. It arrived in Philadelphia on August 11, 1830. On its return trip, the "Sunbury" anchored at Middletown on August 26 where, because of breaks in the Pennsylvania canal, it had to remain until October. On October 11 the boat arrived in Harrisburg and finally, on October 29, the "Sunbury" arrived in Sunbury having taken a full three months to travel to Philadelphia and back, a distance of about

150 miles. On a similar trip the "Sunbury" took two months to travel only 33 miles because of breaks in the canal.⁴

But other problems besides time seemed to plague the canals. According to several newspaper accounts, political events delayed the building and hindered the repair of the canal that had initially been built entirely by manual labor, surely a feat by itself. Speculative land sales resulted in the lack of capital to finance its construction. Labor contracts that were to have been awarded to Northumberland County residents were won by New York City immigrants who caused riots because they wanted better pay, then walked off the job.

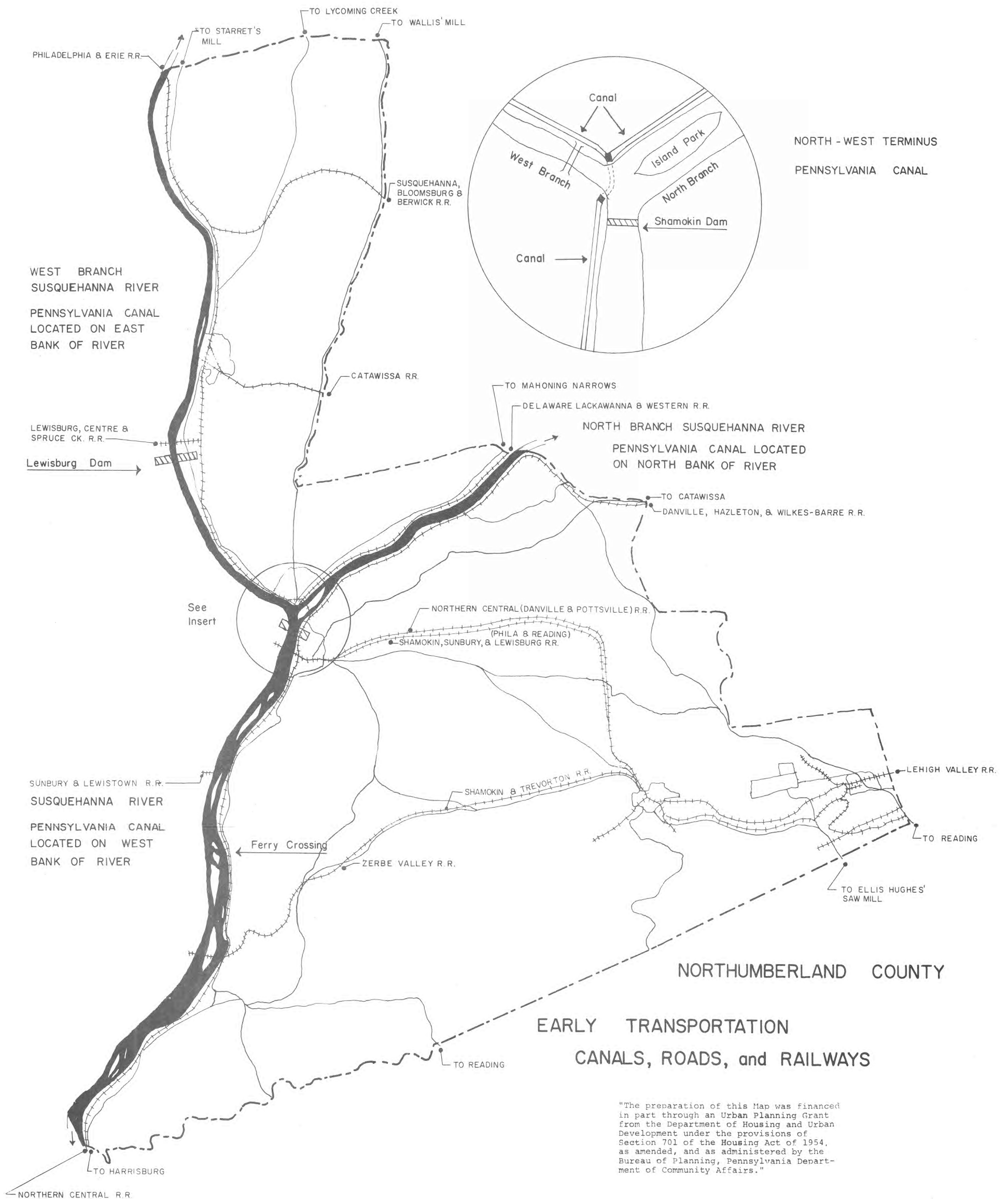
But even in 1838, only 10 years after its inception, the canal had been rendered useless. The Sunbury Gazette indicated that such a mismanagement of public funds had rendered the canal between Northumberland and Duncan's Island little better than a dry ditch. The navigation for the week of August 18, 1838 had been entirely stopped because of the leaky condition of the Shamokin Dam. The same thing had happened in the summer of 1837 and, the newspaper indicates, will probably happen in the coming summers.⁵ The canal was doomed. The Northern Central Railroad was building along the east shore of the Susquehanna, finally reaching Sunbury in 1858; the

⁴Schamokin Canalboat, Sunbury, Pa., Nov. 6, 1830, p. 3, Col. 1. Reprinted from German.

⁵Sunbury Gazette and Miner's Register, Sunbury, Pa., Aug. 18, 1838, p. 1, Col. 1.

Sunbury & Erie Railroad was building north and west to Williamsport. The advent of the railroads, coupled with the entire initial cost of the canal system in Pennsylvania of \$24,000,000 that never showed an annual income of over \$700,000 in any of its 30 years led to its doom. By 1841 the State of Pennsylvania's debt exceeded \$42,000,000 on which the state defaulted, even on the interest of the bonds. By 1858 the railroads completely swallowed the canal system when the Sunbury and Erie Railroad purchased the Susquehanna and Lycoming divisions for \$3,781,250. In April 1901 the water was finally drained from the canal at Selinsgrove. The Pennsylvania Canal System that was to have been part of the system connecting the Great Lakes with the Chesapeake Bay had died its own natural death.

Yet the canal had served some purpose. Charles Dickens, in his American Notes tells of leaving Harrisburg for the west aboard an Express Packet Boat on March 25, 1842. The caskets of two presidents who died in the White House, William Henry Harrison in 1841 and Zachary Taylor in 1850 were both carried on the Pennsylvania Canal. Yet time has almost obliterated remnants of the canal system although today, renewed interest has sparked the reconstruction of some portions of the canal system that remains, even to today, one of the most unique engineering feats in the country.



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TRANSPORTATION

RAILROADS

Today Northumberland County is served by only two railroads, Con Rail (Consolidated Railroad Corp.) and Delaware and Hudson. Interestingly, before April 1, 1976 rail service was provided by neither of these roads as the county was served by the Penn Central, Erie Lackawanna, and Reading lines. These were all bankrupt and not reorganizable so to preserve rail service they were all merged into Con Rail. The Delaware and Hudson purchased the former Penn Central tracks between Wilkes-Barre and Sunbury to preserve a southern outlet and to keep some degree of rail competition in the area.

It was not always so. There were a number of local railroad companies who built the lines in Northumberland County and operated them for several years before they were merged into larger systems. By the beginning of the Twentieth century the number of railroads serving the county had dwindled to only four: The Pennsylvania, the Reading, the Lehigh Valley and the Delaware, Lackawanna and Western. These would remain intact until 1959 when the LV line into Mt. Carmel was abandoned; in 1960 the DL & W was merged into the Erie Lackawanna and in 1968 the Pennsylvania became part of the Penn Central.

Pennsylvania

The first railroad project in Northumberland County was the Danville and Pottsville. Initial meetings on this line were

held in Pottsville as early as 1825. There were three possible early routes - to Sunbury and/or Danville, or to Catawissa. Eventually the route to Sunbury was chosen because it was felt that it had more potential local traffic and it passed through the Mahanoy Valley where there were known coal resources. In fact, some of these coal lands were owned by Stephen Girard of Philadelphia and it was his investment which brought about the construction of the road. The Danville and Pottsville was incorporated on April 8, 1826. The line was surveyed in 1828 by the famous engineer Moncure Robinson.

Construction was started in December of 1832 from both termini. The entire line between Sunbury and Pottsville required mine inclined planes to cross the mountains. This was to prove the bane of the company and the two sections never were joined.

The western end of the line from Shamokin to Sunbury was completed on August 15, 1838, a distance of 19.8 miles though the section to Paxinos had opened in 1835. The eastern section from Pottsville to Ashland was also finished the same year, but the gap between Shamokin and Ashland was never closed. Two locomotives were acquired but proved to be too heavy for the track and horses were used as motive power until 1852.

In 1851, this western section of the line was reorganized as the Philadelphia and Sunbury which laid new rail in 1852 to enable locomotives to resume operation. In 1855, the line was extended to Mt. Carmel, but it failed and was reorganized

as the Shamokin Valley and Pottsville in 1858. In 1863 this line was taken over by the Northern Central Railroad and thus became part of the Pennsylvania system. It operated for many years as the Shamokin branch of the Pennsylvania and hauled much coal and iron ore. It remained intact until the advent of Con Rail when sections are to be abandoned and served from the parallel Reading line.

The attraction of Northumberland County coal was the impetus for promotion and construction of the first line into Northumberland County from outside. This was the Northern Central Railroad which also traced its heritage back to the early days of railroading in this county. The line was chartered in 1828 as the Baltimore and Susquehanna with the purpose of securing some of the hard coal traffic for the port of Baltimore and to provide a faster route than the roundabout canal route for domestic coal. Construction was begun in 1829, but it was not until 1838 that the first section of line from Baltimore to the Maryland line was opened. It was completed into Pennsylvania at York in 1840. In 1851 the line reached Lemoyne, opposite Harrisburg.

Despite financial difficulties, it was decided to construct a line from Lemoyne to Sunbury to tap the coal traffic and to connect with the Sunbury and Erie which was planned to connect to the Great Lakes. The Susquehanna Railroad Co. was organized to carry out this construction in 1851. The line was opened

to Port Trevorton (via the Trevorton bridge to be described later) on July 24, 1857 from whence canal boats were used to Sunbury. Sunbury was reached by the railroad on June 28, 1858 and Northumberland County was finally tied into the railroad network of the country. The line became the Northern Central in 1854. After early financial difficulties, the line became extremely profitable during the Civil War and was able to double track its line from Harrisburg to Sunbury. Shortly before the war it was leased to the Pennsylvania but never went out of existence as a separate company.

At Sunbury, the Northern Central connected with another pioneer line, the Sunbury and Erie, later the Philadelphia and Erie. This line was authorized as early as 1836 to give Philadelphia a connection to the Great Lakes in competition with the Erie Canal. The necessary finances could not be raised until 1852 when contracts were let for construction of the first section from Milton to Williamsport to block the Catawissa Railroad from using the route. This was completed late in 1854.

The line finally reached Sunbury in September 1855 giving Sunbury its second line as the Northumberland Central had not been completed. The line was finally completed to Erie on October 17, 1864 giving Northumberland County its first direct connection to the Great Lakes.

Meanwhile in 1861, the name was changed to the Philadelphia and Erie by the state legislature in an act granting state assistance through purchase of bonds. The line was leased to the

Pennsylvania for 999 years on January 1, 1862.

The last major line of the Pennsylvania in Northumberland County was that which paralleled the North Branch to Wilkes-Barre. This line traced its origin back to the Wilkes-Barre and Pittston of 1859. The name was changed to the Danville, Hazleton, and Wilkes-Barre on April 10, 1867 and construction began later in that year. The road was completed from Sunbury to Tomkicken (45 miles) on November 4, 1869 and was leased to the Pennsylvania on March 1, 1872. The line from Catawissa to Wilkes-Barre using a part of the Nescopeck Railroad was completed.

Three other branches completed the Pennsylvania in Northumberland County. The Sunbury and Lewistown which ran from Selinsgrove Jct. to Lewistown was incorporated in 1870 and completed the 43.3 mile line on December 1, 1871. The Lewisburg, Centre, and Spruce Creek was incorporated in 1856 but work did not begin until 1868. By 1871, the line was open from Montandon to Mifflinburg and was later extended to Milesburg. The name was changed to Lewisburg and Tyron in 1879. The Susquehanna, Bloomsburg, and Berwick was originally built from Watsontown to Bloomsburg in 1887 and was extended to Berwick in 1903. It was taken over by the Pennsylvania in 1918.

For many years, the Pennsylvania Railroad was a major influence on the economy of Northumberland County, especially in the Sunbury-Northumberland area where it was a major employer. Sunbury was a divisional headquarters for many years and the

Northumberland Yard which was begun in 1912 was one of the major classification yards on the Pennsylvania system although it was never fully utilized to its full capacity. The Pennsylvania also had a yard and terminal at Weigh Scales where it employed a substantial number of people for many years. An interchange was maintained with the Lehigh Valley Railroad at a yard just west of the Mt. Carmel passenger station called Exchange. Even today the eastern part of the village of Atlas is known as Exchange although the yard has been gone for years.

For many years the Pennsylvania operated a substantial passenger service through Sunbury as part of its route between New York, Philadelphia, and Washington on the south and Buffalo and Erie on the north. In addition to the expresses which lasted right up until 1971, local trains serving all of the smaller towns were operated into the thirties on the main line and all of the branches. Perhaps the most remembered train to operate through the county was the "Pennsylvania-Lehigh Express" or "Pittsburgh Flyer" as it is fondly remembered. This train operated from Phillipsburg, N.J. to Pittsburgh from 1916 to 1934 using the Lehigh Valley east of Mt. Carmel and passing through Shamokin, Sunbury, Northumberland, Milton, and Watsontown on its way to Williamsport, Lock Haven, Altoona, and Pittsburgh. During this 18 year period every major town in the county was connected by a fast train, but the competition of the automobile proved to be too much, eventually for all passenger service that operated through the county.

Reading

The other major railroad in Northumberland County was the Reading which operated two main lines through the county as well as a long branch and numerous spurs to serve coal mines. The Reading was a major coal operator as well as being a railroad and, except for a short time in 1893 when it attempted to reach New England, was always extremely prosperous until the decline in coal mining set in. This ultimately led to its bankruptcy in 1973 and eventual inclusion in Con Rail.

The history of the Reading lines in the county is somewhat complicated. The Catawissa Railroad which finally ran from near Tamaqua to Newberry (Williamsport) and passed through Northumberland County for a short distance between Danville and West Milton was the first section of the later Reading to be opened. This line originated as the Little Schuylkill and Susquehanna in 1835 although the idea dated back to 1822. Some miles in the vicinity of Lofty were graded but track was never laid.

In 1849 the LS & S became the Catawissa, Williamsport, and Erie and by 1854 the line was open from Tamaqua to a connection with the Sunbury and Erie at Milton. In 1855 this became the route of a through passenger train from Philadelphia to Buffalo, Niagara Falls, and Chicago - Northumberland County's first through train, three years before completion of the Northern Central tied the rest of the county into the railroad network.

In 1860, the line was reorganized as the Catawissa Railroad and in 1871 it was extended from Milton to Williamsport avoiding the necessity of operating over the Philadelphia and Erie. The Catawissa Railroad was leased by the Philadelphia and Reading in November of 1872. The section in Northumberland County between Milton and Danville was abandoned when the line was merged into Con Rail.

By 1869, the Reading had a line from Shamokin to Port Trevorton. This originated in 1850 when the Trevorton, Mahanoy, and Susquehanna RR and the Susquehanna and Union Bridge Co. were incorporated. These were merged in 1854 as the Trevorton and Susquehanna RR. The line was completed from Trevorton to Port Trevorton in January 1855. Its purpose was to carry coal from the Trevorton mines to the canal at Port Trevorton and later to a connection with the Northern Central at Herndon. After financial difficulties the line became the Zerbe Valley RR and was purchased by the Philadelphia and Reading on July 1, 1868 (although not connected to that system).

This link from Shamokin to Trevorton was completed in 1869 by the Shamokin and Trevorton RR, a subsidiary of the Philadelphia and Reading. The bridge across the Susquehanna to Port Trevorton was demolished in August 1870 although the abutments can still be seen. The line has gradually been cut back until today only the section between Shamokin and Trevorton is used, primarily for coal traffic .

As yet untold is how the Reading reached Shamokin from the east. There were two routes. By 1860, the Mine Hill and Sckuylkill Haven RR reached Locust Gap over the Gordon Planes and was extended to a connection with the Shamokin Valley and Pottsville at Enterprise by the Locust Gap RR. This route was used by passengers until 1865 and by freight until 1896 when the Gordon Planes were closed.

What became the Reading's main line was built by the Mahanoy and Broad Mountain RR which was chartered in 1859. The line reached Locustdale in 1863 and was also connected to the Shamokin Valley and Pottsville at Enterprise Junction by the Locust Gap RR. After the SV & P passed into the hands of the rival Pennsylvania, the Enterprise RR completed the Reading route into Shamokin in 1869. The Mahanoy Valley RR which was a branch from Locustdale reaching as far as Gowen City was completed in 1870, but has been abandoned for many years.

The gap in the Reading line between Shamokin and West Milton was closed by the Shamokin, Sunbury, and Lewisburg RR. This line was incorporated in 1882 after an agreement between the P & R and the New York Central to route coal from Shamokin to Williamsport over the SS & L and Catawissa to the NYC tracks. The line was completed in 1883 and leased to the Philadelphia and Reading and immediately became the main line, at least for passenger traffic. Its Sunbury depot, now restored, was reputed to be the first railroad station to be lit by electricity.

The Reading also played a major role in the economic development of Northumberland County, especially in the coal region area. It was a major employer itself in the Shamokin area and until forced to sell them in the 1970's owned a large number of collieries itself. These were taken over by the Philadelphia and Reading Coal and Iron Co., a related company, after railroads were forbidden to own coal mines and carry their products. Until the decline of the coal industry after World War II, the Reading operated an extensive freight service but there was not enough traffic to keep it prosperous after coal's decline.

The Reading also operated passenger trains through the county although never extensively. Service between Shamokin and Williamsport was terminated as early as 1949. Service between Shamokin and Philadelphia was maintained until 1963 when the famous "King Coal" saw its last run.

Others

As mentioned briefly, two other railroads entered Northumberland County. The Lehigh Valley reached Mt. Carmel from the east in 1865. Much coal was hauled over this line which was double track all the way to its junction with the LV main line at Penn Haven Junction. It was hard hit by the decline of coal, and the part of the line in Northumberland County was eventually abandoned completely in 1959.

The Delaware, Lackawanna, and Western opened a branch from its main line at Scranton to a connection with the Pennsylvania

at Northumberland in the 1880's. This line also paralleled the North Branch of the Susquehanna River on the north (right) bank and served the busy towns of Berwick, Bloomsburg, and Danville. It always carried a good deal of freight traffic and passenger service was maintained until the early fifties. The DL & W was merged into the Erie Lackawanna in 1960 and when the railroad failed in 1972 the line from Northumberland to Hicks Ferry near Berwick was included in the Con Rail system.

Summary

The railroad played a large role in the development of Northumberland County. For years, it was the major employer in the Sunbury-Northumberland area and those places were typical railroad towns until the role of the railroad was lessened in the 1930's and, especially in Sunbury, replaced by more choersified industries.

The history of the railroads in the county is inextricably bound to the history of coal. It was the insatiable demand for anthracite which was the direct cause of the construction of nearly every line in the county. When this demand dropped off, the railroads went into a decline with the result that every line in the county became bankrupt. In Northumberland County, as in much of Pennsylvania, there was not enough industry replacing coal to keep up the demand for rail service and what industry that did appear was generally not rail-oriented.

Thus, we have seen the railroad grow to a position of dominance where almost every town in the county was served by two

lines and then fall to a lesser role in the transportation picture. No town in the county today is dependent on the railroad for many jobs.

Speculation is always interesting. Northumberland County might have been situated on a heavy-duty, high speed, east-west main line. During the 1920's there was a proposal to build the New York, Pittsburgh, and Chicago RR which actually was to run in as nearly a straight line as possible from Easton to near Pittsburgh at a junction with the Pennsylvania. This would have created a much shorter route from New York to Chicago. The line would have followed Mahanoy Creek through the southern part of the county, but the idea was killed by the depression before anything was built. It boggles the mind to think what might have happened to the economy of Northumberland County, especially the still very rural southern part, had this line ever been built.

The railroad has also left us an architectural heritage. There are a number of railroad related sites included in the historic sites inventory. Most of these are stations which are fine examples of period architecture and some method should be found to preserve them as part of our heritage if at all possible.

THE TROLLEY

A nearly forgotten piece of the Northumberland County transportation picture is the role played by the electric trolley car. During the 1910's and 1920's trolleys connected Watsontown and Mifflinburg by way of Milton and Lewisburg; Kapp Heights and Sunbury through Northumberland; Sunbury and Hamilton; Sunbury and Selinsgrove; Danville and Riverside; Trevorton and Shamokin; Weigh Scales and Shamokin; and Shamokin and Ashland by way of Kulpmont, Mt. Carmel, and Centralia. A trolley line also once operated between Mt. Carmel and Locust Gap and Shamokin and Sunbury had extension local systems.

The Lewisburg, Milton, and Watsontown Passenger Railway Company operated a line 9.28 miles long from Lewisburg to Watsontown and also operated over the PRR line an additional 11 miles between Lewisburg and Mifflinburg. The line was incorporated in 1897 and succumbed to the inroads of the motor car in 1928.

Sunbury and Northumberland were connected by one of the earliest electric lines. This was begun in July 1889 and was opened in July 1890. The line was 3.1 miles long and extended from 2nd and Pine Sts. in Sunbury to Front and Queen Sts. in Northumberland. The early electric system proved to be a failure and had to be replaced by horses on December 1, 1891. This caused such a drop in patronage that the company went bankrupt and it was reorganized and re-electrified in 1892. At this

period it was known as the Sunbury and Northumberland Electric Railway Co.

The Northumberland line was extended to Sixth and Queen Sts. in 1906 and a line to Hamilton on Market St. was opened in 1908. This was projected to be extended to Shamokin, but the line was never built. This company underwent a number of reorganizations and name changes, but became one of the longer lived trolley lines in the state as it managed to operate until 1939.

The Sunbury and Selinsgrove Electric Street Railway was chartered in 1904 to build a trolley line between those two towns. It could not be built, however, until the river bridge was completed. The first section between Sunbury and Shamokin Dam opened January 11, 1908 and the entire line was opened May 30, 1908. The line was seven miles long.

This line also underwent its share of financial difficulties and underwent several reorganizations and name changes. It was finally abandoned in 1934, although the bridge abutments which carried the line over Penna. Creek entering Selinsgrove can still be seen.

Danville and Riverside were connected by the Danville and Sunbury Transit Co., a line which attempted to build between those two towns but never completed the line. At its maximum extent, the line was 2.8 miles long. It was chartered in 1906 and abandoned in 1924.

The coal region was served by two trolley lines. The

Shamokin and Edgewood Electric Railway Co. had lines from Shamokin to Weigh Scales and Trevorton and a line to Edgewood park which it operated. It traced its origin back to the Shamokin Street Railway Company chartered in 1889 and service was converted to busses in 1929.

The Shamokin and Mt. Carmel Transit Company was the largest trolley system in the county. Its main line extended from Shamokin to Ashland with branches from Mt. Carmel to Locust Gap and Ashland to Locustdale. At its maximum, it operated 20.5 miles of line and used 64 cars. It began in 1892 as the Shamokin and Mt. Carmel Electric Railway Company. Service was converted to busses in 1936, not because the trolleys were unprofitable but because the state condemned the right-of-way to improve the highway between Shamokin and Mt. Carmel.

For a period of about 30 years the trolley provided a valuable means of local transit in Northumberland County. The lines finally were done in by improved highways and increasing automobile ownership, although the descendent of at least four of the streetcar companies still provide bus service in the county in 1976. Not much physically remains from the trolley era. The bus garage on Edison Ave. in Sunbury was originally the S & N carbarns but there have been extensive alterations. The Shamokin and Mt. Carmel's car barn still stands along Rt. 61 in Strong and is also used with less alteration as a bus garage by the lines' successor.

Development of the Coal Industry in Northumberland County

The development and expansion of the coal industry in Northumberland County constitutes a unique achievement in the mining industry partially because of the extensive reserves of anthracite coal to this area and partially because of the 200 year old history of the anthracite industry. Equally important is understanding the reasons for its rise as a dominant fuel throughout the 1800's and its decline in the past 50 years that moved anthracite in Northumberland County from its peak production year in 1917 of almost 100 billion tons to less than 6 billion tons in 1973. Encouraged in the 19th century by the need for an economical fuel located near metropolitan centers, anthracite prospered until the beginning of the 20th century when, plagued by work strikes and environmental legislation, new energy sources appeared and anthracite began a rapid decline to its 1973 low. Today with increasing cost of electricity and the shortages anticipated in the gas and oil industry, demand for anthracite as a fuel alternative has only recently begun to increase.

A hard coal composed of between 91 to 97 percent carbon, anthracite is found in Northumberland County as well as in the surrounding counties of Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Schuylkill, Susquehanna, and Wayne where approximately ninety-five (95) percent of the United States reserves of anthracite are located. These 10 counties are divided into four (4) district fields, each based on the shape and location of each coal basin.

In Central Pennsylvania these district fields are divided into Northern, Eastern Middle, Western Middle, and Southern - each separated by specific geological conditions covering some 484 square miles. Of this, Northumberland County occupies a ninety-four (94) square mile basin of small interconnected valleys surrounded by parallel ridges located within the Western Middle field. This coal field is composed of two parts - the Mahanoy district located in Columbia and in parts of Schuylkill counties that covers forty (40) square miles and the Shamokin district located in Northumberland County that covers a fifty (50) square mile area that represents about one-tenth of the entire anthracite region. Mt. Carmel, Zerbe, and Coal townships, with parts of East and West Cameron Townships are included in this region.

This area is divided into three (3) quadrangles, each based on the name of the nearest town - Trevorton, Shamokin, Mt. Carmel. Collieries located in each of these quadrangles were as follows:

Trevorton Quadrangle

North Franklin

Bear Valley (part)

Shamokin Quadrangle

Glen Burn

Bear Valley (part)

Henry Clay - Stirling

Cameron

Burnside

Big Mountain

Buck Ridge No. 1 -
Greenback

Royal Oak

Luke Fidler

Hickory Swamp (part)

Colbert (part)

Maysville (part)

Corbin

Mt. Carmel Quadrangle

Hickory Swamp (part)

Colbert (part)

Maysville (part)

Excelsior

Enterprise

Locust Gap

Alaska

Scott

Hickory Ridge

Natalie

Greenough

Richard's

Pennsylvania

Reliance

Sious-Sayre (part)

Midvalley Nos. 1 -
2 (part)

Anthracite coal is an organic material, formed from the remains of vegetation that existed during the Carboniferous period when the area now known as Pennsylvania was sub-tropical. As plants and trees vegetated and successive layers of new

growth buried the earlier ones, enormous pressure was exerted on the earlier layer causing this decaying material to be compressed into peat. As more layers were buried, bacteria did not have sufficient oxygen to decompose the material; the decaying process was slowed until the sea submerged the swamps causing still more pressure to be exerted until the actual coalification process began and anthracite was formed. Shale was also formed in the coal vein when minerals were buried and compressed along with the organic material that was to become anthracite.

Anthracite in North America was first recorded on a map by John Jenkins, Sr. in 1762 although it was not used as fuel until 1769 in Wilkes-Barre. Coal was first discovered in the Western Middle region about 1780 when a man named Cherry picked up some pieces of "stone coal" from Shamokin Creek and exhibited them as curiosity pieces for visitors. Yet its value as a fuel would go virtually unnoticed for ten years until Necho Allen discovered its potential as a burning fuel. In 1791 Philip Ginter also discovered the potential of coal at Mauch Chunk, Carbon County. At about the same time Issac Tomlinson was crossing his farm which was located between Shamokin and Mt. Carmel when he observed some black stones lying in a small stream. Because he was already aware of coal's potential as a fuel, Tomlinson gave them to a blacksmith for his fire. Coal's potential as a heating fuel had been discovered. Also about this time a man named

Jesse Fell from Wilkes-Barre discovered that "stone coal" could be used as a heating fuel when he burned it in crudely constructed grates. As these grates improved and stoves were invented, the demand for this space heating fuel increased.

From these humble beginnings, coal's use as a natural fuel resource would skyrocket, reaching its peak production period in 1917 when nearly 100 million tons of anthracite was mined; by 1950 production had dropped to 44 million, then to 9 million in 1970, and by 1973 only 6.3 million tons of coal were being produced.

The reasons for this serious decline in coal production began about 1926 when the railroad companies were forced to divert their interest in the coal mining industry. The mining strike that lasted from 1925-1926 encouraged coal users to look elsewhere for energy sources such as oil and gas that proved much more convenient. Strikes and antitrust suits, coupled with passage of legislation affecting mining and environmental laws added to the problems that would severely cripple the mining industry.

But all this was to come later. 1814 marked the year the first Shamokin coal was marketed. In the beginning of the mining industry sufficient quantities of coal could be gathered by prying coal from outcroppings and picking it up. As demand increased, the need for a more efficiently productive system grew until deep mining became the common means for coal extraction throughout the remainder of the

19th century. However by the middle of the 20th century most anthracite coal would be strip mined.

SMALL DEEP MINE
SHAFT OPENING



Deep mined coal is extracted through four (4) types of openings: 1) drift 2) slope 3) tunnel and 4) shaft. First drift opening occurs naturally as workers pick coal from outcroppings that occur at the base of an incline. Digging continues upward, into the hill, following the seam while allowing for the gravity flow of water. This type of entry also serves as the gangway as deep mining progresses. The second type, slope entry, also follows the seam of coal from an outcropping but along a declining plane. This type of entry dominates the deep mining industry because of the absence of suitable entrances for drifting. As the name indicates the third type of entry, tunnel, provides a horizontal entry into and through the overlying or underlying rocks to intersect a seam, thereby providing access to coal seams above water level. Finally the fourth type, shaft entry, is

vertical, driven to reach coal buried two hundred or more feet beneath the surface. Gangways are also driven to allow mines access to each vein for development of seams and extraction of coal. Originally furnaces were placed at the bottom of the draft to assure air circulation but by the end of the 19th century, they were replaced by fans to provide ventilation.

When the coal is finally hauled to the surface, the large chunks pass through a breaker where coal is cleaned and processed for market, a process unlike the original method in which coal was broken and cleaned by hand. This manual method of processing persisted until 1844 when the 1st mechanical breaker was introduced; here gravity-fed coal was crushed by

DEEP MINE
CAVE-IN



a small toothed, cast iron roll and then separated by screens. Slate pickers, whose job was to clean the coal by hand, were replaced in the 1870's by jigs that cleaned and separated coal by specific gravity. Today the processing of anthracite coal

includes mechanically breaking and cleaning it until all impurities are washed away and the processed coal is fairly uniform in shape to insure a better burning fuel. Coal is still marketed in sizes established over 100 years ago: egg, stove, chestnut, pea, buckwheat, rice, and barley.

Today technology has replaced workers at the surface of the mine but underground mining has remained free from radical changes although some improvements have been made in loading, haulage, dewatering, and ventilation. Yet the actual extraction of coal from a deep mine is still accomplished by manual labor methods similar to those of the 19th century although some advanced work is now accomplished by drills and dynamite. Yet manual labor remains. During the 19th century mining was based on a well-established social order. A mine worker began his career between the ages of four and eight as a slate picker; later he became an errand boy and finally entered the mine as a door boy. From this point age and experience dictated his future role in the mining operation; he first became a mule driver, then a laborer, and finally a miner. The mine worker's pay and his status in this social order was based on both the miner's skill and the importance of his job to a mining operation. But the manual operation essential to deep mining has been replaced by the mechanical operation essential to other forms of anthracite mining. By 1974, deep mining in Northumberland County had fallen from a high annual production in 1917 of 7,889,237 tons to a low of 61,456 tons,

indicating that one reason for the decline in deep mine operations is the technological advances in surface excavation equipment that has facilitated coal removal, thereby replacing deep mining with strip, culm bank, and stream recovery methods.

Anthracite strip mining operations vary from shallow excavations that follow outcroppings to the complete removal of sections of land that are hundreds of feet below the surface and cover many acres. Four operations essential to strip mining exist today, each based on technological advances. First the overburden is drilled and blasted by a diesel powered rotary blast hole drill rig in order to sink holes thirty to sixty feet deep. After the overburden is blasted, it is removed by draglines, power shovels, or front end loaders.

DRAGLINE IN
OPERATION



Each piece of machinery has its own advantage. For example, a dragline can reach into steeply pitched areas otherwise inaccessible, retrieve material from flooded areas, permit

direct: casting of the overburden and handle large rock formations. However, a dragline has two main drawbacks: it is expensive to operate and is somewhat immobile, so immobile, in fact, that dirt highways have been constructed over mountains to walk these machines from one site to another. Generally they cover about one mile per day. However the power shovel has more digging and lifting power than the dragline as well as a somewhat faster trucking cycle. Easier to maneuver and position than the dragline, the power shovel operates more efficiently on a flat surface and sacrifices mobility for lifting power, as well as its ability to operate at close quarters have proven its effectiveness in strip mining. After coal has been extracted by using either draglines, power shovels, or front end loaders, the process of backfilling is required in order to restore the land to its original contours. Again front end loaders or crawler mounted draglines are suitable for replacing earth.

The second method of recovering coal is known as culm bank recovery that utilizes accumulated waste products from the early methods used in coal preparation. Generally this coal is finer in size making it ideal for the demand being generated by new markets, especially as utility companies install new coal burning equipment that utilizes this silt coal. Power shovels, front end loaders, or smaller crawler-mounted draglines are used to recover culm bank coal operations.

Finally stream recovery methods attempt to recover coal from streams and waterways that drain the anthracite region. In the early days of mining, before the introduction of environmental regulations, preparation plants discharged waste, i.e. small bits of coal inappropriate for early burning processes, directly into streams that resulted in substantial amounts of anthracite accumulating in local streams. In addition naturally eroded coal and silt that collected in the major rivers draining the anthracite region, namely the Susquehanna, Schuylkill, and Lehigh, as well as their tributaries are being recovered by dredging methods.

When coal is recovered through dredging operations it is sent to a preparation plant to be separated from its impurities, washed, sized, and loaded for shipment. Although most coal breakers that process mined coal were constructed before 1950, some have been modernized. Currently two types of preparation plants exist: one that handles coarse coal and one that handles finer particles. Regardless of the type of preparation plant, each breaker must be monitored as the characteristics of coal change from vein to vein in order to insure a consistent, salable coal. The salable coal produced from the three methods of mining reflects Northumberland County's change from 1924 to the present as well as the number of employees required to produce this coal. In 1924 Northumberland County produced 61,456 tons of coal through deep mining using 82 employees;

328,231 tons of coal through strip mining using 179 employees; and 654,325 tons of coal through culm banks using 27 employees. These figures indicate the desirability of strip mining and culm bank recovery, since this shift from deep mining to culm bank and strip mining recovery is indicative of the shift from manpower to technology.

Manpower, in the 1900's for deep mining operations in Northumberland County, was supplied primarily by immigrant groups who lived and worked in a homogeneous environment. As these immigrant groups moved into other localities, the source for manpower operations slowed. In 1950 sixty-seven percent of the entire anthracite industry's employees worked in deep mines. By 1973 eighty-two percent were involved in surface operations. Figures relating to Northumberland County also indicate that fewer men are now providing more anthracite. In the peak period of 1917, 8,464 employees inside and 4,208 employees outside the mine supplied 7,889,237 tons of coal through deep mine operations. Today twenty-seven men supply 654,325 tons. Or in 1917 one man in deep mine operations produced about 623 tons while in 1974 one man, using culm bank recovery, produced 24,234 tons. Yet despite these disjointed figures, the trend toward surface operations will have to be reversed if the anthracite industry is to revive. Mine workers will have to be attracted to deep mining by improved working conditions, benefits, and pay. Paul Smith, Secretary of Pennsylvania Department of Labor and Industry, 1974, summed

up this problem by stating:

"To reverse this trend (from deep mining to stripping) and revive anthracite deep mining, a number of barriers must be overcome. The one with which the subcommittee (manpower) is most concerned is the lack of interest on the part of potential workers to get into this kind of operation. It is simply not very appealing work, but we believe this can be corrected to some extent if it is clear that deep mining is a safe operation, that it pays well, that there are opportunities for advancement, and that it is not a degrading operation."¹

Yet the actual beginnings of coal mining in Northumberland County showed no indication of its future disintegration. John Boyd discovered coal in Shamokin Creek in 1826 on the Primrose vein, a red ash coal in a place then known as John Boyd's strong coal quarry. Later this highly producing anthracite coal mine was to become the Shamokin Coal Company. In 1841 Fagely, Cleaver & Company began mining coal and eventually became the biggest coal shippers in the area. But even in the early days of mining, the industry was plagued with problems. In 1842 an anthracite furnace belonging to the Shamokin Coal & Iron Company was suspended. That same year the Danville & Pottsville Railroad Company, chartered in 1826 by Stephen Girard - Philadelphia, Bird Patterson - Pottsville, Daniel Montgomery - Danville, and Samuel J. Packer - Sunbury, failed and horses were substituted to pull the cars originally pulled by locomotives to the local market in Danville.

The town of Shamokin became ghost-like as residents moved

¹Paul Smith, Secretary of the Pennsylvania Department of Labor and Industry, Working Papers for the "Coal for the 70's Pennsylvania Action Conference," April 24, 1974.

out and property depreciated in value. But the coal land operators were looking for a new and bigger market; the failure of the Danville and Pottsville Railroad emphasized the need to look in areas other than local markets. No outlet had yet been provided to Philadelphia and shipment to Sunbury for further delivery to Baltimore via the Pennsylvania Canal was proving to be unprofitable. Kimber Cleaver, 19th century railroad surveyor and engineer, designed a railroad system from Shamokin to Pottsville which opened the coal trade with Philadelphia. By 1850 the town of Shamokin began to grow and prosper as the Shamokin coal field began to revive. In 1851 the Danville and Pottsville Railroad was renewed; the entire road between Shamokin and Sunbury was reconstructed and completed in 1853 providing still another route for the coal market. In 1854 the Philadelphia and Sunbury Railroad was completed from Shamokin to Mt. Carmel; this extension led to the development of collieries in the Mt. Carmel area. The first colliery to ship coal was the Green Ridge to Ayers, Lewis & Company by the Green Ridge Improvement Company. By 1859 fifteen mines were operating in Northumberland County. In 1864 the price of coal reached it's highest mark in the nineteenth century of \$10.75 per ton. By 1868 Northumberland County coal mining had reached it thirtieth anniversary with the total tonnage of the past thirty years at 5,712,656 tons. Shipments at this time were to Philadelphia, Baltimore, Canada, and the Northeast as well as points farther south. In 1853 anthracite

coal was used as a fuel to power steam ships in the United States Carribean and coastal trade. More than half of these steamers used Pennsylvania anthracite either entirely or in conjunction with sails. Anthracite was shipped to Havana and Nicaragua to supply steamers on the Carribean Run and was even sent to California. The annual consumption of anthracite for steam shipping was estimated at a quarter of a million tons. Anthracite, because it was smokeless and emitted fewer sparks, was preferred to bituminous in the steam shipping industry.

By 1871 the costs of mining had become too great for single operation and much of the coal land in the county was purchased by two corporations: 1) the Philadelphia and Reading Coal & Iron Company 2) the Mineral Railroad & Mining Company. These two corporations continued to dominate the mining industry throughout the remainder of the later half of the nineteenth and the early twentieth centuries. From Northumberland County's coal mining inception in 1851 until 1889, 46,669,062 tons of coal was produced. By 1924 7,207,553 tons of coal was produced in Northumberland County to be followed by a decline that resulted in a low of 955,362 tons produced in 1973. However, in 1974, 1,044,012 tons was produced reflecting an increase for the first time in fifty-seven years.

After coal is mined, it must be transported to the consumer. In the early days of mining, transportation was relatively simple; mined coal was simply thrown on a horse-

drawn coal car and transported to some local point to be used as fuel. As demand increased and new uses were found, railroads were developed to facilitate transportation to a distant place. By this time new markets in home heating, industrial consumption, and navigation had opened doors for anthracite in Philadelphia, Baltimore, Canada, and the Northeast. As coal's usage expanded, complex furnaces, were constructed to use coal more efficiently, thereby creating the need for uniform coal sizing and shaping resulting in the establishment of coal breakers. Two stages in coal transportation began to emerge: the first step was from the mine to the breaker, the second from the breaker to the customer. Earlier coal had been thrown into carts and pulled by horses or mules to the breaker. After coal was uniformly sized, rail transportation hauled coal to markets. But by the late 1940's trucks had emerged on the scene to generate real competition for the monopoly that trains had held in early coal transportation.

Today these two stages of transportation still exist in mining production. The initial stage, haulage from mine to breaker, is absorbed by the production costs, thus freeing the customer from a separate billing. Whether to use rail or truck in transporting coal from mine to breaker depends on several factors: first the method used to extract the coal. Since strip mining has increased over deep mining for anthracite and since these trucks are used in the actual process of coal extraction coupled with the fact that strip mines never

remain in the same location, trucking is the most practical and economical. Secondly the actual distance from mine site to breaker must be considered. Usually the average distance from mine site to breaker is short, increasing the use of trucks for short distance hauls that eliminates the additional economic factor of constructing more railroad tracks and sidings. However as the distance increases, trucking costs increase while rail rates per mile generally remain constant.

The second stage of transportation is from breaker to customer. Shipments from the breaker begin in the loading pockets of the preparation plant where the process of transferring coal to the railroad car or truck is carefully scrutinized for coal breakage to insure its uniformity. After the coal has been loaded into the railroad car or truck, its destination ranges from local markets in Northumberland County to nationwide and international markets. For the entire anthracite region, 24% headed to local markets, 71% to regional markets such as other parts of Pennsylvania, New Jersey, and New York while the remaining 3% was loaded into vessels at the Great Lakes, Philadelphia, or Baltimore for international shipping.

By 1973, fifty-seven percent of all prepared coal was carried by trucks while the remaining forty-three percent was carried by rail reflecting increasing growth of truck transportation since, in 1950, trucks handled less than one-fifth of anthracite production. This increase in trucking coupled with the decline in the amount of coal mined has severely

hurt the railroads where, in the past, as much as ten percent of their revenues were obtained from coal haulage.

The cost of shipping coal by rail is based on several factors with mileage seldom the principle determiner. First the presence of truck competition to given rail destination Secondly the weight of the rail car used meaning that the bigger the hopper car, the lower the rate. And finally the ownership of the coal car determines the price; if the car is owned by the railroad then the cost of shipping is higher. Yet railroads have also adversely discriminated in prices against the anthracite coal industry. In 1938 the Pennsylvania Anthracite Coal Industry commission discovered anthracite rates to be excessive when compared with the average cost of shipping bituminous coal. In 1937 railroads were charging the anthracite industry 1.237 cents per ton mile while the cost of shipping bituminous coal was 0.825 per ton mile.

Today trucking has become the principle means for transportation, thus offering a viable alternative to railroads. In 1973 preparation plant operations sold their products to truckers who either sold it to retail dealers or sold it directly to customers. Most of the coal marketed by truck was destined for Pennsylvania or the mid-Atlantic states. This dramatic shift from rail to trucking in anthracite production can best be explained in economic terms. Increased rail freight rates have forced a declining industry to search elsewhere for less expensive transportation. Larger truck capacities and improved

highways in interstate highways (80, 81, 84, and 380) have created both efficient and economical means of transportation to New York City, Philadelphia, Baltimore, Syracuse, and Harrisburg.

But haulage costs were not the only problems the anthracite industry had. Legislation enforcing safety factors and protecting environmental resources also discouraged an already declining industry. The first legislative act applying to Schuylkill, Northumberland, Columbia and Dauphin counties was passed in 1870 for the health and safety of individuals who were employed in coal mines and provided for the appointment of mine inspectors to enforce these laws. Current legislation has also affected coal mining:

- 1) The National Environmental Policy Act of 1969 established the Council of Environmental Quality (CEQ) and granted all federal agencies a mandate to consider the environmental impact of their actions. The Council is comprised of 3 people who report directly to the President; their responsibility is to recommend national policies after approving environmental trends.
- 2) The Federal Energy Administration Act of 1974, no. 6, is to establish a comprehensive national energy policy and assess the adequacy of energy resources for the future. Oil and gas are to be reduced as primary energy sources in favor of coal, if coal is feasible to the user in an effort to reduce oil and gas imports.
- 3) The Energy Supply and Environmental Coordination Act of 1974. This Act gave the FEA the power to prohibit

any major burning installation the privilege of burning oil or gas as its primary energy source if the plant has the capacity to burn coal.

- 4) Clean Air Act of 1965. Legislate against air pollution originated a national resource and developmental program to protect and maintain clean air. Each state was directed to enforce its own standards of air pollution. This act should benefit the coal industry; a statement by the National Coal Association¹ predicts that annual coal production will have doubled by 1985. This will result in an additional \$21 billion investment in new mines, and jobs for 80,000 new miners.
- 5) Non-Nuclear Energy Research and Development Act of 1974. Earmarked funds for the research and development of non-nuclear energy technology. This too could be a boom to the coal industry since the development of low sulphur boilers, coal gasification, coal liquefaction, and in situ gasification that are specifically mentioned, would encourage coal development.
- 6) Energy Reorganization Act of 1974. This act combined the Atomic Energy Commission, the Office of Coal Research, and branches of the Bureau of Mines, and the Environmental Protection Agency, and the National Science Foundation.
- 7) Federal Coal Mine Health and Safety Act of 1969. Established the "miner" as the first priority in the coal mining industry. Its purpose is to:
 - 1) Establish mandatory health and safety standards.

¹The Impact of the Clean Air Act on the U.S. Coal Industry: "The Problem and its Solution", National Coal Assoc., 1974.

- 2) Require coal mine operators and miners to comply with such standards.
- 3) Provide assistance to and cooperate with the states in developing and enforcing state health and safety programs.
- 4) Improve and expand, in cooperations with both the state and industry, research, development, and training programs aimed at preventing coal mine accidents and occupational diseases.

Representatives appointed by the Secretary of Interior enter the mines and have the authority to cite violations - all of which are subject to assessment.

If a violation is a serious danger, the inspector has the authority to order the mine closed.

This act also establishes health and safety standards for all phases of both surface and underground mining operations.

This act also administers the "Black Lung Program" through the Secretary of Health, Education and Welfare, as well as Labor. MESA (the Mine Enforcement and Safety Administration), has been established in the office of the Secretary of Interior to specifically carry out the provisions of the Act.

- 8) Federal Water Pollution Control Act of 1972. The purpose of this act is to establish minimum water control criteria through state action to locate, identify, and propose treatment methods for all sources of water pollution.
- 9) Appalachian Regional Development Act of 1965. This act acknowledges that the Appalachian Region, in which Northumberland County is included, is abundant in natural resources but lags behind the rest of the nation in economic growth.

- 10) Pennsylvania Anthracite Coal Mine Act of 1965 (P.C. '72). This act gives the Pennsylvania Secretary of Environmental Resources the authority to establish anthracite mining districts, appoint qualified mine inspectors, and certify miners.
- 11) The Clean Streams Law of Pennsylvania (1970). Prevents pollution of waterways.
- 12) Pennsylvania Surface Mining and Reclamation Act of 1971. Requires restoration of the land to original or acceptable contours.
- 13) Pennsylvania Air Pollution Control Act, 1968 (amended 1972). Establishes indexes for permissible air pollution. Such requirements for sulphur dioxide emission would favor the use of anthracite.

Although much of this Legislature has sought to encourage anthracite as a fuel resource, much of it also severely restricted mining operations by legislating against indiscriminate water pumping that remains one of the most critical problems in the anthracite industry. The water that has collected in abandoned mines plus the surface water that enters the mine from rains constitutes the need to either pump mine water to the surface or drain underground water using gravity through drainage tunnels. Legislation restricts pumping mine water to the surface and into creeks unless properly filtered to meet the Clean Streams Law of Pennsylvania. The alternative to surface pumping is to pump mine

MINE POOL -

Believed to be as much as 400 feet deep. Located off LR 49087 between Kulpmont and Locust Gap.



water into underground drainage tunnels used to contain water. This theory however is weakened because many of the pillars made of coal left behind as supports in deep mining operations at one time contained this water; however, this coal has been mined resulting in a domino theory in which water reaches a certain level and spills over into a mine. If that mine water is not pumped, water will fill that mine and spill into the next, and so forth, until like today many of the underground mines in the Western Middle Field have flooded resulting in approximately 61 billion gallons of water contained in sixty-seven mine pools in 1949. Today no current figures exist but run-offs have been constructed to filter surface water directly into streams, thereby eliminating additional water running into deep mines.

PART II
SITE INVENTORY

INTRODUCTION

An historic perspective can provide insights into the wisdom and character of the past that are often lost in today's hectic world. History offers a means for comparison which enables us to better understand where we are by furnishing knowledge about where we have been. Northumberland County enjoys a rich historical heritage. A great diversity of historic sites abound in all regions of the county providing tangible links with our past.

The purpose of this HISTORICAL SITE INVENTORY is to list these sites, and explain their historic significance with an eventual goal of physical preservation. The HISTORIC SITE INVENTORY should not be regarded as a final or inflexible document. The Northumberland County Planning Commission welcomes comment and reaction so that refinements and

new sites can be constantly added.

The County Inventory of Historic Sites shall be limited to objects and areas of historic significance still extant within the present boundaries of Northumberland County. The following criteria will be used to evaluate potential historic sites not already included on the state and federal historic registers.

- 1) National, state and/or local historic significance
- 2) Sites possessing distinctive architecture, setting and/or workmanship
- 3) Sites associated with the lives of historic persons
- 4) Sites possessing archaeological significance

The County Inventory of Historic Sites shall include the following information:

- 1) The site's name

- 2) The site's location and map identification number
- 3) A historical synopsis of the site
- 4) A historical evaluation of the site, i.e.:

C-local/county level historic significance

S-state historic significance, on the State Inventory of Historic Sites

N-national historic significance, on the Federal Register of Historic Sites

SA-to be added to the State Inventory

NA-to be added to the Federal Register

- 5) An evaluation of the site's physical condition, i.e.:

G-good

F-fair

P-poor

The State Inventory of Historic Sites is a listing of sites kept on file by the Pennsylvania Historical and Museum Commission.

This inventory does not involve regulations, controls or other programs. The list only indicates sites which are judged to be of state-wide historic significance.

The Federal Register of Historic Sites is maintained by the United States Department of the Interior, under the Historic Preservation Act of 1966. Sites are added to the Register upon nomination by the state and approval of the National Park Service. Criteria for selection of sites is very similar to the ones used in this study for Northumberland County.

The Historic Preservation Act of 1966 established an Advisory Council on Historic Preservation to advise Congress and the President in this area. The Council consists of the Secretaries of Interior, Housing and Urban Development, Commerce, Treasury,

Transportation, and Agriculture; the Attorney General; the Administrator of the General Services Administration; the Chairman of the National Trust for Historic Preservation; the Secretary of the Smithsonian Institution, and ten citizens appointed by the President. Any federally assisted, funded or licensed project affecting a site on the Register must consider the effects of the project on the site, and Advisory Council must have the opportunity to review the project. No injunction power to halt the project is authorized, but it is intended that the review by the Advisory Council will eliminate conflicts with the registered site. Effects to be considered include:

- 1) Destruction or alteration of all or part of a property
- 2) Isolation from, or alteration of, its surrounding environment

- 3) Introduction of visual, audible, or atmospheric elements that are out of character with the property and its setting

Sample HISTORICAL SITE INVENTORY entry

39 NORTHUMBERLAND COUNTY COURTHOUSE-SUNBURY

The impressive brick courthouse was built in 1865 at Market & Second Streets in Sunbury. It is in the Romanesque Revival style, featuring three bays with recessed semi-circular window arches, massive quoins, a truncated tower on one side of the main entrance and a large clock tower on the other side.

C, N, SA, G

map identification number

name and location of site

historical synopsis of the site

historical and physical evaluation:

C-county significance, N-on Federal Register, SA-to be added to State Register, and, G-good physical condition

1 AC & F COMPLEX, MILTON

The present operation was founded in 1864 as Murray, Dougal and Company and built wooden railroad tank cars to carry oil. These early cars were nothing more than two large tubs on a flat car. In 1899 13 car building companies, including Murray, Dougal and Co., were consolidated into American Car and Foundry. The AC&F Milton plant began building riveted steel cars in 1900 and all welded cars in 1931. Today the plant employs over 600 men and can build over 300 modern tank cars a day.

C, G

2 AIRMAIL BEACON LIGHT, SUNBURY

In 1924 a beacon light was installed on Penn's Hill, northeast of Sunbury as part of the first transcontinental air mail route. It was later moved to Mile Hill until it was decommissioned in the late 1960's. The light was given to the State Historical Society at Harrisburg.

C

3 SITE WHERE ANTHRACITE WAS FIRST DISCOVERED, KULPMONT

In 1790 Issac Tomlinson discovered coal in the bed of Quaker Run Creek, a site now inside the borough limits of Kulpmont. Tomlinson's discovery of "black stones" was the first in the middle coal fields.

C, SA, NA

4 SITE OF FIRST ANTHRACITE MINE, SHAMOKIN

The first anthracite mine in Northumberland County was opened in Shamokin in 1826. It was located in the bed of the Shamokin Creek between Webster and Clay Streets. The coal was taken to Danville in large wagons, transferred to arks and shipped down the Susquehanna River to Columbia.

C, SA

5 PAUL BALDY HOUSE, SUNBURY

This brick house on the north side of market square was built in 1820 by Paul Baldy, a blacksmith and veteran of the Revolutionayr War. In 1823 the house was purchased by attorney Samuel J. Packer, postmaster of Sunbury. The house served as Sunbury's Post Office. from 1835 until 1855. Today the house serves as an office building.
C, G

6 THE BLOCK HOUSE, MT. CARMEL

The Block House, located on S. Turnpike St., is the oldest building still standing in Mt. Carmel. It was built in 1863 by Patrick Donohue, operator of the Locust Mountian Coal and Iron Co. The house was substantially built of stone, supposedly to resist a potential confederate attack during the Civil War. Nearby Donohue Row was also developed by Patrick Donohue.
C, G

7 THE BLOODY SPRING, SUNBURY

The Bloody Spring is located in Sunbury between Shikellamy Ave. and Memorial Park. On this site during the French and Indian War (1754-1763) a colonial soliiier from Fort Augusta was killed by Indians. His blood is said to have colored the waters red.
C

8 BUCK RIDGE POSSESSION HOUSE, SHAMOKIN

This frame dwelling is the oldest "company home" left in Northumberland County. It was built in 1850 by the Big Mountain Coal & Improvement Company to house miners working at the Buck Ridge Colliery.
C, P



9 CENTRE TURNPIKE

This toll road was completed in 1811 and ran from Reading from Sunbury via Pottsville, Mt. Carmel, Bear Gap, and Paxinos. It was the main traffic artery from the interior to Philadelphia until the 1830's and the coming of Pennsylvania's canal system.
C, S

10 CHRIST EPISCOPAL CHURCH, MILTON

This is Milton's oldest church and the only one to escape the Great Fire of 1880. The cornerstone was laid on July 17, 1849, and the building was completed later that year. The church was renovated in 1897-98 and again in 1958. The congregation dates back to 1794.
C, G

11 DANVILLE AND POTTSVILLE RAILROAD

This was one of the first railroads built in the United States. It ran between Sunbury, Paxinos, and Shamokin. It was used to carry coal from the Shamokin coal fields to the Pennsylvania Canal at Sunbury. Begun in 1834, the line was opened to Shamokin in 1838. The first trains consisted of small wagons pulled by horses on wooden tracks. The line is now part of the Penn Central Railroad.

C, S, NA

12 DAVIS HOUSE, NORTHUMBERLAND

This large brick house is located at 309 Water Street in Northumberland. Construction began in 1772 on a lot previously owned by Joseph Priestley. In 1811 an addition was put on and in 1875 a third and final addition was built. The house features a fine interior with many pieces of antique furniture. The building is privately owned and currently used as a funeral home.

C, G, SA



13 DONNEL HOUSE, SUNBURY

This house was built in three sections, the oldest in 1779, making it the oldest brick building in Sunbury. The oldest part was originally a tavern, operated by Jacob Preisinzer. The house eventually passed into the hands of Charles G. Donnel, Judge of Northumberland County, and is known locally as the Judge Donnel House.

C, G

14 DUNKLEBERGER HOUSE, HUNTER'S STATION

In poor condition.

15 FIRST ELECTRIC LIGHT SITE, SUNBURY

The first successful use of a three wire indoor electric lighting system was begun on July 4, 1883, in the City Hotel, Sunbury. Thomas Edison personally supervised the work.

C, S

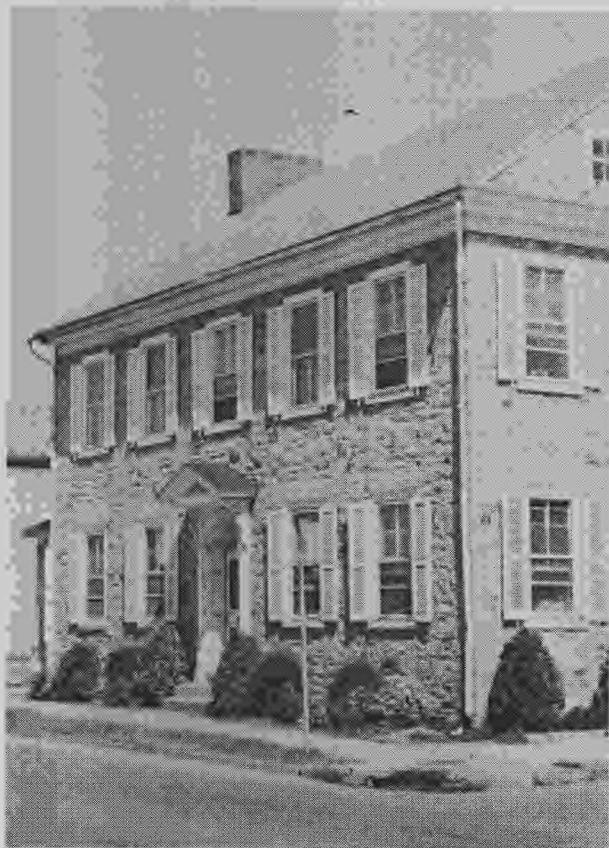
16 FIRST ELECTRIC STREET LIGHTS, MT. CARMEL

Mount Carmel was the first town in the world to use electric street lights. On November 17, 1883, Thomas Edison founded the Edison Electrical Illuminating Company and on January 1, 1844, Oak Street's electrical lights were turned on. The original installation consisted of 38 arc and 50 incandescent lights.

C, SA

17 FAIRCHILD HOUSE, MILTON

This is Milton's oldest house. It was built in 1803 by Peter Swartz for John Herthington. It survived the Great Fire of 1880 and several major floods. It is located on the corner of Apple and S. Front Streets.
S, G



18 FIRST PRESBYTERIAN CHURCH, WATSONTOWN

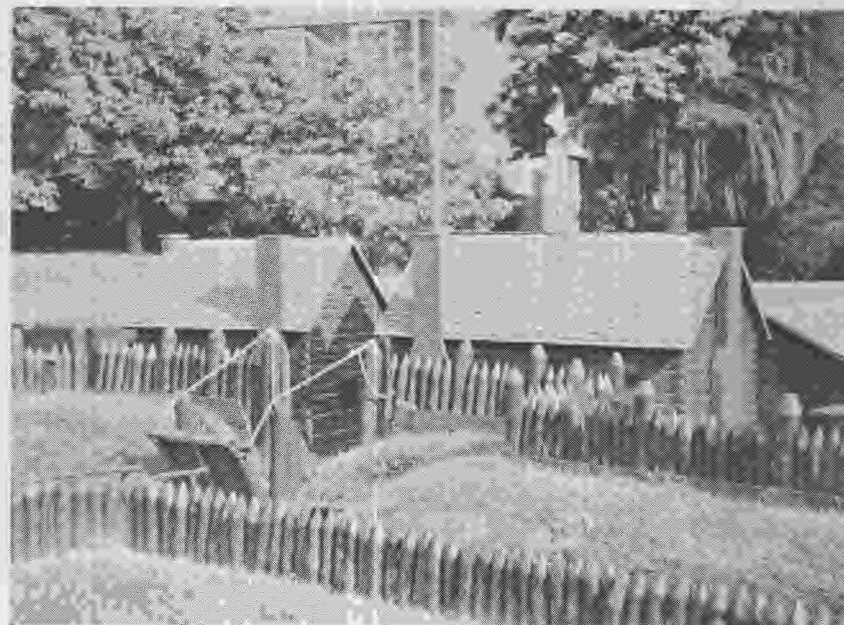
The congregation of this church dates back to July 16, 1775. The present church was built in 1874 at a cost of \$13,000 and dedicated on January 5, 1875. The interior was redecorated in 1965. The church features an interesting corner steeple with main entrance.
C, G



19 FORT AUGUSTA, SUNBURY

The large stockaded fort was built 1756-57 during the French and Indian War. It had a garrison of 400 men. The complex contained a commandant's house, barracks, well and powder magazine. The fort was abandoned in 1781. There is a 1:6 scale model of the fort and a museum located on the site at 1150 N. Front Street, Sunbury.

C, S, NA, G



20 SITE OF FORT BOONE, TURBOT TOWNSHIP

The site is located at the crossing of I-80 and muddy Run Creek. It consisted of a grist mill and stockade built by Capt. Hawkins Boone, a cousin of Daniel Boone. Capt. Boone was killed in the Battle of Fort Freeland on July 29, 1779. There is no record of Fort Boone's eventual fate, although relics have been found on its site.

C

21 FORT FREELAND, WATSONTOWN

The fort consisted of a stone farm house and a wooden stockade built in 1778. On July 29, 1779, it was attacked by British troops accompanied by Indians. After a bitter fight the fort's entire garrison of 21 men and boys were killed.

C, S, F

22 SITE OF FORT SWARTZ, TURBOT TOWNSHIP

The site is located about one mile north of Milton on the east bank of the West Branch of the Susquehanna River. It was one of three forts left standing from the North Branch to the West Branch in 1780. It's main function seems to have been to act as a deterrent of attack on settlements downstream and act as a buffer for the Sunbury-Northumberland area.

C

23 GLEN BURN COLLIERY, SHAMOKIN

This coal mining complex is located along Route 61 at Shamokin. Many of its structures date from the last century and are still in use today. Mining first began on this site in 1839 and was expanded by the Fagely Brothers in 1841. In 1862, the property changed hands and took the name Cameron Colliery. This colliery is one of the oldest and largest in the state and is now open to tours by the public.

C, S, NA, G



24 GRANT SCHOOL, MILTON

In 1789 the first grammar school in the county was built on this site at the corner of Cherry and Lower Market Streets. The original log building was used until 1838 when it was sold and moved to the mouth of Limestone Run where it was used as a blacksmith's shop. A two room brick schoolhouse was erected and rebuilt in 1872. It escaped the Great Fire of 1880 and survived until 1900 when the present school was built and named the Grant School. In 1914 a two room addition was built.

C, F



25 GREAT SHAMOKIN PATH, MILTON AREA

This was the main Indian highway from Shamokin (Sunbury) to the Ohio country. It followed the West Branch of the Susquehanna River to Lock Haven, then crossed the mountains by way of Snow Shoe to the West.

C, S

26 CHARLES HALL HOUSE, SUNBURY

This large colonial brick and stone house was first begun in 1775, and later expanded by the brick addition in 1796. It was built by Charles Hall, a noted lawyer. It is located at Front and Market Streets, Sunbury.

C, S, G

27 HIMMEL CHURCH SEXTON'S HOUSE, NEAR
REBUCK, WASHINGTON TOWNSHIP

This was originally a log schoolhouse built in 1774 by the Himmel Church. The building has been remodeled and is presently used as the Sexton's House.
C, S, F

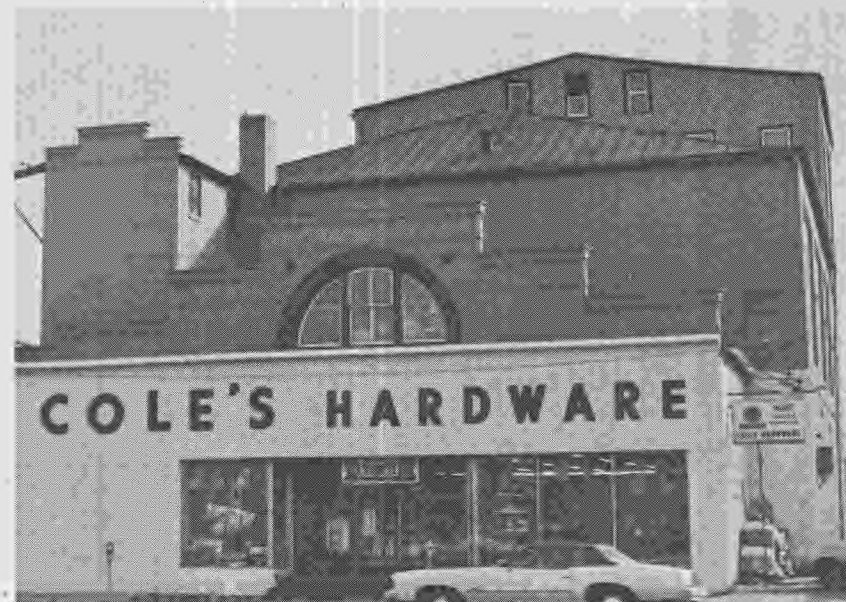
28 FARROW HOTEL, SNYDERTOWN

Old hotel once used as a stagecoach stop. It's now converted to apartments. Original building dates from early 19th century.
C, G



29 CHESTNUT ST. OPERA HOUSE, SUNBURY

Opened on September 12, 1901. From 1915 to 1935, 571 road shows and 440 vaudeville acts were performed. Such famous players as Helen Hayes, Tyrone Power, Sophie Tucker, and Marie Dressler performed here. Now Cole's Hardware Store.
C, SA, G



30 100F ORPHANAGE, UPPER AUGUSTA TWP.

History sketchy. Large complex of buildings along Snyderstown Road about 3 miles east of Sunbury. Once had own railroad station, still standing.
C, F

31 GASTON SCHOOL HOUSE, LEWIS TOWNSHIP

Located on Route 44 between Turbotville and McEwensville this one room school house is typical of the type of building used in the 19th & 20th centuries. Built in 1860, this school served as the summer school of the McEwensville Academy. This school was closed in 1937.

C, F



32 J.H. & C.K. EAGLE INDUSTRIAL PLANT NO. 1
(SHAMOKIN SILK MILL), SHAMOKIN

This huge brick industrial complex is located on East Independence Street in Shamokin. It was one of the largest silk processing plants in the world until the Depression and the advent of synthetic fibers ended the area's silk industry. The main building contains over three million bridles and a distinctive four-sided clock tower.

C, SA, F



33 PETER JONES TAVERN, NORTHUMBERLAND

This stone structure was built prior to 1800 at the corner of Wheatley and Priestley Aves. in Northumberland. It originally was used as a tavern with brewery attached. Later it served as the borough poorhouse. Currently it is a private residence.

C, F



34 KEEFER'S STATION BRIDGE

This Upper Augusta Township structure was built in 1888 and has a 100' span across the Shamokin Creek. The Burr Design bridge is located on Twp. Rd. 698 off Pa. 61.

C, SA, G



35 KEITHAN'S BAKERY, SUNBURY

This was Sunbury's oldest surviving business, established in 1881 by John A. Keithan. The store, with a bakery located in the rear, was located at 340 Market Street until being closed in June 1976.
C, G

36 KING'S HIGHWAY

This road ran from Orwigsburg to Fort Augusta via Minersville and Shamokin. It reached the Sunbury area in 1770.
C, S

37 KISHACOQUILLAS GRAVESITE, DALMATIA

The Shawnee Chief Kishacoquillas died in Dalmatia in 1754. His grave was uncovered in the early 1930's. This area is rich in indian lore.
C



38 KLASSE HOUSE, SNYDERTOWN

The Klasse House is a two story stone farm house located on LR 283 east of Snyder-town. It was one of the first houses built in the Shamokin Valley, completed in 1816.

C, F

39 LEHIGH VALLEY RAILROAD DEPOT, MT. CARMEL

The wooden station, built during the last century, is the sole remaining railroad station in the eastern end of the county. Despite its age, it is in fair physical condition and retains its original appearance.

C, P

40 JACOB LEISENRING'S TAVERN, BEAR GAP

This is a large five bay stone house and tavern built in 1812. It has massive gable chimneys and was a major stagecoach stop in the Centre Turnpike.

C, G, S



41 LOCUST GAP

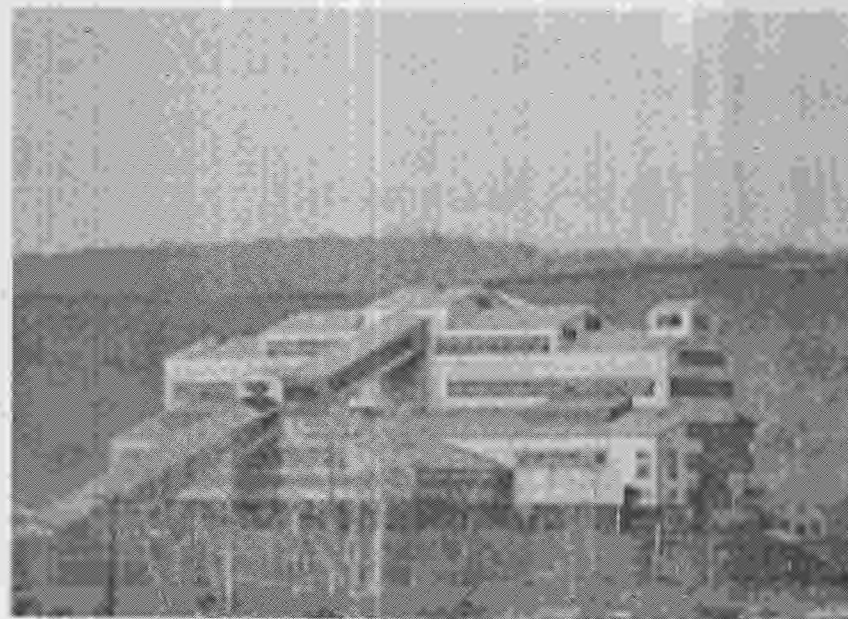
This small mining community was originally settled in the early 1860's. It was the center of Molly MacGuire activity in Northumberland County. The Molly leader Patrick Hester lived here and operated a tavern used by the Mollies as a meeting place.

C, SA, G

42 LOCUST SUMMIT COLLIERY, MT. CARMEL

This is the world's largest anthracite breaker. It was built in 1929 by the P & R, C & I Co. at a cost of \$4 million. Now replaced by a modern preparation facility, the original breaker still stands as a monument to the county's once great coal industry.

C, SA, F



43 HUNTER MANSION, SUNBURY

This large two story Victorian frame house was built in 1852 on the site of Fort Augusta by the grandson of the fort's last commandant. The house features a full double porch and balustrade. It serves as a museum for relics of Fort Augusta and is located at 1150 North Front Street, Sunbury.

C, S, NA, G



44 WILLIAM MACLAY HOUSE, SUNBURY

This large two story stone house was built in 1773. It is in the Georgian style and is one of the most elaborate houses in the area. Unfortunately, its interior has been severely altered although the exterior retains much of its original appearance. It is located at Front and Arch Streets.
C, S, G



45 MALTA SCHOOLHOUSE, MALTA

Interesting 19th century one-room schoolhouse. Used until fairly recently.
C, G



46 MANSION HOUSE, WATSONTOWN

Built in 1867 by John Forgeman.
Located on northeast corner of Main
and Second Sts. Interesting archi-
tecture.

C, G

47 MARKET HOUSE, SUNBURY

The present market house was built in
1901 by Charles and Issac Rockefeller,
local dairymen. Market day in Sunbury
dates back to the Act of Assembly in
1797 which incorporated the borough of
Sunbury and provided for a regular market
day in the town. The market house is
located on the north side of Market
Street at Stroh Alley.

C, SA, G



48 MCKEE'S FORT, DALMATIA

Believed to be the site of Capt. Thomas McKee's Trading Post established about 1740 and first located at this spot on the eastern bank of the Susquehanna River. For a period of time, McKee's Trading Post served as a stopping point for diplomats traveling between Philadelphia and the Indian town of Shamokin (now Sunbury). After McKee acquired extensive land holdings on the west bank of the Susquehanna River, he established a residence at what is now McKee's Half Falls for protection for the Indians on his west; consequently it is believed that McKee's Fort was located on both sides of the Susquehanna River at different periods of time.

49 NORTHUMBERLAND COUNTY COURTHOUSE, SUNBURY

The impressive brick courthouse was built in 1865 at Market and Second Sts., Sunbury. It is in the Romanesque Revival style featuring three bays with recessed semi-circular window arches, massive quoins, a truncated tower on one side of the main entrance and a large clock tower on the other side.

C, N, SA, G



50 NORTHUMBERLAND COUNTY PRISON, SUNBURY

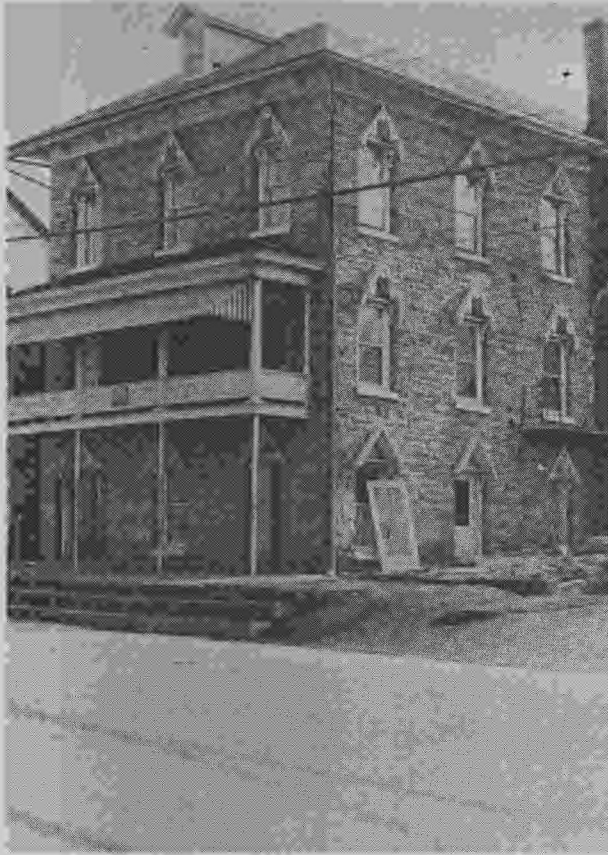
The county prison, located at the corner of Arch and N. 2nd Streets, Sunbury, was built during 1876 and 1877. It features stone construction laid in Ashlar courses. The prison is three stories high with a tower in the center. The entire complex is surrounded by walls 23 feet tall and 18 inches thick. Cells are arranged in two tiers with 23 cells to a tier.
C, SA, G



51 OAK HALL, NORTHUMBERLAND

This large stone Georgian House is located just north of Northumberland along Route 11. It currently houses American Legion Post 44.
C, S, G





52 PATTON HOUSE, TREVORTON

This English design house is built of native mountain stone and located on W. Shamokin St. across from the Post Office. It was built in the early 1850's. In late summer during 1857 a great celebration was held there to mark the bribing of Sunbury. Trevorton and Baltimore by rail. It is said that President James Buchanan slept here during the fete.
C, SA, F

53 PENN CENTRAL STATION, MILTON

This brick structure was built in the last century by the Philadelphia and Erie Railroad to serve Milton. Empty and unused now, it is the object of a community restoration and preservation effort.
C, F



54 PENN CENTRAL STATION, NORTHUMBERLAND

This impressive structure is a birch, colonial style building. It was built in 1910 by the Pennsylvania Railroad to serve the Borough of Northumberland. C, G



55 PENN CENTRAL RAILROAD STATION, SUNBURY

This large brick building is located at the corner of 3rd and Arch Streets in Sunbury. It was built in 1872 by the Northern Central Railroad. C, F



56 PENNSYLVANIA CANAL - NORTH BRANCH
DIVISION

The old canal runs along Route 11, 3.5 miles north of Northumberland. It was built 1829-32 and carried coal until 1901. Boats from the Nanticoke mines traveled over this division on their way to the coast. Remains of the canal bed and towpath are still visible.
C, S

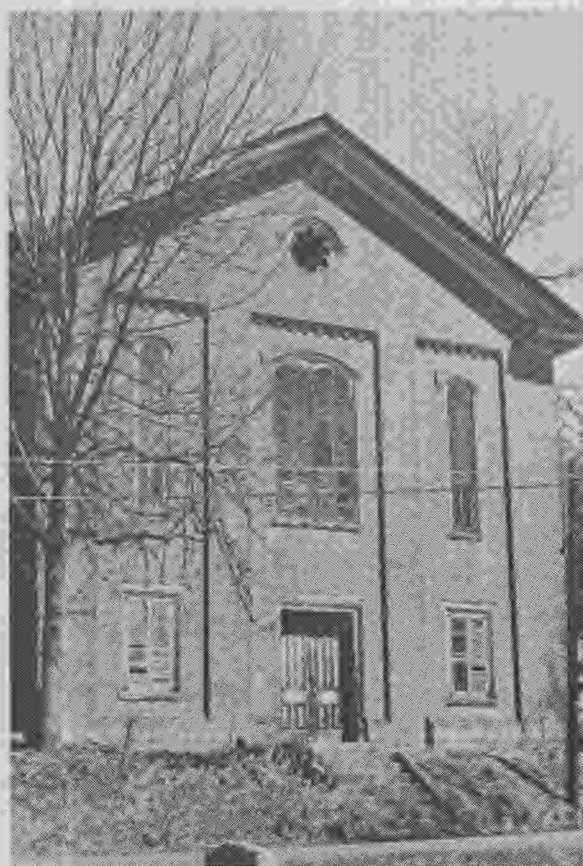


57 JAMES POLLOCK, MILTON

Pollack was born in Milton in 1810 and served as governor of Pennsylvania from 1855 to 1858. State debts were reduced during his term by the sale of state owned canals and railroads as Director of the Mint in 1864 he prepared the motto "In God We Trust" for coins. Pollock died in Lock Haven at the age 80.
C, S

58 OLD SHAMOKIN PRESBYTERIAN CHURCH,
SNYDERTOWN

The original church was built in 1847. It was a log structure in the meeting-house style. It was replaced by a brick building in 1887. The church is no longer used and in poor physical condition. C, S, F



59 PRIESTLEY'S GRAVESITE, NORTHUMBERLAND

Located in Riverview Cemetery, Northumberland.



60 PRIESTLEY-FORSYTHE MEMORIAL LIBRARY,
NORTHUMBERLAND

This large brick house was built in 1820. It houses many of Priestley's books and papers. Although the building became a library, it is possible that it was originally built by Theodore Burr as a tavern.
C, S, G



61 PRIESTLEY HOUSE, NORTHUMBERLAND

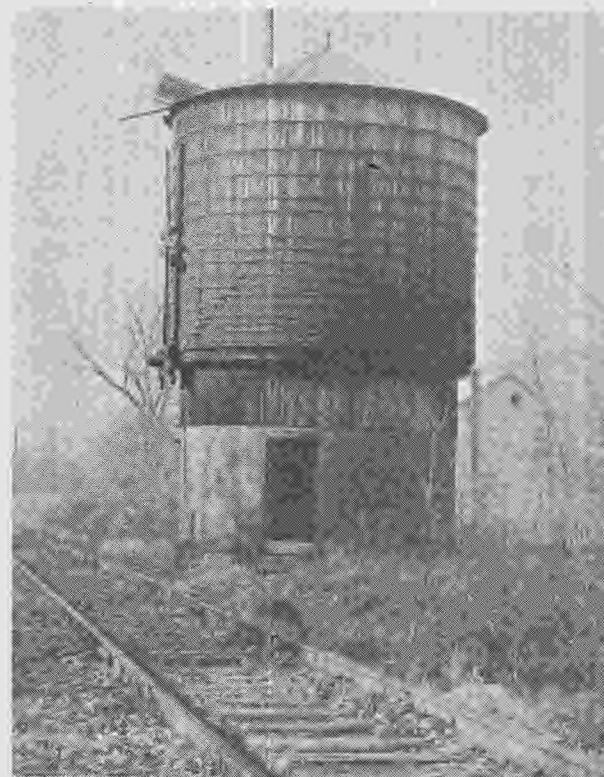
The large two story frame Georgian house is located at North and Hanover Streets in Northumberland. It is the home of the famous chemist, discoverer of oxygen, and noted Unitarian theologian. The home features one story side wings, one of which contained Priestley's laboratory a terminated gable roof with balmstrade, and a double fanlight entranceway. It is in excellent condition.
C, S, NM, G





62 JOSEPH PRIESTLEY MEMORIAL CHURCH,
UNITARIAN, NORTHUMBERLAND

This brick church was built in 1834. The church was founded by Priestley in 1794. It was rededicated as a memorial to Priestley in 1910. The building is located on Front Street, just off King Street, in Northumberland.
C, SA, NA, G



63 RAILROAD WATER TANK, TREVORTON

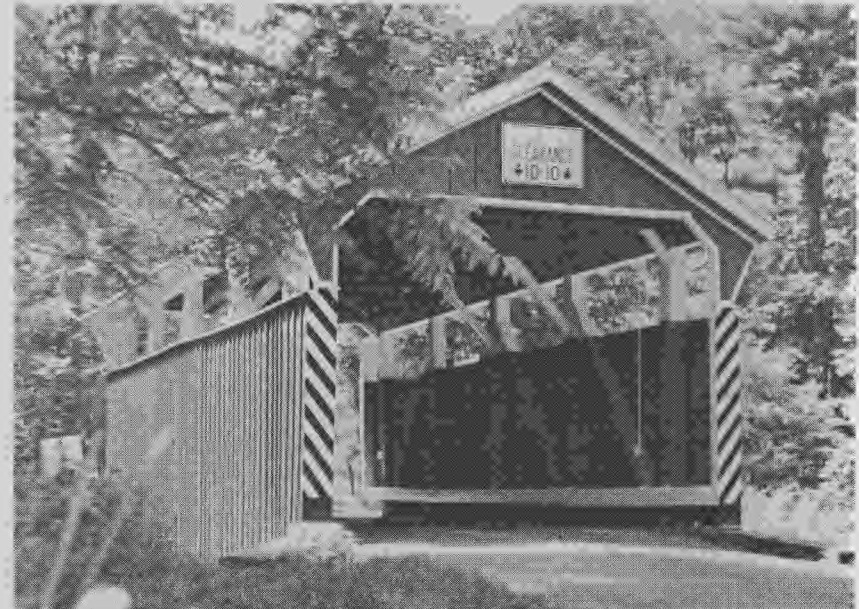
Shamokin and Trevorton were linked by rail in the summer of 1869 when the P&R completed a through route from Shamokin to Herndon via Trevorton. Heavy grades on the line required an ample supply of water. The tank is located along the railroad, just west of its crossing with TR 890.
C, F

64 READING RAILROAD STATION, SUNBURY

This station is currently being restored by private funds. It was the first railroad station to be illuminated with electric lights. The work was personally supervised by Thomas Edison in July 1883.
C, G

65 REBUCK BRIDGE, REBUCK

This King design bridge spans Schvalen Creek on Twp. Rd. 442 off LR 49010 near the village of Rebuck in Washington Township. The bridge was built in March 1874.
C, SA, G





66 RICHARD'S BRIDGE, RALPHO TOWNSHIP

This bridge is a 60' King and Queen design built in April 1852. It spans the South Branch of Roaring Creek and is located off Pa. Rt. 487 on Twp. Rd. 804 just south of Knoebel's Grove.
C, SA, G



67 RICHEL'S BRIDGE, MONTANDON

This is the oldest covered bridge in the United States. It was built in August 1812 at a cost of \$320 by James Moore, a noted bridge builder and one of the founders of Bucknell University. The 163 year old structure, located east of Montandon on Twp. Rd. 573, is of the Burr Truss design incorporating a series of King Posts with a 94' arch spanning the Chillisquaque Creek.
C, SA, NA, G



68 ST. EDWARD'S CHURCH, SHAMOKIN

St. Edward's Church is a beautiful Romanesque structure located at the corner of Webster and Shamokin Streets. Construction began in 1872 thanks to the efforts of Rev. Joseph Koch and the church was completed 7 years later. It is built of brown cut sandstone locally quarried on Big Mountain and was the first church in the world to be illuminated with electric lights. Recently gutted by fire, the church has been completely restored.
C, SA, G



69 ST. MICHAEL'S RUSSIAN ORTHODOX CHURCH,
MT. CARMEL

This church is a Byzantine structure completed and consecrated in 1707. The church is shaped like a boat and was built by the parishioners in three years. Each of its domes represents part of the Holy Trinity. The church also contains the first acronography or visual aids for teaching.

C, G

70 TRANSFIGURATION UKRANIAN CATHOLIC CHURCH,
SHAMOKIN

Massive stone church with five towers capped with domes and large arched windows. Perhaps the finest example of religious architecture in the county, this building is valuable for that reason and should not be destroyed. Located at Shamokin and Clay Streets in Shamokin.
C, SA, G

70 STS. PETER & PAUL CHURCH, MT. CARMEL

Fine Example of Byzantine architecture with the notable "onion" domes. Located at Beech St. and West Avenue in Mt. Carmel.

71 SHIKELLAMY'S GRAVE, SUNBURY

The final resting place of the great Oneida Chief Shikellamy is marked in a triangular plot of ground bounded by Fort Augusta Ave., Front St., and Adams Street.
C, S, G

72 SHIKELLAMY'S TOWN, MILTON

Located on Old Rt.147, .5 miles south of Milton, the Oneida chief lived here before moving to Shamokin (now Sunbury) where he was vice-regent of the Delaware Indians from 1728-1748.
C, S

73 BASSE BECK HOUSE, SUNBURY

This large stone house was built at the corner of Front & Arch Streets, Sunbury, in 1796. It is a Georgian house with elegant interiors.

C, S, N, G



74 COL. MATTHEW SMITH, MILTON

Buried in an unmarked grave 5.5 miles northeast of Milton on old Rt. 147, Co . Smith was a Captain of Lancaster County militiamen. He served with Col. Benedict Arnold on the 1775 midwinter march to Quebec. In 1779 Smith was elected Vice-President of the Pennsylvania Council. He died in 1794.

C, S

75 CASPER SNYDER HOUSE (BLUE BALL INN),
LOWER AUGUSTA TOWNSHIP

The brick house was built in 1789 by Casper Snyder. It was used as a stopping-off place by travelers on the old Tulpehocken Pike which ran past the house. A man was murdered in the house and another died there during a blizzard and their spirits are said to haunt the dwelling. The Snyder House is located along Rt. 147 seven miles south of Sunbury in Lower Augusta Township.
C, S, NA, G



76 SOBER'S CHESTNUT FARM, IRISH VALLEY,
SHAMOKIN TOWNSHIP

Coleman K. Sober, a wealthy lumberman, began to graft chestnut trees as a hobby in 1896. He developed the Sober Paragon Chestnut, a larger, more tender variety of eating chestnut. Sober soon started farming chestnuts on his family's homestead in Irish Valley. The enterprise flourished and by 1910 was the largest chestnut farm in the world, with over 800 acres under cultivation. In 1911 disaster struck in the form of a chestnut blight caused by the constant grafting and inbreeding among Sober's trees, killing all by 1918. Today a large barn is all that remains from Sober's empire in chestnuts.
C, SA, F





77 SODOM SCHOOLHOUSE, MONTANDON

The single story octagonal schoolhouse was built in 1836 of local limestone. It has been restored and retains much of its 19th century appearance. It was used as a school until 1915.

C, S, NM, G

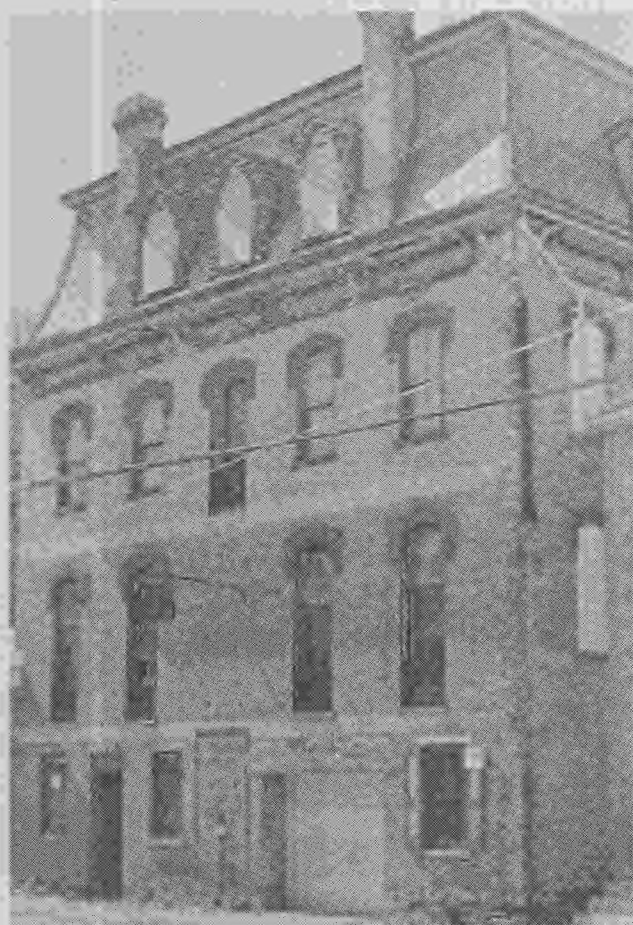
78 STAGECOACH INN, ELYSBURG

Obadiah Campbell built a log cabin on this site about 1779 when he moved from New Jersey after purchasing 400 acres of land. Elysburg now stands on the southern portion of this land. An inn was developed along the turnpike which bisected the tract.

C, G

79 DANIEL STAMBACH'S TAVERN, PAXINOS

This large stone tavern was built in 1815 along the old Centre Turnpike. It was the site of a banquet on November 26, 1835 to celebrate the opening of the Danville and Pottsville Railroad between Sunbury and Paxinos and served as the original station.
C, S, P



80 STONE VALLEY CHURCH, DALMATIA

Believed that public worship began here as early as 1765. First known as the Gap Church, then as the Christian Unity and now known as Zion's Stone Valley Church in the Evangelical Lutheran and Reformed Churches. First church building was a small log structure erected in 1795. Present brick structure was erected in 1890 on the site of the first premanent church of 1796.

81 STONE VALLEY CHURCH SEXTON'S HOUSE,
NEAR DALMATIA

Original parcel of land deeded to the church by the Penns. This small stone building is original and dates from 1790.

C, SA, G



82 SUNBURY TEXTILE MILLS, SUNBURY

Originally built in 1896, the brick complex is a classic example of 19th century "sawtooth" industrial architecture. Reorganized in 1954 as the Sunbury Textile Mills, the buildings remain in use to the present day.

C, SA, G



83 THOMAS HOUSE, STONINGTON

This stone house was built in 1797 along the King's Highway. Frame additions were added during the early 1800's. The house served as an inn and was later the home of Ruben and William Fagley. The Fagley Brothers were coal operators in Shamokin during the 1840's.

C, SA, G



84 TILGHMAN HOUSE, SUNBURY

This is the oldest house in Sunbury, built by James Tilghman, Secretary of the Land Office, in 1772. It is a stone house located near the north corner of Front and Market Streets.

C, SA, NA, G

85 TULPEHOCKEN ROAD

This was the first road to be surveyed and opened into Northumberland County. It was laid out in 1769 and opened through to Sunbury in 1782.

C

87 VINCENT MEMORIAL CHAPEL, WEST
CHILLISQUAQUE TOWNSHIP

This small wooden church was built early in the 1900's and named for Bishop Vincent who was instrumental in raising money for its construction - done mostly through the sale of bonds. The congregation is somewhat older, having met previously to construction of the chapel in a nearby schoolhouse.

C, G

86 UKRANIAN CATHOLIC CHURCH, SHAMOKIN

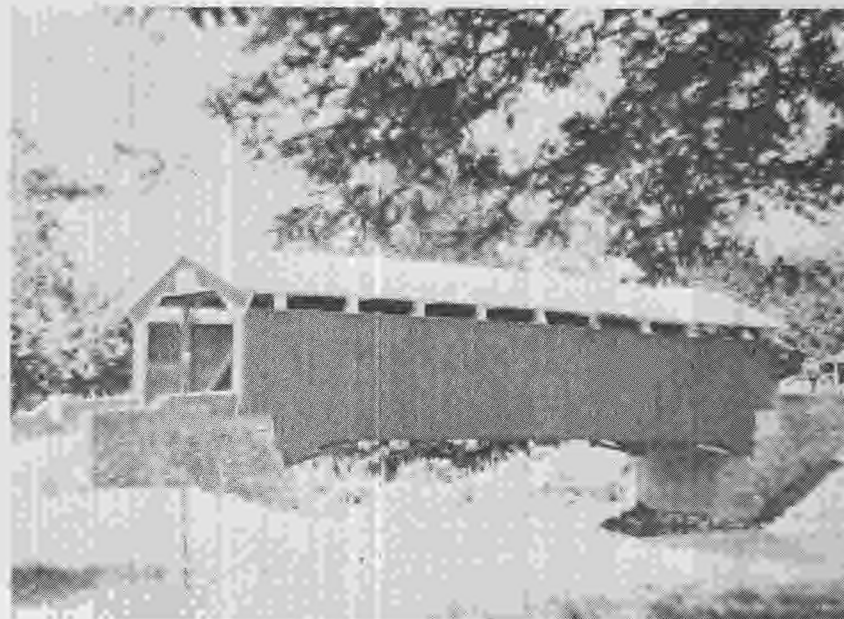
The large two story building was built from native granite in 1907. Reminiscent of the Eastern Orthodox Church it has numerous arches, towers, and bulbous onion domes topped by Byzantine crosses. It is located at Clay and Shamokin Streets in Shamokin.

C, S, NA, G



88 SAM WAGNER BRIDGE, NEAR POTTS GROVE

This is one of the oldest covered bridges in the United States reportedly built in 1812. The bridge is of the Burr Arch design and has an 87' span across the Chillisquaque Creek. It is located northeast of Pottsgrove off LR 49077.
C, SA, G



89 WARRIOR RUN PRESBYTERIAN CHURCH, NEAR MCEWENSVILLE

The original log church was built in 1789. The present beick building eas built in 1835 and restored in 1947. It is in the Greek Revival style featuring four Doric columns supporting a plain pediment and twin famlight doorways.
C, S, N, G



90 WASHINGTON TAVERN, NORTHUMBERLAND

The tavern was built before 1800 to serve local patrons and travelers on stage and canal lines. The Committee of Public Safety, a committee of the Continental Congress, was to also have used the tavern as a meeting place. More data is needed here and can be obtained from the tavern's current owner.

C, SA, G



91 THE WATSON INN, WATSONTOWN

The Watson Inn the oldest operating food and lodging establishment in Northumberland County. Originally known as the Cooner Hotel, it was founded in 1857 by William Cooner. It is located on the NE corner of First and Main Streets in Watson town.

C, G

92 MARTIN WEAVER'S TAVERN, STONINGTON

The large four bay house was built in 1815 of dressed stone. It features separate house and tavern entrances and a full front porch and was a stagecoach stop on the Centre Turnpike.
C, G



93 THE WHALEBACK, SHAMOKIN

The "Whaleback" is a unique geological rock formation resembling the shape of a whale. The 300 ton wonder is over 200 million years old and was discovered during strip mine operations in 1948. There are many unique rock structures near this geological oddity and the area abounds with fossils. The Whaleback is located near Shamokin at the end of LR 49073 at the village of Bear Valley Number Three.
C, SA, NA, G



94 WYOMING PATH, RT. 11

Located northeast of Northumberland along US Rt. 11, it is a section of the Iroquois Warrior's Path, following the Susquehanna River from Shamokin (Sunbury) to the Wyoming Valley.

C, S

95 ZION CHURCH, AUGUSTAVILLE

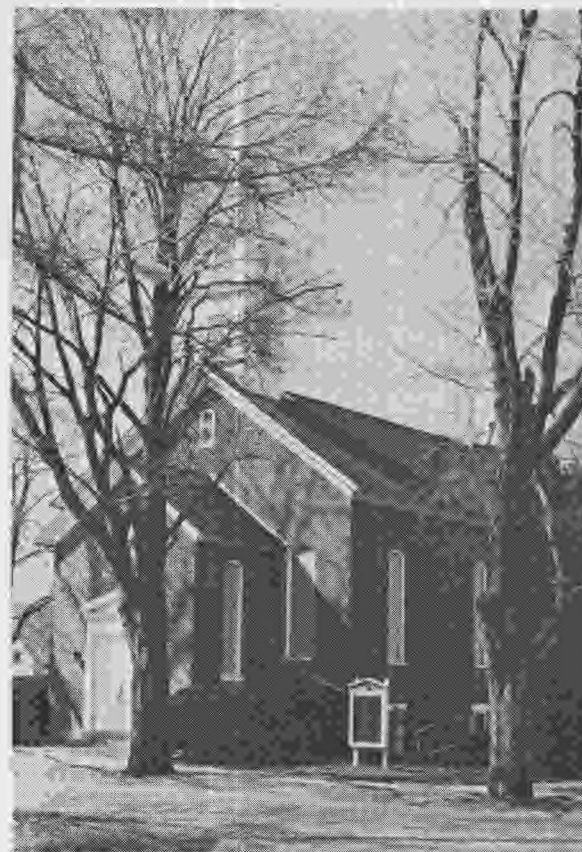
The first church was a small log structure built in 1765. The present church is built of stone in the meetinghouse style.

C, S, G



96 ST. PETER'S METHODIST EPISCOPAL CHURCH,
RIVERSIDE

This brick structure was built in 1872 in Riverside, taking the place of a frame building erected in 1829. This church has existed as an organization from the early period in the history of the Methodist denomination in central Pennsylvania.
C, G



97 WILLIAM REESER'S TAVERN, LOWER AUGUSTA
TOWNSHIP

This tavern is located in Lower Augusta Township on LR 49023 behind Brumbach's Auction barn. Located on what was the original Tulpehocken Road, this tavern is believed to have been run by William Reeser in the early 1800's. Later this became the site of a tannery.

C, F





98 PENN'S TAVERN

Built in 1789, this brick structure is located along route 147 about 7 miles south of Sunbury at Fisher's Ferry. Legends about disapperring blood stains on old floors, things in the hall, doors opening and closing, and clanking log chains abound. Historical data exists suggesting that William Penn's grandson John found his wife Mary Cox at the tavern after she had been abducted by the Indians. She died here and is buried about one-half mile north of the tavern along Rt. 147.
C, SA, G

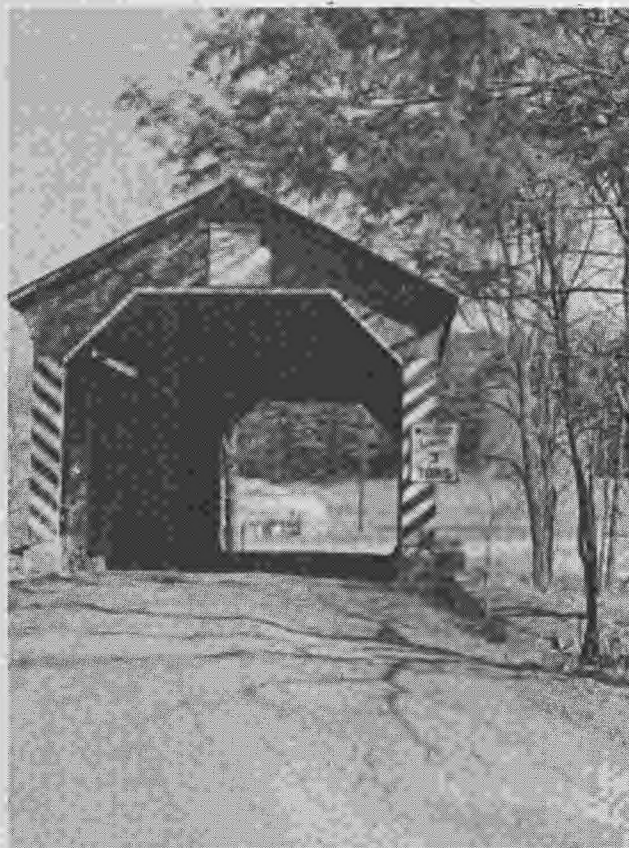
99 THOMAS EDISON'S FIRST ELECTRICAL GENERATING PLANT FOR THREE-WIRED LIGHTS, SUNBURY

Location of Edison Electric Illuminating Company, incorporated April 30, 1883. A lot 30 x 75 feet with a small house was purchased for \$300 and a small building about 25' square was erected. 3 wires were strung along Spring Run down as far as Woodlawn Ave. and then west to Fourth At. The upright dynamo, originally housed in this square building, is now in the Franklin Institute.

100 HUNTER AND GRANT CEMETERY, SUNBURY

Family plots of Hunter and Grant families each surrounded by a stone wall located behind Fort Augusta museum between Joseph and John Streets, Sunbury.

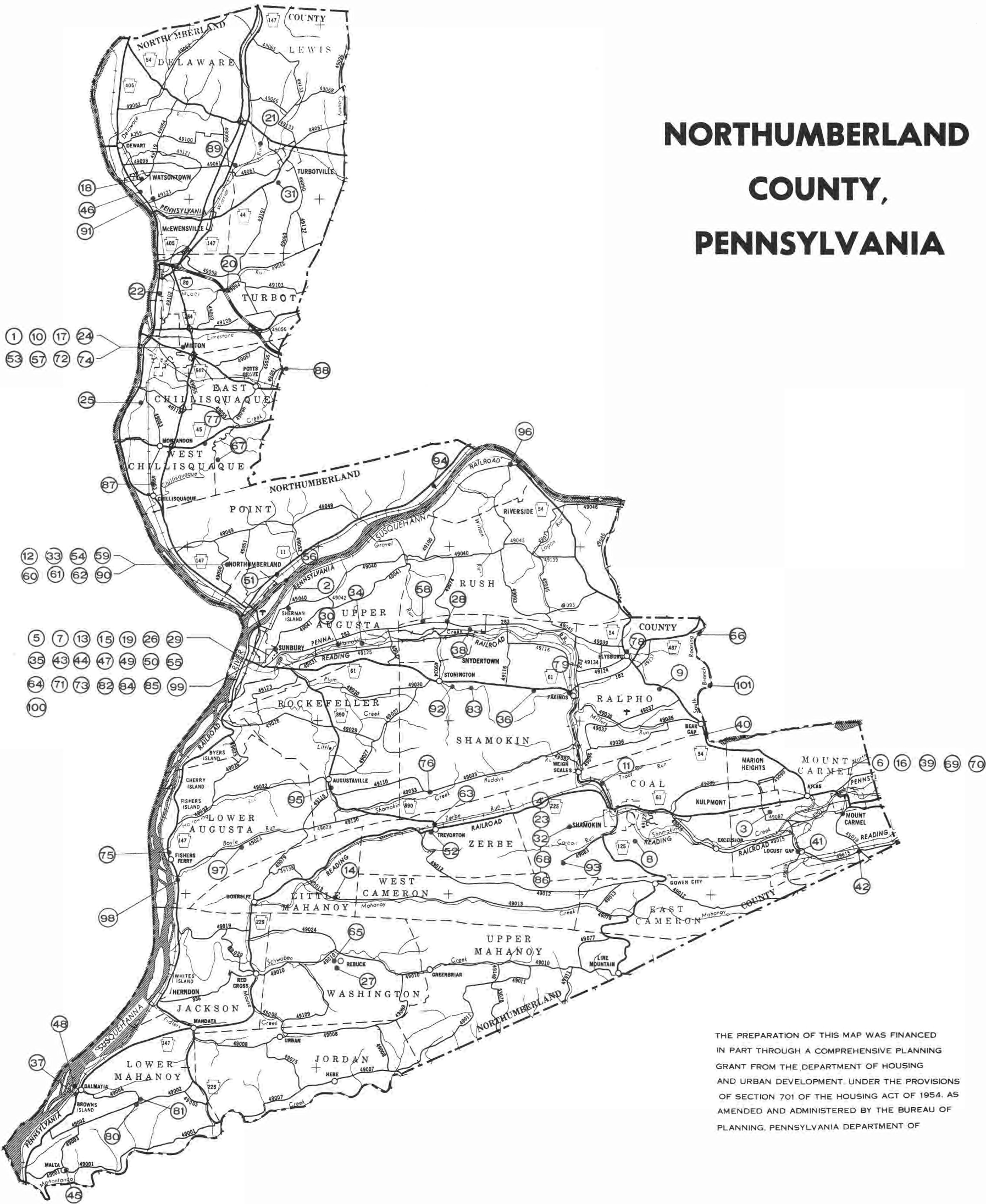
C



101 KRICKBAUM BRIDGE, RALPHO TWP.

Located in Ralpho Township off Pa.
Rt. 54 on Twp. Rd. 459. Erected in
October 1876 of Queen Truss Design
with a 51' span.
C, SA, G

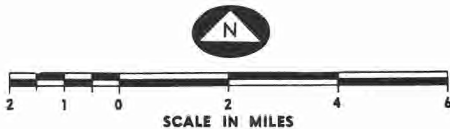
NORTHUMBERLAND COUNTY, PENNSYLVANIA



THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954. AS AMENDED AND ADMINISTERED BY THE BUREAU OF PLANNING, PENNSYLVANIA DEPARTMENT OF

HISTORICAL SITES

Northumberland County Planning Commission
Northumberland County, Pennsylvania



DATE:

PLATE NO.

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