

II. Chapter 01

BACKGROUND FOR PLANNING

A. LOCATION

The Town of Delmar is an incorporated community situated on the Mason Dixon Line, at the most southerly boundary between Delaware and Maryland. Delmar lies midway between the Atlantic Ocean and the Chesapeake Bay. It is almost equally divided by State Street, a street that follows the state line. Delmar, Delaware is in the southwesterly corner of Sussex County, and Delmar, Maryland is in the north central portion of Wicomico County.

The unique position of Delmar on the boundary between Maryland and Delaware has led to the creation of two separate town charters, one from each state. Although there are two separate town governments, otherwise, in all respects, Delmar is a single, unified entity.

B. HISTORICAL

The Town of Delmar was founded in October of 1859 with the extension of the Delaware Railroad to the southern boundary of Delaware. The Mason Dixon Line was responsible for the founding of this unique bi-state town because the Charter of the Delaware Railroad Company permitted only the building of a railroad within the State of Delaware and the charter of the corresponding railroad company in Maryland permitted only the laying of railroad track within the State of Maryland. Thus, in 1859, the two respective railroads met and the Town of Delmar was born. The name of Delmar was derived for this railroad center from the states whose line it straddles - Delaware and Maryland.

The Town of Delmar grew slowly until 1884 when the New York, Philadelphia and Norfolk Railroad Co. completed a railroad from Pocomoke to Cape Charles and also established a ferry service across the Chesapeake Bay between Cape Charles and Norfolk. These new developments immediately made the Delmarva Peninsula an important link between the north and south. The Town of Delmar, being the midway town of the Delmarva Peninsula and already a railroad terminal, was the point for trains to change crews and locomotives and also a center for maintenance of the rolling equipment. As a result of these developments, there was a tremendous influx of experienced railroad men into the community and considerable extra employment was furnished local townspeople. During this accelerated rapid growth period, Delmar became a "boom town". New dwelling units sprang up all over town and new businesses were established to meet the demands of its growing population. By 1889, the population of the Town of Delmar had increased to 680 and was still growing.

In 1888, the Town of Delmar, Maryland was granted a charter by the General Assembly of Maryland. An examination of this charter and the laws of Maryland fail to reveal any mention of the twin town of Delmar, Delaware. Therefore, it could be assumed that up until this time there was very little cooperation between halves of the Town of Delmar.

The Town of Delmar was almost entirely destroyed by fire in 1892 and again in 1901. The first fire destroyed everything in its path over a ten-acre area and the second major fire was almost as destructive. In each instance, the Town of Delmar was rebuilt and continued as a flourishing town.

The first indication of any cooperation between Delmar, Maryland and Delmar, Delaware came in 1924 when surveys were conducted for a possible sewerage system for the entire Town of Delmar. The construction of the sewerage system in 1927 was considered the first joint project between the two towns in that the law provided that both towns would maintain the outfall sewer with Maryland paying the expenses and billing the Delaware side one half of all costs.

The biggest push towards abolishing the jurisdictional, legal effects of the State line came when the Lions Club voted to sponsor a project for the consolidation of the two school systems in the town. Since the town was founded, each side had its own individual school with the one in Delaware operating under the local School Board and the Maryland School operating under the Wicomico County Board of Education. This very controversial issue was bitterly contested for over three years and finally in 1949, this dream became a reality when the junior and senior high schools were consolidated into one school using the Delaware facilities. Four years later, the fourth, fifth and sixth grades were also consolidated with classes in the Maryland school. This controversial decision represented one of the greatest steps forward educationally for the town of Delmar and also towards eliminating the jurisdictional barrier between the two parts of town.

C. NATURAL FEATURES

Climate

The climate of the Delmarva Peninsula is influenced by the proximity of, the Atlantic Ocean and the Chesapeake Bay. This climate, often called "East Coast Marine", is distinguished as warm and humid with no distinct dry season. Summer weather is influenced by sub-tropical warm moist air moving poleward. Winter precipitation results mostly from continental air masses moving west to east, though ocean air moving west provides a warming effect.

Climatic conditions provide for a relatively long growing season of 191 days generally between the months of April and September. The average date of the last killing frost in the Spring is April 20 and the first of the Fall is October 20. Delmar's central location on the Delmarva Peninsula provides for a shorter growing season than that found nearer to the Atlantic Ocean or Chesapeake Bay.

The average annual temperature is approximately 57°F. The month of July is the warmest month with temperatures reaching 90°F. The coldest months occur during late January and early February with temperatures in the 20°F. While a temperature of 0 is rare, temperatures of 32°F or lower can be expected on about 90 days.

Annual precipitation averages about 46 inches of which 12.4 inches expected to fall as snow. Drought may occur at any time of the year, though even the drier summer months usually receive 1.2 inches of precipitation.

Physiography

The Eastern Shore is of fairly recent geologic origin, resulting from a gradual decline in Sea Level. The decline in Sea Level created a number of Marine Terraces, which determine elevation and geologic age. Delmar is located on the Penholoway Marine Terrace, which ranges between 40 to 70 feet above sea level.

The relief of the Delmar area ranges from nearly level to slightly sloping with local relief provided by stream and erosion action. Located in the Wicomico River Watershed, the Delmar area drains and slopes gradually southward.

Ground Water Hydrology

Approximately 50% of the annual precipitation that falls on the Lower Eastern Shore becomes ground water recharge, while the rest is lost to surface runoff, evaporation, or transpiration. The relatively permeable soils and the lack of topographic relief result in a high water table. In the wetter months when evaporation and transpiration are low, the water table often exceeds ground level, creating areas too marshy for urban use.

Ground water resources in the Delmar area are generally abundant and readily developed. The layered unconsolidated formations of sand and clay that constitute the Atlantic Coastal Plain provide the structure for the Eastern Shore's aquifer system. An aquifer is a permeable underground geological formation through which ground water flows. There are two aquifers of importance to Delmar, the Manokin Aquifer and the Naylor Mill Paleochannel. The Manokin Aquifer, at a depth of approximately 50 feet below sea level, provides a water yield of 100 to 1,000 gallons per minute. In many places, as a result of unique geologic configurations, the Manokin Aquifer may be artesian. The chemical character of the water varies widely and may be mildly acidic and/or high in iron content in places.

The Paleochannel

The Paleochannel is the bed of an ancient river that lies at a depth of 100 to 200 feet below the surface. It is a channel that was scoured out of the earth in an earlier geologic age when sea level was much lower. So much water had been captured in glaciers that the shoreline of the sea was at the edge of the continental shelf 75 miles east of Ocean City. When the glaciers melted and the sea rose, the river slowed and the channel gradually filled with sand and gravel. Seventy percent of the old riverbed is filled with sand and gravel. The remainder is filled with water.

The Paleochannel is considered to have been a downstream reach of the Susquehanna River. It is in the unconfined upper sandy soil sediments; the most important aquifer in Wicomico County. The same water bearing strata is the source of Delmar's water.

The Maryland Geological Survey conducted tests in 1972 to explore the extent of the channel. Approximately ten miles of its length is known. Its easterly limits seem to disappear east of U.S. 13. There is a northerly reach that generally follows U.S. 13. Its known limits appear to be within 1 mile of Delmar. The channel lies in an east-west direction, beginning at U.S. 13 and Naylor Mill Road and running westward toward Hebron and Mardela. It is believed that the unexplored portion continues westward, under the Nanticoke River into Dorchester County and the unexplored portion east of U.S. 13 spreads out into a bay like configuration. The Maryland Geologic Survey intends to conduct further explorations.

The test well near Little Burnt Branch, which was pumped at a rate of 4,000 g.p.m., confirmed the existence of vast quantities of water. The quality of the water is satisfactory for most uses with little or no treatment.

It is estimated that the sediments forming the channel-fill deposits contain about 7 billion gallons of water of which half may be available to wells. This estimate assumes a river channel two miles long, one half a mile wide, 120 feet thick and a porosity of 30%. The total amount of ground water available for future development is water stored in the underground reservoir, rain that constantly replenishes the reservoir and water from branches and rivers that may be induced into the channel and surrounding water bearing strata when wells are pumped at high rates. Careful development of the aquifer and monitoring water in surface streams is necessary to reduce the hazard of contamination. Slow development and measurement of pumping will reveal the capacity of the aquifer and forestall possibility of drilling more wells than the aquifer can supply.

The Paleochannel represents a vast, undeveloped, natural resource that will assure nearby small towns and the metropolitan areas in Wicomico County an abundant future supply of potable water. It is in the general interest of Delmar to be aware of this resource so that future plans may include it as a prime factor in development.

Source - Maryland Geological Survey - Bulletin 31 Part I. Hydrology of Channel-Fill Deposits Near Salisbury, Maryland by Fredrick K. Mack and Wilbert O. Thomas, Jr. Part II Exploration and Mapping of Salisbury Paleochannel, by James M. Weigle

Soils

The soils of the Delmar area are of the Matawan-Norfolk associations. According to the U.S. Soil Conservation Service, these soil types consist of level to gently sloping, moderately well-drained to well-drained, generally sandy, upland soils that have a subsoil of fine, sandy, clay loam.

The Matawan-Norfolk Associations are composed of several soil groups of similar material and origin. The Delmar area is composed of essentially two soil types, approximately 70% Matawan and 30% Norfolk. The soils generally are well suited to nearly all the common crops, but full production requires intensive management.

The Norfolk soils have few or no limitations that affect their use for disposal of sewage from septic tanks; however, the Matawan soils have severe' limitations for septic fields due to seasonally high water tables.

Approximately 70 percent of the Delmar area have severe limitations for septic fields; the remaining 30 percent have only slight limitations.

D. SOCIAL AND ECONOMIC CHARACTERISTICS

Population

The town of Delmar, since the 1950s, has experienced a gradual decline in total population (See Table 1). Prior to the 1950s, Delmar was rapidly growing with a 13 percent increase in population between 1940 and 1950. However, by 1960, Delmar, Delaware and Delmar, Maryland decreased in population; total decrease in population was 118 people or 5.03 percent of the total population. Between 1960 and 1970, Delmar again decreased in total population, losing 91 people or 4.08 percent of the total population. That trend reversed in the 1970s and 1980s. Delmar experienced a small population increase from 2,134 in 1970 to 2,392 in 1990. The largest portion of this population increase occurred in Delmar, Maryland. Over the course of the 1990s, Delmar experienced its highest level of growth since the 1940s, with a population increase of 37 percent.

Table 1 - Population Counts

	1930	1940	1950	1960	1970	1980	1990	2000
Delmar, MD	1,180	1,184	1,328	1,291	1,191	1,238	1,430	1,859
Delmar, DE	***	881	1,015	934	943	942	962	1,407
Total	1,180	2,065	2,343	2,225	2,134	2,180	2,392	3,266
Change		885	278	-118	-91	46	212	874
Percent Chg		75%	13%	-5%	-4%	2%	10%	37%

Source: US Census 1930-2000

Females made up 55 percent of the population in Delmar in 2000 (See Table 2). Whites composed 74 percent of the population and blacks 21 percent.

The term Hispanic does not refer to a person's race, but instead their origin. The origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors. In the year 2000, 3 percent of the residents of Delmar categorized themselves as Hispanic.

The population of Delmar, Delaware is somewhat older than the population of Delmar, Maryland (See Table 3). The median age in Delmar, Delaware was 5.6 years older than Delmar, Maryland and 21 percent of the Delmar, Delaware population was 65 years or older in 2000 as compared to 10 percent in Delmar, Maryland.

Table 2 - Sex, Race, and Hispanic Population

	MD	DE	Total	Percent
ALL PERSONS	1,859	1,407	3,266	100%
SEX				
Male	842	620	1,462	45%
Female	1,017	787	1,804	55%
RACE				
White	1,372	1,052	2,424	74%
Black	395	293	688	21%
Other Race	92	62	154	5%
HISPANIC				
Hispanic Origin	59	30	89	3%
All other ethnicity	1,800	1,377	3,177	97%

Source: US Census 2000

Table 3 - Population by Age - 2000

	MD	DE	Total
All Persons	1859	1407	3266
Under 5	157	120	277
5 to 9	162	104	266
10 to 14	173	95	268
15 to 19	147	86	233
20 to 24	129	69	198
25 to 34	247	180	427
35 to 44	313	186	499
45 to 54	216	139	355
55 to 59	69	84	153
60 to 64	61	45	106
65 to 74	100	118	218
75 to 84	64	117	181
85 years and over	21	64	85
Median age	31.7	37.3	

Source: US Census 2000

Population Projections

The 1975 Delmar Comprehensive Plan projected that the 1990 population of the town would be 2,223. That projection was very close in anticipating growth of the town. An estimate of the 1994 population of Delmar, Maryland, prepared by the county using US Census information and planning and zoning estimates, was 1,576 or approximately a 2.3 percent annual increase in the four years since 1990.

Population projection provides a means to anticipate future growth and to reflect such growth into a planning program. It should be noted that population projection is precarious science. The location of a major industry, a large-scale subdivision, or other unforeseeable events can cause relatively large changes, especially when the field is so small. Current forecasts indicate the population of Wicomico County is expected to continue through 2010 at a rate ranging from 12 percent to 16 percent per decade as evidenced in the past. The Delaware Population Consortium estimates that Sussex County will grow by 24 percent in the next decade.

If the assumption is made that Delmar, Maryland will grow at the same rate as Wicomico County, and Delmar, Delaware will grow at the same rate as Sussex County, than population projections can be made. Delmar, Delaware would grow to a population of 1745, and Delmar, Maryland would grow to a population of 2156 by the year 2010. Those numbers combined show that Delmar would have a population of 3901 people in the year 2010.

Income

The per capita income for Delmar, Maryland was \$13,821 in 2000. It was slightly higher in Delmar, Delaware, where it was \$15,060. This is substantially lower than the per capita income is in both the State of Delaware (\$23,305), and State of Maryland (25,614). The per capita income may reflect the over 65 age population of the town and the number of retired persons living in both sides of town. The 65 and older population accounts for approximately 15 percent of the town's population.

Median Family income (Table 4) levels for Delmar are \$31,991 in the Maryland portion of the town, and \$35,521 in the Delaware portion of town. Approximately 13 percent of the population in Delmar is classified under poverty status. This figure represents a 5 percent decline from the 1970 census figures.

Table 4

Income	Family Income	
	Delmar, Delaware	Delmar, Maryland
	329 Families	445 Families
Less than \$10,000	21	45
\$10,000 to \$14,999	21	44
\$15,000 to \$24,999	65	74
\$25,000 to \$34,999	55	86
\$35,000 to \$49,999	47	65
\$50,000 to \$74,999	86	89
\$75,000 to \$99,999	15	18
\$100,000 to \$149,999	19	20
\$150,000 to \$199,999	0	0
\$200,000 or more	0	4
Median Family Income	\$35,521	\$31,991

Source: US Census 2000

Employment and Industry

Employment and labor force statistics have not been tabulated for Delmar; however a fairly accurate cross-section of employment by industry may be estimated for Delmar using 2000 Census information. As shown in Table 5, the primary sources of employment are retail trade; educational, health and human services; manufacturing; and construction.

Table 5 - Employment (16 Years and Over)

Industry	MD	DE	Total	%
Employed persons	853	582	1435	100%
Agriculture, forestry, fisheries, and mining	6	5	11	1%
Construction	96	58	154	11%
Manufacturing	122	83	205	14%
Wholesale trade	47	28	75	5%
Retail trade	183	106	289	20%
Transportation and warehousing, and utilities	20	29	49	3%
Information	10	15	25	2%
Finance, insurance, real estate, and rental and leasing	29	21	50	3%
Professional, scientific, administrative, and waste management	58	46	104	7%
Educational, health and social services	121	121	242	17%
Arts, entertainment, recreation, accommodation and food services	69	37	106	7%
Other services	53	17	70	5%
Public administration	39	16	55	4%

Source: US Census 2000

Employment and labor force statistics based on the 2000 census data indicate that Delmar had approximately a 3 percent unemployment rate for the town with approximately 65% calculated as being in the labor force. The unemployment rate was slightly lower on the Delaware side (2 percent), than in the Maryland portion (4 percent). The overall unemployment rate for Delmar was down from the 1990 rate of 5 percent.

The existence of a good labor supply and close proximity of the railroad make Delmar attractive to industrial development. Existing industry is diverse, though heavily dependent on semi-skilled and unskilled labor.

Delmar is a major rail classification center. As such, industries in the area have the advantage of low car transfer costs and many are large rail users. This generates a number of town problems such as rail traffic disrupting highway traffic at crossings and heavy truck traffic generated by rail-using industries. There are other advantages to locating in the Delmar area. Being centrally located on the Delmarva Peninsula with access to major highways Route 13 and Route 50. Delmar is in easy reach of major markets. In addition, both Maryland and Delaware have aggressive policies for attracting industry, including low corporate taxes, 100 percent financing, employee training programs, close proximity to Universities and Community Colleges, and in Delaware no sales tax.

Principal employers in the Delmar area include:

Delmar Middle Senior High School
Delmar Elementary School
Delmarva Aluminum Co.
Chancellor Care Nursing Home
Allen Grain
Food Lion
Aero Fuel
Triglia Transportation
Concrete Building System, Inc.
Crystal Steel Fabricators, Inc.
American Casein
Saturn of Salisbury
Widgeon Enterprises, Inc.

Housing

In 2000, there were a total of 1379 housing units in the Town of Delmar. Single family housing was approximately 61 percent of the total housing units (See Table 6) and approximately 55 percent of units are owner occupied. There were a total of 566 renter occupied units. Two hundred and ninety-three (293) of these units are located in the Chestnut Manor Apartments (88

units), State Street Station (28 units), Concord Apartments (12 units), Delmar Crossing (107 units), Golden Meadows (34 units), and Country Meadows (24 units).

The vacancy rate provides a reasonable selection of housing suitable to family needs and income levels. The renter vacancy rate in Maryland was 5.5 percent in 2000. The homeowner vacancy rate was 5.2 percent in 2000. On the Delaware side the rental vacancy rate was 9.5 percent the homeowner vacancy rate was 1.6 percent.

Approximately 75 percent of the housing fell between the value of \$50,000 and \$99,999 (See Table 7). The median value of housing in the Delaware portion of the town was \$78,600, which was significantly higher than on the Maryland portion of the town where the median value was \$66,600. There was less of a difference in rental prices between the two sides of town, in Delaware median gross rent was \$440 and in Maryland \$480. The current development plans of single and multiple family housing on both sides of town will help ensure that adequate housing will be available for a diverse range of needs.

In 1993, the Maryland Commission and the Delaware council amended the Zoning code to prohibit the future conversion of single-family houses into multifamily housing units in R-1 and R-2 residential districts. These restrictions were intended to help maintain the single-family atmosphere of those districts and to provide development of multifamily housing in more appropriate areas of the town.

Table 6
Housing Unit Type

	DE	MD	Total	%DE	%MD	% Total
Single-family	346	496	842	59%	62%	61%
Multi-family	147	247	394	25%	31%	29%
Other (mobile homes)	89	54	143	15%	7%	10%
Total Housing	582	797	1379			

Source: US Census 2000

Table 7
Housing Value – Owner Occupied Units

	MD	%	DE	%
Less than \$50,000	57	20%	16	7%
\$50,000 - \$99,000	217	76%	175	75%
\$100,000 - \$149,999	8	3%	32	14%
\$150,000 +	4	1%	10	4%

Source: US Census 2000

Two indicators of overall housing condition are persons per room and plumbing facilities. There were a total of 43 units, or about 3 percent of the total housing stock in which there was 1.01

person per room or more, and indication of crowding (see Table 8). There were a total of 5 units that lacked one or more basic plumbing facilities (see Table 9). This represents less than 1 percent of the total housing stock.

Table 8
Occupancy – Person/Room

	MD	DE
1.00 person or less	688	518
1.01 persons or more	22	21

Source: US Census 2000

Table 9
Units by Plumbing Facilities**

	MD	DE
Total units with all	705	539
Total units lacking 1 or more	5	0

Source: US Census 2000

** Units with all plumbing facilities have all the following: hot piped water, flush toilet for household only, and a bathtub or shower for household only.