

UWCHLAN TOWNSHIP COMPREHENSIVE PLAN UPDATE



ADOPTED
AUGUST 9, 2010

**UWCHLAN TOWNSHIP
COMPREHENSIVE PLAN UPDATE**

ADOPTED: AUGUST 9, 2010

This project has been funded in part through a Vision Partnership planning Grant administered by the Chester County Planning Commission.

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UWCHLAN TOWNSHIP
RESOLUTION NO. 2010-27

**A RESOLUTION ADOPTING THE UPDATED
UWCHLAN TOWNSHIP COMPREHENSIVE PLAN**

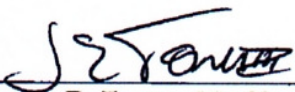
WHEREAS, Article III of the Pennsylvania Municipalities Planning Code (Act 247 of 1968, as amended by Act 170 of 1988), specifically Sections 301 and 302, authorizes municipalities to prepare and adopt municipal comprehensive plans; and

WHEREAS, Uwchlan Township finds it necessary to prepare an Updated Comprehensive Plan to help guide its future development; and

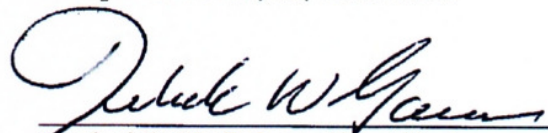
WHEREAS, a draft Comprehensive Plan Update was prepared, public meetings on the draft Plan Update were held by the Comprehensive Plan Committee consisting of certain members of the Planning Commission, a public meeting was held by the Planning Commission, the draft Plan Update was submitted to adjoining municipalities, the school district, and the Chester County Planning Commission, and a public hearing on the draft Plan Update was held by the Board of Supervisors:

NOW, THEREFORE, BE IT RESOLVED, that the Updated Comprehensive Plan for Uwchlan Township of 2010, including all narratives, maps, tables, and appendix, prepared by Robert Smiley, Planning Consultant, is hereby adopted on this 9th day of August, 2010.

UWCHLAN TOWNSHIP
BOARD OF SUPERVISORS



Joseph E. Toner, III, Chairman



Frederick W. Gaines, Vice-Chairman



Milton H. Bozarth, Member

Attest:



Lynda Phil
Secretary

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UWCHLAN TOWNSHIP COMPREHENSIVE PLAN UPDATE



CHAPTER 1 INTRODUCTION & PAST PLANNING POLICY

CHAPTER 1

INTRODUCTION & PAST PLANNING POLICY

This Plan updates the 2000 Comprehensive Plan. Over the past 10 years the Township not only implemented most of the recommendations from 2000, but Uwchlan remained a focal point for development. With the addition of new residents, houses, parks, schools, shopping and employment centers over the past 10 years the Township has chosen to revisit its planning policies in an effort to guide well-planned growth and development.

The Plan Update identifies the changes since 2000, evaluates physical, social and economic resources that remain unchanged, identifies goals and objectives, establishes planning direction, and creates implementation strategies set forth within an action plan. The Plan Update is prepared as a guide to help the Board of Supervisors continue administering the land use planning program of the Township, based on objective data, clear goals, and concise implementation strategies. The Plan Update is intended to be flexible and accommodate inevitable changes and allow appropriate responses to unforeseen events. By preparing this Plan Update Uwchlan has acknowledged that a comprehensive plan is a dynamic and evolving tool that must be periodically reviewed and revised so that it may continue to guide the Township.

Planning statutes and policies exist that provide a framework for the Comprehensive Plan Update. The main statute is the state enabling legislation described below. Existing Township planning policies and ordinances are evaluated for their relevancy to the Comprehensive Plan Update. Public planning policies also exist at the county and regional level that are reviewed for their applicability to Township policy development.

ELEMENTS OF A COMPREHENSIVE PLAN

Ten interrelated elements are included in a Comprehensive Plan, as required by the Pennsylvania Municipalities Planning Code (MPC). The ten elements are as follows:

A statement of objectives of the municipality, concerning its future development, including, but not limited to, the location, character and timing of future development;

A plan for land use, which may include provisions for the amount, intensity, character and timing of land use proposed for residence, industry, business, agriculture, major traffic and transit facilities, utilities, community facilities, public grounds, parks and recreation, preservation of prime agricultural lands, flood plains and other areas of special hazards and other similar uses;

A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality, which may include conservation of presently sound housing, rehabilitation of housing in declining neighborhoods and the accommodation of expected new housing in different dwelling types and at appropriate densities for households of all income levels;

A plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields, port facilities, railroad facilities, and other similar facilities or uses;

A plan for community facilities and utilities, which may include public and private education, recreation, municipal buildings, fire and police stations, libraries, hospitals, water supply and distribution, sewerage and waste treatment, solid waste management, storm drainage, flood plain management, utility corridors and associated facilities, and other similar facilities or uses;

A statement of the interrelationships among the various plan components, which may include an estimate of the environmental, energy conservation, fiscal, economic development and social consequences on the municipality,

A discussion of short- and long-range plan implementation strategies, which may include implications for capital improvements programming, new or updated development regulations, and the identification of public funds potentially available;

A statement indicating the relationship of the existing and proposed development of the municipality to the existing and proposed development and plans in contiguous municipalities, or a statement indicating measures which have been taken to provide buffers or other transitional devices between disparate uses, and a statement indicating that the existing and proposed development of the municipality is generally consistent with the objectives and plans of the county comprehensive plan;

A plan for the protection of natural and historic resources to the extent not preempted by federal or state law, which includes, but is not limited to, wetlands and aquifer recharge zones, woodlands, steep slopes, prime agricultural land, flood plains, unique natural areas, and historic sites;

A plan for the reliable supply of water, considering current and future water resources availability, uses and limitations, including provisions adequate to protect water supply sources. Any such plan shall be generally consistent with the State water plan and any applicable water resources plan adopted by a river basin commission.

THE PLANNING PROCESS

There are four major steps involved in the process of producing this Comprehensive Plan Update: the inventory and analysis of existing conditions and trends; the establishment of goals and objectives; formulating specific plan elements by combining the findings of the inventory with the goals; and the implementation of the policies and proposals of the specific plan elements.

Inventory & Analysis

The initial step in any planning process is to review the variety of existing conditions. This inventory and analysis of existing conditions provides the information from which goals and the Plan Elements are based.

Establishing Goals

Identifying the planning direction desired by the Township and the formulation of the goals and objectives necessary to achieve such is the essence of the Plan. While the inventory and analysis and plan elements can be achieved through professional planning assistance, establishing planning goals rely upon the Township itself to set the intended direction for the plan to be a useful document.

Plan Elements

Combining the planning implications gained from the inventory and analysis with the established goals and objectives facilitates the creation of the specific plan elements for land use, community facilities and utilities, open space, parks and recreation, traffic and circulation, and housing.

Implementation

The final and essential step is to establish short and long-range strategies to implement the specific plan elements of the Plan in the form of an Action Plan. The overall implementation of the Plan involves a prescribed series of actions carried out by the various Townships boards and commissions through various documents over an established timeline

PAST PLANNING POLICY

UWCHLAN TOWNSHIP

Comprehensive Plan of 2000

The Township Planning Commission completed a Comprehensive Plan in December of 1965, which was updated in 1970. The 1970 Update incorporated sections from the then newly enacted Municipalities Planning Code (Act 247 of 1968). A complete revision to the Comprehensive Plan was prepared in 1999 and adopted in April of 2000. Comments from citizens and Township officials were used to develop general goals regarding land use, development, environmental protection as well as the goals and objectives of the updated Open Space and Recreation Plan and updated Circulation Plan. The aforementioned goals were used to create a Future Land Use Plan, Environmental Resources Plan, Open Space, Park and Recreation Plan, Traffic and Circulation Plan, and Population and Housing Plan.

The Land Use Plan was structured based on several influencing factors, which included: the existing pattern of land use; the natural features of the Township; the existing and contemplated transportation and utility facilities; and the capability of Township land to support additional growth.

Zoning Ordinance of 1994, as Amended

The Zoning Ordinance reflects the land use policies of the Township to implement the Comprehensive Plan and was recently codified in June 2009. Flexible development options within the Zoning Ordinance that permit a range of densities from 1.2 to 4.15 dwelling units per acre and require open space ranging from 15 to 35% include: the Residential Open Space Option (ROSO) (§609), under developments such as the Ridings and Windham were created; Planned Single Family Development (PSFD) (§613), under which the Seasons was created; and PCID, Planned Commercial Industrial District (§508), under which Eagleview was created. The design, ownership and maintenance of

the open space are also regulated within each option. The Zoning Ordinance also includes the following regulations that preserve environmental, cultural, and historic resources: FP, Floodplain District (§510); Historic Preservation (§612) that also requires a Historic Resource Impact Study; and reference to the environmental impact assessment report of the Subdivision and Land Development Ordinance (§614). In addition, two definitions (lot area and riparian buffer) offer indirect protection to environmental features by lessening potential density in proximity of the features. Lot area requires the exclusion of steep slopes in excess of 15%, floodplains, and wetlands. Riparian setback and buffer area requires an undeveloped vegetated corridor of 50 feet from the bank or edge of streams, lakes, wetlands or the boundary of the 100-year floodplain. The Zoning Ordinance is comprised of the following districts, which are listed below with their minimum lot areas and/or maximum densities and development options. Map 1-1 depicts the zoning districts.

- *R-A, Rural Agricultural District (1-2 acre & ROSO).*
- *R-R, Rural Residential District (1 acre-60, 000 square feet and ROSO).*
- *R-1, Low Density Residential District (30,000-60,000 square feet, ROSO, PSFD).*
- *R-2, Medium Density Residential District (20,000 square feet-12 DU/acre).*
- *PC, Planned Commercial District (1 acre).*
- *PC-2, Planned Commercial District (6 acres).*
- *PIC, Planned Industrial-Commercial District (5 acres).*
- *PCID, Planned Commercial Industrial District (2 acre minimum, 3 acre average).*
- *PI, Planned Industrial District (2 acres).*
- *PRD, Planned Residential Development (100 acres, repealed on 4-13-87).*
- *PSFD, Planned Single Family Development (20 acres).*

Subdivision & Land Development Ordinance of 1979, as Amended

The Subdivision and Land Development Ordinance has been periodically amended and was recently codified in June 2009. In addition to the plan requirements, review procedures, and design standards, the Subdivision and Land Development Ordinance requires a fiscal impact study (§402.2.f) and an environmental impact assessment (§402.2.g) that requires the: mapping of various physical resources for each site; evaluation of impacts; an analysis of alternatives; and measures to mitigate adverse impacts. The Subdivision and Land Development Ordinance also requires each residential subdivision and/or land development to set aside a specified amount of open space and recreation area based upon the density of the development (§509.1.d) or a fee in-lieu thereof.

Open Space & Recreation Plan

Uwchlan Township adopted its original Open Space and Recreation Plan in 1992. The 1999 Update to the Open Space and Recreation Plan of 1992 provided guidelines for decision making by the Board of Supervisors and its commissions. The Plan presents recommendations for the improvement to existing parks, the improvement of existing recreation programs, and the possible development of land for additional recreational opportunities within the Township. The Plan concludes that the provision of an open space and recreation network comprised of both active and passive uses is a major element in the high quality of life, which Township residents expect and deserve.

In addition to updating the Open Space and Recreation Plan of 1992, the 1999 Update served as the recreation inventory and plan elements of the Township Comprehensive Plan as well as policy guide for recreation and open space within the Township.

Act 537 Sewage Facilities Plan

The Act 537 Sewage Facilities Plan represents the sewage disposal policies of the Township. The last major stand-alone revision to the 537 Plan occurred in 2005 when the Township acquired additional capacity from the Downingtown Area Regional Authority (DARA). Previous Township policy has been the adoption of the County and/or DARA Plans in terms of capacity allocation for sewage treatment of various areas with specific revisions periodically for logical extensions coinciding to areas of Uwchlan planned for development. This Township policy has maintained consistency between the Act 537 Plan and the ongoing development of Uwchlan. Almost the entire Township utilizes public sewer, except the area north of the PA Turnpike and west of PA Route 113.

CHESTER COUNTY

Landscapes2- 2030 Comprehensive Plan Policy Element

Landscapes2, the Chester County Comprehensive Policy Plan, essentially divides the Township into four areas comprised of the following categories: two Growth Areas - Suburban Center located in the Lionville area, adjacent to the PA Turnpike, Route 100, and Route 113 and Suburban Landscape for most of the balance of the Township; one Rural Resource Area - Rural Landscape located along the western edge of the Township; and one Overlay Feature - Natural Landscape for areas along the East Branch of the Brandywine Creek and Shamona Creek and tributaries of the Pickering, Pine, and Valley Creeks. Both County and Municipal strategies for the land use categories include:

Growth Areas

The growth areas contain and are planned for a full range of public infrastructure services, including utilities, transportation facilities, community facilities, and parks. These areas contain large employment centers, commercial centers, population centers, and large areas of residential development. The growth areas can best accommodate the majority of growth anticipated in Chester County by the year 2030. they are suitable for redevelopment and new development. The growth areas contain historic and natural resources that have been and will be protected from development. The growth areas consist of the urban landscape and the suburban landscape.

Suburban Landscape

The suburban landscape is dominated by the built environment. It has an auto-oriented transportation network and is primarily served by public sewer and water systems. This landscape includes land within the Census 2000 Urbanized Area and nearby areas with planned future development. It is characterized by residential subdivisions containing primarily single-family housing. This landscape contains concentrations of non-residential land uses and the largest employments centers in the County.

Suburban Center

Suburban centers are the focal point for intense mixed use growth in the suburban landscape and serve as economic centers for the county. These areas include a mix of commercial uses, office buildings, parks, and community facilities, and they are suitable for additional development and redevelopment.

Rural Resource Areas

Rural resource areas contain important agricultural, environmental, and scenic resources that contribute to the traditional, rural character of Chester County. These lands are appropriate for conservation and preservation activities, and serve as a target area for the County's agricultural and municipal open space preservation programs. Rural resource areas are located outside of designated county growth areas. As such, they are not targeted for significant infrastructure investment and are the least appropriate for development. The rural resource areas consist of the rural landscape and the agricultural landscape.

Rural Landscape

The rural landscape is characterized by open space dominated by woodland and other open areas. It contains agriculture and scattered residential lots and subdivisions on relatively large lots or with protected common open space. There is an auto-oriented land use pattern with limited non-residential uses. Development is primarily served by on-lot sewer and water systems. The rural landscape is located throughout rural resource areas.

Overlay Features

The natural landscape, villages, and protection areas of national significance identify special natural and man-made features that exist throughout Chester County. These designations are considered "overlays" on the map. They do not replace the landscapes (urban, suburban, rural, and agriculture) and centers (suburban and rural), but add to the basic designations. The overlays serve as a foundation for building the Livable Landscapes map and identify areas where special attention exists or where development activity requires additional precaution.

Natural Landscape

The natural landscape is a network of natural resources throughout Chester County. It is identified by streams, floodplains, and forests. These resources are essential elements of the physical environment and the foundation for the livability of all landscapes. The natural landscape serves as an overlay to all other landscapes. It does not preclude all development or agricultural operations, but indicates major areas of natural resources that should be protected or subject to limited disturbance.

REGIONAL

DVRPC Connections 2035: the Regional Plan for a Sustainable Future

Connections, the Regional Plan for a Sustainable Future is the long-range plan for the greater Philadelphia region prepared by the Delaware Valley Regional Planning Commission (DVRPC). The Plan serves as a collective vision across

municipal and county boundaries as to how the region should look and function in the future. The *Connections* Plan focuses on strengthening linkages between land use, the environment, economic development, and the transportation system. The Plan proposes policies which emphasize sustainable growth, redevelopment of existing regional centers, and funding transportation projects that support the Plan's goals. The *Connections* Plan also addresses new focus areas such as climate change and energy needs, cultural and historic landscapes, and local food production. The Plan is organized around four key planning principals: *Create Livable Communities; Manage Growth and Protect Resources; Build an Energy-Efficient Economy; and Create a Modern Multi-Modal Transportation System.*

Uwchlan Township is represented within *Connections* as follows:

- **2035 Land Use Plan** depicts **Existing Development** in all but the north-central portion of the Township, which is designated **Future Development** and **Greenspace Network** along the Brandywine Creek.
- **Planning Areas and Centers** consider the Township a **Growing Suburb**.
- **2035 Conservation Focus Area Map** designates the Brandywine Valley.
- **Regional Trails Network Map** depicts the existing Struble trail and the east-west Township trail to a proposed connection at Church Farm School.
- **Congested Corridors and Emerging/Regionally Significant Corridors Map** notes US 202, 322, 30, PA 100 as a congested corridor.
- **The Major Regional Projects** list contains Route 100 widening from Shoen Road to Gordon Drive as a highway project.

DOWNINGTOWN AREA REGIONAL PLANNING GROUP

Uwchlan is an ongoing member of the Downingtown Area Regional Planning Group (DARPG) that formed in 1999 to examine land issues and opportunities in the seven-municipality region. In addition to Uwchlan, DARPG includes the municipalities that comprise the Downingtown Area School District; Downingtown Borough and East Brandywine, East Caln, Upper Uwchlan, Wallace, West Bradford, and West Pikeland Townships. The initial role of the DARPG was to examine how the legal obligations for a fair share of land uses might be jointly addressed by the municipalities. Preliminary attention was also given to the concept of trails as a regional recreation asset. The DARPG remains intact as a planning entity in the event future projects are identified. Uwchlan representatives maintain informal, but regular contact with neighboring municipalities, particularly the four that abut the Township. The largely reciprocal relationship has, for the most part, successfully avoided any unintended land use conflicts stemmed from planning decisions on either side of the municipal boundary.

USING THE PLAN

The Plan Update is organized to facilitate its ease of use and interpretation. As discussed earlier, the Plan Update begins with an inventory and analyses of the conditions that influenced the current pattern of development within the Township. A statement of Uwchlan's goals and objectives bridges the inventory and analysis with the plan elements. The Plan Update concludes with specific plan elements and short, long-range, and ongoing implementation strategies within an Action Plan for the Township's future land use, community facilities and services, open space, parks and recreation, traffic and circulation, housing, natural and historic resources, and energy conservation.

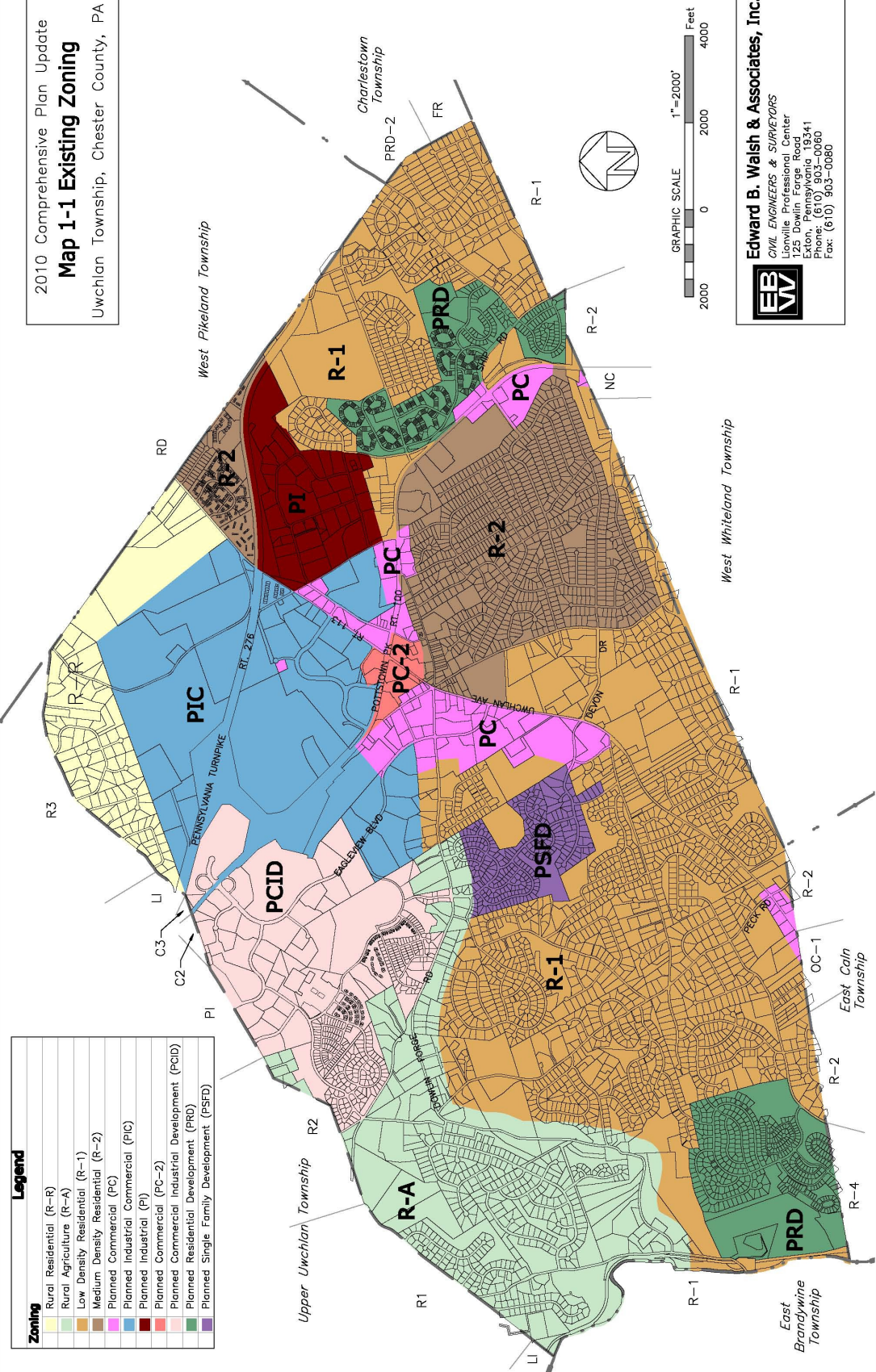
The Plan Update includes a number of maps that are basic planning tools for the Township. These maps contain information with which the Township can not only develop and implement its goals, but can also be used on a continuing, day-to-day basis by the Township Supervisors, Planning Commission, private citizens, builders, business owners, service providers, and others. Township officials and other government agencies as well as prospective residents and businesses may use the Comprehensive Plan Update as a reference resource since it contains a compilation of background information such as population data and transportation inventories as well as future projections.

After adoption, the Plan Update will serve as a guide enabling the Board of Supervisors, Planning Commission, and Township Staff to review current issues and proposals against the recommended direction of the Plan for the future development and character of Uwchlan Township. Overall the Plan Update is a continuous series of recommended individual actions, which must be reviewed and monitored by the Township and action initiated when feasible and timely. The success of Plan implementation requires the coordinated efforts of the Supervisors, Staff, and Commissions and the cooperation of Township landowners.

2010 Comprehensive Plan Update
Map 1-1 Existing Zoning
 Uwchlan Township, Chester County, PA

Legend

	Rural Residential (R-R)
	Rural Agriculture (R-A)
	Low Density Residential (R-1)
	Medium Density Residential (R-2)
	Planned Commercial (PC)
	Planned Industrial Commercial (PIC)
	Planned Industrial (PI)
	Planned Commercial (PC-2)
	Planned Commercial Industrial Development (PCID)
	Planned Residential Development (PRD)
	Planned Single Family Development (PSFD)



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**UWCHLAN TOWNSHIP
COMPREHENSIVE PLAN UPDATE**



**CHAPTER 2
INVENTORY & ANALYSIS**

CHAPTER 2 INVENTORY & ANALYSIS

The Inventory & Analysis Chapter contains the review and details of the following areas of planning emphasis: population, housing and employment; existing development and land use pattern; transportation and traffic conditions; open space, parks, and recreation; community facilities and services; regional relationships; and environmental, cultural and historic resources. Understanding the implications of the data collected within each category of the Inventory & Analysis provides the foundation for setting the goals and planning policy of the Comprehensive Plan Update.

POPULATION, HOUSING & EMPLOYMENT

The population of Uwchlan continues to increase and the particular characteristics of the population are also changing. The character of the population, its housing, and employment need to be evaluated and reflected in the Township Comprehensive Plan Update. This segment of the Inventory & Analysis includes historical data, current information, and population estimates/forecasts. The information will be used in forming and evaluating strategies to implement the goals and objectives of the Township and will be used to allocate more efficiently the resources identified elsewhere in this Chapter. Additionally, this information can be used to provide objective support for land use goals, and ensure that policies are rationally related to needs. Given the dated census data, the Plan should be updated as 2010 data is released.

POPULATION CHARACTERISTICS

Population increases exert a significant impact upon land use, traffic, and municipal facilities and services. Table 2-1 shows the Township's population growth and trends from 1950 to 2000.

**TABLE 2-1
POPULATION & GROWTH COMPARISONS 1950 TO 2000**

Year	Uwchlan Population	Uwchlan Township Population Percent Change	School District Population Percent Change	Chester County Population Percent Change	Pennsylvania Population Percent Change
1950	761	-	-	-	-
1960	995	30.7	-	32.3	-
1970	5,475	450.3	-	31.9	4.3
1980	8,364	52.8	-	14.0	0.5
1990	12,999	55.4	36.0	18.9	0.1
2000	16,576	27.5	18.8	15.2	3.4

Source: U.S. Census Bureau, 2000, 1990, 1980, 1970, 1960 & 1950.

Uwchlan experienced its highest rate of population growth between 1960 and 1970. Since 1970, the population growth has continued, exceeding that of most other municipalities in Chester County. As a comparison, the population in Pennsylvania grew by 0.5 % from 1970-1980, only by 0.1 % from 1980-1990, and 3.4% from 1990-2000, while the population of Chester County increased by 14.0% in the 1970s, 18.9% in the 1980s and 15.2% in the 1990s; the Township's rate of increase was two to three times that of the County and ten times the State during those periods. The population of the Township was 16,576 in 2000.

In July 2009 the U.S. Census Bureau through the Chester County Planning Commission (CCPC) released a 2008 estimate for the Township population as 18,641, which results in a density of 2.8 persons per acre. The CCPC has prepared population forecasts for the Township listed in Table 2-2. While the Township experienced significant growth over the last four decades, the rate of growth is expected to decrease. The numbers given by the CCPC show a growth rate over the next two decades of 9.8% and 7.9%, something not seen for five decades. Even this rate of growth however, may be high given the limited amount of undeveloped residential land remaining in the Township. This will be discussed in more detail in Chapter 4.

**TABLE 2-2
POPULATION ESTIMATE & FORECASTS 2008 TO 2030**

2000 Population	2008 Estimate	2010 Forecast	Change 2000-2010	2020 Forecast	Change 2000-2010	2030 Forecast	Change 2000-2010
16,576	18,641	19,194	15.8%	21,066	9.8%	22,722	7.9%

Source: Chester County Planning Commission & DVRPC, 2009

The PA Dept of Health reported birth and death rates for Chester County for the 5-year period of 2003-2007. The overall rate, or natural increase, was 5.7 persons/1,000 persons (12.9 births minus 7.2 deaths). The CCPC reports that the Township natural increase is about the same as that of the County. The 2005 Township population was 18,150 persons based upon a mid-census report. The 2008 CCPC estimate for the Township of 18,641 persons, accounts for a natural increase of 313 persons and in-migration of 178 persons over the 3-year period of 2005-08. The Township records indicate that 128 building permits were issued for new dwellings over the same time frame (19 single-family, 10 townhouse, 99 apartments). Not all of the dwellings may have been occupied by 2008 due to completion of construction, but if all 19 singles (19 x 3.0 = 57), all 10 townhouses (10 x 2.5 = 25), and 66 apartments (2/3) (48 x 2.0 = 132) were occupied, the resulting 214 persons is not far off the 178 number above.

A review of the age characteristics of the Township provides insight into the current larger age groups and those that will be larger in the future. Table 2-3 compares percentages of each age group for Uwchlan with those of the municipalities in the School District, Chester County, and Pennsylvania. A review of Table 2-3 reveals that the population of the Township had a higher percent of the under 5 and 5-9 age groups than the School District, County, and State. Other school age groups (10-14 and 15-19) were lower than the School District, but fluctuated slightly higher and lower than the County and State. The college age group (20-24) was lower than all other jurisdictions.

**TABLE 2-3
POPULATION BY AGE GROUP, 2000**

Age	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Under 5	1322	8.0	7.4	6.8	5.9
5-9	1,557	9.4	8.4	7.5	6.7
10-14	1,359	8.2	9.0	7.6	7.0
15-19	1,085	6.5	7.6	6.8	6.9
20-24	540	3.3	3.7	5.4	6.1
25-34	2,265	13.7	11.9	12.6	12.7
35-44	3,371	20.3	19.6	17.7	15.9
45-54	2,753	16.6	16.5	14.9	13.9
55-64	1,235	7.5	8.1	8.9	9.2
65-74	719	4.3	4.5	6.3	7.9
75-84	295	1.8	2.6	4.1	5.8
85+	75	0.5	0.7	1.3	1.9
Median Age (years)	35.5		36.6	36.9	38.0

Source: U.S. Census Bureau, 2000, Table DP-1, Profile of General Demographic Characteristics.

The percent of the Township population within the over 55 age groups was smaller than that of the School District, County or the State. The Township's three highest population age groups were 35-44, 45-54, and 25-34, which were the same, albeit lower percents for the School District, County, and State.

Table 2-4 provides information on gender and race characteristics of the Township. Uwchlan, like the School District, County, and State, had a larger amount of females than males. Table 2-4 also illustrates, that with respect to the racial characteristics, the percent of Caucasians and Asians in Uwchlan was greater than that of the School District, County or State, and the percent of Blacks was less.

Table 2-5 lists household information. Uwchlan had virtually the same family size (3.24) as the School District (3.23) and slightly lower household size (2.80 vs 2.83), but both were larger than the County and State. The percent of family households in the Township was also slightly lower than the School District, but larger than the County and State.

**TABLE 2-4
GENDER & RACE CHARACTERISTICS, 2000**

	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Sex					
Male	8,141	49.1	49.6	49.1	48.3
Female	8,435	50.9	50.4	50.9	51.7
Race					
White	15,526	93.7	93.1	89.2	85.4
Black	306	1.8	3.6	6.2	10.0
American Indian, Etc.	13	0.1	0.1	0.1	0.1
Asian, Etc.	537	3.2	2.0	2.0	1.8
Other Race	51	0.3	0.5	1.3	1.5
Hispanic Origin	205	1.2	1.6	3.7	3.2

Source: U.S. Census Bureau, 2000, Table DP-1, Profile of General Demographic Characteristics.

**TABLE 2-5
HOUSEHOLD INFORMATION, 2000**

	Uwchlan Township	School District	Chester County	Pennsylvania
Average Household Size	2.80	2.83	2.65	2.48
Single Person Households	1,079			
Percentage of Total Households	18.2	17.8	22.6	27.7
2 or More Person Households	4,842			
Percentage of Total Households	81.8	82.2	77.4	72.3
Percentage of Family Households	77.1	78.8	71.8	67.2
Average Family Size	3.24	3.23	3.15	3.04

Source: U.S. Census Bureau, 2000, Table DP-1, Profile of General Demographic Characteristics.

SOCIO-ECONOMIC CHARACTERISTICS

Understanding the economic conditions of the Township is another important element of planning for a community. Uwchlan is an affluent township as demonstrated by the data gathered. Table 2-6 indicates that both the median household and family incomes of Uwchlan were slightly larger than the School District, significantly larger than the County, and double the State. The Township per capita income was also higher than all jurisdictions. The percent of total Township families living below the poverty level in 2000 was half that of the School District, one-third of the County, and ten times less than the State.

**TABLE 2-6
INCOME & POVERTY LEVELS, 2000**

	Uwchlan Township	School District	Chester County	Pennsylvania
1999 Per Capita Income	\$33,785	\$33,343	\$31,627	\$20,880
1999 Median Household Income	\$81,985	\$79,645	\$65,295	\$40,106
1999 Median Family Income	\$90,486	\$86,803	\$76,916	\$49,184
Percent of Families Below 1999 Poverty Level	0.7	1.3	3.1	7.8

Source: U.S. Census Bureau, 2000, Table DP-3, Profile of Selected Economic Characteristics.

Residents of Uwchlan Township are well educated, as shown in Table 2-7. In 2000, the percent of the Township population 25 years and older who were high school graduates was considerably higher than that of the School District and County and double that of the State. The percent of the Township population with college degrees was also higher than that of the School District and considerably higher than the County and State. Although not shown in Table 2-7, only Upper Uwchlan Township (57.6%) and West Pikeland Township (59.3%) had a similar percentage of college graduates.

**TABLE 2-7
COMPARATIVE EDUCATIONAL LEVELS – 25 YEARS & OLDER, 2000**

	Uwchlan Township	School District	Chester County	Pennsylvania
	Percent	Percent	Percent	Percent
High School Graduate	97.0	93.9	89.3	81.9
College Graduate	57.7	46.2	42.5	22.4

Source: U.S. Census Bureau, 2000, Table DP-2, Profile of Selected Social Characteristics.

Table 2-8 reinforces the findings that Uwchlan had a higher percent of its population within the early school age, 16.5% attended preschool or kindergarten, than the School District (13.5%), County (13.7%), and State. These age groups will have implications upon the schools within the Township as they advance in grades. On the other hand, the percent of Township students who attended elementary school (46.0%) was less than the School District (48.8%), but higher than the County (44.9%), and State (44.0%). The percent of Township students who attended high school was less than all three jurisdictions. The percent of those who attended college was greater than the School District, but less than the County and State.

**TABLE 2-8
SCHOOL ENROLLMENT - PERSONS 3 YEARS & OVER, 2000**

	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Total	5,229	100.0			
Nursery School, Preschool	573	11.0	8.6	8.3	6.5
Kindergarten	289	5.5	4.9	5.4	5.1
Elementary School (grades 1-8)	2,403	46.0	48.8	44.9	44.0
High School (grades 9-12)	1,042	19.9	23.4	20.4	22.0
College or Graduate School	922	17.6	14.3	21.0	22.4

Source: U.S. Census Bureau, 2000, Table DP-2, Profile of Selected Social Characteristics.

HOUSING CHARACTERISTICS

The quality and condition of the housing stock and residential neighborhoods remains one of the more important assets of the Township. Uwchlan residents derive a personal and public benefit from their well-maintained and varied housing stock. In addition to the economic benefits resulting from appreciating property values in the Township, residents benefit from the opportunity to choose from a variety of different housing types, styles, prices, and environmental settings.

Housing values for owner occupied units and rents for renter occupied units indicate the quality of the housing stock within the Township as well as a picture of what the market will bear for housing. The 2000 housing values in Uwchlan Township were slightly higher than the School District (\$203,500 vs \$199,625) and significantly higher than those in the County (\$182,500) and double those of the State (\$97,000) as shown on Table 2-9. Similarly, rents of Township units were like those of the School District and higher than the County and State. Table 2-9 also indicates that the percent of owner-occupied housing units was about the same as the School District, but greater than that of the County and State. As a consequence, the percent of County and State renter-occupied housing units was higher than that of the Township.

**TABLE 2-9
HOUSING INFORMATION, 2000**

	Uwchlan Township	School District	Chester County	Pennsylvania
Median Value of Owner Occupied Housing Units	\$203,500	\$199,625	\$182,500	\$97,000
Median Gross Rent of Renter Occupied Units	\$852	\$859	\$754	\$531
Percent of Owner Occupied Housing Units	82.0	82.4	76.3	71.3
Percent of Renter Occupied Housing Units	18.0	17.6	23.7	28.7

Source: U.S. Census Bureau, 2000, Tables DP-1 & 4, Profile of General Demographic Characteristics & Profile of Selected Housing Characteristics.

Table 2-10 provides a breakdown of the housing units by type. As Table 2-10 depicts, single family detached units were the dominant housing type in Uwchlan for 2000 with 3,972 units (65.9%) of the 6,030 total housing units. The Township percent of single family units was less than the School District (69.0%), but higher than the County (62.1%)

and State (55.9%). The percent of 1-unit attached structures (townhouses) in Uwchlan (19.4%) was higher than those for the School District (15.0%), County (16.6%), and State (17.9%). The Township percent of 2-unit structures (twin or duplex) was considerably lower than the other jurisdictions. The percent of multi-unit structures containing 3-9 units (apartments or condominiums), while similar to the School District and County (6.9% vs 7.0% and 6.8%), were less than the State (8.0%). Like the smaller multi-unit structures, the percent of Township multi-unit structures containing 10 or more units were similar to the School District (6.9% vs 7.0%), but was less than the County (9.2%) and State (7.9%). The percent of mobile homes in the Township (0.9%) was considerably lower than those for the other jurisdictions.

**TABLE 2-10
TOTAL HOUSING UNITS, 2000**

Unit Type	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Total	6,030	100.0			
1 Unit Detached	3,972	65.9	69.0	62.1	55.9
1 Unit Attached	1,171	19.4	15.0	16.6	17.9
2 Units in Structure	33	0.5	1.2	2.1	5.2
3-4 Units in Structure	191	3.2	2.3	3.2	4.6
5-9 Units in Structure	179	3.0	2.9	3.6	3.4
10-19 Units in Structure	233	3.9	3.8	4.1	2.5
20 or More Units in Structure	182	3.0	3.2	5.1	5.4
Mobile Home	53	0.9	2.4	3.1	4.9
Other	16	0.3	0.1	0.1	0.1

Source: U.S. Census Bureau, 2000, Table DP-4, Profile of Selected Housing Characteristics.

The Township records indicate that as of January 6, 2010 there were a total of 6,563 existing dwellings in Uwchlan, an increase of 805 dwelling units over the 2000 Plan total of 5,758 dwelling units. The breakdown is as follows:

- 4,218 Single Family Detached Dwellings
- 1,324 Townhouses
 - 913 Apartments
 - 60 Twin Houses
 - 48 Condominiums

As of January 2010, Township records indicated that approximately 58 residential units had been approved, but not yet built in existing development within the Township. The majority of these will be built in Eagleview (30 condominiums) and south of Windham (25 single family units). An additional 80 condominium units and 210 senior apartments are planned for the Eagleview Town Center. The Existing Development & Land Use Pattern section of this Chapter and Plan for Land Use contain more information on future residential development.

Residency of the Township has been relatively stable with over half of its population (58.3%) residing in the same home since 1995 as shown in Table 2-11. An additional 20% resided in Chester County in 1995. Overall the percents were similar for the other jurisdictions.

**TABLE 2-11
RESIDENCE IN 1995 - PERSONS 5 YEARS & OVER, 2000**

Location	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Total	15,275	100.0			
Same House in 1995	8,898	58.3	62.5	58.6	63.5
Different House in the U.S.					
Same County	3,056	20.0	19.9	17.9	21.7
Same State	1,684	11.0	8.4	12.1	5.8
Different State	1,444	9.5	8.1	9.4	5.8
Elsewhere in 1995	193	1.3	1.2	2.0	1.4

Source: U.S. Census Bureau, 2000, Table DP-2, Profile of Selected Social Characteristics.

Table 2-12 notes that 98.2% of the total housing units were occupied in 2000, while slightly higher, the percent was similar to those occupied units in the School District, County, and State. The rental vacancy rate was slightly lower in Uwchlan (3.1%) than the School District (5.6%) and County (4.8%), but half the rate of the State (7.2%). Those units in Uwchlan in 2000 that lacked complete plumbing, kitchen, and telephone facilities were less than 0.5% and similar to those percentages of the School District, County, and State, except for the percent of the State lacking telephone service which was triple that of the Township.

**TABLE 2-12
OCCUPANCY & SELECTED CHARACTERISTICS, 2000 (ALL HOUSING UNITS)**

	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Total	6,030				
Occupied Housing Units	5,921	98.2	97.6	96.4	91.0
Vacant Housing Units	109	1.8	2.4	3.6	9.0
Homeowner Vacancy Rate (%)	-	0.6	0.7	1.0	1.6
Rental Vacancy Rate (%)	-	3.1	5.6	4.8	7.2
Lacking Complete Plumbing Facilities	19	0.3	0.4	0.3	0.5
Lacking Complete Kitchen Facilities	5	0.1	0.2	0.3	0.5
No Telephone Service	21	0.4	0.4	0.8	1.4

Source: U.S. Census Bureau, 2000, Tables DP-1 & 4, Profile of General Demographic Characteristics & Profile of Selected Housing Characteristics.

Uwchlan has a relatively new housing stock based upon age of housing units reported in 2000. Table 2-13 indicates that over 50% of the housing units (56%) were built since 1980. The School District and County, on the other hand, had over 50% of their housing units built before 1980 (53.5% & 61.5%), while the State had over 50% of its units built before 1960 (54.6%).

**TABLE 2-13
AGE OF HOUSING UNITS - YEAR BUILT, 2000**

	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Total Housing Units	6,030	100.0			
1999-2000 (March)	212	3.5	2.8	2.8	1.3
1995-1998	461	7.6	7.5	8.1	4.1
1990-1994	848	14.1	11.6	8.5	5.2
1980-1989	1,855	30.8	24.8	19.1	10.1
1970-1979	1,262	20.9	23.1	17.5	13.5
1960-1969	934	15.5	13.4	12.8	11.4
1940-1959	222	3.7	7.5	14.8	24.3
1939 or earlier	236	3.9	9.5	16.4	30.3

Source: U.S. Census Bureau, 2000, Table DP-4, Profile of Selected Housing Characteristics.

EMPLOYMENT CHARACTERISTICS

An analysis of the number of Township residents that are employed, along with the types of occupations in which they are employed, provides additional useful information for planning purposes. Table 2-14 indicates that over half (54.0%) of employed residents had management, professional, and related occupations, which was higher than the School District (48.3%) and County (45.2%) and significantly higher than the State (32.6%).

**TABLE 2-14
OCCUPATION - EMPLOYED PERSONS 16 YEARS & OVER, 2000**

Occupations	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Management, Professional & Related	4,836	54.0	48.3	45.2	32.6
Service	555	6.2	8.8	10.9	14.8
Sales & Office	2,480	27.7	29.4	26.3	27.0
Farming, Fishing & Forestry	8	0.1	0.2	1.0	0.5
Construction, Extraction & Maintenance	457	5.1	6.5	6.9	8.9
Production, Transportation & Material Moving	620	6.9	8.7	9.7	16.3

Source: U.S. Census Bureau, 2000, Table DP-3, Profile of Selected Economic Characteristics.

Table 2-15 displays a similar result when comparing the employment by type of industry. The leading industry groups within which Uwchlan residents worked were professional, scientific, management, administration services (18.1%) and educational, health, social services (16.2). The Township percents were higher for professional services, et al, than the other jurisdictions, but the County and State had higher percents for educational services, et al. Manufacturing and retail trade industries were also a large percentage of Township employees, and whose percents were generally mirrored by the School District, County, and State. The finance, insurance, real estate, and rental/leasing category was another higher category for the Township workers (11.9%).

**TABLE 2-15
EMPLOYED PERSONS 16 YEARS & OVER BY INDUSTRY, 2000**

Industry	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Agriculture, Forestry, Fisheries & Mining	-	-	0.5	2.0	1.3
Construction	306	3.4	4.9	5.6	6.0
Manufacturing	1,381	15.4	16.0	14.8	16.0
Wholesale Trade	660	7.4	4.7	4.0	3.6
Retail Trade	993	11.1	12.9	11.2	12.1
Transportation & Warehousing & Utilities	260	2.9	3.9	4.1	5.4
Information	353	3.9	3.1	3.0	2.6
Finance, Insurance, Real Estate, Rental & Leasing	1,068	11.9	10.5	10.0	6.6
Professional, Scientific, Management, Administrative & Waste Management Services	1,623	18.1	15.7	13.8	8.5
Educational, Health & Social Services	1,448	16.2	18.4	19.8	21.9
Arts, Entertainment, Recreation, Accommodation & Food Services	389	4.3	4.5	5.4	7.0
Other Services	301	3.4	3.8	4.1	4.8
Public Administration	174	1.9	2.1	2.3	4.2

Source: U.S. Census Bureau, 2000, Table DP-3, Profile of Selected Economic Characteristics.

Table 2-16 provides a comparison of the Township to the School District, County, and State in the composition of the work force by selected classification of workers. Private wage and salary dominated the classification of Uwchlan workers with 88.7%, which was similar to the other jurisdictions, although slightly higher. The percent of government and self-employed workers in the Township was slightly lower than the other jurisdictions.

**TABLE 2-16
PERCENT OF EMPLOYED PERSONS 16 YEARS & OVER BY CLASS OF WORKER, 2000**

Class of Worker	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Private Wage & Salary	7,943	88.7	86.0	84.4	82.4
Government	569	6.4	7.8	8.5	11.3
Self Employed	444	5.0	6.1	6.8	6.0
Unpaid Family	-	-	0.1	0.3	0.3

Source: U.S. Census Bureau, 2000, Tables DP-3, Profile of Selected Economic Characteristics.

The place of work for the Township residents reveals something of the character of the municipality, whether it's economically self-sufficient in terms of a commercial/industrial tax base, or merely a "bedroom" community. Uwchlan can still be considered a bedroom community based upon the 2000 Census information. While less than one in four Uwchlan residents (17.0%) worked in the Township, this figure was higher than the School District (13.6%) and County (15.7%) as shown in Table 2-17. More than half of the Township residents (53.8%) worked elsewhere in County, which was less than that experienced by the School District, but more than the County (48.2%). Montgomery and Delaware Counties were the highest two places of work outside of the County for residents of Uwchlan, School District, and County; all had similar percents.

As can be seen in Table 2-18, 85.5% of Uwchlan residents who traveled outside of the Township to work drove alone in a car or other motor vehicle, which was similar to the School District (84.4%) and County (80.7%), but larger than the State (76.4%). The difference with the State is due to double the percent of workers carpooled (10.9%) compared to the Township (4.9%). A slightly higher percent of Uwchlan workers (3.0%) used public transportation

than the School District and County, but was less than the State (5.2%). The percent of Uwchlan residents working at home (6.0%) was slightly higher than the School District and County and double the State (3.0%).

**TABLE 2-17
PLACE OF WORK - WORKERS 16 YEARS & OVER, 2000**

Location of Work	Uwchlan Township		School District	Chester County
	Number	Percent	Percent	Percent
Total	8,816	100.0		
Municipality of Residence	1,502	17.0	13.6	15.7
Elsewhere in Chester County	4,746	53.8	59.6	48.2
Berks County	39	0.4	0.7	0.8
Bucks County	29	0.3	0.5	0.5
Delaware County	527	6.0	6.1	8.0
Lancaster County	86	1.0	1.1	1.3
Montgomery County	984	11.2	9.4	11.4
Philadelphia County	371	4.2	3.9	4.8
Worked Elsewhere in State	84	1.0	1.0	1.0
Delaware	161	1.8	1.9	6.0
Maryland	32	0.4	0.3	0.4
New Jersey	147	1.7	1.1	1.1
Elsewhere in US	108	1.2	0.8	0.7

Source: U.S. Census Bureau, 2000, Census Transportation Package.

**TABLE 2-18
MEANS OF TRANSPORTATION TO WORK - WORKERS 16 YEARS & OVER, 2000**

	Uwchlan Township		School District	Chester County	Pennsylvania
	Number	Percent	Percent	Percent	Percent
Car, Truck or Van					
Drove Alone	7,535	85.5	84.4	80.7	76.5
Carpooled	555	4.9	6.8	8.6	10.4
Public Transportation	266	3.0	2.4	2.6	5.2
Walked	25	0.3	1.0	2.5	4.1
Other Means	36	0.4	0.6	0.6	0.8
Worked at Home	525	6.0	4.7	4.9	3.0
Mean Travel Time to Work (min)	27.4		28.3	27.5	25.2

Source: U.S. Census Bureau, 2000, Table DP-3, Profile of Selected Economic Characteristics.

EXISTING DEVELOPMENT & LAND USE PATTERN

An important element of this Comprehensive Plan Update is the analysis of Township's existing land uses. The descriptions characterize the existing development and highlight the land use pattern. Examining the existing land use over time provides a picture of the historic trends that shaped the current arrangement of land uses. Viewing the existing development and land use pattern of the Township provides the opportunity to evaluate areas best suited for specific future development and serves as the framework for the plan for land use. In addition, the review and documentation of the existing land use reduces the potential conflict of uses within the Future Land Use Plan

PAST DEVELOPMENT

Prior to 1970, the Township was predominantly a rural community with a majority of its land area in agricultural use. Commercial uses were small and scattered, and industrial uses in the Township were negligible. The Township experienced unprecedented growth in the 1970s and 1980s, due primarily to the location of the Downingtown Interchange of the Turnpike, as well as the intersection of Routes PA 100 and 113, and the availability of public water and sewer service. Residential uses were concentrated in two areas: the Village of Lionville; and subdivisions along Route 113.

During the 1970s and 1980s, extensive single family development was constructed in the southern and central portions of the Township including Arbordayle, Ashbridge, Brookwood, Century Oaks, Foxcroft, Greenbriar, Marchwood, Pine Creek Valley, Tarrencoyd, Timber Springs and Welsh Ayres. Multi-family developments were added in the Routes 100 and 113 corridors, including Rhondda PRD, Marchwood Apartments and Aspenwood along Route 100, Severgn along Route 113 and Village Walk along Village Avenue in Lionville, and Liongate and Pickering Pointe located between Route 113 and the PA Turnpike. Several commercial centers were constructed adjacent to the major traffic routes - including Marchwood Center and Colonial 100 along Route 100 and the Lionville and Heritage Centers along Route 113. The Pickering Creek Industrial Park, located east of Route 113 between Route 100 and the Turnpike, Stoneridge located north of the Routes 100 and 113 Intersection, and the Eagleview Corporate Center were also constructed and/or commenced during this same time period.

Single family and multi-family development continued into the 1990s. Single-family developments included: the Seasons and Silver Birches south of Dowlin Forge Road; Shamona Ridge, Uwchlan Hunt, and Whitebriar west of Dorlan Mill Road; Williamsburg on Norwood Road; and Woodlark east of Route 100. Townhouse developments were constructed at Holly Tree and Pickering Station, adjacent to Liongate. Residential development was initiated at the Eagleview development, including the Overlook, Gardens, Claremont Village, and senior housing. The YMCA and commercial uses were developed in the Eagleview Town Center in the late 1990s. Office development continued at Eagleview as well as Stoneridge. Several major community facilities were also constructed, including the Shamona Creek Elementary School on Dorlan Mill Road, the new Downingtown Middle School and conversion of the Junior High to Downingtown East High School on Route 113 in Lionville as well as the construction of the YMCA on Devon Drive.

Since 1999, residential development included: the Ridings, 95 single family lots; Windham, 54 single family lots; Jefferson Grove 22 two-family lots; and Eagleview 463 dwelling units, including Claremont Apartments, Wellington Condominiums, the live-work units, and build-out of Claremont Village. Some commercial uses developed since 1999 included: Exton Ice on Haywood Drive; Elite on Sheree Boulevard; Journal Register Offset, Aegon. Target, Appleby's, Lionville Business Center, and Eckerd/Rite Aid along Eagleview Boulevard; CVS, First National Bank, and medical building along Route 113 (east); Wawa and Commerce/TD Bank along Route 113 (west); Old Village Plaza at the Lionshare; and Starbucks and Subway at Route 100 and Gordon Drive. Community facility uses included Calvary Chapel on Dowlin Forge Road. Parks and open space are discussed separately later in this Chapter.

2009 DEVELOPMENT & LAND USE PATTERN

The 1965 Comprehensive Plan, 1970 and 2000 Updates all documented existing land use in the Township. The existing land use presented within this Update reflects the 2010 conditions in Uwchlan. For consistency with the 2000 Plan (1999 data), the existing land use was divided into the same categories shown on Map 2-1 and Table 2-19.

The land uses in Uwchlan are shown on Table 2-19 and include residential, commercial, industrial, community facilities, parks/open space, agriculture, vacant, and roadways. The land use tabulation of Table 2-19 includes the entire parcel area, not just the portion occupied by the particular developed use. As noted above, the major changes in the

Township over the past ten years due to development involved an increase in residential, commercial, roadways, and parks/open space, with a corresponding decrease in vacant and agriculture.

**TABLE 2-19
EXISTING LAND USE, UWCHLAN TOWNSHIP 2010**

Land Use Category	2010	
	Acres	Percent
Residential	3,111*	46.7
Single-Family	2,889	43.4
Two-Family	12	0.2
Multi-Family	210	3.1
Commercial	612*	9.2
Industrial	68	1.0
Community Facilities	250*	3.7
Parks/Open Space	997*	15.0
Preserved Farm	93*	1.4
Agriculture	425*	6.4
Vacant	307*	4.6
Roadways	793	11.9
Total Township Acreage	6,656	100.0

Sources: Chester County GIS & Tax Assessment Data and land use survey 2009-10.

*Environmentally constrained lands (floodplains, wetlands, riparian buffers, and steep slope) are included within the noted land use categories and are quantified on Page 2-31.

Residential

Residential is located mainly within the southern two-thirds of the Township with the exception of Eagleview, the area adjacent to East Township Line Road, and triangle bounded by Route 113, PA Turnpike, and West Pikeland. Within the residential category, multi-family development (townhouses, apartments, condominiums) is generally located in the following areas: the triangle bounded by Route 113, PA Turnpike, and West Pikeland (Holly Tree, Liongate, and Pickering Pointe); Eagleview (Claremont Apartments, Claremont Village, Garden Villas, Wellington, and the senior apartments); Lionville east of Route 113 and south of Village Avenue (Severgn and Village Walk); both sides of Route 100 from Worthington Road and Rutgers Drive south to Marchwood and Ships Roads (Rhondda, Cadwalader, Aspenwood, Seasons, and Marchwood Apartments). Single family development essentially covers the remainder of the aforementioned area with the exception of the two-family dwellings of Jefferson Grove off of Burdett Drive. Due to the methodology established for the 2000 plan, several residential parcels are large enough for further development. These parcels are not large, but collectively total about 70 acres.

Commercial

Commercial uses consist of office, retail, and service, and were classified such in the 2000 Plan. Most of the commercial uses are located in the following areas of the Township: along Rice Boulevard and Pennsylvania Avenue from Stockton Drive to Route 100; along both sides of Eagleview Boulevard from Routes 113 to 100; both sides of Route 113 from Stoneridge to Gordon Drive; west side of Route 113 north of the PA Turnpike to West Pikeland; along Route 100 from Lionville to West Whiteland; the Town Center in Eagleview; and at the intersection of Route 113 and Peck/Whitford Hills Roads. As experienced over the past ten years, some commercial lands lend themselves to additional development.

Industrial

Industrial uses continue to be located within the Pickering Creek Industrial Park bounded by Route 100, Gordon Drive, PA Turnpike, and Century Oaks.

Community Facility

Community facility uses consist of the schools of the Downingtown Area School District (DASD), the YMCAs, churches, and municipal facilities. Generally community facilities are located in the southern portion of the Township in Lionville (Uwchlan Fire Company and Ambulance Corps and churches), along or near Route 113 from Lionville south (East High School, Lionville Middle School, Lionville Elementary, Uwchlan Hills Elementary Schools, church, and YMCA), along or near Route 100 south (Township Building at Ship Road, Sanitation Department on Rutgers Drive, and churches). The exceptions are the YMCA and wastewater treatment plant in Eagleview, Shamona Creek Elementary off Dorlan Mill Road in the north, and churches along Route 113 near the West Pikeland line.

Park and Open Space

Parks and open space are located predominately south/west of Route 100, except Rhondda and areas in the southeast corner of the Township. The descriptions and areas of the various parks and open space lands of Uwchlan are detailed later in this Chapter

Agriculture

Agriculture continues on all or most of two properties (DASD & Matthews) located north of the Pa Turnpike and west of Route 113 and one property (Nelson Realty) at the PA Turnpike Interchange and Route 100. The Gray property on Worthington Road is also in agriculture. A conservation easement has been placed on the 93-acre Matthews property leaving the three large tracts that total about 425 acres. The two largest properties (DASD & Nelson Realty) are zoned PIC, Planned Industrial-Commercial District, although a 24-acre portion of the DASD property is zoned R-R, Rural Residential District. Plans for the development of each property have been discussed with the Township during the past ten years. The 71-acre Gray property is zoned R-1, Residential District.

Vacant

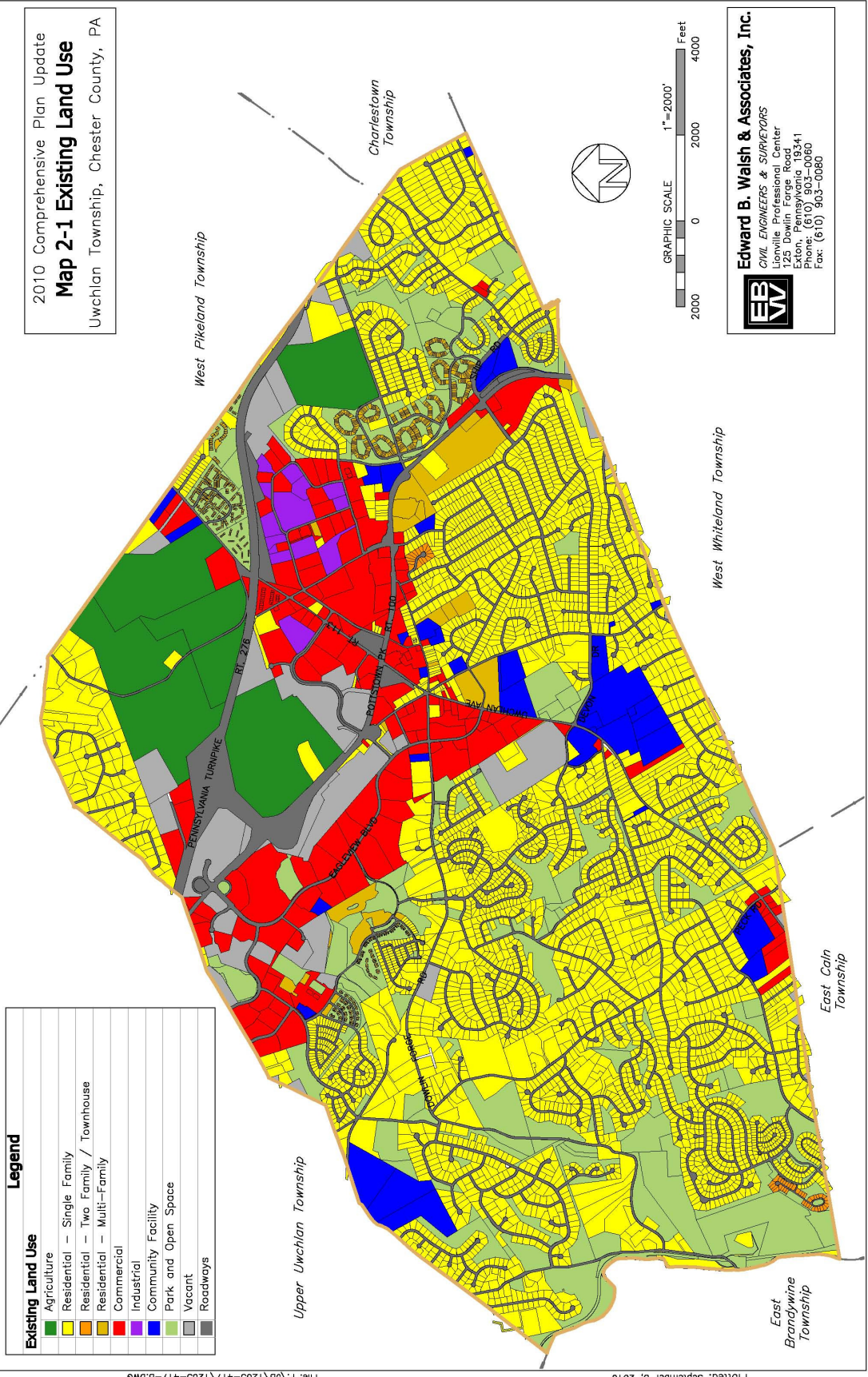
The amount of land in Uwchlan that remains undeveloped is limited. Most of the available land remaining in the Township is zoned for non-residential uses. The area zoned PCID, Planned Commercial Industrial Development District includes the balance of Eagleview Corporate Center (along Eagleview Boulevard, Pennsylvania Avenue, and Route 100) and the Town Center totaling about 63 acres. The balance of Stoneridge, which is zoned PIC, Planned Industrial-Commercial District and totals about 57 acres, plus 9 acres on the westside of Route 100. Two parcels on Haywood Drive totaling about 25 acres zoned PIC. Two parcels along the PA Turnpike totaling about 39 acres zoned PI. Some small infill-commercial areas in Lionville near Target and Wawa remain which are zoned PC/PC-2, Planned Commercial District, collectively about 42 acres.

A smaller portion of the Township is currently zoned for residential uses, which consist of smaller vacant lands, collectively about 67 acres. Notable groups of parcels are located: north of Worthington Road zoned R-1; south and west of Windham zoned R-1; and Eagleview Town Center zoned PCID.

Roadways

The road network of within Uwchlan is shown Map 2-1, whether owned by the Township or State. The representation of the roadways generally corresponds to their associated right-of-way. Lands owned by the PA Turnpike and PADOT are also depicted on Map 2-1.

2010 Comprehensive Plan Update
Map 2-1 Existing Land Use
 Uwchlan Township, Chester County, PA



Legend

Existing Land Use	
[Green Box]	Agriculture
[Yellow Box]	Residential - Single Family
[Orange Box]	Residential - Two Family / Townhouse
[Red Box]	Residential - Multi-Family
[Purple Box]	Commercial
[Blue Box]	Industrial
[Light Green Box]	Community Facility
[Light Blue Box]	Park and Open Space
[White Box]	Vacant
[Grey Box]	Roadways



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COMMUNITY FACILITIES & SERVICES

Community facilities and services are those owned and operated publicly or by private groups or associations that provide functions to serve the public at large. Facilities and services inventoried in this section include: educational facilities, emergency services including police, fire, and ambulance services; and municipal facilities and services. The availability of the various utilities in the Township, such as public sewer and water, solid waste, and storm drainage is also examined due to its importance in terms of present development and future growth. The demand for community services and facilities has increased as the Township grew over the past two decades. In addition to an inventory of the facilities and services any deficiencies in the present level of services are highlighted. Map 2-2 depicts the Community Facilities & Services in the Township.

EDUCATIONAL FACILITIES

Uwchlan Township is served by the Downingtown Area School District (DASD), which provides education for school-age children from kindergarten through grade 12. This service includes bus transportation for most of the students of Uwchlan Township. Understanding the current enrollment and capacities of the schools inventoried within this section provides necessary information that when combined with population data such as school age children gives a forecast of potential need. New school facilities may be considered when developing land use, transportation, and recreational plans, in addition to establishing subdivision and zoning regulations.

All three elementary schools located within Uwchlan have been renovated within the last 12 years to meet all population projections for the School District. Lionville Elementary School, built in 1960 and renovated in 1997, has a capacity of 600 students and a September 2009 enrollment of 614 students. Uwchlan Hills Elementary School, built in 1972 and renovated in 2003, has a capacity of 575 students and a September 2009 enrollment of 566 students. Shamona Creek Elementary School, built in 1990 and renovated in 2007, has a capacity of 675 students and a September 2009 enrollment of 535 students. Each school serves grades kindergarten (K) through 5.

Lionville Middle School, which was renovated in 2000, accommodates students from grades 6 through 8. The building has a capacity of 1,350 students and a September 2009 enrollment of 1,494 students.

The Downingtown East Senior High School, which opened in 2000, serves students in grades 9 through 12 and has a capacity of 1,700 students with a September 2009 enrollment of 1,984 students.

The (DASD) reports that for the 2009-10 school year 3,278 Uwchlan residents attend public school, 553 residents attend private school, and 19 residents are home-schooled. The breakdown of Uwchlan residents attending DASD is as follows: 1,451 at elementary school, 766 at middle school, and 1,061 at high school. Of the overall 4,050 school-age residents, 572 (14.1%) attend something other than DASD. The U.S. Census Bureau 2006-08 American Community Survey contains information on a school district level for the 3-year period. Based upon this information, the following is a breakdown of school age children by their attendance: 11,153 (77.9%); attend public school; 2,614 (18.2%) attend private school; and 551 (0.9%) are home-schooled or not enrolled.

EMERGENCY SERVICES

Emergency services provide a valuable service for the safety and welfare of Uwchlan residents and businesses. The police, fire, and ambulance personnel provide life and property saving services that are vital to the quality of life of the Township. Calls for emergency services are initiated through a 911 system. Police and fire protection and emergency medical services are identified and discussed below.

Police Services

Police protection is an expected and appreciated service by the residents of Uwchlan Township. The need for such services grows as the population and amount of non-residential development grows. The Uwchlan Township Police Department currently provides police protection for the Township. The police department consists of 22 full-time officers, that breakdown is as follows: one chief of police, five patrol sergeants, eleven patrol officers, two detectives, one SRO, two traffic safety, and two staff personnel.

The police department operates a Community Policing Program that includes a "Park and Walk," SRO, and Community Conflict Resolution programs. These programs are designed to get police officers closer to the residents and provide a

proactive customer focused police service. Police service in the Township has been rated very high in previous resident surveys.

Fire Services

Fire protection to Uwchlan Township is provided by the Lionville Fire Company (Station 47). The Fire Company serves Uwchlan Township along with portions of Upper Uwchlan and West Pikeland Townships. The Fire Company has 40+ volunteer firefighters, nine separate line officers, and ten fire police officers. The Fire Company answered 533 responses in 2009, a lower amount than the 609 average yearly responses between 2006 and 2008. Since the 2000 Plan, the Fire Company replaced equipment by adding a 1998 rescue truck, a 2003 engine, a 2008 pump-tanker, and 2000 tower truck with 100 foot ladder. All firefighters are certified as defined by the requirements of the NFPA 1000 Series. The Township provides an annual contribution to the Fire Company for anticipated service. In addition, during work hours, Township Road and Parks Department personnel will respond under the fire service provider program. The Township has a Fire Marshall and conducts annual fire inspections of all non-residential properties in the Township.

Ambulance Services

Uwchlan Ambulance Corps (Station 87) located on South Village Avenue is a non-profit organization that provides Emergency Medical Services to the Township. Station 87 provides 24 hour service and has four Advanced Life Support/Basic Life Support ambulances and two Advanced Life Support paramedic responder units. Personnel consist of 40 active volunteers and 20 full and part time career staff. Station 87 responded to 2,890 calls in 2009 within their 45 square mile coverage area consisting of Uwchlan, Upper Uwchlan, West Whiteland, West Pikeland, West Vincent, East Nantmeal, and Wallace Townships. Station 87 provides service to four regional hospitals: Chester County in West Chester, Brandywine, Paoli Memorial, and Phoenixville. In addition, Station 87 provides numerous educational opportunities for the community as well as many outreach programs.

MUNICIPAL FACILITIES

Facilities

The Uwchlan Township campus contains the following facilities: the administrative building with staff offices and public meeting rooms; the police department building; public works office and garages; and Baird Park (discussed later in the Chapter). The Uwchlan Sanitation Department is located at the Township property on Rutgers Drive. In addition, the Township owns and operates the Eagleview Wastewater Treatment Plant (discussed later in this section).

Township Governmental Organization

Uwchlan is incorporated as a Township of the Second Class and as such its governmental organization starts with the three-member Board of Supervisor elected by the residents as the decision makers that establish Township policy. The Board of Supervisors is responsible for the appointment of all the various Township boards and commissions as well as the hiring of key administrative staff and consultants.

Boards & Commissions

Several boards and commissions were established in the Township, each charged with specific tasks that culminate in recommendations to the Board of Supervisors. The boards and commissions include: a seven member Planning Commission; a nine member Parks & Recreation Board, with liaisons to the Downingtown Area Recreation Consortium (DARC) and the Lionville Youth Association (LYA); a thirteen member Historical Commission; a five member Municipal Authority with recording secretary; a three member Zoning Hearing Board with solicitor; a three member Board of Auditors; a six member Industrial Development Authority with secretary; a nine member Traffic Impact Committee; a three member Codes Appeal Board; a Vacancy Board; an Emergency Operations Center that varies in the number of members; a Downingtown Area Regional Authority (DARA) representative; and a Regional Planning Commission Representative.

Administration & Codes

Headed by the Township Manager, the multi-faceted administration consists of 23 full and 4 part-time employees involving the following section heads and departments: Township Secretary/Administrative Supervisor; Treasurer; Building & Zoning Officer and two assistant building inspectors; Road Superintendent and six person road crew; three person Parks Department; Sanitation Superintendent and two person staff; Fire Marshal and two assistant fire marshals; Emergency Services Director; and two full and four part-time administrative staff.

UTILITIES AND SERVICES

Water Service

Aqua Pennsylvania Water Company (AquaPA) presently serves the developed area of the Township. The vast majority of the Township's dwellings are served by public water, over 90%, as well as all of its businesses. The Township works closely with AquaPA to insure that adequate water service is available to existing and future Township residents and businesses.

Sewer Service

Over 95% of the Township is served by public sewer. The public sewage facilities in the Township are operated and maintained by either the Uwchlan Township Municipal Authority (UTMA) or DARA. Sewage generated by the Township is treated at two facilities: the DARA treatment plant and the Eagleview Wastewater Treatment Plant (WTP). DARA's treatment plant provides wastewater treatment for the majority of the southern and central portions of the Township with public sewer. The Eagleview WTP, which was dedicated to UTMA in 2007, provides service to the Eagleview Corporate Center and surrounding areas and currently treats 0.475 MGD as per the approved Township Act 537 Plan.

Completed in 1973, the Downingtown Regional Water Pollution Control Center provides sewage treatment for the Borough of Downingtown and East Caln, Caln, West Whiteland and Uwchlan Townships. The plant is located in East Caln Township along the Brandywine Creek. The operation of the treatment facility is under the control of DARA. Each of the member municipalities appoints one member to the DARA Board. Uwchlan Township currently has a treatment facility capacity allocation of 2.08395 MGD.

Less than five percent of Uwchlan's population is served by on-lot sewage disposal systems. The largest portion of the Township not currently served by public sewers is located north of the Turnpike and west of PA Route 113. Areas not served by public wastewater treatment systems must rely on on-site sewage disposal, usually in the form of a septic tank and drainfield. Areas outside sewer service areas typically require larger lots to accommodate area for the necessary separation between the well, if public water is not available, and primary and back-up septic drainfield. As a result, density is lower in these areas.

Solid Waste Disposal

The Township contracts with a private contractor, A. J. Blosenski, to provide trash and recyclables collection throughout the Township. Leaf removal has been identified as an issue in the Township.

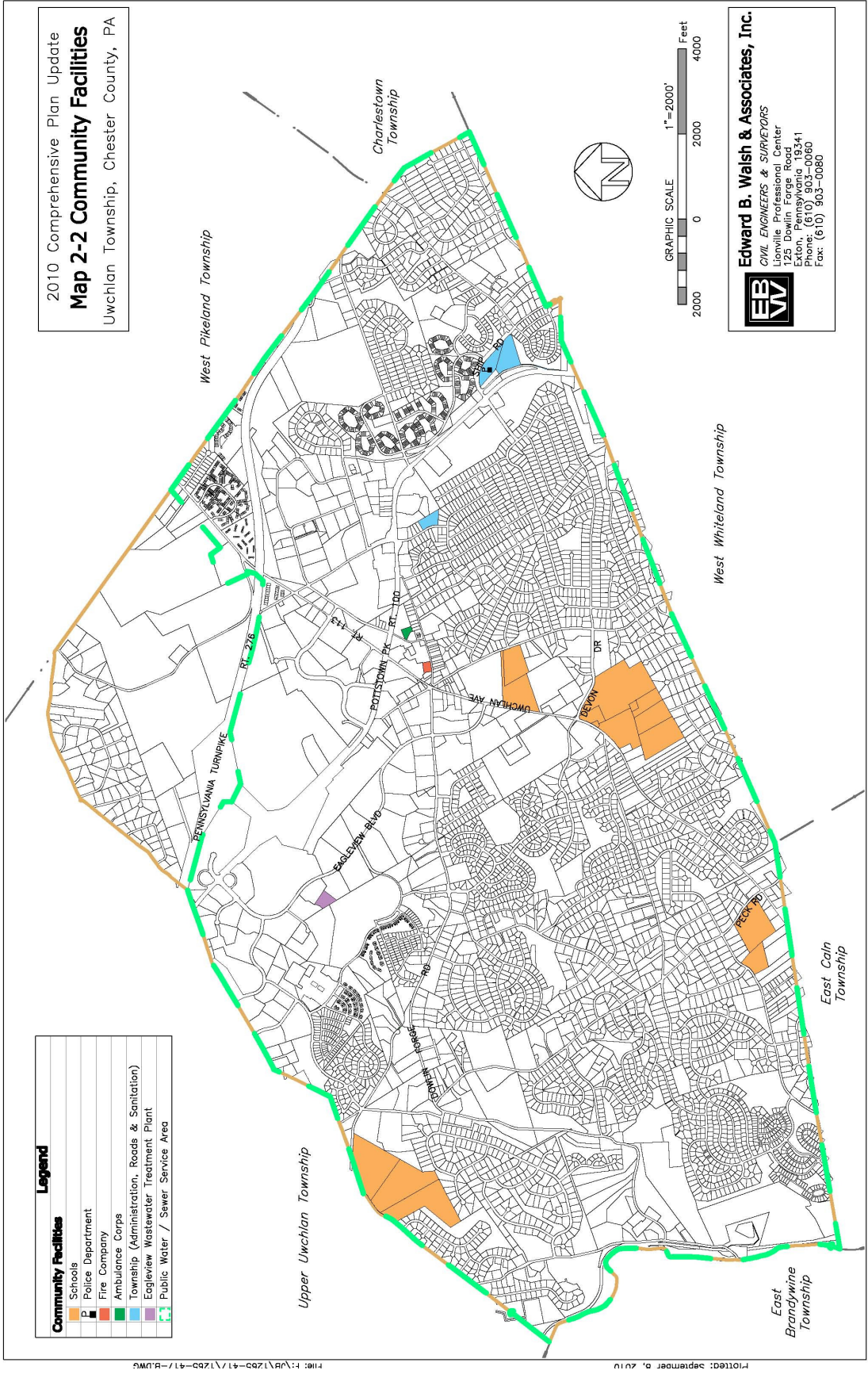
Stormwater Drainage

As development continues to occur within Uwchlan Township and areas adjacent to it, problems resulting from stormwater runoff from ongoing development may increase. The Township's existing Stormwater Management Ordinance includes detailed requirements for the control and reduction of stormwater, including Best Management Practices (BMP) to maintain and/or improve water quality. The Township plans to begin the preparation of a Shamona Creek Watershed Plan in coordination with Pennsylvania Department of Environmental Protection (PADEP) relative to stormwater management. The Township is also responsible for implementing the MS4 Stormwater Management Program per Act 167, which is detailed in Chapter 4.

Other Utilities

In addition to public water and sewer facilities, several other utilities serve the Township. Philadelphia Electric Company (PECO) provides electric and natural gas service. Verizon and Comcast provide telephone service, and cable TV service is provided to portions of the Township also by Comcast and Verizon.

2010 Comprehensive Plan Update
Map 2-2 Community Facilities
 Uwchlan Township, Chester County, PA



Legend

	Schools
	Police Department
	Fire Company
	Ambulance Corps
	Township (Administration, Roads & Sanitation)
	Eagleview Wastewater Treatment Plant
	Public Water / Sewer Service Area

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PARKS, RECREATION & OPEN SPACE

RECREATION: ACTIVE & PASSIVE

Recreation involves the pursuit of leisure activities for the purposes of enjoyment, relaxation, exercise, or other diversion from routine commitments. The quest for recreation may include the desire for a special mood derived from the surroundings; contemplation of a view; solitude of the woods; relaxation around water; or the exertion, excitement and competition on a playing field. Recreation need not be permanent or bound to any particular site or facility. Recreational activity may be formally organized or programmed or it may be spontaneous and molded by initiative or group consensus.

Passive recreation usually involves low intensity recreation by individuals or small groups in natural surroundings. Activities such as hiking, picnicking or nature study are considered passive recreation. Only minimal site preparation and little, if any, structural facilities are required to accommodate most passive recreational activities. Lands constrained from development for environmental reasons are often suited to passive recreation.

Active recreation involves activities which are relatively intensive, both in terms of participation and in use of the land or facility where the activities take place. Active recreation is generally associated with specific facilities such as soccer fields, tennis courts, and the like. It tends to be group-oriented, demanding some form of organizational structure. It frequently requires some knowledge or skill for adequate participation.

OPEN SPACE

In the broadest terms, open space is that area that is not occupied by buildings. Open space enhances building clusters and neighborhoods, separating and connecting them in some relationship. The arrangement and character of this relationship defines the identity, mood, and character of the community and stimulates some kind of emotional response or experience.

The open space character is perceived primarily in a visual context. A variety of landscapes contribute to it, ranging from wooded stream valleys, to hedgerows, woodlots, open yard areas and existing recreational and institutional tracts. These open space areas offer aesthetic and psychological benefits even if physical access is not permitted.

Some open space areas serve important environmental functions. These include floodplains, wetlands, riparian buffers, steep slopes and woodlands. These areas are not only unsuitable for development due to potential hazards, they are also appropriately constrained from development to promote the retention of floodwaters and prevent erosion. Maintained in a natural state, they offer habitat for a variety of flora and fauna as well. Lands that are left open for environmental reasons often provide opportunities for passive recreational activity including hiking, fishing, and nature study.

Certain areas or sites are kept in open space to preserve their unique or special natural, historic, or cultural qualities. Other open space areas are specifically designated, designed or developed for recreational uses, including playfields, courts and picnic areas. Buildings or structures may be included to accommodate further recreational activity and programs.

BACKGROUND INFORMATION

Parks and Recreation Board

In Uwchlan Township, park and recreation issues fall under the purview of the Parks and Recreation Board, established by ordinance January 9, 1967 "to equip, supervise, operate and maintain parks, recreation areas and facilities, and to conduct recreation programs." The Board is comprised of nine members, who are appointed by the Board of Supervisors. The arrangement has worked well to promote cooperation and coordination between the Township and the School District and has facilitated extensive joint use of facilities and programming resources. A wide variety of recreational programs has been and will continue to be offered. The Township Administrative Supervisor is in charge of maintenance of parks and recreation lands and facilities. Extra personnel are hired in the summer in response to greater groundskeeping needs and to oversee seasonally expanded programs.

In addition to the nine member Park and Recreation Board, who meet every month, Uwchlan also participates in the Downingtown Area Recreation Consortium (DARC), the administration and program of which are detailed later.

INVENTORY OF EXISTING RECREATION & OPEN SPACE CONDITIONS

Lands & Facilities

Uwchlan has a well established and diverse parks and open space network with almost 400 acres available to Township residents. From its first public acquisition of ground in the 1970s to its recent completion of the Target Park in 2009, the Township has continued to provide its residents with active recreational facilities, while also preserving environmentally sensitive ground for passive recreation or open space. This policy is consistent with the County goals of preserving open space while also providing recreational use on such land. The Township continues to implement its primary goal of open space preservation either by acquiring sites or requiring their preservation as open space with new development. Development activity since 1999 created 96.7 acres of open space and recreation land; these developments include: Eagleview, developed an additional 134.2 acres of mixed uses with 463 residential units and 59.9 acres of open space and recreation; the Ridings, a 95-lot single family development with 23.0 acres of open space and recreation; and Windham, a 55-lot single family development with 13.8 acres of open space. Since the 2000 Plan, Uwchlan has completed the following park and recreation projects throughout the Township:

- *Walkway connection to Struble Trail at Williamsburg;*
- *Development of three parks at Eagleview (see Table 2-23 for detail);*
- *Parking and trail connection to Martin Park at the Ridings;*
- *Development of the Target Park (see Table 2-23 for detail);*
- *Construction of two trail links along Gordon Drive and Ship Road;*
- *Refurbishment of Aker Park (see Table 2-23 for detail); and*
- *Signage along Uwchlan Trail.*

Before conducting an analysis of the demand for open space and recreational areas within the Township, an investigation of the supply of existing recreational facilities was conducted. Map 2-3 depicts and Table 2-20 lists the locations within the Township where some form of active or passive recreation takes place. The facilities located at the sites are also noted on Table 2-20. There are three types of active/passive recreation lands in Uwchlan: publicly owned land (Township and County); quasi-public land (School District); and privately owned facilities such as the YMCA, Pennypacker Club, and development lands maintained by homeowners associations (HOA).

The public owned and maintained properties in Uwchlan comprise 384 acres (197 acres of parks) that are available for potential use by Township residents. The Township walkway network comprises 9 miles shown on Map 2-4. There are 1.5 miles of the Struble Trail in Uwchlan on 13 acres of land owned by the County that are also available for use by Township residents. Quasi-public and School District lands comprise 187 acres. Although discussed in the 1999 Plan, the Downingtown East High School, between Lionville Middle and Elementary Schools, opened in the Fall of 2000 and is included in this Update. Privately owned facilities comprise 694 acres that are not available for use by all Township residents, unless they are residents of the development, members of the facility or owners of the property.

**TABLE 2-20
EXISTING PARKS & OPEN SPACE**

Township Parks - 197.1 acres

1. **Aker Park:** Located on Bauman Circle in the Marchwood Development, this 5.9 acre park has one tot lot, one basketball court, one baseball/soccer field, one pavilion with four picnic tables, and limited parking.
2. **Baird Park:** 10 acres located on Ship Road at the Township Building, this is strictly a passive park with picnic tables surrounding the five stepping ponds in the rear of the property and parking.
3. **Dowlin Forge Park:** located on about 40 acres of ground on both sides of Shelmire Road near its intersection with Welsh Ayres Way, this largely passive park has two pavilions with picnic tables overlooking a small pond. A connection to the Struble Trail is available here with limited parking.

4. Eagleview Park: Three separate park parcels: 1.37 acres located on the north side of Wharton west Hidden Farm Drive consisting of three tennis courts, one basketball court, and two volleyball courts; 6.55 acres located on the south side of Wharton across from Hidden Farm Drive consisting of two adult softball fields, one little league baseball field, one tot lot, one pavilion, open play area, and parking; and 6.13 acres located on the west side of Wharton between the Villas and Claremont consisting of two soccer/lacrosse fields, one tot lot, one pavilion, and parking.
5. Jones Pond: This scenic passive park consists of 16.9 acres located on Dowlin Forge Road adjacent to the Shamona Creek and Uwchlan Trail. The park has a pavilion, gazebo, picnic tables, and benches overlooking Jones Pond. Parking is limited.
6. Lionville Park: Located off of Devon Drive, this 24.0 acre park contains five baseball fields, three soccer/lacrosse fields as well as a large pavilion with picnic tables, two grills, one tot lot, batting cages, a snack bar, and parking.
7. Martin Memorial Park: This 15 acre tract is located within the Seasons and the Ridings with entrances off of Laurel Moors Drive and Charles Drive, includes one baseball field, one multi-purpose field for soccer/lacrosse and baseball, one basketball court, one tot lot, one pavilion with two picnic tables and a fireplace, and parking.
8. Ridings: 8.6 acres located off Charles Drive that contains parking and handicapped accessible walkway connection to Martin Park.
9. Shamona Creek Parks: Located on 22.7 acres immediately adjacent to the Brookwood subdivision, abutting Peck and Dowlin Forge Roads, and has been divided into two separate parks, Shamona Main and Shamona Peck.
Shamona Main: (Dowlin Forge Road entrance) is one of the Township's largest parks and has access to the Uwchlan Trail. Facilities include one baseball field, one basketball court, two volleyball courts, one tot lot, one pavilion with three tables and two grills
Shamona Peck: (Peck Road entrance) although smaller than Shamona Main, has one baseball field, one tot lot, one pavilion with tables, and parking.
10. Spring Run Park: Located in the Arbordayle subdivision, its entrance is adjacent to 253 Spring Run Lane. This 17.2 acre parcel includes one multi-purpose field for soccer/lacrosse use, one basketball court incorporated into the parking area, one tot lot, one pavilion with picnic tables, and freestanding picnic tables.
11. Target Park: Located on Dowling Forge Road adjacent to the Windham subdivision, this 4.7 acre park includes one large multi-purpose field for soccer/lacrosse use, one basketball court, one tot lot, one pavilion, picnic facilities, and parking.
12. Williamsburg Park: This 18 acre park within the Williamsburg Development abuts the Young property and facilities include one multi-purpose baseball/soccer field, one tot lot, and a walkway connection to the Struble Trail is provided elsewhere in the development.
13. Uwchlan Walkways: The current walkway length totals approximately 9 miles. Phase 1 of 2.2 miles, completed in 2000-2001, created two segments: the longest of 1.7 miles being from the Struble Trail to Pennypacker Swim Club along Dowlin Forge Road; and another segment of 0.5 mile along Dowlin Forge from Fairweather Drive to Eagleview Boulevard. Also in 2001, Eagleview reconstruction along Rice and Pennsylvania Avenue and Eagleview Boulevard to Dowlin Forge Road totaling 2.8 miles; 2004-2006 saw the construction and completion of walkway along PA Route 113 as part of the widening and bridge work for an additional 0.7 mile. Phase 2 of the Township walkway development completed the following during 2003-2005: Ship Road through the Township property to the border with West Whiteland for 0.7 mile and a 0.6 mile segment into the County property within West Whiteland; and along Pickering Drive, Welsh Pool Road, Gordon Drive, and Sheree Boulevard totaling 1.2 miles. The walkway within Rhondda totals 1.2 miles. As noted above, another connection of 0.2 mile was implemented to the Struble Trail from Williamsburg.

Open Space – 834.2 acres (187.0 Township, 551.2 HOA, 96.0 conservation)

1. Arbordayle: 4.8 acres of open space owned and maintained by the HOA, while Township owns park area along stream corridor discussed above. In addition to the recreation facilities discussed under Township Parks this space contains two retention basins, and approximately 1/3 of park area is flood plain, wetlands and wooded area traversed by a stream while smaller open field area is in center of development.
2. Ashbridge: 23.4 acres of open space. HOA owns and maintains the three non-contiguous parcels, two of which contain retention basins, one has a walking path. All three parcels are rather heavily wooded with one being traversed by a stream and containing the accompanying flood plain and wetlands.

3. Brookwood: 14.1 acres of open space. Township owned and HOA maintained. Two parcels make up the open space with both containing retention basins, both being rather steep, heavily wooded and the piece near Dowlin Forge Road containing the entrance drive to the southern portion of Shamona Park.
4. Century Oaks: 7.4 acres of open space. HOA owned and maintained. Space in 2 parcels both heavily wooded, one containing a retention basin, and one having a walking path.
5. Eagleview, Residential: 88.2 acres of open space. The HOA own and maintain the several separate areas that include: two parcels on either side of Deep Willow Drive at Dowlin Forge Road totaling 1.58 acre (OS-B & C) comprise a passive, landscaped entrance; a 5.15 acre (PO OS-A) parcel located at the southwest corner of the Deep Willow Drive and Wharton Boulevard consisting of a natural area with structure, pond, woods, and wetlands; a 1.76 acre (OS-K) parcel located at the southeast corner of the Deep Willow Drive and Wharton Boulevard consisting of a natural area with woods, wetlands, and pipeline; 1.77 acres (OS-O) situated south of the Township's ballfields with an access strip to Dowlin Forge Road consisting of a natural area with woods, wetlands, and pipeline; 23.91 acres (OS-D) located between the Claremont Apartments containing open, natural area comprised of a pond, streams, wetlands, and woods; Claremont Apartments contain three separate greens totaling 0.68 acre; one with gazebo and walkway and one with a pavilion. A 1.19 acre (OS-E) parcel is located between Wharton Boulevards East and West with a gazebo and walkways; Claremont Village has three separate parcels, one 0.45 acre (OS-M & N) green at Mahoney and Braceland Drives, one 5.08 acre (OS-F) green with walkways between the townhouse and singles, and a 3.94 acre (OS-H) parcel located west of the Ferncastle Drive consisting of a natural area with woods, wetlands, and pipeline; the Villas contains a 0.42 acre (PO OS-G) parcel with gazebo and walkway and residual area of 10.42 acres (balance of OS-G); the 1.87 acre Town Center green that contains a concert area, gazebo, garden area, tree alley, and walkways; the 6.89 acre parcel behind Wellington Condos that contains, streams, wetlands, woods; and the four peripheral parcels and internal pipeline parcel of the Gardens that total 23.1 acres and contain a stream, floodplain wetlands, woods, and pipeline (OS-I & others).
6. Eagleview, Commercial: 27.5 acres of open space consisting of ponds, floodplain, wetlands and woods.
7. Foxcroft: 14.2 acres of open space. HOA owned and maintained this space is spread out all over development. The space contains 2 retention basins, is heavily wooded for the most part and contains one area of steep slopes.
8. Greenbriar: 41.3 acres of open space. HOA owned and maintained this space is made up of 3 parcels containing 4 retention basins. The two smaller areas are lightly wooded while the largest piece contains heavy woods, steep slopes with rock outcroppings.
9. Hoffmanor: 7 acres of open space with the Township owning 2.2 acres and the HOA owning 4.8 acres. The space is basically a natural area.
10. Inslee Acquisition: These 38.9 acres, owned by the Township, include the restored Dowlin Forge and are located along the Struble Trail, near the intersection with Dowlin Forge Road, and preserve a large portion of open space. The property consists of steep slopes, wetlands, and mature timber stands that provide a habitat for wildlife.
11. Jefferson Grove: 4.9 acres of open space owned and maintained by the HOA consisting of a detention basin and woods.
12. Jones Acquisition: 16.9 acres of open space owned by the Township, included and described in parks above.
13. Liongate: 22 acres of open space. HOA owned and maintained, the space contains a stocked pond/retention basin; only a small portion of the space abutting the Turnpike is naturally wooded. Recreation is described below.
14. Martin Farm: 15 acres of open space owned and maintained by the Township described above. In addition to the recreation facilities discussed under Township Parks this space contains two retention basins, one being a permanent stocked pond, steep slope, flood plain, wetlands, and parking area linked to the park by a suspended wooden walkway over the wetlands.
15. Matthews Farm: This 93 acres of farmland was preserved jointly between the Township and County through a purchase of development rights program.
16. Meredith: 3.5 acres of open space. HOA owned and maintained containing a retention basin and some wetland areas produced by a springhouse. The open space wraps around the original farmhouse and provides for original open view toward roadway through old pasture area.
17. Natural Lands Trust: 3.0 acres of natural area located south of Dorlan Mill Road at the north end of the Struble Trail.

18. Newman: 4.5 acres of open space abutting Martin Park. The Township owns 1.7 acres that serves as a buffer to Martin park and the HOA owns 2.8 acres that consists of a pond and wetlands.
19. Newcomen: 19 acres of Township owned woodlands and passive open space on Newcomen Road, purchased in 1994.
20. Pine Creek Valley: 10.7 acres of open space. HOA owned and maintained containing 2 retention basins. The narrow parcels that make up the open space are all tied together with blacktop walk paths that crisscross the development through open and wooded areas. Some flood plain and wetland areas are present on the northern tip of the space.
21. Plank: 2.2 acres of open space abutting Meredith open space. HOA owned and maintained. It contains a small retention basis and a small area of wetlands, being for the most part open field areas with few trees.
22. Rhonda: 78.4 acres of open space HOA owned and maintained. Blacktop walk paths connect the numerous parcels of open space, containing several retention basins, wet ponds, a community center with recreation facilities in the form of basketball court, tennis courts, tot lot, a swimming pool and open mowed field area. A small stream emanating on site traverses the large section of open space. The space is basically mowed grass areas with only a small section being wooded and in a natural state.
23. Ridings: 14.5 acres of open space. HOA owns and maintains the four non-contiguous parcels; one contains retention basins, and is rather heavily wooded with some wetlands, the other three function as frontage buffers.
24. Shamona Ridge: 44.8 acres of open space with the Township owning and maintaining the 22.7 acre southernmost parcel, with the other small parcel containing a retention basin being owned by the HOA. The parcel owned by the Township makes up the bulk of Dowlin Forge Park which contains a large pond, pavilions with picnic facilities, jogging paths that link with the Struble Trail to form a ½ mile loop and a natural amphitheater. The jogging trail also provides for a handicapped entrance to the Struble Trail with adequate parking facilities. This section is also very heavily wooded and contains some flood plain, wetlands, and a small stream corridor bisecting it.
25. Uwchlan Hunt: 27.3 acres of open space owned and maintained by the HOA, containing one large retention basin, a large natural area of undisturbed wetlands, some open field area and one large area of steep slope and mature woodlands all adjoining Dowlin Forge Park.
26. Uwchlan Springs: 2.8 acres of open space. HOA owns and maintains the parcel which is a passive, landscaped natural area with a detention basin.
27. Weaver Pond: 24.2 acres of open space owned and maintained by the HOA comprised of a strip of land around the entire development and a large internal section that contains a retention basin, an existing old farm pond, some steep slope area with mature woodland growth. The open space strip that fronts along Route 113 and the western development border contains large rolling man-made berms with mixed plantings.
28. Whitebriar: 16.4 acres of open space owned and maintained by the HOA, containing 2 retention basins, a small stream, some wetlands, one small sparsely wooded area, and is connected to open space areas to the south that abut Dowlin Forge Park.
29. Welsh Ayres I: 17.2 acres of open space owned and maintained by the HOA, containing three retention basins, with a mix of open field area, mature woodlands, and wetland areas, adjacent to Shamona Park.
30. Williamsburg: 59.1 acres of open space mostly owned and maintained by the HOA, but the active recreation area is under ownership and maintenance of the Township. The HOA portion contains a retention basin, some steep slopes, some wooded areas, and a wetland area with stream. The development area has been connected to the Struble Trail by a macadam pathway that goes through the Young Acquisition.
31. Windham: 10.6 acres of open space. HOA owned and maintained. Space in three parcels, one heavily vegetated containing a retention basin and the other two parcels are passive, landscaped natural areas.
32. Woodlark: 20.9 acres of open space owned and maintained by the HOA containing a 2 acre stocked pond/retention facility, a stream, wetland areas and undisturbed natural growth.
33. Young Acquisition: This 79.2 acre parcel, located along the Brandywine Creek and Dowlin Forge Road, is a cornerstone of Uwchlan's efforts to preserve a large portion of the ground in the western section of the Township abutting the Brandywine Creek. Like the Inslee tract, this property contains steep slopes, wetlands, and mature timber stands as wildlife habitat.

County Facilities – 12.5 acres

1. Struble Trail: 12.5 acres containing a 1.5-mile multi-purpose biking and pedestrian trail along the East Branch of the Brandywine Creek the entire length of the Township providing connection the Downingtown Borough.

School District Facilities – 186.8 acres

1. Downingtown East High School: 66.9 acres containing four soccer/lacrosse fields, two field hockey fields, two football fields, one baseball field, one softball field, seven tennis courts, two band practice fields, one running track and cross country course, and one gymnasium.
2. Lionville Middle School: 22.2 acres containing two baseball fields, two softball fields, one football field, one soccer, one soccer/lacrosse field, three field hockey/lacrosse fields, , and one gymnasium. All but two of the fields are located within Lionville Park, which are in addition to the four LYA baseball fields and two basketball courts. The two LYA soccer/lacrosse fields are part of the aforementioned school fields.
3. Lionville Elementary School: 12.2 acres containing one soccer field, one informal playfield, one playground, and one gymnasium.
4. Shamona Creek Elementary School: 63.3 acres containing one soccer field, one informal playfield, one playground, and one gymnasium.
5. Uwchlan Hills Elementary School: 22.2 acres containing two baseball fields, one informal playfield, one playground, and one gymnasium.

Other Private Recreation – 46.5 acres

1. Aspenwood Recreation Area: 0.7 acre containing a swimming pool and picnic tables.
2. Eagleview YMCA: 2.8 acres within Eagleview Town Center containing racquetball courts, exercise equipment, and daycare/preschool.
3. Eagleview, Claremont Apartments: 0.4 acre containing a swimming pool and community building.
4. Eagleview, Claremont Village: 1.4 acre containing a swimming pool, community building, and parking.
5. Eagleview, Gardens: 1.8 acres containing a swimming pool, community building, two tennis courts, and parking.
6. Liongate Recreation Area: within the 22 acres of open space described above containing one basketball court, three tot lots, one swimming pool, and community meeting center.
7. Lionville YMCA: 8.7 acres containing an indoor swimming pool, outdoor swimming pool, and basketball court.
8. Marchwood Apartments Recreation Area: 3.7 acres containing a swimming pool.
9. Pennypacker Club: 15.8 acres which contains 2 swimming pools, a 2 acre pond, 9 tennis courts, and picnic areas.
10. Pickering Pointe Recreation Area: 9.7 acres of open space that contains a playground, gazebo, jogging trail, and picnic tables.
11. Severgn Apartments Recreation Area: 0.5 acre containing a swimming pool.
12. Village Walk Recreation Area: 0.5 acre containing a swimming pool.
13. Williamsburg Recreation Area: 0.5 acre containing a swimming pool and clubhouse.

Recreation Programs

Uwchlan residents participate in a variety of recreational programs; including arts and crafts, athletics, music and dance, social activities, drama, and nature activities. Generally, active programming occurs within the Township, and is sponsored by the Downingtown Area School District (DASD), Lionville Youth Association (LYA), YMCA, or the Township. Outside of the Township facilities, residents utilize private, quasi-public and public facilities and programming agencies, relying particularly on the Downingtown Recreation Consortium (DARC), DASD and on private clubs. Youth athletics are offered by LYA.

Uwchlan is in an envious position with regard to youth athletic programs offered to its residents. The LYA offers seven sports for kids ages 6 to 18. The participation in LYA during the Spring of 2009 was projected at 1,900 registrants of which 1,200 are from Uwchlan. There are few, if any, youth recreation programs that provide such a variety within Chester County. The commitment of the 550 LYA volunteers is demonstrated by the 180,000 hours given to the operation and support of the programs. LYA has grown from the 6 team Lionville Little League in 1965 to the 250 plus team multi-sport league it is today. LYA also provides an 8-week summer camp program. The LYA programs are listed in Table 2-21, expanding over the years as follows:

- | | |
|---|--|
| 1970 - Received Little League Charter; | 1992 – Summer camps offered; |
| 1971 - Introduced girls' softball; | 1996 – Indoor lacrosse offered; |
| 1972 - Incorporated as LYA; | 1999 – Introduced 5-year old co-ed soccer; |
| 1974 - Introduced soccer 9 and older; | 1999 – Soccer celebrated 25 th Anniversary; |
| 1974 - Introduced basketball; | 2000 – Little League celebrated 30 th Anniversary; |
| 1975 - Wrestling began; | 2001 – Summer camps added cheerleading; |
| 1982 - Girls' field hockey started; | 2003 – Soccer celebrated 30 th Anniversary; |
| 1991 – Boys' & Girls' lacrosse started; | 2004 – Summer camps celebrate 10 th Anniversary; and |
| 1991 - Fall Baseball offered; | 2006 – Wrestling tournament celebrates 30 th Anniversary. |

LYA also serves Upper Uwchlan, West Pikeland and portions of East Caln Townships. Together with Uwchlan and the other Townships, LYA has continued a comprehensive plan for facility development. Uwchlan Township essentially provides the playing fields and routine maintenance, while LYA provides the programs that vary from the novice to advanced participant. For eight parks, LYA partners with fencing costs, storage boxes, goals, and bases to augment the Township's maintenance role. In Lionville Park, LYA completely maintains its three little league fields, cuts the grass on all fields it uses for its programs when needed.

As previously discussed, Uwchlan participates within DARC. A recreation director oversees the administrative program and personnel responsibilities. In addition to the director, DARC has two staff members and hires instructors and other staff on an as-needed program basis. A full range of programs are offered to Township residents. DARC offers nearly everything imaginable from a recreation perspective including senior citizen activities, trips to various cultural affairs, whitewater rafting trips, active recreational pursuits like co-ed, women's, and Fall co-ed softball, and basketball leagues, numerous educational courses on business, math, etc., and also programs for those interested in learning various arts and crafts skills. In addition, DARC offers summer half-day camps for ages 3½ through 11 and full day camps for ages 7 through 14. The events are opened to whomever wishes to participate. 2008 participation numbers for Uwchlan residents were 1,573, which was 25% of the overall participation. Tentative Township usage for 2009 is 27%, which includes winter, spring, and summer, but could change with the fall numbers. The overall DARC participation numbers for 2008 were 7,185 of which 6,289 persons were from within the School District and 896 from outside the District. The program is rather heavily utilized by those in the region and even somewhat outside of the school district and is quite successful.

Township residents are served by the Downingtown Area Senior Center (DASC) located on Lancaster Avenue in neighboring East Clan. The DASC provides a wide range of services and activities to adults age 60 and older. From health and wellness programs to full course meals, the DASC provides service to more than 1,500 individuals per year. The DASC offers a variety of classes and clubs designed specifically for the promotion of seniors' mental health and wellness. ROVER, the County-wide service operated by Krapf, provides transportation to and from the Senior Center.

It has been noted that municipalities with populations similar to Uwchlan Township often assume a direct role in recreational programming, aiming to ensure that all sectors of the community are adequately served, including children, youth, adults, senior citizens, and handicapped individuals. Direct programming involvement by the Township, as outlined above, has been minimized through coordination and cooperation (formal and informal) with other public agencies (such as DARC), and with private and quasi-public agencies, including the schools, DASD, YMCA, and LYA. As can be seen by both the DARC information and that which follows regarding the YMCA and LYA, both genders and all age groups in the Township are adequately served by existing recreational programs. Both LYA and the YMCA are sound, growing programs.

The Township entered into a Shared Facilities Agreement with the Downingtown Area School District in 1995. The Shared Facilities Agreement allows Uwchlan, LYA, and YMCA first use of school facilities, both indoor and outdoor, after school activities are finished in return for school use of Township parks, particularly Lionville Park. The Shared Facilities Agreement has increased the use of the school facilities by making them available for use by Township residents.

**TABLE 2-21
RECREATION PROGRAMS AVAILABLE TO TOWNSHIP RESIDENTS**

Quasi-Public Recreation Facilities	
YMCA's: 2 serve Uwchlan	
Lionville	Eagleview
1 swimming pool (outdoor) 1 swimming pool (indoor) 1 basketball court	racquetball courts fitness center preschool
Regional/Subregional Parks:	
Marsh Creek State Park	
<ul style="list-style-type: none"> • Facilities: water & trail-related; boating, swimming, fishing, camping, hiking • Programs include nature study & environmental education. 	
Downingtown School District Programs	
Downingtown East High School	Lionville Middle School
	Adult School; Fields and gym used by LYA; Summer teen program.
Lionville Elementary School	Shamona Creek Elementary School
Summer activities for K-6; After school intramural program; Scout use; Fields used by LYA	Summer activities for K-6; After school intramural program; Scout use; Fields used by LYA
Uwchlan Hills Elementary School	
Summer activities for K-6; After school intramural program; Scout use; Fields used by LYA.	
Athletic Leagues	
Baseball (boys ages 6 to 18): Spring & Fall	Softball (girls ages 6 to 18): Spring
<ul style="list-style-type: none"> • Little League organized into 8 distinct leagues based upon age & skill level (ages: 6-8, 9-12, 13-15 & 16-18; 1,000 players in 2008) • Use 11 fields: Acker, Eagleview, Lionville, Shamona Main, Shamona Peck, Williamsburg Parks; DEHS, Lionville & Uwchlan Hills ES. 	<ul style="list-style-type: none"> • Organized into 6 distinct leagues based on age & skill level (ages: 6-10 & 11-180; 500 players in 2008). • Use 5 fields: Lionville & Shamona Main Parks; Lionville ES.
Lacrosse (boys grades 1-9 & girls grades 3-9): Spring & Winter	Field Hockey (girls grades 3-8): Fall
<ul style="list-style-type: none"> • Organized into 7 divisions for boys & girls (410 players in 2008). • Use 9 fields: Eagleview, Lionville, Spring Run Parks; Lionville ES. 	<ul style="list-style-type: none"> • Organized into 16 teams. • Use fields: Lionville Park.
Soccer (boys and girls ages 6-18): Fall	Basketball (boys & girls ages 6 to 18): Winter
<ul style="list-style-type: none"> • Organized into 85 intramural teams & 7 travel teams. • Use 16 fields: Acker, Eagleview, Lionville, Martin, Shamona Main, Shamona Peck, Spring Run, Williamsburg Parks; Lionville, Shamona & Uwchlan Hills ES. 	<ul style="list-style-type: none"> • Organized into 60 teams based on age. • Use the gymnasium: Lionville MS.
Wrestling (boys grades 1 to 6): Winter	
<ul style="list-style-type: none"> • 120 wrestlers divided by age & weight class. • Use the gymnasium: Lionville MS. 	

Financing

There exists a financial commitment from the Township for recreation, with the 2009 joint recreation budget being approximately \$928,300 and the budget for the park maintenance and administration being \$320,450. However, the key factor to be noted here is that money has been allocated and an effective and comprehensive park and recreation program has been established showing the commitment of the community for providing as many

recreational opportunities as possible while also planning for and actually preserving environmentally sensitive ground through development plan reviews and through actual acquisition.

The Township's past, current and future financial policies are as follows:

- *Provide for its recreational land and facility requirements through the development process;*
- *Provide financial support and facility use for both active and passive recreation programs (DARC and LYA); and*
- *Promote the joint use of the School District facilities through the Shared Facilities Agreement to minimize facility needs.*

The following is a breakdown of the various municipal taxes as they relate to Township residents and labor force: \$1,519,780,970 total assessed valuation; 0.12 Township millage; 24.85 School District millage; 3.804 County millage; \$52 EMS tax (\$47 for Township, \$5 for School District); ½% transfer tax; ½% Township earned income tax; and ½% School District earned income tax.

Administration & Personnel

In addition to the nine member Township Park and Recreation Board, who meet every month, DARC has a full-time director and two staff members. This is in addition to the Township's 4-person staff, which is overseen on a daily basis by the Administrative Supervisor.

The 4-person staff under the Administration Supervisor consists of 4 full-time (40 hours a week) positions and 1 part-time (40 hours a week from May to August) seasonal position. Table 2-22 essentially describes the duties of the 4 park and recreation employees from early Spring to Fall. During the remainder of the year, three of the full-time employees paint and refurbish equipment, pour molds for fence posts and perform other similar duties while the other employee assists in performing fire marshal work.

The Township "Parks and Recreation Department" is adequately staffed to handle its current duties. The Administrative Supervisor utilizes staff from the roads department or sanitation department to fill in for vacations or if additional work is required during a particular week.

Meetings of the Township Park and Recreation Board are advertised and open to the public. Notices for programs or events are made within the newsletters of DARC, LYA, and the Township. In addition to performing administrative and operational duties related to the above programs and budgets, other activities conducted by the Township's Park and Recreation Board include the following:

- Annual Community Day which in 2009 has a \$15,000 budget and begins with the David Good Memorial Run and continues later with games, concert, and fireworks.

Maintenance

The maintenance activities and schedules common to each of the Township parks are set forth in Table 2-22. The maintenance activities outlined in Table 2-22 are the minimum effort for the applicable facility highlighted. Obviously those parks without a particular facility may not need the stated maintenance activity. The Township's current practice is to have all 4 employees work, one park at a time, until each park is completed. This approach results in each park receiving attention (mowing, trash, etc.) each week during Spring, Summer and early Fall. Depending on the dryness or wetness of the season, all parks can be mowed within a week. Any special maintenance activities such as grass cutting at a specified depth or lining fields beyond routine maintenance practices and the Township is reimbursed by organizations requesting such special maintenance.

The Township's major maintenance equipment consists of two 10½' mowers, two 6' zero-turn mowers, two walk-behind mowers, five weed whackers, one 4-wheel drive pick-up truck, and two one-ton 4-wheel drive dump trucks with attachments. The equipment is in good condition and is routinely serviced. The Township has an equipment replacement program.

**TABLE 2-22
GENERAL PARK MAINTENANCE**

Facilities	Maintenance Activity
Play Apparatus	<ul style="list-style-type: none"> - Check footing integrity each spring; - Tighten bolts; cover bolts/nuts to prevent injury; paint each spring as needed; check swing chains each Spring and periodically. - Check wooden equipment for splintering each spring: sand and soil as necessary; - Weed under equipment and install mulch each spring and as necessary.
Ballfields	<ul style="list-style-type: none"> - Weed infield and install diamond tex early Spring (LYA could assist); mow grass weekly/biweekly Spring through autumn; fertilize/lime each Autumn; top seed as necessary late Autumn.
Basketball/Tennis Courts	<ul style="list-style-type: none"> - Sweep to remove dirt/stones from court each Spring; periodic check and replacement of nets; patch and paint asphalt as needed.
Walkways	<ul style="list-style-type: none"> - Add wood mulch or gravel if necessary; patch or replace asphalt/concrete as necessary.
Grass	<ul style="list-style-type: none"> - Biweekly mowing from 4/1 to 10/15
Trees/Landscaping	<ul style="list-style-type: none"> - Pruning of trees and shrubs late winter, each Spring; removal of vines, etc. as needed Spring through Autumn
Streams	<ul style="list-style-type: none"> - Install plantings and rocks to hold banks; remove fallen trees and those leaning; install gabion walls along streams if scouring continues.
Parking Lots	<ul style="list-style-type: none"> - Sweep to remove dirt/stones as necessary. - Restripe lines as necessary and replace wheel stops as needed. - Patch or replace asphalt as needed.
Lighting	<ul style="list-style-type: none"> - Replacement of bulbs as needed and periodic maintenance.
Trash Removal	<ul style="list-style-type: none"> - Sponsor a park cleanup day for each facility early each Spring (LYA or Boy Scouts could assist). - Weekly emptying of trash receptacles and periodic policing of park grounds for litter.

Walkway Network

Walkways, pathways or trails offer a linear recreation and transportation resources as they provide a primary means of access to the broad open space landscape. When designed as multi-use trails they may accommodate pedestrian, equestrian, bicycle, and cross-country skiing use. Uwchlan’s walkways accommodate walking, jogging, running, and biking. Walkways may be incorporated into park facilities and open space areas or may be independent, extending recreational opportunity beyond specifically designated park or open space areas. They can serve as links connecting various open space, park and recreation areas to each other and to the populace they serve. They need not be limited to public lands, but may also pass across private lands at the pleasure of the owners. They can be made permanent through public acquisitions or through establishment of easements. The County’s Struble Trail is multi-use and follows the East Branch of the Brandywine along the western edge of the Township.

Uwchlan has established a 9-mile walkway network throughout the Township. This walkway network offers the opportunity to augment the system of non-motorized access ways linking open space and recreation resources, residential areas, and activity centers throughout the Township. The Williamsburg and Uwchlan Hunt developments are examples of a walkway network being incorporated into the open space network of the development. Approximately 59 miles of sidewalks within developments and along some collector and local streets augment the Township walkway network. Map 2-4 shows the walkway network of Uwchlan.

INVENTORY OF EXISTING TOWNSHIP RESOURCES & LAND

The Township contains substantial portions of its area that are “protected” or restricted from future development. The “protected” lands comprise about 1,800 acres or 27.0% of the Township consisting of the following categories and are shown on Map 2-5:

Lands Owned by Public Agencies

This category consists of land owned by the Township 401 acres (197.1 parks, 187.0 open space, 16.6 community facilities), County 12.5 acres, State 30.5 acres, and School District 186.8 acres. Tracts within this category include the Township Building and parks/open space, Shamona Creek, Uwchlan Hills, and Lionville Elementary Schools, Lionville Middle School, and Downingtown East High School. These areas comprise approximately 631 acres or 9.5% of the Township. A complete listing of land owned by the Township and School District is provided in Table 2-20.

Registered Historic Districts

The district is described in the historic resources section of this Chapter and includes the Village of Lionville. The district comprises 86 acres, or 1.3% of the Township.

Lands Protected by Township Ordinance

Those lands included in this category are areas of floodplain, wetlands, riparian buffers, and steep slope. The Township's Zoning Ordinance contains regulations that prohibit development upon floodplain, wetlands, and steep slopes and within riparian buffers (as defined on page 2-44), thereby, preserving these resources. Floodplain, wetlands, and riparian buffers comprise approximately 428 acres or 6.4% of the Township, 258 acres (3.9%) outside of lands owned by public agencies, while steep slopes (15-25% & 25%+) comprise approximately 1,026 acres or 15.4% of the Township, also about 131 acres (2.0%) are outside of lands owned by public agencies.

Conservation Easements & Homeowners Associations Lands

Lands within this category include the properties under easement, such as the Matthews Farm, and those parcels owned by Homeowners Associations within developments such as Arbordayle, Ashbridge, Eagleview, Greenbriar, Rhondda, Ridings, and Williamsburg. This category comprises 694 acres or 10.4% of the Township. A complete listing of parcels under easement or owned by homeowners associations is provided in Table 2-20.

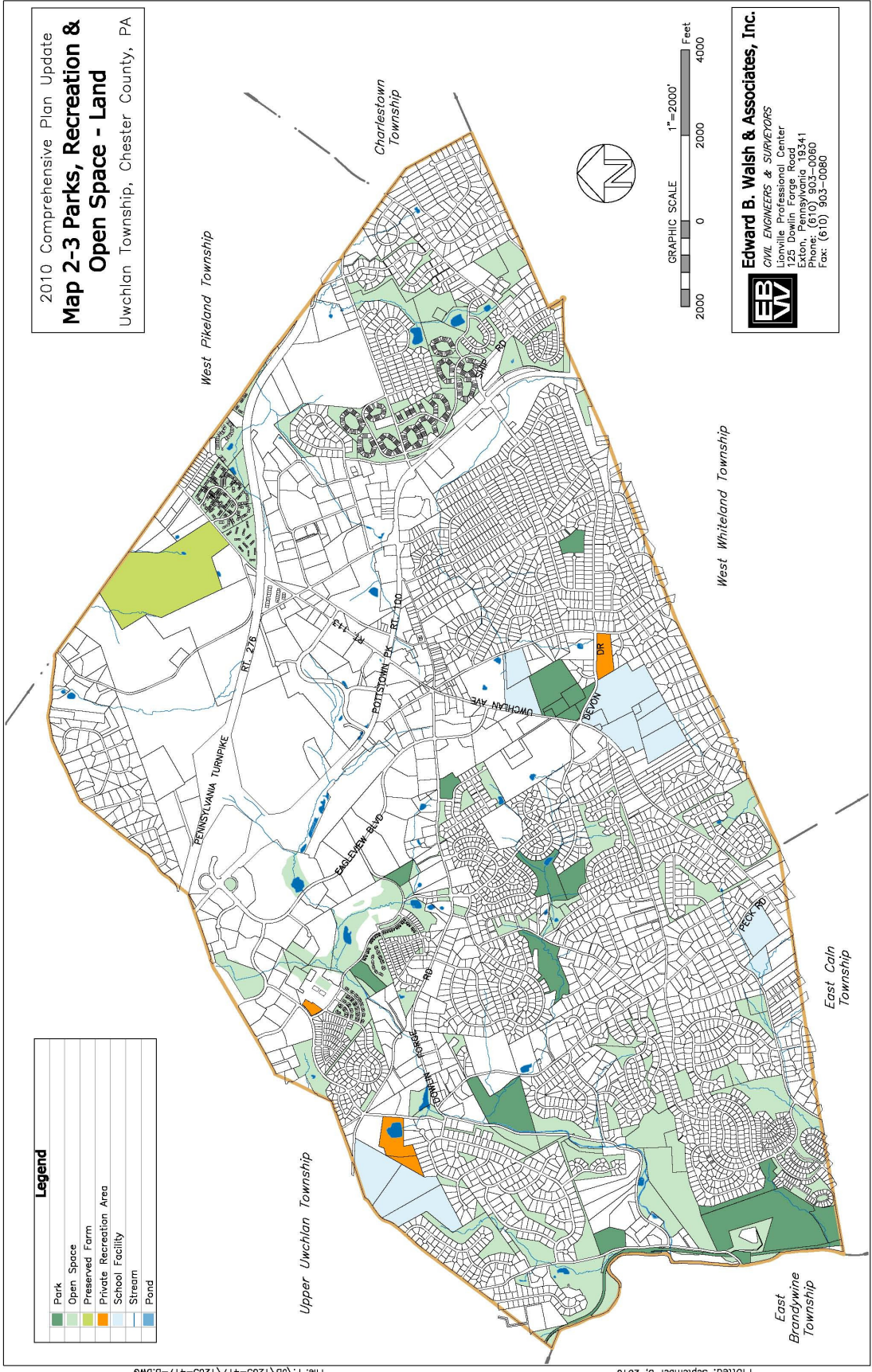
Utility Transmission Easements

Several natural gas and petroleum products transmission lines traverse the Township. There are six oil transmission lines that traverse the Township owned by Allegheny, Atlantic, Laurel, Mobil, and Sun Companies. The oil transmission lines traverse the Township in a northwest-southeast direction, generally from Pennypacker Road toward Route 113 (crossing Route 113 between Woodland Drive and Devon Drive). Four natural gas transmission lines (two each owned by Manufactures and Texas Eastern) traverse the extreme eastern and western portions of the Township.

2010 Comprehensive Plan Update
Map 2-3 Parks, Recreation & Open Space - Land
 Uwchlan Township, Chester County, PA

Legend

	Park
	Open Space
	Preserved Farm
	Private Recreation Area
	School Facility
	Stream
	Pond



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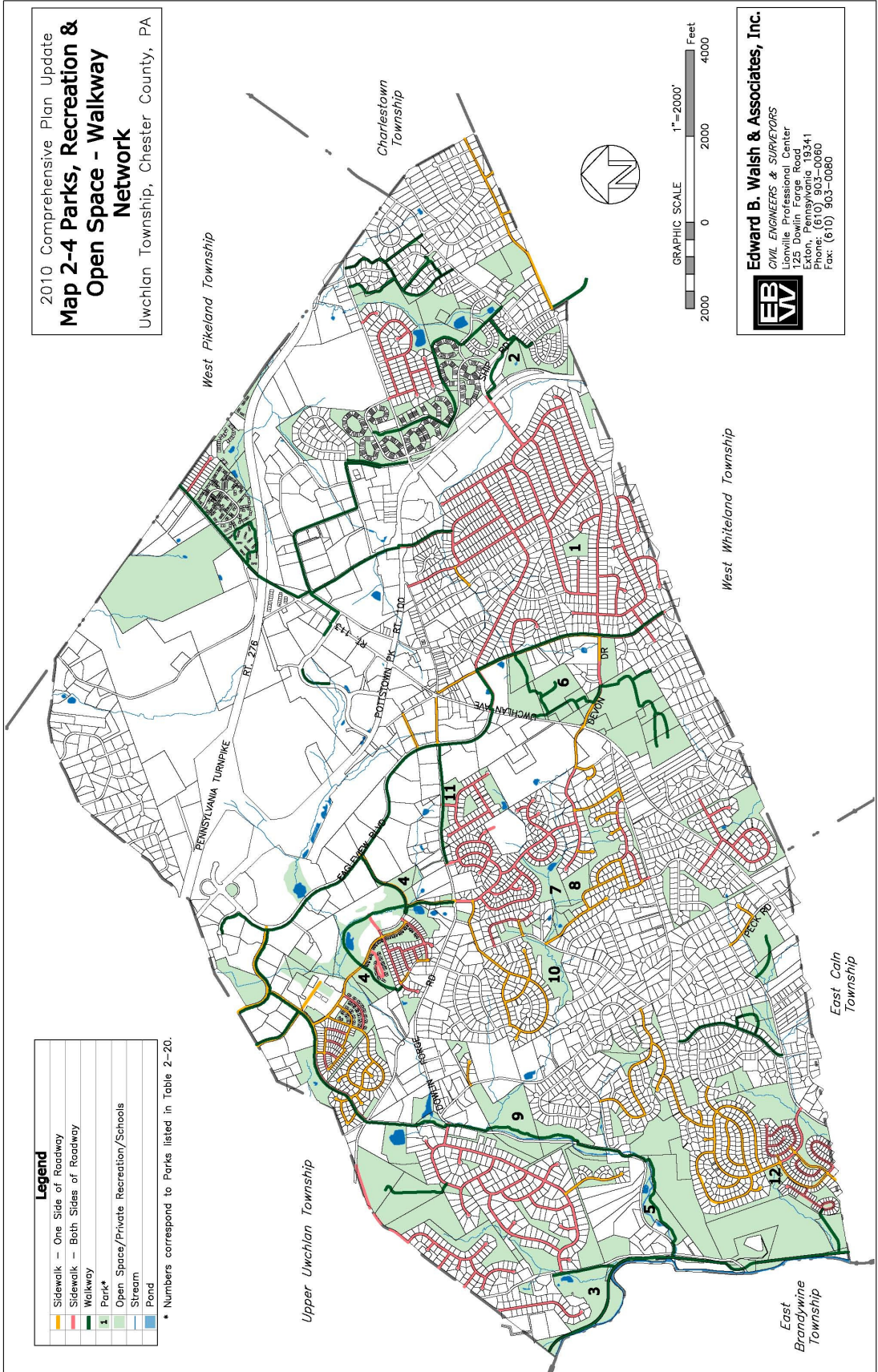
PRINTED: September 9, 2010

2010 Comprehensive Plan Update
Map 2-4 Parks, Recreation & Open Space - Walkway Network
 Uwchlan Township, Chester County, PA

Legend

	Sidewalk - One Side of Roadway
	Sidewalk - Both Sides of Roadway
	Walkway
	Park*
	Open Space/Private Recreation/Schools
	Stream
	Pond

* Numbers correspond to Parks listed in Table 2-20.

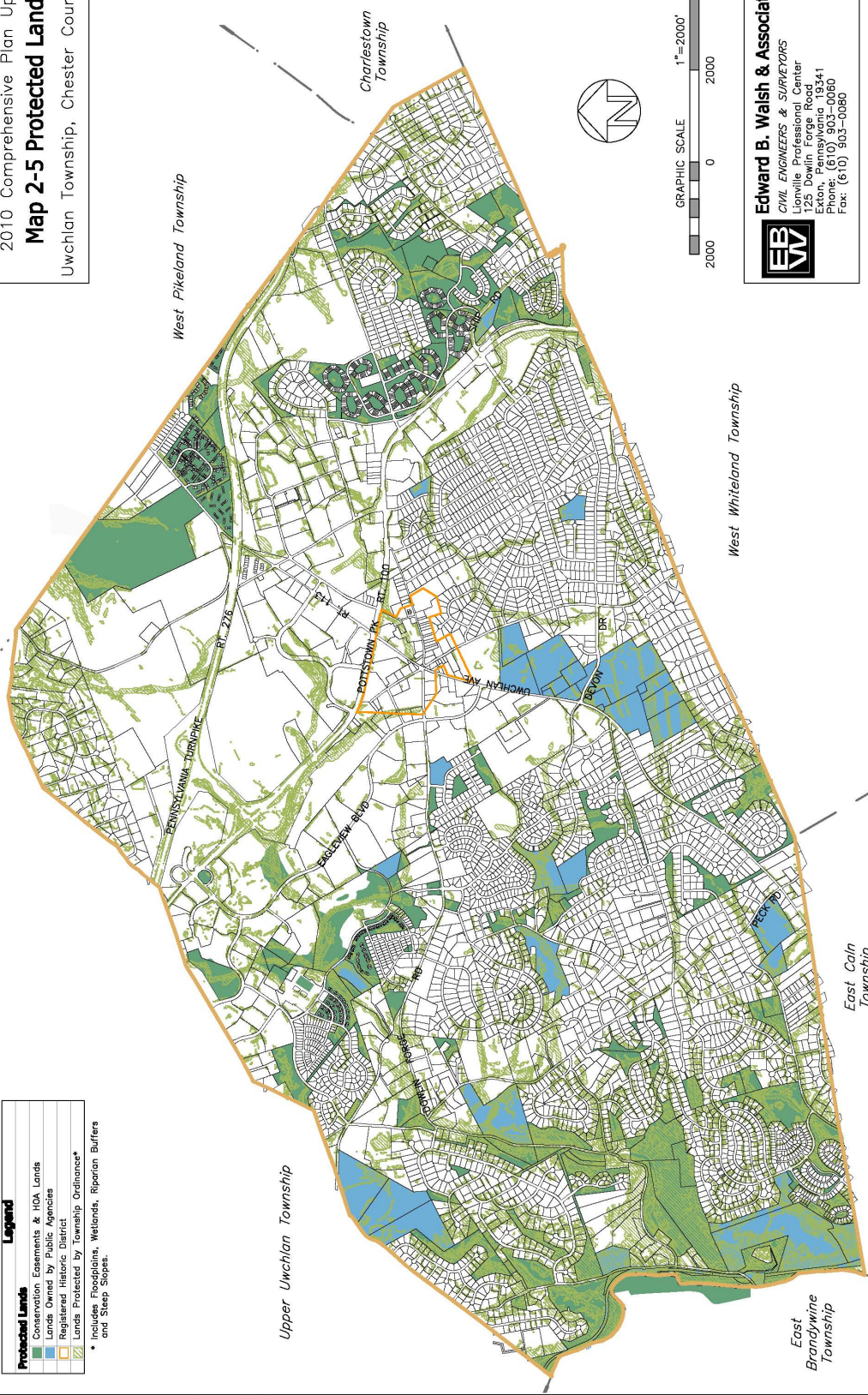


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2010 Comprehensive Plan Update
Map 2-5 Protected Lands
 Uwchlan Township, Chester County, PA

- Legend**
- Conservation Easements & HOA Lands
 - Lands Owned by Public Agencies
 - Registered Historic District
 - Lands Protected by Township Ordinance*
- * Includes Floodplains, Wetlands, Riparian Buffers and Steep Slopes.



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TRAFFIC & CIRCULATION

The Township road network performs several functions. The existing road network guides both circulation and land use patterns of the Township. Providing the means for transportation is the most important function and has several characteristics. Some roads are intended to move traffic at a moderate speed though Uwchlan to destinations beyond the Township, while others are intended to provide access to abutting properties. Another important factor of the road network is defining the Township character. Roads can either enhance landforms, vegetation, and existing buildings or ignore them. Decisions on roadway improvements or new roads need to take into consideration both the Township's character and traffic characteristics. Circulation is and will continue to be a crucial factor in the decision making process regarding land use.

CURRENT STATUS OF THE TOWNSHIP'S ROADWAY SYSTEM

Map 2-6 illustrates the current roadway system and sets forth its functional classification.

Functional Classification of Roads

Functional Classification refers to the type of traffic and type of trip a given road is designed to accommodate. Typically, roadway systems are divided into the following categories of roadways.

- **Arterials:** These are major roads carrying regional traffic at higher speeds and at minimum delays. While arterials can serve abutting land uses, in the case of expressways such as the Pennsylvania Turnpike, they may not. In Uwchlan Township, in addition to the Pennsylvania Turnpike, PA Routes 100 and 113 are arterials.
- **Collector Roads:** These roads shuttle traffic between arterials and local roads. They serve abutting land uses, particularly in commercial areas. However, it is important to limit the number of access points to abutting properties to maintain efficient traffic flow. In Uwchlan Township, major collector roads are designated as follows:

- | | |
|----------------------------------|--|
| - Concord Avenue | - Peck Road |
| - Dorlan Mill Road/Shelmire Road | - Rice Boulevard |
| - Dowlin Forge Road | - Pennsylvania Avenue |
| - Eagleview Boulevard/Crump Road | - Sheree Boulevard |
| - Gordon Drive | - Ship Road/Marchwood Road |
| - Lionville Station Road | - Whitford Road |
| - Norwood Road | - Woodland Road/Deep Willow Road/Devon Drive |

The following have been designated as minor collector roadways:

- | | |
|--|------------------------|
| - Andover Drive | - Sharp Lane |
| - Bausman Drive | - Taylor Road |
| - Deep Willow Road (Wharton to Dowlin Forge) | - South Village Avenue |
| - Newcomen Road | - Valley Hill Road |
| - Pennypacker Road | - Welsh Ayers Way |
| - Pickering Way | - Welsh Pool Road |
| - Princeton Drive | - Wharton Boulevard |
| - Rutgers Drive | - Worthington Road |

- **Local Roads:** All other Township roads. Local roads are designed to serve primarily the residences and businesses fronting the street and carry a low volume of through traffic.

The "functional classification" definitions from the Subdivision and Land Development Ordinance are as follows:

Major Street – A street serving a large volume of comparatively high-speed and long-distance traffic, including all facilities classified as main and secondary highways by the Pennsylvania Department of Transportation (PADOT).

Collector Street – A street designed and located to provide the means to drain traffic off local streets before volumes get too high and to provide access for through traffic between residential neighborhoods and districts within the

Township to major streets and/or a street used for access to nonresidential properties, i.e., commercial, industrial, professional, etc.

Minor or residential street – A street for local traffic as a means of access to abutting residential lots.

TRANSPORTATION INITIATIVES

Uwchlan has been active in improving the streets and roadways within the Township. Since 2000, the Township has completed the following road widening or segment improvements:

- PA Route 113 – Gordon Drive to West Pikeland Township (including the PA Turnpike Bridge widening).
- Pennsylvania Avenue extension to Township Line.
- Wharton Boulevard – Rice Boulevard to Eagleview Boulevard (new collector road).
- Deep Willow Drive – Wharton Boulevard to Dowlin Forge Road (new collector road; extension of collector).

In addition Uwchlan has completed the following intersection improvements:

- | | |
|---|---|
| - PA Route 113 & Eagleview Boulevard/Crump Road | - Pennsylvania Avenue & Eagleview Boulevard |
| - PA Route 100 & Sheree Boulevard | - PA Route 113 & Sheree Boulevard |
| - Eagleview Boulevard & Mukalian | - Eagleview Boulevard & Dowlin Forge Road |
| - Eagleview Boulevard & Sheree Boulevard | |

Uwchlan Township is funding design costs for the continued widening of PA Route 100 between Welsh Pool Road and the Exton Bypass in West Whiteland Township. This project is being done jointly with West Whiteland Township.

Scenic Roads

The Township has several road segments considered scenic that are highlighted in more detailed within the Environmental, Cultural & Historic Resources section of this Chapter.

Mass Transit

Minutes from the center of Uwchlan (Routes 100 & 113), SEPTA's R5 Train provides commuter rail service to Philadelphia at the following stations: Downingtown (5 miles) located on the south side of Route 30 at Stuart Avenue; Whitford (4 miles) located on the west side of Whitford Road north of Spackman Lane; and Exton (4 miles) located on the east side of Route 100 south of the Route 30 Bypass. AMTRAK service is available to Harrisburg and Philadelphia at the same three stations. Commuting times to Philadelphia or Harrisburg via SEPTA and AMTRAK are 30 minute to one hour commutes depending upon time of day. Connections at 30th Street Station in Philadelphia place New York and Washington DC approximately one hour away on AMTRAK.





The bus and train routes serving Uwchlan are augmented by Park & Ride Lots located at the following locations: Route 113 east of Route 100; Downingtown Station at Route 30 and Stuart Avenue; Whitford Station at Whitford Road and Spackman Lane; Exton Station at the Route 100 and Exton Bypass Interchange; Rout 30 at the Route 202 Interchange (4.5 miles).

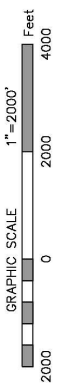
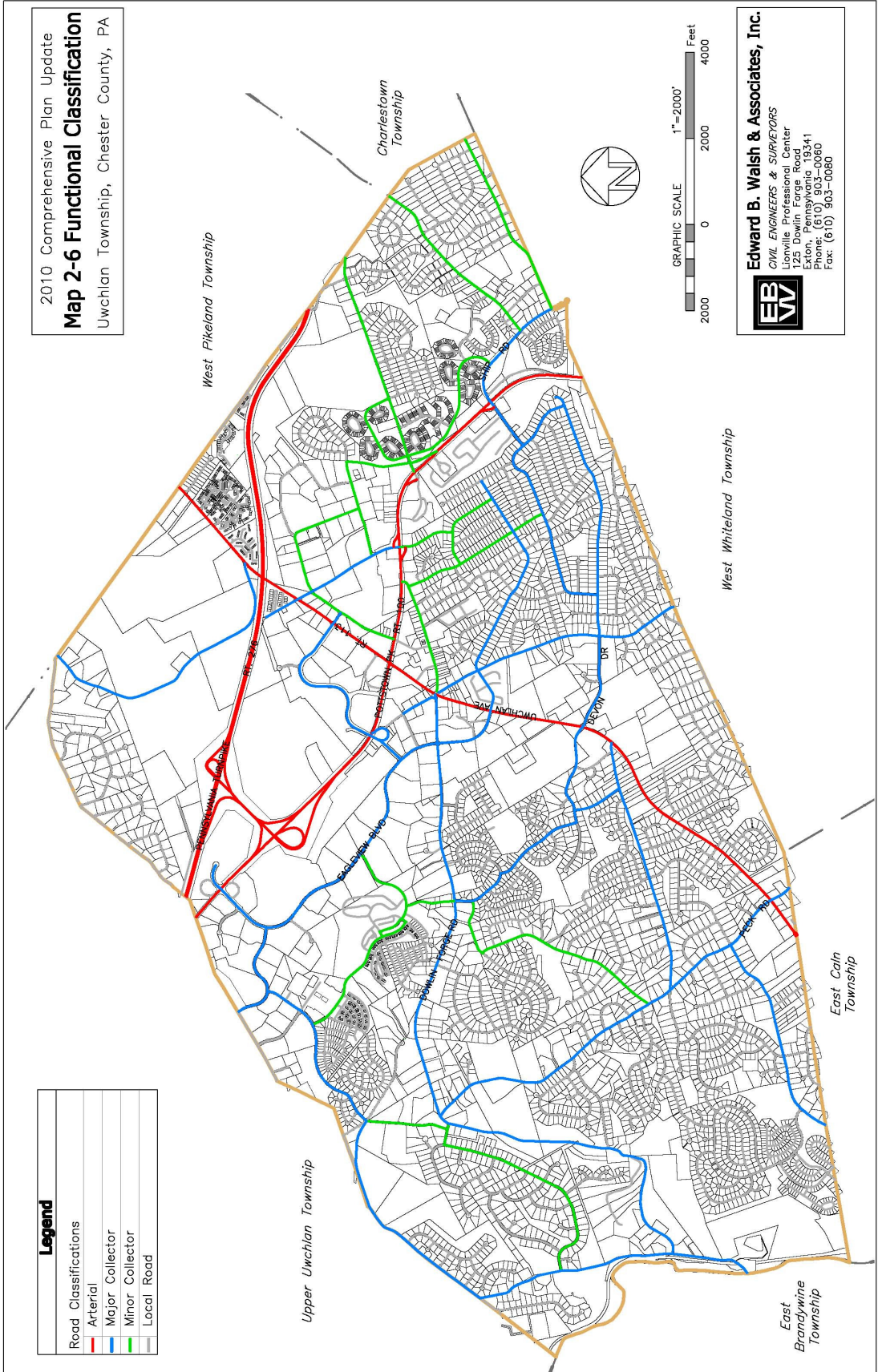
Non-Motorized Transportation

As discussed earlier in the Parks, Recreation & Open Space section of this Chapter, a network of trails and sidewalks exist throughout the Township. The 9-mile Uwchlan Trail and its major spurs were designed not only as the chief pedestrian arteries linking the developments within the Township to Struble Trail and County/Township park in West Whiteland, but linking the developments to the schools, shopping, and employment areas of the Township. Few municipalities can match the 59 miles of sidewalks located along many major roads and within developments throughout the Township.

2010 Comprehensive Plan Update
Map 2-6 Functional Classification
 Uwchlan Township, Chester County, PA

Legend

Road Classifications	
	Arterial
	Major Collector
	Minor Collector
	Local Road




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NATURAL & HISTORIC RESOURCES

Natural resources may be either renewable or non-renewable. Some resources are easily degraded and many are irreplaceable. Although many resources such as air, water, and timber can renew themselves, they do so in a time frame often beyond cultural intervention. Frequently, the ability of humans to deplete resources has not been balanced by our ability to restore them. While individual landowners have few limitations upon their land use and may not intend to degrade the natural and cultural environment, at the Township scale, the cumulative effects of improper land use management can pose severe threats to public health, safety and welfare. Encroachment of development in marginal areas also may result in damage to existing homes through flooding and landslides.

There is a practical implication to viewing land as a resource rather than as a commodity. The unique and irreplaceable beauty, character and sense of community in the Township have been recognized as resources worth protecting. Land use management should occur in a framework of stewardship and in harmony with the long-term preservation of the land. Natural and cultural resources are essential to the quality of life in Uwchlan Township and the following sections provide information intended to promote their appropriate management.

The Township Environmental Resources are mapped as follows: Water Resources (Map 2-7), Land Resources (Map 2-8), and Historic & Cultural Resources (Map 2-9). A description of each of the resources follows.

PHYSICAL FEATURES & NATURAL RESOURCES

Topography

The form of the land is an essential factor in determining the land use potential of any community. A detailed examination of the development pattern of nearly any suburban area will reveal the manner in which the location and nature of topographic features have affected its growth.

Uwchlan falls entirely within the Piedmont province of the Appalachian Highlands. The Township is essentially one physiographic area: upland. Most of Uwchlan is gently rolling, except for another area of steeply eroded slopes in the southwest corner of the Township, flanking the valleys of the East Branch of the Brandywine and the Shamona Creek.

Percent of slope is directly related to the suitability of land for specific forms of development. A five-category system has been used to identify degree of slope.

***0% to 3% Slope:** Such slopes are generally suitable for all development uses.*

***3% to 8% Slopes:** These slopes are suitable for medium density residential development, agriculture, and nearly all commercial, industrial and institutional uses.*

***8% to 15% Slopes:** Slopes of this nature are best suited for moderate to low density residential development, however, considerable care should be exercised in the location of any commercial, industrial or institutional uses.*

***15% to 25% Slopes:** Such areas are suitable only for yards in low-density residential development, limited agriculture, and recreational uses.*

***Over 25% Slope:** This steeply sloping land should be used only for open space and certain recreational uses.*

Slopes equal to fifteen percent or greater are classified as environmental sensitive due to the increased potential for erosion, low degree of slope stability and difficult access in poor weather conditions. Concentrations of steep slopes are found along the East Branch of the Brandywine Creek in the western and southwestern portions of the Township, particularly where streams have eroded deep ravines. Steep slopes are shown on Map 2-8.

Drainage

The surface drainage pattern of Uwchlan Township is situated within two drainage basins as shown on Map 2-7. The Schuylkill River Basin drains the eastern quarter of the Township. The Pickering Creek is a sub-basin of the Schuylkill River Basin and Pine Creek is a sub-basin of the Pickering Creek.

The remaining three-quarters of the Township, lying west of the Schuylkill River Basin, are located in the Brandywine Creek Basin. The Shamona Creek and Valley Creek are both sub-basins of the East Branch of the Brandywine Creek.

Aside from the streams, surface water is contained in a few scattered ponds, some of which are used for recreation and stormwater management. The drainage basins of stream valley systems may be classified as follows:

- *The smallest fingertip tributaries are designated order 1;*
- *Where two first-order channels join, a channel segment of order 2 is formed; and*
- *Where two of order 2 join, a segment of order 3 is formed, and so forth.*

Major stream corridors include the stream valley systems of the third, fourth and fifth order channels. The East Branch of the Brandywine Creek is considered a major stream corridor. Most of the remaining stream system is orders 1 or 2.

Stream Water Quality Classification

Rivers and streams are biological communities, supporting a wide variety of vertebrate and invertebrate animals, plants, and microorganisms. Under natural conditions, these water courses act as conduits for organic matter and nutrients, collected from the watershed and distributed as food to the various biological entities that occur along the continuum from the tops of the watersheds to the mouths of major rivers. As is typical of natural communities, there is a balance of sorts that permits a wide variety of organisms to exist in these streams. It is generally accepted by the scientific community that protection of this natural diversity is important in its own right as well as to humans that currently or someday find use for these organisms as food or medicinal sources. Additionally, streams and rivers have become important sources of drinking water for human population centers.

The quality of surface water in the East Branch, Marsh Creek, Pickering Creek, Pine Creek, Shamona Creek, and Valley Creek sub-basins remains remarkably high. The Federal Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (PADEP) developed water quality regulations designed to protect the physical, chemical and biological integrity of streams. PADEP established a classification system for protected water uses or types. The East Branch, Marsh Creek, Pickering, Pine, and Shamona Creeks are designated as High Quality – Trout Stocking Fisheries. The Valley Creek is designated as Cold Water Migratory Fisheries. The stream classifications are shown on Map 2-7.

High Quality Waters are streams or watersheds that have excellent quality waters and environmental or other features that require special water quality protection. Cold Water Fisheries involve the maintenance and/or propagation of fish species including the family salmonidae and additional flora and fauna that are indigenous to cold water habitat. Migratory Fisheries involve the passage, maintenance and propagation of anadromous and catadromous and other fishes, which ascend to flowing waters to complete their life cycle.

Riparian Buffers

The word “riparian” refers to the vegetated area of land adjacent to a pond, lake, stream, creek, river or wetland. As such, forested riparian buffers are stands of trees, shrubs, and other vegetation which protect waterways from the impact of human activities such as farming, grazing, lumbering, and development. This vegetation intercepts polluted and sediment-laden stormwater runoff from the land surface before it reaches the water body. Preserving and restoring riparian buffers are among the most effective techniques used to protect and enhance the quality of groundwater, surface water, and wildlife habitats. Buffers are most critical in headwaters areas and the smaller first (1) and second (2) order streams discussed above. In addition to maintaining the stream quality classification noted above, riparian buffers are recognized as a stormwater management best management practice (BMP). In particular, forested buffers along streams provide the following critical environmental functions: peak storm flow reduction; filtering pollutants; nutrient uptake, and stream bank stabilization.

Uwchlan has recognized their importance by including a definition of riparian buffer area within the Zoning Ordinance (discussed in Chapter 1) that requires a 50-foot wide undeveloped, vegetated corridor generally parallel and measured outward from either the top of stream or other bank, edge of pond or wetlands, or the boundary of the 100-year floodplain, whichever yields the greater buffer width. Consequently the riparian buffers correspond to the Township-wide stream network shown on Map 2-5 and 2-7.

Floodplains

The entire western border of the Township, the East Branch of the Brandywine Creek, comprises one of the two major floodplains in Uwchlan Township. Shamona Creek, a tributary of the East Branch of the Brandywine Creek, constitutes the second floodplain area. Several other minor floodplains can be found in a fingering pattern corresponding with the stream network within the Township. Floodplains are shown on Map 2-7.

For property owners to receive Federal Flood Insurance, municipalities must participate in the National Flood Insurance Program administered by the Federal Emergency Management Agency, Federal Insurance Administration (FIA). Participation requires the mapping of flood-prone areas and the adoption of floodplain management measures. In 1980, the FIA published a Flood Hazard Boundary Map of Uwchlan Township. Areas subject to inundation from an intermediate level of flooding, also referred to as the "base flood" or "100-year flood," appear on this map.

Wetlands

As defined by the PADEP, the EPA, and the U.S. Army Corps of Engineers, wetlands are those areas which are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas that possess three essential characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Wetlands are shown on Map2-7.

Wetlands have become recognized as uniquely important components of the landscape by scientists, engineers, public interest groups, and governmental agencies. Their importance lies both on the traditional values of wetlands as areas of fish and wildlife protection as well as in newly found values of wetlands as areas of stormwater management.

Wetlands were identified using the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) mapping. The NWI Map was compiled by the U.S. Fish and Wildlife Service using color infrared aerial photos for the identification of wetlands using soil moisture content. The quality of the maps varies greatly depending on the quality of the photos, the time the photos were taken, and the type of wetlands being identified. The NWI Map is a helpful background source for wetland investigations. However, field research by a trained expert is necessary to determine the prevalence or absence of wetlands. Another source for wetland information is the occurrence of hydric soils - which usually are indicators of wetland conditions.

Identified areas include the stream system, open excavations, and farm ponds. Significant wetland areas exist within those wider expanses of the creek corridors. The value of wetlands is often overlooked. Wetland functions and values include: flood conveyance and storage; sediment, erosion and pollution control; wildlife habitats; water supply; groundwater and aquifer recharge; recreation and education. For these reasons, Uwchlan Township needs to protect its wetlands.

Wetlands are protected on the federal level by EPA and on the state level by PADEP. Therefore, any development or encroachment of these areas is subject to both federal and state permitting processes. The Township not only requires wetlands to be shown on all subdivision and land development plans, but also mandates their preservation.

Hydric Soils & Headwaters

In upland depressions and low-lying areas at the fringes of floodplains are found soils with shallow depth to water table and, occasionally, standing water. These are areas of high water table where the upper surface of the zone of saturation is at, or near to, the ground surface for at least a portion of the year. High water table areas vary somewhat due to the variation in yearly and seasonal rainfall and groundwater usage. Some high water table areas change little because of impervious sub-surface soil or geology that limits downward percolation of water. Hydric soils are a reasonable indicator of wetland conditions and are generally found within or adjacent to wetlands. Such "wet" or hydric soils are mapped generally in the Soil Survey of Chester and Delaware Counties.

Some of the hydric soils comprise the headwater areas of the stream system in Uwchlan Township. Headwater areas comprise the stream valley system of first and second order channels. Sub-basins that provide the source water for these channels are the lowest order basins and sometimes contain intermittent streams not part of the ordinary process. The areas identified may be more sensitive, since these areas have steeper slopes and

contaminants and sediments would tend to be transported more rapidly to the streams with limited opportunity for filtering.

In addition to headwater areas of the Pickering, Pine, Shamona, and Valley Creeks, concentrations of hydric soils are located adjacent to the PA Turnpike interchange, between Whitford Road and Route 113, and between Woodland and Devon Drives.

Groundwater & Geology

While the topography determines the patterns of creeks and rivers, groundwater flow is controlled partially by topography, but primarily by subsurface geology. Bedrock geology has primary control on the storage, capacity, quality, and flow of groundwater. Geologic features such as rock type, strata orientation, faults, joints, folds, solution channels, etc., affect groundwater quality, quantity, and movement. Different types of rock allow varying amounts of groundwater to become available for utilization, but the geology can also play a part in contamination of groundwater. For example, a porous rock, or rocks with numerous fractures, may allow rapid and widespread contamination of groundwater sources from surface contamination sources, such as improperly constructed landfills, leaking underground fuel tanks, and failing on-lot sewage disposal systems. For these reasons, the character of the geology will have an effect on potential development.

Geology, the science that investigates the structure of the earth, provides us with information to aid in the development and proper use of our land resources. It helps us locate ground water supplies, minable materials such as coal, iron, oil and limestone, and other raw materials needed by our modern society. Knowledge of local geology is also essential to the engineer in designing dams, highways or large buildings.

In general, the underlying rock throughout the Township consists of igneous and metamorphic rocks (gneiss, quartzite and schist). These crystalline structures have low magnitude porosity resulting in slow groundwater recharge. Groundwater capabilities have been estimated as low in the north (1-10 gpm) to moderate in the remainder of the Township (10-60 gpm). Well sites in the Township must be carefully chosen to obtain maximum yields.

Fault zones indicate areas where the groundwater flow may mainly be through fractures. Fault zones shown on the Land Resources Map are also based on U.S. Geological Survey information and represent areas where the rock has not only fractured but also moved up or down. These areas may provide a path for groundwater flow since the movement along the fault zone usually breaks and creates open spaces in the rock.

These areas may be important in terms of both water quality and quantity. The more fractures a well intercepts, the higher the yield. Since fractures transmit the groundwater, they can also transmit contaminants contained in the groundwater. This means that once the groundwater is polluted, the pollution may spread to other areas at a quicker rate in aquifers which are more fractured. The fault zone within Uwchlan Township is located in the southern portion of the Township within the quartzite formations.

The Township is essentially situated between two regional aquifers: the Stockton sandstone formation in northern Chester County and the limestone of the Chester Valley. The Township is an upland area comprised of gneiss and quartzite formations. Therefore, no regional aquifers exist within Uwchlan Township.

Soils

Historically, the nature and quality of soil has had a very important effect on how land was used, especially in agricultural areas. It is therefore important to review the nature and qualities of Uwchlan Township's soils, because land use activities are frequently reflections of soil type.

In terms of efficient use of resources, a common-sense goal would be to arrange land uses so that the best soils for agricultural uses (i.e. well-drained, deep, and fertile) are left undisturbed, while residential development would be focused towards soil areas that are less productive or are not easily worked. Construction costs can be minimized if development is steered towards areas that have deep well-drained soils rather than a high water table or shallow depth to bedrock. Intensive land uses, such as industrial, commercial, or activities that require large parking areas, should also be directed towards soils that can support heavy loads or paved areas.

While virtually any structure can be safely built on almost any soil type (or slope), such developments may require unreasonable amounts of engineering, site preparation, and cost. Therefore, while this analysis will not predict the appropriate location for any land use with one hundred percent certainty, it is a reasonable set of guidelines for future development or areas of constraint.

One of the most useful components of the soil analysis is the list of types of constraints imposed by different soil types. For example, a soil type may be subject to flooding, or be too wet for certain types of development. Constraints can affect construction, such as the ability of soil to support loads, on its frost action, shrink-swell potential, etc. This information is necessary to identify areas that are not appropriate for extensive development.

The major soils types of Uwchlan are the Edgemont soils found north of the Great Valley and carve out the southern quarter of the Township, and the Glenelg-Manor-Chester soils which cover the remaining ground in the Township. The significance of soils for planning purposes lies in suitability of the soils to foundations for buildings and other structures. When a slope is 15% or less Edgemont and Glenelg-Manor-Chester soils have only a moderate degree of limitation for buildings of three stories with basements.

The Soil Survey of Chester and Delaware Counties provides detailed information for individual mapping units within the general soil associations described above.

Woodlands

A high quality hardwood forest exists on the slopes in the western portion of the Township. Of the remaining scattered areas of woodland, many exist in stream valleys, making them especially valuable for open space. The original vegetation of Uwchlan Township was a dense cover of trees. Cutting for the forges and clearing for agriculture eliminated virtually all of the virgin stands of woodlands. Now, the woodlands consist of second and third growth stands. Most woodlands appear to be in the age of 50-70 years. The principal types of trees that make up the present woodlands consist of deciduous hardwoods such as red oak, white oak, black oak, beech, and tulip poplar. The wetter areas include red maple, elm, ash, hickory and sycamore. The existence of these wooded areas on lands of relatively steep slope increases the importance of maximum conservation efforts. The retention of wooded slopes is essential to temper runoff, prevent soil erosion, replenish groundwater and regulate stream flow.

Wooded areas are complex communities of various types of plants in which a variety of plant associations and layers exist at various stages of successional age. These layers may include, but are not limited to grasses and herbaceous growth, shrubs, understory species (trees below upper canopy cover) and canopy species (uppermost layer of trees). Wooded areas are significant for their environmental, social and economic values. These lands are a vital link to the hydrologic cycle. Stands of trees provide natural erosion and flood control by decreasing the speed and amount of stormwater runoff and by providing ground cover. They also reduce temperature extremes and moderate evaporation. The tree canopy reduces the amount and intensity of rainfall reaching the surface; root systems hold the soil; and the forest floor litter protects the ground, slows runoff, and promotes percolation by providing many miniature obstructions and ponding areas. Hence, forest cover is beneficial on steep slopes and other areas where soil erosion potential is high. Trees also function as natural barriers by reducing the unwelcome impact of noise and of strong winds and wind-transported substances (dust, snow) and by screening unsightly areas. Trees also absorb water, which is stored in the stems and leaves and released in evapotranspiration. Woodlands serve as habitats for many kinds of wildlife. Many beneficial species (such as pollinators), soil organisms, and the natural predators (such as the birds that eat insects) live and breed in such areas. The wooded areas in Uwchlan provide most of the habitat for wildlife in the Township. Woodlands are shown on Map 2-8.

Recreational land is enhanced by forested areas. Certain developments may actually increase wildlife values of the woodland by producing more forest/non-forest interface or "edge", a mixed habitat that supports more species than the area it adjoins. The importance of the loss of a particular stand of trees depends upon its relative value in that area. The size and configuration of the stand, its relative uniqueness, and its natural protective functions need to be considered. Steeply sloped woodlands are particularly sensitive to any kind of development that removes the trees, since the consequent increase in stormwater runoff and soil erosion have far-reaching detrimental impacts.

Habitat Areas

Three specific types are home to Uwchlan's plant and animal communities: open field or pasture; forest, often comprising steep and/or stony soils; and the wetlands, including streams, springs, ponds and meadows. Many species of plants and animals may be found in more than one habitat type, due to their ability to disperse and adapt to variable conditions. Other plants and animals have adapted to very specific needs and conditions, and are critically dependent upon the conservation of particular habitat types. Man-influenced habitats often play equally important roles in the maintenance of today's diverse flora and fauna communities; farm fields and pasture, hedgerows and treelines, offer important food and cover sources, for example.

The Pennsylvania Natural Diversity Index (PNDI) provides an inventory of threatened and/or endangered animal and plant species. Natural communities and special plant locations or habitat areas have been generally plotted on U.S.G.S. Quadrangles. Specific PNDI species and locations are divulged by the State and Federal agencies during the land development process. One generalized PNDI site is shown on Map 2-9 adjacent to the East Branch.

HISTORICAL & CULTURAL RESOURCES

Scenic Roads

The major roads traversing Uwchlan Township include the Pennsylvania Turnpike, U.S. Route 100, and Route 113. These roadways are primarily straight, heavily traveled arteries through residential, commercial and industrial land use areas. Therefore, due to the lack of scenic roadside quality, none of these roadways are considered scenic roads. Scenic roads, on the other hand, accentuate and facilitate visual access to the sense of open space that characterizes portions of Uwchlan Township. While that form of access is distinctly passive, it is the form most frequently enjoyed by the general populace. Scenic roads provide a close to home opportunity for pleasure driving and sightseeing, among the most popular outdoor recreation activities in Pennsylvania.

The following collector roads were designated "scenic roads" or "scenic with intrusions." Scenic roads: Dowlin Forge/Pennypacker Road, Shelmire Road, and Lionville Station Road. Intrusions onto scenic roads are created primarily by newer development that has reduced a formerly scenic road to just segments that are scenic. Intrusions include the fronts and rears of houses, multiple driveways and streets, removal of trees, and expansive grass lawns. Scenic roads with intrusions are: Dowlin Forge Road (Pennypacker to Taylors Mill Roads), Peck Road (Filman to Dowlin Forge Roads), Taylor Road (Horseshoe to Spring Run Lanes), and Woodland Drive (Benning Lane to Route 113). Scenic vistas viewed from the scenic roads within the Township include the following, which are shown Map 2-9:

- *View south from Shamona Creek Elementary School;*
- *View from Longfields Way; and-*
- View north from Lionville Elementary School;*
- View northwest from Elm Court*

Historic & Archaeological Sites

Pennsylvania Historical and Museum Commission (PHMC) maintains a listing of all Federally listed and/or eligible historic sites for the State. The Township currently has one listing on the national Register of Historic Places, and three sites have been listed on the Pennsylvania Inventory of Historic Places. The Lionville Historic District, a National Historic District, is the only historic district in the Township and contains 38 structures as shown on Map 2-9. As part of the Chester County Historic Site Survey, which was produced between 1979 and 1982, approximately 140 sites of possible historic and/or architectural significance have been identified in Uwchlan Township.

The Township Zoning Ordinance contains Historic Preservation Regulations. The Historic Resource zoning provisions have been revised periodically and will soon be updated to include all properties with structures built before 1951. The Township's commitment to historic preservation is exemplified in the fact that the Township Administrative Building is a Class 1 resource. The Township, however, does not assume ownership of historic properties – except for the Edith P. Moore Lionville Schoolhouse, the Township building, the Hoffecker House, several ruins in Dowlin Forge Park, the Cadwalader House and two bridges on Dowlin Forge Road – the Shamona Dell bridge (built in 1906) and the Dowlin Forge Bridge (built in 1914). The preservation of these historic properties, therefore, is for the most part left to the individual property owners.

The National Register criteria seek to pinpoint historical significance in terms of integrity of location, design, setting, materials, workmanship, feeling and association - for sites, districts, buildings, structures or objects as follows:

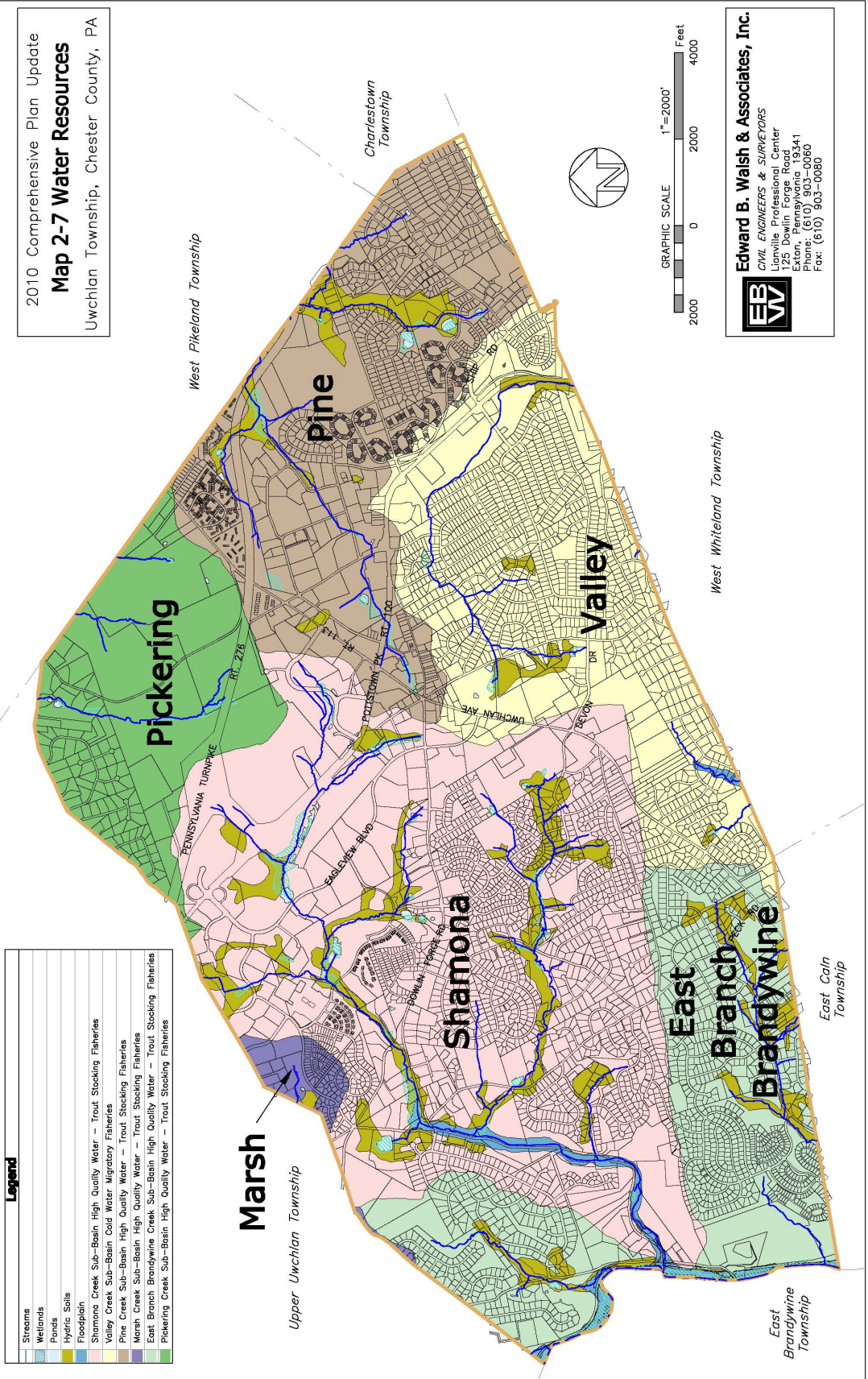
- *that are associated with events that have made a significant contribution to the broad pattern of history; or*
- *that are associated with the lives of persons significant in our past; or*
- *that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
- *that have yielded or may be likely to yield information important in prehistory of history.*

Listing on the National Register does not provide absolute protection; it does, however, mandate an additional level of review known as a Section 106 Review (Section 106 of the National Historic Preservation Act) should a federal action, or federally funded actions impact the property either physically or visually. Such review processes must be followed or the use of Federal money for a project is jeopardized. As noted in Chapter 1, the Township Zoning Ordinance offers additional protection of historic resources.

In addition to the added level of review, listing on the National Register enables the owner of such a property to rehabilitate the property for income-producing purposes and take a 20% Investment Tax Credit on his Federal Income Taxes. Additional regulations, the Secretary of the Interior's Standards for Rehabilitation, also apply to this process and must be stringently adhered to in order to qualify for the credit. A similar but lesser credit (10%) is also available for owners who rehabilitate older structures which are not on the National Register buildings (but which might be identified in the Township inventory).

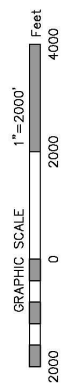
Uwchlan Township is committed to historic preservation. While no registered archaeological sites exist within the Township, preliminary archaeological surveys have been conducted at the Dowlin Forge Ruins, Shamona Park and the Happy Days Farm.

2010 Comprehensive Plan Update
Map 2-7 Water Resources
 Uwchlan Township, Chester County, PA



Legend

Streams
Wetlands
Ponds
Hydric Soils
Floodplain
Shamona Creek Sub-Basin High Quality Water - Trout Stocking Fisheries
Valley Creek Sub-Basin Cold Water Migratory Fisheries
Pine Creek Sub-Basin High Quality Water - Trout Stocking Fisheries
Marsh Creek Sub-Basin High Quality Water - Trout Stocking Fisheries
East Branch Brandywine Creek Sub-Basin High Quality Water - Trout Stocking Fisheries
Pickering Creek Sub-Basin High Quality Water - Trout Stocking Fisheries



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File: T:\UB\1203-41\1203-41-B.MXD Plotter: September 9, 2010

2010 Comprehensive Plan Update
Map 2-8 Land Resources
 Uwchlan Township, Chester County, PA

Legend	
	Woodlands
	Contours
	Steep Slopes (15%+)



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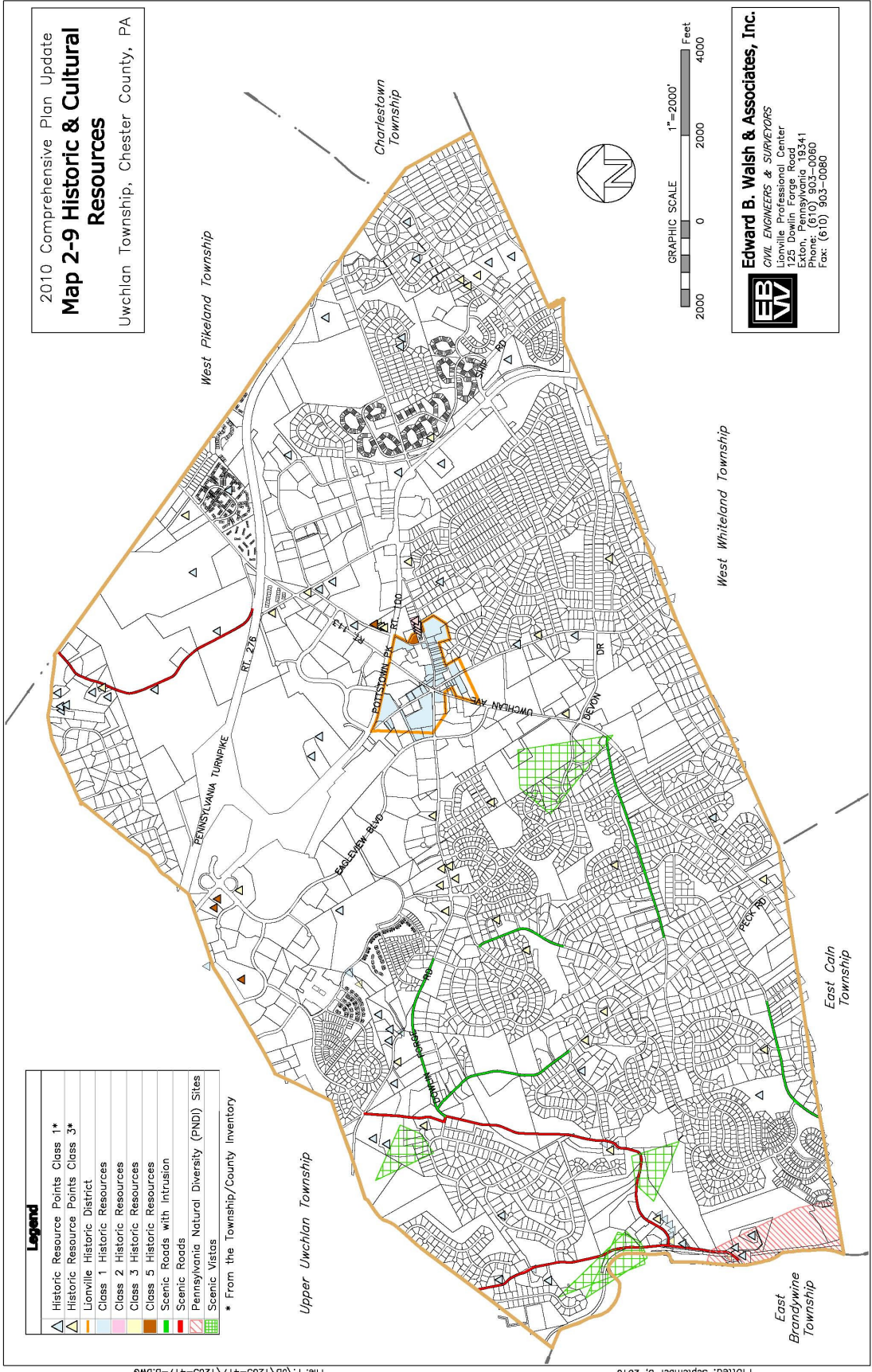


2010 Comprehensive Plan Update
Map 2-9 Historic & Cultural Resources
 Uwchlan Township, Chester County, PA

Legend

	Historic Resource Points Class 1*
	Historic Resource Points Class 3*
	Lionville Historic District
	Class 1 Historic Resources
	Class 2 Historic Resources
	Class 3 Historic Resources
	Class 5 Historic Resources
	Scenic Roads with Intrusion
	Scenic Roads
	Pennsylvania Natural Diversity (PND) Sites
	Scenic Vistas

* From the Township/County Inventory



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GRAPHIC SCALE 1"=2000'
 2000 0 2000 4000 Feet

REGIONAL RELATIONSHIPS

REGIONAL ROLE

Located at the PA Turnpike interchange in the middle of a dynamic, growing region, the center of the Township (PA Routes 100 & 113) is 2.5 miles north of the crossroads of US Route 30 and PA Route 100, the intersection of the major north-south and east-west roads in Chester County that are not limited access highways. The distance to urban centers includes 16 miles to King of Prussia, 35 miles to Philadelphia, 25 miles to Wilmington, 37 miles to Lancaster, and 7½ miles to West Chester, the County seat

The aforementioned highway system of the PA Turnpike, US Routes 30 and 202 and PA Route 100 place Uwchlan residents within a 30-45 minute drive of employment, shopping, entertainment, state, and national parks, a fact reinforced by the average time Township residents commute to work of 27 minutes.

Commuter rail stops at Exton, Whitford and Downingtown, all minutes away, provide AMTRAK and SEPTA to the main rail lines linking Philadelphia to Harrisburg with 30 minute to one hour commutes depending upon time of day. Connections at 30th Street Station place New York and Washington DC literally an hour away on AMTRAK.

Uwchlan is also an employment center, ranking 6th in the County as reported by the US Census in 2000 with 8,946 Chester County residents working in the Township, behind Tredyffrin, East Whiteland, West Goshen, West Whiteland, and West Chester.

The Township plays a significant role within the Downingtown Area School District, which in addition to Uwchlan, includes Downingtown Borough and the Townships of East Brandywine, East Caln, Upper Uwchlan, Wallace, West Bradford, and West Pikeland. As noted with the Community Facilities & Services and Parks, Recreation & Open Space sections, five of the thirteen schools are located within Uwchlan: Downingtown East High School, Lionville Middle School, Lionville Elementary School, Shamona Creek Elementary School, and Uwchlan Hills Elementary School. The School District recently (2007) purchased the SMS property located on both sides of Lionville Station Road north of the PA Turnpike for a potential third high school or other school facility.

Due to the proximity of some of the region's major highways, as mentioned, Township residents are a few minutes away from both employment opportunities and shopping facilities. This advantageous location coupled with the Township facilities and services, such as extensive parks and trails, police, and public sewer and water, make Uwchlan an extremely attractive place to live.

SURROUNDING MUNICIPALITIES

Uwchlan is bounded by six townships. Upper Uwchlan and West Pikeland to the north, Charlestown to the east, West Whiteland and East Caln to the south, and East Brandywine to the west. An overview of each municipality and its planning efforts follows.

Upper Uwchlan Township

Located north of Uwchlan, Upper Uwchlan forms its longest border (4 miles). Like Uwchlan, Upper Uwchlan was one of the most rapidly growing municipalities in the County over the last 20 years. PA Route 100, the main north-south road in the County, bisects the Township, while the PA Turnpike traversing the Township east-west also divides Upper Uwchlan. Residential developments of various unit types dominate the landscape with commercial and industrial uses located up and down the PA Route 100 Corridor. The recently constructed Eagle Bypass is designed to separate local from regional traffic using the PA Route 100 Corridor and relieve congestion through the Village of Eagle, the Township's center of business activity. Upper Uwchlan is home to Marsh Creek State Park (described in Chapter 4), one of two state parks in the County. The Township also contains one of the elementary schools of the Downingtown Area School District, Pickering Valley. The estimated 2008 population was 11,106 persons with a density of 1.6 persons per acre.

The common border of Upper Uwchlan and Uwchlan consists of single family residential along Township Line Road (East and West) with the exception of the Eagleview office/industrial uses along Stockton and Constitution Drives and the commercial/industrial just east of the PA Turnpike. The 2002 Comprehensive Plan's Future Land Use Plan proposes the following along the border with Uwchlan: Rural/Site Responsive (0.5-1 du/ac) from the East Branch of the Brandywine to Moore Road; Suburban/Site Responsive (1 du/ac) from Moore Road to Eagleview; Mixed Suburban

(various uses) from Eagleview to just east of the PA Turnpike; and Suburban/Site Responsive for the balance of the border. The 2002 Zoning Ordinance depicts the following districts along the border with Uwchlan: LI-Limited Industrial adjacent to the East Branch; R1-Residential (2 acres) from the LI District to Moore Road permits single family; R2-Residential (1 acre) from Moore Road to Eagleview permits single family; PI-Planned Industrial/Office (Eagleview); C2-Limited Commercial from Eagleview to PA Route 100; C3-Highway Commercial between PA Route 100 and the PA Turnpike; LI-Limited Industrial just east of the PA Turnpike; and R2-Residential (1.5du/ac) with F2 Flexible Development Overlay for the balance of the border permitting various residential types at an increased density.

West Pikeland Township

West Pikeland forms the other half of the northern border with Uwchlan (2½ miles). The major roads, PA Routes 113 & 401, bisect the Township and essentially form quadrants, while the PA Turnpike crosses the southern corner. Residential development, agricultural, and undeveloped land form a patchwork of uses across West Pikeland, with the greatest density located on the southern portions adjacent to Uwchlan. The most rural and least developed of the abutting townships, West Pikeland has a 2008 population estimate of 4,035 persons with a density of 0.6 persons per acre.

Existing land uses along the border with Uwchlan consist of residential, open space, and agriculture. The Future Land Use Plan of the 2010 Comprehensive Plan proposes a Residential Growth Area (1-2 du/ac to 2-4 du/ac) along the entire boundary with Uwchlan. The 2005 Zoning Ordinance shows the entire common border zoned RD, Residential Development District (1-1.5 du/ac) which permits single family residential.

Charlestown Township

Charlestown is located to the east and forms the shortest border with Uwchlan (½ mile). PA Turnpike, PA Routes 401, 29 and Phoenixville Pike traverse the Township. Another rural and lesser developed abutting township, Charlestown's more dense areas of residential development are in the north, east and west corner with industrial and offices located south of the PA Turnpike adjacent to Phoenixville Pike. Charlestown is the northernmost community in the Great Valley School District. The estimated 2008 population of Charlestown was 6,408 persons with a density of 0.8 persons per acre.

The common border consists of single-family detached residential. The Plan for Land Use of the 2001 Comprehensive Plan proposes Other Low & Moderate Intensity Development (1 du/2 ac), which is essentially residential with the use of Open Space Option encouraged. The Zoning Ordinance of 2006 shows the FR, Farm Residential and PRD-2 Districts (80,000sf) abutting Uwchlan, which permit single family residential.

West Whiteland Township

West Whiteland shares most of Uwchlan's southern border (3½ miles) and is equally centered among traffic corridors with US Route 30, PA Route 100, US Routes 30 and 202 interchange, and Exton Bypass all within its boundaries. The Township contains the Exton Mall, one of two regional shopping facilities in Chester County, as well as several other large shopping centers. In addition to the retail centers, the office and industrial parks along the US Route 30 corridor make West Whiteland a regional employment center, and like Uwchlan, a top ten community in Chester County with 15,142 County residents working in the Township. A portion of the former Church Farm School property is proposed for a regional County/Township park. West Whiteland is the northernmost community of the West Area Chester School District. The 2008 population estimate was 18,209 and density of 2.2 persons per acre.

The existing land uses along the common border with Uwchlan include: mostly single family residential; the Weaver Pond open space; a small commercial use west of PA Route 100; and undeveloped slopes of the North Valley Hills, whether as part of development open space or the County/Township park. The Land Use Plan of the 1994 Comprehensive Plan proposes the following along the shared border: Low Density Residential (<2 du/ac) from the western edge of the Township to PA Route 100; Parks, Permanent Open Space & Resource Conservation along the PA Route 100 Corridor; Medium Density Residential (2-4 du/ac) between PA Route 100 and Ship Road; and alternating Low Density Residential and Parks, Permanent Open Space & Resource Conservation for the balance of the border. The Zoning Ordinance of 1998 shows the adjacent zoning districts to be: R-1 Residential (1 du/ac), permits single family residential, from the western edge of the Township to PA Route 100 and from Ship Road to the eastern edge; R-2 Residential (2 du/ac) between PA Route 100 and Ship Road; and NC, Neighborhood Commercial (30,000sf), permitting retail and office, located just west of PA Route 100.

East Caln Township

East Caln forms the smallest portion of Uwchlan's southern border (1¾ mile). Major roads within the Township include US Route 30 Bypass, Business Route 30, and PA Route 113. Although the smallest of the abutting townships, East Caln provides a diversity of land uses similar to its larger neighbors. A range of residential developments include single family dwellings, townhouses, and apartments. Regional commercial uses align Business 30, including shopping, restaurants, and movie theaters. The Township is home to Bishop Shanahan High School, the only Catholic high school in Chester County. All of the Downingtown Country Club and a portion of the Whitford Country Club are within East Caln. The 2008 population estimate was 4,410 persons with a density of 1.9 persons per acre.

The common border consists mainly of single family development and open space such as Madison at Williamsburg, along with commercial uses adjacent to PA Route 113 and floodplain adjacent to the East Branch of the Brandywine Creek. The 1999 Comprehensive Plan proposes the following uses on its Future Land Use Map along the border with Uwchlan: County Community Facilities from the East Branch to Shelmire Road; Low Density Residential (1 du/ac) from Shelmire Road to Norwood Road; Medium Density Residential (1-2 du/ac) from the Norwood Road to Woodmont Drive; Mixed Residential & Commercial (2-4 du/ac) along PA 113 from Woodmont Drive to Whitford Hills Road; and Low Density Residential for the balance of the border. The Zoning Ordinance of 2007 depicts the abutting land zoned as these districts: R-1 Single Family Detached Residential (1 acre) from the East Branch to Shelmire Road; R-4 Low Density Cluster Residential (0.8-1 acre) from Shelmire Road to Norwood Road; R-2 Single Family Detached Residential (0.75-1 acre) from the Norwood Road to Woodmont Drive; OC-1, Office Commercial (2 acre) along PA 113 from Woodmont Drive to Whitford Hills Road; and R-1 Single Family Detached Residential to the West Whiteland line.

East Brandywine Township

The East Branch of the Brandywine Creek forms the boundary between East Brandywine and Uwchlan (1 2/3 mile). East Brandywine is predominately residential and agriculture, with some local convenience commercial within and adjacent to the villages of Guthriesville and Lyndell. The Township contains one of the elementary schools of the Downingtown Area School District, Brandywine-Wallace and may contain a new middle school. US Route 322, the major road through East Brandywine, traverses the Township from southeast to northwest; PA Route 282 winds along the East Branch. The 2008 population estimate was 6,689 persons and density 0.9 persons per acre.

As noted, the common border with Uwchlan consists of the East Branch of the Brandywine Creek; existing land uses include floodplain, undeveloped land, and one single family property. The Future Land Use Map of the 2009 Comprehensive Plan indicates the bordering land is planned for Residential (1 du/ac) and Residential or Protected Open Space north of Dorlan Mill Road and Protected Public & Institutional south of Dorlan Mill Road. The Zoning Ordinance of 2003 shows the adjacent zoning to be the R-1 Residential District (2 acre), which permits single family residential.

UWCHLAN TOWNSHIP COMPREHENSIVE PLAN UPDATE



CHAPTER 3 GOALS & OBJECTIVES

CHAPTER 3

GOALS & OBJECTIVES

The purpose of this section of the Plan Update is to articulate new goals and objectives of the Township in terms of comprehensive planning for conservation and development. Based upon the preceding inventory and analysis chapter, the goals and supporting objectives serve as the framework for the development of the individual plans elements for land use, circulation, community facilities, and recreation and open space within Uwchlan Township. Goals are general statements which reflect what Uwchlan desires to achieve in terms of Township character, land use, circulation, community facilities, parks and open space, environmental resources, and regional role. Once these goals are formed, they represent a context within which decisions can be made regarding the use of land, community facilities, and circulation. Each goal is then supported by more specific objectives that are aimed at addressing the stated goal. The goals and objectives are followed by statements of specific short and long range implementing strategies within each plan element contained in Chapter 4.

COMMUNITY DEVELOPMENT GOALS & OBJECTIVES

The MPC has established the basic requirements for a Comprehensive Plan, the first of which is a statement of community goals and objectives (*Section 301*):

"The Comprehensive Plan, consisting of maps, charts and textual matter, shall include, but need not be limited to, the following basic elements: (1) A statement of objectives of the municipality concerning its future development, including, but not limited to, the location, character and timing of future development, that may serve as a statement of community development objectives as provided in Section 606 (Zoning)...."

The overriding guiding principle that went in to the preparation of this Comprehensive Plan Update continues to be as follows:

"Provide for orderly development in a manner that will enhance Uwchlan and protect the health, safety, and welfare of all persons residing in the Township."

GOALS FOR THE LAND USE PLAN

- *Identify locations for suburban development that can be efficiently served by the necessary infrastructure.*
- *Support and expand, where appropriate, residential neighborhoods which include a variety of dwelling types that complement one another and reduce the potential for conflicts between different uses.*
- *Locate commercial and industrial uses in areas of the Township where the impact of such uses on adjacent land uses and Township residents will be minimized.*
- *Preserve natural resources by protecting areas of floodplain, wetland, riparian buffers, and steep slope and conserving areas of woodland and open space.*

Overall Development Objectives

- Plan future growth and development to utilize infrastructure improvements.
- Protect the tremendous investment that already exists in homes, commercial, industrial and agricultural enterprises, highways and countless other private and public facilities.
- Encourage the rehabilitation, replacement or elimination of physically unsound or poorly located structures.

Residential Objectives

- Assure that residential areas have sufficient space, privacy and convenience to meet accepted standards of community health, safety and welfare.
- Maintain or raise residential values by 1) preventing the introduction of unsuitable uses, 2) requiring consistent, up-to-date standards in new residential development, and 3) preserving and protecting the Township's natural resources, whenever possible.
- Continue to provide for a full range of housing types in order to meet the varying needs of all families.

Commercial Objectives

- Plan business locations in the Township that give primary consideration to established commercial locations and the need to protect existing residential areas and natural resources.
- Ensure the locations of commercial areas are convenient to residential areas and provide easy access for customers, employees and suppliers.
- Limit the locations of commercial development to sites near major traffic thoroughfares in an effort to separate regional commercial traffic from local traffic.
- Limit spot commercial and strip commercial development along highways and encourage instead planned clusters of commercial development.
- Require that adequate off-street parking and loading areas be provided in all commercial developments and, to the greatest extent possible, separate vehicular and pedestrian traffic.
- Enact and enforce regulations that will result in shopping developments that are attractively designed and landscaped, buffered from roadways and residential areas and accessible from residential developments by both vehicular and pedestrian linkages.

Industrial Objectives

- Plan the location of industrial areas so they are easily accessible to the labor supply, delivery of raw materials, markets, and related activities.
- Through zoning, protect future industrial areas from encroachment by other land uses during the period of time preceding their development into industrial sites.
- Enact and enforce regulations which will require new industries to provide adequate off-street parking and loading facilities, and buffer areas where adjacent to other uses and allow for future expansion.
- Continue to provide for a wide range of industry types in order to ensure a more balanced future economic base.
- Use design and performance standards to minimize the impact of industrial development on adjacent land uses.
- Give primary consideration to the effect that a particular industry on a particular site will have on the Township's natural resources.

GOALS FOR THE COMMUNITY FACILITIES & SERVICES PLAN

- *Create and implement a community facilities plan that meets both the needs of residents and the fiscal capacity of the Township.*
- *Provide adequate fire, ambulance and police protection and other community facilities, utilities and services to assure the welfare and safety of Township residents.*
- *Provide adequate stormwater management facilities for the protection and preservation of existing and future water supply, both surface and subsurface, and the protection of private and public property.*

Community Facilities Objectives

- Continue to work with the Downingtown Areas School District regarding the shared use of recreation facilities and monitor their policies for planned facilities upgrades and/or expansion.
- Combine public and semi-public buildings and recreational sites wherever possible to benefit from convenience and economy.
- Continue to provide a sufficient level of police protection in accordance with the needs of the Township and municipal fiscal limitations.
- Continue to maintain the appropriate level of support for the Lionville Fire Company and Uwchlan Ambulance Corps, or other companies providing services, in order to provide coverage throughout the Township.
- Continue to provide efficient Township administrative services that meet the needs of Township residents.
- Supplement the Plan Update with the 2010 population and housing data as it becomes available.
- Provide public water service to adequately serve existing or potential growth areas within the Township, where feasible.
- Encourage public sewerage service to adequately serve existing or potential growth areas within the Township.
- Continue to monitor the solid waste services provided to ensure that trash removal and recycling efforts are operated in a safe, fiscally efficient, and environmentally sustainable fashion.
- Continue to maintain and update, as necessary, Township stormwater management ordinance provisions in compliance with applicable state and federal regulations and current best management practices.

GOALS FOR THE PARKS, RECREATION & OPEN SPACE PLAN

- *Provide a balance of active and passive recreational areas and facilities for the enjoyment of individuals, groups, and families of all ages who live in the Township at the lowest reasonable costs to Township residents.*
- *Promote varied and diverse recreational programs within the Township.*
- *Promote the maintenance and enhancement of existing parks and recreational areas within the Township.*
- *Provide pedestrian linkage between parks and open space sites within the Township*
- *Continue to offer park and recreation programs for all residents under the administration of the Park and Recreation Board.*
- *Develop a plan for park utilization and maintenance.*
- *Continue to preserve open space through the implementation of zoning provisions such as the Residential Open Space Option.*
- *Include open space for passive recreation, walkways, and preservation of stream/creek valleys in keeping with the County Open Space recommendations.*
- *Develop and/or maintain standards and guidelines for the conservation of open space.*

Parks & Recreation Objectives

- Provide for the development of public, semi-public and private recreation facilities within both underserved and undeveloped portions of the Township.
- Require donations of land as part of all new land development to ensure the provision of neighborhood recreation facilities.
- Evaluate locations for potential parks and recreation sites which could encompass a wide range of passive and active recreational activities.
- Analyze the possibility of using vacant or underutilized sites and structures and utility rights-of-way and other rights-of-way for recreational use.
- Investigate the acquisition of additional lands to satisfy current and anticipated recreational needs.
- Continue to update recreational land standards and criteria related to various types of park and recreation sites and facilities.
- Continue to maintain an inventory of parks and recreational facilities to address current and projected demands.
- Integrate active and passive recreation sites to promote continuous, varied experiences.
- Communicate with Township residents to obtain insights regarding preferences and priorities for recreational facilities and activities.
- Continue to provide for a wide variety of recreational facilities to serve all age groups and abilities of Township residents.
- Identify and prioritize facilities that are needed at each recreation site to permit mixed and varied recreational activities that are complementary to one another.
- Identify and implement a safe means of pedestrian, bicycle and motor vehicle access to the park and recreation sites, where feasible.
- Evaluate walkway linkages and crosswalks throughout the Township to create a realistic means of interconnecting park and recreation sites to residential developments.
- Continue to maintain an inventory of existing recreational programs available to Township residents, ranging from organized sports to the arts to serve children, youth, adults, senior citizens, and handicapped individuals.
- Identify and implement educational programs to foster an understanding and appreciation of recreational facilities and promote their safe and proper use.
- Identify and implement programs that promote access to and use of underutilized recreational resources.
- Continue to fund the existing recreational programs available to Township residents.
- Continue documenting operation and maintenance programs of the parks and recreational sites and facilities.

Open Space Objectives

- Establish and update, as necessary, criteria for resources that should be considered for conservation, especially in the Brandywine Creek and Shamona Creek corridors.
- Identify which lands would be appropriate for open space designation within new subdivisions or land developments.
- Preserve open areas that have a potential for natural recreational sites.
- Develop ordinance provisions that set forth an area between new development and floodplains and wetlands as part of an open space network owned by the Township, HOA or protected under a conservation easement.

- Retain open space and preserved farmland and maximize other open space uses.

GOALS FOR THE TRAFFIC & CIRCULATION PLAN

- *Support the establishment of arterial highways that can carry anticipated through traffic volumes and provide access to major traffic generators, both in the Township and in areas serving the Township.*
- *Ensure that access to these arterial highways is carefully controlled to prevent conflicts between local and arterial traffic.*
- *Provide Township residents with at least two alternative routes to major highways.*
- *Facilitate a system of collector roads that can efficiently carry local traffic between residential areas, and to and from arterial highways through the subdivision and land development process.*
- *Maintain the local nature of residential streets, thereby reducing the impact of high-speed, high-volume traffic on residential areas.*
- *Require the provision of sufficient off-street parking facilities to make it possible to use the entire paved surface of high-cost roadways to carry vehicular traffic.*
- *Support a balanced system of transportation and transit facilities in order to maximize energy conservation and to meet the different needs of people, business and industry.*

Traffic & Circulation Objectives

- Require the addition of new streets to the road system to serve proposed new uses.
- Ensure that new streets and roadways fit into the existing system so that both will function effectively and safely.
- Prioritize the improvement of existing major roads to handle increased traffic.
- Discourage on-street parking on major roadways.
- Continue a program of widening and resurfacing local roads and concentrate local roadway maintenance funds in areas of greatest need.
- Support the provision of mass transit facilities to meet the needs of the Township’s current and future transit-dependent citizens.
- Continually revise the Traffic and Circulation Plan as part of the traffic impact fee evaluation.
- Continue to monitor funding programs available at the Federal, State and County levels.

GOAL FOR THE HOUSING PLAN

- *Continue to promote a sound housing stock for Township residents and a diversity of housing that will meet the needs of all households.*

Housing Objectives

- Continue to provide for a wide range of choices in housing types, costs, and locations.
- Encourage, and where appropriate, require the correction of areas of blight and substandard conditions so that they contribute to the overall value of the Township and well being of Township residents.

GOAL FOR THE NATURAL & HISTORIC RESOURCES PLAN

- *Continue to preserve environmentally sensitive natural resources and open space such as areas noteworthy for physical, historic, cultural, recreational, or scenic quality.*

Natural Resources Objectives

- Establish criteria for resources that should be considered for conservation, especially in the Brandywine Creek and Shamona Creek corridor with a focus on stream and pond preservation.
- Require an approved woodland management plan for new subdivision and land development.
- Confirm mapping efforts to date regarding environmental resources such as floodplains, wetlands, hydric soils slopes 15 to 25%, slopes 25%+, riparian buffers, and woodlands, and update where necessary.
- Continue to update ordinances provisions that preserve sensitive environmental features such as floodplains, riparian buffers, and wetlands along streambeds and steep slopes.

Historic Resources Objectives

- Collaborate with the Historical Commission to identify historic resources, potential historic districts, and measures to mitigate the impact of development upon historic resources.
- Establish an effective program of historic preservation with the joint participation of individual citizens, interested civic groups and all levels of government.
- Continue to enforce the Historic Preservation Ordinance as enacted.

GOAL FOR ENERGY CONSERVATION

- *Minimize energy consumption and incorporate the use of renewable and reliable energy sources to reduce energy costs and environmental impacts.*

Energy Conservation Objectives

- Promote the reuse of existing resources including redevelopment; the restoration of brownfields and greyfields; and allowance for new technologies to be utilized in recycling and waste management.
- Encourage the development, distribution, and use of alternative fuels and energy sources, with a preference for those energy sources that are renewable, sustainable and locally-generated.
- Encourage upgrades to government facilities, utilities and public infrastructure that will promote energy efficiency, and the distribution and use of alternate fuels and energy sources, as they become available.
- Promote energy efficiency and the reduction of energy demand and consumption in the use of vehicles, and the design and construction of motorized and non-motorized transportation infrastructure.
- Support the development and use of energy efficient technologies, as they become available, in farming, manufacturing, industrial processes and activities and other economic development activities.
- Promote energy efficiency standards, such as Leadership in Energy and Environmental Design (LEED) and Energy Star certification for the development or redevelopment of buildings, properties, and neighborhoods.
- Promote the design and construction of subdivision and land development utilizing energy efficient "Green" technologies, as they become available.
- Promote efforts to educate residents, government officials and the business community about energy conservation technology and techniques, through public outreach and demonstration projects.

UWCHLAN TOWNSHIP COMPREHENSIVE PLAN UPDATE



CHAPTER 4 PLAN ELEMENTS & IMPLEMENTATION STRATEGIES

CHAPTER 4

PLAN ELEMENTS & IMPLEMENTATION STRATEGIES

This chapter contains the individual plan elements which comprise the following: Plan for Land Use, Plan for Community Facilities & Utilities, Plan for Parks, Recreation & Open Space, Plan for Traffic & Circulation, Plan for Housing, and Plan for Natural & Historic Resources. Each of the plan elements set forth an overall planning direction and contains short and long-range, and ongoing strategies proposed to implement such. This chapter concludes with a discussion of the interrelationship of each plan elements, both within the Township and region.

PLAN FOR LAND USE

The overall intent of the Plan for Land Use is to propose a future land use pattern that fits within the existing conditions of Uwchlan, yet provides opportunities for land use development that fulfill the vision of the Township. According to the Municipalities Planning Code (MPC) and as listed in Chapter 1, the Comprehensive Plan shall include *“A plan for land use, which may include provisions for the amount, intensity, character and timing of land use proposed for residence, industry, business, agriculture, major traffic and transit facilities, utilities, community facilities, public grounds, parks and recreation, preservation of prime agricultural lands, flood plains and other areas of special hazards and other similar uses.”*

The Plan for Land Use is divided into two parts, the Plan itself and implementing strategies for the planning components. The MPC also requires *“A discussion of short- and long-range plan implementation strategies, which may include implications for capital improvements programming, new or updated development regulations, and the identification of public funds potentially available.”* The short-range implementing strategies for the land use component relates to more immediate action. The long-range implementing strategies involve anticipated needs that should be accommodated in the future once the short range strategies are completed up to 10 years. Ongoing strategies are continued activity on a particular action. Because the timeframe within which a comprehensive plan is useful varies, this Plan is not limited to a particular number of years, but must be evaluated every ten years as specified by the MPC. As the ten-year timeframe approaches, the Township must judge the viability of the document periodically and update the information as available. The last Comprehensive Plan update was in 2000.

It is important to understand the relationship between the Plan for Land Use and the land use regulations of the Township. The Plan for Land Use represents long range goals and provides the framework for decisions relative to land use regulations. Land use regulations, such as zoning and subdivision ordinances, building and housing codes, are more immediate in nature. They are designed to address and guide existing conditions toward the patterns expressed in the Plan for Land Use. Refined and amended regulations are ultimately the means to attain the land use goals of the Comprehensive Plan.

DEVELOPING THE PLAN FOR LAND USE

Several factors were considered in establishing the Plan for Land Use including natural features and constraints, existing development pattern, Township goals and objectives, accessibility to transportation and services, and population projections. These factors are not new to the planning process in Uwchlan. However, what this Comprehensive Plan Update attempts to focus on is the synthesis of all of the factors in the context of short and long range plans for creative new development and possible redevelopment.

Natural & Historic Resources

The resource mapping contained in the Inventory & Analysis Chapter serves as important elements for this planning process. There has been a reaffirmation of the environmental features of the Township in developing this Comprehensive Plan Update, especially given those few properties that remain undeveloped and what they could sustain. Highlights of the natural and historic resources inventory include the following:

- *Approximately 6.4% of the Township is comprised of floodplain, wetland hydric soils or riparian buffer;*
- *Approximately 15.4% of the Township is comprised of steep slope in excess of 15%; and*
- *Approximately 458 structures within the Township were built prior to 1960 and about 140 may be historically significant.*

Existing Land Use

The existing development pattern, as outlined in Chapter 2, serves as the framework for future development patterns. Uwchlan is a suburban community with approximately 5% of its land undeveloped. Highlights of the existing development pattern include:

- Residential is located mainly within the southern two-thirds of the Township with the exception of Eagleview, the area adjacent to East Township Line Road, and triangle bounded by Route 113, PA Turnpike, and West Pikeland.
- Commercial/office uses are generally located along Route 100, Route 113, Eagleview Boulevard, and the Eagleview Town Center.
- Industrial uses continue to be located within Pickering Creek Industrial Park.
- Community facilities are mainly located in the southern portion of the Township in Lionville, along or near Route 113 from Lionville south, and along or near Route 100 south.
- Parks and open space are located south/west of Route 100, except Rhondda and areas in the southeast corner of the Township.
- Agriculture continues on two properties located north of the Pa Turnpike and west of Route 113, one property at the PA Turnpike Interchange and Route 100, and one property on Worthington Road.
- The amount of land in Uwchlan that remains undeveloped is limited and most of the available land is zoned for non-residential uses.

Population Forecasts

Population forecasts are essential in analyzing future land use needs. Adequate provisions for new development are established by anticipating future development and providing land use allocations that meet forecasted populations. According to the population section of the Inventory & Analysis Chapter, the population of Uwchlan in 2008 was estimated at 18,641 persons. By the year 2030, the population is forecasted to be 22,722 persons. This represents an increase of about 4,081 persons which translates to about 1,457 dwelling units given the average household size of 2.80. Assuming the 2010 forecast of 19,194 persons is correct and that the 5.7 persons/1,000 population (noted in Chapter 2) is an accurate representation of Uwchlan's future annual natural increase, an additional 1,127 person natural increase can be expected by 2020 (this is based solely on 5.7/1,000 each year, without factoring in-migration). If the developable land build-out scenario of Table 4-1 yields the 966 persons stated (essentially the maximum in-migration permitted by current zoning), the 2020 population would be 21,287 (19,194 + 1,127 + 966). Not all of the remaining residentially zoned land in the Township will be developed by 2020, but even if split between decades the natural increase alone between 2020 and 2030 will be 1,220 persons. The build-out/natural increase scenario would yield 20,804 persons in 2020 (19,194 + 1,127 + 483). There would be 22,507 persons in 2030 (20,804 + 1,220 + 483). The CCPC/DVRPC forecasts for 2020 and 2030 are not far off: 2020 – 21,066 and 2030 – 22,772. The difference between the two forecasts for 2020 of 262 and 2030 of 265 (1.2%) are statistically insignificant.

Township Goals & Objectives

Chapter 3, Goals & Objectives, contains general goals and more specific objectives for Uwchlan. These include land use goals and objectives for the desired future character of the Township in terms of growth and development, circulation, community facilities, recreation, open space, and environmental resource protection. In summary, the overall goal for Uwchlan is to provide for orderly development in a manner that will enhance the community and protect the health, safety, and welfare of all persons residing in the Township.

Public Policy Context & Legal Requirements

An allocation of future land uses needs to focus on the current Township practice of providing a variety of land uses and housing types as required by the enabling legislation, §604(4-5) of the MPC. A mix of residential densities and the provision for commercial, industrial, and community facilities need to be considered in formulating land use policy decisions. The range of dwelling unit types provided will be described within the Plan for Housing later in the Chapter.

Accessibility

Accessibility to transportation systems, community facilities and services is important in guiding future development. As discussed in Chapter 2, the location of the PA Turnpike Interchange and Routes 110 and 113 within Uwchlan along with its proximity to commuter rail stops at Exton, Whitford, and Downingtown place Township residents a few minutes away from both employment opportunities and shopping facilities. Additionally, five of the thirteen schools of the Downingtown Area School District are located within Uwchlan. This advantageous location coupled with the Township facilities and services, such as extensive parks and trails, and public sewer and water, make Uwchlan an extremely attractive place to live. The Plan for Community Facilities & Utilities and the Plan for Traffic &

Circulation project the community facilities and transportation systems of the Township in much greater detail, particularly their relationship with the Plan for Land Use.

PLAN FOR LAND USE

Map 4-1, Plan for Land Use, depicts patterns of future land use intensity. Nine categories comprise the Plan for Land Use as described below: Low Density Residential, Medium Density Residential, High Density Residential, Commercial, Commercial/Industrial, Industrial, Community Facilities, Parks & Open Space, and an overlay for the Greater Lionville Area. It must be remembered that the Plan is generalized and conceptual in nature, and thus the boundaries of the various land use categories are not meant to be exact.

Residential Land Use

Residential land uses are divided into three separate categories based on density.

Low Density Residential

Areas identified as Low Density Residential are located in the northern portion of the Township adjacent to East Brandywine, Upper Uwchlan, and West Pikeland Townships as shown on Map 4-1. The Low Density Residential land use category is comprised mainly of single family detached residential development at a density of range ½ to 1 dwelling unit per acre and includes those portions of the Township that are currently zoned RA, Rural Agricultural and RR, Rural Residential Districts. Three subdivisions within the area coinciding with RA District were developed under the Residential Open Space Option therefore contain significant open space with lot sizes as low as a ½ acre. There is no public sewer and limited public water in the area coinciding with the RR District (adjacent to Upper Uwchlan and West Pikeland), except that area along Route 113. Mobile home parks are permitted by conditional use in the areas currently zoned for RR District.

Most of the areas proposed for Low Density Residential uses are already developed. The undeveloped areas proposed for Low Density Residential are described below, whether developable or not and shown on Table 4-1.

The area coinciding with the RA District:

- Seven parcels totaling 44 acres that could be further developed to collectively accommodate 26 single family detached dwellings.

The area coinciding with the RR District:

- One undeveloped parcel of 24 acres that is too constrained for development due to floodplain, wetland, steep slope, and limited access; and
- Two adjacent parcels totaling 12 acres that could be further developed to accommodate 35 mobile homes.

Medium Density Residential

Proposed Medium Density Residential is located in the southern half of the Township between the East Branch of the Brandywine Creek and Devon Drive and between Route 100 and Charlestown and West Pikeland Townships as shown on Map 4-1. This land use category is also comprised mainly of single family detached residential development with a density range of ¾ to 2½ dwelling units per acre. For the most part, Medium Density Residential areas coincide with those portions of the Township currently zoned R-1, Low Density Residential District and occupied by smaller lot single family dwellings. The proposed Medium Density Residential area also includes portions of the Township developed under: PRD, Planned Residential Development (repealed in 1987), located in two areas - northeast of Route 100 and Ship Road (Rhondda), and in the southwest corner of the Township north of Norwood Road (Williamsburg) adjacent to East Brandywine and East Caln Townships; and PSFD, Planned Single Family Development located on both sides of Deep Willow Drive generally north of Devon Drive (Seasons & Silver Birches). The PRD and PSFD developments include a mix of single family, two-family, and townhouses along with open space.

Like Low Density Residential, most of the areas proposed for Medium Density Residential uses are already developed. The undeveloped areas proposed for Medium Density Residential are described below, whether developable or not and shown on Table 4-1.

The area coinciding with the R-1 District:

- One undeveloped parcel of 71 acres that due to both natural and manmade constraints, could be developed to accommodate 50 single family detached dwellings.
- One undeveloped parcel of 24 acres that will yield 25 single family detached dwellings based upon review by the Township.
- Six parcels totaling 86 acres that could be further developed to collectively accommodate 41 single family detached dwellings due to natural constraints such as floodplain, wetland, and steep slope.

High Density Residential

The areas in the Township proposed for High Density Residential are shown on Map 4-1 and generally located between the PA Turnpike and Route 113, adjacent to West Pikeland, and between Route 100 and Whitford Road. The area proposed for High Density Residential coincides with those portions of the Township currently zoned R-2, Medium Density Residential District. This land use category is comprised of all types of residential uses, ranging from single family detached dwellings on small lots, to semi-detached dwellings, to townhouses and apartments with a combined density range of 2 to 12 dwelling units per acre. All of the existing multi-family developments contain an open space and/or recreation element. The areas in the Township that are identified as High Density Residential include those areas that already have such development and are served by public water and sewer.

Although developed under a different zoning district (see the PCID discussion in Chapter 1), the Eagleview residential areas would also fit into this land use category. There are no undeveloped areas proposed for High Density Residential, however two undeveloped parcels within the Eagleview Town Center totaling 9 acres are planned for 210 senior apartments and 80 condominiums and shown on Table 4-1.

Commercial

Those portions of the Township proposed for Commercial are located along Routes 100 and 113 as shown on Map 4-1. This land use category represents a mixture of highway commercial uses such as hotels, restaurants, banks, retail stores, and office uses. The area proposed for Commercial coincides with that portion of the Township zoned PC & PC-2, Planned Commercial Districts.

The undeveloped areas proposed for Commercial are described below, whether developable or not and shown on Table 4-1.

The area coinciding with the PC District:

- Five parcels totaling 32 acres that could be developed to collectively total 100,000+sf of office/retail and 3 restaurants, due to natural constraints such as floodplain and wetland.
- One undeveloped parcel of 5 acres that due to PADOT ownership is not currently available for development.

The area coinciding with the PC-2 District:

- One undeveloped parcel of 4 acres that due to PADOT ownership is not currently available for development.

Commercial/Industrial

The purpose of this land use category is to provide for large-site commercial and industrial development to meet current and anticipated future regional needs. The Commercial/Industrial land use category provides for a wide range of office and industrial uses. The area planned for Commercial/Industrial land use is shown on Map 4-1 and generally includes Eagleview and the area straddling the Turnpike west of Route 113. The area coincides with the area of the Township zoned PIC, Planned Industrial Commercial District and PCID, Planned Commercial Industrial Development District as discussed within the zoning ordinance section of Chapter 1.

The largest area of undeveloped land within the Township is proposed for Commercial/Industrial, approximately 489 acres. The area includes the balance of Eagleview Corporate Center and the Town Center, Happy Days Farm at Route 100 and PA Turnpike, the balance of Stoneridge at Route 100, the School District property on Lionville Station Road, and parcels on Haywood Drive. The undeveloped areas proposed for Commercial/Industrial are described below, whether developable or not, and shown on Table 4-1.

The area coinciding with the PIC District:

- Six parcels totaling 420 acres that could be developed to collectively total 3,665,000+sf of office 500,000sf retail, and 4 restaurants, due to natural constraints such as floodplain, wetland, and steep slope.

The area coinciding with the PCID District:

- Five undeveloped parcels totaling 67 acres could be developed to collectively total 670,000sf of office/flex due to natural constraints such as floodplain, wetland, and steep slope; and
- Three parcels totaling 2 acres within Eagleview Town Center that are planned for 50,800sf of office/retail mix.

Industrial

This category is comprised primarily of light industrial uses. The area planned for Industrial land use is bounded on the north and east by Route 113 and the PA Turnpike, on the west by Gordon Drive, on the south by the uses along Pickering Way and basically encompasses the Pickering Creek Industrial Park. This area coincides with the PI, Planned Industrial District as discussed within the zoning ordinance section of Chapter 1. Two undeveloped parcels totaling 38 acres are located within the Industrial land use category and shown on Table 4-1, but are relatively constrained with steep and wetland along with limited access to each.

Community Facilities

This category is comprised of public and private institutional uses, educational facilities, public utility facilities, religious and civic facilities, cemeteries, emergency service facilities, and Township buildings and grounds. The locations of such uses on the Plan for Land Use reflect, for the most part, the existing public/quasi-public uses in the Township. The schools, particularly Shamona Creek Elementary, and Uwchlan Hill Elementary, have additional land for potential expansion and are designated such. The Plan for Community Facilities & Utilities projects the community facilities of the Township in much greater detail, particularly their relationship with the Plan for Land Use.

Parks & Open Space

This land use category includes the Township parks and open space whether owned by an HOA or the Township some of which contain environmentally sensitive areas as well as historic and archaeological resources. The Parks & Open Space category is not only an integral part of the character of Uwchlan, but the services and facilities provided by the Township. The Plan for Parks, Recreation & Open Space and the Plan for Natural & Historic Resources provide much greater detail as to the ongoing preservation of these lands, particularly their relationship with the Plan for Land Use.

Greater Lionville Plan

An existing mix of residential and commercial land uses characterizes the Greater Lionville Area of the Township. The Greater Lionville Area encompasses a significant portion of the Township and includes five sub-areas, as follows:

1. *Eagleview Boulevard Commercial Area – Includes all contiguous parcels zoned commercial along Eagleview Boulevard between Route 113 and the border of Eagleview Corporate Park; and along Sheree Boulevard between Route 100 and Eagleview Boulevard.*
2. *Route 100 Corridor – Includes all parcels with frontage on Route 100 between Gordon Drive and the PA Turnpike Interchange.*
3. *Happy Days Farm/Stoneridge – Includes one of the largest undeveloped parcels in Uwchlan Township, Happy Days Farm tract and the majority of the parcels along Sheree Boulevard between Routes 100 and 113.*
4. *Village of Lionville – Includes all properties on North Village Avenue, the majority of parcels on South Village Avenue, and a portion of North Whitford Road.*
5. *Pickering Creek Industrial Park/Route 113 – Includes all of the parcels within the Pickering Creek Industrial Park, the parcels which front on Gordon Drive between Routes 100 and 113, and several parcels on the north and south sides of Route 113 between Sheree Boulevard and Gordon Drive.*

**TABLE 4-1
PLAN FOR LAND USE, DEVELOPABLE LAND IN 2010 - BUILD-OUT SCENARIO**

MAP NUMBER	ACRES	PROPOSED USE	ZON	CONSTRAINTS	LOCATION	DEVELOPMENT	PERSONS
Residential						467 DU	966
1	24.3	Low density	RR	FLOODPLAIN/WETLAND/SLOPE	LIONVILLE STATION	0 DU	0
2	11.7	Low density	RR	FLOODPLAIN/WETLAND	RT 113	35 MH	98
3	9.5	Medium density	R-1	WETLAND/SLOPE	CENTURY OAKS/NO FRONTAGE	0 DU	0
4	71.0	Medium density	R-1	PARTLY CONTAMINATED	WORTHINGTON	50 SFD	140
5	24.0	Medium density	R-1	FLOODPLAIN/WETLAND/POND	WORTHINGTON	15 SFD	42
6	6.0	Medium density	R-1	FLOODPLAIN/WETLAND	WORTHINGTON	3 SFD	9
7	23.5±	Medium density	R-1	FLOODPLAIN/WETLAND	WINDHAM	25 SFD	70
8	15.9	Medium density	R-1	FLOODPLAIN/WETLAND	LYNNWOOD	10 SFD	28
9	7.6	Low density	RA	FLOODPLAIN/WETLAND	DOWLIN FORGE	6 SFD	17
10	5.0	Low density	RA	-	DOWLIN FORGE	3 SFD	9
11	6.7	Low density	RA	PIPELINE	DOWLIN FORGE	4 SFD	12
12	10.4	Medium density	R-1	FLOODPLAIN/WETLAND	PECK	4 SFD	12
13	20.7	Medium density	R-1	SLOPE/FLOODPLAIN/WETLAND	PECK	9 SFD	26
14	5.1	Low density	RA	-	PENNYPACKER/MILFORD	2 SFD	6
15	5.0	Low density	RA	FLOODPLAIN/WETLAND/POND	PENNYPACKER/DOWLIN FORGE	4 SFD	12
16	5.7	Low density	RA	FLOODPLAIN/WETLAND	PENNYPACKER/DOWLIN FORGE	3 SFD	9
17	8.8	Low density	RA	SLOPE/FLOODPLAIN/WETLAND	MILFORD	4 SFD	12
18	2.7±	High density	PCID	-	WELLINGTON	80 CONDOS	160
19	6.8±	High density	PCID	-	RICE	210 SENIOR APT	315
Nonresidential						4,318,550sf	
20	1.5	Commercial/Industrial	PCID	-	TOWN CENTER	50,800SF OFF/MIX	-
21	7.4	Commercial/Industrial	PCID	FLOODPLAIN/WETLAND/HYDRIC	REGENCY	PREVIOUS PCID PLAN	-
22	5.0	Commercial/Industrial	PCID	-	PENNSYLVANIA	PREVIOUS PCID PLAN	-
23	10.8	Commercial/Industrial	PCID	SLOPE/HYDRIC	PENNSYLVANIA	PREVIOUS PCID PLAN	-
24	5.2	Commercial/Industrial	PCID	-	CONSTITUTION	PREVIOUS PCID PLAN	-
25	32.6	Commercial/Industrial	PCID	SLOPE/HYDRIC	RT 100	PREVIOUS PCID PLAN	-
26	8.8	Commercial/Industrial	PIC	-	HAYWOOD	65,000SF OFF	-
27	16.4	Commercial/Industrial	PIC	-	HAYWOOD	100,000SF OFF	-
28	216.5	Commercial/Industrial	PIC	FLOODPLAIN/WETLAND	LIONVILLE STATION	1,000,000SF OFF	-
29	15.9	Industrial	PI	WETLAND/SLOPE	RT 113	0 SF (SLIP RAMP?)	-
30	22.8	Industrial	PI	FLOODPLAIN/WETLAND/HYDRIC	PHILIPS	0 SF	-
31	112.6	Commercial/Industrial	PIC	FLOODPLAIN/WETLAND	ROUTE 100	2,500,000SF OFF	-
32	57.4	Commercial/Industrial	PIC	-	SHEREE	500,000SF RET	-
33	5.0	Commercial	PC	-	R100/113E	0 SF	-
34	4.3	Commercial	PC2	-	R100/113E	0 SF	-
35	8.5	Commercial/Industrial	PIC	FLOODPLAIN/WETLAND	ROUTE 100	4 RESTAURANTS	-
36	2.4	Commercial	PC	-	SHEREE/EAGLEVIEW	1 RESTAURANT	-
37	4.0	Commercial	PC	-	EAGLEVIEW/DOWLIN FORGE	KFC/TACO BELL	-
38	1.0	Commercial	PC	-	RT 113/EAGLEVIEW	2,750SF BANK	-
39	19.4±	Commercial	PC	FLOODPLAIN/WETLAND	RT 113	100,000SF OFF/MIX	-
40	5.6	Commercial	PC	-	RT 113	OFF/MIX	-

Population multipliers for residential are: 2.80 for SFD & MH; 1.5 for APT; 2.0 for = CONDO.

The number of dwelling units and square footage are estimates based upon the property size, approximate amount of constraints, and zoning. The numbers are not based upon engineered plans nor are they the guaranteed yield.

The Greater Lionville Plan is a guide for the future development and public improvement of most of the contiguous commercially zoned areas in the vicinity of the Village of Lionville. The Plan includes landscape and streetscape recommendations and pedestrian circulation improvements to make this an attractive, pedestrian friendly place for residents to work, shop, and recreate.

The Greater Lionville Plan proposes a unified design theme for the area and sub-areas and includes specific recommendations for street trees, signage, setback requirements, sidewalks, benches, trash receptacles, lighting, and intersection treatments. Plan implementation measures will include possible zoning ordinance language, design guidelines and a public improvement program.

SHORT-RANGE IMPLEMENTATION STRATEGIES

Recommended short-range implementation actions proposed, following the Plan Update adoption, include those listed below for residential and commercial/industrial lands as well as address the policy objectives identified in Chapter 3. Recommendations for community facilities, parks and recreation are provided in those separate Plan Elements following this section.

RESIDENTIAL

Zoning Ordinance

Review and amend, as necessary, the Zoning Ordinance and Zoning Map to include the following:

- Continue to review and possibly modify the area and bulk regulations within the residential districts §§265-501.6-8, 502.6-8, 503.6-8 & 504.6-8 to assure that residential areas have sufficient space, privacy, and convenience.
- Continue to maintain or raise residential values by reviewing the residential districts (§§265-501.2-5, 502.2-5, 503.2-5 & 504.2-5) and remove certain uses permitted to prevent the introduction of incompatible uses within existing and new residential development. Examples include: hospitals that are permitted by special exception in all residential districts; medical clinics, business office buildings, and neighborhood commercial uses permitted by conditional use within the R-2 District.
- Emphasize the use of the Residential Open Space Option on the Gray property and any other remaining large undeveloped parcels planned for Medium Density, to set aside open space for recreation and the preservation of sensitive natural features.

Subdivision Ordinance

Review and amend, as necessary, the Subdivision and Land Development Ordinance to address the following:

- Consider amending §260-503.3.c of the Design Standards to require sidewalks on both sides of the street within new residential developments.
- Evaluate §260-502.3 Street Widths of the Design Standards for residential development relative to on-street parking.

COMMERCIAL/INDUSTRIAL

Zoning Ordinance

Review and amend, as necessary, the existing Zoning Ordinance and Zoning Map to include the following:

- Evaluate the Zoning Map and the uses permitted within §§265-506, 507, 508 & 509 to protect future commercial/industrial areas from encroachment by other land uses during the period of time preceding their development.
- Continue to review the commercial/industrial districts (§§265-506, 507, 508 & 509) to provide for a wide range of uses in order to assure a more balanced future economic base.
- Compare existing off-street parking and loading areas at commercial/industrial uses to the requirements within §265-607 Off-street Parking & Loading of the Supplementary Standards for All Districts to evaluate their adequacy for new developments, and amend as necessary. Evaluate the inclusion design flexibility, such as designated areas for future expansion and shared and/or reserved parking to reduce the amount of impervious surface and potential runoff.

- Continue to evaluate existing conditions within commercial/industrial developments relative to separate vehicular and pedestrian traffic and amend §265-607 Off-street Parking & Loading and §265-605 Shopping Centers as necessary.
- Review and amend §265-608 Screening requirements in the Supplementary Standards for All Districts or particular district to minimize any adverse effects of commercial/industrial development.
- Evaluate inclusion within §265-507.5 of the PIC District, or create a new district, provisions for an age-restricted, continuing care or similar semi-retirement, retirement facility permitted by conditional use along with separate area and bulk standards in §365-507.7 & 8.

Subdivision Ordinance

Review and amend, as necessary, the Subdivision and Land Development Ordinance to address the following:

- Continue to modify §260-510 Erosion & Sediment Controls & Guidelines, Appendix C Construction Improvement Standards and the Stormwater Management Ordinance to include best management practices (BMP) and other creative methods of stormwater management as well as those of the MS4 Program within commercial/industrial developments, thereby mitigating the potential negative affects that a particular use will have on adjacent properties and the natural environment.

LONG-RANGE IMPLEMENTATION STRATEGIES

Recommended long-range implementation actions proposed after the short-range are completed include the following:

Energy Conservation Activities

- Evaluate the creation of ordinances that promote and facilitate the use and generation of alternative energy in building construction and rehabilitation.
- Evaluate the use of incentives for the construction and rehabilitation of buildings that use a green building component as well as traditional energy conservation practices, such as those which will provide natural light and fresh air.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Planning Coordination & Plan Review

- Continue to regulate and uphold ordinances, through legal action if necessary, to ensure that new development occurs in a manner that does not adversely impact existing development or place an undue burden on the Township’s infrastructure.
- Continue to plan the locations of commercial areas so that they are convenient to residential areas and provide sites that have easy access for customers, employees, and suppliers.
- Evaluate the Zoning Map relative to locating of commercial development to sites near major traffic thoroughfares while at the same time separating regional commercial traffic from local traffic.
- Continue to create and enforce design standards that will result in commercial developments that are attractively designed, landscaped, and buffered from roadways and residential areas.

Energy Conservation Activities

- Promote energy efficiency standards, such as Leadership in Energy and Environmental Design (LEED) and Energy Star certification for the development or redevelopment of buildings, properties, and neighborhoods.
- Support programs that allow residents to improve energy efficiency in their homes through weatherization, efficient climate control, and the conservation of hot water.
- Promote energy efficiency standards, such as LEED and Energy Star certification, and the installation of alternative energy generation systems in commercial and industrial operations.
- Support construction and development projects that implement energy conservation, including demonstration projects and programs.

RELATIONSHIP OF THE PLAN TO ADJACENT MUNICIPALITIES' PLANNING EFFORTS

ADJACENT MUNICIPALITIES

According to the Municipalities Planning Code (MPC), and as listed in Chapter 1, the Comprehensive Plan shall include *"A statement indicating the relationship of the existing and proposed development of the municipality to the existing and proposed development and plans in contiguous municipalities."* Chapter 2 highlighted the existing land use and zoning for the six Townships that surround Uwchlan Township: Upper Uwchlan, West Pikeland, Charlestown, West Whiteland, East Caln, and East Brandywine. All six municipalities have adopted Zoning Ordinances and Comprehensive Plans as indicated in Chapter 2. The compatibility of the Plan for Land Use with the abutting proposed land uses and existing zoning districts of the adjacent Townships is highlighted below.

Upper Uwchlan Township

The proposed Low Density Residential, Commercial/Industrial, and Community Facilities of Uwchlan are generally consistent with the Upper Uwchlan Future Land Use Plan for Rural & Suburban/Site Responsive and Mixed Suburban and zoning of R1-Residential, R2-Residential, C2-Limited Commercial, C3-Highway Commercial, PI-Planned Industrial/Office, and LI-Limited Industrial Districts.

West Pikeland Township

The proposed Low, Medium & High Density Residential and Parks & Open Space of Uwchlan are generally consistent with the West Pikeland Future Land Use Plan for Residential Growth Area and zoning for RD, Residential Development District. The High Density Residential proposes higher densities than those planned or zoned in West Pikeland, however this area of Uwchlan contain existing development with no area for new development and abuts the highest density area of West Pikeland.

Charlestown Township

The proposed Medium Density Residential of Uwchlan is consistent with the Charlestown Plan for Land Use for Other Low & Moderate Intensity Development and zoning of FR, Farm Residential and PRD-2 Districts.

West Whiteland Township

The proposed Medium Density Residential, Parks & Open Space, and Commercial of Uwchlan are consistent with West Whiteland's Land Use Plan for Low & Medium Density Residential and Parks, Permanent Open Space & Resource Conservation and zoning of R-1, Residential, R-2 Residential, and NC, Neighborhood Commercial Districts.

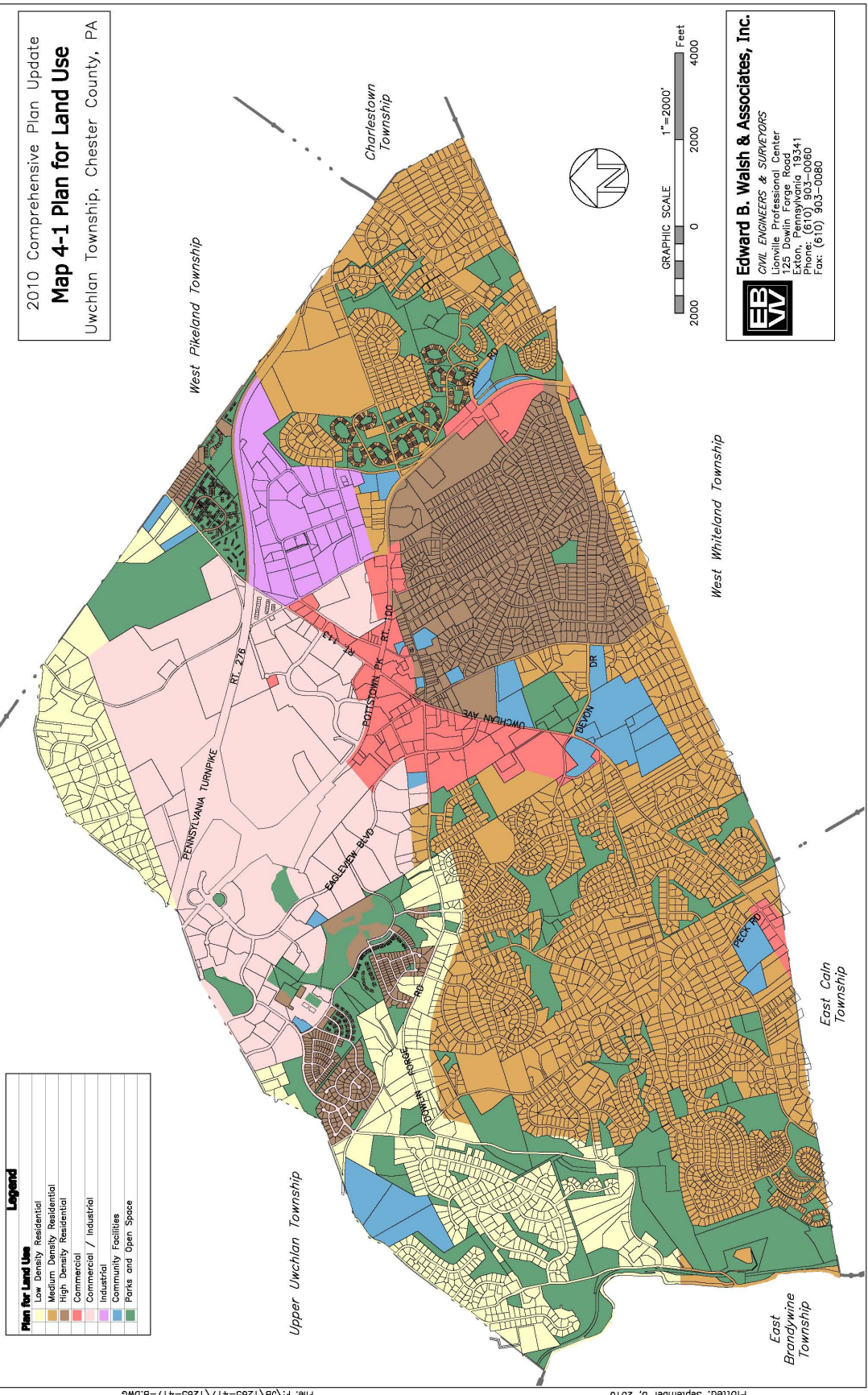
East Caln Township

The proposed Medium Density Residential, Parks & Open Space, and Commercial of Uwchlan are generally consistent with the East Caln Future Land Use Plan for County Community Facilities, Low & Medium Density Residential, and Mixed Residential & Commercial, and zoning of R-1 & R-2 Single Family Detached Residential, R-4 Low Density Cluster Residential, and OC-1, Office Commercial Districts.

East Brandywine Township

The proposed Low Density Residential and Parks & Open Space of Uwchlan are consistent with the East Brandywine Future Land Use Plan for Residential or Protected Open Space and Protected Public & Institutional and zoning for R-1, Residential District (2 acre).

2010 Comprehensive Plan Update
Map 4-1 Plan for Land Use
 Uwchlan Township, Chester County, PA



Legend

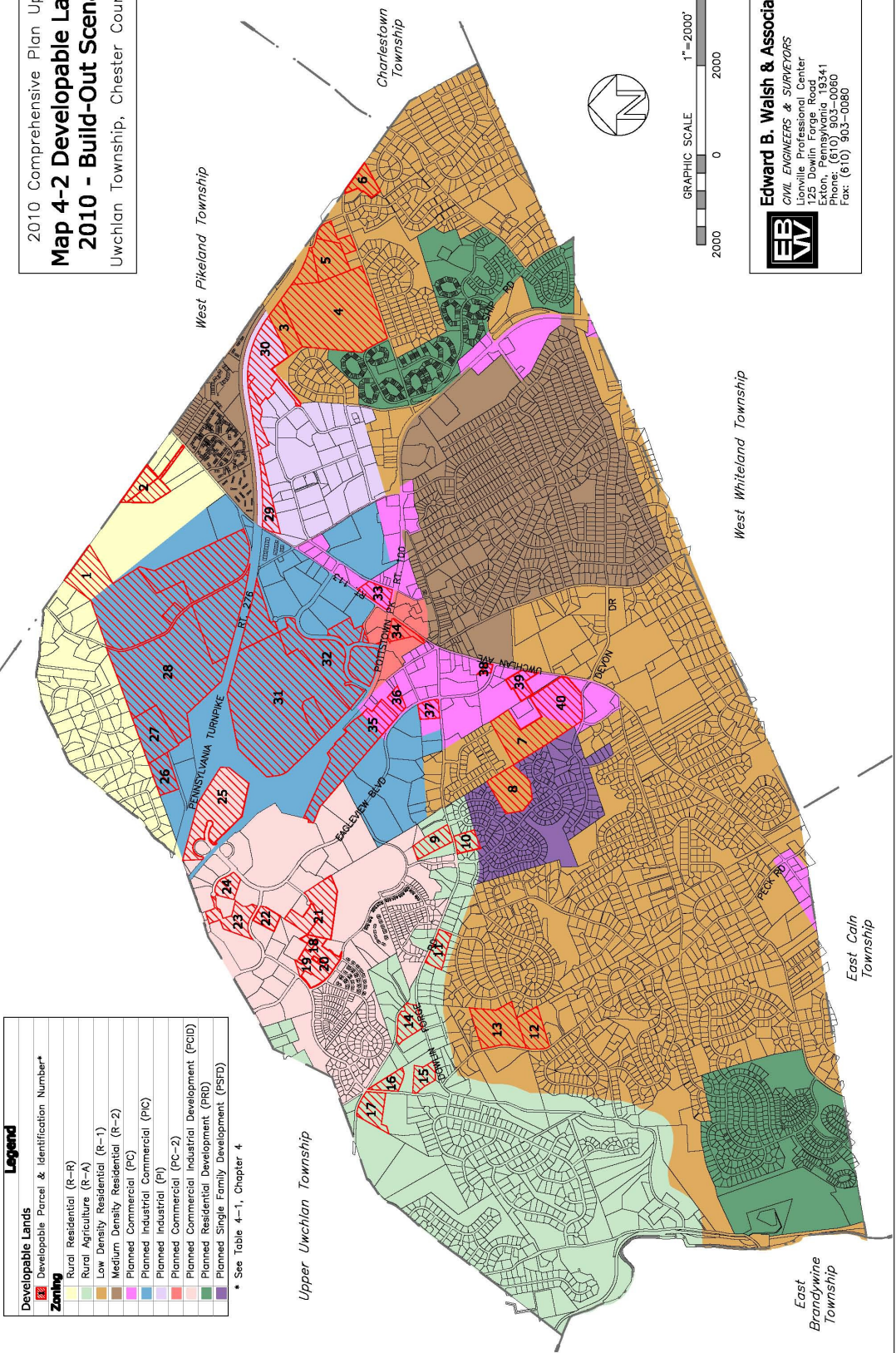
Plan for Land Use
Low Density Residential
Medium Density Residential
High Density Residential
Commercial
Commercial / Industrial
Industrial
Community Facilities
Parks and Open Space



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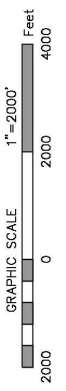
2010 Comprehensive Plan Update
**Map 4-2 Developable Land in
 2010 - Build-Out Scenario**
 Uwchlan Township, Chester County, PA



Legend

Developable Lands	Legend	Identifiable Number*
Developable Parcel	Red outline	Identifiable Number*
Zoning		
Rural Residential (R-R)	Light Green	
Rural Agriculture (R-A)	Light Blue	
Low Density Residential (R-1)	Light Yellow	
Medium Density Residential (R-2)	Light Orange	
Planned Commercial (PC)	Light Purple	
Planned Industrial (PI)	Light Blue-Gray	
Planned Commercial (PC-2)	Light Green-Gray	
Planned Commercial Industrial Development (PCID)	Light Orange-Gray	
Planned Residential Development (PRD)	Light Yellow-Gray	
Planned Single Family Development (PSFD)	Light Green-Gray	

* See Table 4-1, Chapter 4



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PLAN FOR COMMUNITY FACILITIES & SERVICES

The Plan for Community & Services establishes the policies for community facilities, services, and utilities to function and operate in Uwchlan Township. A major factor that influences planning for services is the various jurisdictions that have responsibilities for addressing needs outside of the control of the Township. Several of the community facilities that serve the region are located within the Township, such as five of the thirteen schools of the Downingtown Area School District (DASD), the Lionville Fire Company, and Uwchlan Ambulance Corps. The Township in turn is part of a regional network of facilities whose decision making is located elsewhere such as the DASD and utilities supplied by Downingtown Area Regional Authority (DARA), Aqua PA, and PECO.

According to the Municipalities Planning Code (MPC) and as listed in Chapter 1, the Comprehensive Plan shall include *“A plan for community facilities and utilities, which may include public and private education, recreation, municipal buildings, fire and police stations, libraries, hospitals, water supply and distribution, sewerage and waste treatment, solid waste management, storm drainage, flood plain management, utility corridors and associated facilities, and other similar facilities or uses.”* The Community Facilities & Services section of the Inventory & Analysis coupled with the population forecasts as well as the goals and objectives stated within Chapter 3, provide the background necessary to recommend future levels of community facilities within Uwchlan. This Plan element offers recommendations pertaining to sewage facilities, water supply, school facilities, emergency service needs, and Township services. A major theme of the recommendations involves some type of cooperation with the entity providing the service. In terms of Township services, the objective is to balance the level of service necessary to meet anticipated needs with the Township’s fiscal capabilities and sound management of its resources.

EDUCATIONAL FACILITIES

The educational needs of Uwchlan Township appear to be adequately addressed through the ongoing construction and renovations undertaken by the Downingtown Area School District. DASD reports that with the ongoing construction program, it should have sufficient capacity to serve Uwchlan Township students well into the future. After several years of steady enrollment growth, the increases have leveled off and are expected to be smaller in future years due to the current economic climate. DASD reports a year 2009-10 enrollment of 11,807 students and a projects a year 2014-15 enrollment of 12,192 students. DASD plans for the opening of a new Science, Technology, Engineering & Math (STEM) High School in 2011-12 and the construction of a new middle school opening in 2012-13. The Township should remain abreast of DASD decision making regarding budgets and facilities, specifically those within Uwchlan, and actions relative to their property on Lionville Station Road.

EMERGENCY SERVICES

Police Services

Current staffing of the Township Police Departments appears adequate. The population forecasts of an additional 3,528 persons by 2030 prepared by CCPC/DVRPC project a total build-out of the Township, although the forecasted increase has been questioned by the Comprehensive Plan Committee. The Police Department’s continued allocation of manpower resources by obligated (or dedicated) versus non-obligated (or dedicated) time to handle patrol and responses, rather than the outdated population based standards will more adequately address needs. In addition, the fiscal reality of the Township budget will also dictate the potential for additional police needs.

Fire Services

Based on current standards, the fire protection provided by the Lionville Fire Company appears adequate for existing as well as those future needs projected by this Plan Update. In addition to Lionville’s equipment replacement program, all fire fighters should continue to be required to receive National Fire Protection Agency (NFPA) training. The Township should continue its financial support of the Lionville Fire Company. Continued Township Fire Marshal inspections and strict enforcement of the Fire Protection Code should also occur for both existing and new construction.

Ambulance Services

As in case of the fire protection, the facilities and service of Uwchlan Ambulance Corps and supporting agencies appear adequate to meet the Township’s existing and future needs. In order to ensure that effective Emergency Medical Service is available to all residents, Emergency Medical Technicians (EMT) should be continue to trained and certified, as needed, and a medical doctor(s) should be available to oversee medical services. The Township

should continue its financial support of the Uwchlan Ambulance Corps or any other companies that might serve the Township.

MUNICIPAL FACILITIES

Staff and space at the Township facilities are adequate at the current time and are expected to be so for the near future. As additional municipal services are made available to Township residents, additional space may be required for administration, meetings, and equipment. The Township's coordination of its Emergency Operations Center (EOC) with the County Emergency Management System (EMS) functions adequately relative to emergency preparedness; continued liaison is recommended.

UTILITIES AND SERVICES

Water Service

Aqua PA will continue to provide water service to Uwchlan. The Township should continue to work closely with Aqua PA to insure that adequate water service is available to existing and future Township residents and businesses.

Sewer Service

The continued use of the Downingtown Regional Water Pollution Center and Uwchlan Township Municipal Authority (UTMA) System is proposed to handle the sewer need of Uwchlan Township. The Township must continue to work closely with DARA and the UTMA to insure that adequate sewer service is available to existing and future Township residents and businesses.

Those portions of the Township that remain unsewered must be periodically reviewed both for the potential of public sewer extension within new development and the adequacy of those existing on-lot sewage disposal systems.

Solid Waste Disposal

The current system, whereby the Township contracts with a private contractor to provide trash and recyclables collection throughout the Township, is sufficient at the present time. The Township should continue to monitor this arrangement and revise it as necessary to adjust to future situations.

Stormwater Drainage

The Township should periodically review, and update as necessary, its zoning and subdivision ordinances, building code, erosion and sedimentation and other ordinances to regulate development in a manner consistent with the County, State and Federally-mandated regulations.

One example of this review and update process is the Township's participation in Environmental Protection Agency's (EPA's) MS4 Stormwater Management Program, which involves an ongoing permit, updated every 5 years. The Township, through the MS4, is required to design its program to reduce the discharge of pollutants to the maximum extent possible, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act through six elements: public education and outreach; public participation/involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping.

Other Utilities

At a minimum, every five years the Township's electrical supply should be reviewed to confirm that it is sufficient to meet future requirements. Telephone and cable TV services should be reviewed to confirm that they are comparable to services elsewhere in the Region.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Planning Coordination

- Continue to provide the variety of Township administrative services and facilities, such as building and fire code inspections, newsletter, website, staffing, and meeting facilities.

- Continue to provide adequate Police Department staffing and coverage to serve the residents and business of the Township.
- Continue to financially support the Lionville Fire Company and Uwchlan Ambulance Corps, or other companies providing services, to ensure adequate emergency services for the Township.
- Continue to work with DASD regarding their facilities within the Township and monitor their activity with the property on Lionville Station Road.
- Review and update, as necessary, the Township Act 537 Sewage Facilities Plan.
- Continue to work closely with DARA and UTMA to insure that adequate sewer service is available to existing and future Township residents and businesses.
- The Township must continue to work closely with Aqua PA to insure that adequate water service is available to existing and future Township residents and businesses.

Energy Conservation Activities

- Complete energy audits of Township buildings and facilities for baseline numbers.
- Reduce energy consumption through the purchase of supplies and equipment, or when upgrading physical plant elements such as lighting, cooling or heating systems.
- Establish a minimum average fuel efficiency standard for the procurement of Township vehicles.
- Inform residents about strategies for conserving energy and support education efforts that encourage energy and resource saving practices at home, at school, and at the work place.
- Continue to support, expand, and improve recycling programs in all sectors.
- Support programs that offer consumers opportunities to re-use materials which would otherwise be disposed of, such as permitting curbside pickup for reuse, or “free-cycling”.

LONG-RANGE IMPLEMENTATION STRATEGIES

Recommended long-range implementation actions proposed after the short-range are completed include the following:

- Review the potential extension of public sewer and water to that area of the Township north of the PA Turnpike currently unserved.
- When available, consider the use of alternative wastewater treatment and disposal technologies, such as the retrofitting of existing wastewater treatment facilities in order to improve energy efficiency.

PLAN FOR PARKS, RECREATION & OPEN SPACE

The Plan for Parks, Recreation & Open Space is typically part of the Plan for Community Facilities & Utilities as set forth in the Municipalities Planning Code (MPC) "*A plan for community facilities and utilities, which may include public and private education, recreation ...*", however, the 2000 Comprehensive Plan included the 1999 Update of the 1992 Open Space and Recreation Plan as the recreation inventory, plan element, and policy guide for recreation and open space within the Township. This Plan Update builds upon the Inventory & Analysis of Chapter 2 by evaluating land and facility needs based upon standards and concludes with short-range and long-range implementing strategies.

STANDARDS

The experience of park, recreation and planning experts from around the country has created a pool of common observations and judgments. This experience has been translated into standards for parks and recreation facilities. Park area standards for this Plan Update are based on those established by the National Recreation and Parks Association (NRPA) and are shown on Table 4-2. These standards are presented in terms of land area or number of facilities required to serve a given population.

The NRPA standards presented in this Plan provide a method for generally measuring need. Recreational facility standards for this Plan are based upon guidelines established by three sources: the NRPA, the Chester County Open Space and Recreation Study (CCOSRS), and the Delaware Valley Regional Planning Commission (DVRPC). These standards are shown on Table 4-3. They can be used to evaluate how well existing lands and facilities meet those needs and thereby determine the extent of unmet needs. Population-based standards can also be compared to expected population increases based upon new development. This comparison will afford a general picture of what kind of park and recreation needs any particular development may generate. Standards cannot provide a complete or detailed basis for designing parks or for determining the exact number or location of specific facilities. Detailed design decisions cannot be made according to strict formulas, but must be based on specific needs, desires, and financing and operating capabilities of the Township.

Regional Parks

Regional parks are large scale park preserves serving an area greater even than Chester County. Because of their regional significance, such parks are usually provided by federal or state governments. They typically provide a variety of outdoor recreation opportunities, both active and passive, particularly those requiring large land or water areas. Emphasis is often placed on recreation opportunities beyond the scope of those typically provided at local parks, including, for example, camping, boating and swimming. Based on widely accepted standards developed by the NRPA, most regional parks in southeastern Pennsylvania do not adequately meet the regional park needs of their service areas. Only French Creek State Park, 7,500 acres straddling Chester and Berks Counties, offers a full array of regional park and recreation opportunities. In any case, it is in the interest of Uwchlan Township to support, and even promote, the expansion of regional parks and associated recreational opportunities.

Uwchlan Township is served by a closer regional park, Marsh Creek State Park in neighboring Upper Uwchlan, albeit a specialized water activity related facility. Marsh Creek State Park comprises 1,705 acres with a 535 acre lake and for the following activities and facilities: boating (two launch and 220 seasonal mooring slips); fishing, hunting (on 900 acres designated for such); miles of pedestrian and equestrian trails; picnicking; and a swimming pool with concessions and restrooms.

Sub-Regional Parks

These parks fill the gap between regional parks and local parks. Ideally, they provide relatively large tracts of public open space within a short drive of home; fifteen minutes is considered a reasonable threshold. Serving less than an entire county, sub-regional parks are beyond the scope of municipal provision. They are likely to be provided by county government, but could be provided jointly by more than one municipality. Sub-regional parks should be geared to regular use on weekdays as well as weekends. They should offer the trails, fields, courts, water recreation areas, picnic areas, and woodlands that local parks can only partially provide.

Uwchlan Township will be served by the 700 acre Exton Park, the joint West Whiteland Township/Chester County owned facility located on the Church Farm School property currently in the design stage that will function as a sub-regional park. One design option depicts the following: natural areas consisting of hundreds acres of woodland, wetland, meadow, and ponds; active recreation area consisting of open fields (soccer, multi-purpose), baseball and softball fields; volleyball; hard court facilities (tennis and basketball); multiple playground areas; miles of trails (multi-purpose, pedestrian, primitive, equestrian); numerous picnic areas and pavilions; amphitheater; restrooms and concessions.

Community Parks

Community Parks provide a local place for group and individual sports and exercise, both casual and organized. They serve local outdoor recreation needs on a regular basis. Both active and passive uses are ordinarily provided within a community park. Such activities may make use of adjacent or associated school or municipal facilities. It is generally appropriate to provide undesignated "natural" or landscaped areas at least equal in land area to the area occupied by courts, fields, buildings and other active recreation facilities. In more developed areas, visual and noise screening or buffers from adjacent residential and other land uses may be necessary.

Many of those who use the community park will drive to such a facility. The parks should be as centrally located as possible. Pedestrian walkways and trails should provide safe access from all directions. Where possible, it is desirable to link community parks into the stream valley and background open space network via such trails, effectively expanding the passive or natural areas of the parks. Sites chosen for community park development should have sufficient well-drained soil and relatively level land to accommodate playing fields, courts and other heavily used recreation facilities, if such are planned. Refer to Table 4-2 for standards regarding community parks.

Community parks will vary according to the needs, desires, and means of the Township. Approximately one-half of the average community park is devoted to landscaped and undesignated areas. This space is necessary to prevent different activities from interfering with one another, to provide landscaped transitions between the park and its surroundings, and to provide quiet, shady places for the more passive but equally important kinds of recreation. The actual number of fields, courts and other recreation facilities included at any one park should reflect a careful analysis of Township needs and site characteristics.

Neighborhood Parks

Neighborhood parks should provide spaces and facilities for recreation close to home. Exercise and sitting areas for adults, play areas for children, and undesignated field and court areas should be part of a neighborhood park. Large-scale active recreation facilities may be included if the size of the parks permits. Such facilities are more appropriate in community parks.

Although five acres is the minimum recommended size, neighborhood parks should comprise 10 acres wherever possible. Sufficient land is desirable to provide landscaped or natural buffer areas between different park activity areas and between the park and other adjoining land uses. Sufficient level or nearly level land is needed for court and field areas.

Many of those who use the neighborhood park will travel on foot or on bicycle. Neighborhood parks should be located so that wherever possible park users will not have to cross heavily traveled roadways or rail lines to reach them. Neighborhood parks should provide for recreation close to home, both active and passive. Play apparatus for children should be supplemented by areas designed for older children and/or adults that have full view of the small children, yet avoid physical interference with them. Refer to Table 4-2 for standards regarding neighborhood parks.

Detailed selection of facilities for neighborhood parks should reflect the demographics of the service area of each park. In neighborhoods where young and middle-aged adults without children predominate, for example, there might be a greater concentration of court sport areas and a jogging or exercise trail. Where senior citizens are prevalent, benches in conversational groupings and shuffleboard courts are examples of facilities that become more important. In all cases, park facilities should be designed with multi-use in mind, to facilitate response to varying demographic needs. Appropriate numbers of individual facilities should be determined based on an analysis of neighborhood and community-wide recreation needs relative to the degree those needs are met at other parks and recreation areas.

Pocket Parks

Pocket parks are small walk-to parks which supplement limited "backyard" recreation opportunities in densely developed residential areas. They primarily serve the daytime recreation needs of senior citizens and pre-school children with supervising adults. Pocket parks are required only in areas where residential densities severely limit "backyard" recreation opportunities, essentially limited to multi-family developments, whether apartments, townhouses or the like. Acreage required for pocket parks is intended for that specific recreational use. It may be a part of the overall open space system in a development. It is not a substitute for greater areas of general open space that may be required. Refer to Table 4-2 for standards.

Pocket parks should be located centrally to their service areas. They should be in quiet locations, away from heavy traffic or conflicting land uses. They should be easily accessible, especially by foot, and highly visible. Facilities at pocket parks should reflect the demographic make-up of each service area. These parks service the smallest and potentially most unique populations. In general, primary users are pre-school children with parents or other supervising adults and senior citizens. Primary facilities are play areas for children and passive sitting areas for adults, with walks, benches and tables. Examples of pocket parks within the Township include the "greens" within Eagleview between Wharton Boulevard East and West and at the corner of Braceland and Mahoney Drives.

**TABLE 4-2
PARK FACILITY STANDARDS & NEEDS**

Type of Park	Standard ¹	Size Range ¹	2009	2010		2020		2030	
			Existing Parks ²	Need ³	Deficit(-) Surplus(+) ⁴	Need ³	Deficit(-) Surplus(+) ⁴	Need ³	Deficit(-) Surplus(+) ⁴
Pocket	.25-.5 ac	≤1 ac	0	4.8 to 9.6 ac	-4.8 to -9.6 ac	5.3 to 10.5 ac	-5.3 to -10.5 ac	5.9 to 11.4 ac	-5.9 to -11.4 ac
Neighborhood	1-2 ac	5-10 ac	83.9 ac	19.2 to 38.4 ac	+64.7 to +45.5 ac	21.1 to 42.1 ac	+62.8 to +41.8 ac	22.8 to 45.5 ac	+61.1 to +38.4 ac
Community	5-8 ac	20-50 ac	86.7 ac 86.4 ac	96.0 to 153.6 ac	+77.1 to +19.5 ac	105.3 to 168.5 ac	+67.8 to +4.6 ac	113.9 to 182.2 ac	+59.2 to -9.1 ac
Subregional	5-10 ac	100-400 ac	(701.2 ac)	96.0 to 191.9 ac	-96.0 to -191.9 ac	105.3 to 210.7 ac	+595.9 to +490.5 ac	113.9 to 227.7 ac	+587.3 to +473.5 ac

Notes:

1. Recreation, Park & Open Space Standards & Guidelines; NRPA; Park, Recreation, Open Space & Greenway Guidelines, NRPA; and the American Academy for Park & Recreation Administration. Standards are acres per 1,000 persons.
2. The existing park acreage figures represent developed facilities and those in parenthesis represent a total including parkland that is currently undeveloped (Exton Park). School District properties (Downingtown East HS, Lionville MS, and Lionville ES) have been included in the boldface totals where they relate to a particular park type due to the Shared Facilities Agreement for these schools. Shamona Creek and Uwchlan Hills ES are not part of the Agreement and have not been included, but would be considered neighborhood parks.
Pocket Parks: none small enough to fit standards;
Neighborhood Parks: Acker (5.9), Baird (10.0), Eagleview (13.1), Martin (15.0), Spring Run (17.2), Target (4.7), Williamsburg (18.0) = 83.9 ac
Community Parks: Dowlin Forge (40.0), Lionville (24.0), Shamona (Main & Peck) (22.7) = 86.7 ac
3. Acreage requirements for need are based upon applying the NRPA standards to the population forecasts for 2010, 2020 & 2030. The population data used (from CCPC & DVRPC forecasts) to determine the park facility requirements is as follows:
2010 – 19,194 2020 – 21,066 2030 – 22,772
4. The year 2010, 2020 & 2030 deficit/surplus figures also assume park development for those lands in ().

**TABLE 4-3
RECREATIONAL FACILITY STANDARDS & NEEDS**

Type of Facility	Standard ¹	Existing 2009		2010		2020		2030	
		Township	School District	Needs ³	Deficit(-) Surplus(+) ⁴	Needs ³	Deficit(-) Surplus(+) ⁴	Needs ³	Deficit(-) Surplus(+) ⁴
Field Space									
Baseball/Softball	.5	13	6	10	+9	11	+8	11	+8
Soccer/Lacrosse/Field Hockey/Football	.7	9	15	14	+10	15	+9	16	+8
Court Space									
Volleyball	.3	4	4	6	+2	6	+2	7	+1
Basketball	.4	6	4	8	+2	9	+1	9	+1
Tennis	.5	3	7	10	-	11	-1	11	-1
Other Activities									
Track/Cross Country Course	.2	0	1	4	-3	4	-3	5	-4
Swimming Pool	.2	2	0	4	-2	4	-2	5	-3
Play Apparatus	.5 ²	10	1	10	+1	11	-	11	-
Picnic Area	.2 ²	12	0	4	+8	4	+8	5	+7
Trails	.5mi ²	9 mi.	0	10 mi	-1 mi	11	-2 mi	11	-2 mi

Notes:

1. Chester County Open Space & Recreation Study included standards derived from NRPA & DVRPC. These standards are expressed in fields, courts or activities per 1,000 persons.
2. Standards for play apparatus, picnic areas and trails derived from DVRPC Open Space Standards & Criteria for the Delaware Valley.
3. The facility needs based on applying the CCOSRS standards to the population forecasts for 2010, 2020 & 2030.
4. The year 2010, 2020 & 2030 deficit/surplus figures also assume development of those facilities in () on new parks.

EVALUATION OF PARKS, RECREATION FACILITIES & PROGRAM NEEDS

Parks

Uwchlan currently has seven neighborhood parks: Acker (5.9), Baird (10.0), Eagleview (13.1), Martin Memorial (15.0), Spring Run (17.2), Target (4.7), Williamsburg (18.0) totaling 83.9 acres. The Township has three community parks: Dowlin Forge (40.0), Lionville (24.0), Shamona (Main & Peck) (22.7) totaling 86.7 acres. The nature preserve that includes Inslee, Jones, Shamona Ridge and Young acquisitions contains about 179.8 acres as well. The Shared Facilities Agreement allows for some of the school facilities to be credited. The Middle/High/Elementary Schools and adjacent Lionville Park function as a sports complex, which is a specialized form of park involving high intensity athletic use. Upon review of these figures, the Township has managed to keep pace with existing development, however, if Uwchlan is to maintain this level and serve the anticipated growth, the Township would need additional community park ground. This need becomes more apparent as new development decreases available land for parks therefore acquiring parkland or open space is more critical with the passage of time.

Table 4-2 reports a current deficit of 5 acres for pocket-parks and a surplus of 45 acres for neighborhood parks and 19 acres for community parks. Applying the NRPA standards of Table 4-2 to the existing and forecasted Township population indicates that the current and proposed parks along with the three schools in Lionville adequately serve the Township from 2009 to 2020 in terms of neighborhood and community parks. There continues to be a deficit in pocket parks ranging from as much as 10 acres in 2009 to 11 acres in 2030. A deficit of 9 acres is also noted for community parks by 2030. Although the population-based standards indicate Uwchlan to be adequately served by neighborhood and community parks to the year 2020 for, the continued development of future parks will be necessary to provide linkages and cover currently unserved areas of the Township. As noted, that portion of the Township east of Route 100, particularly the residential areas north of the Turnpike and south of Pickering Creek Industrial Park are not served by a community or neighborhood park. Several options are available for the Township to address the park needs as highlighted below:

Option 1

- *The pocket park need can be met through the surplus neighborhood park acreage;*
- *The neighborhood parkland is currently met and can also meet the pocket park demand; and*
- *The community parkland is currently met. Consideration should be given to acquisition of tracts adjacent to existing parks to augment these facilities.*

Option 2

- *The pocket park need can be met through the land development process;*
- *The neighborhood parkland need is currently met, however one 10-15 acre facility north of the Turnpike could be obtained through the land development process to serve an area need; and*
- *The community park need is currently met; however one 25-acre facility north of the Turnpike could be obtained through the land development process to serve an area need.*

Option 3

- *The pocket park need can be met through the acquisition and development of five to six 1-2 acre facilities;*
- *The neighborhood parkland need is currently met, however the acquisition and development of one 10-15 acre facility north of the Turnpike would serve an area need deficit; and*
- *The community park need is currently met, however the acquisition and development of one 25-acre facility north of the Turnpike would serve an area need deficit.*

Option 2 appears to be the best choice, based upon the current Township practice of obtaining parkland through the land development process. This option is also compatible with the Township policies of developing “larger, more usable” park facilities, the provision for a balance of active and passive recreation opportunities, and the preservation of sensitive natural areas. A variation of Option 2 involves the recognition that the pocket park needs can be served by the existing neighborhood parks, negating need for the acquisition and development of such facilities. Map 4-3 depicts the general locations of parcels for parks and recreation necessary to address the area and locational deficits.

Recreation Facilities

As can be seen in Table 4-3, there are only two existing Township and School District facility types with an existing 2010 or projected 2020-2030 deficit. It is important to understand that the facility types listed reflect a Township-

wide need and not the facility need for a particular park. These recreational facilities deficits are as follows: 2010 – 3 tracks, 2 swimming pools, and 1 mile of trails; 2020 - 3 tracks, 2 swimming pools, and 2 miles of trails; and 2030 – 4 tracks, 3 swimming pools, and 2 miles of trails. The swimming pool deficit is offset somewhat by the 13 swimming pools within developments such as Eagleview, Rhondda, Marchwood, and Liongate as well as the YMCA and Pennypacker Club. Although not available to all Uwchlan residents, these swimming pools serve approximately 40% of the Township population. The approximate 59 miles of sidewalks within developments and along some collector and local streets, while not totally connected throughout Uwchlan, augments the Township walkway network. The implementation strategies will discuss linking the “walkway network.”

The population-based standards reflect only one part of the equation. For recreational planning purposes, the population can be divided into four basic groups, preschool, school age, the work force, and retired. These correspond generally to the respective age groups: 0-4, 5-19, 20-64, and over 65. The typical array of recreational facilities discussed here reflects a normal population distribution within each age group. The preschool age population in Uwchlan was 1,322 persons or 8.0% of the total population in 2000 compared to 6.8% countywide. School age population in Uwchlan was 4,001 persons (24.1% vs. 25.0% countywide), the "work force" age group (20-64) numbered 10,164 persons (61.7% vs. 60.4% countywide), and the over-65 total was 1,089 persons (6.6% vs. 7.8% countywide). The 2000 median age of 35.5 was lower in Uwchlan than 36.6 countywide, based upon a somewhat higher proportion of the population in the preschool and younger adult age population. Uwchlan's demographic makeup continues to underscore the active recreational "need" of a “young” Township.

Programs

As discussed in Chapter 2, Township residents are adequately served by DARC, LYA, and the YMCA. All of these organizations provide a range of programs and activities. LYA addresses the active recreation needs of boys and girls ages 6 to 18, while the YMCA and DARC provide instruction, educational, and other programs serving residents that range from pre-school to adult. LYA's demands upon the Township parks are considerable and limit their availability of facilities for others. Few, if any, communities in Chester County are more adequately served by recreation programs than Uwchlan Township.

SHORT-RANGE IMPLEMENTATION STRATEGIES

Recommended short-range implementation actions proposed following the Plan Update adoption include those listed below:

RECREATION LANDS & FACILITIES

Planning Coordination

- Expand the Shared Facilities Agreement to include the Shamona Creek and Uwchlan Hills Elementary Schools facilities.
- Evaluate a park-school concept at Uwchlan Hills and Shamona Creek Elementary Schools similar to Lionville Park & Middle School. The use of school facilities during non-school hours increases recreational opportunities while reducing the need for separate parklands and recreation facilities. While not the typical park-school concept of developing adjacent park and school sites as a single unit, designed to integrate a range of educational and recreational activities, this opportunity exists on the undeveloped acreage of Uwchlan Hills and Shamona Creek Elementary Schools.

WALKWAY NETWORK

Subdivision Ordinance

- Create a new §512 Walkways which addresses the minimum width, grade, and materials standards for existing and proposed walkway development.

Planning Coordination & Plan Review

- Amend §503.3.c, Crosswalks & Sidewalks, of the Design Standards to require sidewalks on both sides of the street within new residential developments.

- Incorporate the undeveloped tracts south and west of Windham, planned for Medium Density Residential, into Township walkway network as the property affords a connection to Windham, Target Park, and the Uwchlan Trail along Dowlin Forge Road, as well as the opportunity for an extension south to potential commercial area(s).
- Complete the Sheree Boulevard connection of the Uwchlan Trail between Eagleview Boulevard and Route 113 with a bituminous walkway and/or sidewalk through the development process or ordinance.
- Complete the Newcomen Road/Timberlake Drive connection of the Uwchlan Trail between Rhondda and Valley Hill Road with a bituminous walkway and/or sidewalk through the development process or ordinance.
- Add signage for the Uwchlan Trail at Dowlin Forge Rd and Fairweather Dr for sidewalk route to Deep Willow Dr and ultimately the Eagleview pedestrian network.
- Evaluate the feasibility of extending the sidewalk along Woodland Drive from Wagon Trail Way west to Blue Ribbon Way and possibly to Peck Road.
- Provide signage along all Township walkways identifying routes and directions.

OPEN SPACE

Zoning Ordinance

- Amend §265-301 to include a definition of “natural condition” and incorporate such within the open space requirements of those relevant sections, including but not limited to §§265-508.10.g, 604, 609.1.c(3)(e) & 613.5, throughout the ordinance.
- Create a new §265-617, Open Space Management Plan, detailing the management and maintenance responsibilities within the open space of new developments and provide references to §265-617 within §§265-508.10.i, 604, 609.1.c(3)(e) & 613.5.

Subdivision Ordinance

- Amend §260-204 to include a definition of “natural condition” and incorporate such within the open space requirements of those relevant sections throughout the ordinance.
- Amend §260-402.2 to reference §265-617 (ZO), Open Space Management Plan, as supplementary data to accompany the Preliminary Plan where open space is proposed.

Planning Coordination & Plan Review

- Incorporate the undeveloped tract south of Windham, planned for Medium Density Residential, into the Township open space network as the open space created protects wetland areas and provides for a connection to the existing Windham open space.
- Continue to acquire through the open space within the development process, conservation easement, or actual purchase, a buffer along the Shamona Creek.

LONG-RANGE IMPLEMENTATION STRATEGIES

Recommended long-range implementation actions proposed after the short-range are completed include the following:

RECREATION LANDS & FACILITIES

Planning Coordination & Plan Review

- Use the Residential Open Space Option of the R-1 District to obtain suitable neighborhood parkland within the open space of 71-acre Gray property, planned for Medium Density Residential, thereby providing needed recreation area for an underserved portion of the Township.
- Development of the 240-acre DASD tract, planned for Commercial/Industrial, should include a community park adjacent to Lionville Station Road easily accessible for those areas of the Township north of the PA Turnpike.
- Development of the 27-acre Nelson tract south of the PA Turnpike, planned for Commercial/Industrial, should include parkland suitable for recreation on a portion of the property.
- Consider lighted active recreation facilities in conjunction with the development of the 170-acre Nelson properties (Happy Days Farm) and the 240-acre DASD property, planned for Commercial/Industrial, due to their location between the two major roads within the Township as well as the nonresidential zoning district, both on and adjacent to the properties.

- Develop park master plans for the applicable lands on DASD, Nelson & Gray tracts that include recreation facilities and pedestrian connections.
- Continue to augment existing parks by acquiring adjacent parcels, if and when they become available.
- Evaluate and consider the acquisition of the Pennypacker Country Club, if the property becomes available.
- Continue to maintain an inventory of parks and recreational facilities and update park type and facilities standards as part of the 10-year update to the Comprehensive Plan and/or Open Space and Recreation Plan.
- Continue to provide for a wide variety of recreational facilities and activities as well as identify needs to serve all age groups and abilities of Township residents as part of the 10-year update to the Comprehensive Plan and/or Open Space and Recreation Plan.

WALKWAY NETWORK

Planning Coordination & Plan Review

- Connect the eastern and western Township trail networks by providing a crossing at Route 100 at Sheree Boulevard.
- Require the development of the 71-acre Gray property to provide sidewalks along all roads and a bituminous walkway within the open space connecting Century Oaks, Woodlark, and Rhondda.
- Require the development of the 240-acre DASD tract to provide bituminous trails/walkways with the community park sidewalks along all roads, including the extension of Haywood Drive to Lionville Station Road.
- Require the development of the 170-acre Nelson properties to provide sidewalks along all roads to connect with the Sheree Boulevard section of the Uwchlan Trail.
- Extend the bituminous walkway and/or sidewalk along Autumn Drive, into Century Oaks, into the Gray property (once developed) connecting to the sidewalk network of Woodlark and ultimately to the Rhondda trail network.
- Continue to evaluate walkway linkages and crosswalks throughout the Township as part of the 10-year update to the Comprehensive Plan and/or Open Space and Recreation Plan.

OPEN SPACE

Planning Coordination & Plan Review

- Require the development of the 71-acre Gray property to use the Residential Open Space Option within the R-1 District thereby creating open space to protect the floodplain and wetland areas.
- Require an open space network within the development of the 240-acre DASD tract through a combination of the net-out and riparian buffer provisions of the ZO and/or conservation easements to preserve sensitive natural features such as floodplain, wetland, and steep slope.
- Require an open space network within the development of the 170-acre Nelson properties through a combination of the net-out and riparian buffer provisions and/or conservation easements to preserve sensitive natural features such as floodplain, wetland, and steep slope.
- Require open space within the development of the 27-acre Nelson property south of the PA Turnpike through a combination of the net-out and riparian buffer provisions and/or conservation easements to preserve the floodplain and wetland areas.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Planning Coordination & Plan Review

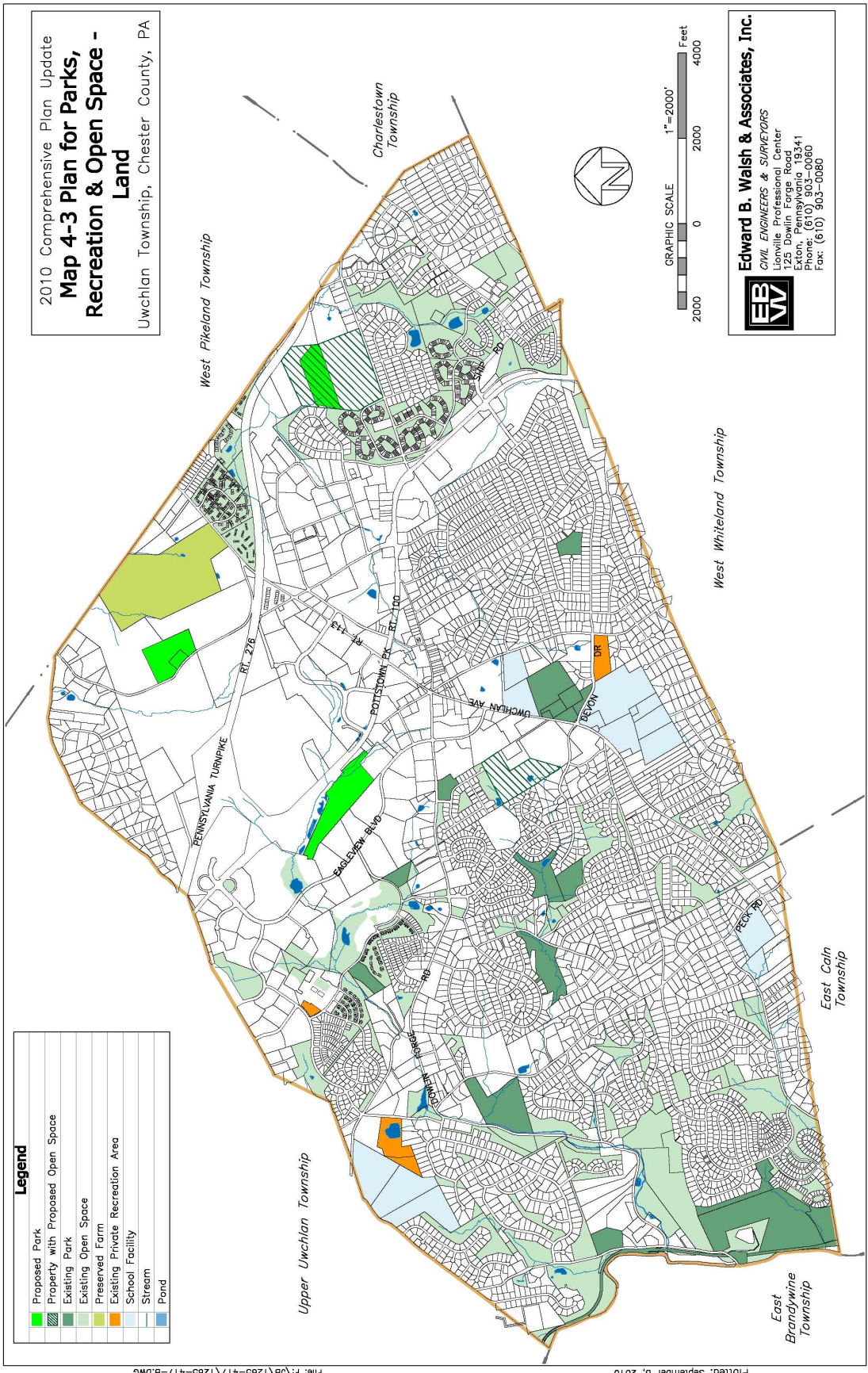
- Continue to acquire those “gaps” within the walkway network previously identified.
- Continue to provide a buffer along the Shamona Creek through open space within the development process, conservation easement, or actual purchase.

Programs, Personnel & Maintenance

- Continue to support the Parks & Recreation Board efforts to maintain an inventory of existing recreational programs available to Township residents by providers such as LYA, DARC, and the YMCA.
- Continue to fund the existing recreational programs, such as DARC, available to Township residents as recommended by the Parks & Recreation Board.
- Continue to cooperate with LYA on the scheduling of field use and maintenance.

- Continue the Township Staff and Parks & Recreation Board program for the operation and maintenance of parks and recreational areas and facilities.

2010 Comprehensive Plan Update
**Map 4-3 Plan for Parks,
 Recreation & Open Space -
 Land**
 Uwchlan Township, Chester County, PA



Legend

	Proposed Park
	Property with Proposed Open Space
	Existing Park
	Existing Open Space
	Preserved Farm
	Existing Private Recreation Area
	School Facility
	Stream
	Pond

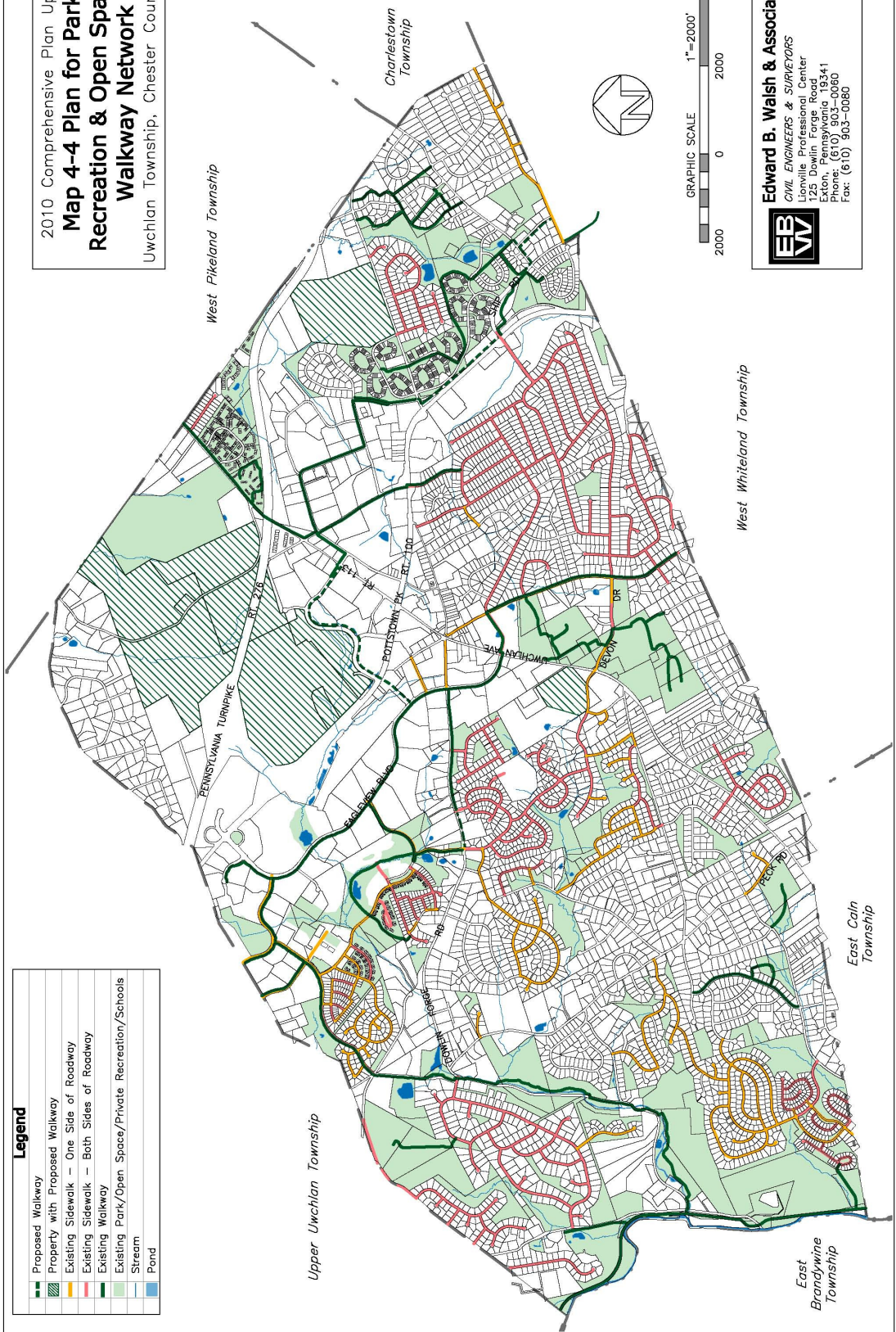


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2010 Comprehensive Plan Update
**Map 4-4 Plan for Parks,
 Recreation & Open Space -
 Walkway Network**
 Uwchlan Township, Chester County, PA

Legend

	Proposed Walkway
	Property with Proposed Walkway
	Existing Sidewalk - One Side of Roadway
	Existing Sidewalk - Both Sides of Roadway
	Existing Walkway
	Existing Park/Open Space/Private Recreation/Schools
	Stream
	Pond



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PLAN FOR TRAFFIC & CIRCULATION

The intent of the Plan for Traffic & Circulation is to establish Township policies regarding circulation based upon existing and anticipated conditions. These policies are the result of combining the traffic and circulation goals and objective of Chapter 3 with the analysis of the existing circulation of Chapter 2 and a reassessment of Act 209 and the Traffic Impact Fee Program for planned improvements. According to the Municipalities Planning Code (MPC) and as listed in Chapter 1, the Comprehensive Plan shall include *“A plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields, port facilities, railroad facilities, and other similar facilities or uses.”*

As recognized in Chapter 2 of this Update, Uwchlan has implemented many projects proposed by the 2000 Comprehensive Plan within the Township that facilitate traffic flow not only within the Township but the region. The Township has actively implemented its Roadway Sufficiency Analysis and a Capital Improvements Plan under Act 209. This Plan element recommends specific roadway improvements, prioritizes improvement projects, and assigns costs implementation responsibility for each. The Plan for Traffic & Circulation also stresses the interrelationship with the Plan for Land Use by examining the impact of development generated by potential land uses upon the roadway network of the Township.

FUNCTIONAL CLASSIFICATION OF ROADWAYS

The functional classification of the Township road network was defined in Chapter 2. As development occurs within specific portions of the Township additional traffic is added to road network and the functional classification of affected road segments will be impacted. The continued build-out of Eagleview will result in Wharton Boulevard and Deep Willow Drive being designated major collectors. The Haywood Road extension to Lionville Station Road would initially be a minor collector road.

ANTICIPATED FUTURE GROWTH

As part of the preparation of this Plan, the anticipated future development within the Township was projected. Using the Institute of Transportation Engineers' *Trip Generation* manual, new trips generated to and from each development identified in Table 4-1 within the Plan for Land Use were estimated. A recap of Table 4-1 indicates 152 dwelling units and 4,318,550 square feet of office and/or retail. A total of 7,379 new trips entering or exiting the Township during the afternoon peak hour are expected by the year 2019. Of these, 6,394 are “assessable” trips. Non-assessable trips may be exempt from a traffic impact fee because a fee has already been assessed or for other reasons. For example, Table 4-1 lists 467 dwelling units, but only 152 are assessable as the remaining units were previously assessed.

A trip distribution model tracing the path of each vehicle as it travels through the Township, either to or from the forecasted development was implemented. After modeling the projected traffic on the roadway network within the Township, future roadway improvements were identified to help maintain acceptable roadway performance.

MASS TRANSIT

Support a continued effort to realize Chester County's newly adopted *Landscapes2* comprehensive plan for transit development.

SHORT RANGE IMPLEMENTATION STRATEGIES

The Map 4-3, Plan for Traffic & Circulation, illustrates the proposed traffic improvement projects, which are also summarized in Table 4-4. Each short-range traffic improvement project is described in detail below.

Road Widening Projects

1. Widen PA Route 100 to six lanes between Welsh Pool Road and Swedesford Road in West Whiteland Township. This widening was recommended in the PA Route 100 Corridor Study, a report prepared by the DVRPC and guided by a steering committee of representatives that included Uwchlan Township. Further analysis has shown that left turns from PA Route 100 at two intersections on the corridor in Uwchlan Township (Gordon Drive/Rutgers Drive and Ship Road/Marchwood Road) should be made from left turn lanes rather than via jughandles as they are today.

2. Widen PA Route 113 to a five-lane cross section between Crossroads Square and Eagleview Boulevard/Crump Road for left turn accessibility and safety.
3. Widen Devon Drive to a three-lane cross section with a landscaped median between PA Route 113 and Whitford Road. This widening will include median and channelization in the form of left turn lanes at the high school, LYA fields, Lionville Park, the YMCA, and developments as appropriate.

New Road/Bridge Projects

4. Pennsylvania Turnpike “slip ramps.” The Turnpike Commission would construct an on-ramp to the eastbound Turnpike lanes from PA Route 113 just east of Gordon Drive as the responsibility of the Township and an off-ramp from the westbound lanes to Lionville Station Road as the responsibility of the developer of the current DASD property. These ramps will be designed to serve only motorists that purchase their tolls in advance through the “EZ-Pass” Program. Motorists with valid EZ-Pass transponders will be able to enter and exit the Turnpike without stopping to receive a ticket or pay a toll. The appropriate toll will be deducted from each user’s account.
5. Construct a collector road between East Township Line Road and Lionville Station Road, essentially an extension of Haywood Road. This roadway would be part of the development of the DASD tract. Lionville Station Road would also be improved between the “Haywood Road Extension” and PA Route 113.

Intersection Improvement Projects

6. PA Route 100 and Sheree Boulevard. A jughandle would be provided for northbound PA Route 100 left turns to Sheree Boulevard.
7. New traffic signal installation at Ship Road and Newcomen Road.
8. New traffic signal installation at Whitford Road and Devon Drive.
9. Dowlin Forge Road and Deep Willow Drive. The curb radii are to be shortened for better sight distance at the intersection.
10. Work with East Caln Township to widen the intersection of Route 113 and Bell Tavern/Garris Roads. (not in Uwchlan Township; not shown on map)

LONG RANGE IMPLEMENTATION STRATEGIES

Each long-range traffic improvement project is described below and shown on Map 4-3, Plan for Traffic & Circulation, and summarized in Table 4-4.

Road Widening Projects

1. Widen PA Route 113 to a six-lane section across PA Route 100. This intersection was recently improved, but problems can again surface with all anticipated development. Three through lanes would be needed on eastbound and on westbound PA Route 113 should the additional development occur. Signing will be considered, directing vehicles westbound on PA Route 113 and turning right to northbound PA Route 100 to travel via Marsh Creek Drive.
2. Improve Whitford Road to provide drainage and shoulder stabilization within the Township limits.

New Road/Bridge Projects

3. Construct a bridge over the Pennsylvania Turnpike at either Eagleview Boulevard or Gordon Drive as part of the DASD property land development.

Other Projects

4. Improve the shoulder along PA Route 113 for emergency response and breakdowns. Shoulders are proposed along PA Route 113 between Peck Road and Devon Drive. This will facilitate emergency service access when traffic is heavy. Other benefits are that it will allow broken-down vehicles to get out of the traffic stream, will enhance bicycle transportation, and will facilitate right turns.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Energy Conservation

- Evaluate locations and install park and ride facilities on public lands where possible.
- Accommodate the use of alternative fuel powered vehicles, the establishment of stations that distribute alternative fuels, and the retrofitting of existing buildings and parking facilities to provide for new fueling technologies, such as vehicle plug stations.

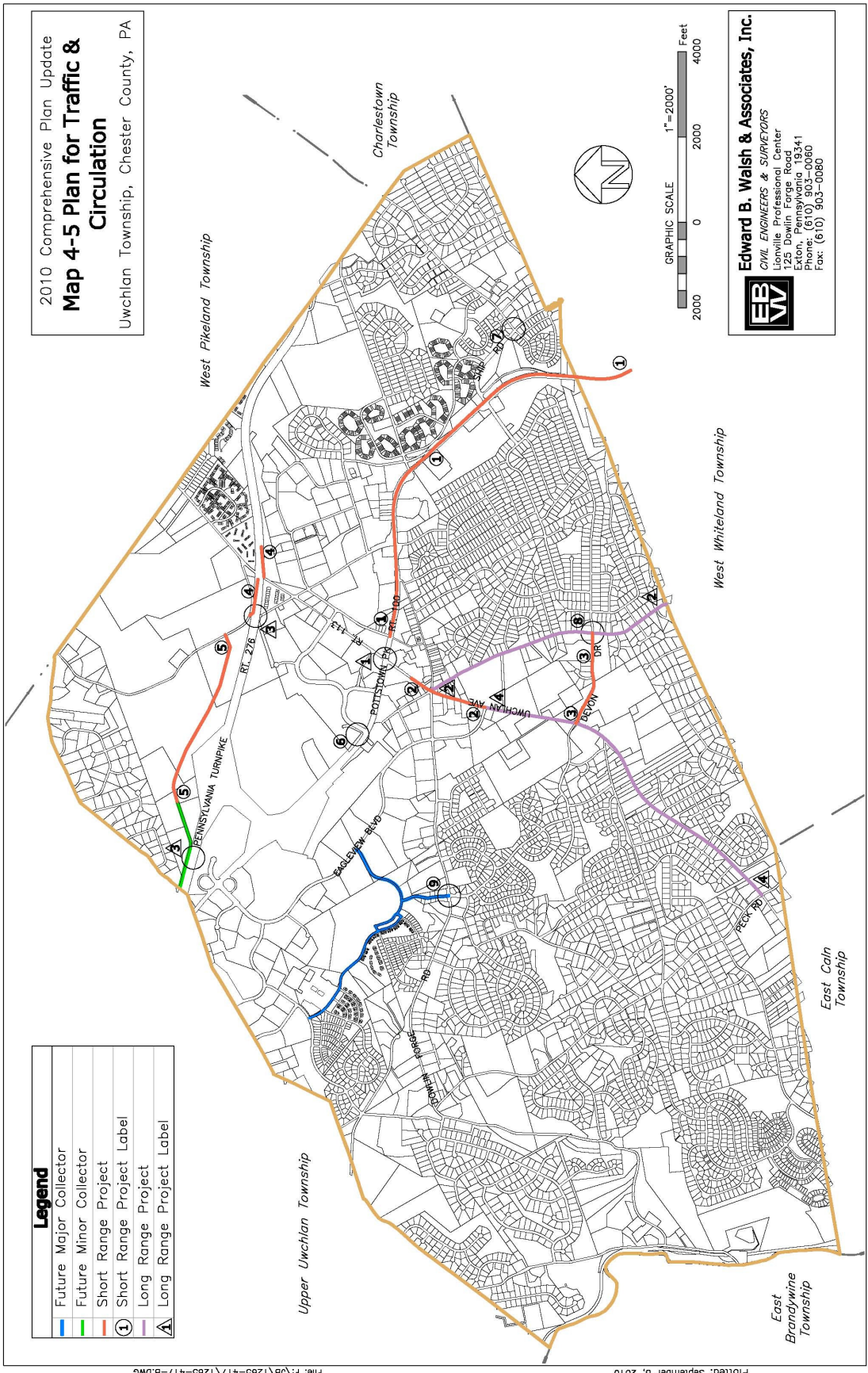
**TABLE 4-4
PROPOSED TRAFFIC IMPROVEMENT PROJECTS**

Project #	Description	Total/ Assessable Costs	Implementation Responsibility		
			Design	Right of Way	Construction
Short-Range Projects					
1	Widen PA Route 100 to six lanes. Eliminate jughandles where possible and construct left turn lanes.	\$500,000/ \$500,000	Uwchlan	Uwchlan	PennDOT
2	Widen PA Route 113 to a five-lane cross section between Crossroads Square and Eagleview Boulevard/Crump Road.	\$1,246,000/ \$1,246,000	Uwchlan	Uwchlan	PennDOT
3	Widen Devon Drive to a three-lane cross section between PA Route 113 & Whitford Road. This widening includes a landscaped median and channelization in the form of left turn lanes at the high school, Lionville Park, LYA fields, YMCA, and developments as appropriate.	\$610,000/ \$610,000	Uwchlan	Uwchlan	PennDOT
4	Construct ITS "Slip Ramps" to the Pennsylvania Turnpike. The eastbound on-ramp would intersect PA Route 113 east of Gordon Drive and the westbound off-ramp would intersect the new collector road connecting Township Line Road & PA Route 113.	\$1,650,000/ \$1,650,000	Uwchlan/ Developer	Turnpike Commission	Turnpike Commission
5	Construct a new collector road between East Township Line Road & Lionville Station Road (extending Haywood Road) & improve Lionville Station Road between the "Haywood Road Extension" & intersection with PA Route 113.	\$2,150,000/ \$0	Developer	Developer	Developer
6	Intersection Improvement — PA Route 100/Sheree Boulevard — Construct jughandle for northbound PA Route 100 traffic.	\$1,670,000/ \$1,670,000	Uwchlan	Uwchlan	Uwchlan
7	New Traffic Signal — Ship Road/Newcomen Road.	\$164,000/ \$164,000	Uwchlan	Uwchlan	Uwchlan
8	New Traffic Signal — Whitford Road and Devon Drive.	\$215,000/ \$0	Uwchlan	Uwchlan	Uwchlan
9	Intersection Improvement — Dowlin Forge Road and Deep Willow Drive. Shorten the radii to permit better sight distance.	\$291,000/ \$0	Uwchlan	Uwchlan	Uwchlan
Long-Range Projects					
1	Widen PA Route 113 to six-lane section across PA Route 100.	\$500,000/ \$0	Uwchlan	Uwchlan	PennDOT
2	Improve Whitford Road to provide drainage and shoulder stabilization within the Township limits.	\$400,000/ \$0	Developer	Developer	Developer
3	Construct a bridge over the PA Turnpike at either Gordon Drive or Eagleview Boulevard as part of the DASD property development.	\$3,750,000/ \$0	Uwchlan	Uwchlan	Uwchlan
4	Improve shoulder along PA Route 113 for emergency services between Eagleview Boulevard and Peck Road.	\$200,000/ \$0	Uwchlan	Uwchlan	PennDOT
TOTALS		\$13,346,000 /\$5,840,000			

2010 Comprehensive Plan Update
Map 4-5 Plan for Traffic & Circulation
 Uwchlan Township, Chester County, PA

Legend

	Future Major Collector
	Future Minor Collector
	Short Range Project
	Short Range Project Label
	Long Range Project
	Long Range Project Label



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PLAN FOR HOUSING

The Plan for Housing establishes the policies for providing and maintaining a variety of housing opportunities within the Township. The Plan for Housing is created in conjunction with the Plan for Land Use. According to the Municipalities Planning Code (MPC) and as listed in Chapter 1, the Comprehensive Plan shall include *“A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality, which may include conservation of presently sound housing, rehabilitation of housing in declining neighborhoods and the accommodation of expected new housing in different dwelling types and at appropriate densities for households of all income levels.”* The existing dwelling unit data and population forecasts of Chapter 2, goals and objectives of Chapter 3, and Plan for Land Use all provide the background for the recommendations of this Plan element.

RELATIONSHIP TO POPULATION FORECASTS

The Plan for Housing uses the population forecasts prepared by the CCPC and DVRPC listed within the Inventory & Analysis as well as a build-out scenario highlighted on Table 4-1 of the Plan for Land Use. By the year 2030, the CCPC and DVRPC forecasted population is 22,722 persons. Again, the amount of the forecasted increase is disputed by the Comprehensive Plan Committee. This represents an increase of about 3,528 persons over the 2010 forecast of 19,194 persons. The Plan for Housing accommodates not only a reasonable natural growth within the Township of the 5.7 persons/1,000 population noted in Chapter 2, but its regional share through in-migration settling in the 467 dwellings listed within developable land build-out scenario of Table 4-1.

HOUSING TYPES

The Plan for Housing is also intended to continue to produce a variety of housing types and to minimize the cost of development. Under the build-out scenario of the Plan for Land Use the following is proposed:

- Areas planned for Low Density Residential accommodate 26 new single family detached dwellings and 35 mobile homes.
- Areas planned for Medium Density Residential accommodate 116 new single family detached dwellings.
- Areas planned for High Density Residential (Eagleview Town Center) accommodate 210 senior apartments and 80 condominiums.

These new dwellings coupled with the existing dwellings listed within the Population, Housing & Employment section of Chapter 2 provide the following projected housing mix:

4,360 Single Family Detached Dwellings
1,324 Townhouses
1,123 Apartments
 60 Twin Houses
 128 Condominiums
 35 Mobile Homes
7,030 Total Dwelling Units

Minimizing development costs and possibly the costs of housing can be done through encouraging new development to either infill on smaller parcels within designated areas of the Township planned for Low and Medium Density Residential, or the use of flexible development options within the Zoning Ordinance for larger properties in areas planned for Medium and High Density Residential. Using the Residential Open Space Option, or Planned Single Family Development where applicable, on the only two large undeveloped properties planned for Medium Density Residential will “cluster dwellings together” thereby reducing the cost of infrastructure. Infill within those undeveloped parcels of Eagleview Residential planned for High Density Residential also reduces the cost of infrastructure.

EXISTING NEIGHBORHOODS & DEVELOPMENTS

The maintenance of housing will retain the attractiveness and value of a neighborhood or development. Code enforcement and homeowner/property owner maintenance are the primary means to maintain housing within neighborhoods and prevent decline. Several energy conservation techniques for residential use, applicable to housing, are highlighted in the Plan for Land Use within the ongoing implementation strategies.

SHORT-RANGE IMPLEMENTATION STRATEGIES

Recommended short-range implementation actions proposed following the Plan Update adoption include those listed below:

Zoning Ordinance

- Continue to review and modify the area and bulk regulations within the residential districts §§265-501.6-8, 502.6-8, 503.6-8, and 504.6-8 to assure that residential areas have sufficient space, privacy, and convenience.
- Continue to maintain or raise residential values by reviewing the residential districts §§265-501.2-5, §502.2-5, §503.2-5, and §504.2-5 and remove certain uses permitted to prevent the introduction of incompatible uses within existing and new residential development.

LONG-RANGE IMPLEMENTATION STRATEGIES

Recommended long-range implementation actions proposed after the short-range are completed include the following:

Planning Coordination

- Monitor changes in state and national building codes and incorporate such within the Township Building/Housing Code for continued enforcement.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Planning Coordination

- Continue to provide a range of dwelling types and densities throughout the residential districts.
- Continue to enforce the Township Building/Housing Code.
- Amend the Plan Update to include the applicable 2010 Census data for population and housing when it becomes available.

PLAN FOR NATURAL & HISTORIC RESOURCES

The Plan for Natural & Historic Resources establishes the policies for the preservation of these important resources within Uwchlan Township. According to the Municipalities Planning Code (MPC) and as listed in Chapter 1, the Comprehensive Plan shall include ***"A plan for the protection of natural and historic resources to the extent not preempted by federal or state law, which includes, but is not limited to, wetlands and aquifer recharge zones, woodlands, steep slopes, prime agricultural land, flood plains, unique natural areas, and historic sites."***

The Natural & Historic Resources section of Chapter 2 describes and maps Township natural and historic resources. The mapped resources include the following: Map 2-7, Land Resources; Map 2-8, Water Resources; and Map 2-9, Historic & Cultural Resources. Map 2-6, Protected Township Lands, of Chapter 2 depicts those portions of the Township which are "protected." While this is a considerable amount of the Township, not all natural and historic resources are afforded protection when overlain onto Maps 2-5, 2-6, and 2-7 and therefore are vulnerable to disturbance. This Plan element recommends specific implementation methods and priorities to preserve those vulnerable resources. The Plan for Natural & Historic Resources acknowledges the interrelationship with the Plan for Land Use and Plan for Parks, Recreation & Open Space by reinforcing the establishment of an open space network through the development process and land acquisition.

PHYSICAL FEATURES & NATURAL RESOURCES

Land Resources Protection

Steep Slope

The Environmental Impact Assessment (EIA) report of the SLDO (§260-402.2.g.4(b)) requires the delineation of slopes 0-15%, 15-25%, and 25%+ for all Preliminary Plans. The Lot Area definition of the Zoning Ordinance nets out steep slope greater than 15%, which affords some protection by limiting the density and intensity of development, but does not totally prevent the development of areas of steep slope. Areas of steep slope (15-25% and particularly 25%+) can be preserved by the creation of Zoning Ordinance amendments that restrict or prohibit development of steep slope. Woodland and understory vegetation should be maintained in steep slopes to reduce stormwater runoff, soil erosion, sedimentation, and mass wasting of soil as well as maintaining wildlife habitat. Impervious surfaces should be restricted and the density of structures should be kept very low to reduce the overall impacts from development.

Woodlands

Significant woodland areas can be preserved through the creation of subdivision and land development ordinance provisions that limits tree removal, protects trees during construction, and requires replacement for specific trees removed. The Township outlined a successful tree replacement formula for the Williamsburg development which was almost entirely wooded. This formula can be used for those wooded properties within the Township that remain undeveloped.

Habitat Areas

The protection of open space in Uwchlan Township is essential to the conservation of habitat for the many species of plants and animals. Uwchlan has established open space networks within developments as well as the purchase of sensitive properties in an effort to maintain continuous corridors of open space within the Township. These corridors allow for normal movement and dispersion of wildlife and to accommodate migration patterns. The protection of wildlife habitat will generally follow those objectives to protect open space, therefore the goal of providing open space within developments should continue to be pursued.

Water Resources Protection

Floodplains, Wetlands, Riparian Buffers, Hydric Soils & Headwaters

Although state and federal regulations generally limit development of floodplains and wetlands, the regulations do not prohibit all development from occurring. The Riparian Setback and Buffer Area definition of the Zoning Ordinance that includes ponds, permanent and intermittent streams and creeks, floodplain, and wetlands, preserves these resources by requiring a 50-foot buffer around such, and should continue to be carefully regulated by the Township. Due to their importance as recharge areas and wildlife habitat, and hydric soils, could be afforded similar protection as the riparian buffer by the creation of a critical water resources overlay and/or an expanded buffer to assist in the preservation of these resources.

Stream water quality classification (discussed in Chapter 2) dictates the extent to which drainage basins/watersheds are regulated by PADEP in terms of erosion and sedimentation control and ultimately the National Pollutant Discharge Elimination System (NPDES) permitting process. The Township should continue monitoring any change in designation by PADEP.

HISTORICAL & CULTURAL RESOURCES

Historic and Cultural Resources Protection

Historic Sites

Structures, sites and potential districts of historical significance and integrity that are highlighted on Map 2-7, Historical & Cultural Resources, may be eligible for listing in the National Register of Historic Places or part of an Act 167 Historic District. In an effort to provide alternatives to demolition of historic resources, use options could be included within §265-612 (ZO), Historic Preservation, as adaptive reuse of a valuable resource.

SHORT-RANGE IMPLEMENTATION STRATEGIES

Recommended short-range implementation actions proposed following the Plan Update adoption include those listed below:

Overall Natural Resources

Zoning Ordinance

- Add a specific community development objective for natural resource protection within §265-201.

Steep Slope

Zoning Ordinance

- Consider the creation of steep slope regulations that restricts or prohibits development and impervious surfaces on steep slope (particularly 25%+) and limits the disturbance of woodland and understory vegetation on steep slopes to reduce stormwater runoff, soil erosion, and sedimentation.

Habitat Areas and Pennsylvania Natural Diversity Index (PNDI) Sites

Zoning Ordinance

- Include the preservation of habitat areas and PNDI sites as part of the natural resource objective of the community development objective within §265-201 discussed above.

Woodlands

Subdivision Ordinance

- Include tree protection and replacement standards, possibly the EIA §260-402.2.g.6 and/or 11.

Floodplain, Wetland, Riparian Buffer, Hydric Soils & Headwaters

Subdivision Ordinance

- Although implied within the EIA §260-402.2.g.5, include the hydric soils, headwaters, and stream classification.

LONG-RANGE IMPLEMENTATION STRATEGIES

Recommended long-range implementation actions proposed after the short-range are completed include the following:

Historic Resources

Zoning Ordinance

- Add a specific community development objective for historic resource protection within §265-201 (ZO).
- The Historic Preservation standards, §265-612 (ZO), have adequately preserved resources within the Township, but these regulations could be modified if the Township desires additional use opportunities.

Subdivision Ordinance

- Reference the required historic resource impact study (§265-612.6 ZO) as part of the EIA §260-402.2.g.8 and requires the delineation of any Class 1, 2 or 3 historic resource as defined in §265-612.3 (ZO).

Planning Coordination

- Consider a historic district for Dowlin Forge that would encompass the complex of buildings and ruins that evolved around the iron forge and continue the restoration project.
- Consider National Register listing for additional historic resources in Uwchlan Township. The structures, sites, and districts of historic significance and integrity identified in the Historical Commission's inventory may be eligible for listing on the National Register of Historic Places. This "listing" process involves the submission of a Pennsylvania Historic Resource Survey form to the Pennsylvania Historic Museum Commission (PHMC) in which the property is described both architecturally and historically, and photographic evidence supplied of its structural condition. The PHMC staff makes the initial determination of eligibility and gives permission to the applicant to proceed with the preparation of a National Register of Historic Places Nomination to be approved at the federal level through the National Bank Service.

Land Preservation Methods

Planning Coordination

- The Township can acquire tracts of land, or portions of tracts, in a variety of ways, including gifts, open space easements, outright purchase, condemnation, and by the use of ordinances such as the mandatory dedication of open space. The Township's efforts along the East Branch of the Brandywine are examples of such land acquisition.
- In addition to regulatory techniques, there are other preservation tools where the principal incentives are federal income, gift, and estate tax reductions. These techniques require negotiation and rely heavily on the willingness and desire of a landowner to preserve open space resources. Though the tax incentives associated with these tools are likely to generate larger and more immediate financial benefits for the taxpayer, they are also irreversible.

All such preservation tools involve a taxpayer's gift of property or property rights to conservation organizations and/or municipal governments. The types of land donations include: 1) outright gifts of land; 2) gifts of land with retained life estate; 3) bargain sales of land; 4) gifts by codicil; and 5) conservation easement donations. Several private conservation organizations actively promote these preservation tools in Chester County; in Uwchlan, notably, the Natural Lands Trust and Brandywine Conservancy.

The conservation easement provides a way in which a property owner can participate in the long-term protection of valuable open space resources on lands intended to remain in private hands. It is legal agreement between the property owner and an eligible recipient (usually a conservation or government organization), under which the landowner (donor) establishes restrictions (usually in perpetuity) over the use of the property. The recipient (donee) agrees to monitor the eased areas to assure that the easement terms are upheld. Because the public benefits from the permanent preservation of important scenic, historic, and natural areas, the donor may qualify for certain federal income tax deductions on the basis that the donated easement is a charitable contribution. Estate and gift tax deductions also can occur from an easement donation, as a result of the reduction in valuation for those tax purposes. Since the landowner continues to own and manage the land, he also continues to pay appropriate taxes (though these may be reduced where use-value assessments exist). The degree of protection varies with each easement and each site, as do the conditions set between the donor and donee. Generally, easements are designed to protect identified open space resources, preclude or specifically limit development, and minimize land individual and, ideally, community resource protection objectives. Preservation of the Matthews Farm is an example of conservation easement use within Uwchlan.

ONGOING IMPLEMENTATION STRATEGIES

Recommended ongoing implementation actions include the following:

Planning Coordination

- Currently the Residential Open Space Option, Planned Single Family Development, and Planned Commercial Industrial District regulations of the Zoning Ordinance, when utilized, have preserved floodplain, wetlands, and

generally hydric soils. The Township policy continues to be the inclusion of all environmentally sensitive areas within the open space of developments.

- Condemnation is essentially the Township exercising its right of eminent domain, which is the authority granted to a government to take, or to authorize the taking of, private property for public purposes. There must be just compensation to the property owner for any such action, according to principles of fair market value.

One form of condemnation is through the use of an Official Map which the Township is empowered to enact by Article 4 of the Municipalities Planning Code. The Township adopted its Official Map in October 2009. An Official Map identifies the exact location of existing and proposed public streets and grounds, of which open space and parkland could be included. The key action of the Township involves the initiation of condemnation or purchase of land designated as public within one year of a landowner's application for subdivision or land development.

- The mandatory dedication of open space or a fee-in-lieu of land generates either open space within developments or provides a fee to use in the purchase of land. The Policy Statement for Contributions to Township Funds does require a fee for park development. The Municipalities Planning Code provisions requires formal adoption of a recreation plan as a prerequisite to implementation of mandatory dedication provisions, which the Township enacted in 1992, and amended in 2000 and this Plan Update.

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UWCHLAN TOWNSHIP COMPREHENSIVE PLAN UPDATE



CHAPTER 5 INTERRELATIONSHIP OF PLAN ELEMENTS & ACTION PLAN

CHAPTER 5 INTERRELATIONSHIP OF PLAN ELEMENTS & ACTION PLAN

INTERRELATIONSHIP OF PLAN ELEMENTS

According to the Municipalities Planning Code and as listed in Chapter 1, the Comprehensive Plan shall include “***A statement of the interrelationships among the various plan components.***” Some of the major interrelationships of the Plan Elements of Chapter 4 are highlighted below.

PLAN FOR LAND USE AND PLAN FOR TRAFFIC & CIRCULATION

The Plan for Traffic & Circulation has a direct link to the Plan for Land Use by applying trip generation factors to the proposed land use listed in Table 4-1 which, in turn, highlights increased volumes of specific road segments that focus upon particular road improvements. Also the properties and their resulting development listed in Table 4-1 transition into improvement projects and costs and ultimately the Act 209 fee as a means of funding portions of the designated improvements. Mass transit that exists, Bus Route 204, connects higher density residential/employment center of Uwchlan with similar areas in West Whiteland generally along the major corridor of Route 100. The Township walkway network of trails and sidewalks links neighborhoods with parks, school, and shopping thereby connecting the various uses.

PLAN FOR LAND USE AND PLAN FOR COMMUNITY FACILITIES & UTILITIES

The Plan for Land Use highlights the mosaic of community facilities and utilities such as the schools, public utility facilities, religious and civic facilities, cemeteries, emergency service facilities, and Township buildings and grounds. The Plan for Community Facilities & Utilities proposes continued municipal services and recommends cooperation with those regional and local facilities that provide services to the Township.

PLAN FOR LAND USE AND PLAN FOR PARKS, RECREATION & OPEN SPACE

The parks and open space networks, public and private, form an integral part of both the Plan for Land Use and the Plan for Parks, Recreation & Open Space. The parks and open space not only provide an interconnection of land uses within the Township, but are augmented by the trail/sidewalk network linking neighborhoods with parks, schools, and shopping as another connection to the various uses. Each Plan emphasizes the use of the Residential Open Space Option on the Gray property and other large undeveloped parcels planned for Medium Density to set aside open space for recreation and the preservation of sensitive natural features. Recreation and open space are also recommended for the DASD and Nelson properties when developed as part of the Plan for Parks, Recreation & Open Space, which will enhance these areas planned for Commercial/Industrial.

PLAN FOR LAND USE AND PLAN FOR HOUSING

The Plan for Land Use establishes the range of densities within the areas planned for Low, Medium, and High Density Residential areas and provides a build-out scenario that forecasts population and dwelling units summarized in Table 4-1. The Plan for Housing expands the dwelling unit forecasts by listing unit types and recommends the use of the flexible developments options of the Zoning Ordinance to reduce housing costs and strengthen code enforcement for proper maintenance of housing to enhance the value and attractiveness of neighborhoods.

PLAN FOR LAND USE AND PLAN FOR NATURAL & CULTURAL RESOURCES

The Plan for Land Use emphasizes the use of the Residential Open Space Option on the Gray property and other large undeveloped parcels planned for Medium Density to set aside open space for the preservation of sensitive natural features that would include the floodplain, wetland, riparian buffer, and greenways recommended by the Plan for Natural & Cultural Resources.

PLAN FOR PARKS, RECREATION & OPEN SPACE AND PLAN FOR NATURAL & CULTURAL RESOURCES

The recommendation for the creation of open space within any development of the Gray property and other large undeveloped residential properties, DASD, and Nelson tracts contained in the Plan for Parks, Recreation & Open Space strengthens the preservation of sensitive natural features initiative highlighted within the Plan for Natural & Cultural Resources. The continued establishment of buffers along stream corridors to preserve water resources such as floodplain and wetland are common to both Plans.

RELATIONSHIP OF THE PLAN UPDATE TO THE COUNTY PLAN – LANDSCAPES2

The Municipalities Planning Code indicates, as listed in Chapter 1, the Comprehensive Plan shall include ***“A statement indicating that the existing and proposed development of the municipality is generally consistent with the objectives and plans of the county comprehensive plan.”***

As detailed in Chapter 1, *Landscapes2*, the Chester County Comprehensive Policy Plan, divides the Township into four areas comprised of the following categories: two *Growth Areas - Suburban Center* located in the Lionville area, adjacent to the PA Turnpike, Route 100, and Route 113, and *Suburban Landscape* for the central and eastern portions of the Township; one *Rural Resource Area - Rural Landscape* located along the western edge of the Township; and one *Overlay Feature - Natural Landscape* for areas along the East Branch of the Brandywine Creek and Shamona Creek and tributaries of the Pickering, Pine, and Valley Creeks.

The County could have been describing Uwchlan when creating the *Growth Areas* of *Suburban Landscape* and *Suburban Center*. The Township contains the ‘employment centers, commercial centers, population centers, and large areas of residential development’ discussed within the *Growth Areas*. While clearly within the *Growth Area* of *Landscapes2*, the Township does not have much area to “grow”. The Plan for Land Use proposes the continuation of the “*Suburban Landscape*” described in *Landscapes-2* with those areas planned for Medium and High Density Residential as well as the Commercial, Industrial, Community Facilities, and Parks & Recreation. The Greater Lionville Plan identifies specific proposals for the “*Suburban Center*” encompassing the areas in and near the Village of Lionville. In addition, the ongoing efforts of Uwchlan to protect/preserve environmentally sensitive areas within public or private open space provides for the continuation of “*Rural and Natural Landscapes*” along the East Branch of the Brandywine and Shamona Creeks as well as in other portions of the Township.

In addition to the *Livable Landscapes* described and mapped within *Landscapes2* highlighted above, the County sets forth objectives and policies summarized by *Priority Actions for Plan for Implementation* that include Land Use, Natural Resources, Open Space & Greenways, Agriculture, Historic Resources, Transportation, Housing, Utilities & Infrastructure, Community Services, Economic Development, and Energy Conservation. The recommended ‘actions’ in turn are separated by the entity responsible for a specific action that include the County, municipalities, citizens, organizations, and the private sector. Those municipal actions applicable to Uwchlan are included within Appendix A.

COMPREHENSIVE PLAN UPDATE CONSISTENCY WITH LANDSCAPES2

A brief summary of the consistency between this Plan Update and *Landscapes2* is provided, rather than comparing each item listed in *Landscapes2* and the recommendations of the Plan Update. Reading the stated municipal actions of *Landscapes2* for the various categories one could just as easily be describing Uwchlan’s past policies and planning efforts as well as the recommendations in this Plan Update. Uwchlan provides a range of residential densities and a variety of land uses both within existing development of the Township and permitted in its Zoning Ordinance. The Township contains residential neighborhoods, employment centers, shopping centers, restaurants, schools, churches, parks, and emergency service providers, all uses integral to the County’s *Suburban Landscape*. Much of the substantial parks and open space network within the neighborhoods of Uwchlan is the result of the creative development options available in the Zoning Ordinance and the policies of the Township. Eagleview, the only development of its kind in Chester County, is an example of Township/developer cooperation to create a zoning district and community that reflects the “Smart Growth” concept now advocated by *Landscapes2*. As described in Chapter 4, Uwchlan has an extensive transportation network of roads, trails, and sidewalks. The park-school concept at Lionville Park and Middle School along with the Shared Facilities Agreement with two additional school facilities are two other examples of the Township actions mirroring the recommended actions of *Landscapes2*. The Township offers multiple municipal services and most of Uwchlan is served by public sewer and water, key elements of the *Suburban Landscape*.

The Plan Elements of Chapter 4 are consistent with *Landscapes2*.

ACTION PLAN

The usefulness of a comprehensive plan is related to the extent that plan proposals are implemented. The purpose of the Action Plan for this Plan Update is to link the goals and objectives of Chapter 3 and specific strategies for implementation detailed within the Plan Elements & Implementation of Chapter 4 with the establishment of participants essential to their implementation. The strategies listed in this Action Plan are essentially condensed versions of those proposed for each of the Plan Elements in Chapter 4 and retain the same prioritization: short range – consideration for immediate action once this Plan Update is adopted; long range – consideration for action after short range priorities are underway or completed; and on-going – continued activity on a particular action. The Plan Elements of Chapter 4 should be consulted for more detail. Strategies discussed in multiple Plan Elements (i.e. recommended use of the Residential Open Space Option [ROSO] for specific properties in the Plan Land Use and Plan for Parks, Recreation & Open Space) are only included within the first Plan Element listed. Actions are grouped by method of implementation such as zoning ordinance, subdivision ordinance, coordination, etc. The principal groups responsible for the implementation are listed below each action as Participants, but are not meant to be all inclusive. Supervisors, Planning Commission, Parks & Recreation Board, Manager, Building & Zoning Officer, Solicitor, Engineer, and Municipal Authority all refer to the Township; all others are self explanatory as they have been discussed throughout this Plan Update.

SHORT-RANGE STRATEGIES

ZONING ORDINANCE

Land Use

- Review and possibly modify the area and bulk regulations within §§265-501.6-8, 502.6-8, 503.6-8 & 504.6-8 to assure that residential areas have sufficient space, privacy, and convenience.
- Review §§265-501.2-5, 502.2-5, 503.2-5 & 504.2-5 and remove any incompatible uses within existing and new residential development.
- Emphasize the use of the ROSO on the Gray property and other large undeveloped tracts to set aside open space for recreation and the preservation of sensitive natural features.
- Evaluate uses permitted within §§265-506, 507, 508 & 509 to protect future commercial/industrial areas from encroachment by other land uses during the period of time preceding their development.
- Review §§265-506, 507, 508 & 509 to provide for a wide range of uses.
- Compare existing off-street parking and loading areas at commercial/industrial uses to the requirements of §265-607 to evaluate their adequacy for new developments, and amend as necessary to incorporate design flexibility.
- Evaluate the separation of vehicular and pedestrian traffic within existing commercial/industrial developments and amend §§265-607 & 605 as necessary.
- Review and amend the screening requirements of §265-608, or particular district, minimizing any adverse effects of commercial/industrial development.
- Evaluate the inclusion in §265-507.5 (PIC District), or create a new district, of provisions for age-restricted, continuing care or similar semi-retirement, retirement facility permitted by conditional use along with separate area and bulk standards in §265-507.7 & 8.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Engineer, Solicitor, planning consultant

Parks, Recreation & Open Space

- Amend §265-301 to include a definition of “natural condition” and incorporate such within the open space requirements of those relevant sections, including but not limited to §265-508.10.g, §604, §609.1.c(3)(e) & §613.5, throughout the ordinance.
- Create a new §265-617, Open Space Management Plan, detailing the management and maintenance responsibilities within the open space of new developments and provide references to §265-617 within §265-508.10.i, 604, 609.1.c(3)(e) & 613.5.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Engineer, Solicitor, planning consultant

Natural & Historic Resources

- Add a specific community development objective for environmental resource protection within §265-201.
- Consider the creation of steep slope regulations (ZO) that restricts or prohibits development and impervious surfaces.
- Include the preservation of habitat areas and PNDI sites within the environmental resource objective of §265-201.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant

SUBDIVISION ORDINANCE

Land Use

- Consider amending §260-503.3.c to require sidewalks on both sides of the street within new residential developments.
- Evaluate §260-502.3 relative to on-street parking for residential development.
- Modify §260-510, Appendix C and the Stormwater Management Ordinance to include best management practices (BMP) and other creative methods of stormwater management as well as those of the MS4 program, to mitigate potential negative affects a particular use may have on adjacent properties and the natural environment.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Engineer, Solicitor, planning consultant

Parks, Recreation & Open Space

- Create a new §260-512 Walkways to address minimum width, grade, and materials standards for existing and proposed walkway or trail development.
- Amend §260-204 to include a definition of “natural condition” and incorporate such within the open space requirements of those relevant sections throughout the ordinance.
- Amend §260-402.2 to reference §617 (ZO), Open Space Management Plan, as supplementary data to accompany the Preliminary Plan where open space is proposed.

Participants: Supervisors, Planning Commission, Parks & Recreation Board, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant

Natural & Historic Resources

- Include tree protection and replacement standards within the Environmental Impact Assessment (EIA) §260-402.2.g.6 and/or 11.
- Review the EIA, §260-402.2.g.5, to include hydric soils, headwaters, and stream classification.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant

PLANNING COORDINATION & PLAN REVIEW

Parks, Recreation & Open Space – Recreation Lands & Facilities

- Expand the Shared Facilities Agreement to include the Shamona Creek and Uwchlan Hills Elementary Schools facilities.
- Evaluate a park-school concept at Uwchlan Hills and Shamona Creek Elementary Schools like Lionville Park & Middle School.

Participants: Supervisors, Parks & Recreation Board, Manager, DASD, Solicitor, Engineer

Parks, Recreation & Open Space – Walkway Network

- Incorporate the undeveloped tracts south and west of Windham into the Township walkway network as a link between residential and commercial areas.
- Complete the Sheree Blvd connection of the Uwchlan Trail between Eagleview Blvd and Route 113.
- Evaluate alternatives for the completion of the Newcomen Rd/Timberlake Dr connection of the Uwchlan Trail between Rhondda and Valley Hill Rd.
- Add signage for the Uwchlan Trail at Dowlin Forge Rd and Fairweather Dr for sidewalk route to Deep Willow Dr and ultimately the Eagleview pedestrian network.
- Evaluate the feasibility of extending the sidewalk along Woodland Dr from Wagon Trail Way west to Blue Ribbon Way and possibly to Peck Rd.
- Provide signage along all Township walkways identifying routes and directions.

Participants: Supervisors, Planning Commission, Parks & Recreation Board, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant, landowner/developer

TRAFFIC & CIRCULATION COORDINATION

Road Widening Projects

- Widen PA Route 100 to six lanes between Welsh Pool Rd & Swedesford Rd in West Whiteland Township.

Participants: Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PADOT, CCPC

- Widen PA Route 113 to a five-lane cross section between Crossroads Square & Eagleview Blvd/Crump Rd.

Participants: Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PADOT

- Widen Devon Dr to a three-lane cross section with a landscaped median between PA Route 113 & Whitford Rd to include median and channelization with left turn lanes at the high school, Lionville Park, LYA fields, the YMCA and developments.

Participants: Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PADOT, DASD, YMCA

New Road/Bridge Projects

- PA Turnpike “slip ramps.” Turnpike Commission to construct an eastbound on-ramp from PA Route 113 east of Gordon Dr as a Township responsibility and a westbound off-ramp to Lionville Station Rd as the DASD property developer responsibility.

Participants: Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PA Turnpike Commission, PADOT

- Construct a collector road between E. Township Line Rd & Lionville Station Rd extending Haywood Dr as part of the DASD property development. Lionville Station Rd would also be improved between the “Haywood Dr Extension” & PA Route 113.

Participants: Supervisors, Planning Commission, Manager, Solicitor, Engineer, Orth-Rodgers, developer

Intersection Improvement Projects

- PA Route 100 & Sheree Blvd to include a jughandle for northbound PA Route 100 & left turns to Sheree Blvd.
- New traffic signal installation at Ship Rd & Newcomen Rd.
- New traffic signal installation at Whitford Rd & Devon Dr.

Participants: Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PADOT

- Dowlin Forge Rd & Deep Willow Dr to shorten the curb radii.

Participants: Supervisors, Manager, Solicitor, Engineer, Public Works

- Work with East Caln to widen the intersection of Route 113 and Bell Tavern/Garris Roads.

Participants: Supervisors, Manager, Solicitor, Engineer, East Caln Township, PADOT, CCPC

LONG-RANGE STRATEGIES

ZONING ORDINANCE

Historic Resources

- Add a specific community development objective for historic resource protection within §265-201 (ZO).
- Consider amending the Historic Preservation standards of §265-612 (ZO) to include additional use opportunities.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Engineer, Solicitor, planning consultant

SUBDIVISION ORDINANCE

Historic Resources

- Amend the EIA, §260-402.2.g.8 to reference the historic resource impact study (§265-612.6 ZO) and require the delineation of any Class 1, 2 or 3 historic resource as defined in §265-612.3 (ZO).

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Engineer, Solicitor, planning consultant

PLANNING COORDINATION & PLAN REVIEW

Community Facilities

- Review the potential extension of public sewer and water to the area of the Township north of the PA Turnpike currently unserved.

Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer

Parks, Recreation & Open Space – Recreation Lands & Facilities

- Obtain neighborhood parkland within the open space of the Gray property.
- Include a community park adjacent to Lionville Station Road within any development of the DASD tract.
- Include parkland suitable for recreation within any development of the 27-acre Nelson tract south of the PA Turnpike.
- Consider lighted active recreation facilities in conjunction with the development of the Nelson and DASD properties.
- Develop park master plans for applicable lands on DASD, Nelson & Gray tracts to include facilities and pedestrian connections.
- Augment existing parks by acquiring adjacent parcels, if and when they become available.
- Evaluate and consider the acquisition of the Pennypacker Country Club if the property becomes available.
- Maintain an inventory of parks and recreational facilities and update park type and facilities standards as part of the 10-year update to the Comprehensive Plan and/or Open Space & Recreation Plan.

- Provide for a variety of recreational facilities and activities serving all age groups and abilities of Township residents as part of the 10-year update to the Comprehensive Plan and/or Open Space & Recreation Plan.

Participants: *Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, Engineer, DASD, landowner/developer, planning consultant*

Parks, Recreation & Open Space – Walkway Network

- Provide a crossing at Route 100 at Sheree Blvd to connect the Township trail networks.
- Provide sidewalks along all roads and walkway within the open space of the Gray property to connect Century Oaks, Woodlark, and Rhondda.
- Provide walkways within any community park and sidewalks along all roads for the development of the DASD tract.
- Provide sidewalks along all roads in the development of the 170-acre Nelson properties to connect with the Sheree Blvd.
- Extend the walkway and/or sidewalk along Autumn Dr, into Century Oaks, and into the Gray property (once developed).
- Evaluate walkway links and crosswalks throughout the Township as part of the 10-year update to the Comprehensive Plan and/or Open Space & Recreation Plan.

Participants: *Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, Engineer, DASD, landowner/developer*

Parks, Recreation & Open Space - Open Space

- Create an open space network for any development of the DASD tract using a combination of the net-out/riparian buffer provisions of the Zoning Ordinance and conservation easements to preserve floodplain, wetland, and steep slope.
- Create an open space network for any development of the Nelson properties using the net-out/riparian buffer provisions of the Zoning Ordinance and/or conservation easements to preserve floodplain, wetland, and steep slope areas.
- Preserve the floodplain and wetland areas within the 27-acre Nelson property south of the PA Turnpike using a combination of the net-out/riparian buffer provisions of the Zoning Ordinance and conservation easements.

Participants: *Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, Engineer, DASD, landowner/developer, conservation organization*

Housing

- Incorporate any new state and/or national building codes within the Township Building/Housing Code.

Participants: *Supervisors, Manager, Building & Zoning Officer, Solicitor*

Natural & Historic Resources

- Consider a historic district for Dowlin Forge encompassing the complex of buildings/ruins around the iron forge.
- Consider National Register listing for additional historic resources in Uwchlan Township.

Participants: *Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, Historical Commission, PHMC, planning consultant, landowners*

Land Preservation Methods

- The Township can acquire tracts of land or portions of tracts through outright purchase.

Participants: *Township Supervisors, Township Manager, Township Solicitor, landowner*

- Encourage conservation easements and land donations.

Participants: *Supervisors, Planning Commission, Manager, Solicitor, landowner, Natural Lands Trust, Brandywine Conservancy or other conservation organization*

TRAFFIC & CIRCULATION COORDINATION

Road Widening Projects

- Widen PA Route 113 to a six-lane section across PA Route 100.

Participants: *Supervisors, Manager, Building & Zoning Officer, Solicitor, Engineer, PADOT, CCPC*

- Improve Whitford Rd to provide drainage and shoulder stabilization within the Township limits.

Participants: *Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PADOT*

New Road/Bridge Projects

- Construct a bridge over the PA Turnpike at either Eagleview Blvd or N. Gordon Dr as part of the DASD property development.

Participants: *Supervisors, Manager, Solicitor, Engineer, Orth-Rodgers, PA Turnpike Commission, developer*

Other Projects

- Improve the shoulder along PA Route 113. Shoulders are proposed along PA Route 113 between Peck Rd & Devon Dr.

Participants: *Supervisors, Manager, Engineer, Orth-Rodgers, PADOT*

ENERGY CONSERVATION

Land Use

- Evaluate the creation of ordinances that promote and facilitate the use and generation of alternative energy in building construction and rehabilitation.
- Evaluate the use of incentives for the construction and rehabilitation of buildings that use a green building component as well as traditional energy conservation practices, such as those which will provide natural light and fresh air.

Participants: *Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant*

Community Facilities

- Promote the use of alternative wastewater treatment and disposal technologies, such as the retrofitting of existing wastewater treatment facilities in order to improve energy efficiency.

Participants: *Supervisors, Municipal Authority, Manager, Building & Zoning Officer, Solicitor, Engineer*

ONGOING STRATEGIES

PLANNING COORDINATION & PLAN REVIEW

Land Use

- Continue to regulate and uphold ordinances to ensure that new development occurs in a manner that does not adversely impact existing development or place an undue burden on the Township's infrastructure.
- Plan the locations of commercial areas that are convenient to residential areas and easily accessible for customers, employees, and suppliers.
- Evaluate the Zoning Map relative to locating commercial development near major traffic thoroughfares while at the same time separating regional commercial traffic from local traffic.
- Create and enforce design standards that will result in commercial developments that are attractively designed, landscaped, and buffered from roadways and residential areas.

Participants: *Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer*

Community Facilities

- Provide a variety of Township administrative services and facilities.

Participants: *Supervisors, Manager, Building & Zoning Officer*

- Provide adequate Police Department staffing and coverage to serve the residents and business of the Township.

Participants: *Supervisors, Manager, Police Chief, Solicitor*

- Financially support the Lionville Fire Company and Uwchlan Ambulance Corps, or other companies providing services, to ensure adequate emergency services for the Township.

Participants: *Supervisors, Manager, Building & Zoning Officer, Solicitor*

- Work with DASD relative to their facilities in the Township and monitor their activity with the property on Lionville Station Rd.

Participants: *Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, DASD*

- Review and update, as necessary, the Township Act 537 Sewage Facilities Plan.

Participants: *Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, Municipal Authority, CCPC, CCHD, PADEP*

- Work with DARA and UTMA to insure that adequate sewer service is available to existing and future Township residents and businesses.

- **Participants:** Supervisors, Planning Commission, Manager, Solicitor, Engineer, Municipal Authority, DARA, PADEP
- Work with Aqua PA to insure that adequate water service is available to existing and future Township residents and businesses.
Participants: Supervisors, Manager, Solicitor, Engineer, Aqua PA

Parks, Recreation & Open Space

- Acquire those “gaps” within the walkway network previously identified.
- Continue requiring a buffer along Shamona Creek through the development process, conservation easement, or purchase.
Participants: Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, Engineer, landowner/developer
- Support the Parks & Recreation Board efforts to maintain an inventory of existing recreational programs available to Township residents by providers such as LYA, DARC, and the YMCA.
- Fund recreational programs, such as DARC, available to Township residents as recommended by the Parks & Recreation Board.
- Cooperate with LYA on the scheduling of field use and maintenance.
- Continue the Township Staff and Parks & Recreation Board program for the operation and maintenance of parks and facilities.
Participants: Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, Engineer, LYA, DARC, YMCA

Housing

- Continue to provide a range of dwelling types and densities throughout the residential districts.
Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, planning consultant
- Continue to enforce the Township Building/Housing Code.
Participants: Supervisors, Manager, Building & Zoning Officer, Solicitor, Engineer
- Amend the Plan Update to include the applicable 2010 Census data for population and housing when it becomes available.
Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, planning consultant

Natural & Historic Resources

- Continue the Township policy of including sensitive water resource areas within the open space of developments.
Participants: Supervisors, Planning Commission, Manager, Building & Zoning Officer, Solicitor, Engineer, planning consultant
- Revise the Official Map as necessary, identifying any proposed new locations for public streets, open space, and parkland.
Participants: Supervisors, Manager, Solicitor, Engineer
- Evaluate the adequacy of the fee for park development within the Policy Statement for Contributions to Township Funds.
Participants: Supervisors, Planning Commission, Parks & Recreation Board, Manager, Solicitor, landowner

Regional Cooperation

- Participate within the Downingtown Area Regional Planning Group to coordinate land use, transportation, and facilities issues and projects with neighboring townships.
Participants: Township Supervisors, Planning Commission, Township Manager

ENERGY CONSERVATION

Land Use

-
- Promote energy efficiency standards, such as Leadership in Energy and Environmental Design (LEED) and Energy Star certification for the development or redevelopment of buildings, properties, and neighborhoods.
 - Support programs that allow residents to improve energy efficiency in their homes through weatherization, efficient climate control, and the conservation of hot water.
 - Promote energy efficiency standards, such as LEED and Energy Star certification, and the installation of alternative energy generation systems in commercial and industrial operations.
 - Support construction and development projects that implement energy conservation, including demonstration projects and programs.

Community Facilities

- Complete energy audits of Township buildings and facilities for baseline numbers.
- Reduce energy consumption through the purchase of supplies and equipment, or when upgrading physical plant elements such as lighting, cooling or heating systems.
- Establish a minimum average fuel efficiency standard for the procurement of Township vehicles.
- Inform residents about strategies for conserving energy and support education efforts that encourage energy and resource saving practices at home, at school, and at the work place.
- Continue to support, expand, and improve recycling programs in all sectors.
- Support programs that offer consumers opportunities to re-use materials which would otherwise be disposed of, such as permitting curbside pickup for reuse, or “free-cycling”.

Participants: *Township Supervisors, Planning Commission, Township Manager, Building & Zoning Officer, Township Departments*

Traffic & Circulation

- Evaluate locations and install park and ride facilities on public lands where possible.
- Accommodate the use of alternative fuel powered vehicles, the establishment of stations that distribute alternative fuels, and the retrofitting of existing buildings and parking facilities to provide for new fueling technologies, such as vehicle plug stations.

Participants: *Supervisors, Manager, Building & Zoning Officer, Solicitor, Engineer, PADOT, CCPC*

**UWCHLAN TOWNSHIP
COMPREHENSIVE PLAN UPDATE**



APPENDIX

A Landscapes2 Recommended Municipal Policies

The following are all recommended municipal actions related to livable landscapes in Uwchlan.

LAND USE

County wide:

- Participate in multi-municipal planning efforts with neighboring municipalities to achieve consistency with effective growth management and resource protection. (LU-1e)

Suburban Landscape:

- Update zoning and subdivision/land development ordinances to support infill development and redevelopment efforts to create walkable neighborhoods. (LU-3c)
- Coordinate subdivision and land development applications with county departments and conservation/preservation groups to protect maintain, and expand the public open space, parks and recreation network. (LU-3d)
- Create incentives for developers to create integrated transportation and trail networks within employment centers, including, pedestrian, bicycle, and bus connections. (LU-3e)
- Update ordinances to require the application of Smart Growth principals in new development to meet future growth needs. (LU-3f)

Natural Landscape:

- Participate in multi-municipal projects and include conservation groups as full partners to protect the natural resource network. (LU-6c)

NATURAL RESOURCES

Land Resources:

- Update and implement geology, slopes, and soils protection standards in municipal ordinances based on current mapping. (NR-1d)
- Adopt Erosion & Sediment Control Plans consistent with PADEP Chapter 102 Erosion Control Regulations. (NR-1e)

Biotic Resources:

- Conduct detailed flora and fauna surveys to guide municipal comprehensive planning and ordinance updates. (NR-2c)
- Provide information to local residents about vector diseases, wildlife and habitat management, and property management based on ecologically sensitive best management practices. (NR-2d)
- Develop and implement management plans for municipal properties based on ecologically sensitive best practices, and target these properties for demonstration projects. (NR-2e)
- Update and implement the biotic resource protection standards in municipal ordinances. (NR-2f)

Water Resources:

- Update and implement the water resource provisions in municipal ordinances, including maintaining the water balance, surface and water quality, and stormwater runoff and flooding. (NR-3c)
- Update Act 537 Municipal Sewage Facilities plans to be consistent with Landscapes2, Watersheds, a current municipal comprehensive plan, and advances in technology. (NR-3d)
- Update municipal ordinances to include riparian buffer and riverbank non-disturbance provisions. (NR-3f)
- Implement the county stormwater model ordinance. (NR-3g)

Integrated Resource Planning:

- Create informational tools addressing the economic and quality-of-life benefits of natural resource planning and restoration efforts. (NR-4c)
- Implement programs that conserve water resources through the reuse of water and wastewater. (NR-4d)

Emerging Natural Resource Issues:

- Enact municipal natural resource plans that address natural disaster preparedness. (NR-5c)
- Secure funding for planning and reforestation efforts that serve to sequester carbon and greenhouse gases. (NR-5d)

OPEN SPACE & GREENWAYS

Parks, Preserves & Recreation Facilities:

- Regularly update the parks and recreation sections of local comprehensive plans. (OSG-1i)
- Identify and reserve undeveloped land to meet future needs for athletic fields and recreational facilities. (OSG-1j)
- Establish and implement sustainable maintenance plans for municipally owned parks, preserves, and open space. (OSG-1k)
- Designate recreational lands and preserves as either "active" or "passive" recreational facilities, or both so as to avoid conflicts. (OSG-1l)
- Coordinate with public schools to integrate municipal and school recreation facilities wherever feasible. (OSG-1m)
- Develop and follow a schedule of playground safety inspections. (OSG-1n)
- Participate in multi-municipal efforts to construct, fund, and program a variety of emerging recreation facilities, such as dog parks, skate parks, swimming pools, ice rinks, and senior citizen facilities. (OSG-1o)

Trails & Greenways:

- Work with the county to map future trail corridors in comprehensive plans and on official maps. (OSG-3h)
- Update local ordinances to include definitions for terms and construction standards used in trail and greenway planning. (OSG-3i)
- Require that trails be part of the improvement package that must be installed before development guarantees are released. (OSG-3j)
- Conduct trail and greenway planning in coordination with adjacent municipalities and key stakeholders. (OSG-3k)
- Consult with local hiking clubs and civic groups when developing new trails, or establishing public trails on traditional routes. (OSG-3l)
- Secure trail easements on a parcel prior to protecting the parcel with a publicly funded conservation easement. (OSG-3m)
- Partner with land trusts to permit trail and greenway rights-of-way on protected open spaces. (OSG-3n)
- Require the provision of bicycle storage facilities within new development, wherever feasible. (OSG-3o)
- Work with businesses and institutions located near trails to share their parking facilities with trail users. (OSG-3p)
- Plan, construct, and maintain locally important trail links. (OSG-3q)

- Participate in multi-municipal trail studies. (OSG-3r)
- Partner with the county and adjacent municipalities to complete regional trail corridors. (OSG-3s)

Extending the County-wide Open Space Network:

- Update ordinances to specifically address the protection of streams, floodplains, fringe wetlands, and riparian buffers as a linked network of surface water features. (OSG-4c)
- Address greenway planning in comprehensive plans and update ordinances and regulations to establish greenways as a multi-municipal network. (OSG 4d)
- Facilitate wildlife habitat and migration through the protection and restoration of riparian buffers, hedgerows, meadows, and woodlands. (OSG-4e)

Protected Open Space Funding, Access & Management:

- Update ordinances to include planning for maintaining and monitoring protected open spaces. (OSG-5h)
- Inform residents, police, and zoning officers about access limitations and building restrictions on protected open space. (OSG-5i)
- Provide funding and maintenance for public plazas, public gardens, urban parks, mini-parks, and other landscaped public areas. (OSG5j)
- Pursue locally-generated funding and partnerships for open space protection. (OSG-5k)

HISTORIC RESOURCES

Cooperative & Regional Planning:

- Participate in cooperative preservation and planning efforts for large scale nationally and locally significant historic resources. (HR-1g)
- Engage in regional planning partnerships to develop linkages connecting historic resources to one another with pedestrian and bicycle paths. (HR-1h)
- Participate in the Certified Local Government program to form a local-federal partnership and gain access to available financial and technical assistance tools. (HR-1i)
- Identify and prioritize municipal historic resources in collaboration with Chester County through the Chester County Historic Resource GIS Atlas Project. (HR-1j)
- Work together to encourage PADEP and PHMC to improve the overall Act 537 sewage facilities planning module review process as related to historic resources planning. (HR-1k)

Historic Resource & Context Preservation:

- Update and implement comprehensive policies to ensure historic resource protection is addressed. (HR-2f)
- Ensure that historic resource protection zoning standards are adopted. (HR-2g)
- Use new and innovative tools to assist with historic preservation and conservation goals, such as transfer of development rights. (HR-2h)
- Require historic resource identification and assessment of the potential impacts of a proposal on resources as part of the subdivision or development plan review and the building and demolition permitting process. (HR-2i)
- Incorporate historic commission reviews and recommendations into plan, ordinance, and infrastructure project reviews. (HR-2j)
- Enact and enforce functional building maintenance regulations to ensure historic resources are properly maintained. (HR-2k)
- Facilitate the application of allowances under the International Existing Building Code that forms part of the PA Uniform Construction Code which encourages the reuse of historic structures. (HR-2l)
- Adopt a village protection planning program, where applicable, as part of the municipal comprehensive plan. (HR-2m)
- Ensure context sensitive design for transportation, streetscapes, and other major infrastructure improvement projects including the use of compatible materials in areas that contain significant historic resources. (HR-2n)
- Investigate providing matching funds for resource protection and easement acquisition for the most significant historic resources and landscapes. (HR-2o)

Community Character Preservation & Revitalization:

- Use historic and cultural resources as the foundation for revitalization activities, particularly in suburban centers. (HR-3e)
- Adopt incentive standards that encourage appropriate rehabilitation and adaptive reuse of historic resources in suburban centers. (HR-3f)
- Adopt appropriate land use and dimensional standards in zoning to help encourage compatible infill development, particularly in historic areas. (HR-3g)
- Assist the Chester County Visitors Bureau with promotion of historic and cultural heritage tourism through coordination and identification of key sites to be promoted. (HR-3h)
- Promote historic resources and cultural heritage as elements of the Chester County Economic Development Council's municipal services and economic development programs, particularly as they relate to suburban centers and landscapes. (HR-3i)
- Apply for VPP funding and assistance with updates to Community Center Development plans in suburban centers. (HR-3j)
- Maintain a list of unoccupied historic structures and market them to potential historic preservation-oriented developers. (HR-3l)
- Advocate for state and federal elected officials and agendas to pursue expanding the tax benefits for preserving historic resources. (HR 3n)

Preservation Advocacy & Education:

- Create historic commissions, historic architectural review boards, environmental advisory councils, and other similar entities to provide education, technical assistance, and increased awareness about historic resource protection. (HR-4g)
- Create community awards or public recognition events, through municipal historic commissions, to publically acknowledge historic resources and successful preservation efforts. (HR-4h)

TRANSPORTATION

- Coordinate with planning partners, neighboring municipalities, and appropriate stakeholders during the planning, design, and implementation of traffic improvements. (T-1r)
- Update comprehensive plans and ordinances to encourage a mix of land uses, densities, and site plans that support alternative modes of transportation. (T-1s)
- Consider the use of various tools to plan, fund, and implement transportation improvements including, but not limited to, comprehensive plan and ordinance updates, public/private partnerships, and design/build delivery systems. (T-1t)
- Maintain existing municipal owned transportation infrastructure, particularly roadways, bridges, trails, and traffic signals. (T-1u)
- Implement municipal capital projects to address identified transportation needs. (T-1v)

HOUSING

Housing Supply:

- As part of comprehensive plan updates, conduct needs assessments and fair share analyses to determine the gap between the need for and supply of housing. (H-1e)
- Permit appropriate residential densities and more diverse housing choices in designated growth areas using innovative Smart Growth tools that are consistent with the Keystone Principles. (H-1f)

Housing Quality:

- Create incentives for the development and redevelopment of housing that meets LEED, Energy Star, or other green building standards. (H-3c)
- Implement enforcement measure for building code violations. (H-3e)
- Inform residents about the resources available to assist with home repair and maintenance. (H-3f)

Housing Context:

- Provide incentives for the redevelopment of vacant properties for quality, moderately-priced, multi-family housing such as density bonuses and streamlined approvals. (H-4c)

Housing Accessibility:

- Adopt zoning regulations that do not restrict opportunities for congregate living situations for people with special needs. (H-5e)
- Grant "responsible accommodations," that may include zoning variances and subdivision waivers, to permit development or redevelopment of housing for people with disabilities. (H-5f)
- Eliminate discriminatory or disparate treatment of people with special needs in all public decision making. (H-5g)

Housing Advocacy:

- Include school district officials in local and multi-municipal planning efforts and share information about growth projections and housing needs. (H-6h)
- Share information about fair housing and fair lending practices through municipal websites, newsletters, etc. (H-6i)
- Review municipal plans and ordinances for consistency with the Landscapes2 housing goal, objectives, and policies. (H-6j)

UTILITIES & INFRASTRUCTURE

Planning Coordination:

- Review and update Act 167 stormwater management plans and Act 537 sewage facilities plans to maintain water quality consistent with state and federal requirements. (UI-1d)
- Enforce Act 537 plans and limit public sewer infrastructure outside of designated service and growth areas as established by Landscapes2. (UI-1e)
- Coordinate regular updates of municipal Act 537 plans, comprehensive plans, stormwater management plans, and other like documents in order to consistently and effectively guide growth. (UI-1f)

Wastewater & Water Facilities:

- Evaluate alternatives and determine the need for, and appropriate location of, future water withdrawals, land application of wastewater, or wastewater discharges in coordination with CCPC, CCWRA, CCDCD, and other county agencies. (UI-2d)
- Initiate redevelopment efforts that use existing sewer and water infrastructure, and maintain or upgrade these systems. (UI-2e)
- Provide information and outreach materials that encourage water conservation and reuse. (UI-2f)
- Require homeowner/condominium associations and businesses to maintain on-lot sewage disposal systems, including mandating inspections, repairs, and septic tank pumping. (UI-2g)

Solid & Hazardous Waste Management:

- Participate in household hazardous waste collection programs. (UI-3c)
- Inform and offer outreach (newsletters, websites, flyers, etc.) to increase awareness of the need for waste reduction, recycling and responsible solid waste management. (UI-3d)

Energy Generation, Transmission & Distribution:

- Implement energy efficient building design and operation in municipal facilities. (UI-4e)
- Communicate with local utility providers and share information regarding updates or changes to services or facilities. (UI-4f)

Communications:

- Update zoning ordinances to accommodate communications infrastructure. (UI-5b)

Stormwater Management:

- Provide informational materials to citizens and businesses regarding impacts of stormwater and runoff, and what can be done to mitigate those potential problems. (UI-6c)
- Require homeowners and condominium associations, as well as businesses, to maintain stormwater systems. (UI-6d)
- Adopt stormwater management standards based on state and federal regulations, as well as the PA Best Management Practices manual. (UI-6e)

COMMUNITY SERVICES

Education:

- Establish a formal relationship with the school district to regularly communicate and share information about school plans and programs, and approved municipal subdivision and land development plans. (CS-1c)

Libraries:

- Budget annual funds to support community libraries. (CS-2c)

Emergency Services:

- Establish dedicated funding sources for emergency services employees and volunteer fire and ambulance companies that serve their communities. (CS-3e)
- Keep road signs current and clearly visible to ensure emergency responders can locate incident sites without delay. (CS-3f)

Health Care:

- Update zoning ordinances to adequately provide for health care facilities, such as ambulatory surgery centers and diagnostic imaging centers, within priority locations in urban and suburban centers. (CS-4b)

Human Services:

- Ensure that ordinance do not unfairly restrict individuals with disabilities from accessing housing of their choice within residential neighborhoods. (CS-5c)

Public Health:

- Require compact development with sidewalks and create trail that expand opportunities for walking and other physical activity. (CS-6c)

ECONOMIC DEVELOPMENT**Business Retention & Expansion:**

- Partner with public and private-sector entities to develop and/or retrofit commercial and industrial facilities to meet the specialized needs of high priority and emerging industries. (ED-1b)

Business Growth & Development:

- Provide development incentives and regulatory flexibility to attract businesses and create jobs within the local jurisdiction. (ED-2b)
- Permit and encourage preservation and adaptive reuse of historic properties, and use of available rehabilitation tax credits, as economic development tools. (ED-2c)
- Approve the expansion or upgrade of utility infrastructure within designated economic development zones and growth areas. (ED-2d)

Economic Infrastructure:

- Partner with developers to provide open space and recreation amenities as an integral component of commercial, office, and industrial centers. (ED-3d)

Workforce Development:

- Provide opportunities for local job creation through the expansion of business development programs. (ED-4e)
- Partner with employers and developers to create housing that supports the workforce in the local community. (ED-4f)
- Inform residents about local education and training opportunities. (ED-4g)

Economic Growth Management:

- Amend ordinances to permit businesses to start up, relocate, or expand in close proximity to public transit and pedestrian facilities. (ED-5d)
- Engage in multi-municipal planning efforts that seek to balance commercial development, infrastructure improvement, open space preservation, and high density residential development. (ED-5e)
- Identify brownfield and greyfield properties that have potential for redevelopment as industrial, office, or retail-commercial uses. (ED-5f)

Planning & Coordination:

- Partner with the county and economic and community development entities to develop comprehensive plans and ordinances that create opportunities and incentives for business growth, retention, and expansion. (ED-6c)

ENERGY CONSERVATION**Reducing Demand & Consumption:**

- Update comprehensive plans to address energy conservation. (EC-1f)
- Complete energy audits of municipal buildings and facilities. (EC-1g)
- Update municipal regulations and ordinances that implement Smart Growth principles. (EC-1h)
- Inform residents about strategies for conserving energy. (EC-1i)
- Locate municipal services near mass transit and pedestrian facilities. (EC-1j)
- Reduce energy consumption through the purchase of supplies and equipment, or when upgrading physical plant elements such as lighting, cooling or heating systems. (EC-1k)
- Upgrade and improve municipal recycling. (EC-1l)

Improving Energy Efficiency:

- Establish a minimum average fuel efficiency standard for the procurement of vehicles. (EC-2e)
- Install park and ride facilities on public lands. (EC-2f)

Revitalization, Reuse & Recycling:

- Support and expand recycling programs in all sectors. (EC-3c)
- Expand efforts to revitalize urban landscapes and reuse buildings and properties that include a green building component. (EC-3d)

Alternative & Sustainable Energy Generation:

- Adopt ordinances that promote and facilitate the use and generation of alternative energy in building construction and rehabilitation. (EC-4d)

Energy Conservation Practices:

- Provide incentives for the construction and rehabilitation of buildings that use traditional energy conservation practices, such as those which will provide natural light and fresh air. (EC-5c)