



# **DARBY TOWNSHIP PLAN 1975-1990**

Prepared For the  
Darby Township Board of Commissioners

By the

Delaware County Planning Commission

May, 1975

May 1975

Board of Commissioners  
Darby Township  
Delaware County, Pennsylvania

Gentlemen:

We are pleased to transmit herewith the final report of our comprehensive study of Darby Township entitled Darby Township Comprehensive Plan 1975-1990. This study presents recommendations concerning the future development of your community together with extensive background information.

The recommendations of this report are a result of a close and productive cooperative effort between our office and the Township. We hope that this plan will be of significant value in guiding the growth of Darby Township in the years ahead.

Sincerely yours,

*William H. Bates*  
William H. Bates, Chairman

*George A. Varvoutis*  
George A. Varvoutis, Executive Director

WHB/GAV/dm



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# GOALS FOR DARBY TOWNSHIP

## THE PLAN

### Introduction

An environment based on optimum land use distribution does not come about accidentally, particularly in a highly urbanized region. It is the outcome of a practical plan carefully implemented — through local policies and programs.

This Comprehensive Study for the Township of Darby represents a planning effort based on the analysis and examination of past and present trends as well as projections. It is designed to be a general guide to local development policies; it is not a specific blueprint for future action. The Study (and Plan) should be modified and updated from time to time, as local needs and objectives warrant.

### GOALS

Prior to formulation of a Plan which indicates land uses and the interrelationships among them, the identification of goals and objectives of the Community is required. The stated objectives should reflect the needs and desires of the Community as well as an understanding of the present and potential conditions of the municipality.

#### Overall Goal

The overall goal is to protect the public health safety and welfare through the creation and maintenance of a physical, economic and social environment such that Darby Township may become a better place in which to live, learn, work and play.

The major means for the achievement of the overall goal are listed below.

These secondary goals and objectives represent what the Township tries to achieve and are the standards against which local actions can be measured. Like the proposals in the

Study the goals and objectives are flexible and should periodically be discussed and reviewed by public officials and residents, so that there is a basic understanding of the direction in which the Township is heading.

#### Secondary goals and objectives

##### Goal 1

Improve the environment by provision and maintenance of well balanced, rational land use patterns.

Objective 1. Minimize conflict between residential and other types of land use.

Objective 2. Maximize opportunity for a wide range of choices in residential housing arrangements and costs.

Objective 3. Utilize land in a practical manner by encouraging development and optimum location of positive tax ratable uses (industry and commerce).

Objective 4. Improve the aesthetic features of the Township.

Objective 5. Efficiently control industrial growth within a rational framework of zoning standards.

Objective 6. Undertake an active program of Community vigilance to assure high maintenance and aesthetic standards for the existing row units in the North Section and the existing row and twin units in the South Section which are at present in good structural condition.

**Goal 2.**

Promote the orderly and efficient distribution of goods and services (wholesale and retail).

Objective 1. Promote the development of a convenience shopping center on the south side of Hook Road near Tribbitt Avenue.

Objective 2. Encourage upgrading of additional small commercial establishments in the area of Sharon and Clifton Avenues.

Objective 3. Protect the Township from smoke, noise and air pollution and other nuisances.

Objective 4. Within a well-balanced scheme of land use, encourage well-located and well-planned new industrial developments, while maintaining the existing developments at high standards.

**Goal 3.**

Establish a viable recreation program and strive to make optimum use of existing land for recreational purposes.

Objective 1. Utilize much of the available open space including flood plains, vacant areas, and areas with unstable soils or hazardous building conditions.

Objective 2. Maintain cooperation with school system to promote a viable recreation program (after school hours).

Objective 3. Attempt to the extent possible, to upgrade and improve as recreation areas, those sites which cannot be put to a more intensive use.

**Goal 4.**

Provide transportation facilities for the safe and convenient movement of people and goods among places of residence, employment, education, shopping and recreation.

Objective 1. Promote a better system of local streets so as to provide suitable internal circulation and access to major roads.

Objective 2. Establish a functional hierarchy of street systems designed to serve different traffic needs.

**Goal 5.**

Provide adequate community services for all Township residents.

Objective 1. Increase size of and maintain high professional standards of police force and fire department.

Objective 2. Cooperate with and assist in the projects of the Delaware County Redevelopment Authority in the South Section of Darby Township.

**Planning Goals**

In striving to achieve all the goals mentioned, the Township must recognize that planned improvements are necessarily related to fiscal capabilities. Thus, new facilities and other physical improvements have to be carefully studied and periodically re-evaluated for the most beneficial allocation for Township resources.

**Goal 1.**

Guide the Township growth through a long range Comprehensive Plan.

**Goal 2.**

Support and encourage continuity in the Township's overall planning program. Assiduous implementation of the Comprehensive Study will promote orderly and rational development, while qualifying the Township for Federal and State monies.

## SUMMARY OF MAJOR RECOMMENDATIONS

### I. LAND USE RECOMMENDATIONS

#### A. NORTH

1. RESIDENTIAL LAND USE — No major proposals.
2. COMMERCE — The entire area bounded generally by Ashland Avenue, the southern Township Line just north of MacDade Boulevard, Oak Lane and Academy Avenue is proposed for commercial use.
3. INDUSTRY — Light industrial use is recommended for the Okeola Area, in the vicinity of Grobes and Groce Avenues and along Oak Lane, generally between Academy Avenue and Groce Avenue.
4. INSTITUTIONS — No major proposals.
5. OPEN SPACE AND RECREATION — No major proposals.

#### B. SOUTH

1. RESIDENTIAL LAND USE
  - (a) The presently vacant land in Hook Road Area II (near Linden and Felton Avenues) is recommended for medium-high "density" residential use.
  - (b) Medium density residential development is recommended for Renewal Area III West, north of Orange Avenue and on the north and west side of the Bonsall Tract.
2. COMMERCE — A convenience shopping center is recommended for the southeast corner of Hook Road and

Tribbitt Avenue. This shopping area would serve the residents of the densely populated Hook Road Renewal Area I.

3. INDUSTRY — Light industrial use is proposed for the four areas listed below:
  - (a) Urban Renewal Area Number III, known as the Bonsall Tract.
  - (b) The presently vacant parcel on the east side of Clifton Avenue, opposite Forrester Avenue.
  - (c) The large parcel in the southwest corner of Calcon Hook Road and Tribbitt Avenue.
  - (d) The large parcel in the southwest corner of the Township, west of Tribbitt Avenue, opposite Hermesprota and Walter Avenues.
4. INSTITUTIONS — A multi-purpose Community Center designed as a focal point for community and civic activities is proposed for the site currently occupied by the auto graveyard at the southwest corner of Hook Road and Calcon Hook Road. The uses and facilities in the center may include but should not be limited to a municipal building, rooms for meetings of public and semi-public organizations, child day care center, public library, counseling service and tot-lot.
5. OPEN SPACE AND RECREATION — Clearview, the site of the former (now closed) landfill is proposed for open space and recreation.

## II. TRANSPORTATION PROPOSALS

### A. NORTH

#### 1. ROAD WIDENING

- (a) Oak Lane should be widened from two to four lanes to accommodate the anticipated increased traffic volume.
- (b) Bartram Avenue should be widened from 18 feet to 24 feet between Oak Avenue and the vicinity of Cooke Avenue.

#### 2. RECOMMENDED IMPROVEMENTS

- (a) Improvement of intersection of Oak Lane and Rively Avenue.
- (b) Traffic signal at Oak Lane and Bartram Avenue and its synchronization with light at Oak Lane and Rively Avenue.
- (c) Traffic light at intersection of Bartram Avenue and Ashland Avenue.

- 3. ONE WAY FLOWS — One way flows are recommended for parts of the following streets: Garfield, Cooke, Hopkins, and Academy Avenues and Westbridge Road.

- 4. PARKING RESTRICTIONS — Parking prohibitions (in addition to existing prohibitions) are recommended for a segment of Oakwood Drive (between Westbridge and Stratford), School Lane and a section of Academy Avenue.

- 5. PUBLIC TRANSPORTATION — No change

### B. SOUTH

- 1. ROAD WIDENING — Calcon Hook Road must be widened to four lanes because of the anticipated traffic from the proposed light industrial use on the Bonsall Tract, the proposed light industrial development of the area to the south of Calcon Hook Industrial Park and from the Kresge distribution operation, in Sharon Hill.

- 2. RECOMMENDED IMPROVEMENTS — No major improvements proposed.

- 3. ONE WAY FLOWS — One way flows in the South Section are recommended for sections of Linden, Orange, Laurel, Scott, Newlin, and Lincoln Avenues.

- 4. PARKING RESTRICTIONS — Parking prohibitions on one side of the street are recommended for Bayard, Ash, Clifton (north of Hook Road), Felton, Linden, and Burton Avenues and Laurel Road. Parking should be prohibited entirely on the proposed extension of Sharon Avenue.

- 5. MUNICIPAL PARKING LOT — A parking lot is proposed just north of Laurel Road to serve the parking needs of Lincoln Park residents.

- 6. PUBLIC TRANSPORTATION — Proposed new bus route: Hook Road, Tribbitt Avenue, Clifton Avenue, Hook Road and Sharon Avenue.

- 7. PROPOSED NEW ROAD — A new road which can be termed an extension of Sharon Avenue is proposed from Hook and Sharon, southeasterly to Calcon Hook Road.

TOWNSHIP OF DARBY

RESOLUTION # 1-5-75

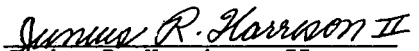
WHEREAS, the Township of Darby, Delaware County, Pennsylvania, contracted with the Delaware County Planning Commission to prepare a Comprehensive Plan and other elements to community development to assure the future orderly growth and development of the Municipality; and

WHEREAS, the Delaware County Planning Commission completed the Comprehensive Study and presented a summary and conclusion with recommendations at a public hearing on Wednesday, April 30, 1975 to the residents of Darby Township; and


NOW THEREFORE BE IT RESOLVED by the Board of Commissioners of the Township of Darby that the Darby Township Comprehensive Plan be adopted as presented.

RESOLVED, this 14th day of May, 1975.

BOARD OF COMMISSIONERS  
OF DARBY TOWNSHIP

  
Junius R. Harrison, II  
President

ATTEST:

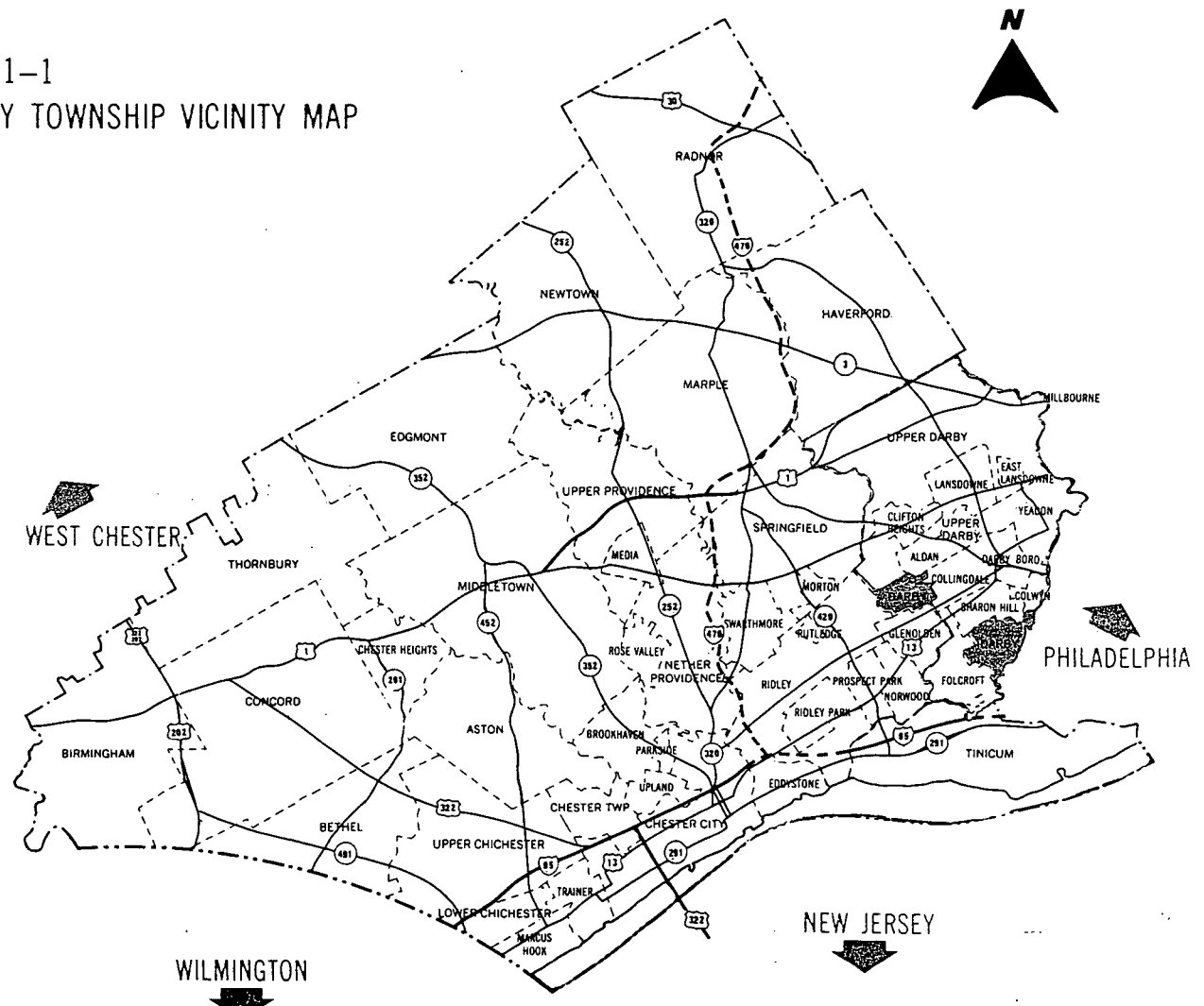
  
William J. O'Halloran  
Township Secretary

# PART I

## EXISTING CONDITIONS



MAP 1-1  
DARBY TOWNSHIP VICINITY MAP



## CHAPTER ONE

### INTRODUCTION

#### REGIONAL SETTING

Darby Township, located in southeastern Delaware County, is divided into two non-contiguous portions about one mile apart totaling approximately one and one-half square miles. The North Section occupies about 375 acres and is bounded by Upper Darby, Ridley, Aldan, Collingdale, and Glenolden. The South Section of the Township is slightly larger and consists of nearly 535 acres bounded by Sharon Hill, Folcroft, Colwyn and the Eastwick neighborhood of Philadelphia. Both Sections lie in Planning District III, distinguishing the southeastern portion of Delaware County, (Maps 1-1 and 1-2).

Darby Township lies within the urbanized ring surrounding the City of Philadelphia. The land use of the immediately surrounding communities to the north and west is primarily residential with commercial and industrial development along the old major highways. To the south lie the marshes of Tinicum, bisected by industrial use along Governor Printz Boulevard (Pa. Route 291) and, farther south, the Delaware River. The Philadelphia International Airport is to the southeast along with the redevelopment area of Eastwick in Philadelphia.

Major shopping facilities are located within a few minutes driving time of both Sections of the Township, particularly along Chester Pike and MacDade Boulevard.

The main employment centers near the Township are the Folcroft Industrial Park, Philadelphia International Airport with its large storage warehouses, and the many employment centers in southwest Philadelphia.

#### HISTORICAL DEVELOPMENT

The history of Darby Township as a municipality can be traced back to the English settlements of 1682. The visit of William Penn during that year and the natural advantages of the land no doubt encouraged the growth that led to official recognition in 1683 of "Derby Liberty" as a Township with the functions of local government.

Maximum size of the Township reached 18.5 square miles with the inclusion of the old Swedish settlement of "Calconne Hook" in 1686. By 1700 the entire area was known as Darby Township.

The population grew as the forests were cleared to make room for farming the well drained soil. The Muckinipates, Cobbs and Darby Creeks were the source of water power for mills producing flour and textiles as well as the waterways of commerce. Legal records of churches, schools, roads and stage coach lines reveal a developing permanent community co-existing with a summer colony for Philadelphians able to escape the periodic outbreaks of yellow fever.

The two patterns of change that are central to the history of Darby Township are (1) its gradual dismemberment through the creation of smaller units of local government which came to characterize the area and (2) the rapid growth of industry and railroads.

The first division began as a matter of convenience in 1747 when the inhabitants of Upper Darby voted to maintain their local governmental functions apart from Lower Darby except for the levies made for the support of the poor. In 1786 this separation was formalized. Up to this time the entire area was part of Chester County but in 1789 Delaware County came into existence as it is now known.

The next partition created Darby Borough in 1853. This area was the site of most of the mills, churches, schools, a library and other features of a population center, and had been known informally as the town or village of Darby. Darby Township continued as a predominantly agricultural area.

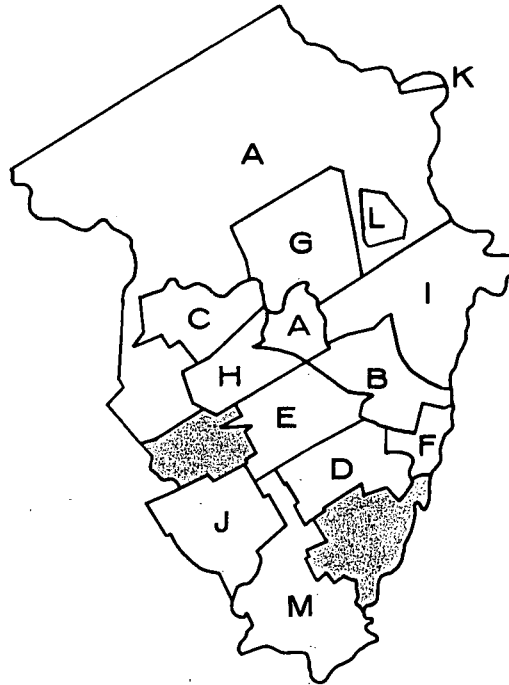
The two initial subdivisions removed more than half the territory and isolated the Township from its previous socioeconomic and cultural center.

To summarize we may note that the existence of 14 municipalities by 1922, where there had been three in 1883, parallels four major trends: (1) post Civil War industrialization (2) growth of railroads (3) development of a public school system whereby each municipality constituted a separate school district and (4) urbanization.

The result of this partition is the present Darby Township, a land area of less than 1.5 square miles which is itself divided into two Sections by two other municipalities—Collingdale and Sharon Hill Boroughs.

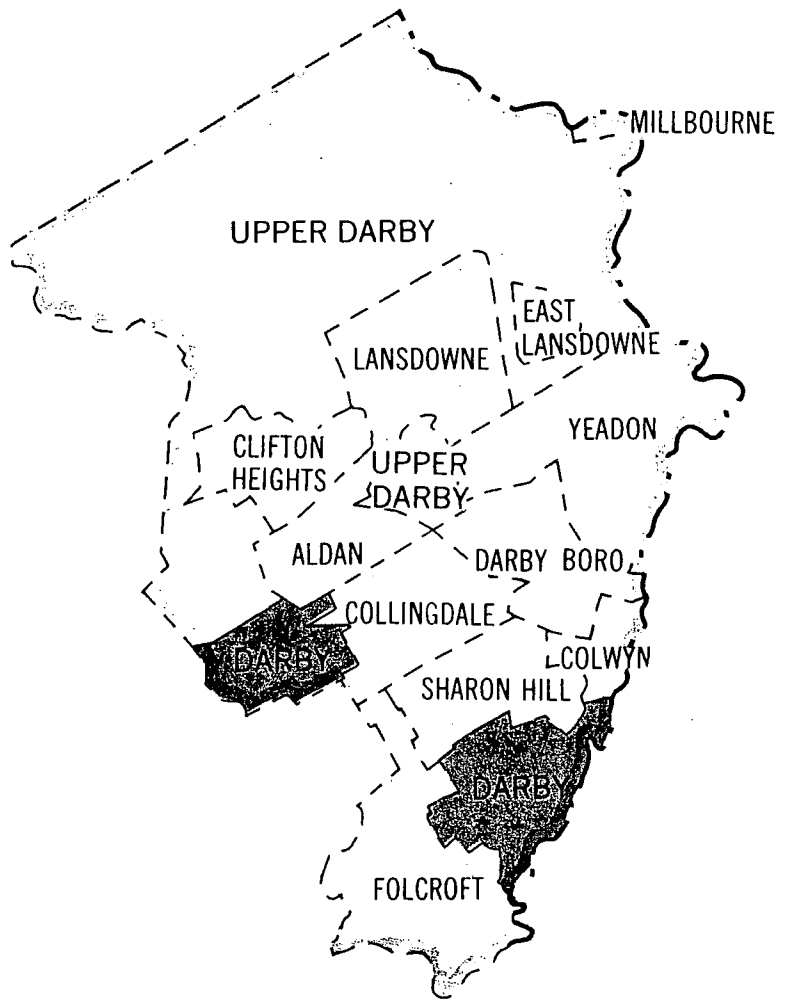
FIGURE 1-1

POLITICAL DISMEMBERMENT, 1683-1975



AREA	DATE OF INCORPORATION	MUNICIPALITY CREATED	AREA IN SQUARE MILES (PRESENT)
A	1786	Upper Darby Township	7.62
B	1853	Darby Borough	0.82
C	1885	Clifton Heights Borough	0.62
D	1890	Sharon Hill Borough	0.77
E	1891	Collingdale Borough	0.87
F	1892	Colwyn Borough	0.25
G	1893	Lansdowne Borough	1.30
H	1893	Aldan Borough	0.59
I	1894	Yeadon Borough	1.60
J	1894	Glenolden Borough	0.86
K	1901	Millbourne Borough	0.07
L	1911	East Lansdowne Borough	0.22
M	1922	Folcroft Borough	1.38

Source: Darby Township Comprehensive Plan, Walter R. Livingston, Jr. AIA, 1971



MAP 1-2  
PLANNING DISTRICT III

## CHAPTER TWO

### NATURAL ENVIRONMENT

#### GENERAL

The natural features of a given area determine, to a significant extent, the types of land uses and development desirable or possible in that area. They can serve to either encourage or constrain development and to shape the living habits and customs of the residents. For this reason, a firm understanding of the natural conditions of Darby Township is a prerequisite for rational formulation of recommendations for the Township's future housing, transportation, education, employment, recreation and land use.

Both Sections of the Township lie within the Atlantic Coastal Plain and are characterized by predominantly flat terrain. The soils in both Sections fall mainly within the Beltsville-Sassafras-Butlertown soil association.

There are three creeks flowing through or abutting Darby Township. The Muckinpates Creek forms the western boundary of the North Section, the Hermesprota Creek bisects the South Section and Darby Creek forms part of its eastern boundary of the South Section (boundary between Darby Township and the City of Philadelphia).

#### UNDERLYING GEOLOGIC FORMATIONS

Darby Township is basically comprised of the Wissahickon Formation which is frequently found in southeastern Pennsylvania. This formation was named from its exposure along Wissahickon Creek a tributary of Schuylkill River, in Fairmont Park, Philadelphia. It is a heterogeneous formation made of oligoclase-mica schist, a medium-grained rock composed of biotite, muscovite, and quartz, with a variable amount of feldspar as well as chlorite. Garnet is usually present as well as quartz, calcite, magnetite, and tourmaline. Pyrite and other sulphides of iron are present. The weathering process of these sulphides tends to stain the rock yellow.

The Pennsauken Formation overlays the Wissahickon except along creek valleys where it has been eroded. The Pennsauken Formation consists of weathered and sandy gravels. The Cape May Formation is found through much of the South Section. Sands and gravels with clay and silt at the base compose this area.

## SOILS

Much of the Township, both North and South Sections, is made-land of silt and clay. The major soils in the balance of Township territory are the Beltsville, Sassafras and Butlertown, with Woodstown soils and Othello soils appearing in small areas.

The Beltsville soils are deep, moderately well drained and have a fragipan. Their surface layer is dark grayish-brown silt loam and their subsoil is yellowish-brown silty clay loam. The fairly sandy Sassafras soils are well drained and the Butlertown and Woodstown soils are moderately well drained.

In the North Section of Darby Township there is Chewecia silt loam and Wehadkee silt loam found along the Muckinipates Creek. Aside from being subject to flooding, these soils are unsatisfactory as foundations for building sites because of high water tables. Similar flood plain soils are located along the Hermesprota and Darby Creeks in the South Section of the Township.

## TOPOGRAPHY

The term topography refers to the configuration of the land surface including its relief and the position of its natural and man-made features. Topography is in part determined by drainage of an area, the natural downward flow of water to the sea. In Darby Township the drainage pattern is determined by the creeks within and along its boundaries.

Most of the Township consists of level land, except along the three creeks which have been previously discussed.

The most prominent man-made topographic feature in the Township is the former Clearview Landfill site, located in the northeast corner of the South Section. The site forms presently an unsightly, huge hill which covers an area of approximately 40 acres.

## FLOOD PLAINS

The term "flood plain" is usually defined as the normally dry land adjoining a watercourse or other body of water that is subject to temporary flooding from over-bank flow.

In the past, Township residents have incurred damages due to flooding conditions in the flood plain. Consequently, Darby Township applied for Federal Flood Insurance which is designed to provide flood insurance protection to property owners in flood prone areas.

The Township became eligible for such insurance in November, 1974. At this time the Department of Housing and Urban Development, Flood Insurance Program is in the process of defining the one-hundred-year flood plain in Darby Township. Once this information is compiled, flood hazard boundary maps will be prepared, delineating the areas of flood prone lands. When available this information should be included in the land use plan by means of an overlay to the existing plan so as to make possible proper regulation of the areas affected.

## CHAPTER THREE

### POPULATION AND HOUSING

#### POPULATION GROWTH

The total population of Darby Township in 1970 was 13,198, an increase of 4.7 percent from 1960, (Table 3-1). This increase was much smaller than that between 1950 and 1960, the time period when population rose from 3,450 to 12,598 persons, an increase of 265.2 percent.

The population of Planning District III in 1970 was 197,488, an increase of 5.1 percent from 1960. The percentage of increase between 1950 and 1960 was 18.7.<sup>1</sup>

The 1970 total population of Delaware County was 601,425, an increase of 8.7 percent from 1960.

Table 3-1 shows that the substantial increases in population for the Township, Planning District III and for the County in the decade of 1950-1960, were followed by a considerable decline in the rate of population growth for all three comparison units.

<sup>1</sup> In 1972 the Delaware County Planning Commission subdivided the County into six Planning Districts, as one of the initial steps in the development of a County Comprehensive Plan. These districts were defined in terms facilitating planning on a sub-county basis and were formed along logical subdivision lines to contain those municipalities which because of employment patterns, residential character or other similarities, have much in common, (Map 1-2).

#### POPULATION DENSITY

In 1970, Darby Township had a land area of 1.64 square miles and a total population of 13,198, a density of 8,064 persons per square mile.

The corresponding density for Delaware County was 3,253 persons per square mile, while that for Planning District III was 11,202 persons per square mile. Both Darby Township and Planning District III densities are urban and more comparable to the neighboring City of Philadelphia than to Delaware County — particularly the County's northern and western areas.

#### AGE AND SEX CHARACTERISTICS

##### North Section

Between 1960 and 1970 there was a decrease in the "under 5 years" group, from 1,908 to 1,078. Two other notable changes during this

TABLE 3-1						
POPULATION GROWTH, 1940-1970						
Year	Darby Township		Planning District III		Delaware County	
	Number	Percent	Number	Percent	Number	Percent
1940	2,899	—	117,179	—	310,756	—
1950	3,450	19.0	158,162	34.9	14,234	33.3
1960	12,598	265.2	187,850	18.7	553,154	33.5
1970	13,198	4.7	197,488	5.1	601,425	8.7
Source: 1940 Census						
1950 Census						
1960 Census						
1970 Census						

## FAMILY INCOME

### North and South Section

time period were the increase in the "15 to 19 years" group from 302 to 978 persons and the increase in the "45 to 54 years" group from 424 to 1,133 persons.

#### South Section

Between 1960 and 1970 there were substantial changes in the age — sex composition of the South Section. Among the age groups which had notable changes were the "20 to 24 Years" group which increased from 178 to 323 persons and the "45 to 54 years" group which increased from 315 to 505 persons. Finally, there was an increase in the "over 75 years" group from 35 to 66 persons.

TABLE 3-2	
POPULATION BY SECTION, 1970	
North Section	9,349
South Section	3,849
TOTAL	13,198
Source: 1970 Census	

Table 3-3 shows family income ranges of both Sections for 1960 and 1970.

While there were 83 families in the \$3,000 to \$3,999 income category in 1960, only 5 fell into this category in 1970<sup>2</sup>. During the same period of time the number of families earning between \$4,000 and \$4,999 decreased from 180 to 21. Also, the number of families in the \$5,000 to \$5,999 decreased from 513 to 33.

With regard to the income range between \$10,000 and \$14,999 the number of families in this range increased from 157 to 1,004. Similarly, the number of families earning \$15,000 to \$24,999 increased from 24 to 424.

The trend between 1960 and 1970 has shown a marked decrease in the number of families earning up to \$8,000 per year; a substantial increase is noted for those in the \$9,000 to \$9,999 range and drastic increase is apparent for families earning between \$10,000 and \$25,000 and over.

<sup>2</sup>In order to isolate the real change in family income the 1970 dollar figures have to be adjusted for 1960 dollar value.

TABLE 3-3  
FAMILY INCOME, 1960-1970

Income Range	NORTHERN SECTION		SOUTHERN SECTION	
	Number of Families		Number of Families	
	1960	1970	1960	1970
All Families	2,186	2,194	805	964
Less than \$ 1,000	28	19	44	14
\$ 1,000 - \$ 1,999	4	11	69	27
\$ 2,000 - \$ 2,999	48	35	82	28
\$ 3,000 - \$ 3,999	83	5	130	78
\$ 4,000 - \$ 4,999	180	21	125	41
\$ 5,000 - \$ 5,999	513	33	112	25
\$ 6,000 - \$ 6,999	463	84	76	77
\$ 7,000 - \$ 7,999	343	151	83	71
\$ 8,000 - \$ 8,999	207	173	23	59
\$ 9,000 - \$ 9,999	133	193	40	78
\$10,000 - \$14,999	157	1,004	21	310
\$15,000 - \$24,999	24	424	0	145
\$25,000 and over	4	41	0	11

Source: 1960 Census  
1970 Census

### EDUCATION

Certain conclusions can be drawn from the 1970 Census information concerning formal education of Township residents. The following is a brief analysis of this information by Township Sections.

In the North Section, with a total population of 9,349, the number of persons over twenty-five years of age counted for school years completed was 4,178. Of this number, .08 percent did not complete any school years. 12.8 percent completed eight years or less, 75.3 percent completed four years or less of high school, and 11.1 percent completed one to four years of college.

In the South Section, with a total population of 3,849, the number of persons counted was 2,109. In comparison, .09 percent completed no years of school, 25.3 percent completed eight years or less, 64.6 percent completed four years or less of high school and 9.2 percent completed one to four years of college.

### HOUSING TENURE AND VACANCY

In 1970, the housing stock of Darby Township totalled 3,404 units, of which 2,887 were owner occupied, 496 renter occupied and 53 vacant, indicating a vacancy rate of 1.55. This vacancy rate is low and precludes sufficient choice among units.

The vacancy rates in Planning District III and Delaware County were 1.83 and 2.02, respectively, in 1970, (Table 3-4).

TABLE 3-4  
VACANCY RATE, 1970

	Darby Township	Planning District III	Delaware County
Total Units	3,404	63,922	184,403
Total Vacant	53	1,173	3,734
Vacancy Rate	1.55	1.83	2.02

Source: 1970 Census

TABLE 3-5  
HOUSING RATE OF CHANGE, 1960-1970

	Darby Township	Planning District III	Delaware County
Housing Units 1960	3,111	56,955	162,030
Housing Units 1970	3,404	63,922	184,403
Percent Increase	9.4	12.2	13.8
Owner Occupied Units 1960	2,750	43,633	121,755
Owner Occupied Units 1970	2,887	44,684	131,624
Percent Increase	5.0	2.4	8.1
Renter Occupied Units 1960	361	11,918	34,744
Renter Occupied Units 1970	496	18,051	49,045
Percent Increase	37.3	51.5	41.1

#### HOUSING RATE OF CHANGE

Table 3-5 shows the increase in housing units from 1960 to 1970 for Darby Township, Planning District III, and Delaware County. The percentage increase for housing units was 9.4 in the Township; 12.2 percent in Planning District III; and 13.8 percent in Delaware County. The increase for owner occupied units was 5.0 percent, 2.4 percent and 8.1 percent for the Township, District III and the County, respectively. There was a much greater percentage increase for renter occupied units between 1960 and 1970. The increase was 37.3 percent for the Township, 51.5 percent, Planning District III and 41.1 percent, Delaware County, (Table 3-5).

#### VALUE OF DWELLING UNITS

The 1970 Census indicates that the median value for owner occupied units varies slightly among the two Sections. The 1970 median value of owner occupied units in the North was \$14,300; while that in the South was \$11,500. It is probable that these values were underestimated, partially due to the method

in which the data was gathered. The average value of the row houses in the North Section is presently estimated at over \$23,000. It should be noted that real estate has been steadily increasing in value since the 1970 Census.

According to the 1970 Census the average owner occupied housing in the County was valued at \$16,946 in contrast to the Township's \$13,278. The average contract rent was \$82.00 for the Township while for the County it was \$123.00. It is therefore apparent that in comparison to the Township the average value of owner occupied units and the average contract rent is significantly higher for Delaware County.

#### POPULATION PROJECTIONS

The future population of Darby Township will obviously depend on local birth rates and migration. It will also depend on a variety of other important factors such as the degree to which the municipality promotes new policies toward multi-family units (thus increasing the availability of housing in the area) and availability of easy home financing. Table 3-6 indicates the population projections for Darby Township, and shows an increase of 6.6 percent, between 1975 and 1990.

TABLE 3-6

#### POPULATION PROJECTIONS, 1975-1990

1975	1980	1985	1990
13,526	13,854	14,137	14,420

Source: Delaware Valley Regional Planning Commission, Penna. Dept. of Environmental Resources.

## CHAPTER FOUR EXISTING LAND USE

### GENERAL

High density row housing, constructed after World War II is typical of North Section of the Township. In the South row and twin houses are replacing the pre-1930 single family units. Remaining land area in the South is mostly industrial (about ninety percent of all Township industry is located here).

Small commercial areas serving the nearby residential uses are found in both the North and South Sections. Cemeteries cover a substantial amount of land in both Sections of the Township.

### RESIDENTIAL

#### North Section

The North Section of Darby Township is primarily residential. The density most frequently found here is over 10 dwelling units per acre. The typical housing types are twin and row homes, concentrated in the western half of this Section and extending across, along the top one-third of the Township. Several small areas with a density of 7.2 to 10.0 units per acre are scattered throughout the North Section. Some less dense areas, 1.1 - 7.1 dwelling unit per acre, are found in a pocket bounded by Lawton Terrace and Beech Avenue between Ashland and Madison Avenues and also near Garfield and Cooke Avenues. Another area of similar density is located along Keighler and Kreighton Avenues. Very

few lots of 1.0 or less dwelling units per acre are found in the North Section of the Township. Varying residential densities are found along two north-south arterials, Ashland and Oak Avenues. The Okeola area along Oak Avenue north of Academy Avenue shows some signs of deterioration.

#### South Section

The western half of the South Section of the Township is also intensely developed for residential use.

Nearly all area east of Calcon Hook Road and south of Hook Road is industrial. There is intense residential development in Hook Road



Redevelopment Area I (bounded by Hook Road on the north, Clifton Avenue on the east, several large non-resident parcels on the south, and Scott Avenue on the west) with an average density of more than 10 units per acre. The Darby Townhouses are located in this area.

Residential development is located north of Hook Road and west of Clifton Avenue. Hook Road Redevelopment Area II is characterized by twin homes (many on Linden, Felton and Orange Avenues) and some row homes. The density here is less than in Hook Road Area I.



Most of the dwellings along Greenhill Road fall into the density category of 1.1 to 7.1 units per acre.

Lincoln Park, bounded by Hook Road on the south, Sharon Avenue on the west, Orange Avenue on the north and several large parcels on the east is the most densely populated area in this Section of the Township. All dwellings are one-story row units, situated on very small lots, generally less than 2,000 square feet.

The Bonsall Tract, bounded by Jackson Street (north), Orange Avenue (south), the rear line of properties fronting on Calcon Hook Road in Sharon Hill Borough (east) and Orange

Avenue (south) is characterized by houses in the 1.1 to 7.1 units per acre category. The majority of these units are deteriorating. Especially critical is the condition of several units, which are clearly dilapidated and lack adequate plumbing. There are many large unmaintained parcels frequently used for indiscriminate dumping and storage of junk cars.

## COMMERCE

### North Section

The North Section of the Township contains few commercial facilities. There is a small, local shopping center on the west of Ashland Avenue slightly north of Poplar Avenue. This convenience shopping area serves the Briarcliffe area and other nearby areas. Among the establishments in this shopping center is a delicatessen, a small sized supermarket, a tavern and offices of a local magistrate.

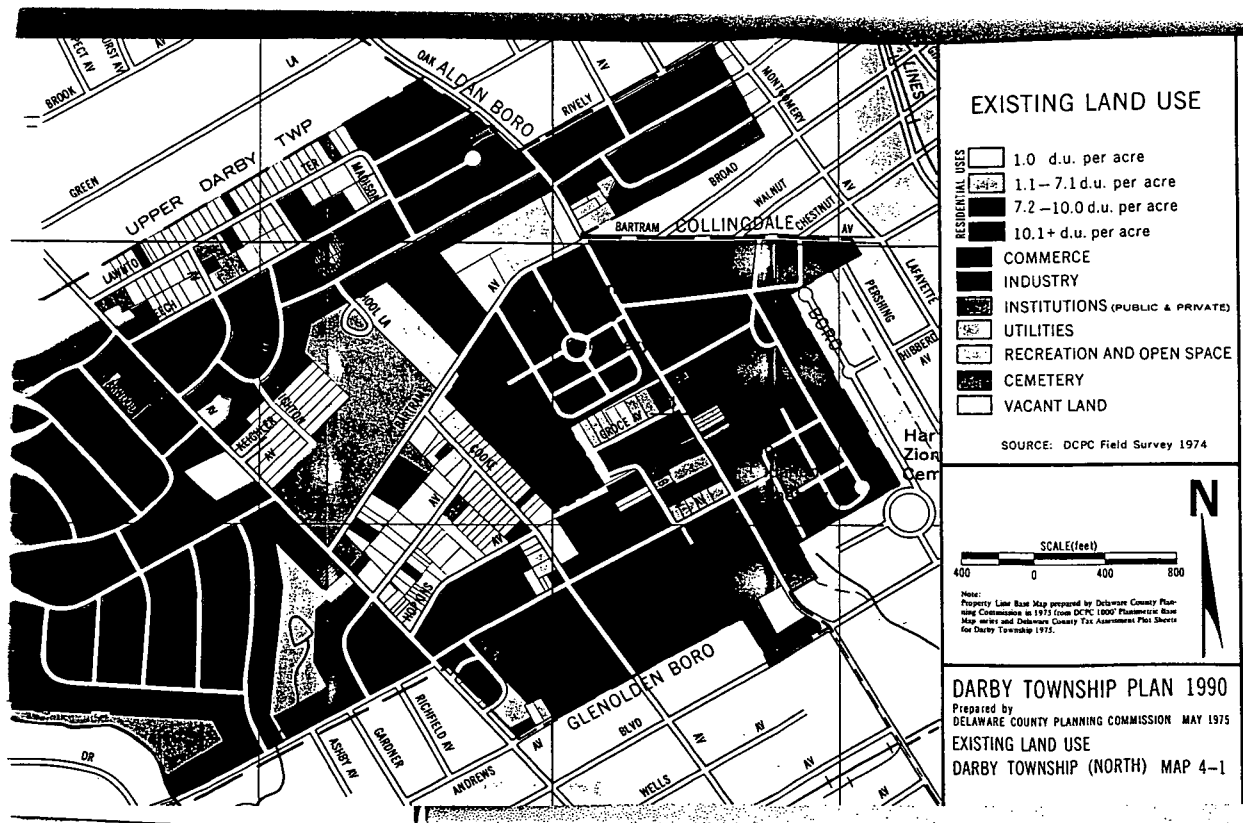
It can be said with assurance that people who live east of Oak Avenue, and along Academy Avenue, do not often use the facilities of this convenience center. However, this center is of substantial importance to Briarcliffe residents who must shop there, unless they wish to drive much farther to obtain common food products.

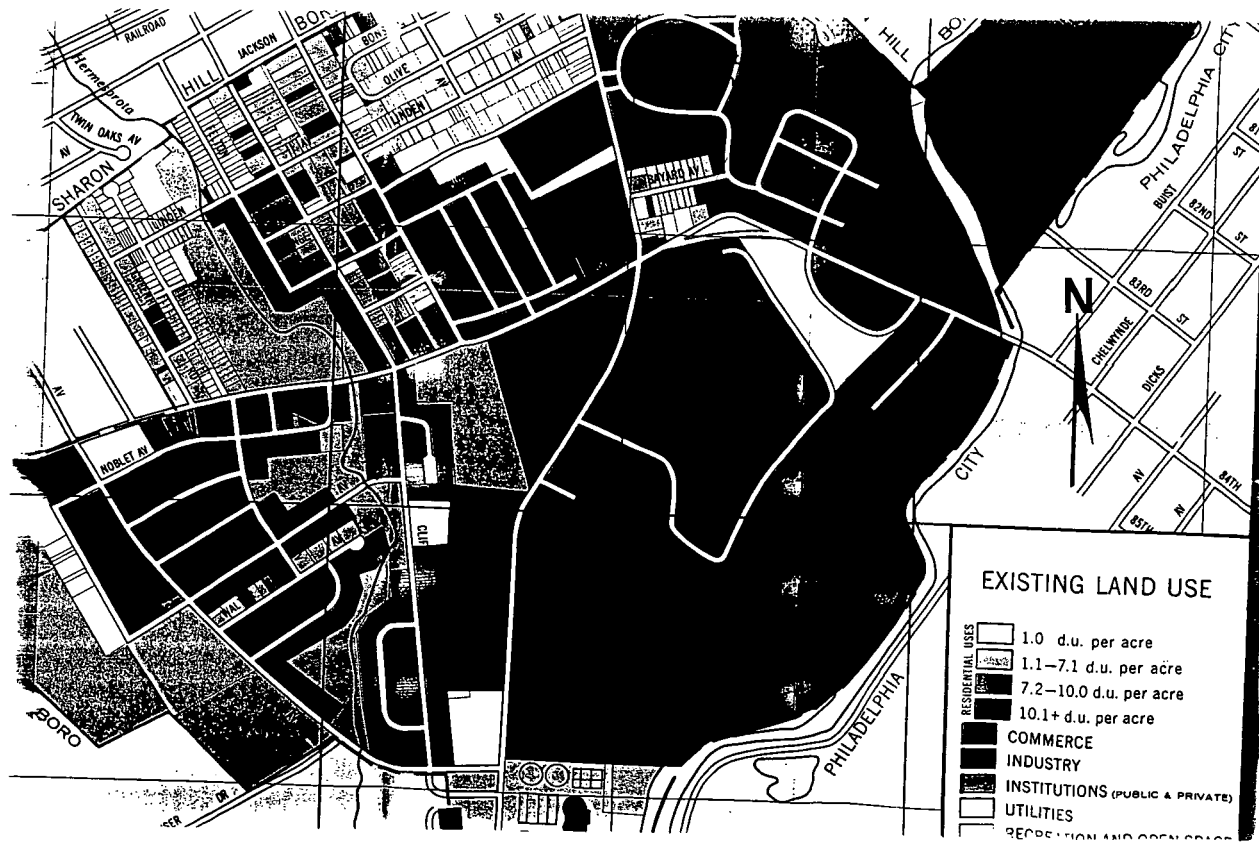
This condition indicates the need for an additional convenience shopping center in a different part of the North Section.

A small sandwich shop is located on the South side of Bartram Avenue, opposite the Junior-Senior High School. There is one grocery store which serves the Cooke-Garfield-Hopkins area.

The major commercial facility in the North Section is Kleins Department Store<sup>3</sup>, located one block north of MacDade Boulevard, west of Cooke Avenue. Nearby there is a large drive-in theater which occupies the block east of Kleins.

<sup>3</sup> closed as of March 1975





A truck sales and service establishment is located directly east of the MacDade Drive-In.

The department store, drive-in theatre and truck sales establishment combined, appear to occupy over ninety percent of the commercial land area in the North Section.

There are several small establishments in the area of the intersection of Oak Lane and MacDade Boulevard. Among these, are a gas station, auto repair shop and tavern.

With the exception of the relatively large commercial complex in the vicinity of MacDade Boulevard and Cooke Avenue which serves several municipalities in the southeastern part of the County, all North Section commercial establishments are basically local.

#### South Section

Map 4-2 shows a small number of commercial establishments in several areas of the South Section. Several small establishments are located along Clifton and Sharon Avenues. Commercial use is also found north of Hook Road at its intersection with Calcon Hook Road. Other small commercial establishments are located on the south side of Hook Road near Darby Creek, at the southwest corner of Hook Road and Clifton Avenue (medical center and pharmacy), and along the south side of Hook Road at the west boundary of the Township (gas station, auto repair shop, glass installation shop). Finally there is a cafe on the south side of Hook Road, adjacent to Darby Township Fire Company No. 4.

#### INDUSTRY

##### North Section

The industry in the North Section consists primarily of storage-distribution facilities located on Groce Avenue and on Academy Avenue in the Okeola area. In addition there is a machine shop and a light assembly plant on Bartram Avenue, across from the Junior-Senior High School.



##### South Section

The South Section of Darby Township has more than ninety percent of the industrial land in the Township. Most of this land is occupied by various storage and distribution establishments. The largest is the Gulf Oil Tank Farm which occupies approximately 97 acres—almost one-half of the industrially used land in the South Section. In addition there are numerous air-freight and light assembly establishments. Many of these are located in two huge buildings on the west side of Calcon Hook road, south of the Bonsall Tract and east of Lincoln Park.

The Darby Creek Joint Authority Sewage Treatment Plant and the Delaware County Incinerator No. 2 located on Calcon Hook Road also cover sizeable land areas.

Although Darby Township has substantial industrial lands (either presently in industrial use or zoned for light industry), there has been a marked decrease in industrial manufacturing activity between 1969 and 1973. It should be noted that much of Darby's existing industries consist of various types of storage, air freight, light assembly and other "non-manufacturing" industries, which replaced the older manufacturing establishments.

## NEIGHBORHOOD ANALYSIS

### North Section — Okeola

The Okeola neighborhood is bounded by the Township line on the south and east, Ashland Avenue on the west, and Bartram Avenue on the north. A large percentage of lots here are poorly maintained and approximately one-third of the dwelling units are deteriorating or dilapidated. Most streets lack curbs and sidewalks, and paving is in poor condition, street lighting is minimal and there are many instances of mixed and conflicting land uses. The many signs of blight, particularly in the vicinity of Grobes and Groce Avenues, produce an inferior living environment and enhance further deterioration. The large drive-in theater backing on Academy Avenue, the cluster of construction yards and offices and beverage distributor together with some dilapidated residences on Academy Avenue and Oak Lane are principal examples of blighting influences which detract from the livability of the neighborhood.

### Oak Lane and Bartram Avenue Area

A problem which needs mention is that created by a large lot (approximately one acre) located at the northwest corner of the intersection of Oak Lane and Bartram Avenue. This large, poorly maintained lot is adjacent to the Briarcliffe Swim Club and it is frequent-



ly used as a gathering spot by loitering youths. It is also used as a parking lot or "rest stop" by truck drivers. All these activities result in unsightly and often hazardous holes in the ground at this parcel.

Bartram Avenue, which constitutes its south boundary is approximately 18 feet wide and highly deteriorated. There are large cracks and potholes throughout. In conjunction with the poor condition of Bartram Avenue, the poor condition and appearance of the parcel has a blighting influence on the area.

### South Section

The South Section of Darby Township presently has more problems than the North. Among these are a high number of substandard dwelling units, large poorly maintained parcels, and an entire area (Bonsall Tract) which lacks basic utilities, roads, sidewalks, recreational facilities and such municipal services as refuse removal. The entire area east of Calcon Hook Road is a mix of junk car dumps and poorly maintained storage facilities. Gulf Oil Tank Farm, a large cemetery, the closed Clearview Landfill and a sewage treatment plant are nearby. Most of this area is aesthetically deficient.

There are few commercial structures in this area, and only one street (Bayard Avenue), one block in length, with residential units.

The County Incinerator No. 2 is situated across from the sewage treatment plant, on the south east corner of Tribbitt Avenue and Calcon Hook Road. A large, unsightly auto graveyard is located on a triangular parcel at the southwest corner of the intersection of Calcon Hook Road and Hook Road.

To the west of Calcon Hook Road there are two problem areas, Lincoln Park and the previously mentioned Bonsall Tract. A portion of the Calcon Hook Industrial Park and a large vacant parcel (zoned light industrial) are located between Calcon Hook Road and Lincoln Park.

#### **Hook Road Project Number One**

Hook Road I was the first redevelopment effort in the entire Hook Road area. Although first proposed in 1954, this project was not in effectuation until the early 1960's. There were 443 units (as of February 1975) built in this area under the auspices of the Delaware County Redevelopment Authority. Of this total, 231 were sales units and 212 rentals. The sales units were constructed with utilization of the FHA 220 mortgage insurance program, while the rental units were built under the 236 and the 221-D3 Federal Assistance Programs, (172 and 40 rental units respectively).

The construction of these urban renewal units has substantially upgraded the character of the area and provided much needed housing. All sales units are of the row-house variety; the rentals are either garden apartments or duplexes.

Generally, these buildings are in very good structural condition and, with diligent code enforcement, they are expected to provide sound housing for many years.

It is significant to note that this renewal area is totally developed with the exception of one block at the southeast corner of the intersection of Hook Road and Tribbitt Avenue.

#### **Hook Road Project Number Two**

Originally approved in 1953 and subsequently revised a number of times through 1963, this project encompasses an area of some 36 acres generally located between Clifton Avenue, Jackson Street, and Hook Road on the east, north and south, respectively. The western boundary is the rear line of properties fronting on Greenhill Road.

Although a total of 196 sales units were proposed, only 63 (nearly thirty percent) have been built to date. The Federal FHA 235 Assistance Program was utilized in order to reduce the interest rate of the developer who could therefore reduce the mortgage for buyers, thus making housing available to low and moderate income families.

The FHA 235 Program was utilized for 62 of the 63 units in Area II. One unit was sold conventionally. All of the 62 aforementioned units are of the twin variety.

#### **Hook Road III and III West**

This area, presently submitted as one urban renewal project, is bounded, in general by Jackson Street and Calcon Hook Road on the north and east, Orange Avenue and Hook Road on the south and Clifton Avenue on the west. It is the north-south strip of land between Sharon Avenue and Clifton Avenue, that is known as Redevelopment Area III West. The area to the east of Sharon Avenue and north of Orange Avenue is Hook Road Renewal Area III, also known as the Bonsall Tract.

The total project covers an area 55.27 acres. There are 190 dwelling units in 170 structures in the project area. Of the total number of dwelling units, 148 are substandard.

#### **Bonsall Tract**

The Bonsall Tract is predominantly residential in character; however, there are numerous junk yards and small areas used for refuse dis-



posals throughout the area. Many of the dwellings are situated on relatively large lots, thus making possible the disposal of various types of refuse at some distance from the dwelling. There are no curbs, sidewalks or public sanitary or storm sewerage facilities. This lack of sewers creates streams of raw sewage flowing along the streets.

The above mentioned conditions serve to create a substandard and unsanitary environment; an environment prone to impose substantial constraints on the physical, intellectual and emotional development of the residents.

#### Redevelopment Area III West

This area, now combined with Hook Road III as one renewal project, covers a strip of land of approximately eight square blocks between Clifton and Sharon Avenues, extending from Hook Road on the south to Jackson Street (the Township boundary) on the north. Clifton and Sharon Avenues, form the west and east boundaries of the area.

Thirteen business establishments as well as one semi-public organization (Sons of Sharon) are located in this 21 acre area. Many of the units have severe structural faults creating blighted and hazardous conditions. Similar to many structures in the adjacent Bonsall Tract, this area also contains many poorly crafted buildings, and additions of makeshift materials; however, in contrast to the structures in the Bonsall Tract, most structures in Area III West have been constructed of brick and masonry materials.



## CHAPTER FIVE

### COMMUNITY FACILITIES

#### GENERAL

The need for adequate community services and facilities in Darby Township exceeds at present the level of services provided by the Township. Community facilities, both public and private, are shown on Maps 4-1 and 4-2. An overview of these facilities and services follows.

#### MUNICIPAL BUILDING

The Township Municipal Building is a temporary facility located in the North Section of the Township on Ashland Avenue. The building is leased by the Township and contains the office and meeting room of the Commissioners, the office of the Township Secretary and the clerical staff.

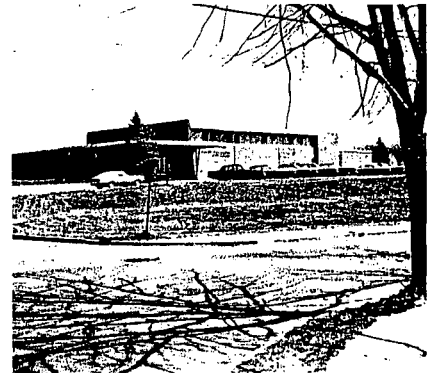
#### PRIVATE INSTITUTIONS OR ASSOCIATIONS

Located in the North Section of the Township on Bartram Avenue is the Father and Son Association. The objective of the group is to involve fathers, — over five-hundred in number, in coaching, administrative tasks and fund raising for their sons' organized sports activities. The Association receives a limited amount of financial support from the Township and is in the process of building a new field house on the north side of Bartram Avenue near Cooke Avenue.

Located in the South Section of the Township on Sharon Avenue are the Sons of Sharon. A charitable organization, they seek to provide many types of aid (food, shelter, etc.) for Township citizens in need of assistance.

#### SCHOOLS

Darby Township, both North and South is part of the Southeast Delco School District. Two Elementary and one Junior-Senior High School comprise the educational institutions within the Township.



Darby Township Elementary School, located on School Lane and Rively Avenue in the North, is the larger of the elementary schools with 21 classrooms and the largest total enrollment. It serves grades 1, 2, 3 and 4 and has 28 teachers for 250 male and 200 female students. The size of the site, incorporating a playground is four acres.

Studevan Elementary School, at Hook Road and Sharon Avenue in the South, has 19 classrooms. It serves grades 5, 6, and 7 and has 20 teachers for 219 male and 161 female students. It also has a playground on a four acre site.

Darby Township Junior-Senior High School is located on Bartram and Ashland Avenues in the North Section of the Township. It has 33 classrooms, 43 teachers and houses grades 8, 9, 10, 11 and 12. There are 335 male and 311 female students. A tennis court, baseball and football field are part of the four acre site of the school.

Over the past four years, total enrollment in these schools has declined, (Table 5-1). For the school year 1971-1972, total enrollment was 1,842. At present, the total enrollment figure is 1,771. The projected enrollment for schools serving Darby Township also exhibits a downward trend, (Table 5-2). By the school year 1979-80 the enrollment is expected to be 1,710, or 61 students less than at present. Thus, the present facilities can adequately meet the demands of future student population, unless a radical change occurs within the Township.

TABLE 5-1

ENROLLMENT BY GRADE, 1971 TO PRESENT

	1971-72	1972-73	1973-74	Present
Kindergarden	197	218	237	273
Grade 1	168	138	120	111
Grade 2	137	151	115	116
Grade 3	149	142	140	110
Grade 4	124	161	138	135
Grade 5	127	133	146	129
Grade 6	137	127	126	134
Grade 7	143	171	128	121
Grade 8	134	129	167	127
Grade 9	151	152	131	168
Grade 10	146	109	140	121
Grade 11	122	132	115	132
Grade 12	107	111	131	94
Total	1,842	1,874	1,834	1,771

Source: Southeast Delco School District

LIBRARY FACILITIES

The only library in Darby Township is located in the Junior-Senior High School at Ashland and Bartram Avenues. As of April, 1971 the library contained approximately 7,000 volumes. It is operated by monies from the budget of the Southeast Delco School System.

The library is available to the students of the High School until 4:00 p.m. each school day. It is open to parochial school students between 3:00 and 4:00 p.m., Monday through Friday.

TABLE 5-2

PROJECTED ENROLLMENT, 1974/75-1979/80

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Kidgn. - 6	1,008	966	957	952	972	981
Grs. 7-9	416	382	384	398	374	361
Grs. 10-12	347	414	410	358	365	368
Totals	1,771	1,762	1,751	1,708	1,711	1,710

Source: Southeast Delco School District

## RECREATION

Darby Township has ample areas suitable for recreation; however, most of them are unimproved and unused. The nature of the predominant types of development in the Township, high density rows and twins, indicates a marked need for additional recreational areas and programs.

### North Section

Small recreation areas mainly designed for preschool and elementary school children comprise much of the recreational facilities in the Township. The Spruce Avenue Playground and the Madison Avenue Playground are both located in the North Section. Both facilities are basically of the tot-lot type with swings and sliding boards. The latter also has basketball facilities.

Crescent Park is a relatively large recreation area located on Ashland Avenue, across from the Darby Township Junior-Senior High School. The facilities here include two tennis courts, one full size basketball court, swings, sliding boards and other tot-lot equipment and approximately one acre of open space which can be used for football, baseball as well as for informal games.

Other small areas with tot-lot equipment are the Brookwood, West Bridge, and Park Drive Playgrounds in the Briarcliffe area.

The Father and Son Association owns a large parcel west of the Junior-Senior High School and north of Bartram Avenue.

The privately owned Briarcliffe Swim Club, located at Oak Lane and Bartram Avenue offers a variety of facilities for its members.

The recreational potential of the flood plain areas along and near the Muckinipates, and the Junior-Senior High School is presently unrealized.

The flood plain areas could be improved at a relatively small cost and could provide much

needed passive recreational areas in the densely populated Briarcliffe, particularly since this type of development is one of the few uses compatible with flood plain conservation policies.

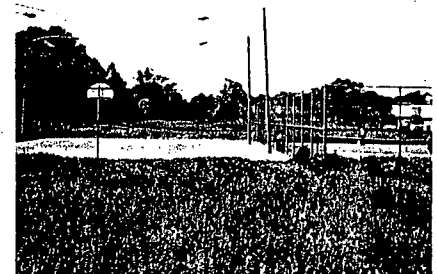
### South Section

There is abundant land in the South Section suitable for recreational uses. Unfortunately only a limited part of this land has been improved and maintained for recreation although the need for recreational facilities in the South Section seems to be great. The densely populated Lincoln Park, can serve as an illustration of potential service area.

The main recreation area in the South Section is Carson Conway Park, located at the north-west corner of Hook Road and Clifton Avenue with most of its frontage on Hook Road. The facilities here consist of two tennis courts, one full sized basketball court, one tot-lot and a large area of open space in the flood plain of the Hermesprota Creek.

There is a basketball court at the corner of Forrester and Clifton Avenues. In the summer months organized basketball games are played here.

There is a relatively sizeable park area called South Hermesprota Run Park, bounded by Burton Avenue, on the west, Noblet Street on



the north, Clifton Avenue on the east and Forrester Avenue on the south. This park is owned by the Township and has an area of slightly over five acres. Much of this land is in the Hermesprota Creek Valley and is part of the Creek flood plain.

A small area with two basketball courts is located at the corner of Hermesprota Drive and Tribbitt Avenue. This area is part of South Hermesprota Run Park. There is also a tot-lot in the vicinity of these basketball courts. Organized football games are held at the field of the Studevan Elementary School. The teams are sponsored by and receive some support from the Township.

A golf driving range is located to the west of Scott Avenue. This area is used mainly by local residents during the summer and autumn months.

There are two other tot-lots in the South Section: the Orange Avenue playground immediately north of Lincoln Park and the Brennen Street play area at the corner of Olive Street and Brennan Avenue. Both facilities are equipped with standard tot-lot equipment such as swings, sliding boards, merry-go-rounds, etc.

A pool on the church property at Clifton and Orange provides summer recreation for area residents.

#### HISTORIC SITES

There are no historic sites located in Darby Township that are on the National Register or on the Commonwealth of Pennsylvania Inventory of Historic Sites.

#### WATER SUPPLY

Darby Township is served with public water by the Philadelphia Suburban Water Company which also serves all of Delaware County east of Crum Creek serving 433,624 customers in 1970 with a total daily send-out of 38.23

million gallons per day. There are no figures available for individual communities. The Philadelphia Suburban Water Company has one source of supply in the County which is Crum Creek and utilizes the Pickering Creek Station near Phoenixville and the Upper Merion Station in Bridgeport as additional sources. The treatment plant is located in Nether Providence Township and has a rated capacity of sixteen million gallons per day.

#### SEWERAGE FACILITIES

Darby Township is located in the Darby Creek watershed which is a major watershed divided into minor watersheds. The North Section lies in the minor watershed of the Muckinipates and the Hermesprota while the South Section is located in the Hermesprota and the Darby Creek watersheds.

In 1928 the Delaware County Board of Engineers was formed to evaluate the sewerage needs for Delaware County. They recommended the construction of six regional sewage treatment plants of which the Darby Creek and Muckinipates Sewage Treatment Plants served Darby Township. Due to numerous delays it was not until 1954 that the Muckinipates STP was constructed and 1955 when the Darby Creek Joint Authority STP was built.

The North Section of the Township is served by the Muckinipates Authority while a small section of the western part of Southern Section is also served by the Muckinipates Authority and the remainder is served by the Darby Creek Joint Authority. It is estimated that 9400 residents located on 418 acres are served by the Muckinipates Authority. The estimated sewage flow from Darby Township to the Muckinipates Authority is one million gallons per day.

A total of 632 acres of Darby Township with a population of 4,512 is served by the Darby Creek Joint Authority with an estimated flow of .496 million gallons per day.

TABLE S-3  
INVENTORY OF EXISTING OUTDOOR RECREATION FACILITIES

Area	Total Acreage	Active Passive Undeveloped	Major Facilities
<b>NORTH</b>			
<b>Public</b>			
1) Brookwood Park — along Muckinapates Creek (M)	.5*	A	PE
2) Westbridge (M)	9.0*	A,U	GC,PE,PF,U
3) Park Drive (M)	2.5*	A	PE
4) Crescent Park — between Crescent and Garfield (M)	12.0	A	PE,P
5) Madison Avenue Playground — Beech and Madison Avenue (M)	.4	A	PE,P
6) Spruce Avenue Playground — Spruce Avenue, east of Oak Lane (M)	.1	A	PE
<b>Quasi-public</b>			
1) Father and Son Association (P)	3.	A	FP,B
2) Briarcliffe Swim Club — Oak Lane and Bartram Avenue (P)	14.	A	PE,GC,P,B,S
<b>Public Schools</b>			
1) Darby Township Elementary School — School Lane and Rively Avenue (S)	4.	A	PE
2) Darby Township Junior — Senior High School — Bartram and Ashland Avenue (S)	4.	A	FP,GC
<b>SOUTH</b>			
<b>Public</b>			
1) Carson Conway Park — North of Hook Road (M)	13.6	A	PE,GC,P,OP
2) South Hermesprota Run Park (M)	5.5	A	GC,P,OP
a) Upper-South of Hook Road			
b) Lower-Hermesprota Drive and Tribbitt Avenue			
3) Orange Avenue Playground (M)	2.0	A	PE
4) Forrester-Clifton Play Area (M)	.4*	A	GC
5) Brennen Street Play Area — Olive and Brennen Streets (M)	.5	A	PE,P
<b>Private</b>			
1) Gabe's Driving Range (P)	8.8	A	OP
<b>Public Schools</b>			
1) Studevan Elementary School — Hook Road and Sharon Avenue (S)	4.	A	GC,FP,PE
<b>TOTAL</b>	<b>81.5</b>		(Includes open space and recreation areas of schools and quasi-public and private institutions).
	<u>6.4</u>		
	<u>75.1</u>		
	<u>4</u>		
	<u>71.1</u>		

KEY:  
OWNERSHIP, MAINTENANCE:  
M Municipally owned and maintained  
S School owned and maintained  
P Privately owned and maintained

AREA UTILIZATION:  
Active (A) Sports, play area laid out: maintenance regular, intensive use  
UNDEVELOPED (U) Facilities and periodic maintenance lacking  
\* Approximate areas

FACILITIES:  
U Undeveloped  
OP Open, play or informal playfield areas  
FP Formal playfields (layouts for football, baseball, softball, or hockey)  
GC Game court (basketball, tennis, volleyball)  
PE Playground equipment (swings, slides, jungle gyms, sandboxes)  
P Picnic Facilities  
B Shelter or building  
S Swimming or wading pool

Source: DCPC Analysis and Township Records

It should be noted at this writing that the Muckinipates Authority has a sewer ban which prohibits any new connections to the system. This ban was placed by the Pennsylvania Department of Environmental Resources.

The major unsewered section of Darby Township is in the area known as the Bonsall Tract. Sewerage systems are on-site cesspools many of which are malfunctioning. This area is in the Darby Creek Joint Authority service area.

It is projected that the sewage flow will increase to 1,086 MGD for the North Section and to 0.763 MGD for the South Section by the year 2,000.

#### SOLID WASTE COLLECTION AND DISPOSAL

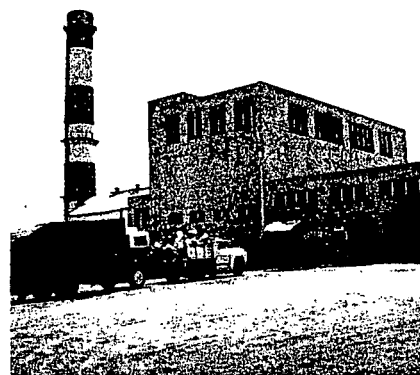
Darby Township in 1970 produced approximately 6,938 tons of residential incinerable solid waste. The solid wastes are currently collected by a private contractor. This solid waste is currently disposed at the Delaware County Incinerator No. 2 located on Calcon Hook Road in Darby Township and Folcroft Borough. Access to this disposal facility is via Calcon Hook Road.

In addition to the residential solid wastes, the following table indicates other types of solid waste produced in Darby Township.

TABLE 5-4  
SOLID WASTE GENERATION, 1970

	Street & Alley	Tree & Landscape	Park	Catch Basin	Leaf
TONS	694	1,179	90	118	340

Bulky residential solid waste (stoves, refrigerators, couches, etc.) in 1970 accounted for an additional 775 tons which had to be collected and disposed. Generally Darby Township provides for bulk collection three times a year. These bulk items were disposed



in either Clearview Landfill in Darby Township or the Tri-County Landfill in Folcroft Borough. Both these landfills have now been closed by the Pennsylvania Department of Environmental Resources, thus creating a situation where these wastes have to be hauled to New Jersey or Chester County for disposal.

Industrial solid wastes are handled by the producer or a private collector. The industries in Darby Township in 1970 produced over 900 tons of solid wastes.

Demolition waste varies per year depending upon the number of structures to be torn down. However, a rule of thumb is that for every structure demolished an average of fifteen tons of waste is produced. Since demolition is performed mostly by the County Redevelopment authority or private individuals, the collection and disposal of this material is their responsibility and not that of the Township government.

#### FIRE PROTECTION

Fire protection for Darby Township is provided by three volunteer fire companies and financed by a fire tax (two mills) and fund raising projects of the individual companies.

There are three fire companies in the Township. Briarcliffe Fire Company is located on

TABLE 5-5		
INVENTORY OF FIRE PROTECTION EQUIPMENT, 1975		
Goodwill	Oak Avenue, 1/2 block north of Groce Avenue	1954 GMC Pumper 1974 Imperial Pumper 1965 Ford Squad Truck
Briarcliffe	Beech & Poplar Avenues	1968 Hamn Pumper 1974 Imperial Pumper 1970 GMC Squad Truck
Darby Township Fire Co. No. 4	Hook Road, opposite Greenhill Road	1968 Hamn Pumper 1974 Imperial Pumper 1958 GMC Squad Truck
All three companies are equipped with a 35' and 14' long ladder on both pumers.		
Source: Mr. Lee Taliaferro, Darby Township Fire Marshall		

the north side of Beech Avenue near Poplar Avenue. The Goodwill Fire Company is located on the east side of Oak Lane, approximately one block north of Groce Avenue in the Okeola area. Both of these companies are in the North Section of the Township and will respond to all fire alarms in the North Section.

There is only one fire station in the South Section; Darby Township Fire Company No. 4, located on the south side of Hook Road, opposite Greenhill Road. It serves the entire South Section.

All three companies have similar equipment as shown in Table S-5.

## POLICE

Law enforcement is one of the most expensive services provided by Darby Township and by nearly all of the adjacent communities. Costs for police have increased substantially in the Township between 1970 and 1975. Law

enforcement is a service of great concern for local residents and the Police Department and, by its nature, is one of the most important community services.

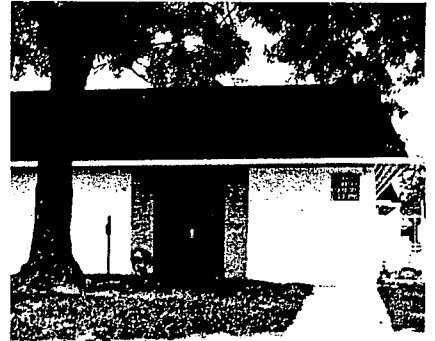
According to accepted standards of law enforcement students and officials, a municipality should have a *minimum* of 1.0 policemen per 1,000 population; the optimum ratio is 1.0 policemen for 500 population. Darby Township has approximately one policeman for 823 residents or 1.21 policemen per 1,000 population. Although this number (and ratio) is adequate it is below the ideal condition. It must be noted, however, that, in addition to the 17 policemen the Township Force has four trained police dogs. These four dogs improve the Township's standing and bring it slightly closer to the ideal condition. In short the police force at present is better than adequate. The adequacy of the force manpower is slightly enhanced by the fact that there are very large areas which require little or no police protection (e.g., Clearview, the cemeteries in both Sections, and the large Gulf Oil Tank Farm which provides its own security).

There are four patrol cars in the Township. These are monitored by the Media Radio Dispatch at the Media Courthouse.

The police building at Hook Road and Clifton Avenue contains two jail cells for short term detention.

The Township Police Force is under agreement with the adjacent communities of Sharon Hill, Collingdale and Folcroft (and in some cases others) for reciprocal assistance.

Police officers are hired through the Civil Service and must attend the Philadelphia Police Academy or the State Police Training Academy. New officers are on probation during their first six months. The Police Department has a policy of encouraging policemen to enroll for additional learning in law enforcement. Courses are offered by the Delaware County Community College, by the Delaware County Police Chiefs Schools, as well as by the Federal Bureau of Investigation.



## CHAPTER SIX TRANSPORTATION

### 1975 PHYSICAL CONDITIONS

Transportation is an essential element in the life of any modern community. The attainment of effective safe and efficient movement of men and materials to their destination has assumed a vitally important status, particularly in the last three decades.

#### ARTERIAL SYSTEM

Regional and local street and highway systems differ substantially in role and function. There is a hierarchial relationship among roadways which is of significance in the development of rational systems for moving traffic or locating different types of developments. All roads in the present arterial system in Darby Township are shown on Map 6-1.

An arterial system as defined herein consists of four types of roads:

**URBAN PRINCIPAL ARTERIALS**, carry 10,000 or more vehicles per day. Roads in this category carry large volumes of traffic from one region to another or among certain areas within the region.

**URBAN MINOR ARTERIALS**, carry between 7,000 and 10,000 vehicles per day. These roads provide for major movements between and within communities, often to places of employment and commerce.

**URBAN COLLECTOR-DISTRIBUTOR ROADS**, carry between 5,000 and 7,000 vehicles per day; collecting and distributing traffic within a local area for the purpose of providing access to arterial roads.

**LOCAL COLLECTOR-DISTRIBUTOR ROADS**, carry no more than 5,000 vehicles per day and are similar in function to urban collector distributor roads with the exception of lower volumes. These roads are particularly important to the circulation within a particular locality.

#### TRAFFIC VOLUMES

##### North Section

On the basis of the volumes of the roads shown on Map 6-1 of the 1975 roadway system of Darby Township, it can be seen that MacDade Boulevard, which traverses the Township for a very short distance, is an urban principal arterial. This road carries a high volume of traffic and is lined with commercial establishments. It should be noted that MacDade Boulevard traverses the North Section of the Township for a distance of less than 250 feet, but runs parallel (and in close proximity) to the entire southern boundary of the North Section. It carries approximately 20,000 vehicles per day.

Oak Lane is an urban principal arterial which traverses the eastern part of the North Section of Darby Township in a north-south direction, and carries between 14,000 and 15,000 vehicles per day.

Ashland Avenue is classified as an urban minor arterial. It traverses the western part of the North Section in a north-south direction, and carries approximately 8,000 vehicles per day.

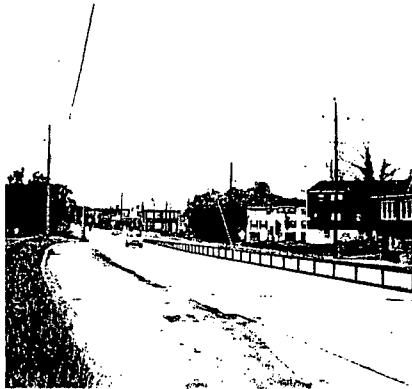
There are presently no streets classified as urban collector-distributor in the North Section.

Academy and Bartram Avenues are local collector-distributor streets which cross the North Section in a generally east-west direction.

#### South Section

The classification of the roads in the South Section is given below:

Hook Road which carries approximately 32,400 total vehicles per day is an urban principal arterial which traverses the South Section in an east-west direction. It is one of the major roadways which provides access from Delaware County to the City of Philadelphia.



Calcon Hook Road (north of Hook Road) is a urban minor arterial, carrying approximately 9,200 vehicles per day in a north-south direction. It serves as one of the two roads which provides access from the South Section of the Township to the Chester Pike commercial areas.

Sharon Avenue is an urban minor arterial, traversing the South Section (north of Hook Road) in a north-south direction. Sharon Avenue also connects this Section of the Township with Chester Pike.

There are presently three local collector distributor roads in the South Section: Tribbitt Avenue, Clifton Avenue and Calcon Hook Road, all south of Hook Road. All three roads run in a generally north-south direction and provide access to and from Hook Road for nearly all areas of the South Section, south of Hook Road.

#### EXISTING TRAFFIC FLOWS

##### North Section

The effectiveness of local traffic circulation is of great importance to a community. One of the methods used to facilitate circulation is the use of one-way flows on streets.

The existing 1975 one-way flows are on Pine Street (westbound to its intersection with Spruce Street) and on Spruce Street (in a southbound and eastbound direction to the Township boundary line). Both these streets are located east of Oak Lane in the northeast corner of the North Section of Darby Township.

The only additional one-way flow is found on Park Drive from its approximate intersection with Hillcrest (westbound and northbound) toward Stratford Avenue. This one-way regulation covers only approximately one block in length.

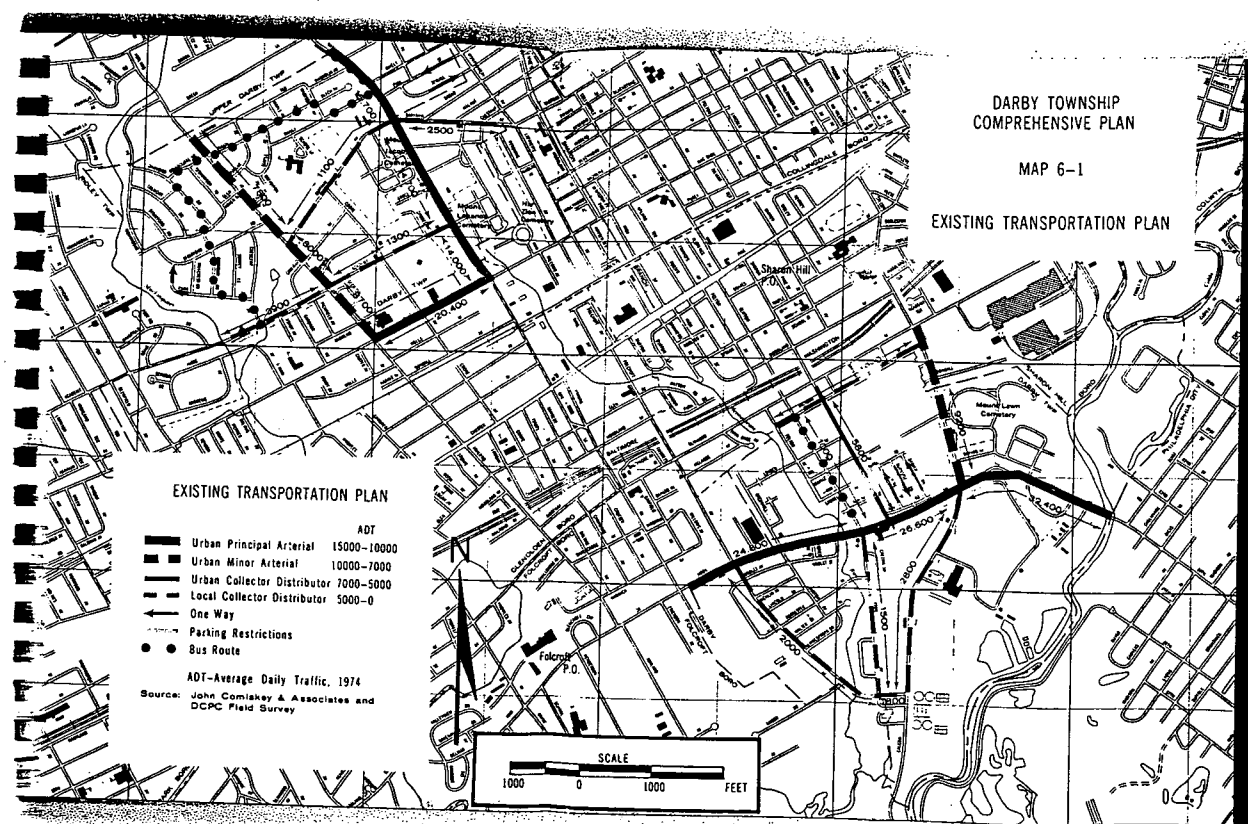
##### South Section

There are only three one-way streets in the South Section, all in Lincoln Park. These are

# DARBY TOWNSHIP COMPREHENSIVE PLAN

MAP 6-1

## EXISTING TRANSPORTATION PLAN



Pine Street (northbound) Burnside Road (southbound) and Barker Road (northbound). These streets are approximately one block in length from Ash to Laurel Roads.

## PARKING RESTRICTIONS

### General

Darby Township, with little exception, has adequately provided for traffic movement through parking removal. In addition to consideration of traffic volume and street widths the measure of efficiency of the local streets must be evaluated in light of the existing and relatively dense residential development prevalent on both sides of many streets in both Sections of the Township.

### North Section

Map 6-1 shows existing parking restrictions for the Township. With regard to the North Section, it should be noted that the predominant restriction pattern is the prohibition of parking on one side. With only very few exceptions this pattern is evident throughout the Briarcliffe area, east of Ashland Avenue, and all of the streets north of Bartram Avenue. There is a very high correlation between row house development and prohibition of parking on one side.

Parking is prohibited on both sides of the street throughout Oak Avenue, Bartram Avenue (except for school parking) and along Cooke Avenue from Glenolden Borough north to the rear line of units fronting on Academy Avenue.

Parking is prohibited on both sides of a segment of Ashland Avenue, between Poplar Avenue and the north boundary of the Township.

### South Section

As shown on Map 6-1, the two main roadways on which parking is presently prohibited on both sides are Hook Road and Calcon Hook Road.

Parking is also prohibited on both sides of Clifton Avenue between Laurel Road and Forrester Avenue. From the corner of Clifton and Forrester Avenues parking prohibitions are limited to only the east side of Clifton Avenue and extend southward to the intersection of Clifton and Tribbitt Avenues. Parking is entirely prohibited along Tribbitt Avenue, between Hook Road and Noblet Street.

Parking restrictions for one side of a given roadway, apply to the following streets: Greenhill Road (east side), Laurel Avenue, between Clifton and Felton (south side); Ash Avenue, between Clifton and Sharon (south side) and Noblet Avenue (south side).

## ACCIDENTS

### North Section

Table 6-1 shows the location, number and type of accidents at the given intersections for the year 1973. The most prevalent types of accidents are at signalized intersections and involve left-turning vehicles and rear end collisions.

At the intersection of Oak Lane and Bartram Avenues, right angle collisions are also prevalent in conjunction with the accident types mentioned above. Sight-distance is very poor for traffic entering the intersection of Oak and Bartram (from east of Oak Lane). On the basis of numerous site surveys as well as



TABLE 6-1								
ACCIDENT BREAKDOWN – HIGH ACCIDENT LOCATIONS								
JANUARY-DECEMBER 1973								
Intersection	Right Angle	Left Turn Angle	Right Turn Angle	Rear End	Fixed Object	Head-On	Misc	TOTAL
Calcon Hook & Hook		9		9		1		19
Clifton & Hook		6		4			1	10
Hook & Sharon		6	1	2			3	10
Bartram & Oak	3	2		3			1	11
Oak & Rively		2		7	1			11

photographs of the intersection, it is apparent that the poor sight distance is caused by the cemetery wall of Mount Lebanon Cemetery.

The intersection of Oak and Rively Avenues is also a high accident area because of the volume of traffic, curvature of the road, inadequate roadway design (jog) and the large number of roads and driveways with access onto Oak Lane.

#### South Section

Table 6-1 shows three high accident areas in the South Section. All three are at signalized intersections: Hook and Calcon Hook, Hook and Clifton and Hook and Sharon Roads. The intersection of Hook and Calcon Hook Roads has had the highest number of accidents (19) in 1973. The predominant types of accidents at this intersection are rear end and left turn collisions. The other two intersections had ten accidents at each intersection in 1973.

### PUBLIC TRANSPORTATION

#### North Section

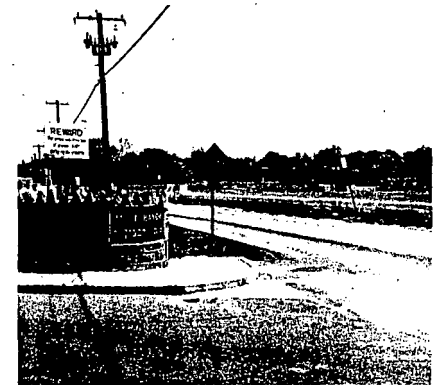
Darby Township has SEPTA bus routes operating through both Sections. Penn Central commuting facilities are currently located to the north of this Section, and a trolley line runs along Woodlawn Avenue to the east of this Section.

The SEPTA bus route serves the most heavily populated areas of the Township as shown on Map 6-1. Three northbound buses "originate" at the intersection of Academy Avenue and Crescent Drive.

#### South Section

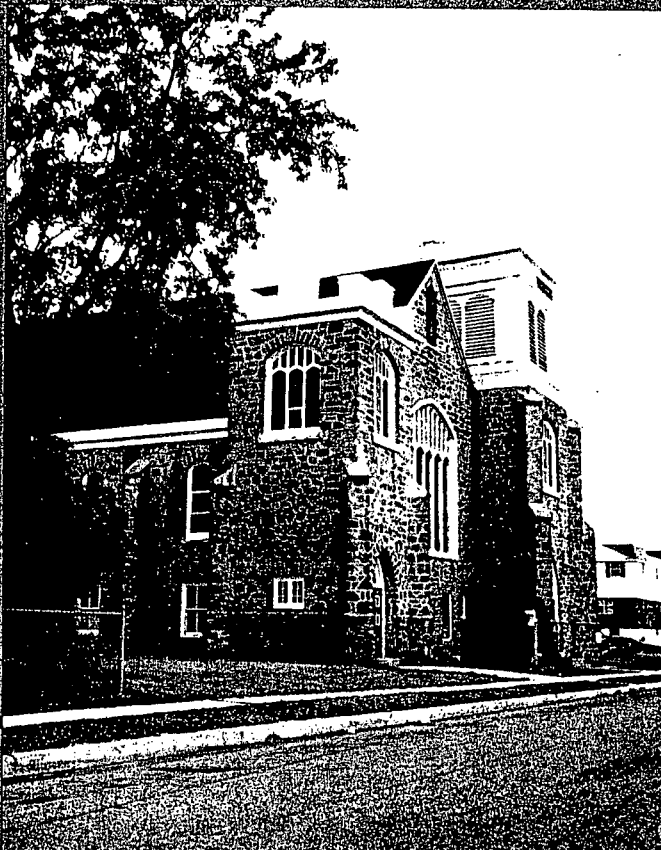
The bus coverage in this Section does not appear adequate for today's condition, or for the proposed land use and development patterns.

The only bus route through this Section is from Folcroft Borough eastbound, along Hook Road to Clifton Avenue, then northbound along Clifton Avenue beyond the north boundary of the South Section.



## PART II

# RECOMMENDATIONS



## CHAPTER SEVEN FUTURE LAND USE

### GENERAL

Guiding land use development through planning, zoning and code enforcement is one of the major functions of local government. Within the framework of State law, Darby Township may shape the development of all its land, both public and private. The Future Land Use Plan represents a guide for community development, and, although itself is not binding, it constitutes the foundation for Township Zoning Regulations.

Recommendations for future land use are based on several factors. One factor is the existing pattern of land use which was discussed in Chapter 4. Another, the condition of structures, may be particularly justified with regard to areas where many structures are in a state of disrepair. Highway accessibility, aesthetic considerations, and the attainment of an improved tax base are additional factors. Finally, the considerable urban renewal activity and additional projects presently in execution affects future land use proposals.

This Future Land Use Plan encompasses the time period between 1975 and 1990. However, it should be periodically revised and/or updated to reflect changing conditions.

Nearly all recommendations for changes in existing land use are in the Okeola area of the North Section and in the South Section. Very little proposed change in the North Section, outside Okeola, is due to the intense development characterized by row homes.

Hook Road Renewal Area Number III, known as the Bonsall Tract, has been appropriated State financial assistance and it appears Town-

ship officials as well as the Delaware County Redevelopment Authority are in agreement that this area should be developed with light industrial use.

### DENSITIES

The densities of the residential development in the Township are shown in the legend of the Existing and Future Land Use Maps, for both Sections. In many cases there has been an "averaging" of densities for an entire area or block — as opposed to density designation for each lot or parcel. The density categories used are as follows:

Low Density — 1 or less dwelling units per acre.

Medium Density — 1.1 to 7.1 dwelling units per acre.

Medium-High Density — 7.2 to 10 dwelling units per acre.

High Density — 10.1 or more dwelling units per acre.

These categories are meant as guidelines not as terms for actual densities.

### RESIDENTIAL

#### North Section

A very small change in the number of dwelling units is expected in the North Section. Most of the area is covered by the row units in the Briarcliffe area, by singles and twins on Lawnton Terrace, and by two large cemeteries.

Some few additional twins and single units on lots of approximately 5,000 square feet are recommended for the northern part of this Section, along Beech Avenue, Lawnton Terrace, and at one or two places along Ashland Avenue.

There are several small vacant parcels at Cooke Avenue between Academy and Bartram. The one vacant lot on the east side of Cooke to the north of the candy store is recommended for residential use, (Map 7-1).

#### South Section

As shown on Map 7-2 existing medium and medium-high density residential uses (singles and twins) along both sides of Greenhill Road should be continued.

There should be residential and recreational uses in Hook Road Redevelopment Area III West, particularly on the parcels where existing residential structures are presently dilapidated and will be razed in the near future. Also many of the existing units should be upgraded and rehabilitated.

Of the 196 residential units initially proposed for Renewal Area II, only 63 have been constructed to date. At present, there are 128 building lots available in Area II. Utilization of public assistance programs — Federal and State — is warranted in order to subsidize low-income families to own and maintain the units proposed for this area. Generally medium-high density residential development is recommended for this area (preferably twins).

Hopefully the lots on the west side of Scott Avenue will be developed with medium-high density residential use, as strongly recommended, thus providing additional dwellings for relocation and attaining a condition wherein families may choose from two or three alternate locations for their future residence.

The Delaware County Housing Plan 1970-2000 (Report 6, 1974) indicates that there are 1,346 low and moderate income house-

holds in the Township. The Report recommends an increase of 77 units (5.7 percent) for low and moderate income families by the year 2000. These additional units will be needed to accommodate the existing and the projected population. Given the fact that approximately eighty percent of the units recently constructed at Roosevelt Drive are not occupied, given the availability of 128 residential lots in Hook Road Renewal Area II, as well as the recommended construction of the units on the west side of Scott Avenue, it is anticipated that Darby Township will provide for more than its "share" of low and moderate income dwelling units — far sooner than the year 2000, (Map 7-2).

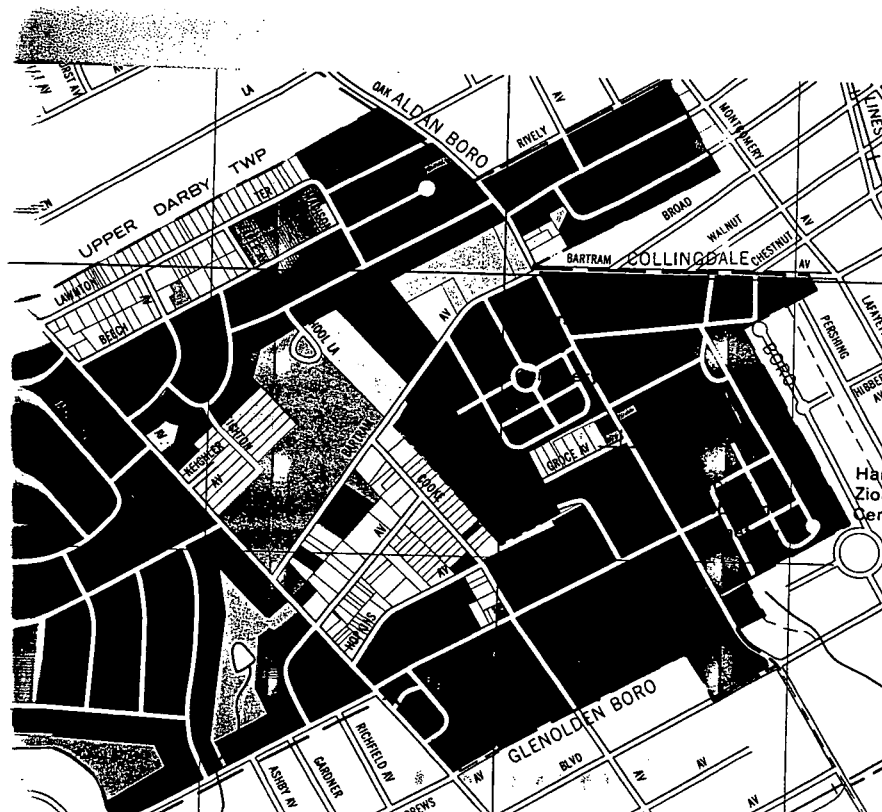
#### COMMERCE

##### North Section

A large tract of commercially zoned land is located along the south boundary of the North Section of the Township. Presently nearly all of this area consists of commercial uses: a large drive-in theatre, a large department store, truck sales and service establishment, and several small commercial establishments on the north side of MacDade Boulevard.

Kleins Department Store is now (March, 1975) in the process of closing its retail operation. The large area, which includes a parking lot, can accommodate many commercial establishments. A convenience shopping center could be located here if no large chain store follows.

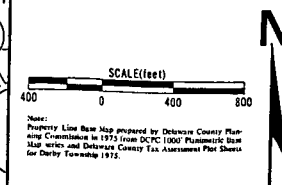
Also, the large tract presently occupied by the MacDade Drive-In Theatre could be developed with intense commercial use, thus improving the tax base. The Township could establish a policy of promoting intense commercial use along the south boundary of this Section. However, in nearly all cases, the decision to develop in this fashion remains, of course, with the property owners.



# FUTURE LAND USE

- RESIDENTIAL USES
- 1.0 d.u. per acre
  - 1.1 - 7.1 d.u. per acre
  - 7.2 - 10.0 d.u. per acre
  - 10.1+ d.u. per acre
  - COMMERCE
  - INDUSTRY
  - INSTITUTIONS (PUBLIC & PRIVATE)
  - UTILITIES
  - RECREATION AND OPEN SPACE
  - CEMETERY
  - VACANT LAND

SOURCE: DCPC Field Survey 1974

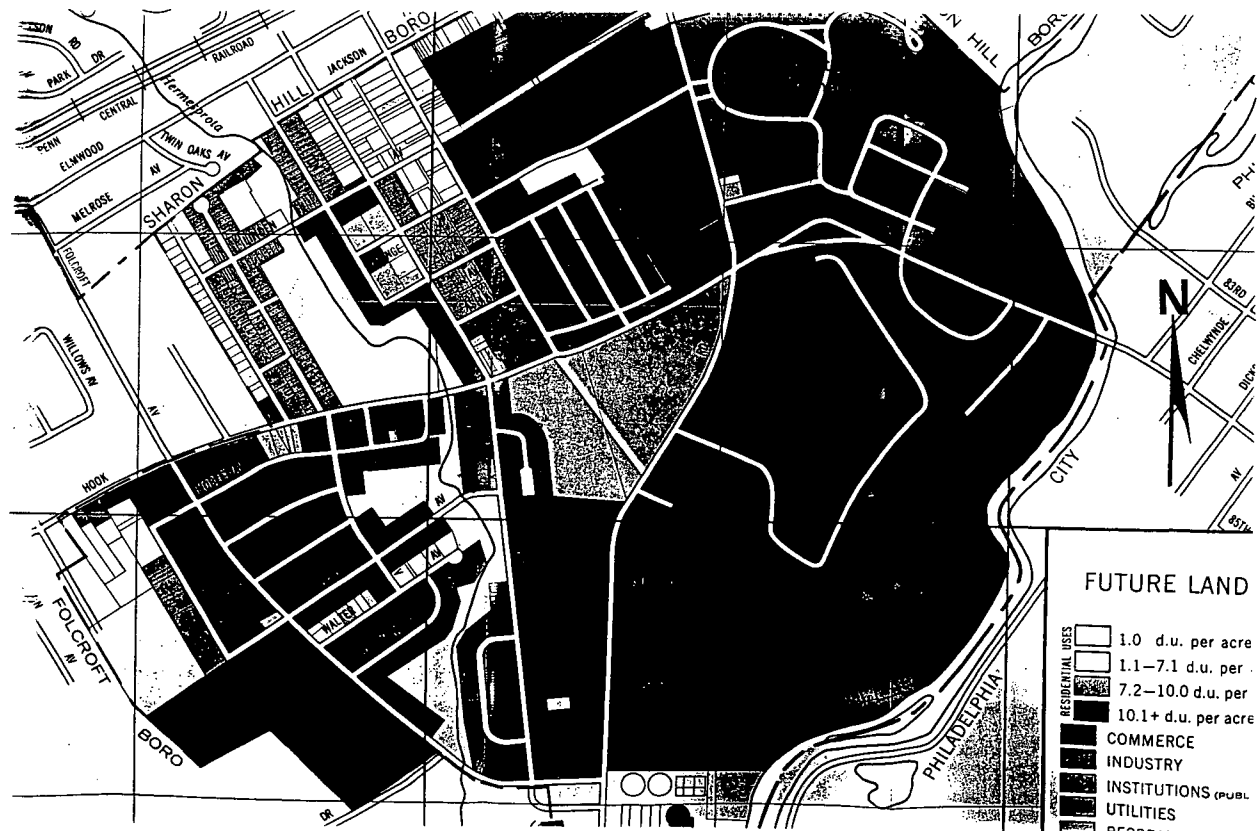


## DARBY TOWNSHIP PLAN 1990

Prepared by  
DELAWARE COUNTY PLANNING COMMISSION MAY 1975

FUTURE LAND USE

DARBY TOWNSHIP (NORTH) MAP 7.1



The convenience shopping center on Ashland Avenue near Poplar Avenue should continue. With adequate code enforcement and maintenance this shopping area should serve the residents of the densely populated Briarcliffe area, for many years in the future.

Finally, the area adjacent to the south side of Glen Circle apartments at Ashland Avenue, now mainly occupied by several residential lots of approximately ten thousand square feet is recommended for commercial use, (Map 7-1).

#### South Section

A convenience shopping center is recommended in the South Section at the southeast corner of the intersection of Hook Road and Tribbitt Avenue. This area is the one undeveloped block in the Hook Road Renewal Area I. The proposed shopping center should have a small food supermarket as the main unit in the complex and other stores such as a hardware store, laundry, barber shop, auto parts store, etc. The complex should be designed so as to provide adequate off-street parking.

Commercial development is also recommended for the south portion of Renewal Area III West. Renewal activities in this area should consist of selected clearance as well as rehabilitation. There are presently some 13 commercial establishments in Renewal Area III West. The area should continue to contain a significant number of well-maintained retail and service establishments due to its proximity to Lincoln Park, the development of Renewal Area II and major roadways in the vicinity.

Another area where additional commercial development is recommended is that to the north of the intersection of Calcon Hook Road and Hook Road. Presently there are several residential units, a gas station, engine shop, and hot dog stand in the vicinity.

An intensification of commercial development, particularly along Calcon Hook Road is recommended. One of these establishments

could be a food store or restaurant to serve the employees of the nearby Calcon Hook Industrial Park.

#### INDUSTRY

##### North Section

Presently there is only a small amount of industrial land in the North Section. The land presently used for industry is recommended to continue.

The major recommendation is for light industrial use in the Okeola area, in the vicinity of Grobes and Groce Avenues and along Oak Lane, as shown on Map 7-1.

With few exceptions, the existing housing in this part of the Okeola area is substandard. Adequate parking area and proper sanitation facilities are also often lacking.

The proposed light industrial development in the Grobes-Groce vicinity should be similar, to that on Bartram Avenue and to that on Academy Avenue (near Grobes).

Another industrial area in the North Section is located on the south side of Bartram Avenue, west of Cooke Avenue. The industrial uses here do not create any notable smoke, odor, noise or dust and generate a minimal amount of traffic. As a result, they appear to be compatible with the general character of the area and are recommended to continue.

There will be little change, if any, to the remaining industrial land use of this Section since the remaining areas consist of cemeteries, open space, and principally high density residential development.

##### South Section

The principal areas recommended for light industrial use are the Bonsall Tract and the large area in the southwest corner of the Township. The development of the Bonsall Tract with light industrial use complements the existing industrial lands along Calcon

Hook Road, including Calcon Hook Industrial Park. In like manner, the proposed light industrial use in the southwest corner of the Township (west of Tribbitt Avenue) is a logical extension of the adjacent industrial park in Folcroft Borough, (Map 7-2).

With regard to the Bonsall Tract it should be noted that State assistance for industrial development is available on a 90/10 sharing basis with the Township, and is subject to adoption of the Comprehensive Plan. Township officials, the Delaware County Redevelopment Authority and also the Delaware County Planning Commission are in agreement for the proposed light industrial development of the area.

The very poor condition of existing residential structures, lack of sewerage facilities and paved roads and the proximity to the Calcon Hook Industrial Park and the Philadelphia International Airport are all reasons for recommending light industrial development. It is anticipated that this will have a positive impact on the Township tax base.

Light industrial use is recommended for the large parcel at the northwest corner of Calcon Hook Road and Tribbitt Avenue (opposite the County Incinerator No. 2) and the parcel at the southeast corner of Forrester and Clifton Avenues (just south of Calcon Drive).

A recent DCPC study dated May, 1975 of the Sharon Hill Borough Zoning Ordinance recommends a planned industrial district for the large area occupied by and adjacent to the Kresge distribution operation. The same zoning district (planned industrial) was tentatively recommended for the Bonsall Avenue vicinity (east of Calcon Hook Road) and for the small irregular area along the west side of Calcon Hook Road, between the Road and the Bonsall Tract in Darby Township. Implementation of these recommendations together with those in this Study (for industrial use) would tend to create a light industrial employment center in this vicinity.

Industrial use is recommended for the triangular area between Hook Road and "Old Hook Road" and for the area to the north, on both sides of Bayard Avenue, (Map 7-2).

Finally, continued industrial use is recommended for the vast tracts of land along Calcon Hook Road. This area includes the Gulf Oil Tank Farm, various air freight and storage operations, and the Calcon Hook Industrial Park.

## INSTITUTIONS

Recommendations for future institutional uses are discussed in Chapter 8.

## RECREATION AND OPEN SPACE

A comprehensive discussion of future recreation programs and facilities as well as proposed open space is found in Chapter 8, (Maps 7-1 and 7-2).

## CEMETERY

Both Sections of Darby Township have ample land which is used for cemeteries. It is not recommended that any additional space be used in this manner.

## CONCLUSION

The above described uses combined with the Future Land Use Map are a representation of a desirable and feasible Future Land Use Pattern. The Future Land Use Plan is largely based on the various community needs and goals and provides a framework for the development of a well-balanced community assuring the best possible environment, an economic use of land and a proper mix of land uses.

The Township should not interpret this proposed Future Land Use Plan as a rigid set of goals to be rigorously pursued. The Plan should be regularly and formally re-evaluated as new and more detailed knowledge becomes available.

## CHAPTER EIGHT

### COMMUNITY FACILITIES

#### GENERAL

Modern municipal services and facilities help to shape the environment within the Township. As population increases and a community develops, community facilities must be expanded and improved to meet the needs of the residents. The recommendations for community facilities are based on existing facilities and services, anticipated needs and established development goals.

#### COMMUNITY SERVICE CENTER AND MUNICIPAL BUILDING

A neighborhood Community Service Center is recommended to be constructed in Darby Township due to the need for such a facility. It should be designed to serve as a nucleus for programs and activities which can benefit Township residents. It should be a vehicle which can assist Township residents, local government, public and private agencies to work together toward the solution of problems. It is proposed the center be located at the southwest corner of Hook Road and Calcon Hook Road.

The Community Service Center should provide for (1) information and referral services to help residents find assistance in solving their problems either within the center or elsewhere; (2) health and welfare services such as dental health, day care facilities for children, family counseling, financial or legal advice; (3) educational programs ranging from tutorial sessions to employment counseling and job training; (4) recreational and cultural activities such as a small gymnasium, library and facilities for arts and crafts programs; (5) meeting rooms for community groups, clubs and special events and (6) municipal offices.

It should be noted that the present municipal building is a temporary facility, which is not adequate in terms of office space. The proposed Community Service Center appears to be the best possible location for permanent municipal offices. Larger, permanent, municipal offices would facilitate more efficient services and accommodate a large number of people at public meetings.

#### PRIVATE INSTITUTIONS

It appears that the existing private institutions in both Sections will be generally adequate to serve particular private needs in the near future. However, the need for future private institutions should be considered when this Comprehensive Plan is periodically updated by the Township, as recommended in Chapter 10.

#### SCHOOLS

According to the projections of the Southeast Delco School District there is no need to introduce any major changes in Darby Township's schools within the next fifteen years. A lowered school enrollment is reflected in the projections of the school district, (Table 5-1).

Apart from routine maintenance, it may be expected that within the next fifteen years the existing schools will require some renovation and improvement.

Studevan Elementary School, at Hook Road and Sharon Avenue, in the South, is in immediate need. The building is an old structure fronting on Hook Road, a major regional

highway. Improved setback is desirable since the curb line is approximately 12 or 13 feet from the front door of the school.

Schools should cooperate with the Township to make facilities available to local residents after school hours. Thus present school resources can be utilized more efficiently.

#### LIBRARY SERVICES

There is no public library in the Township. Other than the Junior-Senior High School Library, there is no provision for the reading needs of pre-school children or adults.

It is recommended that the Township provide such a facility for its residents as a long range plan. Three alternatives are available: to construct and finance its own facility, to contract with neighboring municipalities or to obtain "mobile units."

According to the State Library Council on Library Development, specific eligibility requirements for State aid must be met in order to qualify. These requirements are based on population. For Darby Township, the area of service should serve a minimum of 10,000 persons or have an annual operating budget of \$15,000. The hours of services should be 35 hours per week. The collection should consist of 1½ book titles per capita, or 20,000 volumes, and 50 periodicals. The level of certification for head librarian should be Provisional Librarian, a staff position requiring a Bachelor's Degree and completion of at least 12 credit hours of courses in library service. As noted above, it is recommended that library facilities be located in the proposed Community Service Center.

#### RECREATION

##### North Section

There is almost no land suitable for additional recreational use in this Section of the Township. The scarcity of additional recreational lands is concurrent with existing and proposed high density residential development.

The intense residential uses, particularly row house development, have contributed significantly to the great need for recreation areas. This need is anticipated to increase during the next 15 years. For this reason the recommendations for future recreational use focuses only in part on proposals for the acquisition of recreational lands.

The above mentioned scarcity of recreational lands combined with financial limitations as well as the significant existing and anticipated need for recreation creates a problem which defies solution via the traditional recommendations — to acquire or set aside certain lands for future recreational use.

Exceptions to the above statement are two small minor areas which can and should be developed for recreational use. The lot at the northwest corner of the intersection of Oak Lane and Bartram Avenue (presently for sale) as well as that on the east side of Ashland Avenue, opposite Glenhaven Road are recommended for recreational use, (Map 7-1). The site at Oak and Bartram should be used for passive recreation only, and definitely not for a tot-lot, given the probable widening, and increased traffic volumes on Oak Lane which combined would create a safety hazard for children crossing Oak Lane.

No additional recreational lands are recommended to be acquired. Obviously, the use of these two areas proposed for recreation (combined with use of existing areas) would, nevertheless, leave a large gap between the amount of recreational areas and facilities and recreational needs.

Another constraint is the limited budget allotted for recreation. The relatively small recreational budget seems to reflect the limited revenues available for all municipal functions. The 1974 budget for recreation was less than \$16,000.

An additional method to provide recreation opportunities in the Township (North and South Sections) is to establish a well-formulated, low-cost, well-organized recreation pro-

gram making use, whenever possible, of mobile recreational equipment and school related facilities.

The Township and School Board officials of the Southeast Delco School District should arrange several meetings for discussion of optimum use of school facilities by local residents. The school has a large tract of land which could be of benefit to non-students, particularly during the summer vacation. Similarly, the school should allow local residents limited use of the school gymnasium for organized recreation activities. There is no other gymnasium in the Township. This type of arrangement would benefit local residents, many of whom desire more recreational activity; it would also serve to help channel energies of youth in positive, constructive ways.

#### South Section

The Future Land Use Map recommends three areas for future open space and/or recreation, (Map 7-2).

It is recommended that a small tract of land located behind the units fronting on Clifton Avenue, and approximately 300 feet north of Tribbitt Avenue (near its intersection with Clifton Avenue) be used as a tot-lot to serve the children of the residents along Clifton Avenue and Roosevelt Drive.

A small tot-lot is also recommended to be located on the west side of Felton Avenue north of Linden Avenue (Felton Avenue is presently unopened in this area).

The entire Clearview area, the size of the former landfill, closed in November of 1974 for not meeting State regulations for sanitary landfills, is recommended for open space. Because of long-standing substandard operating conditions, inadequate or nonexistent compacting and cover at the end of each day's operation, the site is presently hazardous for any permanent structures.

Because of the serious questions regarding suitability of the site for standard construction and the high costs attendant to piling

supported construction, it appears highly advisable to recommend this area for recreation and/or open space.

The particular type of recreation and/or open space is not indicated, since any possible development will be contingent upon Federal and/or State assistance or cooperation with adjacent municipalities.

Provision of passive recreation for Clearview and the elimination of the existing unsightly and unsanitary "mountain" through planting should be one of the main goals of the Township in terms of provision of open space. The use of Clearview for recreation and/or open space would represent the most significant possible step in Darby Township's beautification, and in removal of unsanitary conditions, and would eliminate an almost legendary blight and nuisance.

#### WATER SUPPLY

Darby Township is served with public water by the Philadelphia Suburban Water Company. With anticipated industrial development on the Hook Road Redevelopment Area Number III, known as the Bonsall Tract, and with the expansion of the Calcon Hook Industrial Park (directly south of the tract), water needs for this area can be expected to increase by 1990. The Philadelphia Suburban Water Company will be required to expand its daily sendout to accommodate this increase.

#### SEWERAGE FACILITIES

The North Section of Darby Township is served by the Muckinipates Authority as is a small section of the western part of the South Section of Darby Township. At present, the Muckinipates Authority has imposed a sewer ban which prohibits any new connections to the system. The remainder of the South Section is served by the Darby Creek Joint Authority. An unsewered section is found within the area known as the Bonsall Tract which should be sewerred.

In 1971 the Delaware County Planning Commission completed a county-wide sewerage

facilities study entitled the Delaware County Sewerage Facilities Study which was Phase I of continuing planning in this field. In October of 1970 the firm of Albright & Friel, now a division of Betz Environmental Engineers, Inc. was employed by the County Commissioners to develop a regional wastewater plan for Delaware County. This study was completed in November 1972. Previously, on October 20, 1971, the County Commissioners formed the Delaware County Regional Water Quality Control Authority (DELCORA) to implement this plan.

The Delaware County Regional Sewerage Project affects Darby Township in the following ways. The Darby Creek Joint Authority Plant located in Darby Township is to be phased out and a pumping station at the Darby Creek Joint Authority to be constructed to connect to Southwest Philadelphia Sewage Treatment Plant. In addition it is proposed that the Muckinipates Authority STP be phased out and a pumping station be constructed with a 42" interceptor to the Darby Creek pump station and thus on to the Southwest Philadelphia STP. Thus if this plan is implemented all of Darby Township sewage will be conveyed to Philadelphia for treatment. This will help to alleviate the currently severe degradation of water in Darby Creek and Tinicum Marsh and lift the building ban for the Muckinipates Authority.

#### **SOLID WASTE COLLECTION AND DISPOSAL**

Solid wastes are currently collected by a private contractor with disposal at the Delaware County Incinerator No. 2 located on Calcon Hook Road in the Township and Folcroft Borough.

Since the Township currently contracts for the collection of residential solid wastes, and since the projections of solid waste generation indicate that the solid wastes produced will double by the year 2000, (Table 8-1) it is recommended that the Township Commissioners prepare an alternate municipal collection plan. This plan should provide for the purchase of trash trucks, the hiring of man-

power, operating expenditures, etc., and comparison of the bids received from private contractors. Thus, if it is to the financial advantage of the Township to go to municipal collection, the plan can be implemented. Bids should be taken for contract collection in September or October to enable the Commissioners due time to reach a decision on this matter.

**TABLE 8-1**  
**SOLID WASTE GENERATION, 1970-2000**

Year	1970	1975	1980	1985	2000
Resident	6,938	7,420	8,190	9,247	12,874
Bulky	775	836	915	1,037	1,497
Leaf	340	337	341	350	374

#### **FIRE PROTECTION**

No new fire companies are currently planned for Darby Township. Fire protection is provided by three volunteer fire companies and is adequate. However, equipment should be renewed and updated when necessary to expand services and insure efficiency.

The Township, having recognized the above mentioned needs filed an application, dated February 26, 1975, for a Community Block Grant with the Department of Housing and Urban Development. Part of this application, is a request for a grant of \$4,500 for purchasing needed fire hose and air-pack equipment for the Township's Fire Companies.

#### **POLICE**

Darby Township has approximately one policeman for 823 residents or 1.21 policemen per 1,000 population. This ratio is better than adequate though not ideal (1.0 policemen per 500 population). The Township Force consists of seventeen policemen, four trained police dogs, and four monitored patrol cars.

It is recommended that the Township encourage officers to keep up to date with current law enforcement practices and strive towards the optimum ratio for the Police Department.

## CHAPTER NINE

### TRANSPORTATION

### ANTICIPATED 1990 CONDITIONS

#### 1990 PHYSICAL CONDITIONS

As expected, volumes on the important roadways will increase through 1990. The "energy crisis" and the prevailing economic conditions have depressed the rate of growth of traffic volumes on our roadways. Comparisons of volumes today to those of 1972 throughout the eastern half of Delaware County show slowing growth rates and, in some cases, declining volumes of vehicles. This phenomenon, when considered in conjunction with the normal growth rates experienced before the energy dilemma, suggests a smaller yearly rate of growth of traffic volumes through 1990. In the case of Darby Township, yearly growth rates of traffic volumes are anticipated to be 2 percent through 1990, whereas the pre-energy crisis yearly factor was 2.5 percent.

#### TRAFFIC VOLUMES

##### North Section

As can be seen on Map 9-1, increases of significant consequence will occur on Oak Lane, Ashland and Academy Avenues. The volumes on Oak Avenue are anticipated to increase from the existing 14,700 vehicles per day, to an anticipated 20,600 vehicles per day in 1990. The arterial classification of Oak Lane will not change.

The volumes on Ashland Avenue are anticipated to increase from the present 8,000 vehicles per day to approximately 11,000

vehicles per day. Ashland Avenue is anticipated to become an urban principal arterial by 1990.

Traffic volumes on Academy Avenue are anticipated to increase from the existing 3,900, west of Ashland and 1,300 between Ashland and Oak to approximately 5,500 and 1,500, for the respective segments, by 1990.

The functional arterial classification of Academy Avenue east of Ashland is anticipated to change from the existing local collector distributor to an urban collector distributor within the next fifteen years.

##### South Section

Map 9-1 indicates substantial increases in traffic volume anticipated for Hook Road, Calcon Hook Road, and Sharon Avenue, through 1990.

Traffic volumes on Hook Road are projected to increase from the existing approximate 25,000 vehicles per day to an anticipated approximate of 37,000 within the next 15 years, (more precise counts are shown on Map 9-1).

Traffic volumes on Calcon Hook Road (north of Hook Road) are expected to increase from the present 9,200 vehicles per day to approximately 12,900 vehicles per day by 1990. This

projected increase in traffic would change the classification of Calcon Hook Road, north of Hook Road, from an urban minor arterial to an urban principal arterial within the next 15 years.

Sharon Avenue presently carries approximately 5,800 vehicles per day and is classified as an urban collector-distributor. It is anticipated that by the year 1990, Sharon Avenue will carry a traffic volume of 8,100 vehicles per day, and, accordingly, will become an urban minor arterial.

No change in classification is anticipated for Tribbitt Avenue; Clifton Avenue, south of Hook Road; and Calcon Hook Road, south of Hook Road, although traffic volumes are expected to increase.

Finally, the daily traffic volume for Jackson Street is anticipated to increase from the present 1,990 to approximately 2,500 vehicles per day. The road classification will not change.

#### RECOMMENDED IMPROVEMENTS

##### North Section

Observation of traffic flow during the peak hours indicated congestion and delay on Oak Lane at its intersection with Rively Avenue, Bartram Avenue and MacDade Boulevard. Widening is needed along the entire roadway which presently is 24 feet wide. The Pennsylvania Department of Transportation (Penn DOT) has completed design plans for the widening of Oak Lane which is on the Twelve Year Program. Given the anticipated growth of traffic and accident history, it is recommended that Oak Lane be widened from the existing two lanes to four lanes.

On the basis of several DCPC surveys, it has been found that the existing width of Bartram Avenue from Oak Avenue to Cooke Avenue is 17 to 18 feet. This narrow width combined with the curvature of the road impair safe vehicular transportation. Accordingly, it is recommended that Bartram Avenue be widened to 24 feet throughout the above mentioned area.

The intersection of Oak Lane and Rively Avenue needs improved signal operation in conjunction with the Oak Lane widening, due to accident experience at this intersection.

A traffic signal is presently needed at Oak Lane and Bartram Avenue. The Township should contact Collingdale Borough and request from them an indication of what they plan to do at this intersection, given that a permit has been issued by PennDOT.

In addition to this intersection, a traffic signal (light) is also recommended for the intersection of Ashland Avenue and Bartram Avenue. It is recommended that the Township make an in-depth study of this intersection to determine the extent of the need for a traffic signal here. The intersection of Oak and Rively needs improved signal operation through synchronization with the proposed signal at Oak and Bartram to avoid a traffic bottleneck in this area.

Notwithstanding the type(s) of future commercial development ultimately located in this area, it is of extreme importance to minimize curb cuts just south of the Township (North Section) boundary along MacDade Boulevard in the Borough of Glenolden. Since that strip of MacDade Boulevard between Ashland Avenue and Oak Avenue is presently a high accident area, cooperation between Darby Township and Glenolden Borough with regard to proper controls on vehicular ingress and egress is essential.

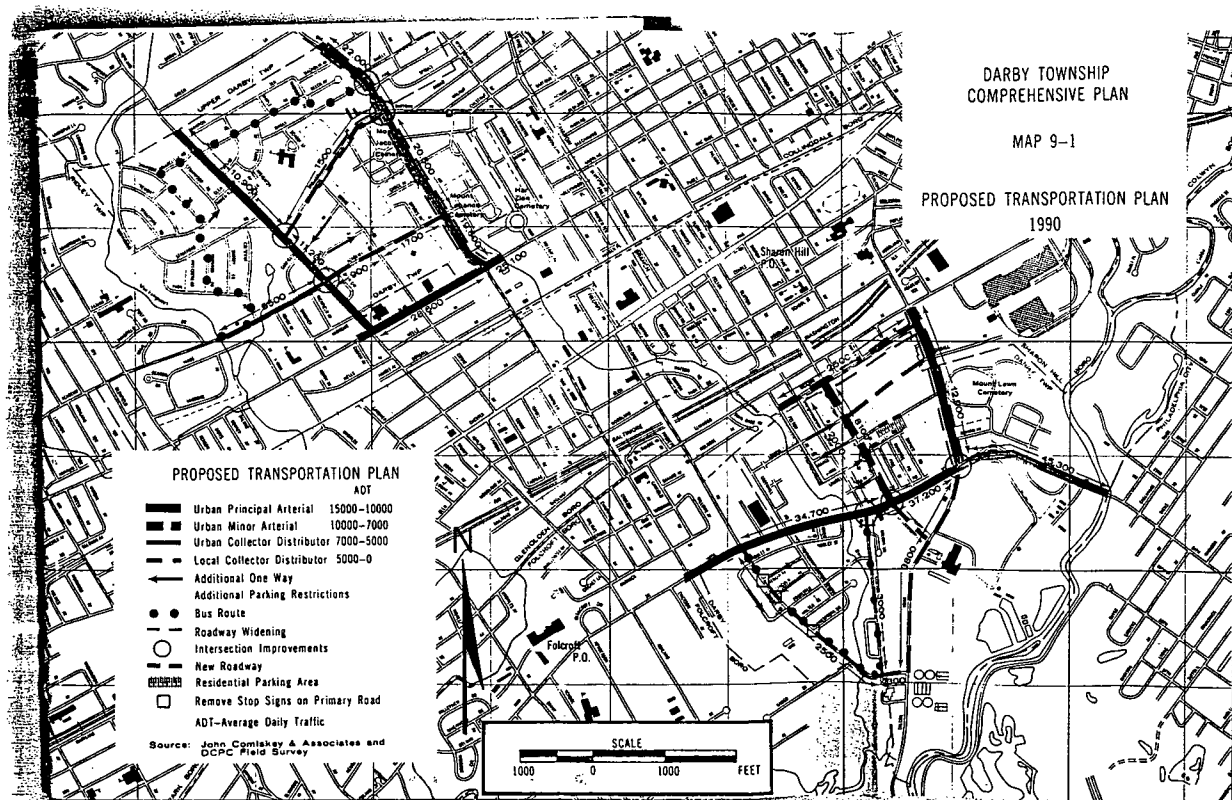
##### South Section

The anticipated industrial development along Calcon Hook Road particularly the proposed development of the Bonsall Tract with light industrial use as well as the recommended intensification of light industrial use east of Lincoln park will increase the need to improve the capacity of Calcon Hook Road. Given the anticipated volumes and proposed land use for the Bonsall Tract, Calcon Hook Road, from Hook Road, north to Chester Pike, must be widened to four lanes.

DARBY TOWNSHIP  
COMPREHENSIVE PLAN

MAP 9-1

PROPOSED TRANSPORTATION PLAN  
1990



The proposed industrial use for the Bonsall Tract necessarily means that the existing roadway system within the tract is inadequate and must be redeveloped in conjunction with future development. The recommendation for a roadway through the Bonsall Tract is tentative and may change to service the proposed light industrial development.

The proposed redevelopment of the Bonsall Tract, combined with the very high density residential development at Lincoln Park, situated just south of the tract, increases the need for a parking lot for Lincoln Park residents which is recommended to be located just north of Laurel Road. To improve circulation for both the proposed industrial tract and the Lincoln Park area, Orange Avenue between Sharon Avenue and Calcon Hook Road must be made a continuous, paved roadway. These recommended improvements are shown on Map 9-1.

Congestion has been noted along Hook Road and is apparently due to intersection deficiencies. Improved signalization and possible minor physical improvements will allow adequate traffic movement.

The anticipated industrial development along Calcon Hook Road south of Hook Road appears to necessitate an additional roadway for adequate circulation and development. While the future development is important to new roadway location, an overriding factor in this area is the necessity for new access roads to properly align with major roadways. A new roadway is recommended as shown on Map 9-1. This proposed new road is basically an extension of Sharon Avenue from Hook Road to Calcon Hook Road. The new roadway should be 26 feet wide and curbed on both sides.

Vehicles are required to stop too frequently along important roadways due to the excessive use of the "STOP" sign control at intersections. From the standpoint of efficiency and safety this is most hazardous. The greater the number of times vehicles are forced to stop, the higher the probability of accidents.

Also, constant stopping of vehicles contributes significantly to reduce capacity. Therefore certain "STOP" signs should be removed along Sharon and Tribbitt Avenues. However, the Township should study each intersection prior to any removal of "STOP" signs.

## PROPOSED TRAFFIC FLOWS

### North Section

One-way flows are recommended for Garfield Avenue, in a westbound direction, from Cooke Avenue to Ashland Avenue; on Hopkins Avenue, in an eastbound direction from Ashland Avenue to Cooke Avenue; and on Academy Avenue, in a westbound direction, from Cooke Avenue to Ashland Avenue.

### South Section

The following four streets in the South Section are recommended, along with others, for one-way flows: Linden Avenue (eastbound) from Felton to Sharon, Orange Avenue (westbound) from Sharon to Felton, Laurel Avenue (eastbound) from Felton to Sharon, and Ash Avenue (westbound) from Sharon to Clifton, (Map 9-1).

In the area south of Hook Road the following streets are recommended to be one-way: Scott Avenue, Newlin Avenue, Lincoln Avenue, and the small portion of Forrester Avenue between Scott and Tribbitt Avenues.

It is tentatively recommended that one street should traverse the Bonsall Tract in a generally east-west direction, as shown on Map 9-1. In conjunction with this proposed new street we recommend a "STOP" sign at the intersection of the proposed street with Sharon Avenue.

## PUBLIC TRANSPORTATION

### North Section

Presently, there are no recommendations for additional bus routes or any recommended changes to the existing bus route.

### South Section

It is recommended that modifications be made in the bus route to provide for more frequent service and decreased walking distances within the neighborhoods served. The recommended changes to bus service in the South Section are noted on Map 9-1.

The proposed bus route along Tribbitt Avenue and Clifton Avenue is intended to serve the densely populated areas to the south of Hook Road, particularly Renewal Area I, the new Roosevelt Drive row home development,

the intense residential development along Clifton Avenue, and the light industrial development proposed for the southwest corner of Tribbitt and Forrester Avenues.

More comprehensive changes of the public transit system in Darby Township would have to be in response to regional public transit improvements. Hopefully, such improvements will be realized in the future.

## CHAPTER TEN

### IMPLEMENTATION GUIDELINES

#### GENERAL

The Darby Township Comprehensive Study is to be used by officials and residents of the Township as a guideline for future decisions. The planning process is a continuous one in which the Comprehensive Plan itself is only one element, a flexible document designed to be periodically revised as new information is obtained. It is therefore recommended that the Commissioners and the Planning Commission of Darby Township provide for one formal meeting every two years to consider possible revisions to the Plan. This procedure will serve to assure the relevance and utility of the Plan.

#### REGULATORY CONTROLS

The Pennsylvania Municipalities Planning Code, Act 247 indicates that the governing body shall have the power to adopt and amend the Comprehensive Plan. Before adopting the Plan at least one public hearing must be held pursuant to public notice. The adoption of the Comprehensive Plan shall be by resolution by the affirmative votes of the majority of the members of the governing body.

#### ZONING

The Zoning Ordinance of Darby Township should be amended to conform to the Comprehensive Plan. Where zoning is changed so that an existing land use or lot size which is now permitted is no longer permitted, the "non-conforming" land use or lot is allowed to continue indefinitely, according to Pennsylvania law. However, new non-conforming uses may not be created.

Presently there is much high density residential development in the Township, characterized by the predominance of row units in both Sections. Even higher densities can be found in the area known as Lincoln Park.

The existing widespread high density residential development places a burden on municipal services, utilities and the school system. This burden is reflected in the increased monies necessary for provision of even minimal municipal services. Continued high density development would place the Township at a very serious financial disadvantage.

Changes in the Township Zoning Ordinance can limit additional high density residential development. The zoning ordinance is one of the more effective tools which, when properly utilized and enforced, could be essential in the attainment of a rational and realistic balance between providing an opportunity for a wide range of housing arrangements and the recognition that planned improvements must be related to the fiscal capability of the Township.

#### **SUBDIVISION REGULATIONS**

Subdivision regulations control new development through certain minimum design criteria. Presently the Township does not have subdivision regulations and it is recommended that the Delaware County Subdivision Regulations be utilized. The Township should review this condition and possibly adopt its own subdivision regulations.

#### **BUILDING, ELECTRICAL, PLUMBING AND HOUSING CODES**

Building, plumbing, and electrical codes pertain to the safe and sound standards for all new construction, rehabilitation, major repairs and alterations.

A housing code is necessary to bring existing housing up to standard and to maintain that standard. Although it appears that the Township has effectively enforced its codes, a constant review procedure should be maintained to assure that the codes will be kept up-to-date.

#### **ADMINISTRATIVE MODIFICATIONS**

One of the elements essential to the adequate implementation of the recommendations in this Study, and for improved functioning of municipal government is a greater commitment to action and closer cooperation among the various governmental bodies — Board of Commissioners, Planning Commission, Zoning Board, Recreation Committee, School Board and the various service departments (fire, highway, police, etc.).

With the increasing complexity of the day-to-day operation of municipal government, a more intense participation by a greater number of elected and appointed officials will be urgently needed in the future.

Similarly, there appears to be only minimal citizen participation in governmental functions. More opinions from more people would aid the governing body in its deliberations regarding municipal issues and problems. The officials of Darby Township should establish a systematic informational campaign designed to show local residents the importance of their input into the decision-making process.