# A History of Delaware Roads and A Guide to Researching Them





Philadelphia Pike, 1919 and 2004

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#### **History of Delaware Roads**

#### Introduction

To celebrate roads generally, and specifically designate historic roads, Delaware's Scenic and Historic Highways program embraces the notion that a road's history plays a central part in telling the story of a place. This guide provides an overview of the history of roads and transportation in Delaware from the seventeenth century to the present day. As you begin to make sense of the varied buildings, vegetation, and land uses in your road's corridor, this publication can provide historical background to the events surrounding its development. Among historians and preservationists, this background information is referred to as "historic context," which serves as the framework for the different significant time periods of history and important themes or trends specific to each period.

This historic context of Delaware's roads lays out the major chronological periods of transportation history for Delaware and the United States in six parts:

- Waterways, Trails and Early Roads, 1600-1700
- King's Highways and Colonial Roads, 1700-1800
- Turnpikes and Canals, 1800-1830
- 'Dark Ages of Roads': Railroads, Steamships, Streetcars, 1830-1900
- Automobile Roads: 1900-1950
- From National Highways to the Interstate Highway System, 1950-2000

These periods aim to relate developments in Delaware's transportation history together with national trends.

Delaware's roads challenge our understanding of history. Given the long history of settlement and development across the state, it's surprising to learn that roads as we know them today date only from the 1910s. Writing in 1919 as Delaware's chief engineer in the newly formed State Highway Department, Charles Upham described the need for an entirely new system of roads across the state.

In the beginning the State Highway Department had the general idea of following the old country roads so far as possible. But their endless winding, their constitutional irregularity, their unnecessary and dangerous sharp turns finally made it seem expedient to abandon the old roads altogether, so far as detailed alignment was concerned.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> <u>Delaware State Higways: The Story of Roads in Delaware from the days of the 'beasts of burthen' to "The Road to To-morrow</u> (Dover: Clearing House of the Delaware State Program: 1919), 24.

Delaware's roads consisted of an unplanned, loose network of roads that served local users. Maps from the nineteenth and early twentieth centuries show short sections of winding roads leading from point to point. These roads often found their alignments from habit rather than planning, producing the inefficient and dangerous roads the new engineers lamented. Old roads followed the terrain carefully, responding to topography, water, and vegetation in seeking the path of least resistance (and expense for bridges). Property boundaries also exerted a strong effect on the alignment of roads, with many roads following the irregular boundaries between properties as the path of least resistance.<sup>2</sup>

Delaware's first State Highway Department began with a mandate to build a modern road network, not just for Delaware, but also to serve national goals. The Federal Highway Act of 1916 provided Federal funding to support new road building and compelled each state to form a highway department to coordinate work. This focused attention on routes such as the duPont Parkway (present US 13 and 113) forming a major through route along the Eastern seaboard of the United States.<sup>3</sup> In addition to coordinating projects, the Highway Department promoted the application of professional engineering practice in the planning and building of roads. The Delaware Department embraced the creation of new, more direct routes as discussed already. The Department also adopted a policy for new highways to bypass towns to avoid traffic congestion and the conflicts associated with obtaining (and maintaining) the right of way along Main Streets. Engineers also employed steam-powered earth moving equipment to change the alignment of roads, lowering grades and filling in low spots to shorten roads and ease travel.<sup>4</sup>

The State Highway Department in 1917-19 set about designing and building a new integrated system of roads across Delaware. These engineers planned to first build 270 miles of roads to serve as the main arteries of the state's system; this out of 3,933 miles of public roads in 1919!<sup>5</sup> Delaware's network of new roads grew along a north-south spine begun as the duPont Parkway in 1911. As an indicator of both the state's low starting position and the progress achieved by the new road builders, total mileage for hard-surfaced roads increased from 11.4 miles statewide in 1915 to 825 miles in 1930 to 1,239 miles in 1934. Contemporary description boasted that "no house [was] more than four miles from a paved road" by the 1930s!<sup>6</sup>

<sup>&</sup>lt;sup>2</sup> A careful and thorough study of Delaware roadmaking in the 18<sup>th</sup> and 19<sup>th</sup> century can be read in an MA Thesis by Philip J Deters, "Local Roads – Technology, Custom and the Law: From Farm to Church, Mill and Market in the Delaware Piedmont, 1790-1850," (University of Delaware 1992).

Delaware 1992).

The national system of numbered routes emerged in 1925 with the rise of the new federal highways system, led by the American Association of State Highway Officials. Drake Hokanson, <a href="https://doi.org/10.2016/jnac.2016/jnac.2016/">The Lincoln Highway: Main Street across America</a> (Iowa City: University of Iowa Press, 1988), 108.

<sup>&</sup>lt;sup>4</sup> <u>Delaware State Higways: The Story of Roads in Delaware</u>, 24.

<sup>&</sup>lt;sup>5</sup> Delaware State Higways: The Story of Roads in Delaware, 10.

<sup>&</sup>lt;sup>6</sup> Delaware Federal Writers' Project Papers, "State Highways and Byways," 325, 327.

The shift from old roads to new involved more than just the commitment to rebuild roads. Fundamental shifts took place in the minds of road builders and users in the 1910s and 20s. Through the nineteenth century and into the twentieth, as the Chief Engineer put it, "the old theory was to spend much for maintaining, little for building [roads]." In a time before heavy trucks and commuters in cars, gravel or macadam road surfaces could be built cheaply and maintained in good order year after year. Roads were maintained locally, with residents volunteering to help fill in low spots. Grading of roads was carried out periodically as needed, contracted among local residents by appointed supervisors in each of Delaware's Hundreds.

With the coming of the automobile, this approach to road building met the 'death of a hundred trucks' during the First World War. In northern Delaware, truck convoys came into heavy use for the first time to haul war materials through the Northeast corridor and devastated Delaware's aging mud and gravel roadbeds. Truck-inflicted damage forced the new highway department to reassess its statewide road-building and maintenance plans. Surfaces that had been adequate for horse-drawn, local traffic proved hopelessly flawed for the coming of the automobile age. The impact of automobile and truck traffic from both in- and out-of-staters elevated roads from a local concern to a state and even national priority. Changing demands ushered in a new era of road building: "new roads of a permanent type...spending much for building and very little for maintenance." The craft of maintaining the old macadamized road went the way of the horse and buggy as engineering and planning gave birth to the new road. <sup>7</sup>

Yet Delaware's rich history as the 'First State' and long settlement by Native Americans, Swedes, Dutch, and English settlers complicates this story of 'new roads.' While the Chief Engineer advocated the abandonment of the state's traditional network of short, dog-legged, and soggy-bottomed roads, the deep history of settlement along the Delmarva peninsula compelled modern builders to pretty much follow the same routes as their forbearers. For example, the duPont Parkway followed a similar path as the seventeenth-century King's Highway from Wilmington to Dover. Likewise, Interstate 95 utilizes the same corridor as the King's Highway, the Baltimore Turnpike, the Baltimore and Ohio Railroad and US Route 40. In this sense, Delaware's roads are both new and old; the roads we travel are mostly products of the 1920s-1960s, yet the corridors they follow often date to the 1700s or even 1600s. Telling the story of your road may cut across multiple historic periods reflecting different ideas about road building, travel, and land uses along the right of way.

The following history of road development not only illustrates three centuries of roads in Delaware and the United States, but also the changing way Americans have conceived of roads from colonial times to the present. This historic context develops the major national themes of transportation history and then relates them to Delaware's unique development.

<sup>&</sup>lt;sup>7</sup> <u>Delaware State Higways: The Story of Roads in Delaware</u>, 9.

#### Waterways, Trails, and Early Roads 1600-1700

America's native inhabitants who lived along the eastern seaboard of North America primarily used rivers and streams for travel, while overland trails often connected arterial waterways. When Europeans began establishing colonial settlements in the 1600s, they tended to cluster their communities in costal areas or along rivers which provided direct access to major water routes. The important role water played in transportation is reflected in the settlement patterns established in many of Delaware's earliest communities. An important feature in Delaware's early Swedish settlements was the longlot—a long thin strip of land which began at waters edge and moved inland. This division of land emphasized the value of access to the water's edge and water-borne transportation.

Geographer James Vance writes of this early time that "on land all that were needed were paths for animals and carts to move among adjacent farms strung along the shore." Early roads—short, discontinuous and parochial—followed well-worn Indian trails and animal paths across the landscape of the New World. John Stilgoe has described Americans as believing that "roads appeared by chance, not intension." In Delaware, travel from the north to the south was accomplished by navigating the river or the bay, while east to west travel depended on rivers and creeks that lead to the state's interior.<sup>8</sup>

#### King's Highways and Colonial Roads 1700-1800

Throughout the Colonial period, improved roads—ideally free from obstruction and "made" from compacted earth or surfaced with stone—remained relatively rare. The King of England designated some roads as "King's Highways," perhaps for purposes of legal right of way and communication between colonial officials and elites. In 1679, the Levy Court in New Castle records that the King's Road be made

clear of standing and living trees at least 10 foot broad; all stumps and shrubs to bee cloose cutt by ye ground; the trees markt yearly on boath sides; sufficient Bridges to bee made & kept over all marshy, swampy and difficult, dirty places, & whatever else shall be thought more necessary in & about ye highways aforesd. 9

This passage suggests that the King's Highway was little more than a rough woodland trail hacked through the brush and trees, lacking a prepared roadbed. These were not roads as we think of them, usually involving concrete, asphalt, or even gravel surfaces. Nor did they have a

<sup>9</sup> Scharf, History of Delaware, 413

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<sup>&</sup>lt;sup>8</sup> James E. Vance, <u>Capturing the Horizon: The Historical Geography of Transportation since the Sixteenth Century</u> (John's Hopkins, 1990),170; John Stilgoe, <u>Common Landscapes of America: 1580-1845</u> (New Haven: Yale University Press, 1982), 128.

fixed alignment; the route was to be marked yearly as the brush was cut away to again widen the 'right of way.'

In Delaware and the surrounding region, political and economic developments during the Colonial period led to the designation of several King's Highways, extending from Philadelphia to Dover as well as points further south. Delaware's roads, where they existed at all, tended to follow an east to west axis from coastal ports inland, with a north-south passage roughly following the course of modern-day US 13. These routes were dependent upon local terrain which varied across the state. William Beckett, Anglican missionary at Lewes described roads in eastern Sussex county in 1728 in a letter:

The Roads in my Parish are very commodious for traveling, the Land being level and generally sandy. So that people usually come to church Winter and Summer some 7 or 8 miles and others 12 or 14 miles which is no strange thing, but very common among the Inhabitants of America.<sup>10</sup>

The flat topography and well-draining sandy soil made local inland roads passable for horsedrawn travelers, but conditions varied across the state where swamps, streams, and the hills of the Piedmont complicated land travel.

In eighteenth-century Delaware, water transportation remained the dominant mode of transport for people and goods, yet roads formed a link in the regional transportation network. Eighteenth century newspaper articles and advertisements from the newspapers such as the *Pennsylvania Gazette* often described roads as major features, playing upon that timeless rule of real estate 'location, location, location.'

To be Lett...A Brick messuage, in the town of St. George in New Castle county, on Delaware...the whole is commodiously situated on a very public road, leading to and from Philadelphia to Dover, to Lewestown, to Georgetown, in Maryland, Frederickstown and Annapolis, &c. The house has been a long accustomed tavern and store.<sup>11</sup>

Though lacking the hard surfaces and engineered alignments of today's roads, these early roads formed extended networks in the eighteenth century mind, connecting the small village of St George to points as distant as from Annapolis to Lewis and Philadelphia. Other examples highlight different connections:

To be sold, a tract of land, at Whiteclay creek, in New Castle County, containing above 100 acres...for years past has had great applause for producing large crops...the front of this land is high, and commands a fine prospect, and the creek is so deep, that ships of 200 tons burthen have been built there...As this is the nearest landing to Lancaster and the back counties of such a depth of water, which with the pleasantness of the situation will admit of great improvements for trade or landings. <sup>12</sup>

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<sup>&</sup>lt;sup>10</sup> Reprinted in "Descriptions and Travel Accounts of Delaware,1700-1740." <u>Delaware History</u>, 141.

<sup>&</sup>lt;sup>11</sup> Pennsylvania Gazette, Item 38757, 11 September 1766.

<sup>&</sup>lt;sup>12</sup> Pennsylvania Gazette, Item 52721, 25 February 1773.

Transportation in the eighteenth century closely integrated roads together with water-based forms of transit, as roads carried goods from inland towns and farms to water landings. Water transportation provided the most efficient means of moving people and goods. The value of such access is promoted in advertisements such as this one from 1794:

A valuable plantation, lying in Apoquimeny Hundred, New Castle county, in the state of Delaware...on which is erected a good log dwelling-house; there is a bearing orchard of good fruit, the remainder is covered with as good timber as any whatever, which of consequence must render it very valuable to the purchaser, lying only 4 miles from the landing on the Delaware, 4 from Duck Creek cross roads, joins on the great road leading from Philadelphia to Dover, has every advantage of a public post road and water navigation; when the price of fuel at the metropolis of Pennsylvania is considered, the advantages resulting from this estate, on account of its timber, must be obvious. <sup>13</sup>

Without access to good roads and water transport to Philadelphia, the standing timber would be much less valuable. Roads and water transportation comprise an important network; without access, there would be no development or commerce. Another plantation advertised "to be Lett…near the Mouth of Christiana creek, distant from Philadelphia 30 miles by Land" points out that "Passage by Water generally made in four or five Hours."

Other advertisements and notices advertising rewards for captured runaway slaves and indentured servants suggest something of the characters along the colonial road. Consider, for example, the case of Hugh Baker, described in an advertisement featured in the <u>Pennsylvania</u> Gazette on May 21, 1770:

Five pounds reward. Ran away yesterday morning from the subscribers mill on Pennypack, an Irish servant lad, named Hugh Baker, a forward, hearty, active fellow, about 19 years of age, 5 feet 8 inches high, has a tolerable good countenance, rather pale, and when spoke to, is apt to move his face to and fro, as well as to keep his body and feet in motion; walks clumsily; he can write and cast up invoices and accounts; wears remarkably long brown hair, sometimes tied behind; he may perhaps cut it off, to prevent his being apprehended...He was met yesterday by a person coming from Chester to Philadelphia, on the road traveling downwards, with a design, as it supposed, to get onboard of the man of war that now lies at New Castle, or some vessel that may be at Reedy Island, as he attempted it about twelve months ago. Whoever secures said servant in any goal, so that the subscribers may have him again, shall be entitled to the above reward, besides reasonable charges, from ROBERT and ELLIS LEWIS. 15

To readers of the late 18th century, the road is a place onto itself. Hugh Baker isn't to be found at Chester, Grubbs Landing or Brandywine Village, but instead 'on the road traveling downwards.' And to Hugh, the road is a special sort of place, a dynamic place of transition, a liminal space halfway between servitude and freedom...or at least the sort of freedom one might find on a 18th century man-of-war. Many people, such as Hugh Baker, took advantage of the seemingly

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<sup>&</sup>lt;sup>13</sup> Pennsylvania Gazette, Item 79710, 11 June 1794.

<sup>&</sup>lt;sup>14</sup> Pennysıvania Gazette, Item 39552, 15 January 1767.

<sup>&</sup>lt;sup>15</sup> Pennsylvania Gazette, Item 46688, 24 May 1770.

uncontrolled nature of colonial roadways while other travelers fretted about traveling on the road, perceiving them as treacherous and uncontrolled.

Despite any perceived danger they posed, roads became increasingly important as settlement spread west through the Piedmont and into the Trans-Appalacian West. During the French and Indian War, the military forged their way through forests and countryside using Indian guides, while explorers such as Mason and Dixon pioneered new routes across the wilderness. During the American Revolution, British blockades of the Atlantic seaboard made good overland transport a necessity for soldiers as well as merchants. By 1783, when the Treaty of Paris finally codified American independence from Britain's Imperial control and mercantilist policy, stagecoaches utilized recent road building efforts. Still, as settlers emigrating westward carved farms out of the frontier west of the Appalachians, the need for wagon-friendly routes and "economic roads" to move freight to coastal markets intensified, and the question of who would pay to build and maintain them became an increasingly public concern.

#### **Turnpikes 1800-1830**

The effort to build new roads at the close of the eighteenth century and the first decades of the nineteenth century was both a local and national priority. Debates raged among Federalists and Democrats (notably Alexander Hamilton and Thomas Jefferson) over the role of the federal government in supporting or building 'national roads'. From this contentious standoff emerged the turnpike – a state-chartered, privately financed toll road, taking its name from the turning gates located at toll houses every few miles along the road. The first of these major toll roads was the Philadelphia and Lancaster Turnpike, completed in 1794. Delaware's first turnpike was the Newport-Gap Pike, completed in 1808 and extended to Wilmington in 1811. <sup>16</sup>

Driving the construction of turnpikes in America were new innovations in road technology and engineering. Historian John Stilgoe makes a distinction between "natural roads," those emerging out of habit and "artificial roads" best typified by the turnpike. The turnpike corporations sought out the straightest routes between destinations to minimize the cost of construction. They also employed new techniques in constructing prepared road surfaces. The Scottish builder and engineer John Loudon MacAdam (1756-1836) developed a system that used a heavy roller to press broken or crushed stone into the ground. With layered stones compacted and interlocked with each other and small stone particles worked into the voids and set with water, macadam surfacing proved strong, smooth, and capable for withstanding heavy traffic. By the first decades of the nineteenth century, macadam technology had arrived in the United States, a relatively

<sup>&</sup>lt;sup>16</sup> For the most thorough and readable history of turnpikes, see Donald C. Jackson, "Turnpikes in Southeastern Pennsylvania," in <u>Early American Technology: Making and Doing Things from the Colonial Era to 1850</u>. (Chapel Hill: University of North Carolina Press, 1994): 197-239. Lichtenstein Consulting Engineers, <u>Delaware's Historic Bridges</u> (DelDOT, 2000), 4.

inexpensive way to build turnpike or other road whose maintenance cost could be spread over a long period of time. 17

An act passed in 1811 by Delaware's state legislators to construct a road from Wilmington to Great Valley points out that travel between these two destinations was suffering so much "as to become deeply injurious and sensibly felt by the public." The Great Valley road, like many eighteenth and nineteenth century roads, were generally little more than dirt paths over which stages and wagons could creep. Because the local bodies which maintained most roads often had neither money nor the time to improve them, many roads were in a constant state of disrepair. 18

Realizing that much of Delaware's economic well-being depended upon providing a way for traders and farmers to get their goods to and from the market, the state encouraged private companies to sponsor the construction of several new turnpike roads within Delaware that were funded largely through the collection of road tolls. A number of turnpikes radiated out from Wilmington to connect the agricultural hinterland with the city's ports and industry: the Newport and Gap Turnpike (1808, 1800), Great Valley or Concord Pike (1809-13), New Castle and Frenchtown Pike (1809-14), Kennett Pike (1812-13), New Castle and Wilmington Pike (1813), Philadelphia Pike (1813-23), and the Christiana and Wilmington Pike (1821). 19 These economic roads fostered Delaware's industrial, commercial and agricultural development.

This system also placed the burden of supporting road maintenance firmly on the users of the new turnpikes, many of whom came from neighboring Pennsylvania. The rich soil of southeastern Pennsylvania produced agricultural prosperity that directly affected Delaware. Grain produced in along the fertile valleys of the Piedmont fed Wilmington's Brandywine flour mills.

The Philadelphia Pike, formerly a King's Highway, was an important turnpike that provided a macadamized riding surface from Delaware's settlements to Philadelphia during America's Federal period. First chartered in 1813, the road was not completed until 1823. By 1800, the Philadelphia to Baltimore Turnpike crossing east to west across the northern neck of Delaware was the principal land route between those cities and the overland portage between Elkton, Maryland on the Chesapeake Bay and Christiana on the Delaware Bay.

Although turnpikes facilitated regional travel, some investors complained that toll roads did not provide adequate economic returns. This was the case in Delaware and other states where turnpikes tolls rarely covered management and operating costs.<sup>20</sup> Although the turnpike approach to road building had limitations, demand for improved roads in the early national period

<sup>&</sup>lt;sup>17</sup> Stilgoe, 128.

Delaware State Higways: The Story of Roads in Delaware, 7.
 Delaware's Historic Bridges, 5.

<sup>&</sup>lt;sup>20</sup> Delaware's Historic Bridges, 5

continued. The impetus for roads played upon popular Jeffersonian ideals of agrarian self-sufficiency. Recognizing the economic benefit of fostering land ownership and social mobility, the federal government began taking steps to subsidize frontier settlement. As construction began in 1806, the Cumberland Road offered a 30-foot-wide, paved route over the Appalachian Mountains, extending from Maryland to Kentucky. Funded by Ohio land sales, the Cumberland Road stretched from the Potomac to the Ohio Rivers. When the road was completed in 1817, this route became the first National Turnpike—"one of the chief avenues to the west."

#### Dark Ages of Roads: Railroads, Ships, Streetcars 1830-1900

The early to mid-nineteenth century can be characterized as a period when road development stagnated, what one scholar has termed "the dark ages of roads." In the mid-nineteenth century, new transportation technologies such as the canal, steamboat, and railroad shifted transportation investment away from roads. Turnpikes had not yielded the economic windfall desired by private investors and revenues kept falling as overland freight took to the much more efficient system of canals and railroads spreading out across the nation.

From the 1830s to the 1900s, roads increasingly became the concern of local, rather than state or federal government policy. (The federal government would not support road-building again until the early 1900s.) Furthermore, states resisted the loss of sovereignty associated with the federal subsidy of road building. Between 1829 and 1837, President Andrew Jackson and the Democratic Party limited federal involvement in road building efforts, preferring to leave transportation in the hands of local government.

After the improvement of the steamship by Robert Fulton in 1807, these self-propelled vessels navigated waterways irrespective of wind and current, facilitating the efficient transport of cargo along America's great river systems: the Mississippi, Ohio, Missouri, Hudson, and Delaware. Steam powered packet boats also ran along the shores of the Delaware Bay from Philadelphia to Lewes.<sup>23</sup>

Canals extended the reach of water-borne transportation. With the completion of the Erie Canal in 1825 the canal era began in the United States, reaching its height around 1840. During the first half of the 1800s, canals promised easier long distance shipping of commodities such as grain and coal. Featuring a complex system of locks, canals were feats of engineering borrowed

<sup>&</sup>lt;sup>21</sup> James E. Vance, <u>Capturing the Horizon: The Historical Geography of Transportation</u> <u>since the Sixteenth Century</u> (John's Hopkins, 1990), 170-179.

<sup>&</sup>lt;sup>22</sup> Maxwell G. Lay, <u>Ways of the World: A History of the World's Roads and the Vehicles</u> that Used Them (New Brunswick: Rutgers University Press, 1992), 344.

<sup>&</sup>lt;sup>23</sup> James E Valle, "Steamboats in the Salt Marshes" in <u>The Delaware Estuary:</u>
Rediscovering a Forgotten Resource (Newark: University of Delaware Sea Grant College, 1988),
28. John Munroe also wrote a personal history of making the journey from Delaware to
Philadelphia, published as "The Trip to Philadelphia" in <u>The Philadelawarians and Other Essays</u>
Relating to <u>Delaware</u> (Newark: University of Delaware Press, 2004) 294-299.

from Europe that connected existing water routes and facilitated heavy transport. Horses or mules towed smaller freight-laden while steamboats became more common as the century progressed.<sup>24</sup>

In Delaware, the Chesapeake and Delaware Canal, opened in 1829, dramatically reduced the distance of water routes between Philadelphia and Baltimore. Spanning east to west across Delaware, the canal provided an important shipping route between the Chesapeake Bay and Delaware River. Canals, however, proved impractical in creating a comprehensive transportation network across the state (and the nation). The commitments of time and money for canal building proved great; the fourteen miles of the Chesapeake and Delaware Canal took four years to build and cost over two million dollars.

The enthusiasm for canal-building was short-lived and soon overshadowed by another engineering innovation: the railroad. As the industrial revolution began to transform the midnineteenth century American landscape, railroad development marked the fusion of advancements in technology with interstate carrying capacity. Steam-driven locomotives rapidly eclipsed road and water transportation for the efficient movement of passengers and goods across long distances. Although largely uninvolved with local road building, Andrew Jackson's government had an eye to the American west and encouraged the trans-continental application of this new technology by designating all railroads as postal routes in 1838, and subsidizing private railroad development through land grants. At that time there were 3,000 miles of track across the country, although by 1860 that number had increased to 30,000.

The railroad came to Delaware early, with the New Castle and Frenchtown Railroad opening in 1831. The Philadelphia, Baltimore, and Wilmington Railroad connected the three cities in 1838. By 1856 the Delaware Railroad reached as far south as Seaford, extending to Delmar in 1859. Delaware's railroads integrated the state's economic development on a north-south axis, while also tying it into larger transportation networks of the eastern seaboard. Development boomed along the spine of railroads extending through Delaware's center. The industrialized northern part of the state, focused in New Castle County, and the agricultural south were both serviced by trains that linked Delaware's economic growth to national markets via high speed rail. The state became a major supplier of food for burgeoning industrial cities such as Philadelphia, Baltimore, New York and Pittsburgh. Prior to refrigerated carriages, fresh peaches and strawberries departed northbound from Kent and New Castle Counties and arrived at city markets within hours.

Following flatter topography and established settlement patterns, railroad companies often sought out the same transportation corridors as earlier post roads, turnpikes, and canals. New towns also sprang up alongside railroad stations across America, responding to new access and economic opportunities. While settlers continued to move westward, emigrant trails and

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<sup>&</sup>lt;sup>24</sup> William Holmes, "Turnpikes Across the Peninsula," <u>Delaware History</u>, 73.

wagon roads seemed to most successfully open up the west for railroad developers. After 1850 the railroad was the long distance carrier of choice. <sup>25</sup>

Rail transportation also affected cities where land developers and entrepreneurs planned suburban communities connected by rails. Starting in 1864, Wilmington saw its first horse-drawn street car for commuters which traveled a route that extended two miles from the Philadelphia Wilmington & Baltimore railroad depot to the end of the line near the Baltimore & Ohio RR Depot. Two decades later in 1885, the first experimental electric trolley lines were constructed in Wilmington. Trolleys quickened the pace of transportation and in the process made it possible for people to live ever farther from the urban center. Streetcars carried commuters north and west of Wilmington to new suburbs such as Elsmere founded in 1891 and Gordon Heights (Bellefonte) founded in 1905. Several amusement parks and resorts, such as Wilmington's Shellpot and Brandywine Springs Parks, were also constructed by trolley car companies interested in increasing their ridership while also offering city residents a summertime escape. <sup>26</sup>

#### Automobile Roads 1900-1950

Streetcar suburban development and country amusement parks were just one expression of the growing desire of overcrowded city dwellers to escape to the country. The bicycle was the first technology to enable individuals the total freedom of movement under their own power. Starting with the 'high-wheeled bicycle' in the 1870s and increasing in popularity with the 'safety bicycle' introduced in 1889, the bicycle craze promoted recreational travel. The invention of the bicycle and increasing appearance of automobiles made sporting travel in the country an option, although these vehicles required smooth road surfaces. While these new vehicles were at first only available to the rich, their need for paved roads resonated. The poor state of roads compelled the League of American Wheelman (a bicycle advocacy group) to lobby the government for better road surfaces suitable for rubber-tired bikes. Urban dwellers could rely on streetcars for inner city commutes, but city streets quickly became congested. Country roads leading to urban markets were unreliable even for farmers, and optimistic citizens looked to the government for both solutions and funding. The coalition of bicycle enthusiasts and farmers came together through the 'Good Roads' movements of the 1890s, advocating improvements in road building before the automobile achieved popularity.

<sup>&</sup>lt;sup>25</sup> Vance, <u>Capturing the Horizon</u>, 489

<sup>&</sup>lt;sup>26</sup> Susan Mulchahey Chase, David Ames, Rebecca Siders, Suburbanization in the Vicinity of Wilmington, Delaware, 1880-1950+/-: A Historic Context. (Newark, DE: CHAE, 1992), 81-89.

<sup>&</sup>lt;sup>27</sup> Clay McShane, *Down the Asphalt Path: The Automobile and the American City* (NY: Columbia University Press, 1994), 56. The bicycle began with the French velocipede (1868), which was metal with rubber wheels, but what really caught on in America was the "Safety bicycle" introduced in 1889.

'Good Roads' advocates gave rise to both state and national-level organizations to improve roads. These efforts culminated in the creation of the first federal-level initiative for improved roads – the Office of Roads Inquiry (ORI) formed in 1893 within the U.S. Department of Agriculture. Federal involvement in national transportation—through research and funding—transformed twentieth century highway development. Primarily an investigative bureau, its studies provided a foundation for the planning and construction of new roads that would pay enormous dividends in the decades to come.<sup>28</sup>

The proliferation of the automobile after 1908 not only changed the way people related to the landscape, but it began to change the landscape itself. In 1900, there were only 8,000 motor vehicles on America's road, but by 1920 that number had climbed to 8 million. In Delaware there was a similar climb in automobile use—313 cars were registered in 1907, but by 1917 this number had grown to 10,702. Henry Ford's inexpensive Model-T, introduced in 1908, accelerated automobile ownership and led to increased public interest in improved road networks and bridges. In 1913 when Ford invented mass production through the assembly line, the number of cars on the road increased as the price of cars decreased. Families began using automobiles for Sunday drives and vacations, and farmers found that paved roads facilitated easier transport of goods to market.<sup>29</sup>

In the twentieth century, the automobile and truck fostered a shift to highways as the primary transportation system. Responding to the growing number of automobiles, Delaware's General Assembly passed several acts which encouraged road construction and maintenance within the state during the first decades of the twentieth century. In 1903, Delaware's Assembly first past laws governing the use of automobiles in Delaware, which required that all automobiles be equipped with a horn, bell or similar device, and that drivers slow down their automobiles when approaching a horse or mule-drawn carriage. In that same year, the General Assembly also passed a State Aid Law, providing each county with \$10,000 each year for joint state-country funding of new road construction. <sup>30</sup>

In 1908, beginning with the construction of the concrete, dual-travelway duPont Parkway, funded by T. Coleman du Pont, Delaware emerged as a national leader in modern highway construction techniques. After the Federal Highway Act and the establishment of the Delaware State Highway Department in 1917, engineers began to systematically improve rural farm to market roads across the state. Major highway construction in the 1920s again ran parallel to the railroads and further reinforced the north-south integration of the state's economy and development pattern. Because of the east-west orientation of the many stream tributaries to the

<sup>&</sup>lt;sup>28</sup> Paul Daniel Marriott, <u>From Milestones to Mile Markers</u>, pp. 61-66.

<sup>&</sup>lt;sup>29</sup> M. Southworth and E. Ben Joseph, <u>Streets and the Shaping of Towns and Cities</u> (NY: McGraw Hill, 1997), p. 56.

<sup>30</sup> Delaware State Higways: The Story of Roads in Delaware, 35

Delaware River and Bay, the construction of a north-south highway system required the construction of hundreds of small bridges.

As the American automobile industry intensified production in the years around the First World War, cars became cheaper to buy and traffic increased exponentially. The increasing influence of car culture on the landscape brought the inadequacy of the road network to the fore. Private efforts continued to both lobby the government (the American Automobile Association established in 1902) and build new roads (the 1913 completion of the Lincoln Highway.)<sup>31</sup>

During World War I, policymakers determined that a more robust, comprehensive transportation system was necessary for national defense purposes. Long established railroad networks suffered traffic jams owing to intensified wartime shipping needs. Simply improving local roads would not do; the country needed an integrated network of improved roads and efficient traffic corridors leading into and out of cities. Yet, issues of who would fund these new roads persisted. Farm-to-market roads did not often possess the traffic necessary to generate adequate income through tolls, nor the population to support roads through local taxes. At the national level, however, there was income to support road-building efforts. In 1913, the sixteenth amendment had established the national income tax, which increased public funds to support domestic policies such as highway construction. 32

As the number of motor vehicles on the road increased from 2 million in 1915 to almost 10 million in 1920, the need for a coherent national network received federal action. The modern interstate highway system began to take form in 1916 with the *Federal Road Act*. This landmark act apportioned \$75 million to states in matching fund grants (50/50) budgeted over five years to improve rural postal roads. In Delaware, Philadelphia Pike (present US-13) was project one under this new initiative.<sup>33</sup>

A key provision of the act stipulated that states had to create their own road departments to oversee federally funded road building projects. On April 2, 1917, Delaware founded its own highway department and provided \$100,000 to each of its three counties for road development. By the end of 1917, all 48 states had done likewise. Requiring each state to develop their own highway departments centralized authority and facilitated coordination between engineers at the state and national level. In providing funds and articulating state programs, the *Federal Road Act* effectively professionalized the organization and implementation of highway policy. Entry into World War I postponed major construction in the U.S., but in 1921 Congress reauthorized the *Federal Highway Act* and established the Bureau of Public Roads to oversee the development of

<sup>&</sup>lt;sup>31</sup> Clay McShane, <u>Down the Asphalt Path: The Automobile and the American City</u> (NY: Columbia University Press, 1994).

<sup>&</sup>lt;sup>32</sup> Dilger, American Transportation Policy,13.

<sup>&</sup>lt;sup>33</sup> M. Southworth and E. Ben Joseph, <u>Streets and the Shaping of Towns and Cities</u> (NY: McGraw Hill, 1997), 75.

a modern "connected system of highways" capable of supporting a wartime economy and mobilization effort. 34

As highway construction commenced after World War I, Detroit's automobile manufacturers competed with price wars, personalized models, and installment plans. The automobile became a powerful symbol of American success, independence and social mobility. The road itself took on a visible identity when in 1925 national highways received uniform road markings and a numbered route system where north/south routes got odd numbers, while east/west routes got even numbers. This nationally integrated and standardized highway system grew alongside the proliferation of automobiles to change relationships between Americans, the built environment, and the landscape.

With more people driving to work from suburban homes outside the city, and more commercial shipping using trucks, traffic conditions grew congested near urban areas. Roadside support services such as gas stations sprung up along arterial routes. Road engineers received professional training at colleges and experimented with multi-lane roads to improve access and flow. In addition to improved road design, the increase of traffic in the 1920's also necessitated the increased policing of Delaware's roads. Delaware formed its first state police department in 1923 with a total of 16 officers, although four years earlier in 1919 the state founded a "Highway Traffic Police Department" with a single officer whose primary duty was to enforce the speed limit on the Philadelphia Pike north of Wilmington.<sup>35</sup>

The collapse of the stock market in 1929, accompanied by mass unemployment and a disastrous drought in the Midwest, deflated federal revenues for building while bringing business activity to a standstill nationwide. The New Deal, Franklin Delano Roosevelt's administrative answer to the Great Depression after 1933, offered work relief programs aimed at restoring citizens' purchasing power. These New Deal work relief programs such as the Public Works Administration, the Civil Works Administration, the Civilian Conservation Corps and the Works Progress Administration focused manpower on large-scale building projects such as national parks, dams, roads and bridges. Delaware's state government used work relief programs and funding to widen existing state and local roads and to build new bridges. In this sense, the Depression dramatically affected urban and rural road systems.

The New Deal programs dovetailed with the 1938 Federal Highway Act, which marked the first formal inquiry into the possibility of building an Interstate system. In the design and construction of such new superhighways during the thirties, engineers and city planners looked to European models such as the German Autobahn. Innovations of landscaping, grading, improved surfaces, restricted access, and cloverleaf intersections went into the conception of new highways such as the Merritt Parkway (1934) and Pennsylvania Turnpike (1940). Efforts also

<sup>&</sup>lt;sup>34</sup> Robert Jay Dilger, American Transportation Policy (Praeger, 2003), p. 13.

<sup>&</sup>lt;sup>35</sup> A Factual Report on Delaware's Highways (1948)

focused on upgrading and connecting established roads, and accommodating the demands of urban traffic. Still, there were questions of how to recuperate the long-term costs associated with building and maintaining these roads and bridges, and many of these new highways became toll roads. With the development of highways, automobiles began to overtake streetcars in the cities, and the trucking industry began to be more efficient than railroads for carrying goods over short distances.

The escalation of hostilities on the European stage after 1939 started a massive mobilization effort in the U.S. Wartime production rejuvenated the economy by engaging heavy industry and creating jobs. After World War II, increased prosperity led to population increase and suburban development. Soldiers returned home from the war ready to start families, and the GI Bill helped them to secure mortgages, receive a college education, and buy automobiles. New highway projects not only allowed people to travel from place to place in record time, but they also opened swaths of undeveloped countryside that had previously had been difficult to access, promoting the growth of post war commercial and residential suburbs.

#### National Highways to Interstate Highway System 1950-2000

By the 1950s, President Dwight Eisenhower advocated federal spending for an interstate highway system to meet the increase in traffic while providing an adequate infrastructure for the military in the event of a national emergency. In 1954, President Eisenhower called for a national interstate highway system. Although the military supported the plan, motorists and the trucking industry opposed the use of tolls and fuel taxes to pay for road development. New controlled access expressways such as the New York Thruway and California freeways improved the flow of traffic, signaling, sight lines, and the width of pavements, shoulders, and bridges. They also incorporated innovations such as the double level cloverleaf exchange.

The 1956 Federal Aid to Highways Act established funding for the interstate highway system, with the federal government would pay 90 percent of the cost of construction through the establishment of the Highway Trust Fund to be fed by national taxes on fuel, tires, and motor oil. This act centralized national road funding and development and had an enormous impact on the road system we have today. This act also created the new Federal Highway Administration and charged it with the responsibility to set highway design standards for everything from road width to interstate signs.<sup>36</sup>

Delaware experienced rapid changes in the period after the Second World War with the growing population of New Castle County in the north and increased demand for improved capacity on roads statewide. Interstate highway funds supported the construction of Interstate 95 (1963) and 495 (1978). the Delaware Memorial Bridge, a 3,650 foot-long suspension bridge,

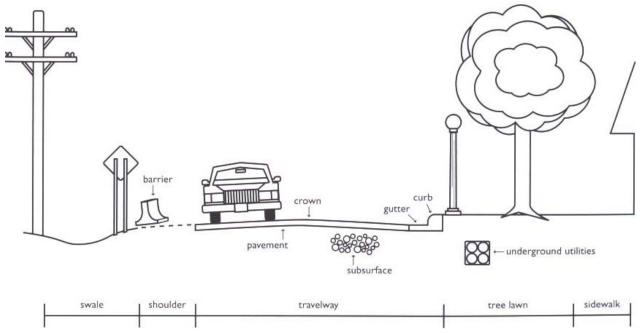
Center for Historic Architecture and Design University of Delaware

<sup>&</sup>lt;sup>36</sup> Dilger, American Transportation Policy, 20.

ranked the sixth largest in the world when it was opened to traffic in 1952 and provided a valuable connection between Delaware to the New Jersey Turnpike. More recently, Delaware has completed another upgrade to its major north south transportation route with the construction of State Route 1 as a four-lane, limited access highway from I-95 in the north to the Delaware beaches at Lewes and Rehoboth (1987-2003).

Delaware's road system has been centuries in the making. Understanding the different periods of its evolution and character can shed much light upon what you see along your road corridor. The story of America is the story of roads and the mix of continuity and change in the past suggests that roads and the landscape are likely to continue evolving in the future to respond to society's changing needs and demands.

#### **Describing your road**



Source: Mariott, From Mile Stones to Mile-Markers (2004)

#### Pavement (Marriott, p. 16)

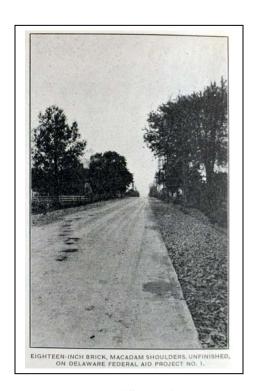
Pavement is the durable or semi-durable surface of the travelway. Pavement may be dirt, gravel wood (logs lain side-by-side to create a corduroy road or wood blocks), stone (cobblestone or granite Belgian-block), brick macadam, concrete or asphalt.

#### Subsurface

Subsurface refers to the stabilized base beneath the pavement. [It] provides both a stable base to support the pavement and a prepared surface on which to lay or adhere the pavement. The subsurface comes in contact with the ground.

#### Shoulder

A shoulder is a stabilized surface that runs parallel to and is flush with the travelway. In general a shoulder is used for higher-speed roads without a curb and gutter. It varies in width and may or may not be constructed of the same material as the travelway.



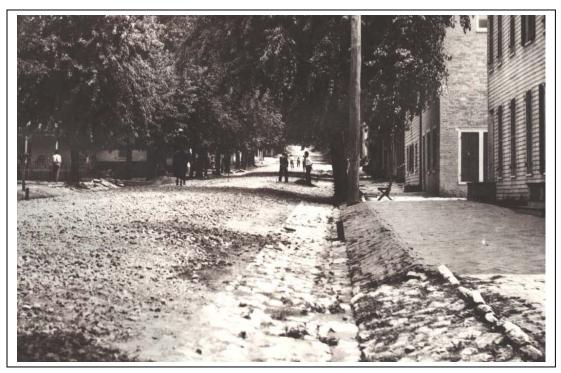
Source: Public Roads (1920)

#### Gutter

A gutter is a channel at the edge of the travelway designed to collect and direct surface or rainwater away from the road. Gutters are generally concrete or brick.

#### Curb (Marriott, p. 17)

A curb is a raised face at the edge of the travelway or gutter. Generally 6 to 12 inches in height, a curb provides a physical barrier between the travelway and the adjacent sidewalk or landscape.



Macadam surfaced road, showing stone gutter, curb, and sidewalk. Westminster, Maryland, date unknown Source: ARBA Pictorial History

#### **Macadam** (Pictorial History of Roadbuilding, 32)



Constructing a Macadam road

Source: US DOT

First
popularized
by John
Macadam in
the 1780s, this
revolution in
road building
proposed the
laying of
uniform
gravel as

pavement over a gently sloped subsurface with ditches on each side for drainage. The layers were compacted with a heavy roller, causing the angular stones to interlock. Dust would eventually settle in between the stones and further increase the road's resistance to water penetration. Later, a layer of tar was often applied over the rocks to keep them firmly in place (referred to as tarmac). While macadamized roads were labor intensive to construct and maintain, they provided a strong and free-draining surface which strengthened as traffic compacted and solidified the road's surface.

#### **Corduroy**



Deer Creek Meadows, CA 1941

Corduroy roads offered a cheap method of bridging soft spots along a wet or low lying road. The technique involved laying many small-diameter logs across the roadway. As the name suggests, the road had a ribbed surface which offered a rough ride. Spreading

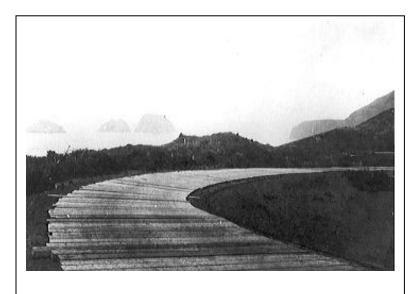
a layer of sand or dirt over the top of the logs helped soften the bumps.

Corduroy was used in America from primarily in the nineteenth century, mainly to bridge streams or marshy areas where travelers would otherwise get bogged down in mud.



Stafford County, Virginia, 1912 Source: ARBA Pictorial History

#### Plank



Plank road, Oregon, ca. 1900

Plank roads are paved either with large squared logs placed side by side or with sawn wooden boards nailed to runners set at a 90-degree angle to the planks. These runners and their attached boards are linked together to form a continuous and relatively stable road surface capable of accommodating heavy vehicles.

What these plank roads lacked in durability, they compensated for in their price, costing only \$1,500-1,800 per mile as compared with \$3,500-4,000 per mile for macadamized paving. The first plank roads were constructed in Canada during the 1830s, coming to Michigan in 1837 and New York in 1844. Their popularity waned with the rapid growth of the rail network. As seen in the photographs, however, plank roads made a limited and short-lived comeback with the coming of the automobile owing to their smooth surfaces and cheaper costs relative to brick or concrete road construction.



Plank road, ca. 1900

Source: ARBA Pictorial History

#### Brick





Iowa brick road, 1917

Source: ARBA Pictorial History

Philadelphia Pike under construction, Wilmington, 1919 Source: DPA

Brick roads, created by laying tightly fitted pavers laid over a sandy subsurface, became increasingly common during the second decade of the twentieth century after the popularization of the automobile. While brick roads were labor intensive to construct, they offered a durable road surface which also provided traction. Due to the high cost of the material, engineers employed brick pavers on roads handling high volumes of traffic or heavy loads, as shown here on the "Industrial Highway" US-13, north of Wilmington.



Philadelphia Pike, Wilmington, Delaware 1919

Source: State Hwy Department Photographs, DPA

#### **Asphalt**

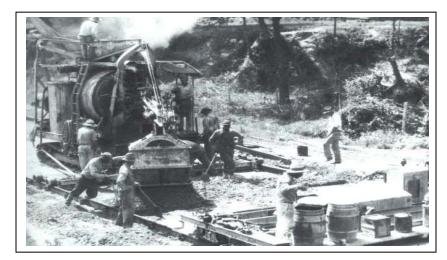


Laying asphalt paving, location unknown, ca. 1900-1915 Source: ARBA Pictorial History

Asphalt paving is composed of tar or another bituminous substance mixed with various types of pebbled rock. This mixture creates a solid, continuous, and waterproof road surface which is relatively easy to repair.

The first use of asphalt in America was in 1872 in Battery Park and on Fifth Avenue in New York, and on Pennsylvania Avenue in Washington DC in 1877. Asphalt presented many technical challenges and only emerged as a common paving material in the 1920s. Today asphalt surfaces comprise 96% of all paved roads in the United States.

#### Concrete

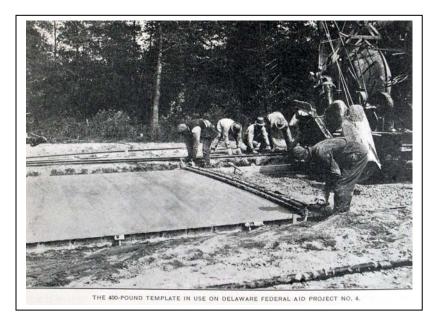


Constructing U.S. 40, Ohio, 1940

Source: ARBA Pictorial History

Laid over a bed of compacted soil and crushed gravel, concrete ranks as one of the most durable road surfacing materials.

The first concrete highway constructed in the United States was built in 1908—the same year the Model T Ford was introduced. As the longest lasting road surface with great load-carrying capacity, it saw use widespread use in the highway projects of the early 20<sup>th</sup> century. Still today, the majority of the highways constructed in America use concrete pavements.



Concrete finishing on the road from Delmar to Laurel, Delaware

Source: Public Roads (1920)

#### How to Research the History of your Road

Learning to research the history of your road may sound like a difficult and tedious ordeal. You may have no idea of how or where to start. This section of the manual offers an introduction to the process of researching the history of your road. Hopefully, it is an experience you will come to enjoy, as you discover new things about your road and community. Research can even be exciting, as you uncover and connect details from your road's past for the first time!

This chapter provides a range of general and specific aids to help you understand the history of Delaware's roads. The first section, **A Guide to Researching the Roads of Delaware**, outlines the types of sources most useful to answering the historical questions confronting you while you prepare a scenic and historic highway nomination. This guide aims to explain how and where community organizers can research their road in preparation to nominate it as a Delaware scenic and historic byway. It begins by describing the types of maps, photographs, books, and papers that hold the greatest promise for learning about your road. These are listed in the order in which you might wish to approach them, considering that certain resources build upon one another; it makes sense to look at maps first to identify road names before searching through a library catalog.

More specific leads for researching the history of a road are developed in several appendicies. Appendix A: A Guide to Collections and Research Sources Useful for Researching Delaware Roads is designed to introduce the reader to the numerous libraries, archives, and research centers in the state that hold important collections of materials useful for completing a scenic highway nomination. Each entry profiles one institution, describing its most relevant materials and explaining what to expect from a visit. Appendix B: Selected Bibliography on Transportation and Roads provides detailed and comprehensive listings of the most important maps, photographic collections, manuscripts, and books for researching your scenic and historic highway. Appendix C: Historical Timeline of the Development of Delaware Roads compiles a range of important dates from U.S. and Delaware's history together with the many milestones of Delaware's transportation history. The timeline can help you 'connect the dots' between what's happening in your community and across the state and country.

While this chapter lays out some important steps for you to follow, keep in mind that no two roads are exactly alike and historical research is unique to each road. As you learn more about your road, you will find yourself occasionally going back to resources you had previously examined. You may find that some of the most promising sources say little about your road. On the other hand, you may discover a treasure trove of information at your local library or historical

society or from an unexpected source such as a neighbor whose grandfather was an avid amateur photographer of your community.

Before beginning your road research in earnest, however, remember to first examine the road itself. Often the anticipation of what may be found in libraries and archives causes researchers to forget that the road is its own best source of information. Historic roads expose passersby to many layers of history. Moving from one block to another along an old road will often allow a traveler to jump decades if not centuries at a time – from a building that was once an eighteenth-century inn to a nineteenth-century Victorian house. By researching the history of your road, you will be able to better recognize these various layers and understand, among other things, how these layers developed side by side. Researching your road will also give you a better understanding and awareness of your surroundings on the local, regional, and national level, and help you recognize both the significance of your community's resources and how these resources can be preserved for the future.

#### Maps

Maps are important resources to consult in the initial stages of your research for their ability to place your road in context, allowing you to see how it linked various locations together. Maps give your road and its history a "place" and suggest how a road may have looked at a particular moment in time. While a single map of your road will provide you with insight into one chapter of your road's history, maps are perhaps most useful when they are studied in conjunction with one another. Assembling a collection of maps of your road from different eras acts as a mosaic of its history. You can watch your road and its surrounding area develop over a span of several decades, if not centuries, allowing you to clearly see how your road has changed through time.

As you look at maps from the 1700s to the present day, be sure to note the different information recorded on them. In addition to the information we would commonly expect to find on a road map, such as names of roads and towns, early maps such as Beers (1868) and Baist (1898) also include the names of individual properties and buildings, railroads, streetcar lines, and even vegetation such as gardens and orchards. Above all, remain curious and learn as much as you can from the sources you examine.

Like all research tools, maps are not altogether free from error or bias and the information found in them should be compared with that found in other research materials, such as city directories or other maps. Nevertheless, locating your road on a number of maps from a range of periods will help you assess your road's impact and importance in the local, regional, or national road network. Early maps of Delaware, such as the Rea and Price Atlas (1849), and the Beers Atlas not only depict a road's path, but they also depict the location of buildings and other features along the roadway. Like their earlier counterparts, modern maps such as the United

States Geological Survey (USGS) topographic sheets also portray a road's modern course together with the footprint of many of the buildings that line the road.

Both historic and modern maps are available at a number of libraries and archives, such as the University of Delaware Morris Library, the Historical Society of Delaware, Hagley Library, and the State Archives. Several maps are also available online. (For a complete list of maps and on-line topographic resources, consult Appendix B.)

#### **Photographs**

They say a picture is worth a thousand words; as you study the history of your road, you may see the truth in that old adage. Photographs are key research tools that visually reveal how your road has changed over the years and document events, places, and things that may not be recorded elsewhere. It is unlikely you would ever find a description of what your road looked like in the early 1900s, whether it had curbs, fences, or trees along its shoulders, let alone describing the type and location of houses, farms, or outbuildings. One photograph can literally convey an impression of the landscape along your road. In this way, photography is invaluable for its ability to communicate how your road has changed over time, but also in revealing the timeless character of the area that remains.

Photographs are the most seductive sources you will find. While they can be extremely helpful to your research, you should remain critical and ask yourself questions as you study them:

- Are there dates recorded with the photographs? If not, look for evidence in the photographs that provide an approximate date models of automobiles, style of houses/buildings, telephone poles/power lines, road itself with some additional research, this may help you determine the age of the photographs.
- Who took the photographs you are examining? Were they photographers working for a state agency, or were they taken by community members? Knowing who made them will help you understand their significance to your road's story.
- Why did they make these photographs? What did the photographers intend to capture in the image they made? Many photographs were taken immediately before and after road construction, documenting major changes along your road.
- Compare the photograph's information with your own personal concept of the road's appearance at the time period at which the photograph was taken. Do the views surprise you in any way? For example, are there telephone poles or billboards along your road where you thought it would have been more pastoral? Did you expect your road to have more or less development in the era the photograph was taken?
- Does the photograph reveal anything about the purpose of your road? What sort of traffic does the photograph show using the road?

- How was the road paved, and what does the type of pavement suggest about the traffic the road was intended to handle?
- What does the photograph say about the people who lived along the road? Is the character of your road residential or commercial? Agricultural or industrial?

Photographs are like maps in that they can reveal important information and hide information at the same time. Therefore, it is important that you compare your photographs to other research resources as well as with the modern road. This will enable you to better use the information in your photographs and help you recognize not just how the road developed or how features lining the road have changed over time, but will help you explain why this development and these changes have occurred. There are a wide variety of photographs you can use to research your road.

- Aerial Photographs: The panoramic perspective provided by aerial photographs often reveals a great deal of information about the way various elements of your roadway fit together, and how your road responds to and shapes its natural and manmade surroundings. Aerial photographs can be especially useful at the onset of your research as you break your road into smaller sections for study. (A good source for modern aerial photographs is datamil.udel.edu). Historic aerial photographs are also available in a number of collections including Hagley and the Delaware Public Archives, however, aerial photographs did not become common until the 1930s. Be aware that you will also need to receive written permission before you will be permitted to access the aerial photographs at the Delaware Public Archives because of security concerns.
- Historic Photographs: Historic photographs are windows to your road's past, and allow you to see sections of your road and its surroundings at a particular time in the past. Historic photographs can provide visual illustration of road modifications, such as enlargements and repaving, and can show buildings, landscapes, or other features that have been altered or removed over the course of years. By tracing your road's history through photographs, you can receive insights into the bygone or often imperceptible forces that have impacted your road. The State Highway Department photographs at the Delaware Public Archives are the the most important collection of road related photographs. (See Appendix A for additional details.)
- Postcards: Postcards are another important source of historical images dating from the late 1900s until the present day. These feature images of important buildings and landscapes, ranging from cityscapes and courthouses to gas stations and general street

views. The University of Delaware's Morris Library has a particularly good collection of postcards available online at: <a href="http://www.lib.udel.edu/digital/dpc/">http://www.lib.udel.edu/digital/dpc/</a>

Films: Several State Highway Department films, dating from the 1950s and 1960s, depict
a number of Delaware's roads. Many of Delaware's roads are featured, and unlike
photographs, these films give the viewer opportunities to view the road from a variety of
angles, or under construction. (For a complete list of films, please contact the Delaware
Public Archives.)

#### **Secondary Sources**

Secondary sources include books, articles, and theses that can help you research your specific road or provide valuable background information relevant to your story. After you have familiarized yourself with your road through maps and photographs, you should begin to gather a collection of relevant secondary sources including general state and local histories. The bibliography in Appendix B lists many of the most helpful of these sources by geographical area.

As you consult secondary sources, ask yourself, "what does this source tell me about my road and its intrinsic qualities?" Secondary sources can provide you with specific facts about your community or may be most valuable by identifying key themes for your story. For instance, a good source on early turnpikes on south-eastern Pennsylvania may not mention your road, but will give you a vivid idea of how nineteenth century turnpikes functioned.

As you read, examine each source's bibliography and notes to locate other valuable sources of information. Pay particular attention to the original documents used by the writer, which may direct you to more information. Historical research resembles detective work in this way; your job is to follow up all the leads you come across, some of which will take you in new and unexpected directions.

Be aware that you are likely to find many secondary sources in the course of your research that relate in some way to your road, but not all will be of equal quality or relevance to your story. There is no one definitive history that is "official" or "perfect." Each source you consult has its own value and limitations. This means that the best research necessarily relies on multiple sources, giving you the broadest perspective on events. Bearing this in mind, it is important that you to keep your specific research goals in mind so that you will recognize important and valid information as you research.

#### Newspapers

Since the 1700s, newspapers have reported on the everyday events and concerns of their communities. While the content and scope of the news has varied widely over the last three hundred years, newspapers often times remain the best (if not only) record of a community's

significant events, as well as its day to day routines. Newspapers capture a community's immediate and often fleeting viewpoints on a wide range of topics. The opinions expressed in newspapers often demonstrate a community's goals and values, and at the very least provide the researcher with an idea of how a community might have thought and functioned in a particular moment in time.

The Selected Bibliography in Appendix B identifies the widest circulating newspapers covering the state of Delaware. They can be extremely useful sources of information on your road, covering issues ranging from road construction to suburban expansion. If you find specific references to newspaper articles from secondary sources, you may want to seek out the original newspaper story. You can search microfilmed copies of old newspapers at libraries such as the University of Delaware's Morris Library and the Delaware Public Archives. These two institutions have large collections of microfilmed newspapers from all over the state that are available to researchers. You can locate particular stories using references found in other books or you can also browse specific dates that relate to a particular moment in your road's history. Newspaper clippings files, such as those housed in the Wilmington Public Library or the Delaware State Archives, also contain many articles on transportation and community history from throughout the state.

When reading historic newspaper articles on your road, it is important to read aggressively, asking questions as you read:

- Why was the information in the article considered newsworthy at the time?
- Where does the story appear in the paper? On the front page or in another section?
   Does its original placement in the newspaper indicate its perceived importance to the editors (and public)?
- How has the road's use changed over time? Does the article suggest changes in the way people used or viewed the road from then to now?
- What do the newspaper articles reveal were the major issues or being discussed about your road, or the major problems it faces? Are these issues similar to the issues and problems your road faces today, or have these issues and problems changed?

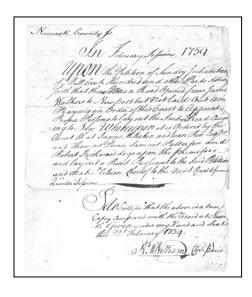
As you review articles, ask yourself how the article's information helps you develop your road nomination. Does it simply tell an interesting vignette, or does it help you better understand your road's intrinsic qualities, history, evolution, etc? Like most sources, newspapers can reflect a certain bias or reflect the opinions of only a small percentage of the population. Remember that stories in newspapers are often rushed to the press, and the facts presented in an article may not have been completely verified or arguments fully developed to reflect all sides of an issue.

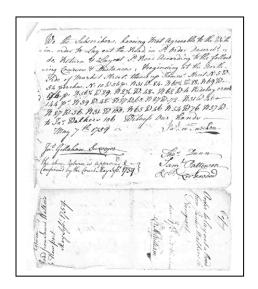
#### **Road Papers**

After creating a picture of your road's general history from maps and secondary sources, you may wish to undertake more detailed primary source research. Road papers and road books, found at the Delaware Public Archives, record the detailed story of your road from the 1700s to the 1900s. Road papers record petitions by individuals for the creation of new roads, changes in alignment of old roads, and maintenance of existing ones. The earliest road papers date from the 1700s and include the name of the individual requesting the road work, location of the road, date, description of work requested and the signatures of those petitioning for the work. Filed together with the road papers are road returns, which are official reports that assess the condition of a road, and recommend repairs or alterations.

It is important that you have a good feel for the road and its history before examining road papers. Some of the papers for Sussex County are indexed, but most of Delaware's road papers are catalogued by date and county, requiring the researcher to locate relevant papers by searching through papers of a particular year to find your road by name or by those of individuals and places found along the road. Many of the names and places mentioned in these papers have been changed or no longer exist, so familiarity with present and past road names is essential. It is also important to remember that many of the road papers are handwritten in eighteenth and nineteenth century script; this can be a time consuming to read and decipher!

#### Example of a road paper, Mill Creek Hundred





#### **Road Contracts**

Like road papers, State Highway Department and DelDOT road contracts provide important information about your road's history and construction. The earliest road contracts date from 1918 and extend to the present day. As documents for the construction and maintenance of roads, they are a wealth of information, recording road location and alignment, dates of design and construction, the name of the contractor, the contractor's estimates of the costs of construction, and correspondence related to the road project. Road contracts often also include engineering drawings, many of which capture a remarkable level of detail in recording property lines, names of owners, location of buildings, building types, vegetation, cross-sections of the road, and a variety of road features such as curbs, retaining walls, and medians. If possible, try and locate road contracts for each major repair made to your road. In order to do this, you will need to know the dates of road repairs.

The Delaware Department of Transportation allows private researchers to access a number of in-house resources which DelDOT employees themselves use when working on transportation projects. One such resource includes an electronic index of DelDOT road contracts (FALCOLN) housed in the State Archives and elsewhere (see the description of the road contracts in the State Archives section). This computerized database allows you to locate a particular road's construction and maintenance contracts through a search by road maintenance number. (Each road in the state has a unique road maintenance number to identify it – your DelDOT liason can provide you with maps to find this information). Researchers can access the FALCOLN system by appointment only. Please contact Jude Crawford at (302) 760-2328 or jacrawford@mail.dot.state.de.us to set up a time to access the database.

Contracts are also available at the Delaware Public Archives on microfilm. Most of the road contracts are indexed and have been copied onto microfilm by the archive. Some of the rolls, however, still have yet to be transferred onto microfilm. If you locate a contract that you wish to see, please consult with the archivist. Rolls that have not yet been copied generally require two weeks for processing.

#### Oral History

Oral history is a formal term for interviewing residents and recording their memories. It is a fun way to gather and preserve historical information that is often unavailable through more conventional sources. Talking with those who have lived on or near your road can provide a wealth of information about your road's development, and can humanize your history by bringing facts and dates to life. Oral histories can be used as both a supplement to the written record or as a primary document, depending on what other materials are available on your road.

Conducting oral history interviews is not as straightforward as you may expect. Aside from defining your goals, preparing questions, and choosing a method for recording the interviews (audio or videotape, for instance), you need to approach these interviews as another type of historical record to evaluate. One source for more information on conducting oral history interviews, visit the Oral History Assocation webpage at:

http://omega.dickinson.edu/organizations/oha/

If you live near the road you are studying, you are likely to know several people with whom you could discuss your road's history. If you are not familiar with community members, you may want to locate a local history association or community organization that could direct you to people who would be interested in sharing their personal history. When you contact the interviewees, state the goals of the project in a way that would both encourage the informant to participate and suggest the type of information you are seeking. Through this process, you may also locate people who have personal collections of photographs and other memorabilia that relate to the history of the area. Such collections can reveal many aspects of your road's development that would otherwise go unnoticed.

When conducting interviews, be sure to compose a list of questions ahead of time that will help you to uncover information that will further your research. Some topics you may want to discuss with your interviewee might include:

- The road's intrinsic qualities: What makes the road special?
- Road type: How would you classify your road's "type"? Industrial Highway or country farm road? How was it paved, and does this give any clues to its type and how it was used? Who used the road and what needs did it serve?
- Road appearance: Ask the interviewee how the road and the community influenced each
  other in the past. Find out where certain key buildings were located and how they were
  used. Perhaps your interviewee has photographs of the road that he or she could use to
  illustrate his or her points and descriptions.
- Transportation: What role did the road play in keeping people and places connected to each other? Has this role changed over time (increased or decreased)? Have the various places or destinations the road links together changed over time?

- Major road renovations: What was the road was like before a major expansion and what
  was it like after? Does your interviewee's answer explain why the change was carried
  out? What effect did the renovation have on the road and the surrounding community?
- Community: Was the road important to the community? Did it connect or divide neighborhoods and people? Has the community's view of the road changed over time? Typically the more specific your make your questions, the more productive the response of the interviewee. If you want to find out more about your road's alterations, avoid asking generic questions such as "how has the road changed?" instead ask "what was this stretch of the road like before it was paved in 1950? What was it like after?" In order to ask specific questions, you will need to be familiar with the major events in your road's history. Also keep in mind that the way you phrase and ask questions will elicit different responses.

When conducting an interview, a tape recorder can help you to fully capture each question and response. Supporting photographs, maps, and other materials can also help the interviewee to remember certain features, recall memories, or clarify points. To verify the facts you gather through your oral history, it is a good idea to ask several people the same set of questions and then, if possible, check their responses with any other sources you might have.

Finally, when you complete the interview ask your respondent to pass the word that you would like to talk to others about the road. Word of mouth is always the best way to get out your message!

# **National Register Nominations**

The National Register of Historic Places is the Nation's official list of cultural resources eligible for preservation. The Register coordinates and supports public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

Locating nominations for buildings, neighborhoods, or sites along your road might give you access to research that has already been done on your road or important elements in your roadside landscape. Some nominations might focus on a single site along your road while other nominations might be broader in their scope, and like all research tools national register nominations will vary in their applicability to your own research goals. Nevertheless, they are important resources to consult as you research and prepare your own nomination, and could give you insights into the past chapters of your road, as well as some of the catalysts that directed the development of your road. For a complete list of National Register Nominations for Delaware, visit the following link: <a href="http://www.cr.nps.gov/nr/research/nris.htm">http://www.cr.nps.gov/nr/research/nris.htm</a>

# State Historic Preservation Office (SHPO) Cultural Resource Surveys

The State Historic Preservation Office (or SHPO) maintains a list of historically significant properties, referred to as Cultural Resources and identified by survey number (CRS Number). These records encompass a greater range of properties than those appearing on the National Register. The amount of information available varies by property, but often includes photographs, names of property owners, building descriptions, and dates of construction.

To find out more about the CRS properties, contact the SHPO at (302) 739-5685.

# **Phone Books / City Directories**

Old phone books and city directories can provide you with specific information about the individuals who lived along your road and the types of businesses that once lined your road. Some city directories simply list the names of residents and businesses and their addresses. Many directories list individual's occupations, sometimes providing a simple designation such as "merchant," "chandler," "carpenter," and at other times providing a descriptive title and even where the subject is employed. The Historical Society of Delaware and Delaware Public Archives possess the most extensive collections of state and local directories.

# **Appendix A:**

# A Guide to Collections and Research Sources Useful for Researching Delaware Roads

Researching your road will help you find information on your road's earliest history and changing appearance over time. The following descriptions of Delaware research facilities are intended to help you navigate through each of these important collections to locate material on Delaware's roads. They also include suggestions on how to use these collections to find the specific information you will need to write a scenic and historic highway nomination.

This research guide and accompanying bibliography (Appendix B) is not comprehensive. Your research will lead you to discover other sources not listed in here, such as those held in the collections of local historical societies or community members themselves. One reference will often direct you to many other sources of valuable information on your road. Be sure to check the bibliographies found at the back of the books and articles you locate to find references to other helpful publications on your road and community.

As you begin your research, you need to consider a few basic questions. These will help you focus your research goals and guide you to the relevant collections and sources for your road:

- When does your road first appear? Why did it appear?
   Historic maps, local and histories, as well as road petitions housed in the Delaware State
   Archives are good sources for information regarding the early development of your road.
- What are your road's modern and historic names?
   Historic maps, atlases, and even long-term residents in your neighborhood can help you discover traditional and historic community place names. Be sure to make note of any spelling variations on your road's historic or modern name(s).
- What are the modern and historic names of the various features found along your road? Many early maps and documents refer to roads by the name of rivers, buildings, property boundaries, etc. that lined the roadway at one time. To effectively use these documents, therefore, it is important to know the current and historic names of the natural and manmade features lining your roadway.
- What communities fall within the study area? Modern and historic maps, as well as long term community members are good sources of information about the communities that along the road. Remember that community names, like road names, can change over time. In addition to creating a list of these different names, you can also label a map with these names as you research. This list and map is extremely important because you will use these names to start your research. Be sure to bring these resources with you when visiting the research institutions.
- What businesses, industries, schools or other institutions line your road?
   Information on the businesses, schools, etc. found along your road can often reveal important information about how and why a road developed in a certain manner. This information also reveals important information regarding the relationship between the road and the individuals, communities, and institutions it served or continues to serve.

Answering these and other questions as you begin your research will provide you with key names, topics, and ideas you can investigate to find pertinent material on your road. Finding the

answers to these questions will also help you organize your efforts and maximize the time you spend in libraries and archives.

## Libraries and Research Facilities

This is a list of research facilities, archives, and libraries in Delaware most suited for your research on a scenic and historic road. All of these institutions are open to the public, though many are specialized libraries that will require some advanced planning before your visit.

However, you should spend some time on their websites. This will familiarize you with their collections and may even give you access to important information relating to your road. Call in advance to discuss your research topic and to inquire about current hours of operation. Some libraries have limited staff and may need advance notice to retrieve special records or items. Be prepared to conduct your own research, and bring plenty of paper and *pencils* with you. (Many libraries prohibit the use of pens in their research rooms.) Please respect any special rules for handling old documents and rare books. When in doubt as to what you can or cannot do, ask the librarian. All facilities charge for photocopies, scans, and other forms of image reproduction.

# **Historical Society of Delaware (HSD)**

505 Market Street, Wilmington DE, 19801 (302) 655-7161 / www.hsd.org

The Historical Society of Delaware, founded in 1864, is a private, non-profit, educational organization operated for the benefit of the public. Its mission is to provide and encourage a greater understanding and appreciation of history, particularly the history of the State of Delaware. The Society collects and preserves materials relating to the history of Delaware and Delawareans, interpreting that history through research, exhibitions, publications, and educational programs.

(From HSD website introduction)

The Historical Society of Delaware (HSD) possesses a number of photographic collections relevant to the history of transportation and roads across the state. These include the construction and expansion of the duPont Highway and the principal streets, parks, and town squares of Delaware's towns and cities. The historical society also maintains a valuable assortment of books, manuscripts, pamphlets, and ephemera which offer many insights into Delaware's historic roads and byways. The society's collection of historic atlases and maps also offer important clues as to how Delaware's roads have developed over time and provide evidence for historic property boundaries and the placement of structures along the roadside.

Most of the items at HSD can be found using a card catalogue which is organized by type of material (photographs, manuscripts, books/publications, maps, and ephemera) and by topics and subject headings (i.e. roads and highways, cities and towns, etc). When searching the card catalogue, it is important to search for records using each of the catalogues. Start by searching under your road's name. This may be the current name of your road, although you will also want to search the cards using your road's alternate or historical names. Other ideas for searching the catalogue include: the name(s) of the communities through which your road passes as well as topics such as transportation, travel, turnpike, toll road, highway. Once you are further along in your research, you may want to search for materials under the names of property owners that lived along the road. When you find the record of a document that interests you, locate a librarian and ask him or her to retrieve it for you.

## Hours:

It is not necessary to make an appointment ahead of time to research at the Historical Society of Delaware, but be aware of their hours when planning your visit (Monday from 1:00p.m. to 5:00 p.m., and Tuesday – Friday from 9:00 am to 5:00 pm except major holidays). Before using the

society's resources, you will be asked to sign in and check all bags and coats. Like other societies and libraries, HSD allows you to only use pencil and not pen while working with their collection. You will be expected to supply your own paper.

### Rules:

Most items in the collection may be copied unless they are too fragile or are subject to copyright restrictions. The librarians will provide photocopies of materials for you upon request. Copy fees are \$.25 per page, and \$.30 for oversized copies. Prior permission must be obtained from the Society to publish or display any items copied from the collections.

# **Hugh M Morris Library, University of Delaware**

181 South College Avenue, Newark, DE 19717-5267 (302) 831-2965 / www.lib.udel.edu

and historic Delaware newspapers on microfilm.

The Morris Library is the main library for the University of Delaware. As such, it maintains the most comprehensive and up to date collection of books, journals, and magazines in the state on a wide variety of topics. These include a large number of books and scholarly journals relating to local and national transportation history and community and state histories. In addition to these general references, the Morris Library's Special Collections Department maintains a strong collection of Delaware-related manuscripts, rare books, maps, atlases, and other publications (for more information regarding the maps in the collection see <a href="http://www.lib.udel.edu/ud/spec/mapsnote.htm">http://www.lib.udel.edu/ud/spec/mapsnote.htm</a>), including the unedited manuscripts of the Federal Writers Guide for Delaware. The Special Collections Department also maintains as a valuable collection of postcard images which have been digitalized and are available for viewing online at <a href="http://www.lib.udel.edu/digital/dpc/">http://www.lib.udel.edu/digital/dpc/</a>. The Morris Library's collection also includes several modern

Material can be checked out from the Morris Library by University of Delaware students and members of the general public who purchase a library card. These cards cost Delaware residents \$25 per year while out-of-state residents pay \$60 per year. Please note that you can not check out material housed in the library's special collections. The Morris Library's catalogue is available online at <a href="http://delcat.udel.edu">http://delcat.udel.edu</a>, and allows one to browse records by type of material (none, printed material, manuscripts and archives, pictures and moving pictures) and by title phrases, author's name, subject, etc. To access materials housed in Special Collections, you will need to register your name and present picture identification before entering the reading room. A complete list of special collections policies and regulations is available online at <a href="http://www.lib.udel.edu/ud/spec/policies.htm">http://www.lib.udel.edu/ud/spec/policies.htm</a>.

#### Hours:

Morris Library is generally open from 8:00 am to midnight, except for Friday and Saturday when the library closes at 8:00 pm. However, the library's hours vary during holidays and academic intersessions. Call 302-831-BOOK for library hours of the Morris Library and branch libraries or check the Library Web for library hours. The library's Special Collections Department is open from 9:00 to 5:00 Monday, Wednesday, Thursday and Friday. On Tuesday, Special Collections remains open until 8:00 pm. The photocopy fee for both general and special collections materials is \$.10 a page.

# **Hagley Research Library**

1 Brandywine Gateway
Wilmington, DE 19801
(302) 658-2400 / http://www.hagley.org

Hagley Library houses an extensive collection of books, historic images, rare documents, maps, and ephemera. Of particular interest to road and byway researchers are several rare books and manuscripts which illustrate chapters of the history of road transportation in Delaware and the Mid-Atlantic region. Hagley's photograph collection is also a good source for images of Delaware roads and communities, and is especially rich in photographs taken of the Wilmington area. The *Victor Dallin Collection* of aerial photographs and the general "Hagley file" of street and road photographs are particularly helpful photographic collections for road researchers.

## Hagley Library's catalog is available online at:

http://38.115.62.80/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First, and can be searched by type of material (none, printed material, manuscripts and archives, pictures and moving pictures) title phrases, author's name, subject, etc. When examining the catalog, note that each record can be expanded to a detailed entree which will show any special notes or attachments associated with each item. After you find the record of an item that interests you, fill out a call slip and give it to the librarian at the circulation desk who will retrieve the item for you.

### Hours:

First time visitors to the Hagley Library need to register at the Library's circulation desk and present picture identification. The library is open Monday through Friday from 8:30 a.m. to 4:30 p.m. (except major holidays), as well as the second Saturday of every month from 9 a.m. to 4:30 p.m. The Pictorial Collections Department closes over the lunch hour from noon to 1 p.m.

Please note that the manuscript reading room is closed on Saturday, therefore researchers wishing to view manuscripts on Saturday must request materials by 1 p.m. on Friday. Hagley Library charges <u>\$.25</u> for photocopies.

# Wilmington Public Library

10 E 10th Street, Wilmington, DE 19801 (302) - 571 – 7400 / <a href="http://www.wilmlib.org">http://www.wilmlib.org</a>

The third floor of the Wilmington Public Library maintains the best collection of both historic and contemporary newspapers in the state. The newspapers in the Library's collection include hardcopies of the *Delaware State News* from 1923 to the present, and microfilmed copies of the *Morning News* from March 1880 to the present, the *Evening Journal* from May 1888 to the present, *Every Evening* from May 1888 to February 1933, and the *Sunday Morning Star* from May 1884 to April 18, 1954. Please note that the *Morning News* and the *Evening Journal* combined to form the *News Journal* in 1989. The Wilmington Library has collected a copy of every edition of the News Journal.

Newspapers can be skimmed day by day for relevant stories, but you may also wish to consult the library's clippings file, called the Delaware Index of Newspapers. This large collection of articles dating from the late 1920's to the 1970's is searchable under headings such as "transportation," "streets," "street railroads (trolleys)," "turnpikes," and the specific name of your road and of the city(ies) through which your road passes. The library's index is especially strong in material on New Castle County and northern Delaware.

## **Delaware Public Archives**

121 Duke of York Street, Dover, DE 19901 (302) 744-5000 / <a href="http://www.archives.state.de.us">http://www.archives.state.de.us</a>

The Delaware Public Archives is one of the oldest public archives programs in the country. Created by the General Assembly in 1905, the Archives moved into its current home on January 8, 2001.

The mission of the Delaware Public Archives is three-fold:

to identify, collect, and preserve public records of enduring historical and evidential value; to ensure access to public records for present and future generations of Delawareans; and to advise and educate in the creation, management, use, and preservation of public records.

The Archives holds more than 40,000 cubic feet of government records and historical documents.

## (From DPA website)

The Delaware Public Archives collection offers a number of valuable resources for researching your road's history, such as legal documents dating from the late 17th century onwards, historic photographs, books on state and local history, historic road atlases and maps. The Archives has a searchable online catalogue that may be accessed at:

http://www.state.de.us/sos/dpa/collections/guideintro.shtml.

Many of the items housed in the State Archives must be retrieved by the archives staff. To have the staff locate items for you, fill out an order slip kept on the main desk of the Archives reading room and give it to an available staff member who will then deliver the requested items to your research table once they are located.

Key collections for the study of your road are described along with their use:

## Road Papers

The archives' "road papers" and "road orders" are particularly useful documents for those researching Delaware's roads. These papers primarily consist of petitions, orders, and returns dating from the early eighteenth through the twentieth centuries calling for the construction or alteration of roads within Delaware and typically include the name of the individual or group who petitioned the court for the road improvement, location of the road, the petition's date, a description of the work to be done, and the signatures of the petitioners. Surveyor's plots are sometimes included. One sample road paper title "A survey return for a road from Chapel Branch to Robert Burton's Gate in Angola Neck," illustrates the importance of familiarizing yourself with your road, its landmarks, and historic names and property owners, etc. before searching this collection.

The Archives has a finding guide for Sussex County's road papers (binder # 59) that organize the papers by road, year, and document type (petition, survey). Unfortunately, finding guides for New Castle and Kent counties do not exist. When researching the road papers for these counties, you will need first need to establish an approximate date when your road may have been created or modified (for instance, 1750-1800). The archivist can then provide you with a box of papers that all fall within that span of time.

### Delaware State Highway Contracts

The Archives houses many DelDOT highway contracts which date primarily from the years between 1918 and 1961. These road contracts show detailed drawings of road

construction and alteration, diagrams of road grades, the placement of buildings along the road, the names of property owners, and much other useful information.

Be aware that the Delaware Department of Transportation has a searchable electronic index of all road contracts housed in the State Archives. See DelDOT section for more information.

At the DPA, contracts can be located using a research guide (binder # 39), organized by location, (which can mean the name of the actual road [i.e. Concord Pike], the distance between two points [i.e. Cokesbury Church to U.S. 113], or communities along the road. [i.e. Claymont]), then by contract number, year, and type of project (i.e. Philadelphia Pike to Claymont, CN 203, 1932, sidewalk-concrete). In another section of the research guide, these contracts are also listed by contract number first, then location, year, type, and remarks (i.e. CN 7, 1923, Marsh Road, concrete, roadway). Be sure to carefully examine the research guide to locate all the contracts that relate to your road.

When locating contracts, you will first need to find the record for the contract in the research guide (binder # 39). All of the microfilm rolls are organized according to record group numbers, and are housed in cabinets found in a small room off the larger microfilm viewing area located at the back of the Archives' reading room. Use the record group number for road contracts (#1540) to locate the file cabinet that holds your microfilm.

### Films

The DPA maintains a small collection of films produced by the State Highway Department from the 1950s to 1980s. Many depict construction or maintenance work on certain Delaware roads, while others document traffic problems or general views along a roadway. These films can be viewed in the State Archives, but it is necessary to call at least a day ahead to schedule a time with the archivists.

# Photographs

The archives maintain an extensive photograph collection of images taken throughout the state from the mid nineteenth century onwards. These photographs are divided into a large general archives collection and several smaller collections donated to the archives by private citizens. The general collections extends from circa 1860 to the present, and are organized by broad subjects (i.e. cities and towns, transportation, etc.) and subdivided into narrower subjects (Transportation—New Castle County, Delaware

memorial Bridge, etc.). Be sure to also examine the catalogue of Delaware post-cards located at the end of the general photographs binder.

#### Books

The State Archives Library has an extensive collection of Delaware-related books. The library's book records are organized alphabetically in a card catalogue according to authors' names, book titles, and subjects. It is best to have as much information on a book as possible before searching the card catalogue.

### Maps

The State Archives maintains a large collection of modern and historic maps related to Delaware and the Mid-Atlantic region. This collection is searchable by card catalogue organized according to the map name and date.

## Record Group (RG) 1540

Record Group 1540 contains many documents and sources that relate to Delaware's roads and byways and includes DelDOT and county road records from the early 1900s to the present.

### Newspaper Clippings

The newspaper clipping files at the State Archives are among Delaware's most comprehensive and well-maintained. You can find articles that relate to your road in the general "transportation" clippings file, or in the files kept on the various communities that abut your road.

### Hours:

The archives are open Mondays, Tuesdays, Fridays, and Saturdays from 8:00 a.m. - 4:30 p.m., Wednesdays and Thursdays from 8:00 a.m. to 8:00 p.m., and are closed for all state holidays. First time visitors to the State Archives need to register at the Library's circulation desk and present picture identification. Photocopies of materials housed in the archives are \$.25. For additional information, visit their website at: <a href="http://www.state.de.us/sos/dpa/collections/rules.shtml">http://www.state.de.us/sos/dpa/collections/rules.shtml</a>

# **Delaware Department of Transportation (DelDOT)**

Administration Center 800 Bay Road (Mailing Address: P.O. Box 778) Dover, DE 19903 The Delaware Department of Transportation allows private researchers to access a number of inhouse resources which DelDOT employees themselves use when working on transportation projects. One such resource includes an electronic index of DelDOT road contracts (FALCOLN) housed in the State Archives and elsewhere (see the description of the road contracts in the State Archives section). This computerized database allows you to locate a particular road's construction and maintenance contracts through a search by road maintenance number. (Each road in the state has a unique road maintenance number to identify it – your DelDOT liason can provide you with maps to find this information). Researchers can access the FALCOLN system by appointment only. Please contact Jude Crawford at (302) 760-2328 or jacrawford@mail.dot.state.de.us to set up a time to access the database.

In addition to the FALCOLN index, DelDOT's collections also include United States Geological Survey (USGS) maps, regional maps, county maps, and a nearly complete collection of state highway maps. In addition to the maps, DelDOT maintains a number of historic photographs, primarily from the 1920s, which focus on Delaware's bridges. DelDOT houses several additional historical negatives which show Delaware's roads, a few of which have developed prints accompanying the negatives. Researchers should contact George Kent at (302) 760-2455 to access the DelDOT maps described above. To access DelDOT's photographs, contact Tim O'Brian. In addition, DelDOT's Department of Archeology maintains a collection of reports detailing previous archeological projects sponsored by the department. For more information on these reports, contact Michael Hahn at (302) 760-2131 or mhahn@mail.dot.state.de.us.

# **Center for Historic Architecture and Design (CHAD)**

University of Delaware 307 Alison Hall Newark DE 19716-7360 (302) 831-8097

Part of the University of Delaware, CHAD brings together research and public service for historic preservation at the local, state, and national levels. Since 1984, CHAD has conducted projects documenting more than 3,000 historic structures across Delaware and the eastern United States. The archives at CHAD contain a number of useful resources as you research your road's history, including historic structure reports, context reports, individual property files, reference works, and Masters' thesis on Delaware history and preservation topics.

## **Hours and access:**

Please call the Center two weeks in advance of your planned visit so that staff can prepare materials for your visit and schedule time to assist you. Unfortunately because of the nature of the collection it is not possible to gain access to the collection without a staff member present. To make an appointment with a CHAD staff member please call Karen Spry at (302) 831-4543.

## Information at CHAD:

Archival records for each property documented by CHAD are catalogued and organized into three folders (research files & narrative, drawings, and photographs). These can be used if you need to know something specific and in-depth about the history of a house, farm, or other property along your road. Many of CHAD's documented buildings are no longer standing, which makes these records that much more valuable for 'reconstructing' the lost historic landscape along your road.

Properties along your route can be identified with help from CHAD's staff. Information and documentation varies depending upon the building and the scope of work. Each property file includes field notes, drawings, and photographs. Additional information within these individual property files may include:

## Maps

Photocopied historic and recent road maps show the site location. These include standard reference maps such as USGS topographic maps and historic maps of Delaware, including the Beers atlas (1868) and Rea and Price's state map (1849).

## Photographs

The photographs that you will find in these folders are elevations and perspectives of the building's exterior, as well as, the interior of the building, related outbuildings, surrounding landscapes of the property, and occasionally, view sheds taken by CHAD as part of field documentation. The photographs can be in black & white, color, 35mm, large format, digital or slides. Copies of historic photographs are occasionally included in property files.

## Primary source documents

Photocopies of research materials include property title and deed research, tax assessments records, population census records, Orphan's Court records, personal letters, and newspaper articles.

## Narrative Summary

These reports will include a brief description of the property and its history.

## Drawings

These range from annotated measured pencil drawings produced 'on site' in the field to precision ink-on-mylar and AutoCAD drawings produced to HABS standards. The level of documentation varies from building to building, but if the building is no longer standing these drawings could provide valuable information about the lost structure(s).

## National Register (NR) reports

These reports can be prepared by CHAD or by an outside agency. They will include historical information, including date of construction and significance, as well as a description of the property.

# **State Historic Preservation Office (SHPO)**

21 The Green, Suite A

Dover, Delaware 19901-3611

302-739-5685 / http://www.state.de.us/shpo/default.shtml

The State Historic Preservation Office has a large collection of natural resource studies, historical resource studies, architectural studies, and a number of other unpublished surveys and reports. These reports can provide you with valuable information when researching specific sites, features, and buildings that line your roadside. The SHPO Research Center also includes a small library of books on historic preservation which are available for research use.

Before researchers can access the SHPO collections they must call ahead for an appointment. The Research Center is open 8:30 am - 4:00 pm, Monday through Friday, except on state and federal holidays. For a small fee, the SHPO staff will also photocopy any materials from their collection that you request.

## **Local Historical Societies**

This list of libraries and archives highlights those of greatest importance statewide. Sometimes the best research comes from those closest to home, so you should also seek out local historical societies. One extremely helpful source for locating additional collections is the *DIRECTORY OF* 

HISTORICAL RECORDS IN DELAWARE, compiled by Richmond D. Williams in 1995 for the Delaware Historical Records Advisory Board, Hall of Records, Dover DE. It is available online at: <a href="http://delgensoc.org/dehisrec.html">http://delgensoc.org/dehisrec.html</a>

Collections vary widely in scope and scale at the local level. Check with your groups to see what resources they have available. Remember, too that their greatest help might not be from a collection of research materials, but from their collective knowledge of your community (and road's) history.

To give you an idea of what to expect, we have included mention of one particularly important collection in Sussex County:

## **Lewes Historical Society**

110 Shipcarpenter Street
Lewes, Delaware 19958
302-645-7670 / http://www.historiclewes.org

The Library and Archives of the Lewes Historical Society contain nearly 4,000 volumes and additional papers and records which relate particularly to the history of Lewes, although the library also features books and papers relating to state history as well. Of particular interest to road researchers is the Society's collection of 60,000 historic photographs. This collection includes many aerial images primarily taken during the middle of the twentieth century depicting Lewis and its surrounding region. The Society's collection also includes several local histories, archeological reports, and assorted documents and manuscripts which illustrate various chapters of the town's history and development.

### Hours:

The Lewis Historical Society is open Monday through Friday 10:00 am to 4:00 pm, although hours are subject to change without notice. Appointments are not required to research the library or archives, but are suggested to insure that all material will be available. Before accessing the collections, all researchers are required to present a driver's license or other valid form of ID. The Lewis Historical Society can request photo-duplications and/or photographic reproductions of materials for a fee; however, they will deny requests to photocopy any materials that are too fragile to be reproduced.

# Appendix B:

# Selected Bibliography on Transportation and Roads

# **Maps of Delaware**

## Baist, G.W. Atlas of New Castle County, Delaware, 1893.

Baist's 1893 atlas illustrates streets, railroad tracks, building lots, buildings (coded to indicate their construction type i.e. brick, frame, etc.), civic buildings, parks, industrial developments, etc. (Historical Society of Delaware, University of Delaware Morris Library Special Collections)

## Baist, G.W. Property Atlas of the City of Wilmington, Delaware, 1901.

Baist's 1901 property map of Wilmington shows streets, railroad tracks, building lots, buildings (coded to indicate their construction i.e. brick, frame, etc.), civic buildings, parks, industrial developments, etc.

(Historical Society of Delaware, University of Delaware Morris Library Special Collections).

### Beers, J.G. Atlas of the State of Delaware, 1868.

Beers's 1868 atlas features a collection of maps of Delaware's hundreds and principal communities that show the placement of roads, structures, land use, property boundaries, civic buildings etc. Accompanying the maps are abbreviated business directories for several Delaware cities, tables of distances, etc.

(Historical Society of Delaware, University of Delaware Morris Library Special Collections)

### Byles, Map of Kent County, 1859.

Byles early *Map of Kent County, Delaware* shows the placement of circa 1859 roads and railroad lines, land ownership, schools, communities, and natural features (rivers, lakes, etc.). This map also features inset maps of Smyrna, Dover, Milford, Frederica, Lipsig, Hazlettville, Kenton, and Felton.

## **Delaware State Highway Maps**

After its founding in 1917, Delaware's Highway Department began to produce official state highway maps. Many of the early maps through the 1920's and 1930's show roadways but do not label them. From the 1940's onward, however, the roadways are shown and labeled, various types of roads are indicated (paved, dirt, etc.), and several additional features, such as historic sites, natural features, etc are identified. Delaware's highway maps are valuable in that they show the development of Delaware's primary and secondary roads through the twentieth century. The Special Collections Department at the University of Delaware's Morris Library, the Delaware Department of Transportation Archives, and Delaware's State Archives all maintain collections of Delaware highway maps.

- Delaware State Archives
   1916, 1920, 1924, 1925, 1926, 1928, 1929, 1931, 1932, 1935, 1936, 1937, 1938, 1939, 1940, 1942, 1946, 1948, 1952, 1957, 1961, 1964, 1965, 1967, 1968, 1969, 1971
- DelDOT Highway Maps
   1920, 1924-1925, 1931, 1932, 1936, 1938, 1940, 1942, 1947, 1948, 1949, 1950, 1952, 1954, 1955, 1957-58, 1961, 1965, 1969, 1970, 1971, 1985, 1990
- University of Delaware Morris Library Special Collections Highway Maps:

1924, 1929, 1930, 1932, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1948, 1949, 1950, 1952, 1957, 1958, 1959, 1960, 1961, 1962, 1971, 1976

State Highway Maps										
5.1	1916	1920	1924	1925	1926	1928	1929	1931	1932	1934
Delaware State Archives Delaware	*	*	*	*	*	*	*	*	*	
Department of Transportation UDel Morris Library Special Collections			*						*	*
Delaware State	1935 *	1936 *	1937 *	1938 *	1939 *	1940 *	1942 *	1946 *	1947	1948 *
Archives Delaware Department of Transportation UDel Morris Library Special Collections		*		*		*	*		*	*
	*	*	*	*	*	*	*			*
Delaware State	1949	1950	1952 *	1954	1955	1957 *	1958	1959	1960	1961 *
Archives Delaware Department of	*	*	*	*	*	*	*			*
Transportation UDel Morris Library Special Collections	*	*	*			*	*	*	*	*
Delaware State Archives Delaware Department of Transportation	1962	1964 *	1965 *	1969 *	1970	1971 *				
			*	*	*	*				
UDel Morris Library Special Collections	*		*			*				

## Franklin Survey Company, Atlas of Wilmington, New Castle County, Delaware, c. 1936.

The Franklin Survey Company's 1936 Wilmington atlas includes a series of detailed maps of Wilmington and its neighborhoods, illustrating streets, railroad tracks, building lots, buildings (coded to indicate their construction i.e. brick, frame, etc.), civic buildings, parks, industrial developments, etc.

(Historical Society of Delaware, University of Delaware Morris Library Special Collections).

## Hopkins, G.M. City Atlas of Wilmington, Delaware, 1876.

Hopkins 1876 city map of Wilmington shows streets, railroad tracks, building lots, buildings (coded to indicate their construction i.e. brick, frame, etc.), civic buildings, parks, industrial developments, etc.

(Historical Society of Delaware)

## Hopkins, Map of New Castle County, 1881

Hopkins *Map of New Castle County, Delaware* provides information on circa 1881 roads and railroad lines, the location of past industry, historic place names, land ownership, schools, communities, and natural features (rivers, lakes, etc.). This map also features inset maps of

Delaware City, St. Georges, Christiana, Stanton, Wilmington, Newport, New Castle, Newark, Odessa, Townsend, Glasgow, and Middleton.

# Mueller, A. H. Map of the Delaware River: The Clyde of America and the State of Delaware, 1919.

Mueller's *Map of the Delaware River* shows roads, trolley and rail lines, the location of towns and natural features, etc. in Delaware, New Jersey, and southern Pennsylvania (HSD, DPA)

## Rea, Samuel & Jacob Price, Map of New Castle County, 1849

The Rea and Price *Map of New Castle County* provides information on roads and railroad lines, historic place names, land ownership, schools, towns, communities, and natural features (rivers, lakes, etc.), as well as an inset map of Wilmington.

# Sanborn Insurance Maps

Sanborn maps are large-scale plans that include information such as the outline of each building, its size, shape and construction materials, height, function, location of windows and doors, etc. Sanborn maps also provide street names, street and sidewalk widths, property boundaries, building use, and house and block numbers. Information on construction details (for example, steel beams or reinforced walls) is often given on the plans while shading indicates different building materials. Extensive information on building use is given, ranging from symbols for generic terms such as stable, garage, and warehouse to names of owners of factories and details on what was manufactured in them. Other features shown include pipelines, railroads, wells, dumps, and heavy machinery. The development of several Delaware towns and cities can be traced through the various Sanborn maps created from the late 19<sup>th</sup> century to the mid 20<sup>th</sup> century.

From a University of Delaware computer, one can use the following link to access all of Delaware's Sanborn maps online (<a href="http://sanborn.umi.com/">http://sanborn.umi.com/</a>). The Sanborn maps are also available at the University of Delaware's Morris Library in microfilm format (Microfilm # 3333, 6026), and in paper format in the Morris Library's Special Collections Department, The Historical Society of Delaware, Hagley Research Library, and the State Archives. For instructions on reading Sanborn maps, please refer to the following link: (<a href="http://fisher.lib.virginia.edu/collections/maps/sanborn/">http://fisher.lib.virginia.edu/collections/maps/sanborn/</a>)

## Online Maps and Map Guides

Delaware Geological Survey (http://www.udel.edu/dgs/index.html)
 The Delaware Geographical Survey maintains an internet accessible database of maps of Delaware found at:
 <a href="http://www.rdms.udel.edu/dgs/cicMap.html">http://www.rdms.udel.edu/dgs/cicMap.html</a>

 This search tool allows you to find records of historic and modern maps.

This search tool allows you to find records of historic and modern maps related to specific regions of Delaware housed in publicly accessible collections throughout the state. When use this database, first choose

what type of map you need (an asterisk [\*] will allow you to perform a general search of all maps available). Next indicate if you want to limit your search to maps of a specific county, and then list the particular agency, date range, etc. you want your search to include. Placing an asterisk in any of these boxes will allow you to perform a general search in that field. Each result is hyperlinked to a detailed record that provides information regarding the location and the accessibility of each map.

# Datamil (datamil.udel.edu)

Datamil is a good online source for modern maps of Delaware, as well as aerial photographs of the state. To access both maps and photographs, locate the map guide on the left hand side of datamil's homepage. Clicking on the map guide icon will bring up a secondary page featuring a map of Delaware. Zooming in on that map will bring up a variety layers on the map's right side which can be added or taken away, allowing you the flexibility to create a variety of maps.

# David Rumsey Map Collection

An online collection of important historic maps of states, regions, countries, etc. The site features several maps of Delaware that primarily date to before 1850.

www.davidrumsey.com

### Delaware State Archives

Online guide to a portion of the map collection housed in the Delaware State Archives

http://www.state.de.us/sos/dpa/exhibits/misc/mapcollection/viiidehwys1914.shtml#TopOfPage

## Historical Society of Delaware

Online guide to a portion of the map collection housed at the Historical Society of Delaware

http://www.hsd.org/Library Atlases.htm

 University of Delaware Morris Library Special Collections
 Online guide to the University of Delaware Morris Library Special Collections maps.

http://www.lib.udel.edu/ud/spec/findaids/hist\_map/contents.html

# **General Readings on Historic Roads**

Clay. Grady, "Strips", *How to Read the American City* (University of Chicago Press, Chicago 1980), 85-109.

Clay's chapter on the development of road "strips" illustrates why and how strips form and how they impact the surrounding landscape.

# Jackson, J.B., "Roads Belong in the Landscape", A Sense of PLACE, a Sense of TIME (Yale University Press, New Haven 1994), 187-205.

"Roads Belong in the Landscape" offers a general illustration of the way in which roads have altered and shaped the American landscape over time.

# Jackson, J.B., "Roads", *Discovering the Vernacular Landscape* (Yale University Press, New Haven, 1984), 21-27.

"Roads" discusses the way a traveler should look at and study the road and its surrounding landscape to better understand the way the road developed and impacted its surroundings.

# Jackson, J.B., "The Discovery of the Street", *The Necessity for Ruins* (University of Massachusetts Press, Amherst 1990), 55-66.

"The Discovery of the Street" discusses the way a traveler should look at and study the road to better understand how it formed and developed over time.

# Jacobs, A.B., "An Introduction to Great Streets", "The Great Streets We Once Lived On", "Requirements for Great Streets", "Qualities That Contribute", *Great Streets*. (The MIT Press 1993), 2-12, 270-293, 293-308.

*Great Streets* provides examples of notable streets around the world, and illustrates many of the elements that come together to make them "great."

# Jacobs, A.B. *Looking at Cities.* Cambridge, Massachusetts: Harvard University Press, 1985.

Looking at Cities introduces a way of looking at the cityscapes that uncovers clues illustrating how it has changed over time.

# Edward, Ralph. "Ordinary Landscapes of the first Machine Age: 1900-40", *The Modern Urban Landscape* (Baltimore: The Johns Hopkins University Press, 1987), 76-82.

"Ordinary Landscapes of the first Machine Age: 1900-40" offers a history of the impact of roads on the landscape during the first half of the twentieth century.

# Southworth, M. and Ben-Joseph, E. *Streets and the Shaping of Towns and Cities*. McGraw-Hill Publishers, New York 1997.

Streets and the Shaping of Towns and Cities illustrates development of cities and streets in America in nineteenth and twentieth century America.

# Stilgoe, J.R., "Roads", *Common Landscape of America 1580 to 1845* (Yale University Press, New Haven 1982), 128-134.

"Roads" offers a look at the development of roads in the United States during its period of initial growth.

# Stilgoe, J.R., "Strips", "Interstate", "Main Street", *Outside Lies Magic: Regaining History and Awareness in Everyday Places* (Walker Publishing Company, Inc. 1999), 1-88, 89-103, 131-156.

Looking at Cities presents a detailed method of examining a cityscape in ways that help to illustrate how the city has changed over time.

# **General Histories of Transportation**

**United States Department of Transportation Online Bibliography:** 

http://199.79.179.78/ref/biblio/highways/highways\_references.cfm

# America's Highways 1776-1976: A History of the Federal Aid Program. Washington DC: U.S Department of Transportation, Federal Highways Administration, 1977.

America's Highways documents the development of highway transportation in the United States over the past four centuries.

(Hagley Research Library, University of Delaware Morris Library)

## Armstrong, Ellis L., Sullen M. Hoy, ed. History of Public Works in the United States 1776-1976. Chicago: American Public Works Association, 1976.

History of Public Works features a chapter on the local, state, and federal involvement in developing transportation systems within the United States, as well as a chapter on various types of road related infrastructure including tunnels, highways, and bridges. (Hagley Research Library, University of Delaware)

## Borth, Christy. Mankind on the Move: The Story of Highways. Washington, DC: Automobile Safety Foundation, 1969.

Mankind on the Move offers a general overview of roads through history, with a section focused on the development of roads in modern America. (University of Delaware)

Dunbar, Seymour. A History of Travel in America. Indianapolis, IN: Bobbs-Merrill Co., 1915. A History of Travel in America is a collection of vignettes that highlight aspects of American travel in the 19<sup>th</sup> and early 20<sup>th</sup> centuries.

(Hagley Research Library, University of Delaware)

## Durrenberger, Joseph Austin. Turnpikes: A Study of the Toll Road Movement in the Middle Atlantic States and Maryland, Valdosta, GA: The Author, 1931.

Turnpikes: A Study of the Toll Road Movement presents the history of turnpikes in the United States, highlighting their development, financing, general use, eventual nationalization, etc. (Hagley Research Library, University of Delaware Morris Library)

# Lane, Wheaton J and Jean Labatut, edt. Highways in Our National Life: A Symposium. Princeton: Princeton University Press, 1950.

Highways in Our National Life includes various articles regarding the history of roads around the world in Near East, China, England, the United States, and elsewhere. The book also features articles which primarily focus on the sociological, cultural, and physical impacts of roads. (Hagley Research Library, University of Delaware)

# Lay, M. G. Ways of the World: A History of the World's Roads and of the Vehicles ThaUse Them. New Brunswick: Rutgers University Press, 1992.

Ways of the World offers information on how roads have been constructed and used through history.

## Marriott, Paul Daniel. Saving Historic Roads: Design and Policy Guidelines. New York: John Wiley and Sons, 1998.

Saving Historic Roads offers suggestions on how to preserve and manage historic roads in light of modern pressures and realities.

(University of Delaware Morris Library)

## Public Roads Magazine. Washington: U.S. Federal Highway Administration, 1918-2005. Public Roads Magazine, is a publication whose printing covers much of the 20th century. As a result, it tracks many of America's major concerns and trends in developing its road and highway network. University of Delaware's Morris Library has many of the publication's early volumes, while the latest volumes can be found on-line at <a href="http://purl.access.gpo.gov/GPO/LPS1663">http://purl.access.gpo.gov/GPO/LPS1663</a>. (University of Delaware Morris Library U.S. Documents-Lower Level TD 2.19 has: v.1(1918)-

v.10(1929/1930),v.13(1932/1933)-v.32(1962/1964),v.35(1968/1970)-v.64(2000))

# Ringwalt, J.L. *Development of Transportation Systems in the United States.* Philadephia, PA: The Author, 1888.

Development of Transportation Systems explores the principle forms of transportation in the 19<sup>th</sup> century. Sections of the book treat local efforts to improve roads, common or country roads, and the general development of roads during the 1800's in the United States. (Hagley Research Library, University of Delaware)

# Stilgoe, John R. Common Landscapes of America, 1580-1845. New Haven: Yale University Press, 1982.

**Common Landscapes of America** is a general overview of America's vernacular landscapes, taking examples from New England, the Mid Atlantic region, and the Southwest. The books chapters primarily focus on the evolution of America's man made environment from the 16<sup>th</sup> to the 19<sup>th</sup> century in relation to agriculture, community life, urban development, and early forms of industry.

(Hagley Research Library, University of Delaware Morris Library)

# Vance, James E. Capturing the Horizon. The Historical Geography of Transportation since the Sixteenth Century. Johns Hopkins University Press, 1996.

Capturing the Horizon outlines the history of transportation from the Renaissance to the present day and specifically discusses the development of various forms of transportation as well as the manner in which these forms of transportation impacted and were impacted by various political, economic, and cultural trends.

Whiteman and Taintor, consultants. *Byway Beginnings: Understanding, Inventorying, and Evaluating a Byway's Intrinsic Qualities.* Federal Highway Administration and National Park Service, 1999.

Byway Beginnings offers helpful guidance on how to inventory and evaluate a byway's intrinsic qualities.

# **Transportation Histories of Delaware**

Annual Reports of the State Highway Department of the State of Delaware, 1917-Present.

The *Delaware Annual Report* includes a yearly transportation budget, record of DELDOT expenditures, transportation improvement recommendations, statistics, and road related facts from 1917 to the present.

(University of Delaware Morris Library)

# Office of State Highway Commissioner, Biennial report of the New Castle County State Highway Commissioner. Wilmington, Del.: C.M. Smith Print. and Stationery Co.

The *Biennial Report* are available for the years 1909 – 1910, 1917 – 1918, and 1919 – 1920 and includes information on the history of New Castle County roads as well as a detailed statement of roads built or improved during the course of the year. These statements include figures on the work accomplished and specifics regarding road width, depth, length, cost, etc.

# Cheyney, James B., "Delaware's Turnpikes," in *Federal Writers Project Resources 1936-1941*, v. 22, 333-400.

Delaware's Turnpikes offers a detailed history regarding the construction, use, maintenance, cost, etc. of turnpike roads in Delaware.

(University of Delaware Morris Library Special Collections)

Delaware State Highway Department. *Delaware State Highways: The Story of Roads in Delaware from the Days of Beast and Burthen to "The Road of Tomorrow."* Dover, DE: Delaware State Highway Department, 1919.

Delaware State Highways offers a dated but useful history of the development of the "good road" movement in Delaware, and a summary of Delaware's early twentieth century road and highway improvements.

(Hagley Research Library, University of Delaware Morris Library.)

# Delaware State Highway Department. *Delaware State Highway Report.* Dover, DE: Delaware State Highway Department, 1917-1970.

The *Delaware State Highway Report* was published annualy from 1917 to 1970, and provides a yearly update of the department's activities. Among other things, this report offers researchers information regarding the state of specific projects undertaken each year, as well as financial information which correspond to those projects.

(University of Delaware Morris Library)

# Deters, John Philip. "Local Roads—Technology, Custom and the Law: from Farm to Church, Mill and Market in the Delaware Piedmont, 1790-1850." Master's thesis, University of Delaware, 1992.

Local Roads focuses on the impact of technology, laws, individuals, organizations, and other factors on the development of roadways in Northern Delaware during the period between 1790-1850.

(University of Delaware Morris Library)

Faris, John Thomson. *Old roads out of Philadelphia*. Philadelphia: J.B. Lippincott, 1917. *Old Roads out of Philadelphia* offers vignettes on a number of historic roads that connected Philadelphia with surrounding regions and communities.

# Gray, Ralph D., "Transportation and Brandywine Industries, 1800-1840," *Delaware History*, v. 9, n. 4 (October, 1961), 303-325

*Transportation and the Brandywine Industries* discusses the development of roads, canals, railroads, etc. in the Brandywine valley, and correlates this development with the growth of the region's commerce and industry.

(Hagley Research Library, University of Delaware Morris Library)

# Lemon, James T. "Urbanization and the Development of Eighteenth-Century Southeastern Pennsylvania and Adjacent Delaware," *William and-Mary Quarterly*, vol. 24, no. 4 (1967), 500-539.

(Hagley Research Library, University of Delaware Morris Library)

# Lichtenstein Consulting Engineers. *Delaware Historic Bridges*. Dover: Delaware Department of Transportation, 2000.

Delaware Historic Bridges surveys all bridges in Delaware built before 1957, and includes a brief accompanying history of Delaware's roadways and railroads. (University of Delaware Morris Library)

## McNinch, Marjorie. Bridges. Wilmington: Cedar Tree Press, 1995.

*Bridges* provides a history of Delaware's covered bridges, and includes historic photographs of many of these bridges.

# New Castle County. Annual Report of the County Road Engineer, New Castle County, Delaware. Wilmington, DE: James F. McIvor and Son, 1908 / 1917.

The Annual Report of the County Road Engineer provides an update on the progress made on roads in each hundred in New Castle County. The specific information included on in the individual reports include the amount of money disbursed in the featured hundred over the course of the year on the road improvements as well as a brief description of the nature of those improvements.

(University of Delaware Morris Library Special Collections Delaware Library has: 1st(1908),10th(1917))

# New Castle County. *Biennial Report of the New Castle County State Highway Commissioner*. Wilmington, Del: C.M. Smith Print and Stationery Co., 1909 / 1910, 1919 / 1920, 1917 / 1918.

Like The Annual Report of the County Road Engineer, the Biennial Report of the New Castle County State Highway Commissioner features each hundred in the county, and offers brief descriptions that highlight the nature of the progress that has been made on the roads in the hundred over the featured year.

# Quinn, Judith. "Traversing the Landscape in Federal Delaware." *Delaware History* 23, no. 1 (Spring-Summer, 1988): 39-61.

Traversing the Landscape in Federal Delaware features late eighteenth and early nineteenth century travel descriptions which reflect views and ideas on the terrain, wildlife, vegetation, and forms of travel available in Delaware during the Federal period.

(Hagley Research Library, University of Delaware Morris Library)

# Weslager, C. A. 140 years along Old Public Road in Mill Creek Hundred, New Castle County, Del.

Wilmington: Historic Red Clay Valley, Inc., 1960.

140 Years along Old Public Roads presents the nineteenth and twentieth century history of Old Public Road (State Road No. 225).

(Hagley Research Library, University of Delaware Morris Library)

# **Regional and State Histories**

## **University of Delaware Morris Library Delaware History Bibliography:**

http://www2.lib.udel.edu/subj/genealogy/resguide/delhist.htm

## Albensi, Bill. The Colony of New Sweden. Wilmington, DE: Nopoly Press, 1987.

The Colony of New Sweden offers a short, general overview of the Swedish settlement that later grew to become Wilmington, DE.

(University of Delaware Morris Library Special Collections)

# Bevan, Wilson Lloyd. *History of Delaware, Past and Present*. New York: Lewis Historical Publishing Co., 1929.

History of Delaware, Past and Present is a detailed four volume history of Delaware that extends from the colonial era to the end of World War I. The History of Delaware also includes chapters on specialized topics such as country histories, state politics, transportation, industry, etc. Volumes three and four contain biographical material on famous Delawareans.

# Conrad, Henry C. *History of the State of Delaware from the Earliest Settlement to the Year 1907.* Wilmington: Published by author, 1908.

History of the State of Delaware is a three volume account which focuses on (volume I) state history, (volume II) the history of Delaware's counties and hundreds, and (volume III) a variety of topics relating to the state's political, economic, and cultural legacy.

# Delaware History (journal). Wilmington, DE: Historical Society of Delaware, 1946-semiannual.

The journal of the Historical Society of Delaware. Issues of *Delaware History* from 1963 onwards are indexed in *America: History and Life*. Volume 27 has a cumulative index for volumes dating from 1946 to 1996.

(Hagley Research Library, University of Delaware Morris Library)

# Federal Writers' Project of the Works Progress Administration for the State of Delaware. *Delaware, A Guide to the First State.* New York: The Viking Press, 1938.

Delaware, A Guide to the First State highlights Delaware's historic cities, byways, and other points of interest. This guide offers a brief history of transportation in Delaware as well as general histories and descriptions of the state's natural, economic, cultural, and sociological characteristics.

(Hagley Research Library, University of Delaware Morris Library)

Federal Writers' Project of the Works Progress Administration for the State of Delaware. Delaware, A Guide to the First State—Indexes is a carbon copy of a typewritten index too long to be printed in Delaware, A Guide to the First State. The

# Ferris, Benjamin. A History of the Original Settlements on the Delaware— & a History of Wilmington. Baltimore: Gateway Press, 1987.

A History of the Original Settlement focuses on the initial settlement of the region surrounding the Delaware River by Swedes, Dutch, and English colonialists. Part III of the book focuses specifically on the history of Wilmington and contains a few paragraphs on the development of the city's transportation related infrastructure.

(University of Delaware Morris Library)

# Hancock, Harold Bell. *Delaware two hundred years ago: 1780-1800.* Wilmington, DE: Middle Atlantic Press, 1987.

Delaware two hundred years ago presents a history of Delaware's Federal Period, including a chapter on transportation during this era.

(Hagley Research Library, University of Delaware Morris Library)

## Hancock, Harold. History of Sussex County, Delaware. 1976.

The History of Sussex County features a broad and short survey of the county's history over the past three centuries.

(University of Delaware Morris Library)

# Hancock, Harold. *History of Kent County, Delaware*. Dover, DE: Dover Litho Printing co., 1976.

The History of Kent County features a general history of Kent County with short descriptions of the county's towns and cities.

(Hagley Research Library, University of Delaware Morris Library)

# Hoffecker, Carol. *Readings in Delaware History*. Newark: University of Delaware Press, 1973.

Readings in Delaware History is a compilation of papers on topics that illustrate chapters from different periods of the state's history, including travel accounts of Delaware written during the colonial era.

(Hagley Research Library, University of Delaware Morris Library)

# Hoffecker, Carol E. *Delaware: A Bicentennial History.* New York: W.W. Norton and Company. 1977.

Delaware: A Bicentennial History is a general history of Delaware from colonial times to the present, with a particular emphasis on the social, economic, and political influences and events which have impacted the state.

(Hagley Research Library, University of Delaware Morris Library)

# Johnson, Amandus. *The Swedes on the Delaware, 1638-1664.* Philadelphia, PA: International Printing Company, 1927.

The Swedes on the Delaware includes information on the political and social conditions in Sweden at the time of the settlements, the founding of the Swedish colonies, various Swedish

expeditions to America, and general information regarding day to day life in the Swedish Colonies.

(Hagley Research Library, University of Delaware)

Johnson, Amandus, The Swedish Settlements on the Delaware: Their History and Relation to the Indians, Dutch and English. Philadelphia, PA: Swedish Colonial Society, 1911. The Swedish Settlements on the Delaware is a detailed, two volume history that includes information on the political conditions in Sweden at the time of the settlements, the various companies and industries involved in the founding of the Delaware settlements, the founders and their roles in founding the colonies, the social, economical, and political life in the colonies, and the conclusion of Swedish involvement in Delaware settlements. (Hagley Research Library University of Delaware Morris Library)

Munroe, John A. History of Delaware Forth Edition. Newark: University of Delaware Press, 1984.

History of Delaware is a general history of Delaware from its first Swedish and Dutch settlements to the present day.

(Hagley Research Library, University of Delaware Morris Library)

Munroe, John A. Colonial Delaware: A History. Millwood, NY: KTO Press, 1978. Colonial Delaware offers a largely political history of Delaware's colonial era. (Hagley Research Library, University of Delaware Morris Library)

Munroe, John. Federalist Delaware, 1775-1815. New Brunswick, NJ: Rutgers University Press. 1954.

Federalist Delaware is a specialized history of Delaware focused on the years between 1775 and 1815, with a chapter that highlights Delaware transportation during this period. (Hagley Research Library, University of Delaware Morris Library)

Reed, H. Clay. A Bibliography of Delaware through 1960. Newark, DE: University of Delaware Press, 1966. [Revised] Bibliography of Delaware, 1960-1974. Newark: University of Delaware Press, 1976.

Both bibliographies contain lists of publications and documents relating to Delaware's history categorized by topic, including transportation and communication. (Hagley Research Library, University of Delaware Morris Library)

Reed, H. Clay. Delaware, a History of the First State. 3 Vols. New York: Lewis Historical Publishing Company, 1917.

Delaware, a History of the First State is a three volume work of short biographical entrees on notable Delawareans who lived roughly before the second half of the 20<sup>th</sup> century. (Hagley Research Library, University of Delaware Morris Library F 164 .R4)

Scharf, J. Thomas. History of Delaware, 1609-1888. Vols. I & II. Philadelphia: L. J. Richards and Co. 1953

Coghelan, Gladys M. and Dale Fields, ed. Index to the History of Delaware, 1609-1888. Wilmington: Historical Society of Delaware, 1976.

History of Delaware is a detailed, two volume history of Delaware stretching from 1609 to 1888. Volume I offers a general state history, while volume II features descriptions and histories of Delaware's counties, hundreds, and principal cities and communities.

(Hagley Research Library, University of Delaware Morris Library F164, S31, 1888a)

(Hagley Research Library, University of Delaware Morris Library F 164 .S33 1976)

Swisher, Joe A. The Complete Guide to Delaware Historic Markers. Baltimore: Image Publishing, 2002.

The Complete Guide to Delaware Historic Markers illustrates each of the state's historical markers with photographs and general site descriptions and histories. Delaware's Public Archives website (<a href="http://www.state.de.us/sos/dpa/">http://www.state.de.us/sos/dpa/</a>) has a link to the state's Historical Markers Database located in the toolbar on the lower left hand side of the archive homepage. (University of Delaware Morris Library F 165.S95x 2002)

# United States Geological Survey. *Delaware Place Names.* Washington: U. S. Government Printing Office, 1966.

Delaware Place Names provides information on both historical and modern names of locations in Delaware. For an additional information on a number of Delaware's place names is http://delgensoc.org/deltowns.html.

(Morris Library Reference F162 .U54)

Vincent, Francis. *A History of the State of Delaware*. Philadelphia: John Campbell, 1870. *A History of the State of Delaware* features an early account of Delaware's history extending from the pre-European period to the late 19<sup>th</sup> century. (Hagley Research Library Microform ,University of Delaware Morris Library F167 ,V77)

Ward, Christopher. *The Dutch and the Swedes on the Delaware, 1609-1664*. Philadelphia: University of Pennsylvania Press, 1930.

**The Dutch and the Swedes on the Delaware** is both a history of the interaction between Dutch and Swedish colonies on the Delaware, and an examination of these colonies' economic, political, and sociological characteristics.

(Hagley Research Library, University of Delaware Morris Library F167 .W25)

Weslager, C.A. *The English on the Delaware: 1610-1682.* New Brunswick, NJ: Rutgers University Press, 1967.

**The English on the Delaware** presents a general history of English settlements along the Delaware River, focusing on the people who founded and governed the colonies and the various events and conditions which impacted and shaped them over time.

(Hagley Research Library, University of Delaware Morris Library F157.D4 W43)

Weslager, C.A. *Delaware's Buried Past: A Story of Archeological Adventure*. New Brunswick, N.J.: 1944. *Delaware's Buried Past* is a survey of Delaware's pre-European geologic and ethnologic history. (Hagley Research Library E166, W4 1068 Normal Lean)

Library, University of Delaware Morris Library F166 .W4 1968 Normal Loan)

Weslager, C.A. New Sweden on the Delaware: 1638-1655. Wilmington, DE: The Middle Atlantic Press, 1988. New Sweden on the Delaware is a narrative history of the Swedish and Dutch involvement in the settling of Delaware, with an accompanying list of sites related to Delaware's Swedish settlements.

(Hagley Research Library, University of Delaware Special Collections)

Online guide to the University of Delaware Morris Library Special Collections Holdings for New Castle County.

http://www.lib.udel.edu/ud/spec/guides/newcastl.htm

# **Delaware Local and Community Histories**

## Bridgeville

Hancock, Harold et al. *Bridgeville, a Community History of the Nineteenth Century.* Bridgeville, Del: Bridgeville Historical Society, Inc., 1985.

*Bridgeville, a Community History of the Nineteenth Century* is a compilation of documents, notes, photographs, and excerpts from various sources that illustrate aspects of Bridgeville history. (Hagley Research Library)

### Christiana

Cooch, R.R. A *History of Christiana, Delaware*. Christiana: Christiana Bicentennial Commission, Inc. 1976.

History of Christiana, Delaware is a short pamphlet focusing primarily on the history of Christiana before and after the American revolution.

(Hagley Research Library, University of Delaware Morris Library)

## Dewey Beach

Dougherty, Barbara Quillen, ed. *Dewey Beach, history and tales*. Dewey Beach, DE: Harold E. Dukes Jr, 1996.

Dewey Beach, history and tales comprises a collection of accounts, stories, photographs, advertisements and other documents and records that illustrate aspects of Dewey Beach's history.

(Hagley Research Library University of Delaware Morris Library)

### Dover

City of Dover. Dover, the first two hundred and fifty years, 1717-1967: a brief history of Dover, Delaware. Dover: City of Dover: 1967.

Dover, the first two hundred and fifty years is a commemoration of Dover's 250<sup>th</sup> anniversary held in 1967, highlighting the city's general history, notable buildings and sites, and prominent citizens. (University of Delaware Morris Library)

### Frederica

Coverdale, Mildred. Frederica. Milford, DE: Shawnee Printing, 1976.

Frederica offers a site by site narration of the town's history.

## Georgetown

Georgetown Historical Society. *From Crossroads to County Seat.* Georgetown, DE: Rodgers Graphics, 1990.

From Crossroads to County Seat features short entrees regarding the various figures, places, organizations, and general characteristics that have influenced the history of Georgetown through the centuries.

#### Lewes

Pusey, Pennock. *History of Lewes, Delaware*. Wilmington: Historical Society of Delaware, 1903.

History of Lewes is a short recounting of the community's past, emphasizing Lewes' colonial era.

Terrell, Dan. *Eight Flags over Lewes*. Rehoboth Beach, DE; The Duck Press, 1975. *Eight Flags over Lewes* recounts the history of the various individuals, groups, and governments which governed or impacted Lewes in the 17<sup>th</sup> and 18<sup>th</sup> centuries.

#### Middletown

<u>Darsie, Julie Catharine.</u> "Suburbanization and the integrity of historic agricultural landscapes, Middletown vicinity, New Castle County, Delaware." Thesis (M.A.), University of Delaware, Newark, 1997.

Suburbanization and the integrity of historic agricultural landscapes is an in-depth study of the various threats posed to the landscape around Middletown, DE by the upgrading of rural roads and the increasing development of the region.

(University of Delaware Morris Library)

## Milford

# Dover Public Library. <u>A Tricentennial View of Milford, Delaware, 1683-1983.</u> Dover, DE: Dover Public Library, 1983.

A Tricentennial View of Milford, Delaware is a short, selective summary of Milford's history with accompanying descriptions of some of the community's points of interest. The booklet also offers a few historic images of Milford's buildings, citizens, etc.

(Hagley Research Library, University of Delaware Morris Library Special Collections)

Hancock, Harold Bell, ed. *Nineteenth century Milford*. Milford, DE: Chronicle, 1978. (Hagley Research Library, University of Delaware Morris Library)

Milford Historical Society. A History of Milford, Delaware: in commemoration of the 175th anniversary of the founding of Milford in 1787. Milford, DE: Milford Chronicle, 1962. A History of Milford comprises of a short history of Milford's civic and social institutions, community activities and organizations, landmarks, etc. (Hagley Research Library, University of Delaware)

# Hitchens, E. Dallas. *Milford Delaware and Milford area after 1776 : land records study of Upper Sussex and Lower Kent Co., Delaware.* Wilmington: Delaware Genealogical Society, 1985.

Milford Delaware and Milford area after 1776 focuses on the ownership, use, and development of land parcels in Milford and the surrounding area from property records, court documents, deeds, and other documents. (Hagley Research Library, University of Delaware Morris Library)

# Hitchens, E. Dallas. *The Milford Delaware Area before 1776.* Milford, DE: Shawnee Printing, 1976.

The Milford Delaware Area before 1776 offers a history of Milford focusing on the community's key citizens, politics, land grants, and socio-cultural characteristics.

### Milton

Hancock, Harold. *Milton's first century, 1807-1907.* Westerville, Ohio: Otterbein College Print Shop, 1982.

*Milton's first century, 1807-1907* includes a compilation of histories, journal entries, newspaper clippings, census data and other material relating to the city's history. (University of Delaware Morris Library)

# Henderson, George L. "Continuity and change in a Delaware shipbuilding town: Milton, Delaware, 1870-1910." M.A. Thesis, University of Delaware, 1988.

Continuity and change in a Delaware shipbuilding town includes, among other things, the history of many streets in Milton around the turn of the century.

(University of Delaware Morris Library)

### Newark

Online guide to the University of Delaware Morris Library Special Collections Holdings for Newark, DE

http://www.lib.udel.edu/ud/spec/guides/newark.htm

# Cooch, F.A. Little Known History of Newark, Delaware and its Environs. Newark: Press of Kells, 1936.

Little Known History of Newark, Delaware and its Environs comprises a collection of short essays regarding the communities, individual properties, buildings, etc. located in and around Newark, Delaware.

(Hagley Research Library, University of Delaware Morris Library F 174 .N58 C65x 1936)

Handy, Egbert G and Jas L. Vallan Digham Jr.. *Newark, Delaware: Past and Present.* Newark: Newark Historical Society, 1982.

*Newark, Delaware: Past and Present* offers an early record of the events, institutions, and people which have shaped Newark over the past three centuries.

(Hagley Research Library, University of Delaware Morris Library)

### New Castle

# Boeschenstein, Warren. *Historic American Towns along the Atlantic Coast.* Baltimore: Johns Hopkins University Press, 1999.

Historic American Towns features a chapter on New Castle, Delaware highlighting both the city's development through history and current efforts to preserve the town's heritage.

# Constance, Jean Cooper. "A Town Among Cities: New Castle, Delaware, 1780-1840." PhD diss., University of Delaware, Newark, 1983.

A study of the Federal-era history of New Castle, Delaware. (Hagley Research Library, University of Delaware Morris Library)

# Cottrell, Robert Curtice. "Town planning in New Castle, Delaware, 1797-1838." M.A. thesis, University of Delaware, Newark, 1991.

A thesis that discusses the design, development, and the attempts to implement Latrobe's New Castle's town plan during the period between 1797 and 1838. (University of Delaware Morris Library)

# Delaware Federal Writers' Project. *New Castle on the Delaware.* New Castle: New Castle Historical

## Society, 1950.

New Castle on the Delaware features a description of modern New Castle, the town's history, and its architecture. The book also features a survey of New Castle's buildings and other points of interest

(Hagley Research Library, University of Delaware Morris Library)

# New Castle Historical Society. 350 years of New Castle, Delaware: chapters in a town's history. Wilmington: Cedar Tree Books, 2001.

350 years of New Castle, Delaware: chapters in a town's history comprises a collection of essays on New Castle's evolution from a Dutch post to a modern, preservation-minded community. (Hagley Research Library, University of Delaware Morris Library)

# Newport

Johnson, Ella Welden. *The Story of Newport, A Square Little Town in the State of Delaware.* Wilmington, DE: Paragon Press, Inc., 1963.

The Story of Newport illustrates the history of Newport's three centuries from the viewpoint of a longtime resident.

## Odessa

Schwartz, Sally. "Cantwell's Bridge, Delaware 1770-1860." Thesis (Bachelors) University of Delaware, Newark, 1974.

Cantwell's Bridge offers a demographically-based history of Cantwell's Bridge, Delaware (now known as Odessa), focusing on its nineteenth and twentieth century history.

#### Seaford

Hancock, Harold, Madeline Dunn Hite. *Slavery, steamboats, & railroads: the history of 19th century Seaford.* Seaford, DE: Junior Achievement Program of Seaford High School, 1981

Slavery, steamboats, & railroads: the history of 19th century Seaford consists of a collection of documents and histories that highlight several issues, concepts, and events that impacted Seaford and Sussex County during the nineteenth century. The book includes a section on the nineteenth century transportation in and around Seaford.

(Hagley Research Library, University of Delaware Morris Library)

Robinson, W. Wright. A history of Seaford 1632-1932. Delmar, DE: Red Arrow Press, 1932.

A History of Seaford focuses on the community's development during the nineteenth and early twentieth century.

(Hagley Research Library, University of Delaware Morris Library)

## Smyrna

Caley, George L. Footprints of the Past: historic houses, buildings and sites of Smyrna and the Duck Creek area. Smyrna: Duck Creek Historical Society, 1972.

**Footprints of the Past** is a guide to the historic architecture and points of interest in Smyrna and the larger Duck Creek area, including photographs and short descriptions of each of the featured buildings and sites.

(Hagley Research Library, University of Delaware Morris Library)

## Wilmington

Clement, A.J. Wilmington, Delaware. Its Productive Industrial and Commercial and Maritime Advantages. Wilmington, DE: Delaware Printing Company, 1888.

Wilmington, Delaware offers a nineteenth century description of the city's history, points of interest, and industrial development.

**Dunlap, Gertrude F.** *Fox Point Remembered.* **Wilmington, DE: Foxpoint Association, 1990.** *Fox Point Remembered* comprises a collection of stories and images gathered from "long-time" residents of the Fox Point suburb of Wilmington. (University of Delaware Morris Library)

Every Evening. *History of Wilmington*. Wilmington, DE: Moss Engraving Company, 1894. *History of Wilmington* is detailed but loosely organized history of Wilmington which highlights the city's late nineteenth century commercial, social, political, and religious character.

Heite, Louis Bono. "The Elastic City: Wilmington Reacts to Industrialization, 1814-1860." Ph.D. diss. University of Delaware, Newark, 1987.

The Elastic City explores Wilmington's evolution from a mercantile to an industrial city, and the effects this transition had on the city's urban form.

Hoffecker, Carol E. *Brandywine Village: The Story of a Milling Community.* Wilmington: Old Brandywine Village, Inc., 1974.

Brandywine Village highlights the founding and development of Brandywine Village as a center of milling in Delaware.

(Hagley Research Library, University of Delaware Morris Library)

Hoffecker, Carol E. *Corporate Capital: Wilmington in the Twentieth Century.* Philadelphia: Temple University Press, 1983.

Corporate Capital analyzes the history of Wilmington's twentieth century urban growth and the impact large corporations have had in shaping much of this development. (Hagley Research Library, University of Delaware Morris Library)

Hoffecker, Carol. Wilmington Delaware, Portrait of an Industrial City, 1830-1910. Charlottesville: University Press of Virginia, 1974.

Wilmington Delaware, Portrait of an Industrial City comprises the history of Wilmington's growth from 1830-1910, and includes bits of information regarding the development of transportation in the city during this period.

(Hagley Research Library, University of Delaware Morris Library)

Lincoln, Anna T. Wilmington, Delaware: Three Centuries under Four Flags, 1609-1937 Rutland, VT: Tuttle Pub. Co., Inc., 1937.

*Wilmington, Delaware: Three Centuries under Four Flags* provides a general history of Wilmington, featuring sections on the development of the city's roads, education, religious life, library, inns and taverns, and other subjects.

(Hagley Research Library, University of Delaware Morris Library)

# **Photographic Collections**

University of Delaware Special Collections Online Postcard Collections: <a href="http://www.lib.udel.edu/digital/dpc/browse-subj.html">http://www.lib.udel.edu/digital/dpc/browse-subj.html</a>

## Victor Dallin Collection, Hagley Library

The Dallin collection includes several files of oblique aerial photographs of factories, private estates, schools, country clubs, towns, airports, rivers, and many other sites in Delaware and throughout the Mid-Atlantic area.

(Hagley Library, Dallin storage shelves)

**Blagg, Daniel.** *Dover, A Pictorial History.* Virginia Beach, VA: The Donning Co., 1980. *Dover, A Pictorial History* comprises a collection of 19<sup>th</sup> and 20<sup>th</sup> century photographs and illustrations which narrate Dover's history from the colonial era to the early 1970's. (University of Delaware Morris Library)

DeVincent-Hayes, Nan. *Rehoboth Beach in Vintage Postcards.* Postcard history series. Charleston, SC: Arcadia, 2002.

(University of Delaware Morris Library)

Albert, Richard C. and Carrie E. Albert. *Along the Delaware River*. Charleston: Arcadia, 2002.

Bennett, Bo and Nan Devincent Hayes. *Rehoboth Beach in Vintage Postcards*. Charleston: Arcadia, 2000.

Rehoboth Beach in Vintage Postcards highlights a selection of late nineteenth and twentieth century images of Rehoboth beach, its historic architecture, roads, citizens, and visitors.

Boyle, Neal, John Jacob, Edward Fowler. Lewes to Laurel. Charleston: Arcadia, 2003.

Hester, Ray and Martha Schiek. Claymont. Charleston: Arcadia, 2000.

**Claymont** features a collection of 19<sup>th</sup> and 20<sup>th</sup> century photographs that highlight several of Claymont's buildings, roads, and general points of interest,

Hoffecker, Carol E. Wilmington: A Pictorial History. Virginia Beach, VA: Donning Company Publishing, 1982.

*Wilmington: A Pictorial History* presents a collection of antique and modern photographs, maps, drawings, etc. of important historic buildings, roads, and general points of interest in and around Wilmington, Delaware.

(Hagley Research Library, University of Delaware Morris Library)

Kenton, Dave. Milford. Charleston: Arcadia, 2003.

Lewis Historical Society. A pictorial history of Lewes, Delaware, 1609-1985. Lewes: Lewes Historical Society, 1985.

(Hagley Research Library, University of Delaware Library)

Lake, Joseph R. Hockessin, a Pictorial History. Dover, DE: Dover Litho Printing Co., 1997.

Hockessin, A Pictorial History is an assortment of nineteenth and twentieth century images of Hockessin landmarks, buildings, landscapes, and community members. The book includes some text regarding aspects of Hockessin's history.

(University of Delaware Morris Library)

McNinch, Marjorie G. *Wilmington in Vintage Postcards*. Charleston, SC: Arcadia, 2000. *Wilmington in Vintage Postcards* presents a collection of primarily early twentieth century images of Wilmington's buildings, roads, parks, etc.

(Hagley Research Library, University of Delaware Morris Library)

# Meehan, James D. Bethany Beach Memories. Bethany Beach, DE: Harold E. Dukes, Jr., 1998.

Bethany Beach Memories features a collection of historic and modern images of Bethany Beach and its community members.

# Meehan, James D. Rehoboth Beach Memoirs. Rehoboth Beach, DE: Harold Dukes, 2000.

Historic and modern images of Rehoboth Beach and her citizens, interspersed with excerpts of the town's history.

# Sillman, Charles. *A Time to Remember, 1920-1960*. Wilmington, DE: Kanmagraph Company, 1962.

A Time to Remember offers a collection of mid twentieth century photographs of Northern New Castle County, emphasizing images taken of the areas in and around Wilmington.

## Thompson, Pricilla. Wilmington's Waterfront. Charleston: Arcadia, 1999.

Wilmington's Waterfront features an assortment of historic images showing the city's Delaware and Brandywine River waterfronts, including several images relating to transportation and roads in the waterfront area.

(University of Delaware Morris Library)

# Rendle Ellen, and Constance J. Cooper. *Delaware in Vintage Postcards*. Charleston: Arcadia, 2001.

Delaware in Vintage Postcards presents a collection of early twentieth century postcards of Delaware's various cities, streets, and buildings.

Slavin, Peter F. and Timothy A. Slavin. Dover. Charleston: Arcadia, 2003.

# The News Journal. *Delaware Memories, 2 Volumes*. Vancouver, WA: Pediment Press, 2001.

**Delaware Memories** is a two volume series featuring images of Delaware's citizens, interspersed with photographs of various Delaware cities and towns. (University of Delaware Morris Library)

Willey, Shannon. Seaford. Charleston: Arcadia, 1999.

# Stevenson, Jay. Rehoboth of Yesteryear: As Seen Through Picture Post Cards. Rehoboth Beach, DE: Jay Stevenson, 1980.

Rehoboth of Yesteryear is a collection of early twentieth century postcards of Rehoboth Beach.

# **Newspapers**

## Northern Delaware / Wilmington

Morning Herald

v. 1 (1875) - v. 3 (1877), v. 5 (1877) - v. 7 (1878), v. 10 (1878) - v. 12 (1878), v. 14 (1879)

Daily Morning News V. 1 (1880) - v. 2 (1880)

Morning News V. 2 (1880) - v. 64 (1913)

Wilmington Morning News V. 64 (1913) - v. 169 (1966)

*Morning News* 1966 - 1989

Wilmington Evening Journal no. 1 (1888) - 45th year, no. 168 (1932)

Evening Journal and Every Evening 1933 – 1934

Wilmington Journal-Every Evening 1934 – 1960

Evening Journal 1960 - 1988

News-Journal 1989 – present

**Southern Delaware** *Delaware State News* 

# **Archaeological Reports and Surveys**

Reports on various archaeological projects of relevance to the history of your road can be found at the Historical Society of Delaware, the State Historical Preservation Office, and the Center for Historic Architecture and Design at the University of Delaware.

## **New Castle County**

Bachman, David C., and Custer, Jay F., <u>Final Archaeological Investigations of the Newport-Gap Pike (Route 41) Corridor, Wilmington and Western Railroad to Washington Avenue, New Castle County, Delaware, Delaware Department of Transportation Archaeology Series No. 65, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1988.</u>

Barse, William P., "Phase I and II Archaeological Investigations of the Route 141-Centre Road Corridor in New Castle County, Delaware," Delaware Department of Transportation Archaeology Series No. 35, Thunderbird Archaeological Associate, Front Royal, Virginia, 1985.

- Beidleman, D. Katharine, Catts, Wade P., and Custer, Jay F., <u>Final Archaeological Excavations at Block 1191, Wilmington, New Castle County, Delaware,</u> Delaware Department of Transportation Archaeology Series No. 39, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1986. (2 copies)
- Bowers, Martha H., <u>Architectural Investigations of the Route 896 Corridor Summit Bridge to SR 4 New Castle County, Delaware,</u> Delaware Department of Transportation Archaeological Series No. 53, The Cultural Resource Group Louis Berger & Associates Inc., East Orange, New Jersey, 1987.
- Bowers, Martha H., <u>Architectural Investigations on State Route 7, U.S. Route 13 to Interstate 95 and at Milltown New Castle County, Delaware, DELDOT Archaeological Series 57, The Cultural Resource Group Louis Berger & Associates, Inc., East Orange, New Jersey, 1988.</u>
- Brown, Ann R., Basalik, Kenneth J., and Tabachnick, Alan, <u>Investigations of Cultural resources</u>

  <u>Delaware Route 273 DE Route 7 to US Route 13, New Castle County, Delaware,</u>

  Delaware Department of Transportation Archaeological Series No. 76, Cultural Heritage Research Service, Inc., North Wales, PA, 1990.
- Catts, Wade P. and Bachman, David C., <u>Final Archaeological Investigations of the Glatz Site</u>, <u>Route 7 North, New Castle County, Delaware</u>, Delaware Department of Transportation Archaeological Series No. 60, Department for Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1987.
- Catts, Wade P., Cunningham, Kevin W., and Custer, Jay F., "Archaeological Investigation at the Welsh Tract School, District No. 54 Newark, New Castle County, Delaware," DELDOT Contract 79-103-05 P.E., Delaware Department of Transportation Archaeology Series No. 22, 1983.
- Catts, Wade P., and Custer, Jay F., <u>Tenant Farmers, Stone Masons, and Black Laborers: Final Archaeological Investigations of The Thomas Williams Site, Glasgow, New Castle County, Delaware, Delaware Department of Transportation Archaeological Series No. 82, Department for Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1990.</u>
- Catts, Wade P., Hodny, Jay, and Custer, Jay F., <u>Phase I & II Archaeological Investigations of Old Baltimore Pike from Four Seasons Parkway to the Christiana Bypass, New Castle County, Delaware, Delaware Department of Transportation Archaeological Series No. 71, Department for Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1989.</u>
- Catts, Wade P., Hodny, Jay, and Custer, Jay F., <u>"The Place at Christeen": Final Archaeological Investigations of the Patterson Lane Site Complex Christiana, New Castle County, Delaware, Delaware Department of Transportation Archaeology Series No. 74, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1989.</u>
- Catts, Wade P., Hodny, Jay, Guttman, Mara, and Doms, Keith R., <u>The Archaeology of Rural Artisans: Final Investigation at the Mermaid Blacksmith and Wheelwright hop Sites, State Route 7-Limestone Road, New Castle County, Delaware, Delaware Department of Transportation Archaeology Series No. 110, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1994.</u>
- Catts, Wade P., Rappleye-Marsett, Lauralee, Custer, Jay F., Cunningham, Kevin and Hodny, Jay, <u>Final Archaeological Investigations of the Route 7 South Corridor, Route 13 to I-95, New</u>

- <u>Castle County, Delaware,</u> Delaware Department of Transportation Archaeology Series No. 58, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1988.
- Cavallo, John E., Friedlander, Amy, and Bowers, Martha H., <u>Cultural Resource Assessment Hares Corner Interchange U.S. Route 13 and SR 40 New Castle County, Delaware,</u>
  Delaware Department of Transportation Archaeology Series No. 59, The Cultural Resource Group Louis Berger & Associates Inc. East Orange, New Jersey, 1988.
- Coleman, Ellis C., Catts, Wade P., Hoseth, Angela, and Jay F., Custer, <u>Final Archaeological Investigations of the John Ruth Inn Site, 7NC-D-126, Red Mill Road and Routes 4 and 273, New Castle County, Delaware, Delaware Department of Transportation Archaeology Series No. 77, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1990.</u>
- Coleman, Ellis, C, Cunningham, Kevin W., Catts, Wade P., and Custer, Jay F., Intensive
  Archaeological Investigations of the Wilson-Slack Agricultural Works Complex, Chestnut
  Hill Road-Route 4, Newark, New Castle County, Delaware, Delaware Department of
  Transportation Archaeology Series No. 34, Department of Anthropology, Center for
  Archaeological Research, University of Delaware, Newark, DE, 1985
- Coleman, Ellis C., Cunningham, Kevin W., Bachman, David, C., Catts, Wade P., Custer, Jay F., "Final Archaeological Investigations at the Robert Ferguson/Weber Homestead Ogletown, New Castle County, Delaware," Delaware Department of Transportation Archaeology Series No. 16, 1983.
- Coleman, Ellis, C., Cunningham, Kevin W., O'Connor, Jim, Catts, Wade P. and Custer, Jay F., "Phase III Data Recovery Excavations of the William M. Hawthorn Site 7NC-E-46 New Churchman's Road Christiana, New Castle County, Delaware," Delaware Department of Transportation Archaeology Series Number 28, 1984.
- Coleman, Ellis C., Hoseth, Angela, and Custer, Jay F., <u>Phase I and II Archaeological Investigations of the Ogletown Interchange Improvements Project Area, Newark, Delaware, Delaware Department of Transportation Archaeology Series No. 61, Department of Anthropology, Center for Archaeological Research, University of Delaware, 1987.</u>
- Cunningham, Kevin, Henry, Susan L., Coleman, Ellis C., and Daley, Tish, "Preliminary Archaeological Investigations at the South Wilmington Boulevard King and Front Streets to Fourth and Walnut Streets Wilmington, New Castle County, Delaware," Delaware Department of Transportation Archaeology Series No. 18, 1984.
- Custer, Jay F., and Bachman, David, "Phase III Data Recovery Excavations of the Prehistoric Components from the Hawthorn Site 7NC-E-46, New Churchman's Road, Christiana, New Castle County, Delaware," Delaware Department of Transportation Archaeological Series Number 27, 1984.
- Custer, Jay F., Catts, Wade P., Hodny, Jay, and De Santis Leithren, Colleen, Final Archaeological Investigations at the Lewden Green Site (7NC-E-9), Christiana, New Castle County, Delaware, Delaware Department of Transportation Archaeology Series No. 85, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1990.
- Custer, Jay F., Coleman, Ellis, C., Shaffer, Mark, and DeSantis, Colleen, "Phase I & II Archaeological Research of the Proposed Bridge 260 Replacement County Road 346, Whitten or Walther Road New Castle County, Delaware," Delaware Department of

- Transportation Archaeology Series No. 36, Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, 1985. (2 Copies)
- Custer, Jay F., and Cunningham, Kevin W. (eds.), <u>Bulletin of Archaeological Society of Delaware:</u>
  <a href="mailto:Current Research in the Historic Archaeology of Northern Delaware">Current Research in the Historic Archaeology of Northern Delaware</a>, Number Twenty-One, New Series, Delaware Department of Transportation, Fall 1986.
- De Cunzo, Lu Ann, "'ATT Oppoquemennen:' A Reconnaissance and Location Survey of Appoquinimink and Drawyer's Creeks, Delaware, from Route 13 to the Delaware River, with a Focus on the Period 1630-1730," Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, July 1993.
- De Cunzo, Lu Ann, "A Reconnaissance and Location Survey of the Christina River and White Clay Creeks, Delaware from Churchman's Marsh West to the Delaware State Line, With a Focus on the Period 1620-1730," Department of Anthropology, Center for Archaeological Research, University of Delaware, Newark, DE, July 1994.
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