

***JOINT
COMPREHENSIVE
PLAN***

***FLEETWOOD BOROUGH
MAIDENCREEK TOWNSHIP
RICHMOND TOWNSHIP***

BERKS COUNTY, PENNSYLVANIA

2011

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INTRODUCTION

The Fleetwood-Maiden creek-Richmond Joint Comprehensive Plan provides policies for guiding the growth and preservation of the three municipalities over the next ten years. The Plan’s real value is in evaluating proposed changes in the communities against the Plan’s policies for land use, roads, community facilities and services. The test of each change affecting any of these elements should be a question: “Is this consistent with our Joint Comprehensive Plan?” or “Does this carry out the goals of our Plan?”

A Joint Committee

The nine-member Fleetwood-Maiden creek-Richmond Joint Comprehensive Plan Committee was formed to update the current Joint Comprehensive Plan between Richmond Township and Fleetwood Borough and add Maiden creek Township as a participating member. Each municipality appointed three representatives to the Committee.

The Committee considered the following when preparing the Plan:

- What are our area’s assets and concerns?
- How do we build on our assets and overcome our concerns?
- What do we want to change and what do we want to preserve?
- How do we achieve the changes we desire, prevent the changes we want to avoid and preserve what is valuable to our area?

The Joint Comprehensive Plan

This Plan describes the Townships’ and Borough’s official policies for conservation, development and future public improvements. These policies are illustrated in the Future Land Use Plan Map and are described by the text of this document and visually supported by the other maps within the document. Residents, businesses and community groups will assist the three municipalities in carrying out these policies.

The Fleetwood-Maiden creek-Richmond Joint Comprehensive Plan has three major parts:

1. Background for the Plan
2. A Plan for the Future
3. Action Program

Background for the Plan summarizes existing conditions and trends in the three municipalities and adjacent areas.

A Plan for the Future describes the goals and recommendations which, when carried out, will lead Fleetwood, Maiden creek and Richmond toward the future that the Townships and Borough envision for their area.

The Action Program outlines actions that Fleetwood, Maiden Creek and Richmond can take to ensure the Plan is put into practice. The Plan addresses joint concerns, as well as issues related specifically to each municipality.

Benefits of Regional Planning and Cooperation

While this Joint Comprehensive Plan is not a regulation, it is the basis or vision for what those regulations should state. Participation within a joint comprehensive plan allows municipalities, as per the Municipalities Planning Code Act 247, to plan for growth and development on a regional basis, rather than on an individual basis. Each municipality is not required to house all uses. The uses are shared amongst the participating municipalities. This allows municipalities to be more proactive in planning for the appropriate location of future growth and development, which helps alleviate the difficulties of trying to fit a use in a municipality where it doesn't fit. Municipalities that complete a joint comprehensive plan are also permitted to do a joint zoning ordinance.

Another benefit of planning regionally does not always have to deal with planning. Municipalities that participate in a joint comprehensive plan have historically, in Berks County, been able to use the plan as a stepping stone towards other cooperative efforts. Some of these efforts involve; road crews, equipment sharing, police, fire, recreational activities, and transportation issues.

BACKGROUND FOR THE PLAN

BACKGROUND FOR THE PLAN

This part of the Plan summarizes major findings in the following subject areas:

- Regional Influences
- Brief History
- Government Profile
- Natural Features
- Population, Housing and Employment
- Existing Land Use
- Community Facilities and Services
- Transportation and Circulation
- Land Use Policies and Zoning in the Region

REGIONAL INFLUENCES

A community's regional setting is a prominent influence on its growth and development. Fleetwood Borough, Maiden creek and Richmond Townships are located in north-central Berks County, a suburban to rural area that has seen steady development pressures from the Lehigh Valley and Reading areas. The area still maintains a very strong agricultural community.

Fleetwood Borough, Maiden creek and Richmond Townships are situated in north-central Berks County in southeastern Pennsylvania. Berks County lies along the western edge of the Delaware Valley region, which is part of the growing urban corridor between New York, Philadelphia and Washington D.C. This corridor is one of the leading industrial and commercial trade regions of the United States.

Fleetwood lies in the southern portion of Richmond Township and is surrounded by the Township on three sides with Ruscombmanor Township being its southern border. Richmond Township is bordered by Greenwich Township to the north, Maxatawny Township to the northeast, Lyons Borough and Rockland Township to the southeast, Ruscombmanor Township to the south and Perry Township to the northwest. Maiden creek Township's is bordered by Richmond Township on the eastern side, Ruscombmanor and Muhlenberg Township on the southern side, Ontelaunee Township to the west and Perry Township to the north. The two Townships and Borough together comprise 39.3 square miles, 1 square mile in Fleetwood, 14.6 square miles in Maiden creek and 23.7 square miles in Richmond. There are currently 73 municipalities within Berks County.

Fleetwood, Maiden creek and Richmond are influenced by their close proximity to the growing Lehigh Valley, Kutztown and Reading areas. Direct access to the area via Interstate 78, and SR 143, SR 662 and SR 737 has increased development pressure in the immediate region. Due to its accessibility, central location and the growing SR 222 corridor that bisects the two Townships and has the terminus of the Kutztown By-pass on the eastern edge of Richmond Township and the terminus of the Sinking Spring By-pass

on the western edge of Maiden creek Township, the area has seen increased amounts of residential and non-residential growth. The relatively high priced housing costs of the western Lehigh Valley region have made this area of Berks County a reasonably priced attractive alternative for commuters from the east and the expansion of the Greater Reading Metropolitan area towards the west, northeast and east of the City have pushed development towards the western part of the area.

Fleetwood Borough is a small, mature community with a variety of residential, commercial and industrial uses, including newer, suburban style residential development in the north-western sector of the Borough. Only a small amount of undeveloped land still exists in Fleetwood. Adaptive reuse of currently underutilized property and appropriate in-fill uses along with re-development are the Borough's primary opportunities for future growth. The Borough's housing stock is a mix of attached and detached housing types, including pristine examples of historic architecture. Several structures in Fleetwood reflect the Borough's prosperous past as both a manufacturing and shipping center in Berks County.

While Maiden creek Township has seen a substantial amount of new residential growth in the last twenty years, a large quantity of land is still in productive agriculture. Much of the land in the Township is covered by prime agricultural soils, a designation based upon the quality and productivity of the soil. Many of the parcels that are farmed today are part of the Agricultural Security Area. Special intensified agricultural zones promote the continued production of mushrooms. Berks County is a leading mushroom producer for the eastern United States, and a considerable percentage of that production comes from Maiden creek Township. The Township also has a majority of the City of Reading's water supply, Lake Ontelaunee, located within its boundary. The Lake bisects the Township's entire northern section from access to the rest of the area. The land surrounding Lake Ontelaunee is heavily used by nature enthusiast, fisherman and hunters. With a large quantity of land within the Township used for farming and the Lake, this has kept most of the new growth, both residential and non-residential in the southeastern portion around and radiating out from the SR 222 and SR 73 intersection, and along the Park Road corridor into Richmond and Fleetwood.

Richmond Township is also, historically, a farming based community that encompasses old and new residential development, a commercial strip along SR 222 that bisects the Township, and some industrial uses. However, the Township is still among Berks County's least densely developed municipalities. Winding roads, hilly terrain, farmland, scenic creek corridors characterizes much of the Township. Historic churches, farmsteads and other remnants of the area's unique heritage are scattered throughout Richmond Township.

BRIEF HISTORY

Local history helps explain why communities look and function the way they do today. The role of farming, mineral resources, Lake Ontelaunee, and the railroad and heavy industry were the strongest influences on the Fleetwood-Maiden creek-Richmond area's formative growth and development.

Early Inhabitants

The Delaware or Lenni Lenape Indians were the earliest known inhabitants of the Fleetwood, Maiden creek and Richmond area. These natives, along with some smaller tribes, lived in villages along the Schuylkill River, Tulpehocken, Manatawny, and Maiden Creeks. The Lenni Lenape were divided into three tribes: the Unamis, or turtles; the Unalachtgos, or turkeys; and the Minsi, or wolf. The Unamis were the most prevalent in Maiden creek, while the Minsi inhabited the Fleetwood and Richmond area. The largest Minsi settlement in Berks County was located at present day Virginville in the northern portion of Richmond Township.

The first European settlers came to the area in the early 1700's after England's King Charles II granted 40,000 square miles of land to William Penn in what is now eastern Pennsylvania. William Penn organized colonization and made friends with the Indians. These early settlers included English members of the Society of Friends (Quakers) and immigrants from Sweden, Holland, Germany, England, Ireland, Scotland, and Wales. Most of the original Quaker settlement is now covered by Lake Ontelaunee. The German settlements grew the fastest. By the first federal census in 1790, Germans and German descendants comprised almost 75% of Berks County's total population.

Berks County Established

The Pennsylvania Assembly established Berks County in 1752 from parts of Chester, Lancaster and Philadelphia Counties. Fear of Indian raids was a major concern throughout most of the northern colonies at this time. As a frontier region between settled area and Indian lands, Berks County was part of a line of forts that extended every 12 miles from the Susquehanna River to the Delaware River. By the time of the American Revolution, Berks County businesses included several small crafts and industries to supplement the area's early reliance on hunting, trapping, fishing and farming. The Berks County seat of Reading became a major colonial center for hat and clock making during the second half of the eighteenth century.

Maiden creek Township Established

The first survey of Maiden creek Township was completed by Benjamin Lightfoot on July 20, 1746. The survey was performed at the request of the local property owners in order to create a new Township. The survey, describing an area of 13,000 acres held by seventeen property owners, was included in a petition and sent to the Court of Quarter

Session in Philadelphia in December of that same year. The area described included present-day Maiden Creek Township, all of the area that is now Ontelaunee Township and the part of Leesport Borough on the east bank of the Schuylkill River. The new township was named for the stream crossing the territory. Maiden Creek was named because it was a branch of the Schuylkill River, which the Indians called “Ontelaunee”, meaning “Little Daughter”. Maiden Creek Township was one of twenty townships already in existence when Berks County was created in 1752. In 1850 the final division of Maiden Creek Township occurred when Ontelaunee Township was incorporated.

Moses Starr, the first settler, was the first and for many years the only representative of Berks County in the Pennsylvania Provincial Assembly. In 1756, the Assembly declared war on the Indians and offered rewards for scalps. This declaration caused many Quakers to resign from the Assembly, hastened the decline of Quaker Rule in Pennsylvania, and brought tension to the Township. Between 1750 and 1758 Indians fought the English settlers with the French. Many Berks County men, women and children were killed and homes burnt, although Maiden Creek Township was not affected by the Indian raids.

The main villages in the Township were Blandon, named after the Bland family, originally named Bland Town and Bland Station; and Molltown and Evansville. These were all formed from the late 1700’s to the mid-1800’s. The first post offices in the Township were established in 1856.

Richmond Township Established

Richmond was organized as a Township in the same year as the creation of Berks County, 1752. However, references to an area of similar boundaries called Moselem (an Indian word meaning “trout stream”) appeared sometime earlier. Eighteenth Century businesses in Richmond Township included three mines, an iron furnace, and iron forge and mills. The Merkel family built two of these mills on Moselem Creek in 1749 and 1796. Richmond’s first church buildings, including the Zion Lutheran Church and the St. Peter’s German Reformed Church date from the 1760’s.

The earliest concentrated settlements within Richmond Township included Virgenville, Walnuttown, where there was a small inn, and Coxtown, which later was to become Fleetwood Borough. First references to a road in the area mention a Macungie and Moselem Spring Trail, which Conrad Weiser and other German settlers used on their 1723 migration from New York to the Tulpehocken area of western Berks County. This trail may have been the origin of SR 222.

Fleetwood Borough Established

An 1816 map of the area showed five mills in Richmond, including Eckert’s, Merkel’s, Rothermeil’s, Griesemer’s and one unnamed mill. Coxtown was still only a collection of five to six log buildings at this time and Walnuttown and Virgenville were similarly small. Growth in the area was very slow throughout the early decades of the 1800’s.

Coxtown established a post office in 1852. The railroad stimulated genuine development shortly thereafter. By 1860, Coxtown was the site of a freight depot along a newly completed railroad between Reading and Allentown. Local investors then began bringing large quantities of iron ore from surrounding mine to Coxtown for shipping. A shop to repair ore wagons and a carriage shop soon appeared. Town elders changed the name of Coxtown to Fleetwood in 1869, probably after Fleet and Wood, the two men who surveyed the railroad through town. Local officials adopted a plan for the town in 1868 and Fleetwood officially became a borough in 1873. The following year another rail line appeared at the northern end of Richmond Township through Virginville.

Transportation and Industry

The first roads built in the region were the precursors to SR 61 and SR 222. In 1745 “Maidencreek Road” was constructed between Parvin’s Mill (at the mouth of the Maiden Creek) to Reading. This was originally part of Maiden creek Township. In 1753 the “Easton Road” was constructed from “Maidencreek Road” to Easton: the precursor to SR 222. The “Maidencreek Road” went through additional extensions and eventually, when completed in 1822, went as far as Sunbury, passing through Hamburg and Ashland. This is now the present day SR 61. Another major road was constructed in 1844 that connected the area to Oley, Pottstown, and Philadelphia via Stagecoaches, running along what is now SR 73. The Stagecoach routes also used the “Easton Road”. The stagecoach routes improved travel and spurred migration westward. By 1800, many of the Quakers had migrated westward and the German immigrants or “Pennsylvania Dutch” were established in the area. The construction of the rail line from Reading to Allentown signaled the end of the stagecoach travel.

The main industries of the region were centered on agriculture and the iron industry. Maiden creek and Richmond Townships were almost entirely agriculture throughout the early and mid 1800’s. The Quakers and Pennsylvania German “Dutch” farmers who first cleared the land planted and cultivated grains and other crops in the area’s fertile soils. The daughters of Moses Starr grew mulberry trees in order to raise silkworms and establish a silk industry. During the late eighteenth and early nineteenth century, grist mills on the area’s many waterways, small iron mines and small iron works sprung up throughout the region. Richmond Township developed into a locally important iron center by 1850. Up to 15,000 tons of iron ore per year were mined from the Moselem iron bed in Richmond Township. Between 1850 and 1880, a thriving iron industry grew in Richmond that featured a large iron furnace along the Moselem Creek, saw mills to supply wood for burning in the furnace, the owner’s mansion, worker housing, a hotel and related development. However, the iron boom was virtually over by the 1890’s.

As Fleetwood Borough and the villages grew, stores, hotels, distilleries, bakeries, craft shops and factories were established. Some of the structures which housed these activities and services are still in evidence today. Evidence of the industriousness of the early settlers is found in the diversity of occupations and the broad range of service and facilities provided. The work ethic of these early residents can be attributed largely to the role of religion and education in their culture.

The Twentieth Century

By the turn of the Twentieth Century, the focus of business in the region was in the Borough and Villages. The substantial building that now houses the Fleetwood National Bank Building was constructed as a hosiery mill and hosiery store in 1898. For decades, Fleetwood was active in carriage construction and repair. In 1909, local investors founded the Fleetwood Metal Body Company in response to the loss of similar businesses that were destroyed by fire or relocated during the first decade of the 1900's. The Company opened with 5,000 square feet of manufacturing space and expanded several times. After a fire in 1917, Fleetwood Metal Body built a modern, 60,000 square foot manufacturing plant in Fleetwood. The plant, which employed 400 people, was one of the largest and best equipped automobile body factories in the United States. Duesenberg, Packard, Lincoln, Pierce Arrow, Bentley, Mercedes, Fiat and Rolls Royce were among the many famous cars that featured Fleetwood auto bodies. Fisher Body Company purchased Fleetwood Metal Body in 1925. Operations were continued in the Borough until Fisher moved the plant to the Detroit area in 1931.

Though Fleetwood lost its world-famous employer, the Borough has taken many important strides since the 1930's. In 1935 Fleetwood organized a recreation board that sponsored a summer program until 1973. The Borough also built a public swimming pool in 1961. The Fleetwood Borough Police Department, which originated in 1930, contracted to extend police protection into Richmond Township in 1957. This became the first formal multi-municipal police service in Pennsylvania and is still in place in 2011. Maiden creek Township also formed a local police force in 1954. Maiden creek and Ontelaunee formed a regional police force in 1991. The Northern Berks Regional Police, which includes Maiden creek, Ontelaunee and Leesport, was established in 1998.

A number of major infrastructure projects occurred during this timeframe. Lake Ontelaunee was created in 1926 by the damming of Maiden Creek to provide the City of Reading with a larger public water supply. This separated Maiden creek Township into two discontinuous sections. After long deliberations, Fleetwood constructed a sewer system and sewage treatment plant to complement its public water system in 1965. Paved roads for auto traffic, the coming of the gas powered tractor in the 1920's and later the wide spread use of electricity changed the life and appearance of the Townships and Borough during the twentieth century. Despite these modifications, Richmond and a significant portion of Maiden creek have largely continued in their role as part of the rural countryside surrounding Fleetwood Borough and the villages. Commerce and traffic have continued to grow along the Route 222 corridor and residential growth is scattered through Richmond and concentrated in the southern portion of Maiden creek around Blandon and Fleetwood.

Even with the development in the region over the last 30 years, farming is still one of the largest income sources today, as it has been since the colonial times. The types of farming operations are varied, from dairy and other animal production to crops, nursery, vegetables and mushrooms. Giorgio Foods, located in Blandon, is a major producer of mushrooms and other food products. The concentration of Mennonite farmers, historic

structures and churches, old barns and one-room school houses are living reminders of the areas colorful heritage. This delicate balance between progress and preservation is one of the major topics this joint comprehensive plan is designed to address.

The Twenty-First Century

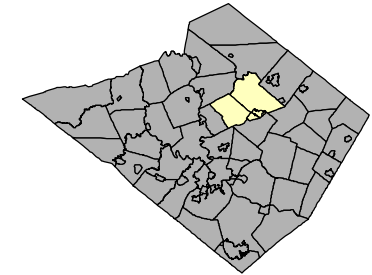
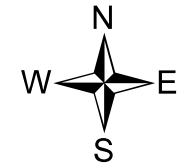
With the beginning of the twenty-first century, the area has seen some economic ups and downs along with new housing development pressure highs and subsequently the year 2010 saw the lowest new housing starts in Berks County since prior to 1980. As the economy slowly returns to a more natural level the area is seeing continued maintenance of existing businesses and modest employment growth of some of its industrial and manufacturing facilities. It is anticipated that East Penn Manufacturing, a large nationally known producer of batteries, will expand and the Allentown Cement Company has indicated that it will expand its quarry operations. A number of other businesses such as Sunsweet and F.M. Brown's and Sons are expecting to continue with normal operations.

Historic Sites

The following maps and tables show the most historically significant sites in the Fleetwood-Maiden creek-Richmond area. The Guldin Mill, located in Maiden creek Township, is the only structure in the Township listed on the National Register of Historic Places. Within Richmond Township, Dreibelbis Mill, Virginville Historic District, Dreibelbis Farm, Moselem Farms Mill, Merkel Mill Complex, and the Christian Schlegel Farm are each recognized on the National Register of Historic Places. Currently, within the area, there are nine other sites that are eligible for the National Register along with over a hundred other locally significant sites. These sites include homes, farms, commercial properties, churches, bridges, schools, graveyards and the railroad. Concentrations of buildings with historic and cultural value are generally found within the Borough, Villages and at significant crossroads.

Fleetwood Borough currently does not have any sites that are listed on the National Register; however there are a number of sites that are eligible. The Fleetwood Bank Building, Fleetwood School, and a bridge are all considered eligible sites. There are also a number of other sites that with additional inspection and investigation might be elevated to the eligible list or National Register list. The core of the downtown Fleetwood and adjacent areas that contain Fleetwood's oldest structures are areas that retain a high degree of historic integrity. In recognition of this, the Borough created an Architectural Overlay District. The intent of the new district is to stimulate economic growth while maintaining the existing character of the Borough.

Historical Resources Maiden Creek Township



Historic Sites

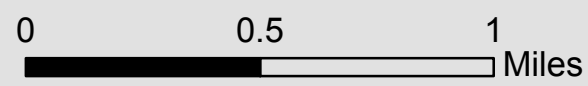
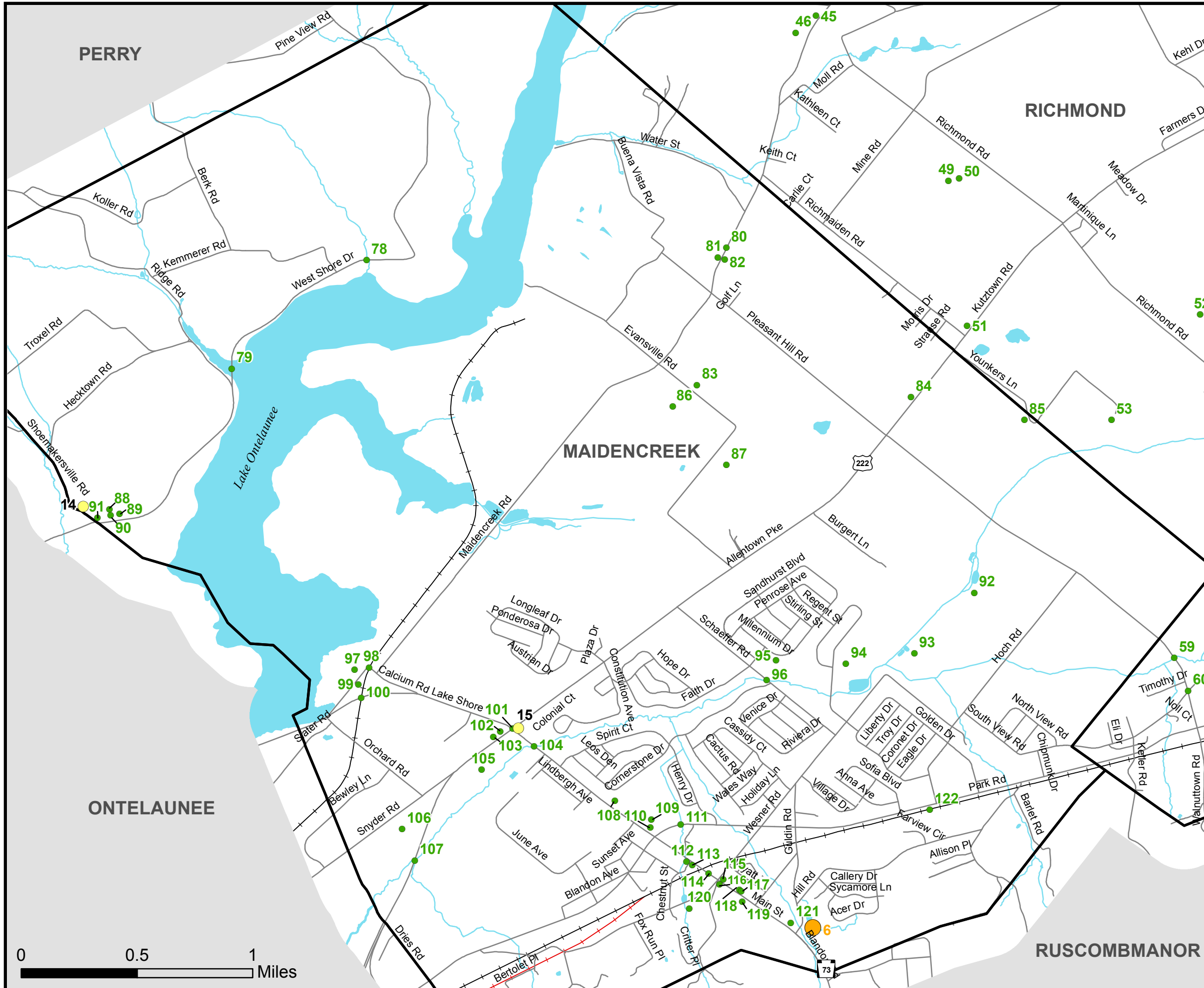
- National Register Listed
- National Register Eligible
- Other Historic Sites*
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

* Includes sites identified by surveys conducted from one or more of the following groups: Pennsylvania Historic and Museum Commission, Berks County Conservancy, George Meiser and local historical societies.

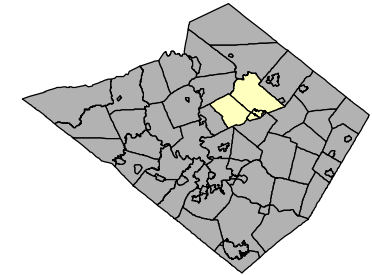
Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services

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Historical Resources Richmond Township



Historic Sites

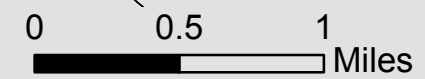
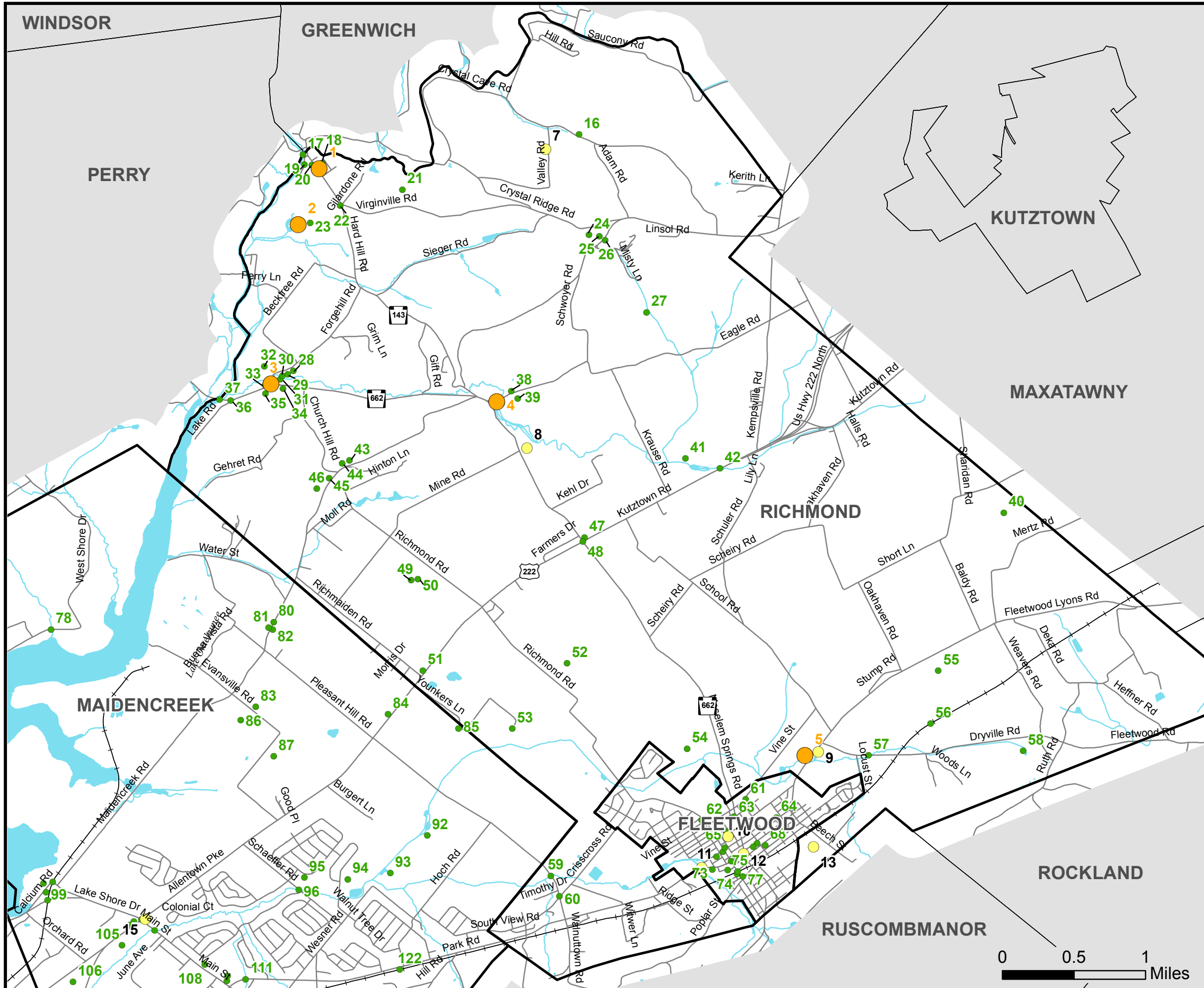
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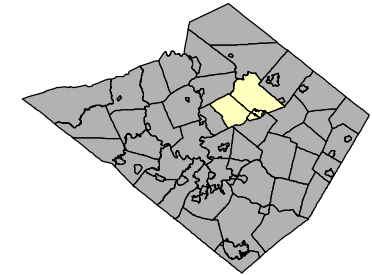
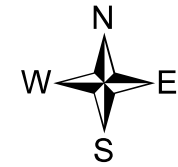
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Historical Resources Fleetwood Borough



Historic Sites

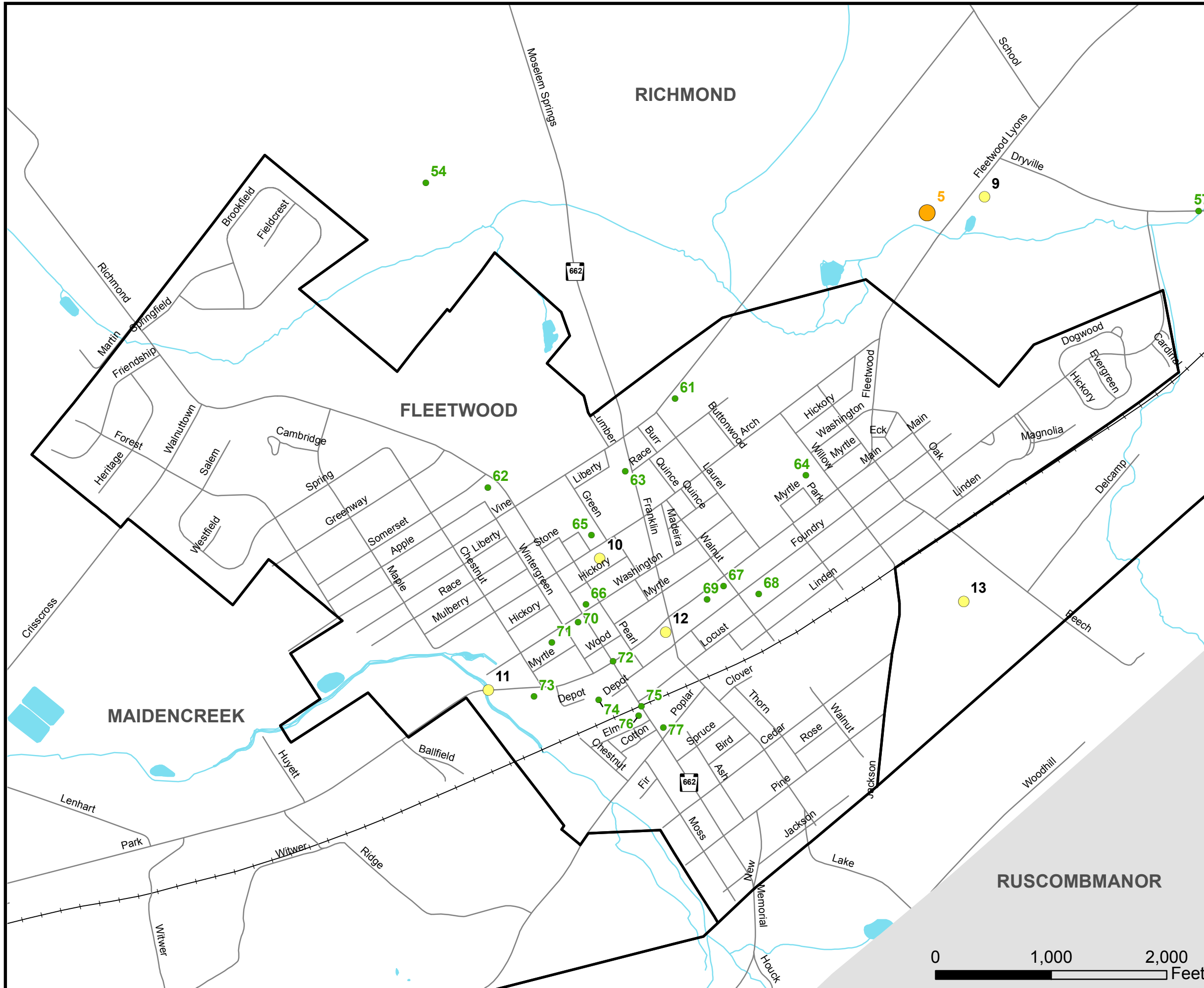
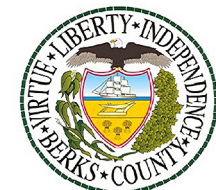
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- Other Historic Sites*
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Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services

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Fleetwood, Richmond, Maidencreek
Historical Resources

NR Listed Sites

ID	Historic Name	Municipality
1	Virginville Hisoric District	Richmond
2	Joel Dreibelbis Farm	Richmond
3	Moselem Farms Mill	Richmond
4	Merkel Mill Complex	Richmond
5	Christian Schlegel Farm	Richmond
6	Guldin Mill	Maidencreek

NR Eligible Sites

ID	Historic Name	Municipality
7	Crystal Cave	Richmond
8	Leibelsperger Farm	Richmond
9	Schlegel Grist Mill	Richmond
10	Fleetwood School (Community Center)	Fleetwood
11	Bridge	Fleetwood
12	First National Bank in Fleetwood	Fleetwood
13	Isaac Henry Farmstead	Fleetwood
14	Kindt's Corner Historic District	Maidencreek
15	Samuel G. Kaufman House	Maidencreek

Other Sites

ID	Historic Name	Municipality
16	Stein's School House	Richmond
17	Virginville Bridge	Richmond
18	St Paul's Chapel / Sunday School	Richmond
19	Dreibelbis Mill/Virginville Mill	Richmond
20	Mansion House	Richmond
21	Dragon Cave	Richmond
22	Dreibelbis Hotel	Richmond
23	Jacob Dreibelbis Farm	Richmond
24	Graveyard	Richmond
25	Moselem Church	Richmond
26	Moselem School	Richmond
27	John Sell Farm	Richmond
28	Eckert Charcoal Furnace	Richmond
29	Hunter Anthracite Furnace	Richmond
30	Moselem Forge	Richmond
31	Moselem Forge And Furnace	Richmond
32	Bridge	Richmond
33	Early Grist Mill	Richmond
34	Moselem Iron Co Building	Richmond
35	Moselem Furnance Mansion	Richmond
36	Village of Moselem	Richmond
37	Bridge	Richmond
38	Merkel Mansion	Richmond
39	Schoolhouse	Richmond
40	Kiefer Farm	Richmond
41	Moselem Springs Farm	Richmond
42	Bridge	Richmond
43	St Peter's United Church of Christ	Richmond

Fleetwood, Richmond, Maidencreek
Historical Resources

ID	Historic Name	Municipality
44	Graveyard	Richmond
45	Becker's St. Peter Church	Richmond
46	Graveyard	Richmond
47	Moselem Springs Inn	Richmond
48	Village of Moselem Springs PO	Richmond
49	Graveyard	Richmond
50	St Henry's Catholic Church	Richmond
51	Hoch's White Horse Tavern	Richmond
52	Billig Farm	Richmond
53	Lee Heffner Jr. Property	Richmond
54	Hoch Farms	Richmond
55	William Schaeffer Farm	Richmond
56	Philadelphia and Reading Railroad	Richmond
57	Bridge	Richmond
58	Heffner Log Cabin	Richmond
59	Bridge	Richmond
60	Village of Walnuttown	Richmond
61	Janet Schaeffer Property	Fleetwood
62	Wellington Strause Property	Fleetwood
63	Sholl Home	Fleetwood
64	Schlegel Pioneer Home	Fleetwood
65	Schoolhouse	Fleetwood
66	Paul Fretz Property	Fleetwood
67	Paul Ernst Property	Fleetwood
68	7th Day Adventist Church	Fleetwood
69	Victorian House	Fleetwood
70	Carl Slegel Property	Fleetwood
71	John Hunsicker Property	Fleetwood
72	Village of Fleetwood	Fleetwood
73	Wanner-Schaeffer Mill	Fleetwood
74	Schaeffer and Wanner Mill	Fleetwood
75	Philadelphia and Reading Railroad	Fleetwood
76	Old Town Hall	Fleetwood
77	Town Hall	Fleetwood
78	Bridge	Maidencreek
79	West Shore Drive Bridge	Maidencreek
80	Village of Molltown	Maidencreek
81	Store / Hotel	Maidencreek
82	Molltown Store	Maidencreek
83	Reeser Farm	Maidencreek
84	Kerby Homestead	Maidencreek
85	Kerby Farm	Maidencreek
86	Evansville Road House	Maidencreek
87	Stoudt Farm	Maidencreek
88	Graveyard	Maidencreek
89	Maidencreek Friend's Meeting House	Maidencreek
90	Maidencreek Friends School	Maidencreek
91	Orthodox Friend's Meeting House	Maidencreek
92	Kauffman Farm	Maidencreek

Fleetwood, Richmond, Maidencreek
Historical Resources

ID	Historic Name	Municipality
93	Johannes Kauffman Homestead	Maidencreek
94	Rothermel Homestead	Maidencreek
95	Rothermel Farm	Maidencreek
96	Bridge	Maidencreek
97	Lightfoot-Meredith House	Maidencreek
98	Bridge	Maidencreek
99	C.J. Miller Mill	Maidencreek
100	Maiden Creek Bridge	Maidencreek
101	Village of Maidencreek	Maidencreek
102	Halfway House Hotel	Maidencreek
103	Kauffman Store	Maidencreek
104	Bridge	Maidencreek
105	Route 222 House	Maidencreek
106	Penrose Farm	Maidencreek
107	Bridge	Maidencreek
108	Kauffman House	Maidencreek
109	Graveyard	Maidencreek
110	Evangelical Lutheran & Reformed Church	Maidencreek
111	Bridge	Maidencreek
112	Ahrens Store	Maidencreek
113	Blandon House	Maidencreek
114	Village of Bland's Town (Blandon)	Maidencreek
115	Store	Maidencreek
116	Hotel	Maidencreek
117	Zion Evangelical Church	Maidencreek
118	Schoolhouse	Maidencreek
119	544 Main Street House	Maidencreek
120	Blandon Rolling Mill	Maidencreek
121	Guldin Store	Maidencreek
122	Philadelphia and Reading Railroad	Maidencreek

Natural Features

The use of the land is influenced by several types of natural features such as hydrology, steep slopes, woodlands and soil characteristics, among others. This section describes how natural features will continue to influence the ways in which the Fleetwood-Maiden creek-Richmond area is developed and conserved.

Climate

The Fleetwood-Maiden creek-Richmond area enjoys a fairly moderate, humid, continental climate. This is due to the area's location on the leeward side of the mountains of east-central part of Pennsylvania, known as the Appalachian Mountains. When compared to other areas of Pennsylvania at about the same latitude, winters tend to be shorter and milder. Summers are long and frequently humid. The average relative humidity in any given year is usually above sixty-five percent. Two-thirds of the time, skies are clear to partly cloudy, and the average amount of sunshine is about fifty-seven percent of the possible amount. An average annual precipitation of 41.4 inches falls in Berks County. Storms are typically numerous enough to ensure adequate moisture throughout the year. Average monthly temperatures have fluctuated somewhat over the last ten years, however in general range from a low of around twenty-eight to thirty degrees Fahrenheit in January to a high of around seventy-eight to eighty degrees Fahrenheit in July. May is generally the month with the most precipitation. Recently average temperatures have fluctuated, the cause of this fluctuation is still under study.

Hydrology

Hydrology refers to the water-related features such as streams, flood prone areas and drainage characteristics. These features are important for the following primary reasons:

- Streams and creeks provide potential recreational areas, water sources and valuable aquatic habitat,
- Knowledge of drainage basins is necessary in designing sanitary sewers and storm water facilities,
- Alluvial soils and floodplains denote areas prone to flooding. Development in these areas may negatively impact water quality and sensitive habitats, worsen flood conditions and result in loss of property and lives,
- Alluvial soils, hydric soils and wetlands indicate land where chronic or occasional wetness may weaken foundations or otherwise constrain construction, and
- Wetlands are important aquifer recharge areas. These areas act as a natural filter for storm water. They support a uniquely sensitive environment and are protected by both state and federal laws,

- Riparian and wetland buffer areas also help in filtering water before it reaches either the stream or aquifer. These areas also help to reduce the amount of sedimentation that reaches the streams and slows the velocity of the stormwater runoff that can cause damage to the stream banks.

Almost the entire Fleetwood-Maiden Creek-Richmond area lies within the Maiden Creek Watershed drainage basin, which drains approximately twenty percent of Berks County. The Sacony Creek drains parts of this area, from the northern part of Richmond Township and a small portion of southeastern Richmond via Kutztown, and then flows into the Maiden Creek, at Virginville. The Willow Creek forms a sub basin that drains most of the southwestern portion of Richmond, all of Fleetwood and the southern part of Maiden Creek. Runoff from the central portion of Richmond drains into the Maiden Creek via the Moselem Creek. Also, a small part of the headwaters of the Manatawny Creek is found in the southeastern part of Richmond.

The Pennsylvania Department of Environmental Protection (DEP) designates certain streams by their quality, temperature and aquatic value. The portion of the Sacony Creek within the northern part of the joint planning area is considered a Trout Stocking Fishery (TSF). TSF identified streams are those whose water quality should be protected to allow propagation of trout and warm water flora and fauna. The other portion of the Sacony Creek, near Lyons Borough, and the Willow Creek are Cold Water Fisheries (CWF). These are streams that should be protected to remain as habitats for fish species and additional fauna and flora indigenous to cold water. In these streams it is important to maintain a buffer area that includes shade to keep the water temperature from rising. The Moselem Creek is designated a High Quality-Cold Water Fishery (HQ-CWF). This means that the Moselem Creek's water quality is very high and that both quality and temperature should be protected. Peters Creek is designated as Exceptional Value (EV). This is the highest rating that a stream can have. In general the water quality of the stream is considered to be excellent. Extra care should be taken in this area of the region to ensure the quality of the stream is not impaired.

Wetlands are important to recharge groundwater and to support wildlife, fish and other aquatic life. They also act as a natural filter of water pollutants. The Watersheds and Wetlands map following includes the wetlands that are shown on the National Wetland Inventory. These are the approximate locations of the known prominent wetlands. However, this resource does not include all wetlands. When developing a property an additional inventory needs to occur to determine if there are any smaller wetlands located on the property.

Geology and Groundwater

Geology and the availability of groundwater needs to be considered when planning for future development. The Fleetwood-Maiden Creek-Richmond area is broadly classified into three geologic formations; the Ordovician shales, Cambrian limestone and limestone with quartz, and Ordovician limestone. Ordovician shales, found in the northern portion

of the area and the central and southern sections, are underlain by the Cambrian and Ordovician limestones.

The shales found in the northern part of the area tend to produce groundwater whose chemical quality is good, though the water is moderately hard and may be high in iron content. Well yields in these shale foundations are low, averaging 40 gallons per minute in Berks County. The limestone belt underlying the central and southern portions of the area tends to produce hard groundwater that requires softening for most uses. There is also a significant hazard of groundwater contamination in limestone areas, due to fractures and sinkhole potential. Groundwater yields from these limestone formations are extremely variable, ranging from 5 to 1,000 gallons per minute with an average of 40 gallons per minute. Groundwater characteristics are very important in the rural areas of Maiden creek and Richmond Townships, which rely upon individual on-site wells, and also for Fleetwood Borough whose public water, also originates from groundwater located in northern Ruscombmanor Township. Maiden creek Township Authority, which supplies public water to the village of Blandon, relies on three wells in the Township.

Portions of the area are prone to the formation of sinkholes. Sinkholes are a surface depression created when groundwater dissolves the surrounding rock to the point where the void becomes unstable and collapses. Depending upon the size of the void and its proximity to the surface, the sinkhole may be a barely noticeable surface depression or it could occur as a sudden catastrophic event. Areas underlain by limestone and related rock are most prone to sinkholes as they are the most soluble. Acidic groundwater will hasten the dissolution, as the acids chemically react to elements in the limestone. Groundwater acidity may be worsened by acid rain and other pollutants. The creation of underground caverns is associated with this process. One of the more famous underground caverns is found in northern Richmond Township, Crystal Cave.

Geologic Names of the Region		
Allentown Fm	Epler Fm	Granitic Gneiss
Hamburg Sequence	Hamburg Sequence (Shale with Graywacke)	Hamburg Sequence (Shale with Limestone)
Hardyston Fm	Hornblende Gneiss	Jacksonburg Fm
Leithsville Fm	Martinsburg Fm	Ontelaunee Fm
Rickenback Fm	Stonehenge Fm	Warrior Run

Source: USGS; Pennsylvania

Radon

Radon gas is an invisible, odorless, tasteless and radioactive gas whose presence is related to geology. Radon is known to increase health risks when persons are exposed to concentrations of the radon over time. The Surgeon General states that “radon is the second leading cause of lung cancer in the United States today”. Some health studies also indicate that children are more susceptible to radon. Concentrations of radon occur when enclosed areas accumulate this naturally occurring gas. The Fleetwood-

Maiden creek-Richmond area's proximity to the Reading Prong increases the likelihood of the presence of higher levels of radon gas. The Reading Prong is a geologic area which produces a very high level of radon from Reading to the Lehigh Valley along the South Mountain corridor. However, all of Berks County is in what EPA considers as their Zone 1 (Highest Potential for levels greater than 4 pCi/L). Various radon studies, remediation projects and programs have been around for over thirty-five years. It was not until 1984, though, that Pennsylvania realized the severity of the issue in certain areas. A construction worker at the unfinished Limerick Nuclear Generating Station set off the portal radiation monitors entering the facility. Since the facility was not active as yet a study was performed on the individual's home. The study of the Berks County home showed radon gas levels at 2600 pCi/L. The EPA recommends that remedial action be taken when the radon gas levels are above 4 pCi/L.

It is recommended that a radon gas test be performed on all home levels below the third floor and all schools. Radon mitigation equipment is easier and very inexpensive to install in new homes or inhabited structures. Once the home is built a new radon test should be performed and if necessary installation of the radon vent fan should occur. In recent years it is much less expensive to install radon mitigation equipment into existing homes, however every home is different and the cost is dependant upon a number of building structure factors. High levels of radon should not be ignored. Further information can be found in the *PA Citizen's Guide to Radon*.

Step Slopes

The Natural Resources map shows two categories of slopes within the Fleetwood-Maiden creek-Richmond area; land between 15 percent and 25 percent grade (moderately steep slopes) and land over 25 percent grade (very steep slopes). Knowledge of steeply sloping areas is important in planning for future development because:

- Steep slopes are susceptible to erosion when soil and vegetation are disturbed,
- Disturbance of steep slopes can lead to landslides, and
- Construction and maintenance of roads and buildings on steep slopes is very costly.

Almost all of the steep and very steep slopes lie in the northern sections of the Townships and along the southern boundary of the region. The northern section steep slopes are associated with the shale section of the Great Valley, which extends the length of Berks County. The portion of the Fleetwood-Maiden creek-Richmond area lying along the floor of the Great Valley is characterized by rolling farmland and the relatively flat topography that is generally found with good agricultural soils. Only a very few concentrations of steep slopes are found in between Maiden creek Rd/Eagle Rd, on the north side and Park Rd/Fleetwood Lyons Rd, on the south side of the area. The southern section is the area associated with the geologic formation known as the Reading Prong.

Woodlands

Woodlands are areas that contain primarily second and third generation forests. The existence and protection of woodland areas are important for the following reasons:

- Woodlands are a scenic resource that provides visual relief, softening views of the landscape,
- Woodlands provide unique wildlife habitats which, once destroyed, take decades to recover,
- Vegetation cover and root systems of the forest ecosystem protect against erosion and stabilize the soil, and
- Woodlands provide protection and improvement of water quality running into streams and water bodies.

Most of the woodlands that exist in the area are located in the same general location as the steep slopes described previously. These areas are typically unsuitable for farming due to topography and/or rocky soils. There are a few scattered concentrations of woods in the middle portion of the area, however none of any significant size. The southern portion of the region associated with the foothills of Irish Mountain, which is part of the South Mountain that continues along the regions boundaries, have some larger continuous sections of wooded lands. These woods have remained simply because of the steep slopes being difficult to develop. Also, the area surrounding Lake Ontelaunee, owned by the City of Reading, has significant acreage of woodlands. When the lake was created, the surrounding lands were included in the City property to protect the quality of stormwater run-off entering the lake. In this way, the land was protected from conversion into farmland, as well as from all other types of development.

Animals and Plants

In 1991, the Pennsylvania Science Office of the Nature Conservancy prepared the Berks County Natural Areas Inventory. This is a list and mapping of rare and endangered plants, animals and natural communities in Berks County. The Berks County Natural Areas Inventory information was then entered into the Pennsylvania Natural Diversity Inventory (PNDI) data base. The PNDI provides information on sites of statewide significant and for protection of biological diversity. The area contains diverse populations of local flora and fauna. Natural areas in the region, particularly in the more un-developed northern and southern sections, serve as permanent and temporary habitat for a variety of flourishing birds and wildlife species. The PNDI information is updated periodically and prior to developing a parcel, this data base should be checked to make sure that there is not a conflict with a PNDI site.

Soils

Many different soil types with a variety of soil features exist within the Fleetwood-Maiden creek-Richmond area. The United States Department of Agriculture’s Natural Resources Conservation Service (USDA, NRCS), along with input from a variety of other agencies, prepares and maintains the Soil Survey for Berks County. In the past, this was a printed document called the Soil Survey: Berks County, Pennsylvania. All of the information about soils is now accessible through the NRCS website and is called the Soil Data Mart. The Soil Data Mart contains all of the technical information for each of the soils listed on the Soils map and the Agricultural Soils.

A specific soil type is determined by the origin, or “parent material” of the soil, how sandy or clay-like it is, if it has a lot of pebbles or large rocks, how severely eroded it is, and the slope of the area where it is found. Each soil map unit has a two-three letter designation that associates that unit with a specific description of the soil capability. This information includes parent material, runoff classification, depth to restrictive features, drainage capacity, flooding and/or ponding, seasonal high water table information, hydric soil, and land capability class, which can be from Class I-VIII. See map figure 5-A and 5-B for the soil map units within the Fleetwood-Maiden creek-Richmond area.

Many different soil types with a variety of soil features exist within the Fleetwood-Maiden creek-Richmond area. Soils affect land use planning in two principal ways. Perhaps most obviously, soil types are an indication of suitability for various kinds of agricultural activity. Certain soil types have been identified by the State as “Prime Farmland” and “Farmland of Statewide Importance”. These are commonly referred to as Class I, II and III soils. Such soils cover a large portion of the area. See map figure 6-A and 6-B. The following table lists the agricultural soil map unit names that are associated with the agricultural soils. Those listed under Prime Farmland are generally Class I soils, while those listed as Farmland of Statewide Importance are generally Class II and III soils. Class I and II soils are the best for agricultural production purposes.

Agricultural Soils	
Prime Farmland	Farmland of Statewide Importance
BfB	BkB
CmA	BkC
CmB	DfC
CpB	EhC
DbA	GeC
DbB	Ho
EhB	LaC
GeB	MuC
HaB	WeB
LaB	
Me	
MuA	
MuB	

Source: USDA Soil Data Mart

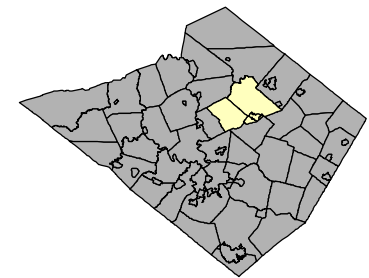
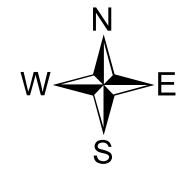
This area has some Class I soils, but most of the soils are Class II with some Class I and III interspersed. Class III soils are limited in their ability to support certain crops and require additional conservation practices.

The other significant affect that soils have are for development purposes. Soil types determine the ability of an area to support on-site septic systems. Soils unsuitable for on-site septic systems are shallow, stony, poorly drained, too permeable or on steeply sloped land. Soil suitability for on-site septic systems is not an important issue in areas served by public sewage systems, such as in and around Fleetwood Borough and in and around the southern and south-western portions of Maiden creek Township. However, soil suitability for on-site septic is an issue in other parts of the area. In general, the soils found north of Lake Ontelaunee and east of Evansville Road and north of Maiden creek Road have varying degrees of limitations for on-site septic systems; from slight to unsuitable for on-site septic systems. The northern portion of Richmond Township has severe limitations for on-site systems. The valley portion of the area that includes from just north and west along the SR 222 corridor and on the south and east to the Park Road and Fleetwood Lyons Road has very few limitations, except along creek corridors, for on-site septic systems. However, this area also contains the best agricultural areas too. The area that is on the south side of Park Road and the Fleetwood Lyons Road starts out with few limitations then as the topography becomes steeper there are moderate to unsuitable areas for on-site septic systems.







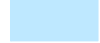


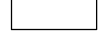


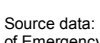
Regulatory Control of Natural Features

Certain natural features are subject to regulatory controls by agencies other than, or in addition too, the Fleetwood-Maiden creek-Richmond governments. Federal, State, and other local agencies possess regulatory control over features such as Lake Ontelaunee (which is a man-made reservoir), watersheds, groundwater, surface streams, floodplains, and wetlands. Government entities, such as the U.S. Army Corps of Engineers, Federal Emergency Management Agency, the U.S. Fish and Wildlife Service, the Pennsylvania Department of Environmental Protection, the Pennsylvania Department of Conservation and Natural Resources, the Delaware River Basin Commission, and the Berks County Conservation District limit the authority of the local municipalities policies through their own preemptive standards, regulations, and procedures. The resource protection policies advocated by this Plan respect these regulations and are intended to complement them.

Watersheds and Wetlands



Legend

-  Sacony Creek Watershed
-  Maiden Creek Watershed
-  Schuylkill Watershed
-  Manatawny Creek Watershed
-  Subwatersheds
-  Wetlands
-  Water Bodies
-  Hydric Soils
-  Streams
-  Municipal Boundaries
-  Roads
-  Railroad
-  Inactive Railroad

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, USDA NRCS, DEP

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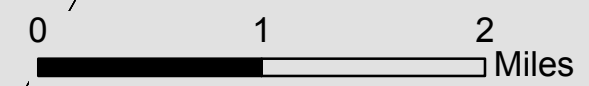
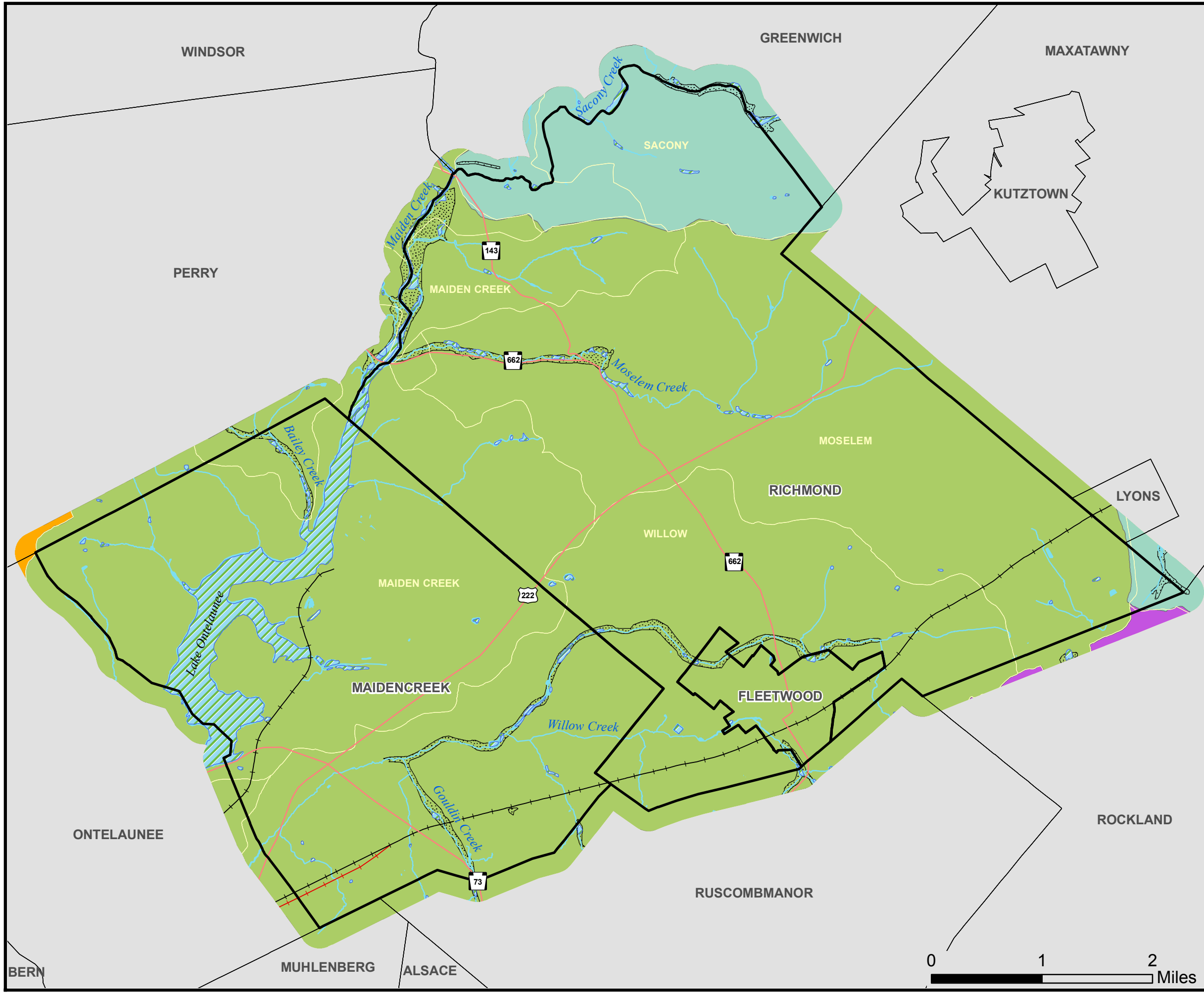


FIGURE 2-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Watersheds and Wetlands



Legend

- Sacony Creek Watershed
- Maiden Creek Watershed
- Schuylkill Watershed
- Manatwny Creek Watershed
- Subwatersheds
- Wetlands
- Water Bodies
- Hydric Soils
- Streams
- Municipal Boundaries
- Roads
- Railroad

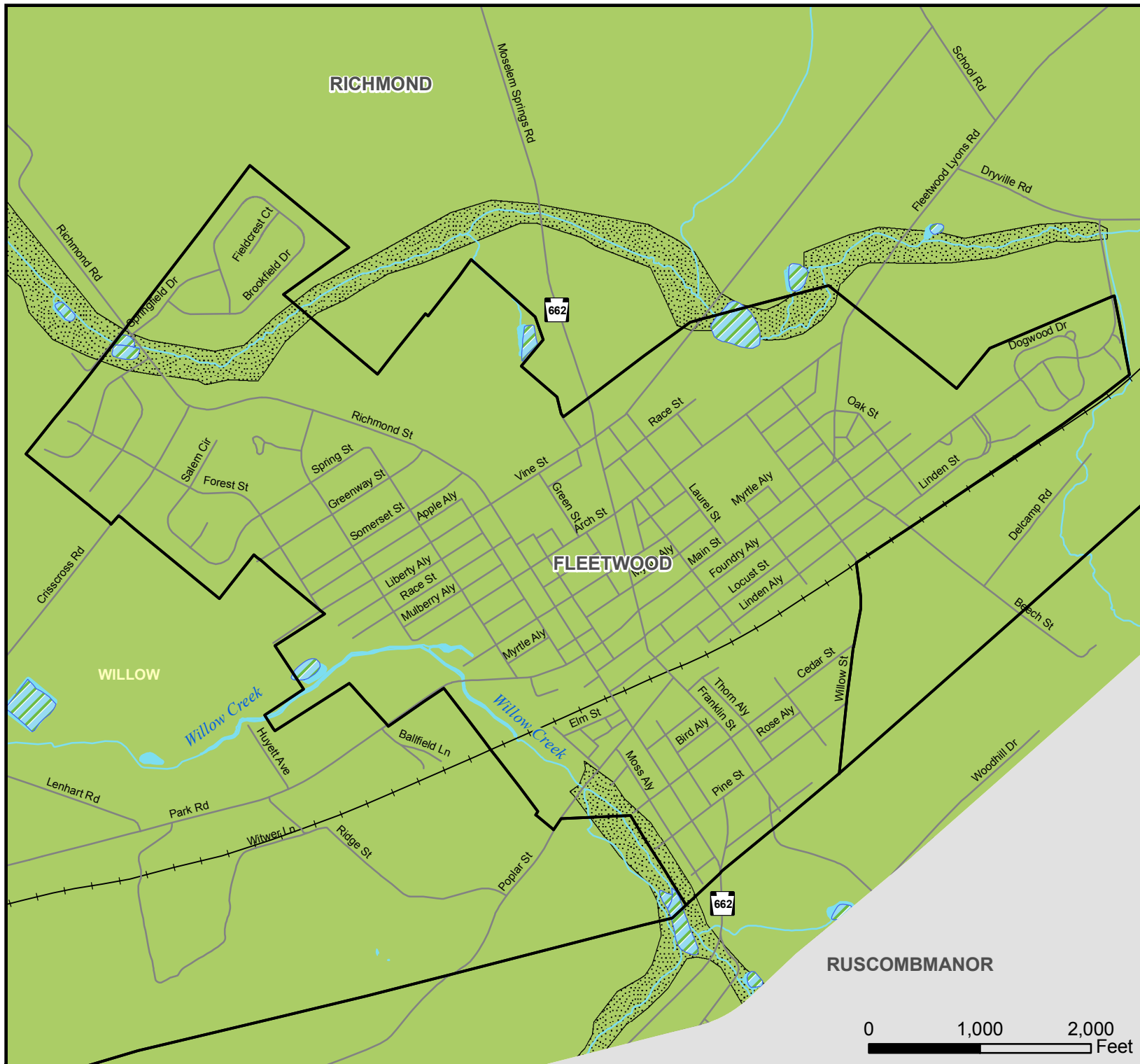
Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services, USDA
NRCS, DEP

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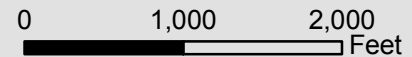
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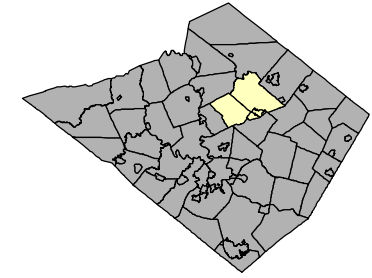
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Geology



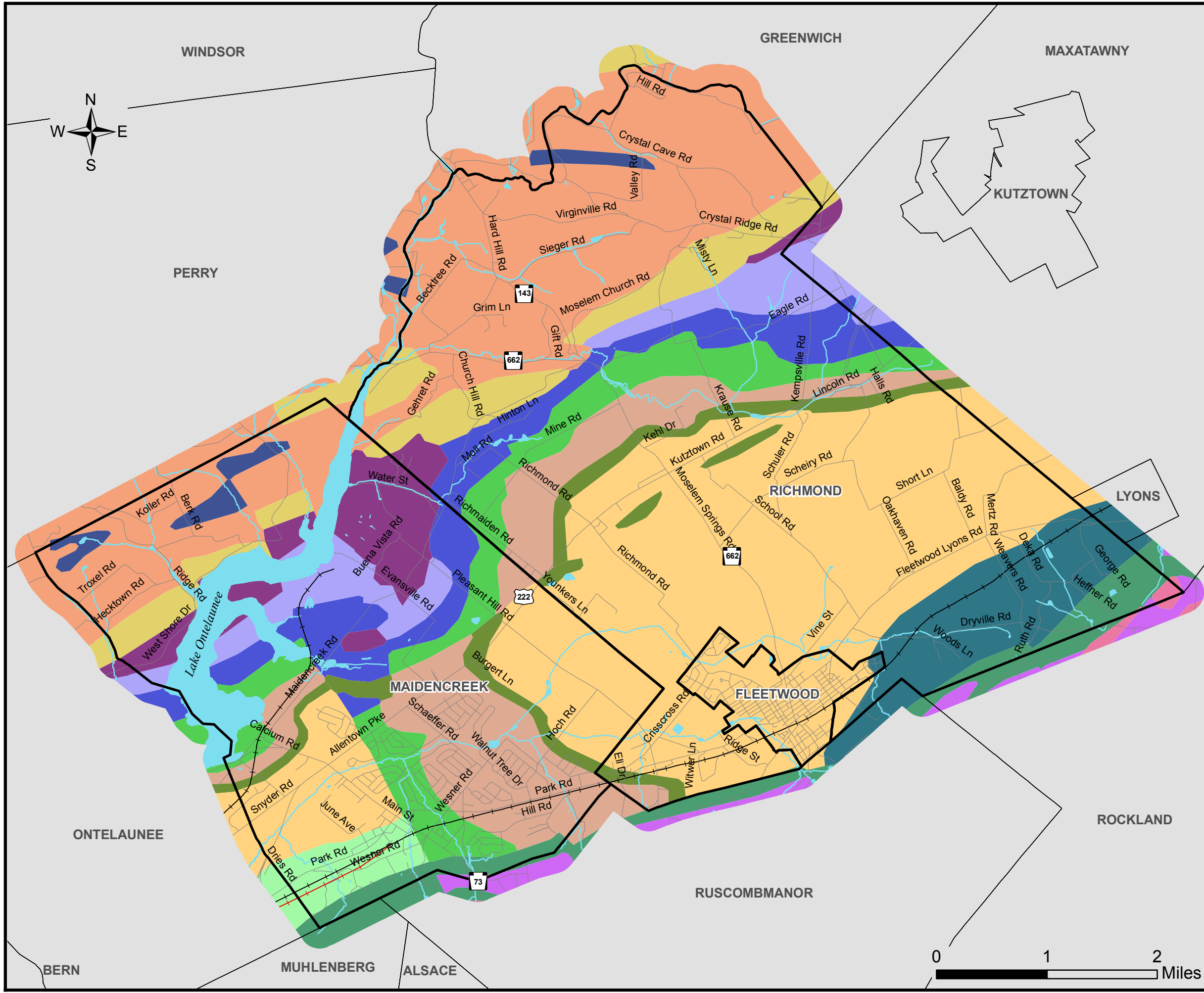
Geology

- Allentown Fm
- Epler Fm
- Granitic Gneiss
- Hamburg Sequence
- Hamburg Sequence (Shale with Graywacke)
- Hamburg Sequence (Shale with Limestone)
- Hardyston Fm
- Hornblende Gneiss
- Jacksonburg Fm
- Leithsville Fm
- Martinsburg Fm
- Ontelaunee Fm
- Rickenback Fm
- Stonehenge Fm
- Warrior Run
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services

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WINDSOR

GREENWICH

MAXATAWNY

PERRY

KUTZTOWN

RICHMOND

LYONS

MAIDENCREEK

FLEETWOOD

ROCKLAND

ONTELAUNEE

RUSCOMBANOR

BERN

MUHLENBERG

ALSACE

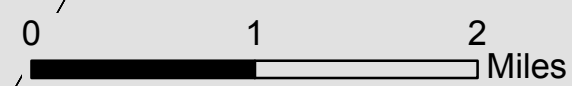
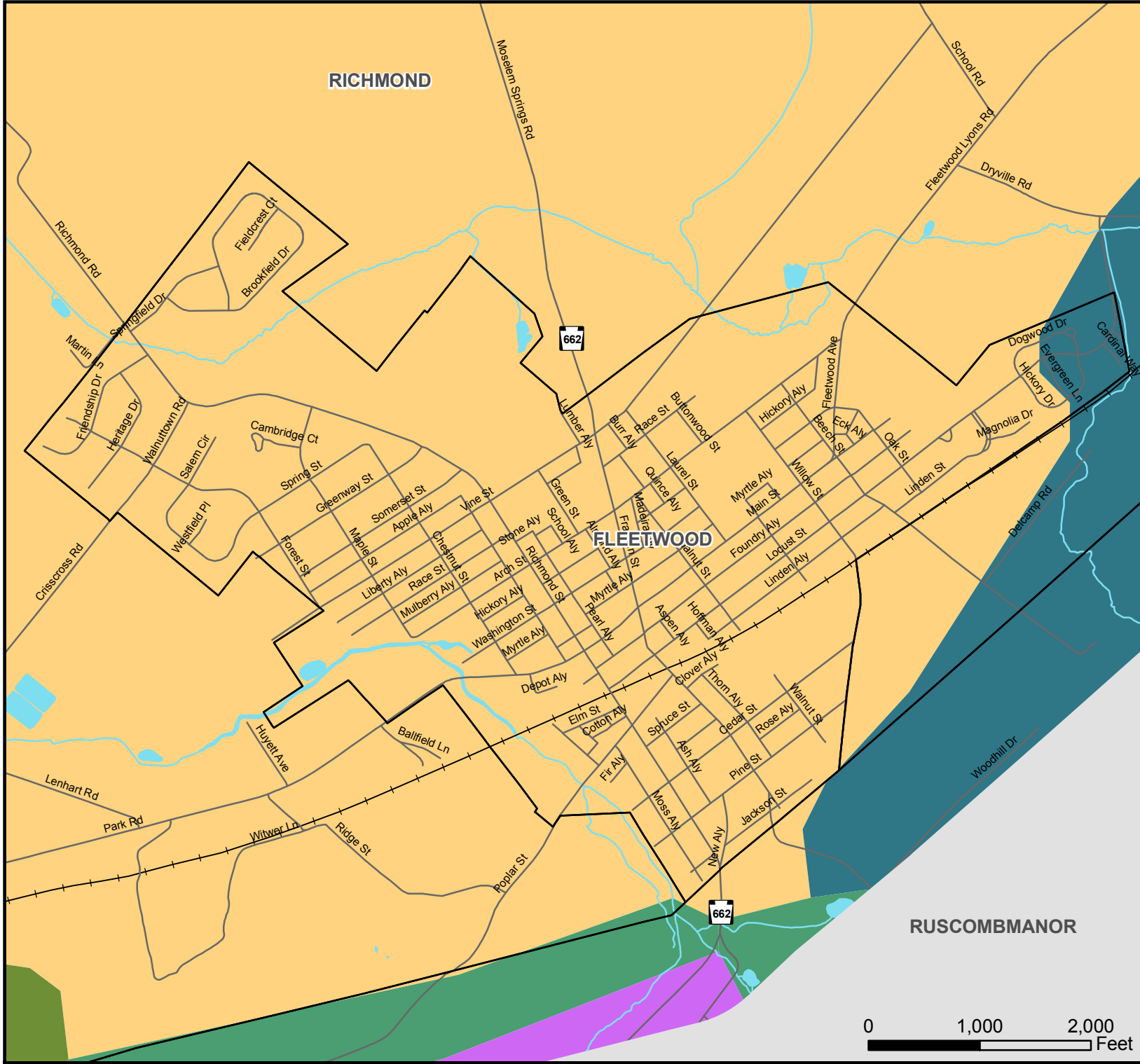


FIGURE 3-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Geology



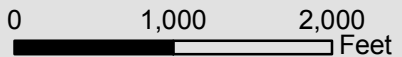
Geology

- Allentown Fm
- Granitic Gneiss
- Hardyston Fm
- Leithsville Fm
- Stonehenge Fm
- Municipal Boundaries
- Roads
- Railroad
- Streams

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services

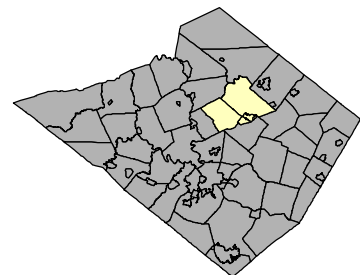
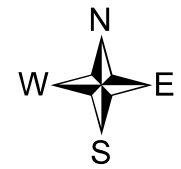
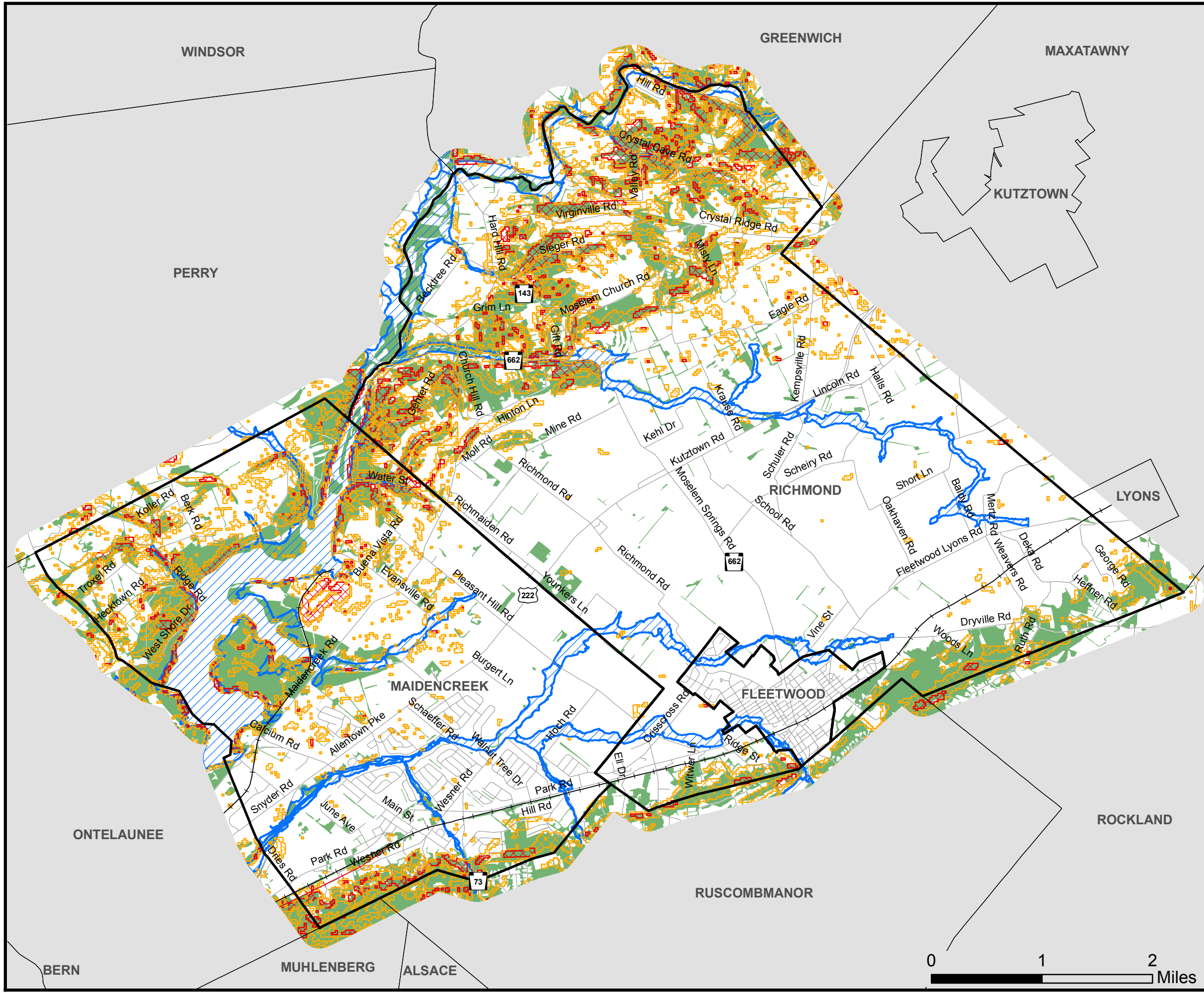
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Natural Resources



Legend

- 15-25% Slope
- >25% Slope
- 1 Percent (100 Year) Floodplain*
- Woodlands
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad

* Preliminary FEMA 1 percent (100 year) floodplain data from December 2010.

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, Berks County Mapping, FEMA

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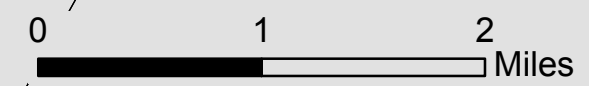
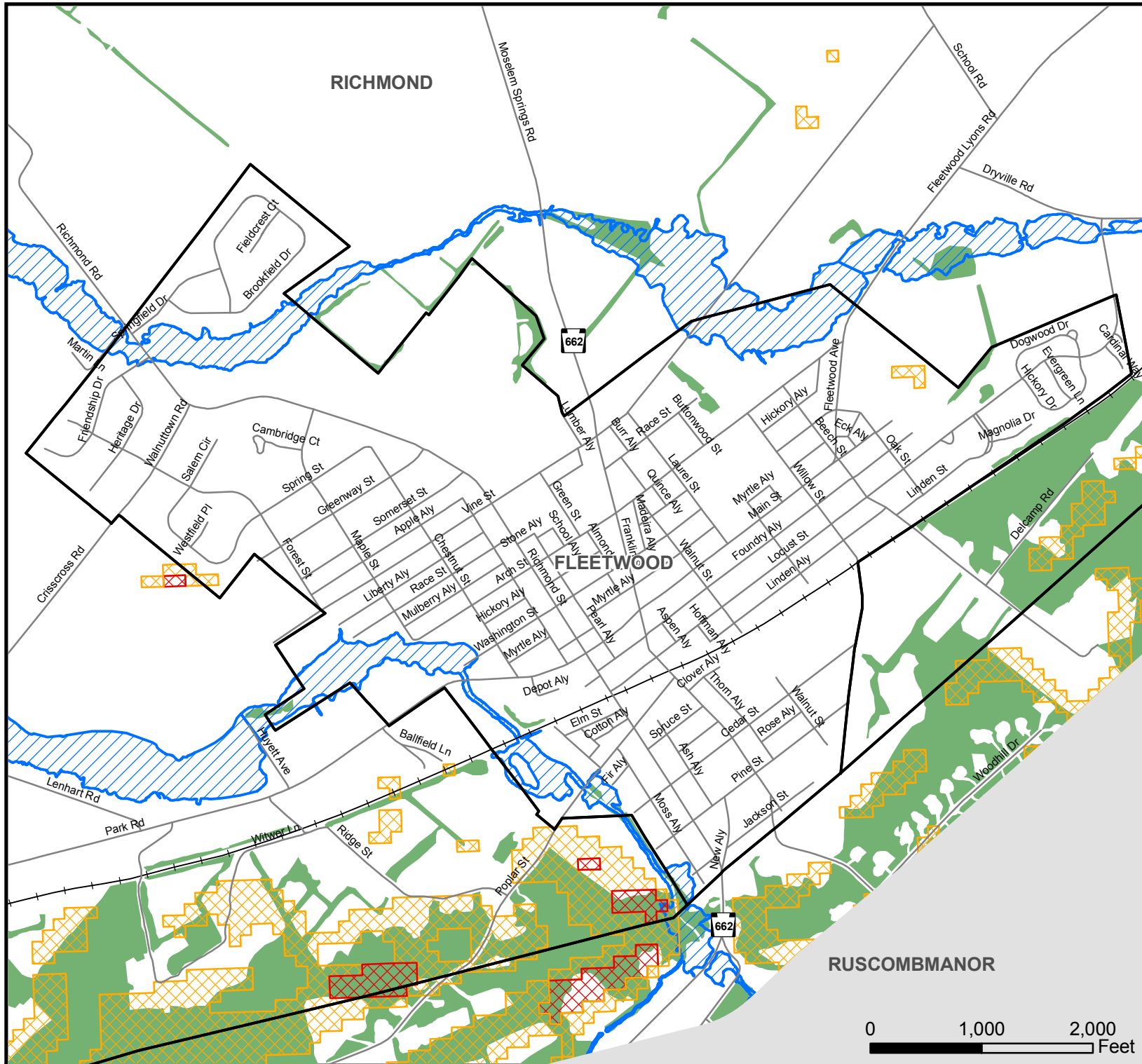


FIGURE 4-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Natural Resources



Legend

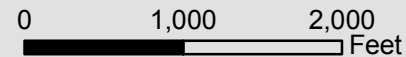
- 15-25% Slope
- >25% Slope
- 1 Percent (100 Year) Floodplain*
- Woodlands
- Municipal Boundaries
- Roads
- Railroad

* Preliminary FEMA 1 percent (100 year) floodplain data from December 2010.

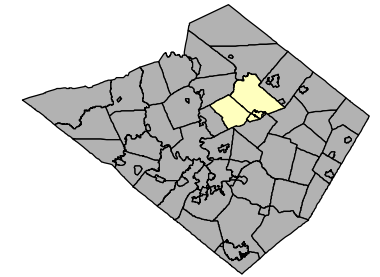
Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services, FEMA

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Soils



Soil Map Unit Descriptions

	AnB		CmB		GnA		ToA
	AoB		CpB		HaB		TwB
	BfB		DbA		HeD		Ua
	BfC		DbB		HeF		UgB
	BhD		DfC		Ho		UgC
	BkA		DfD		LaB		UkB
	BkB		EdD		LaC		UmB
	BkC		EhB		LbB		UmD
	BkD		EhC		LbD		W
	BkF		EhD		Me		WeB
	BmB		GeB		MuA		WeD
	BtA		GeC		MuB		
	BtB		GeD		MuC		
	BvB		GfB		Qu		
	CmA		GfD		ThA		

- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, USDA NRCS

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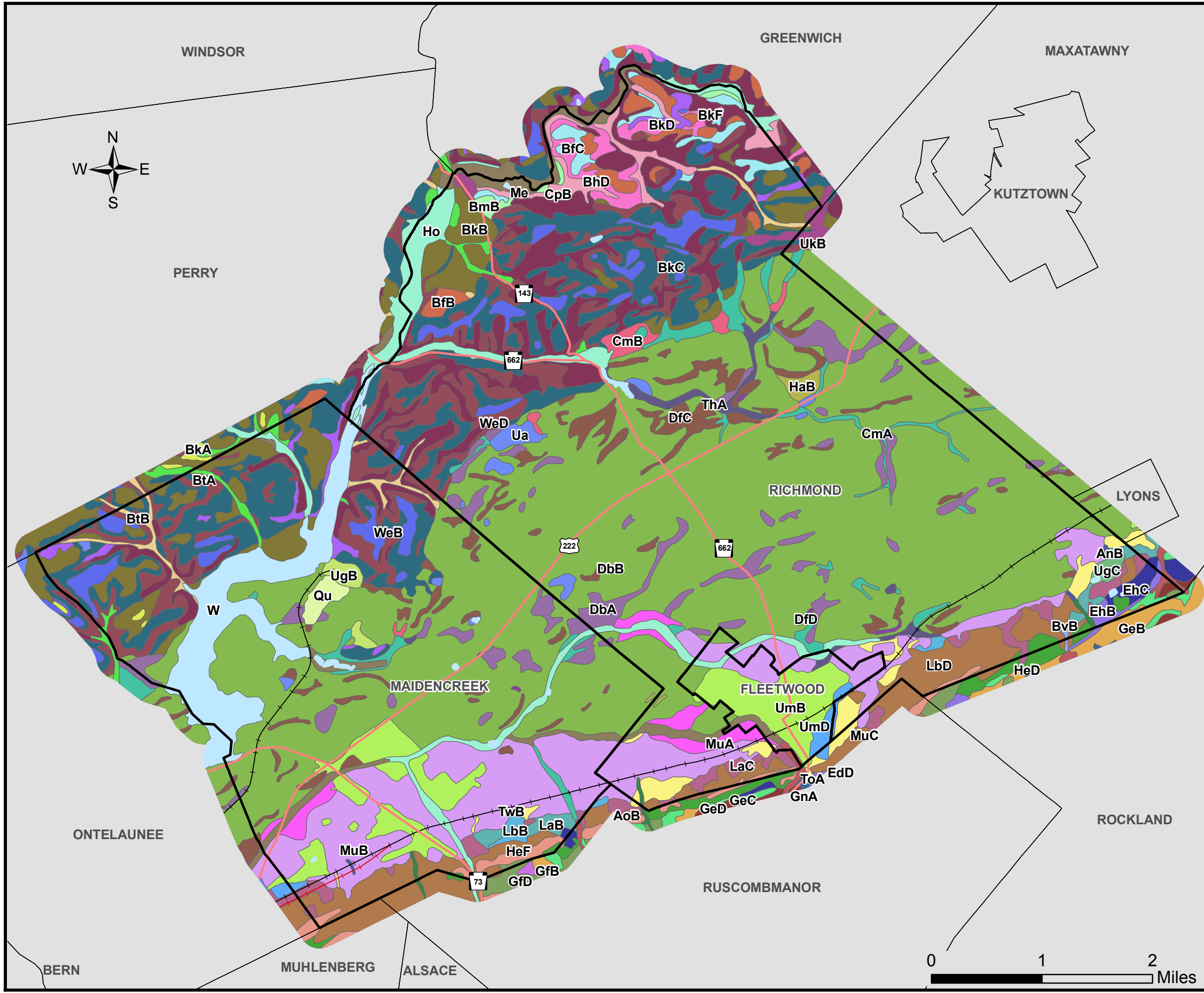


FIGURE 5-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Soils



Soil Map Unit Descriptions

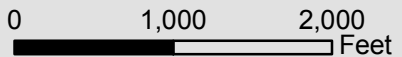
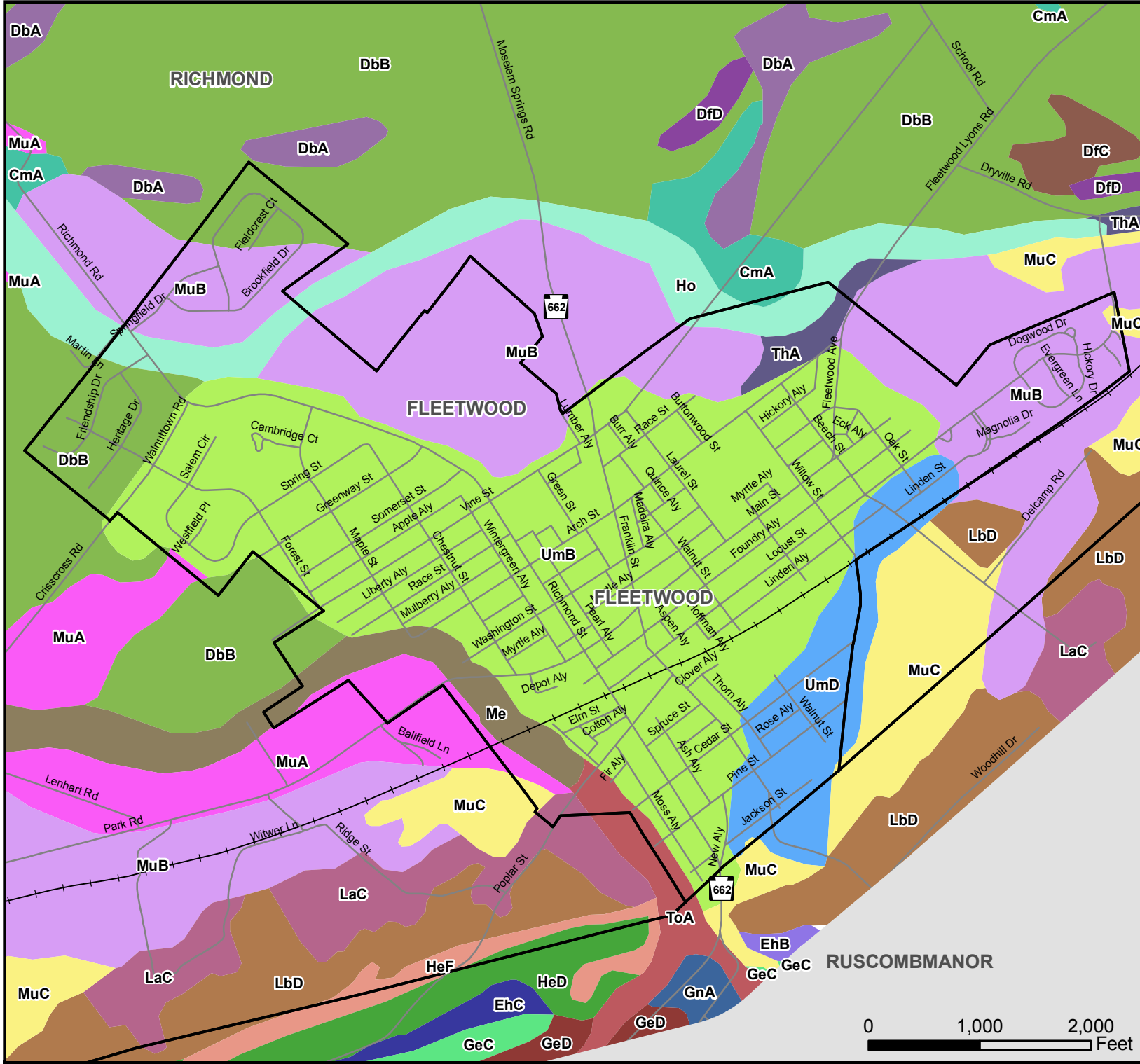
	Municipal Boundaries
	Roads
	Railroad

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services, USDA
NRCS

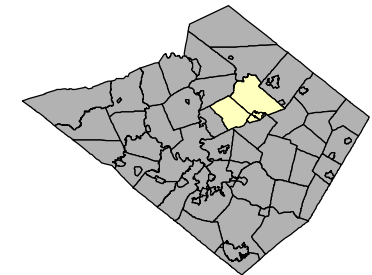
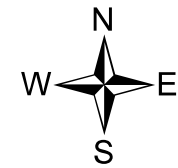
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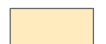


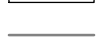
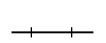
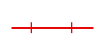

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Agricultural Soils



Soils Capability Classifications

-  1
-  2
-  3
-  4 - 8
-  Municipal Boundaries
-  Roads
-  Railroad
-  Inactive Railroad
-  Streams

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, USDA NRCS

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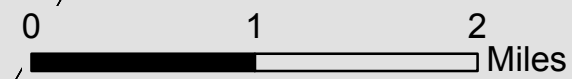
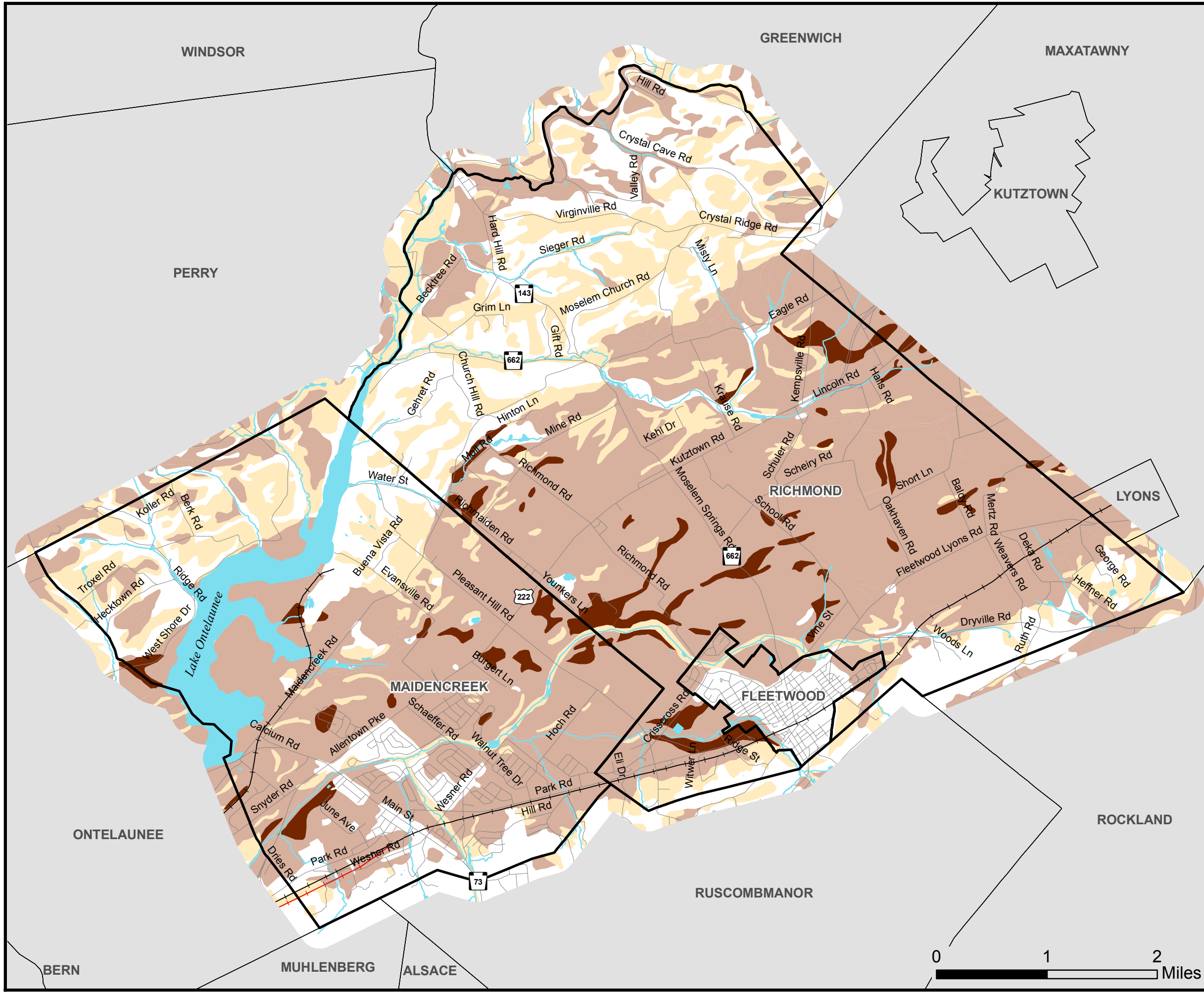
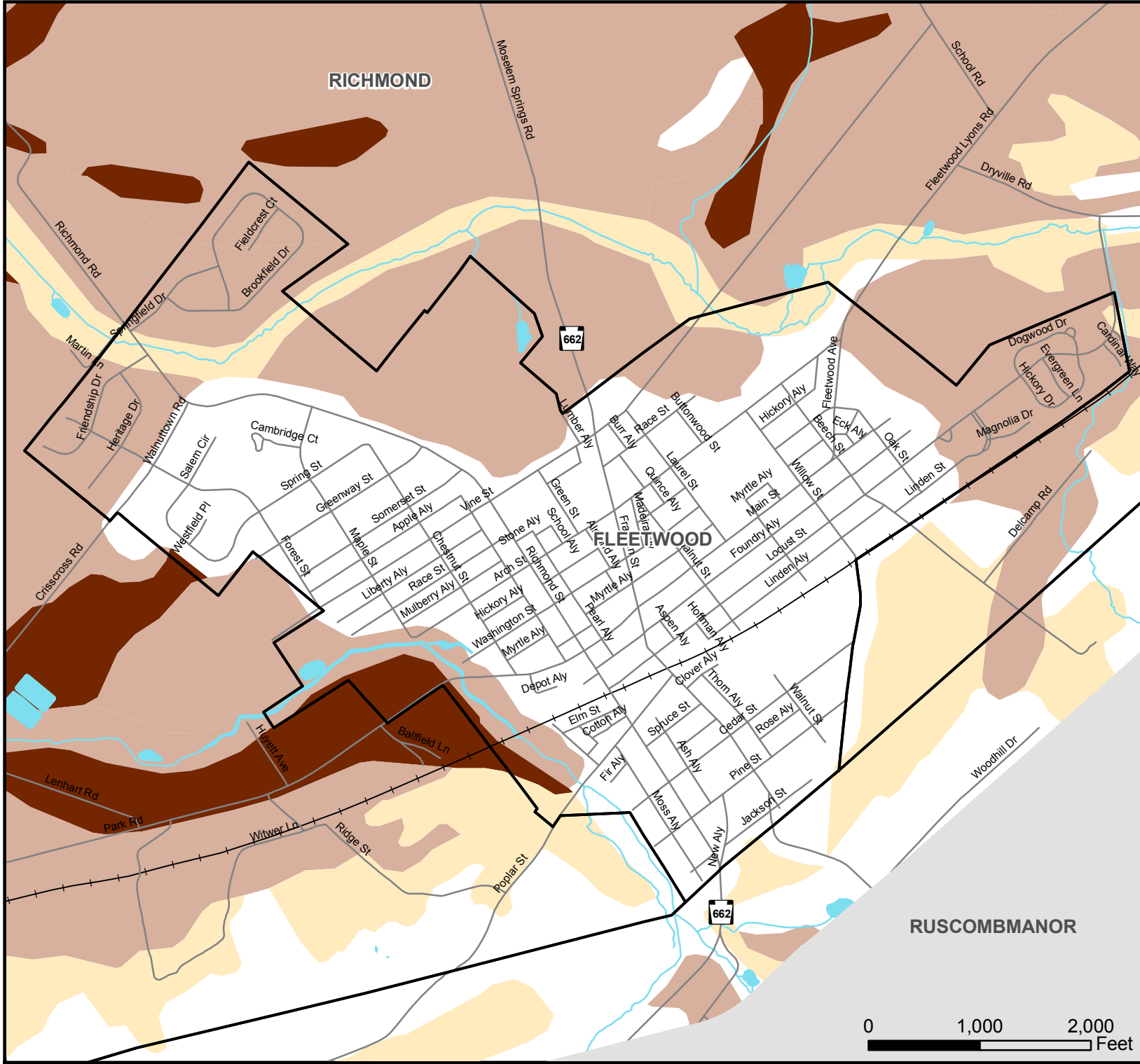


FIGURE 6-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Agricultural Soils

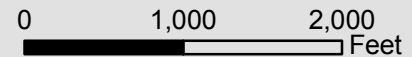


Soils Capability Classifications

- 1
- 2
- 3
- 4 - 8
- Municipal Boundaries
- Roads
- Railroad
- Streams

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services,
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Government Profile

Maidencreek and Richmond's status as townships and Fleetwood's designation as a borough mean that there are some differences in the structure of each municipality's local government. However, each community operates a small to medium sized local government that relies wherever possible on volunteers, with a minimum of municipal staff.

Municipal Structure

Maidencreek and Richmond are both townships of the second class governed by a three-person Board of Supervisors. The Supervisors are elected at large for six-year terms. Fleetwood is a borough governed by a seven-person Borough Council and a Mayor. The Borough Council and Mayor are elected at large for four-year terms. All three municipalities have planning commissions and zoning hearing boards. Fleetwood and Maiden creek each have a recreation board, too.

Each of the three municipalities retains a solicitor, municipal engineer, zoning officer, sewage enforcement officer, and uniform construction code enforcement office. All of the municipalities participate with the Berks County Uniform Construction Code Board of Appeals. Richmond Township and Fleetwood Borough each employ a full-time municipal secretary to assist in day-to-day operations, while Maiden creek Township employs a township manager to oversee the day to day operations. The Community Facilities Map shows the municipal offices and other community facilities located in the area. Fleetwood's municipal offices are at the Fleetwood Community Center on Arch Street and the Borough garage on West Vine Street adjacent to the Community Park. Maiden creek's municipal office and garage are located off of Rt 73 on Quarry Road. Richmond's municipal office and garage are located off of Rt 662 on Kehl Drive.

Municipal Finances

Municipalities rely upon taxes, real estate transfer fees, liquid fuels reimbursement, licenses and permits, fines, interest, grants and various other revenue sources to operate the local government budgets. It is increasingly difficult to balance municipal budgets as the value of real estate has dropped in the last few years, there are fewer transfer fees and the recession economy has created a domino effect reducing ~~on~~ interest, grants and other revenue sources.

In order for the municipalities to maintain services and infrastructure, such as police and roads, hard decisions regarding taxes and which services or facilities to cut or reduce sometime have to be made.

Population, Housing and Employment

Local population, housing and employment trends illustrate how an area's residents, housing stock and economy are changing over time. These trends help determine planning and zoning policies; such as how much land to set aside for commerce, industry and different types of residential uses.

Fleetwood Borough, as with many other communities within Berks County, saw a growth rate that was above normal for the 1990 to 2000 timeframe. Since then, the Borough has seen only a slight increase and with very little vacant land available will see most of its growth in the future from re-development. Maidencreek Township during the 1990's also saw a huge leap in new housing construction and a population growth of 92.90%, almost nine times that of Berks County. This growth now appears to be tied into the inflated market conditions and is now settling down and adjusting into more sustainable levels during the 2000 to 2010 timeframe. Richmond Township's growth spurt occurred prior to 1980 and currently is one of the municipalities that have seen a population reduction in the 2000 to 2010 timeframe of 2.9%. This trend is consistent with other Townships in Berks County that have large tracts of farmed land.

The area's new residents over the last twenty years have generally been younger and better educated. Fleetwood and Maidencreek have also become more affluent, while Richmond has become slightly less affluent, but still better than the overall County poverty percentage. As the area goes through the transition from overbuilding to a more sustainable level of new construction there is an anticipation of more re-development, potentially higher average persons per household, and smaller more affordable homes built.

Total Population

The following numbers are based upon the recent initial release of the decennial 2010 U.S. Census information of population, population by race and total housing units. The remaining information is based upon estimates and other County gathered information from a variety of sources.

Fleetwood Borough's population was 4,085 as of 2010, an increase of 67 persons (1.70%) since 2000. Berks County's overall population grew by 10.10% during the same timeframe. Fleetwood's growth rate spiked between 1990 and 2000 at 15.50%, which was higher than the County's 11.0%. Maidencreek Township's population was 9,126 as of 2010, an increase of 2,573 persons (39.30%) since 2000. Maidencreek's growth rate also spiked in the 1990's at 92.90%.

Richmond Township has seen its population gradually slow down over the last 30 years. Richmond's population was 3,397 as of 2010, a decrease of -2.90% since 2000. Their previous growth rate in the 1990's was 1.80% and in the 1980's it was 7.30%.

Total Population

Total Population By Year	FLEETWOOD BOROUGH			MAIDENCREEK TOWNSHIP			RICHMOND TOWNSHIP			BERKS COUNTY		
	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change
1990	3,478	-	-	3,397	-	-	3,439	-	-	336,523	-	-
2000	4,018	540	15.50%	6,553	3,256	92.90%	3,500	61	1.80%	373,638	37,115	11%
2010	4,085	67	1.70%	9,126	2,573	39.30%	3,397	-103	-2.90%	411,442	37,804	10.10%

Source: Census 2010

Population Projections

The population projections for Fleetwood and Maiden creek were fairly accurate for the year 2010 with Fleetwood at 1.50% and Maiden creek at 38.00%. However, Richmond’s projection was not, the projections estimated an increase of 5.00% when in actuality the population decreased. Generally, the population is estimated to increase over the next twenty years in the area; however these numbers will probably need to be updated to reflect the effects that the recession has had on income and the housing market. It is anticipated that more modest growth will occur in the future rather than the double and almost triple percentage growth that occurred in the more recent past.

Populations Projections

Population Projections By Year	FLEETWOOD BOROUGH			MAIDENCREEK TOWNSHIP			RICHMOND TOWNSHIP			BERKS COUNTY		
	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change
2010	4,078	60	1.50%	9,039	2,486	38.00%	3,674	174	5.00%	411,053	37,415	10.00%
2020	4,461	383	9.40%	9,887	848	9.40%	4,019	345	9.40%	449,306	38,253	9.30%
2030	4,869	408	8.40%	10,790	903	9.13%	4,386	367	9.13%	490,375	41,069	9.14%

Source: BCPC Tax Assessment and PA State Data Center 2008

Population in Adjacent Municipalities

Between 1990 and 2010 Maxatawny, Muhlenberg and Rockland Townships had the highest growth rates among the municipalities adjacent to the Fleetwood-Maiden creek-Richmond area. Their growth rates over the 20-year period were 38.12%, 38.94% and 41.23% respectively. Rockland Township’s major population increase occurred in the 1990’s and has since slowed down considerably. Rockland’s population only increased by .004% between the years 2000 and 2010, while Maxatawny and Muhlenberg Township’s increases are higher for the same period. Greenwich and Ontelaunee Townships have also seen high growth rates during this 20-year period. Greenwich has

had consistent growth, while Ontelaunee actually saw a decrease from 1990 to 2000 then a significant increase for the 2000-2010 timeframe.

Previously, Maiden creek Township was the area’s most rapidly growing municipality. During the 20-year period Maiden creek grew by 168.65%, most of which occurred in the first ten-years. In the second ten-year timeframe Maxatawny and Ontelaunee Townships also grew by a very similar percentage to Maiden creek. Maxatawny grew 32.20%, Ontelaunee grew 35.30% and Maiden creek grew 38.00%. The extraordinary growth that occurred in the area during this timeframe put a severe strain on the facilities in the Fleetwood Area School District, which includes Fleetwood Borough, Maiden creek and Richmond Townships.

Current indications are that the future growth of the area will be smaller than in the past and at a more manageable level. While there are a number of residential developments that have been approved or submitted in Maiden creek Township most of them have not moved forward due to the recession and it is anticipated that they will continue to remain inactive until a more promising market returns.

Population of Adjacent Municipalities

MUNICIPALITIES	1990	2000	2010	PERCENT CHANGE 1990-2010
FLEETWOOD BOROUGH	3,478	4,018	4,085	17.45%
Greenwich Township	2,977	3,386	3,725	25.13%
Lyons Borough	499	504	478	-4.21%
Maxatawny Township	5,724	5,982	7,906	38.12%
Perry Township	2,516	2,517	2,417	-3.93%
MAIDENCREEK TWP.	3,397	6,553	9,126	168.65%
Ontelaunee Township	1,359	1,217	1,646	21.12%
Muhlenberg Township	14,127	16,305	19,628	38.94%
Rockland Township	2,675	3,765	3,778	41.23%
RICHMOND TOWNSHIP	3,439	3,500	3,397	-1.22%
Ruscombmanor Township	3,129	3,776	4,112	31.42%

Source: Census 2010

Gender

Gender refers to the number of males and females in a population. There are no special conditions in Fleetwood Borough or Maiden creek and Richmond Townships that have altered the traditional 50/50 balance between total males and total females.

Population by Gender

AREA	TOTAL POPULATION	MALES		FEMALES	
		NUMBER	PERCENT	NUMBER	PERCENT
FLEETWOOD BOROUGH	4,018	1,946	48.40%	2,072	51.60%
MAIDENCREEK TOWNSHIP	6,553	3,282	50.10%	3,271	49.90%
RICHMOND TOWNSHIP	3,500	1,751	50.0%	1,749	50.00%
BERKS COUNTY	373,638	182,956	49.0%	190,682	51.00%

Source: Census 2000

Persons by Age

Information on local age trends help to assess existing and projected needs for housing, schools, recreation programs and other municipal services. Age trends also provide clues to whether an area is likely to gain or lose population in coming years.

Fleetwood, Maidencreek and Richmond are distinct communities but their age profiles are fairly similar. 35-44 year olds is the largest single age category in each municipality. In the previous Joint Plan and Maidencreek the largest age category was 22-34 year olds. The distribution of residents by age is nearly the same in each municipality except that Maidencreek has more 0-14 year olds than Fleetwood and Richmond, which indicates that Maidencreek has a higher number of younger families. Richmond and Fleetwood have a higher percentage of persons in the 65-74, 75-84 and 85+ categories, which is consistent with a farming community such as Richmond and Fleetwood being an older established borough.

Differences between 1990 and 2000 illustrate how the area is evolving. Residents 45-54 years were the fastest growing age category in Maidencreek; Richmond’s was the 75-84 year age group, while in Fleetwood it was the 35-44 year age group. Both Maidencreek and Fleetwood have growth in all of their age categories, however Richmond does not. Richmond’s growth is stagnant or negative in four age categories; 10-24, 25-34, 55-64 and 85+.

Both Fleetwood and Maidencreek have attracted growth within the age groups that signify families and empty nesters. The affordability of homes in Fleetwood and the availability of a variety of home types within Maidencreek along with easy access to both the Reading and Allentown areas have played a role in this growth. Richmond’s population is more based upon farming and shows trends towards an older population. Richmond saw a significant drop in its 25-34 year age category of -27.6%.

Population by Age

AGE 2000	FLEETWOOD BORO.		MAIDENCREEK TWP.		RICMOND TWP.		BERKS COUNTY	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
0 – 4	254	6.30%	550	8.40%	192	5.50%	23,032	6.20%
5 – 9	294	7.30%	545	8.30%	229	6.50%	26,574	7.10%
10 – 14	300	7.50%	546	8.30%	241	6.90%	26,874	7.20%
15 – 19	227	5.60%	380	5.80%	234	6.70%	26,494	7.10%
20 – 24	207	5.20%	263	4.00%	181	5.20%	21,972	5.90%
25 - 34	592	14.70%	1,021	15.60%	426	12.20%	47,454	12.70%
35 – 44	678	16.90%	1,350	20.60%	626	17.90%	60,489	16.20%
45 – 54	478	11.90%	883	13.50%	513	14.70%	51,305	13.70%
55 – 59	211	5.30%	273	4.20%	192	5.50%	18,388	4.90%
60 – 64	150	3.70%	198	3.00%	161	4.60%	14,866	4.00%
65 – 74	334	8.30%	365	5.60%	299	8.50%	28,766	7.70%
75 – 84	222	5.50%	138	2.10%	178	5.10%	20,164	5.40%
85+	71	1.80%	41	0.60%	28	0.80%	7,260	1.90%
TOTAL	4,018	100.0%	6,553	100.0%	3,500	100.0%	373,638	100.0%

Source: Census 2000

Race

Outside of Reading, Berks County has a relatively small non-white population. Non-whites were 12.2% of Berks County’s population in 2000, but only 2.2% in Fleetwood, 3.4% in Maidencreek and 1.5% in Richmond. This number has increased across the board as a whole for Berks County and the Fleetwood-Maidencreek-Richmond area. The 2010 Census shows that non-whites were 16.8% of Berks County’s population, 4.2% in Fleetwood, 8.2% in Maidencreek and 2.3% in Richmond.

RACIAL CHARACTERISTICS

AREA						
	ALL PERSONS	NON-WHITE PERSONS	ALL PERSONS	NON-WHITE PERSONS	ALL PERSONS	NON-WHITE PERSONS
FLEETWOOD BOROUGH	3,478	35 (1.1%)	4,018	88 (2.2%)	4,085	171 (4.2%)
MAIDENCREEK TOWNSHIP	3,397	102 (3%)	655	224 (3.4%)	9,126	748 (8.2%)
RICHMOND TOWNSHIP	3,439	20 (.6%)	3,500	51 (1.5%)	3,397	79 (2.3%)
BERKS COUNTY	336,523	21,962 (6.5%)	373,638	45,526 (12.2%)	411,442	69,294 (16.8%)

Source: Census 2010

Households refer to all persons living in a housing unit whether related or not. Reflecting a national trend, the area’s and the County’s average households became smaller during the 1970 – 1990 timeframe. Contributing factors to this trend included later marriages, more divorces, fewer children and more elderly families. This trend is starting to see some changes as we move into the 21st century. While some areas are still seeing smaller households, such as Richmond who dropped from 2.83 persons per household in 1990 to 2.49 in 2010, there are others that are either maintaining or expanding their persons per household. Both Fleetwood and Maiden creek have similar persons per household averages from 1990 through 2010. Fleetwood, in 1990 averaged 2.52 persons per household, and currently as of 2010 has 2.46 persons per household. Maiden creek, in 1990 averaged 2.8 persons per household, and currently as of 2010 has 2.85 persons per household. Berks County’s average persons per household have increased since the 1990 census by 0.11% from 2.56 to 2.67. Reasons for the stabilization and increase of the average persons per household include adult children staying at home longer or moving back in with their parents for financial reasons and families taking in elderly relatives due to the high costs of long term care facilities. Also, in Berks County the rise in the average persons per household may be attributed to a higher number of first and second generation immigrants coming from countries where it is normal to have more than one generation living in the same household.

Average Persons per Household

AREA	1990	2000	2010
FLEETWOOD BOROUGH	2.52	2.53	2.46
MAIDEN CREEK TOWNSHIP	2.8	2.88	2.85
RICHMOND TOWNSHIP	2.83	2.47	2.49
BERKS COUNTY	2.56	2.55	2.67

Source: Census 2010

Income and Education

Median income is the income level at which half an area’s households earn more and half earn less. Maiden creek Townships’ 1999 median annual household income of \$62,724 is the highest of the three municipalities. Fleetwood Boroughs’ median annual household income is \$48,621 while Richmond Townships’ is \$42,564, which is lower than Berks County’s median of \$44,714. The differences in the average median annual household income from municipality to municipality can be attributed to age of household, number of persons employed in household and in many cases the education level of the employed persons within the household.

According to the 2000 Census, Richmond Township had 8.5% of its population living below poverty level in 1999, compared to 2.8% in Fleetwood Borough, 3.10% in

Maidencreek Township and 9.4% in Berks County overall. Persons in poverty decreased as a proportion of all persons in both Fleetwood and Maidencreek during the 1990's. However, in Richmond and Berks County overall persons in poverty increased during this same timeframe. Since 1964, the federal government has computed annual income levels that represent the threshold of poverty. These figures are adjusted to account for family size, age, gender of family-head, farm or non-farm residence and other considerations. The poverty threshold is intended to measure the minimum income necessary to maintain healthy living conditions.

Education is often related to a person's ability to get and keep a good job. As of 2000, the percentage of all adults in Richmond Township that graduated from high school and may have additional higher education is 33.3%, and those that graduated with a bachelor degree or higher is 18.8%. Maidencreek Township had the lowest percentage of persons to graduate high school and attain an associates degree or take some college courses at 26.1%, however at the other end of the spectrum they had the highest percentage persons attain a bachelor degree or higher at 30.0%. This directly correlates with their high median income level. Fleetwood Borough had the highest rate of graduation from high school with some additional education level at 50.3%, but conversely they had the lowest percentage of persons to attain a bachelor degree or higher at 17.1%. Overall Berks County had a higher number of high school graduation and some additional education at 41.1%, but the number of persons with a bachelor degree or higher was about the same at 18.5%.

AREA	Median Annual Household Income		Persons in Poverty (%)		Bachelor Degrees or Higher (%)		H.S. Diplomas, Assoc. Degrees, College (No Degree) %	
	1989	1999	1989	1999	1990	2000	1990	2000
FLEETWOOD BOROUGH	\$36,347	\$48,621	3.10%	2.80%	14.85%	17.10%	61.95%	50.30%
MAIDENCREEK TOWNSHIP	\$38,550	\$62,724	8.10%	3.10%	13.40%	30.00%	54.00%	26.10%
RICHMOND TOWNSHIP	\$30,206	\$42,564	6.00%	8.50%	9.40%	18.80%	47.80%	33.30%
BERKS COUNTY	\$32,048	\$44,714	7.80%	9.40%	15.10%	18.50%	54.90%	41.10%

Source: Census 2000

Total Housing Units

Trends in total housing units usually mirror changes in total persons. However, even areas losing population tend to add housing units to accommodate the new households being created by singles, divorced people and the elderly. Richmond added 115 housing units from 1990 to 2010, an increase of 8.56%, however over the same timeframe their population growth was -1.2%. Since 2000, Richmond has actually lost 26 housing units.

Maidencreek added 950 housing units during the 2000 to 2010 timeframe, an increase of 40.3%. This is a decrease in the number of units added during the 1990 to 2000

timeframe by 148 units. This trend towards fewer new units being added is consistent across the entire county. Berks County saw an increase of 11.7% from 1990 to 2000, however this dropped to 9.7% for the timeframe from 2000 to 2010.

Fleetwood added 308 housing units during the 20-year timeframe from 1990 to 2010, an overall increase of 21.8%; however from 2000 to 2010 the increase was only 6.0%. This is still a significant increase for a small mostly developed borough. In the future there will most likely be a leveling off of the overall number of housing units in the borough due to the lack of undeveloped land; however the borough does have re-development potential in certain areas and may see different types of residential development in the future.

Occupancy information collected through the Berks County Tax Assessment Office illustrates recent housing construction trends. Maiden Creek Township gained 999 new housing units during the most recent ten-year timeframe, an average of 99.9 homes per year. This number is due to the housing boom that occurred in the 1990's through 2006. Since then, there has been a significant decrease in the number of new homes built. The average over the past four-years is only 34.3 homes per year.

Richmond Township gained 127 new housing units during the 2001-2010 timeframe, an average of 12.7 homes per year, which in turn has dropped to average only 7 homes per year over the last four-years. Fleetwood Borough has seen the least number of new homes built in the last ten-years, 17. This is only 1.7 homes per year from 2001-2010 and in the last two-years no new homes have been added to the tax rolls.

Total Housing Units

AREA	TOTAL HOUSING UNITS			1990-2010 CHANGE	
	1990	2000	2010	NUMBER	PERCENT
FLEETWOOD BOROUGH	1,412	1,623	1,720	308	21.81%
MAIDENCREEK TOWNSHIP	1,259	2,357	3,307	2,048	162.67%
RICHMOND TOWNSHIP	1,343	1,484	1,458	115	8.56%
BERKS COUNTY	134,482	150,222	164,827	30,345	22.56%

Source: Census 2010

New Housing Units by Year and Type

	FLEETWOOD BOROUGH									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Single Family	2	0	2	2	1	1	0	0	0	0
Number of Semi-Detached	0	0	0	0	0	2	4	0	0	0
Number of Townhouses	0	0	0	0	0	0	0	0	0	0
Number of Apartments	0	0	0	0	0	0	0	0	0	0
Number of Mobile Homes	0	1	0	0	0	0	0	1	0	0
Number of Demolished	0	0	0	0	0	0	0	0	0	0
TOTAL PERMITS	2	1	2	2	1	3	4	1	0	0

	MAIDEN CREEK TOWNSHIP									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Single Family	69	58	86	103	123	82	36	25	12	15
Number of Semi-Detached	14	8	0	0	0	11	0	1	2	2
Number of Townhouses	24	6	0	0	0	14	6	9	21	1
Number of Apartments	0	0	0	73	60	3	1	2	0	0
Number of Mobile Homes	2	2	0	3	0	4	0	1	0	1
Number of Demolished	0	1	0	0	0	2	4	1	0	2
TOTAL PERMITS	109	74	86	179	183	116	47	38	35	19

Fleetwood Borough – Maiden creek Township – Richmond Township Joint Comprehensive Plan
Background Report

	RICHMOND TOWNSHIP									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Single Family	11	12	13	11	7	9	3	1	3	5
Number of Semi-Detached	0	0	0	0	0	0	0	0	0	0
Number of Townhouses	0	0	0	0	0	0	0	0	0	0
Number of Apartments	1	0	0	0	0	0	0	0	0	0
Number of Mobile Homes	4	3	2	2	1	8	4	5	3	4
Number of Demolished	3	3	0	0	0	7	6	2	4	6
TOTAL PERMITS	16	15	15	13	8	17	7	6	6	9

Source: Berks County Tax Assessment (2001 – 2010)

Housing Type

Households tend to demand various types of housing as they mature. The cycle begins with young adults and family starters who often need smaller, less expensive housing. Households with children tend to prefer larger, single family homes. As the household grows older and divides, housing preferences and needs often return full circle to apartments, townhouses and other small units such as mobile homes.

Fleetwood, as an older community, Richmond, as a farm community, and Maiden creek, with a combination of farming and developing areas, each face different types of housing markets.

In 2000, single family detached home comprised 50.0% of Fleetwood Borough’s housing stock, compared to 35.4% for single family attached units. Fleetwood has a diverse amount of housing types and sizes that is in line with Berks County’s overall housing profile, due to the significant effect of the Reading and urbanized area that has expanded out from Reading.

Richmond and Maiden creek Townships are similar in their percentage of single family homes. 72.4% of Richmond’s and 72.1% of Maiden creek’s housing stock is single family. However, Richmond has 5.7% of single family attached while Maiden creek has 21.0%. Richmond has 3.4% of its housing stock in 2-units and 3⁺-units and Maiden creek has a slightly higher percentage at 5.8%. Richmond has the highest percentage of mobile homes at 16.1% whereas Maiden creek has 3.6%. The differences that Richmond and Maiden creek have with the percentages of single family attached and mobile homes can generally be attributed to the fact that Richmond’s land use is farming and/or rural with very few areas having public sewer or water while Maiden creek has more diverse land

use and more extensive access to public sewer and water which is needed for the building of attached dwelling units. Mobile homes are more often used for additional housing of family or farm workers in agricultural areas.

Housing Type

TYPE	FLEETWOOD BOROUGH		MAIDEN CREEK TOWNSHIP		RICHMOND TOWNSHIP		BERKS COUNTY	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Single Family Detached	811	50.00%	1,697	72.1%	1,086	72.40%	81,581	54.30%
Single Family Attached	575	35.40%	493	21.00%	85	5.70%	34,822	23.20%
2 Units	101	6.20%	25	1.10%	18	1.20%	6,587	4.40%
3+ Units	136	8.40%	55	2.30%	69	4.60%	21,502	14.30%
Mobile Home	0	0%	85	3.6	241	16.10%	5,650	3.80%
Boat, RV, Van, etc.	0	0%	0	0%	0	0%	80	0.05%
TOTAL	1,623	100.00%	2,355	100.10%	1,499	100.00%	150,222	100.05%

Source: Census 2000

Housing Tenure and Value

The amount of rental housing in an area compared to owner-occupied homes affects housing affordability and an area's ability to respond to the life cycle changes in housing demand described earlier. More rental units usually mean less expensive housing, more affordable to singles, young families and older people. Areas with high rates of owner-occupied housing can be less accessible to singles, starter families and the elderly. An area with a variety of housing types in both owner-occupied and rental-occupied is best. To many of any one type of housing or rentals can lead to other issues, whether it's the exclusion of young families and older people or with an over abundance of rentals and potentially absent landlords there may be problems with maintenance, parking and other quality of life issues. Areas with unbalanced amounts of housing are issues for school districts, too.

In 2000, owner-occupied homes accounted for 75.7% in Fleetwood, 87.3% in Maiden creek, 72.8% in Richmond and 69.7% overall in Berks County. Typically townships have a higher percentage of owner-occupied units than boroughs; however Richmond’s numbers are lower. In general, owner-occupancy overall in the County has slightly decreased since 1990.

Berks County’s 2000 vacancy rate of 5.8% was higher than that recorded in Fleetwood (2.4%), Maiden creek (3.4%) and Richmond (4.6%). Vacancy rates of 3% to 5% are usually considered desirable to offer sufficient choice for households moving into an area. Rates lower than this range typically reflects an older, stable population, such as in Fleetwood.

The 2000 median value for owner-occupied homes was \$99,100 in Fleetwood, \$125,400 in Maiden creek, \$113,900 in Richmond and \$104,900 overall in Berks County. Both Maiden creek’s and Richmond’s median are higher than the County’s while Fleetwood’s is lower. This is a reversal from 1990 for Fleetwood and can be somewhat attributed to the fact that the County saw a tremendous growth in new housing stock over that timeframe, while Fleetwood did not, which boosted housing values in certain areas.

Housing Tenure and Value

TENURE	FLEETWOOD BOROUGH		MAIDEN CREEK TOWNSHIP		RICHMOND TOWNSHIP		BERKS COUNTY	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
OWNER-OCCUPIED	1,229	75.70%	2,058	87.30%	1,081	72.80%	104,719	69.70%
RENTER-OCCUPIED	355	21.90%	218	9.20%	335	22.60%	36,851	24.50%
VACANT	39	2.40%	81	3.40%	68	4.60%	8,652	5.80%
TOTAL	1,623	100.0%	2,357	100.0%	1,484	100.0%	150,222	100.0%
MEDIAN VALUE OF OWNER-OCCUPIED UNIT	\$99,100		\$125,400		\$113,900		\$104,900	

Source: Census 2000

Housing Age and Overcrowding

Age can be a valuable indicator of housing quality when viewed in conjunction with other characteristics such as housing value and housing condition. Fleetwood’s housing stock is considerably older than both Maiden creek and Richmond and similar in age to Berks County’s overall, 32.6%. In Fleetwood 34.2% of the housing units were built in 1939 or earlier, compared to 13.9% in Maiden creek and 28.2% in Richmond. Overcrowded units comprise of 0.43% for Fleetwood, 1.5% for Maiden creek and 0.77% for Richmond. All three municipalities were less than the County at 2.3%. It is expected that the percent overcrowded number may increase in the future due to the trend of adult children staying at home longer and elderly parent(s) moving in with their adult children.

Housing Age and Overcrowding

Housing Age and Overcrowding 2000	FLEETWOOD BOROUGH	MAIDENCREEK TOWNSHIP	RICHMOND TOWNSHIP	BERKS COUNTY
Percent Overcrowded*	0.43%	1.50%	0.77%	2.30%
Percent Built Before 1939	34.20%	13.90%	28.20%	32.60%
Total Housing Units	1,623	2,357	1,484	150,222

Overcrowding percentage based on 1.01 or more persons per room
Source: Census 2000

Employment by Industry

The U.S. Census reports where adult residents of Fleetwood, Maiden Creek and Richmond were employed as of 2000. Persons working in manufacturing (30.0%); educational, health and social services (16.8%); and in retail trade (12.7%) were the largest categories for Fleetwood Borough residents. Similarly, manufacturing (33.0%); educational, health and social services (16.9%); and retail trade (12.4%) were the top employers of Maiden Creek Township residents. Richmond Township residents worked in the same top three categories, manufacturing (25.7%); retail trade (15.1%); and educational, health and social services (14.7%).

Employment by Industry

EMPLOYMENT BY INDUSTRY	RICHMOND TOWNSHIP		FLEETWOOD BOROUGH		MAIDENCREEK TWP.	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Agriculture, forestry, fishing, hunting and mining	72	4.00%	35	1.00%	7	0.30%
Construction	125	6.90%	116	3.30%	62	2.90%
Manufacturing	1,469	25.70%	1,059	30.00%	700	33.00%
Wholesale Trade	127	7.00%	120	3.40%	59	2.80%
Retail Trade	276	15.10%	449	12.70%	264	12.40%
Transportation, Warehousing and Utilities	62	3.40%	234	6.60%	123	5.80%
Information	20	1.10%	35	1.00%	18	0.80%
Finance, insurance, real estate, rental and leasing	65	3.60%	270	7.60%	142	6.70%
Professional, scientific, management, administrative and waste management	109	6.00%	228	6.50%	103	4.80%

Fleetwood Borough – Maiden creek Township – Richmond Township Joint Comprehensive Plan
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Educational, health and social services	267	14.70%	595	16.80%	359	16.90%
Arts, entertainment, recreation, accommodation and food services	76	4.20%	144	4.10%	116	5.50%
Other services (except public administration)	129	7.10%	142	4.00%	141	6.60%
Public Administration	25	1.40%	106	3.00%	30	1.40%
TOTAL	2,822	100.20%	3,533	100.0%	2,124	99.90%

Source: Census 2000

Unemployment

The Reading Metropolitan Statistical Area, the urbanized area of Berks County, had an unemployment rate of 4.3% in 2006 that has risen to 9.2% in 2010. Unemployment rates have risen significantly in the last four years due to the economic recession. Total unemployment rates overall in Pennsylvania for 2010 are slightly better than Berks County at 8.7% while they are slightly worse at the country-wide U.S. level of 9.6%.

**Unemployment Rates
Reading MSA, Pennsylvania, USA
2006-2010**

Area	Unemployment Rates				
	2006	2007	2008	2009	2010
Reading MSA	4.3%	4.2%	5.4%	8.7%	9.2%
Pennsylvania	4.5%	4.3%	5.3%	8.0%	8.7%
USA	4.6%	4.6%	5.8%	9.3%	9.6%

Source: U.S. Department of Labor, Bureau of Labor Statistic, Local Area Unemployment Statistics. Year-to-year data may be inconsistent due to revisions to incorporate updated population controls and re-estimation.

Major Employers in the Region

While there have been ups and downs in the economy over the last few years, job creation has seen some stabilization and improvement. Of the top 25 employers in the County, sixteen of them increased their employment numbers from 2009 to 2010. There were six that reduced their workforce, some that stayed the same and a few new names to add to the list. It appears that many firms are using temporary employees to fill the gaps during busier times, rather than committing to a full time employee. Some companies are hiring employees on a temporary basis first then on a permanent basis if needed.

Top 25 Employers in Berks County

09 –Employers Rank- 10	2009	2010
1. Reading Hospital	6,839	6,877 ⁺
2. East Penn Manufacturing	5,348	5,800 ⁺
3. Reading School District	2,637	2,583
4. Berks County	2,500	4,494
5. Carpenter Technology Corp.	1,917	2,040 ⁺
6. Wal-Mart Stores (7)	1,783	1,786 ⁺
7. PA Gov't (6)	1,775	1,800 ⁺
8. St. Joseph Medical Center	1,514	1,525 ⁺
9. Redner's Warehouse Markets	1,415	1,411
10. Boscov's Inc.	1,400	1,400
11. Berks County Intermediate Unit	1,241	1,270 ⁺
12. (tie) Weis Markets	1,200	1,225 ⁺
13. (tie) Penske Truck Leasing (13)	1,200	1,208 ⁺
14. Wilson School District (15)	1,195	1,150
15. U.S. Gov't (14)	1,150	1,200 ⁺
16. Kutztown University (tie 18)	1,146	1,075
Berks and Beyond Employment Services (16)	unlisted	1,107
17. Boyertown School District (tie 18)	1,066	1,075 ⁺
18. Associated (22) Wholesalers Inc.	1,015	964
19. Sovereign Bank (20)	1,000	1,050 ⁺
20. First Energy Corp. (21)	986	988 ⁺
21. Giant Food Stores (17)	910	1,080 ⁺
22. Ashley Furniture Industries Inc. (23)	726	806 ⁺
23. Transcontinental Direct (UL)	675	Unlisted
24. City of Reading (UL)	670	Unlisted
25. Exeter School District (UL)	664	Unlisted
Alcon Inc. (24)	Unlisted	766
IWCO Direct (25)	Unlisted	730

Existing Land Use

Concern for the use of land is the essence of comprehensive planning. Fleetwood is a mature borough that features a unique combination of densely developed older homes and newer residential subdivisions. Fleetwood's small business district is located along Main Street in the center of the Borough. Fleetwood has a strong industrial heritage still represented by a cluster of industries situated along the railroad tracks that bisect the Borough.

Maiden creek, while experiencing some large scale residential development, has still held onto a significant portion of their agricultural land. With the presence of rich farm soils and the proximity to local markets the area has maintained a large amount of farming along the boundary with Richmond Township, around the Lake Ontelaunee watershed and on the north side of the Lake. The areas around the villages of Blandon and Maiden Creek have become surrounded by residential growth, commercial growth along the major routes and intersections and in the southwestern area industrial growth. The availability of public sewer and water to these areas has allowed the development to be centered here, rather than scattered through the agricultural and Lake Ontelaunee watershed areas. There is also the presence of high-quality limestone in the Township that supports quarrying activity near Evansville.

Richmond remains a mostly rural, largely agricultural municipality. Farming and scenic wooded hillsides still dominate most of the Township, although there are some newer residential subdivisions found around Fleetwood Borough, where sewer and water is present. Commerce is concentrated along the Route 222 corridor and to a lesser extent along Park Road and in Virginville. Richmond's industrial development occurs, for the most part, along the railroad tracks. One of the largest employers in Berks County is East Penn Manufacturing, which is located in the southeastern portion of the Township next to Lyons Borough. Limestone deposits that are quarried are also found in Richmond Township along Eagle Road and the boundary with Maxatawny Township.

Residential Land Uses

Fleetwood Borough

Fleetwood's housing stock is a mix of single family detached, attached units and apartments. Fleetwood's single family detached homes include older homes in the original parts of the Borough and newer, suburban style homes in the outlying sectors. Willow Run and Willow Creek located on opposite sides of North Richmond Street are two of the newer subdivisions. Most of the newer single family detached development is on lot sizes that range between 10,890-21,780 square feet. In general, the size of lots for the older housing stock ranges from 2,900-10,890 square feet.

Single family attached homes represent nearly one-third of Fleetwood's housing stock. Single family attached housing in the Borough consists of largely row homes but also

includes Cloverleaf Crossing, a more recent twin home development. Tarsus Manor and Laurel Court are Fleetwood's two largest apartment complexes. Apartments created by converting former single family homes or other structures comprise most of the Borough's remaining multi-family housing. Fleetwood contains only very limited mobile home development.

Maiden creek Township

Residential uses within Maiden creek are quite extensive and include low, medium and high density single family detached and attached, multi-family and mobile home parks. The low density residential uses are single family detached homes, typically on lots of one acre or more. These are served by on-lot septic disposal systems. The Village of Molltown, located in the northeast corner of the Township, is a more densely populated area of single family homes with on-lot septic disposal systems. Most of the newer development is within the public sewer and water services areas. This new residential development is on lots sizes that range from 8,750-15,000 square feet and includes both single family detached and semi-detached dwellings. Multi-family residential development including townhouses and apartments are found in older buildings within Blandon Village and newer townhouse developments. Mobile homes located on individual lots exist within the Township as well as a mobile home park, designated as housing for 55 and older residents, located in the southeastern portion of the Township near the Ruscombmanor Township boundary line. The Township is seeing growth in housing that services the aging baby boom generation in two assisted living facilities and two 55 and older communities.

Richmond Township

Farmsteads and single family detached homes are the two main housing types in Richmond Township. Farmsteads are located along major and minor roads in every part of the Township. Single family detached homes are scattered throughout the Township, generally in small groupings. There are very few planned residential subdivisions in Richmond. Virginville and Walnuttown are the Township's two largest clusters of village style development. These areas have single family detached, semi-detached, apartments and mobile homes. Very few townhomes are found in the Township. The Walnuttown area has public sewer service available to a limited number of residents and the Virginville area is slated to receive public sewer when a funding source is found. Both of these areas were developed, in general, at densities that do not support on-site septic systems and on-site water systems. Pockets of residential development are found along Rt. 222, Kutztown Road, Crystal Ridge Road, Virginville Road and Ruth Road. Also, there is a mobile home park, Berkleigh Heights, located along Kempsville Road.

Commercial Land Uses

Fleetwood Borough

Fleetwood's traditional downtown Main Street is home to most of the Borough's commercial uses. The heaviest concentration of these uses is clustered along Main Street between Franklin and Richmond Streets, the two roads that carry Rt. 662 in and out of Fleetwood. An assortment of small retail, restaurant, service and office uses are also scattered along other portions of Main Street, North Franklin Street, South Franklin Street, South Richmond Street and a few other locations elsewhere in the Borough. The Borough is making a concerted effort to maintain the traditional downtown area of Fleetwood and its surrounding neighborhoods. The Borough has undertaken an Architecture Overlay District to maintain current local businesses, attract new businesses and incentivize rehabilitation of the area.

Maiden creek Township

There are no large scale shopping centers in Maiden creek, these types of commercial uses are found in nearby Muhlenberg and Spring Township and Wyomissing Borough. The Township has a variety of small strip commercial developments along Rt. 222, near Maiden Creek Village (the intersection of Rt. 73), in the Village of Blandon, and along the Park Road corridor. There are also a number of small freestanding shops restaurants, and health care providers located in these areas.

Richmond Township

The commercial uses found within the Township are retail, small office uses, and service oriented businesses. Most commercial land uses in Richmond Township are situated along the Rt. 222 corridor between the western end of the Kutztown bypass and Richmond's boundary with Maiden creek Township. The portion of Rt. 222 from Rt. 662 west to Maiden creek contains the heaviest concentration of these commercial uses. Growing traffic congestion and the traffic problems that strip commercial add to the already congested Rt. 222 are a major concern for the Township. An assortment of restaurants, auto-related businesses, healthcare, and retail stores exist there now.

Other commercial clusters in Richmond include uses along Park Road just west of Fleetwood Borough, Virginville, and areas in and around the village of Walnuttown. The Kutztown Produce Auction, a farm products wholesale business, is a unique commercial use located on Schiery Road in the heart of the Township's prime agricultural area.

Industrial Land Uses

The industrial land uses are important employers and generators of substantial economic activity in Fleetwood, Maiden creek and Richmond. Most of these industries are stand alone businesses or manufacturers adjacent to the railroad areas. Maiden creek has an industrial park in the southwestern part of the Township.

Fleetwood Borough

Fleetwood has a long tradition of industrial development dating back to the Borough's prominence as an auto body manufacturing center in the early 1900's and a railroad shipping center beginning in the second half of the 19th century. Today, Fleetwood's major industries are still clustered along the railroad, including Sunsweet Growers, F.M. Brown Mills, Fleetwood Shirt Company and other smaller businesses.

Maiden creek Township

With access to both rail and a major highway, Maiden creek Township is well suited for industrial development. A quarry and production facility, operated by the Lehigh-Portland Cement Company and a custom dye manufacturer, Custom Milling and Consulting, is located along Maiden creek Road in Evansville. W.D. Zwicky and Sons is located nearby on Buena Vista Road. This facility produces mulch, compost, soils and alternate fuels for area factories. A variety of industrial operations are found along Park Road between Blandon Village and the Ontelaunee Township line. The Excelsior Industrial Park near Blandon includes several large industrial operations; there are still a few vacant tracts here for future development. Food processing and construction related operations dominate. Giorgio Foods also has some of their mushroom growing operations in this area. Redner's Markets has their headquarters and a distribution center just north of the main industrial area at Maiden Creek Village, west of the Rt. 222 and Rt. 73 intersection.

Richmond Township

East Penn Manufacturing (Deka Battery), which is Berks County's second largest employer, is located in the southeastern corner of Richmond adjacent to Lyons Borough. A quarry, that will also supply raw material to the Lehigh-Portland Cement Company in Maiden creek Township, is located in the northeastern part of Richmond Township along Eagle Road. There are also some small industrial uses scattered throughout the Township.

Institutional Uses

Institutional uses are generally public and semi-public facilities that include schools, churches, cemeteries, municipal buildings, and other non-profits.

Fleetwood Borough

Institutional uses in Fleetwood Borough include the Fleetwood High School-Middle School-Elementary School complex, the Fleetwood Community Center, Fleetwood Volunteer Fire Company and ambulance, a municipal parking lot, and several church properties, including cemeteries. The Fleetwood Borough offices are located inside of the Fleetwood Community Center.

Maiden creek Township

The institutional uses found in Maiden creek Township are the Rajah Temple, Andrew-Maier Elementary School, a Mennonite School on Pleasant Hill Road, Township's municipal building, Blandon Post Office, ambulance and fire department headquarters, several churches and cemeteries, and a few utility installations. Most of these are found in and around the village of Blandon.

Richmond Township

Institutional uses that are located in Richmond Township include the Richmond Elementary School, Willow Creek Elementary School, the Township's municipal building, two granges, Fleetwood Borough's sewage treatment plant, two Mennonite schools, Union Fire Company of Walnuttown, the Virginville Fire Company, the post offices in Virginville and along Park Road just west of Fleetwood, and several church properties, including cemeteries.

Recreation and Open Space Land Uses

This land use includes both publicly accessible parks and open space along with other private or non-profit park, fitness and open space opportunities in the area. Fleetwood Borough, Maiden creek Township and the Fleetwood School District properties contain all of the public athletic fields.

Fleetwood Borough

Fleetwood's Recreation and Open Space lands include the following sites.

- Fleetwood Community Park and Swimming Pool – West Main Street
- Willow Run open space – North Richmond Road
- Public park – West Arch Street
- Public open space – East Washington Street
- Public open space – East Locust Street
- Tri-Valley YMCA – West Arch Street

Maiden creek Township

- Aquabilities Swim School – Park Road (Facility closed in June 2011)
- Blandon Fire Co. Neighborhood Park – West Wessner Road
- Cornerstone Drive Neighborhood Park – Cornerstone Drive
- Faith Drive Basketball Courts – Faith Drive
- Wyatt Drive Tot Lot – Wyatt Drive
- Lake Ontelaunee – Rt. 73
- Maiden creek Community Park – Park Road
- Maiden creek Open Space
- Maiden creek Municipal Building – Quarry Road

- Municipal Tennis Courts – Quarry Road
- Maier’s Grove – Grove Drive
- Ontelaunee Heights Park – Longleaf Drive
- Pleasant Hills Golf Course – Pleasant Hills Road
- Rich Maiden Golf Course – Maiden creek Road
- Shady Glen Picnic Grove – Rt. 222
- Treetops Park – Acer Drive
- Willow Creek Greenway – Between Rt. 73 and Schaeffer Road
- Rajah Shrine – Orchard Road

Richmond Township

Richmond’s Recreation and Open Space lands include the following sites.

- Berkleigh Country Club – Rt. 222
- Moselem Springs Golf Club – Rt. 662
- Tri-Valley YMCA – Crisscross Road
- Conservancy Land – Lake Road
- Deka Softball Field – Fleetwood-Lyons Road
- Crystal Cave – Crystal Cave Road
- Fleetwood Fish and Game Commission – Dryville Road
- Gennetti’s Mini Golf/Range
- Smith Little League Field
- Gamelands 182
- Richmond Elementary School
- Willow Creek Elementary School
- Virginville Fire Company
- Saucony Park Campsites – Saucony Road

Agricultural Land Uses

The agricultural land uses comprise the largest amount of land use within the area. Maiden creek and Richmond Townships have significant acreage in farming, while Fleetwood Borough has only a small portion. Agricultural uses include cultivating for crops, animal production, pasture areas, farm buildings and mushroom production. A large amount of the agricultural land in the area is enrolled in the “Clean and Green”, Act 319, program. This program gives farmland a reduction in property tax assessment in exchange for keeping the property as farmland. Should the owner decide to develop the property there is a payment of back taxes for a specific timeframe that is required.

Fleetwood Borough

The agricultural land use is found within the Borough in the northeastern corner. This area stretches from Rt. 662 along the boundary with Richmond Township over to the area south of the Fleetwood Lyons Road. The area on either side of the Fleetwood Lyons

Road is within the Richmond Township Agricultural Security Area and is also preserved through a Berks County Agricultural Easement.

Maiden creek Township

The agricultural land use in Maiden creek Township is found mostly in the eastern, central and northern portions. A significant amount of this land is enrolled in the Maiden creek Township Agricultural Security Area. There are a number of farms in the eastern and northern parts of the Township that have sold their development rights to Berks County and are now eased. Certain types of farm activities have been regulated by their intensity and are allowed in an area just north of Evansville and in the southeastern corner of the Township, next to the industrial area. This is mainly mushroom farming activities; however many farmers are beginning to turn to more intense agricultural uses such as chicken farming and dry lot dairies in all agricultural zoned areas

Richmond Township

Agricultural uses are the predominant land use in Richmond Township. Farming is done on both a large and small scale and is found in every sector of the Township. A large portion of the farms have been placed within the Richmond Township Agricultural Security Area, which is a requirement if the farm owners want to have their development rights purchased through the Berks County Agricultural Easement Program. The first farm to be purchased by the Berks County program is located in Richmond. Much of the farmland between the Fleetwood Lyons Road and Rt. 222 has had their development rights purchased by the County. There are also some farms within the northern part of the Township that have sold or donated their development rights to the Berks County Conservancy.

Rural/Woodland Land Use

The Rural/Woodland Land Use includes land within the area that is sparsely populated, wooded, and contains steep slopes, watershed, some floodplains, and some small areas of farming.

Fleetwood Borough

There is very little Rural/Woodland Land Use within the Borough. The two areas are along the Willow Creek and on the southern side of the Borough along the boundary with Richmond and Ruscombmanor Townships.

Maiden creek Township

The largest section of Rural/Woodland Land Use within the Township is the Lake Ontelaunee Watershed land. This is generally the land that the City of Reading owns to protect the water quality of Lake Ontelaunee, the drinking water supply for the City and surrounding urban areas. There are also parcels found along the Willow Creek through

developments, in the southern portion of the Township known as Irish Mountain, and along many of the creeks that are tributaries to Lake Ontelaunee in the northern part of the Township.

Richmond Township

The Rural/Woodland Land Use in Richmond Township is generally found in the extreme southern portion where the land becomes steep and in the northern part where there are significant areas of woodland and steep slopes. The northern part of the Township is also where the Maiden Creek, the main tributary of Lake Ontelaunee, is located, and the Sacony Creek combines with the Maiden Creek at Virginville.

COMMUNITY FACILITIES AND SERVICES

Municipalities and other community oriented entities provide a wide variety of facilities and services. Examples of community facilities and services include recreation, education, public utilities and emergency services. Knowledge of community facilities and service, and locations is critical in planning for future development and land use.

Education

Fleetwood Borough, Maiden Creek Township and Richmond Township all belong to and make up the entire service area of the Fleetwood Area School District. The current enrollment, as of November 2010, of the District is 2,730. This is an increase in 652 students since the 1995-1996 school year. The enrollment of the District has steadily increased and led to a number of building renovations and constructions. The District includes the following schools:

Secondary Schools:

Fleetwood Area High School (9-12)
803 N. Richmond Street
Fleetwood PA 19522

The High School, which started out on Arch Street in the Borough, then moved to North Richmond Street in 1968 and is now at 803 North Richmond Street, was built in 1998.

Fleetwood Area Middle School (5-8)
407 N. Richmond Street
Fleetwood PA 19522

The Middle School, which began by sharing the building on Arch Street with the High School, then moved to a new building on North Richmond Street in 1989, has now moved into the previous High School that was renovated in 1999.

Elementary Schools

Andrew Maier Elementary School (k-4)
355 Andrew Maier Blvd.
Blandon PA 19510

This building was originally built in 1951 and renovated in 1973 and 1992.

Fleetwood Elementary School
109 W. Vine Street
Fleetwood PA 19522

This building no longer contains an elementary school. The District rents the building out for other similar uses.

Richmond Elementary School
14432 Kutztown Road
Fleetwood PA 19522

This building was originally built in 1955 and renovated in 1972 and 1992-1993.

Willow Creek Elementary School
603 Crisscross Road
Fleetwood PA 19522

This is a brand new school that was opened at the beginning of the 2010-2011 school year. This building is also attached to the new Tri-Valley YMCA Building that opened in 2011.

The Fleetwood Area School District has significantly expanded and renovated their facilities over the last twenty years due to the rapid growth that the area saw from 1980 to 2000. While there is still growth projected in the area for the future, the projections are not for the type of rapid growth seen in the past.

There are five Christian and Mennonite schools located in Fleetwood Borough, Maiden creek and Richmond Townships. Other private schools are located within the region, but not in the immediate area.

The nearest Colleges and Universities to the Fleetwood-Maiden creek-Richmond Area are:

Kutztown University – Kutztown Borough
Albright College – City of Reading
Alvernia College – City of Reading
Penn State University, Berks Campus – Spring Township
Reading Area Community College – City of Reading
Cedar Crest College – City of Allentown

Muhlenberg College – City of Allentown
Penn State University, Allentown Campus – Upper Macungie Township
Lehigh University – City of Bethlehem
Allentown College of St. Francis de Sales – Upper Saucon Township
Moravian College – City of Bethlehem

Library

The Fleetwood Public Library, located in the Fleetwood Community Center on Arch Street, is the area's main library. Residents are also served by the Kutztown Public Library, and the Reading Public Library. Residents are eligible to use the Rohrbach Library of Kutztown University.

Solid Waste Collection and Recycling

Each household and business in the Fleetwood-Maiden creek-Richmond Area is responsible for arranging their own solid waste collection. Maiden creek Township was mandated after the 2000 census to begin a residential curb-side recycling program and provide a yard waste drop off center. Richmond Township has a drop-off recycling program that is run by the Berks County Solid Waste Authority for their residents. Fleetwood does not have an official recycling program; although residents may drop off their recycling at Berks County-run recycling facilities. Maiden creek Township, Fleetwood Borough and Ontelaunee Township received a grant in 2003 for the purchase of a tree chipper that is shared among the municipalities for the chipping of Christmas trees and brush.

Public Water

The Fleetwood Borough Water Department serves the entire Fleetwood Borough. They also serve portions of the adjacent areas in Richmond and Ruscombmanor Townships. The Borough's water comes from wells and springs mostly located in Ruscombmanor Township along with 1 well located off of East Locust Street and 1 located off of Hickory Drive in the Borough. In the past, the Water Department expanded the system to accommodate Sunsweet Growers need for additional water on certain days.

The Water Department chlorinates its water at a treatment plant on Willow Road in Ruscombmanor Township. At this time there are no supply or quality problems throughout the Borough. Except for some additional lines to provide additional volume in specific areas of the Borough, the transmission lines in the Borough are fairly old. Currently, the Borough deals directly with the customers located beyond their municipal boundaries.

In Maiden creek Township public water is available to the Village of Blandon and the Village of Maiden creek. The Maiden creek Township Authority operates the public water supply system. Water is supplied to the system by three wells. Two wells are located near Blandon while the remaining well is located along Route 222. The Township's

original source of public water, springs located in Ruscombmanor Township, have been taken offline and removed from the public water system, though the land remains under the Maiden creek Township Authority ownership. The system does not have any supply or quality problems at this time.

The remaining areas of Maiden creek and Richmond Townships not served by public water supplies are served by on-lot water sources. There is one part of the area that is adjacent to a public water supply. This is the part of Richmond that is adjacent to Lyons Borough and Maxatawny Township. Lyons Borough's public water services this area.

Public Sewer

The Fleetwood Borough Sewer Authority owns a public sewer system that it leases to Fleetwood Borough. The Authority's sewage treatment plant is located off of Crisscross Road in Richmond Township. The Authority serves all of Fleetwood and some adjacent areas of Richmond Township along and extending out from the Park Road corridor. The system includes a number of pump stations both in Fleetwood and also in the Richmond Township service area. Sunsweet Growers and some other industries pretreat their waste before it flows into the sewer system.

In Maiden creek Township public sewer is available to the southern third of the Township, where the majority of businesses and residents are located. The collection and treatment system is owned and operated by the Maiden creek Township Authority. The sewer treatment plant is located along Willow Creek, in nearby Ontelaunee Township and also provides serve to a portion of Ontelaunee Township. The plant has a maximum monthly permitted capacity of 1,000,000 gallons per day.

The eastern part of Richmond that is adjacent to Lyons Borough, where East Penn Manufacturing is located, is served by the Lyons Borough sewer system. This is to accommodate East Penn's facilities. As East Penn expands they coordinate with Lyons Borough to expand for needed sewer capacity. There is also a proposed sewer service area that extends from Lyons Borough south to the Rockland Township boundary line.

There are three other areas where adjacent municipalities are proposing sewer service areas. Ontelaunee Township is proposing a sewer service area along their boundary with Maiden creek Township from Rt. 73 south to the Muhlenberg Township boundary line. Also, Maxatawny Township is proposing a sewer service area along Richmond Township's boundary line from Rt. 222 south to Sheridan Road. Ruscombmanor Township, when funding becomes available, is planning to provide sewer service to the area along SR 662, from the boundary with Fleetwood Borough, further south. This area has failing residential on-lot septic systems.

The remaining areas of Richmond and Maiden creek Townships are served by on-lot septic systems. Virginville, located in northern Richmond Township, has been identified as having many failing on-lot septic systems. This is mainly due to the fact that the lots

are too small to accommodate on-lot septic disposal. Richmond is in the process of applying for funds to build a public sewer system for Virginville.

With the cost of building, expanding and maintaining a public sewer or water system the municipalities of the region should continue to work together to provide these services on a regional basis. There have been conflicts between the municipalities over provisions of these services in the past. A cooperative and regional approach to providing these services would help to save money and keep growth in the areas that are more appropriate for it.

Hospitals and Social Services

Hospitals in the Reading and Allentown areas serve the Fleetwood-Richmond-Maiden creek area. Saint Joseph's Hospital is located in Bern Township, across from the Reading Regional Airport. Reading Hospital is located in West Reading Borough. There are a number of hospitals in the Allentown area; however the Lehigh Valley Hospital services the eastern part of this area. The Lehigh Valley Hospital recently opened a medical center in the historic Moselem Springs Inn building, while St. Joseph's Hospital operated an imaging center and urgent care facility in Maiden creek Township. Both the Reading and Lehigh Valley Hospitals provide the area with trauma centers and both provide medical helicopter service to this area. Fleetwood Borough has an office of CONCERN, a nonprofit child welfare agency that provides foster care, life skills training and delinquency services to the area.

Other notable facilities include; the Wernersville State Hospital, which houses and treats the mentally ill, the Hamburg Center that houses and serves the mentally retarded, the Reading Rehabilitation Hospital that has both inpatient and outpatient services and The Caron Foundation that provides treatment and rehabilitation for persons with drug and alcohol dependencies.

Police Protection

The Fleetwood Borough Police Department provides police service to both Fleetwood and Richmond. Since 1957, Richmond has contracted with the Borough to provide police service. This is one of the oldest inter-municipal arrangements in Pennsylvania. Recently, Fleetwood has been investigating cooperating with other police departments on a more regional basis.

Maiden creek Township participates in a regional police department, Northern Berks Regional Police. The Northern Berks Regional Police also provides service to Ontelaunee Township and Leesport Borough.

All of the police departments in Berks County participate with the Berks County District Attorney with regard to certain types of investigations and services. There is also a Pennsylvania State Police Barracks located in Hamburg.

Fire Protection, Ambulance Service, and Rescue

Three fire companies cooperate to provide fire protection and rescue services for the Richmond and Fleetwood area:

- Community Fire Company of Virginville
- Union Fire Company of Walnuttown
- Fleetwood Volunteer Fire Company

The Fleetwood Volunteer Fire Company Ambulance Service is the primary provider of emergency medical services for the Fleetwood-Richmond area.

The Blandon Fire Company serves Maiden creek Township. They are a volunteer company located in the Village of Blandon and have been providing service to the area for over 100 years. Ambulance service is provided by the Blandon Community Ambulance Association, which has been providing primary BLC service to Maiden creek Township for fifty years. Schuylkill Valley EMS provides emergency medical transport to areas north of Lake Ontelaunee and Maiden creek Township contracts with Fleetwood ALS for advance life support and paramedic services for the entire Township.

Rescue services are provided to the Fleetwood-Maiden creek-Richmond area through the Fleetwood Ambulance ALS.

Parks, Recreation and Open Space

Parks, Recreation and Open Space refer to the recreation lands, recreation facilities and recreation programs available to residents of the Fleetwood-Maiden creek-Richmond area. Recreation lands are categorized as either regional or local depending upon who they are designed to serve.

Regional Recreation Lands

Regional recreation lands available to residents of the Fleetwood-Maiden creek-Richmond area include publicly accessible open space properties within a 25-mile radius that are in federal, state, or county ownership. The Hawk Mountain Sanctuary, regional hiking trails and the watershed land of the City of Reading are also included. Regional recreation lands attract visitors from throughout Berks County and beyond. Typically, these sites offer a range of opportunities for picnicking, boating, fishing, camping, hiking and various other activities. They may also include areas for nature study, wildlife habitat and conservation. Regional recreation lands within a 25-mile radius are as follows:

Federal Lands

- Blue Marsh Lake National Recreation Area

State Parkland and Forests

- Locust Lake State Park – Schuylkill County

- Tuscarora State Park – Schuylkill County
- Weiser State Forest – Berks County
- State Gamelands #80 – Berks County
- State Gamelands #106 – Berks County
- State Gamelands #110 – Berks County
- State Gamelands #182 – Berks County
- State Gamelands #280 – Berks County
- State Gamelands #141 – Carbon County
- State Gamelands #205 – Lehigh County
- State Gamelands #217 – Lehigh County
- Leaser Lake (PA Fish and Boat Commission Lands – Lehigh County
- State Gamelands #222 – Schuylkill County
- State Gamelands #227 – Schuylkill County
- State Gamelands #257 – Schuylkill County
- State Gamelands #286 – Schuylkill County

County Parkland

- Camp Joy – Berks County
- Kaercher Creek – Berks County
- Hunsinger's Grove – Berks County
- Tulpehocken Valley Creek – Berks County
- Youth Recreation Facility – Berks County
- Antietam Park – Berks County
- Mauch Chunk Lake County Park – Carbon County
- Leaser Lake – Lehigh County
- Trexler Lehigh County Game Preserve – Lehigh County

Hiking Trails

- Appalachian Trail
- Pinnacle Side Trail
- Blue Blazed Trail
- Valley Rim Trail
- Horse Shoe Trail
- Schuylkill River Trail (including the Thun Trail)

Other Regional Parkland

- Hawk Mountain Sanctuary – Private Non-Profit
- Lake Ontelaunee and surrounding land – City of Reading
- Neversink Mountain and trails – Berks County & Berks County Conservancy

Local Recreation Lands

Local recreation lands refer to parks and other recreation related properties designed primarily to serve residents of a specific municipality or area, such as the Fleetwood-

Maiden creek-Richmond area. Local recreation lands can be owned by municipalities, school districts, semi-public organizations, such as sports clubs and fire companies, or private entities. Local recreation lands described in this comprehensive plan are categorized as either publicly accessible or private. Publicly accessible local recreation lands usually provide athletic sports or individual activities. However, some publicly accessible lands are open space areas or greenways without active recreation facilities. Publicly accessible local recreation lands are usually open to the public without charge. Private local recreation lands include company-owned softball fields, private golf courses, fish & game clubs, commercial campgrounds and private conservancy lands, among other sites that either require an admission fee or are only open to members or by invitation. All local recreation lands in the Fleetwood-Maiden creek-Richmond area are listed as follows:

**Local Recreation Lands
Publicly Accessible**

NAME	LOCATION
Fleetwood Community Park and Pool	Fleetwood
Willow Run Open Space	Fleetwood
Public Park – West Arch Street	Fleetwood
Public Open Space – East Washington St.	Fleetwood
Public Open Space – East Locust Street	Fleetwood
Smith Little League Field	Richmond
Richmond Elementary School	Richmond
Willow Creek Elementary School	Richmond
Andrew Maier Elementary School	Maiden creek
Fleetwood High School -Middle School- Elementary School Complex	Fleetwood
Blandon Fire Co. Neighborhood Park	Maiden creek
Cornerstone Drive Neighborhood Park	Maiden creek
Wyatt Drive Tot Lot	Maiden creek
Lake Ontelaunee Watershed Land	Maiden creek
Maiden creek Community Park	Maiden creek
Maiden creek Open Space	Maiden creek
Maiden creek Municipal Building	Maiden creek
Faith Drive Basketball Courts	Maiden creek
Maier’s Grove	Maiden creek
Ontelaunee Heights Park	Maiden creek
Treetops Park	Maiden creek
Willow Creek Greenway	Maiden creek

Local Recreation Lands

Private

<i>NAME</i>	LOCATION
Open Space adjacent to Virginville Fire Co.	Richmond
Crystal Cave	Richmond
Berkleigh Country Club	Richmond
Moselem Springs Golf Club	Richmond
Fleetwood Fish and Game Club	Richmond
Gennetti’s Mini-Golf/Range	Richmond
Deka Softball Field	Richmond
Saucony Park Campsites	Richmond
Private Conservancy Land	Richmond
Walnuttown Fish and Game	Richmond
Tri-Valley YMCA (West Arch Street)	Fleetwood
Tri-Valley YMCA (Crisscross Road)	Richmond
Aquabilities Swim School (closed June 2011)	Maiden creek
Pleasant Hills Golf Course	Maiden creek
Rich Maiden Golf Course	Maiden creek
Shady Glen Picnic Grove	Maiden creek
Rajah Shrine	Maiden creek

Private Recreation

The Fleetwood-Maiden creek-Richmond area has significant acreage in private recreational facilities. Most of the acreage is in private golf courses. There are five golf courses in the area. While the above listed facilities are private they do provide a considerable amount of recreational opportunities for the immediate and surrounding areas. Also, Crystal Cave is a natural geologic phenomenon that draws tourists to the area and has historical significance. The Tri-Valley YMCA specifically caters to local residents, and especially families. They provide a number of programs and cooperate with Fleetwood Borough to operate the Borough Pool and summer recreation program.

Existing Recreation Lands vs. NRPA Guidelines

The National Recreation and Parks Association (NRPA) recommends that communities should have 6.25 to 10.5 acres of developed close to home space per 1,000 residents. The current population of the Fleetwood-Maiden creek-Richmond area is 14,071. Based upon NRPA standards the combined recommended acreage of recreational land for the Fleetwood-Maiden creek-Richmond area is 88 to 148 acres. Based upon the following numbers the area has sufficient acreage on the low range to medium range, but is deficient for the medium to upper range. However, when the acreage for the Fleetwood School District is added, +/-50 acres, then the area has sufficient acreage for all recommended ranges.

Total current publicly accessible recreational lands are:

Fleetwood	– +/-37 acres
Maidencreek	– +/-76 acres
Richmond	– +/-3 acres
Total	= +/-116 acres

This total does not include the recreational acreage of the school districts, Lake Ontelaunee or private facilities. The total is based upon the parcel size of the parks, which may include parking and open space areas. When this total acreage is combined with the acreage of the school facilities, Lake Ontelaunee and private facilities the acreage of overall recreational, open space and park facilities is over 3,000 acres.

Lake Ontelaunee and the surrounding publicly owned land is a very popular recreational destination in the area. The recreational opportunities at the Lake are limited to passive activities such as hiking, hunting and fishing from the shore; boats are prohibited. The lake and the surrounding lands are owned by the City of Reading, but the Pennsylvania State Game Commission has responsibilities for some of the residual lands surrounding the Lake. Since the reservoir is the primary source of drinking water for the City, current policy prohibits active recreational uses, such as boating and swimming, but allows passive uses along the shore. Maiden creek Township has little say over the management of the Lake or surrounding land. The Lake and surrounding land is 2,034.5 acres.

Location	Active Recreation					School Facilities				
	BB/SF	SO/FB	BT	TE	IF	SW	TL	FH	TR	NS
Richmond El.	X	X	X				X			
Andrew-Maier El.	X	X	X				X			
Fleetwood El.			X				X			
Middle	X		X				X			X
Sr. High	X	X		X	X			X	X	
Willow Creek El.	X	X	X				X			X

Active and Passive Recreation: Public Facilities		
Name	Location	Types of Activity
East Locust Street Park	Fleetwood	BT, PA, TL
East Washington Street Park	Fleetwood	Open Space
Fleetwood Park and Pool	Fleetwood	BT, FI, HI, IH, OF, OA, PA, SW, TL
West Arch Street Playground	Fleetwood	BT, VB
Willow Run Open Space	Fleetwood	Greenway
Blandon Fire Co. Playground	Maidencreek	BB, BT, PA, TE, TL
Blandon Meadows Park	Maidencreek	Greenway
Lake Ontelaunee	Maidencreek	FI, HI, HU, NS
Maidencreek Community Park	Maidencreek	BB, BT HI, PA, SO, TL
Maiden Creek Open Space	Maidencreek	Open Space
Maidencreek Municipal Building	Maidencreek	TE

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Background Report

Maiden creek Open Space	Maiden creek	Open Space
Ontelaunee Heights Park	Maiden creek	BY
Treetops Park	Maiden creek	TL
Willow Creek Greenway	Maiden creek	BT, BI, HI, PA, TL
Wyatt Drive Tot Lot	Maiden creek	TL
Smith Little League Field	Richmond	BY

BB – baseball

BY – baseball youth

SF – softball

BT – basketball

TE – tennis

IF – indoor fitness

SW – swimming

TL – tot lot

FH – field hockey

TR – track

NS – nature study

FI – fishing

HI – hiking

HU – hunting

PA – picnic area

SO – soccer

IH – ice hockey

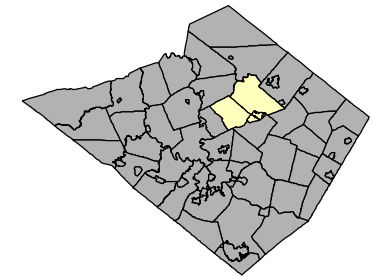
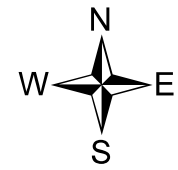
OF – open field sports

VB – volleyball

OA - outdoor amphitheatre

Maiden creek Township has a significant amount of municipal controlled recreational facilities. Fleetwood also has a good amount of facilities that are controlled by the Borough. Richmond Township does not own or operate any recreational facilities. The Fleetwood School District also owns and operates a large amount of the recreational facilities in the area. There are a number of youth sports groups that help to provide sports program for children, including baseball, softball, soccer and basketball.

Existing Land Use



Existing Land Use

- | | | | |
|--|----------------|--|------------------|
| | Agriculture | | Recreation |
| | Commercial | | Residential High |
| | Industrial | | Residential Low |
| | Institutional | | Transportation |
| | Rural/Woodland | | Water |

- Municipal Boundaries
- Railroad
- Inactive Railroad

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services
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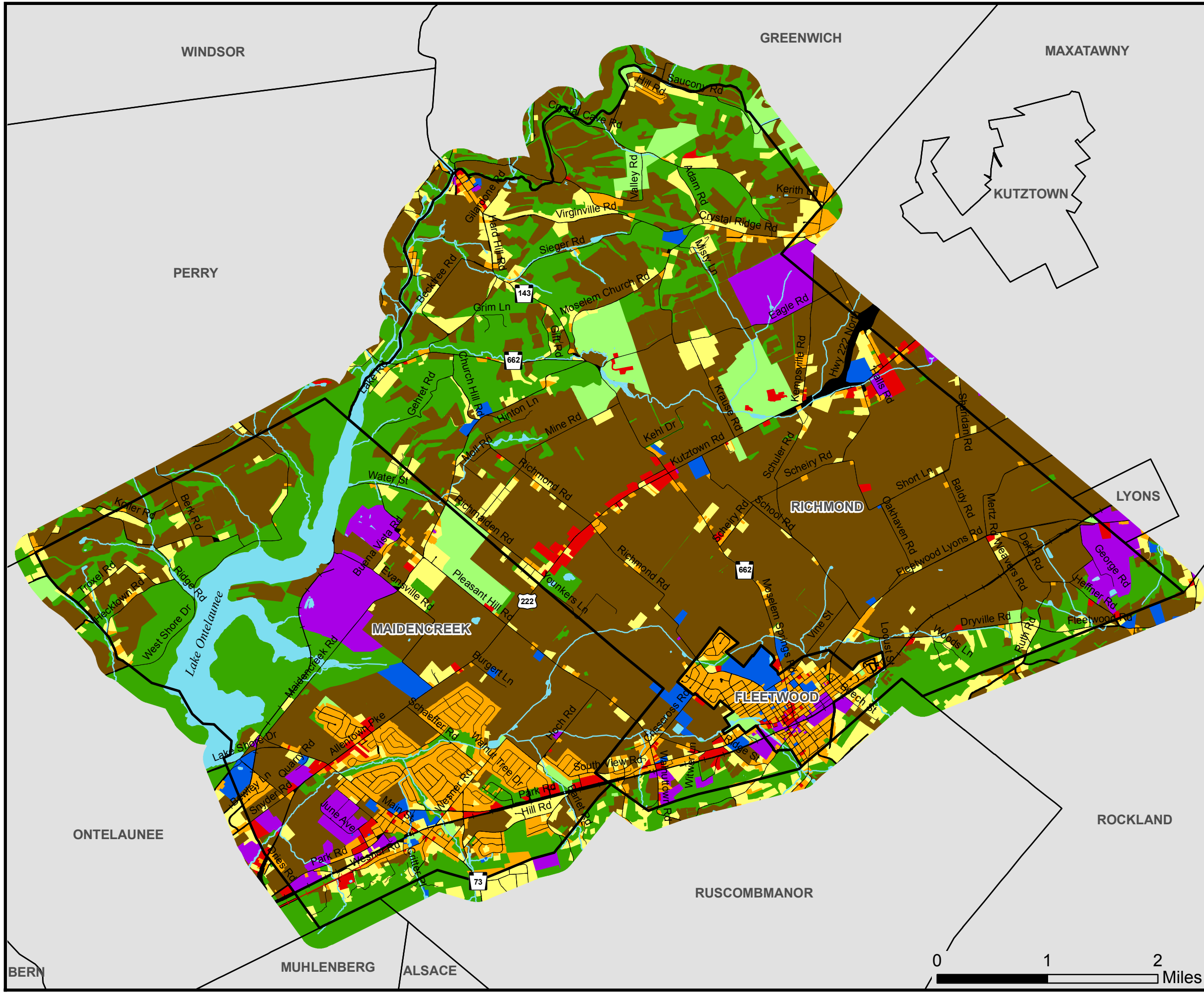
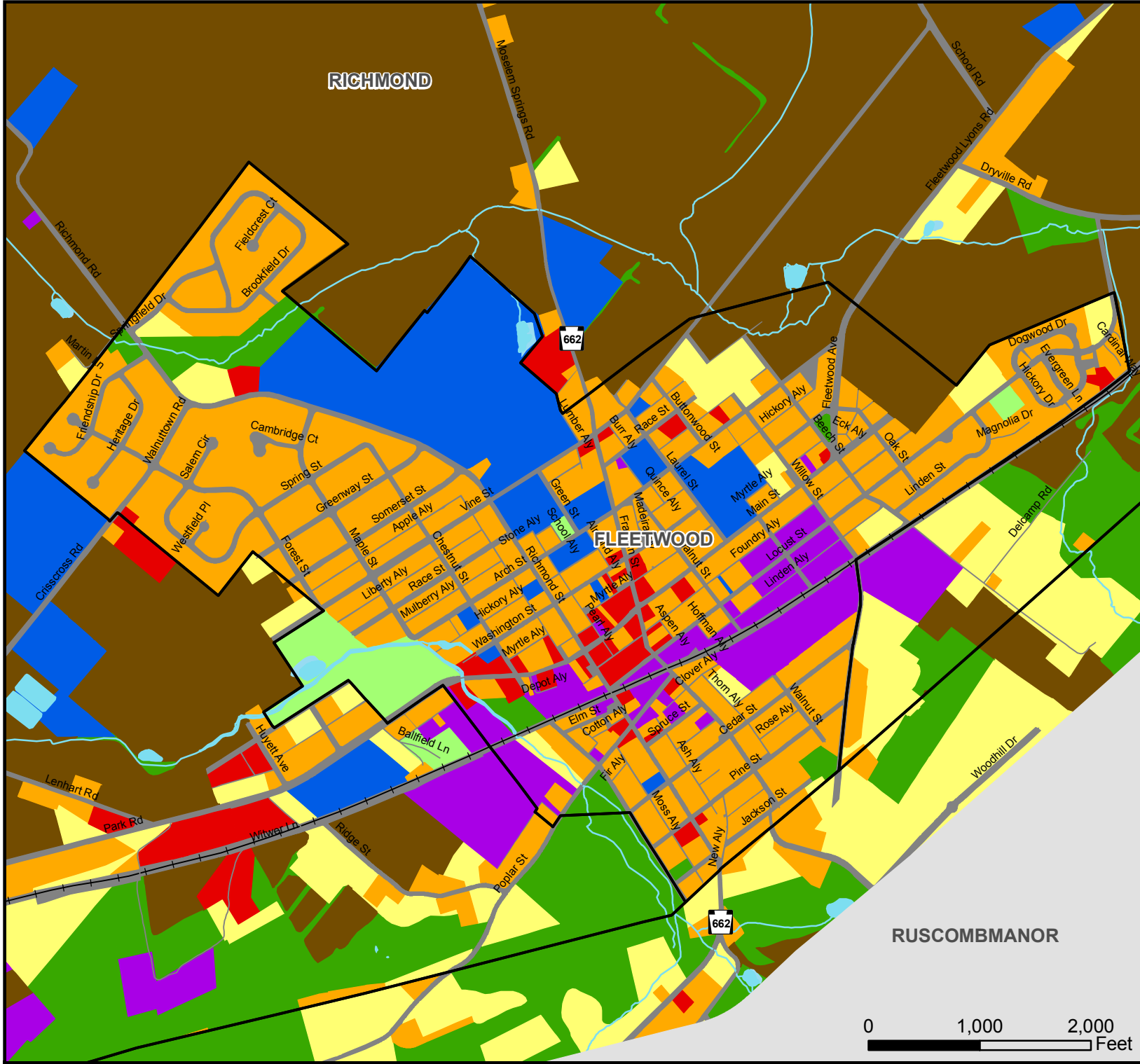


FIGURE 7-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Existing Land Use



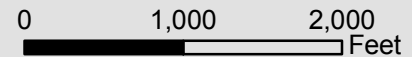
- Existing Land Use**
- Agriculture
 - Commercial
 - Industrial
 - Institutional
 - Rural/Woodland
 - Recreation
 - Residential High
 - Residential Low
 - Transportation
 - Water

- Municipal Boundaries
- Railroad

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services

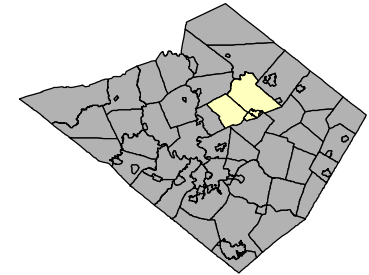
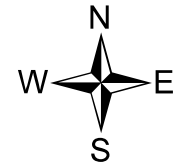
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Community Facilities



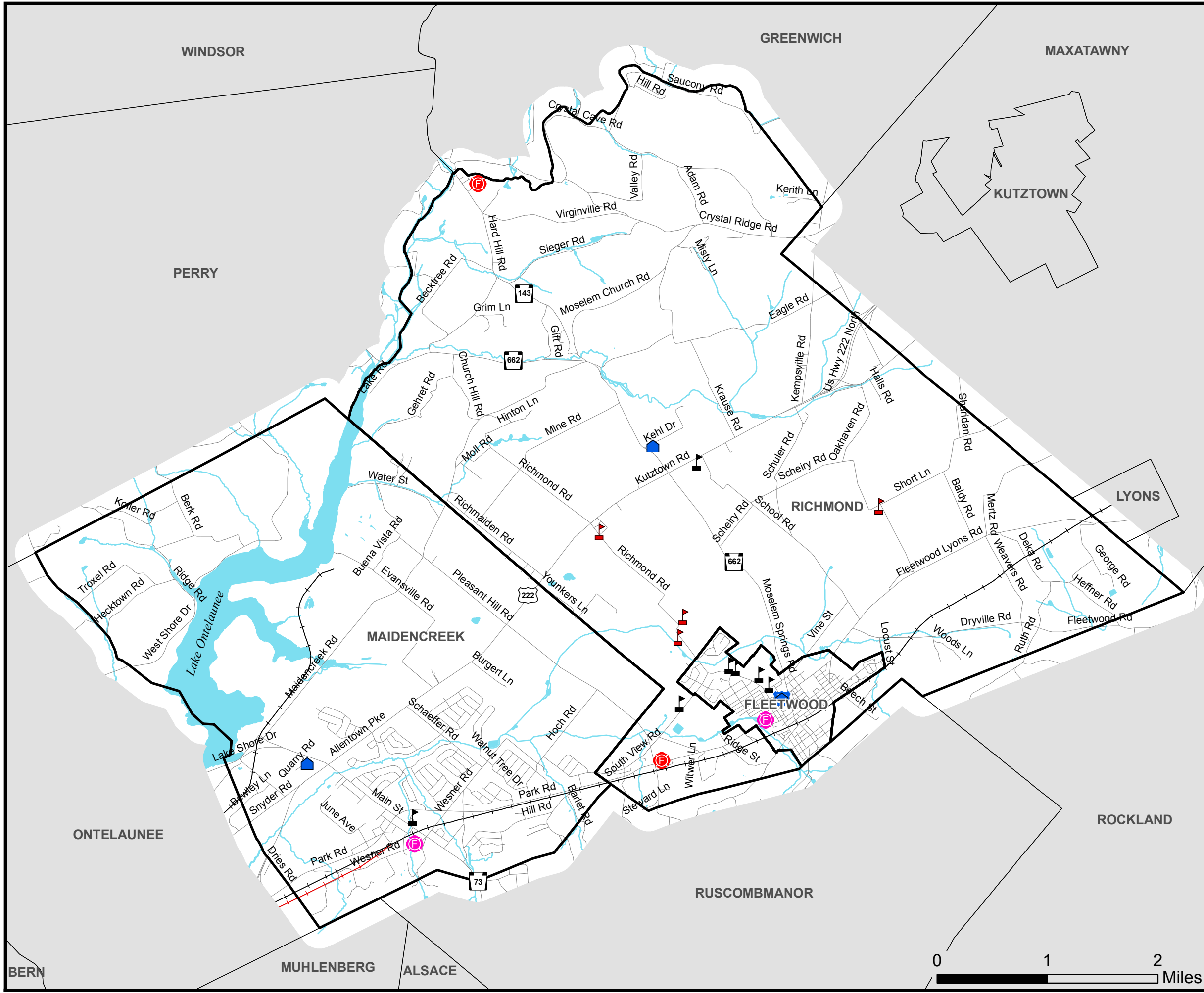
Community Facilities

- Municipal Buildings
- Fire Stations
- Fire Stations with EMS Stations
- Police Stations
- Public Schools
- Private Schools
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

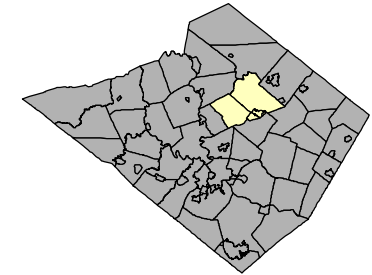
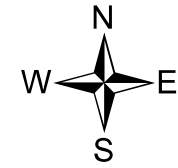
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Parks and Recreation



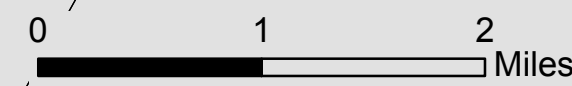
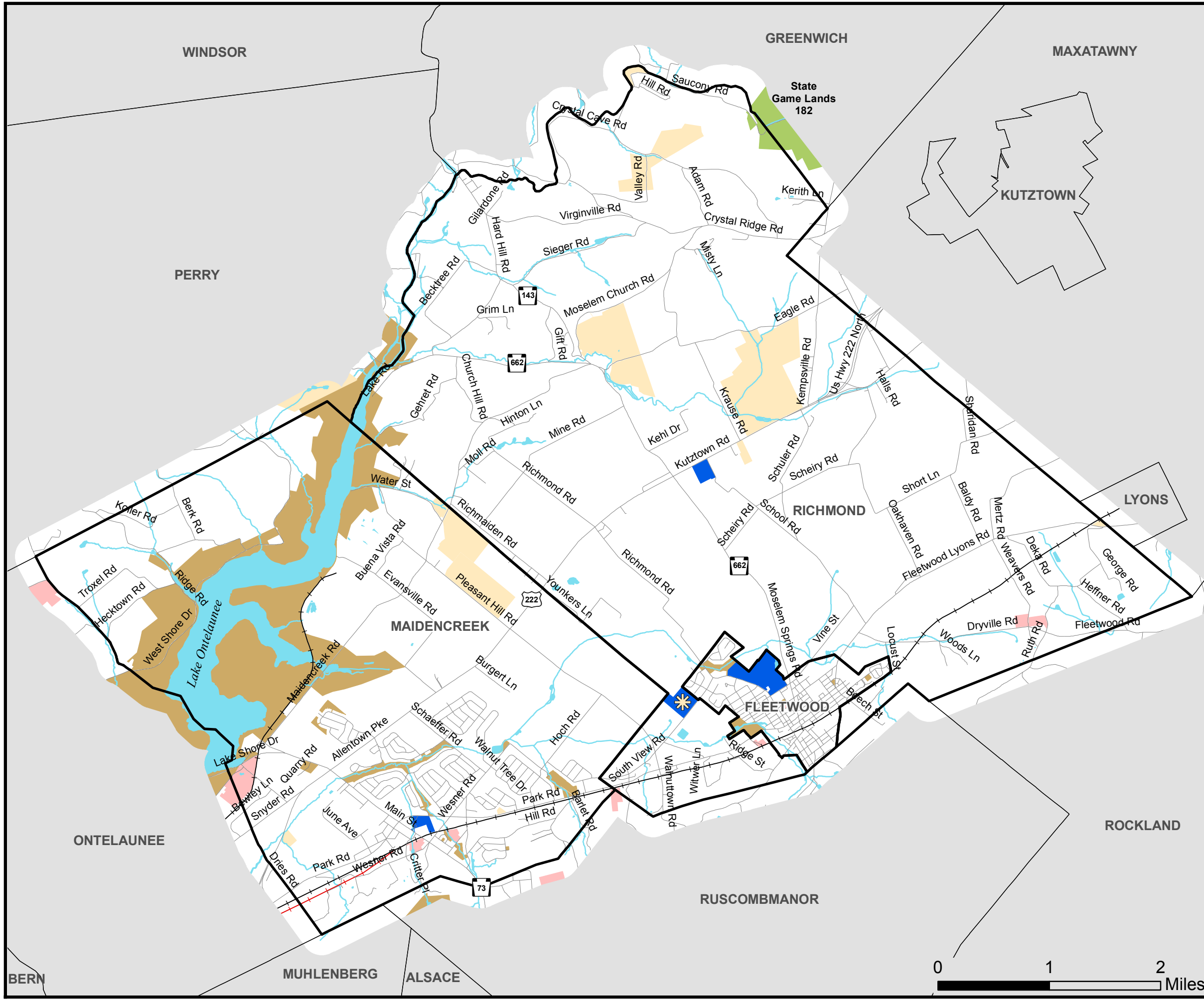
Legend

- State Recreation Land
- Municipal Recreation Land
- Non-Profit Ownership Recreation Land
- Private Ownership Recreation Land
- Public Schools
- YMCA (Non-Profit Ownership Recreation)
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

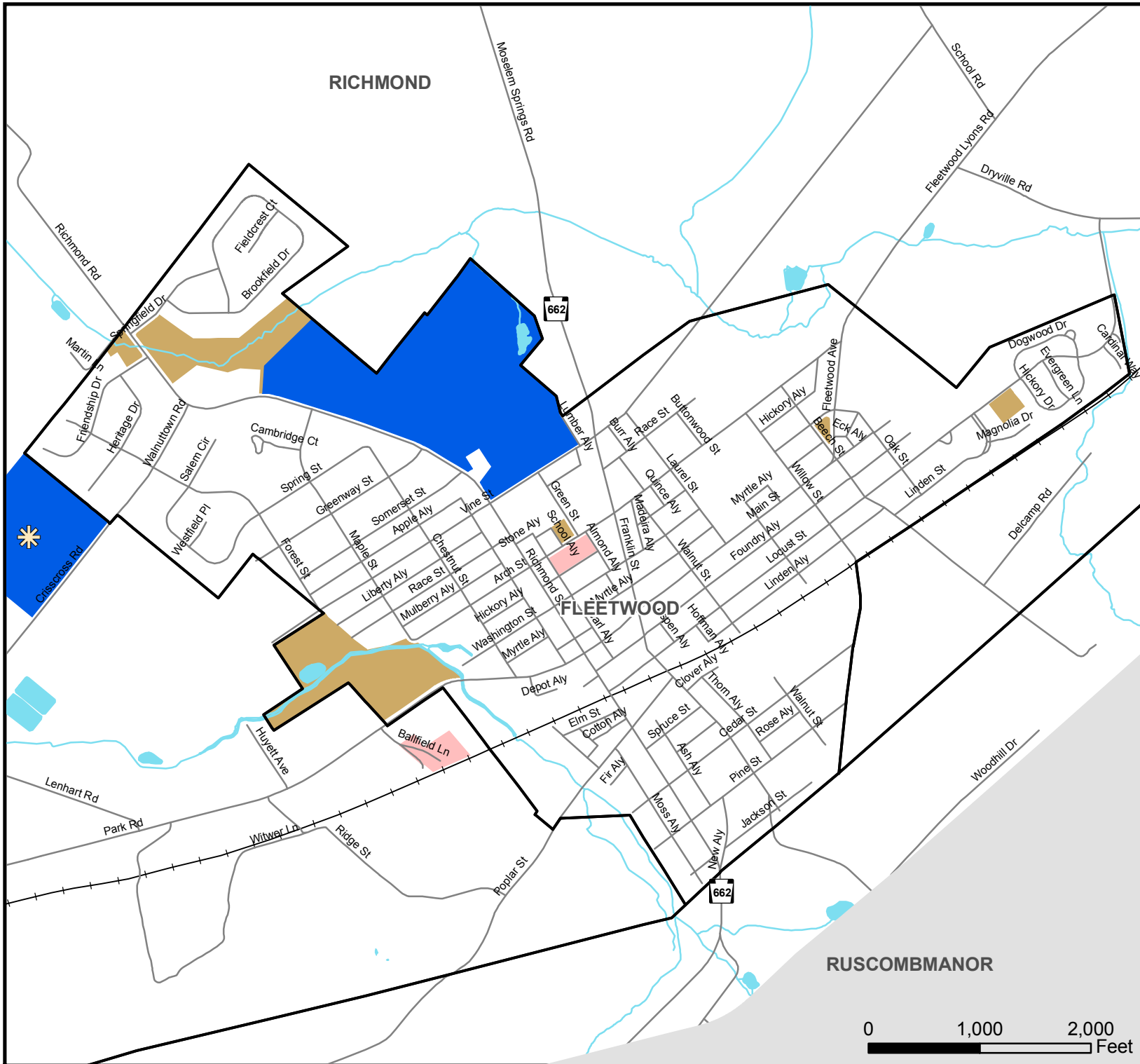
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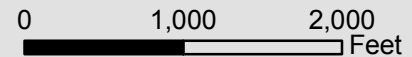
**Fleetwood Borough
 Parks and Recreation**



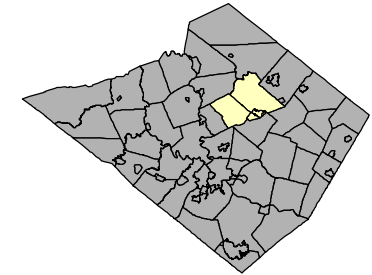
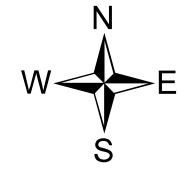
- Legend**
- State Recreation Land
 - Municipal Recreation Land
 - Non-Profit Ownership Recreation Land
 - Private Ownership Recreation Land
 - Public Schools
 - * YMCA (Non-Profit Ownership Recreation)
 - Municipal Boundaries
 - Roads
 - Railroad
 - Streams

Source data:
 Berks County Planning Commission, Berks County GIS,
 Berks County Department of Emergency Services

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Water and Sewer Service Areas



Legend

- Sewer Plants
- Water Service Areas
- Existing Sewer Areas
- Proposed Sewer Areas
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PA DEP

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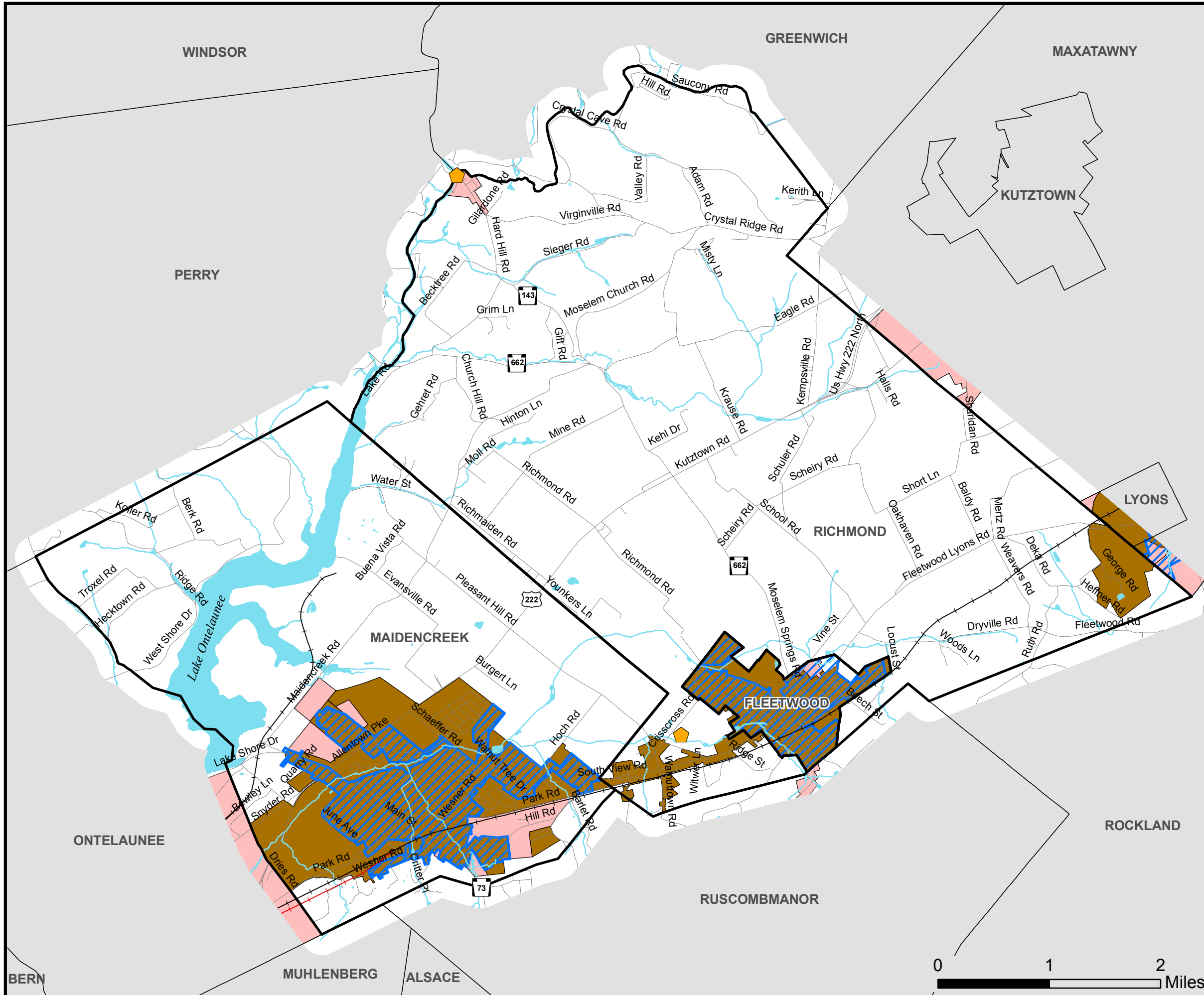
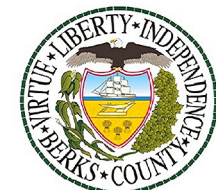


FIGURE 9-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Water and Sewer Service Areas



Legend

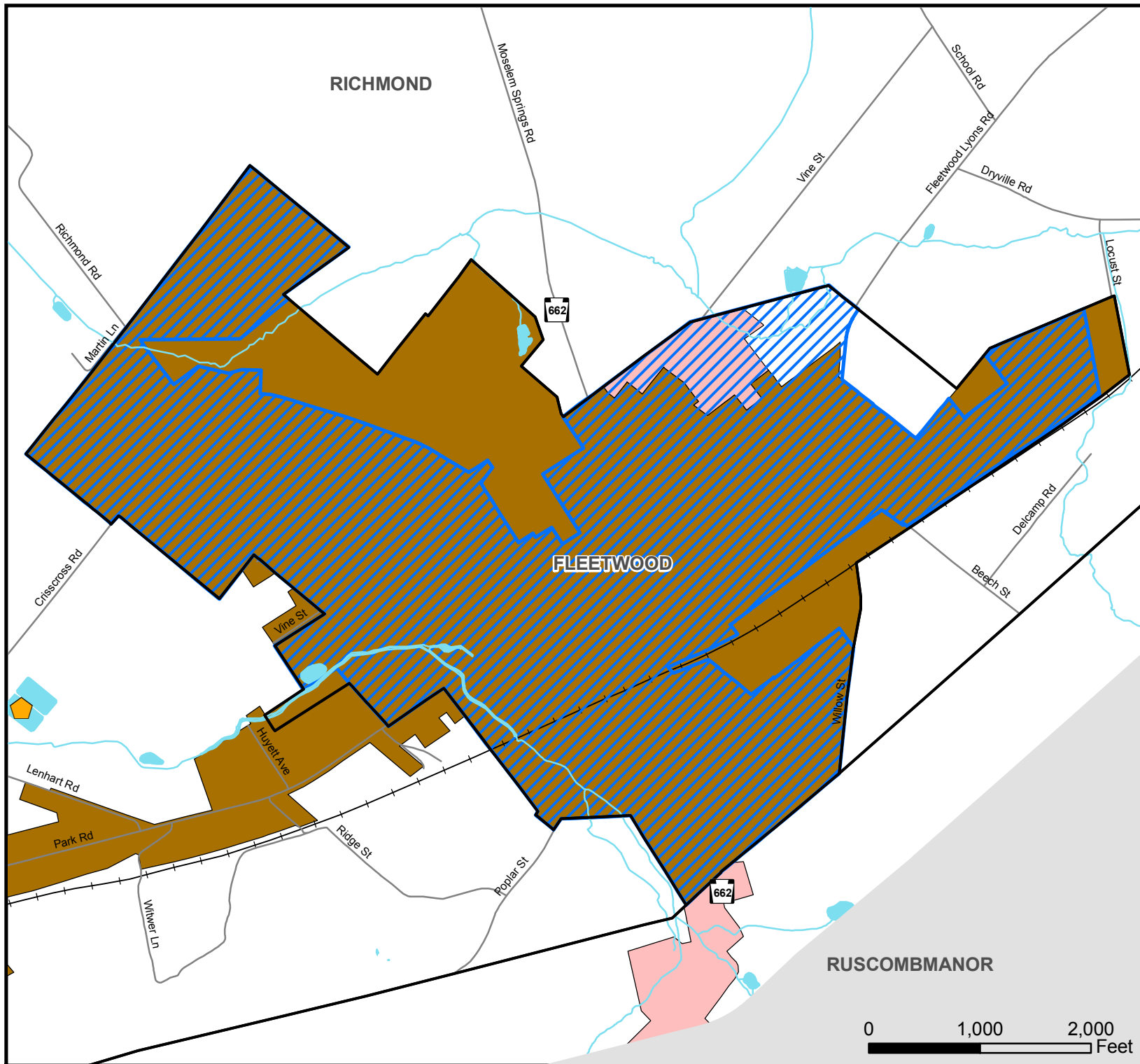
- Sewer Plants
- Water Service Areas
- Existing Sewer Areas
- Proposed Sewer Areas
- Municipal Boundaries
- Roads
- Railroad
- Streams

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services, PA DEP

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TRANSPORTATION AND CIRCULATION NETWORK

BACKGROUND

The relationship between the use of land and its impacts on the circulation network is an important element in the comprehensive planning effort. A community's quality of life is highly dependent on the efficient use of land as well as the effectiveness of its circulation network. One has to understand that a network of transportation and circulation within a region not only pertains to vehicular traffic, but also pedestrian and bicycle uses as well – they are all parts of the transportation system. In order for a network to adequately serve adjacent land uses, it must be regularly evaluated as new development or redevelopment occurs. Different land uses require different road characteristics, and addressing future transportation needs is dependent on a sound understanding of the current network.

Existing and proposed development areas must be considered when making future road programming decisions. In turn, future development patterns should not adversely affect the circulation system. It is necessary to follow appropriate design standards, improve existing roads and manage access so the road network will be capable of performing its intended function. Municipal and individual land use decisions are strongly influenced by existing or proposed circulation systems, while at the same time these same land use decisions can affect the circulation systems and the functions which the roads are expected to perform.

The circulation system within a community has an important influence on the type and location of development which occurs. The location of residential, commercial, and industrial uses can influence the function or classification of roads, their design and their condition. In addition to influencing the character of the community by influencing land uses, the perception of a community can be influenced by the circulation system itself. A municipality with relatively narrow winding roads abutting agricultural and wooded areas will often be perceived as having a rural character, while a municipality with high traffic volumes, unsynchronized signalization, and delays at intersections could be perceived as gridlocked. In areas where development has occurred which does not respect the limitations of the circulation system, the perception can be one of poor planning and frustration.

The transportation system will function properly only when each community has adequate access to the system. The identification of problem areas throughout a region's transportation network, as well as a logical land use plan that enables residents to make fewer vehicle trips are key components to a joint comprehensive plan.

READING AREA TRANSPORTATION STUDY (RATS)

The Reading Area Transportation Study (RATS), the Metropolitan Planning Organization (MPO) for Berks County, was created in 1964 through a legal agreement between the City of Reading, Berks County, and the Pennsylvania Department of Highways (now the Pennsylvania Department of Transportation). According to the Federal-Aid Highway Act

of 1962, any urban area with a population of more than fifty thousand people must maintain a continuing, comprehensive and cooperative (“3C”) transportation planning process consistent with the comprehensively planned development of the urbanized area in order to be eligible to receive Federal funding for transportation projects. RATS enables Berks County to be eligible to receive state and federal funding for highway and transit system capital improvements and operations.

There are two committees that comprise RATS: the Coordinating Committee and the Technical Committee. The Technical Committee is responsible for reviewing items brought before the group and recommending actions to the Coordinating Committee. The Coordinating Committee is the policy body that formally adopts items reviewed by the Technical Committee. The role of the MPO is to promote transportation plans, programs, projects and policies that are consistent with current federal transportation planning legislation and the Clean Air Act. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is the current planning legislation. The transportation planning staff of the Berks County Planning Commission serves as the technical staff to RATS.

RATS recognizes the interconnection between transportation and land use issues. The Berks County Planning Commission works closely with local governments throughout Berks County on land use planning issues. However, under Pennsylvania law, implementation of land use policies is the responsibility of local governments; therefore, RATS has no authority over local land use planning or zoning. However, municipalities are encouraged to attend RATS meetings and provide the valuable input on their priorities and concerns as it relates to their transportation and circulation systems.

The Berks County Planning Commission is the lead agency for the Region’s Metropolitan Planning Organization, RATS. As the lead agency, the BCPC performs all tasks associated with the Unified Planning Work Program (UPWP). This includes Clean Air Act requirements, development of the PennDOT Twelve Year Program for Berks County, Transportation Enhancements, functional classification updates, and traffic volume counts.

BICYCLE AND PEDESTRIAN AND NON-MOTORIZED VEHICLES

Providing appropriate accommodations for the non-motorized traveler should be an important transportation and land use consideration for municipalities. The level of walkability is often an indicator of a healthy and economically vibrant community. Municipalities that identify issues surrounding pedestrian and/or bicycle activity should consider data collection for bicycle and pedestrian facilities. In areas with Amish or Plain Sect populations, data regarding the presence and condition of roadway shoulders and sight distance limitations at high volume intersections can be critical in evaluating the safety level for horse and buggy traffic.

Additional field work and resident input may be necessary to identify areas where: sidewalks are either inconsistent, in poor condition, or absent; people are using roadway

shoulders for walking and bicycling; and bicycle and pedestrian facilities are desired. Special attention should be paid to areas such as parks and schools to determine if appropriate connections to residential areas exist. The Willow Creek Elementary School Safe Routes to School Report of February 2010 outlines potential projects for safer accessibility by pedestrians and students alike.

In urban or more densely populated areas like the Borough of Fleetwood, the focus may be on rehabilitating sidewalks and finding ways to better accommodate on-road bicyclists. A suburban or rural community may focus on providing multipurpose trails for recreation. In either case, data collection should proceed with these goals in mind. Consideration should be given to creating a bicycle and pedestrian plan for the region in order to create a concrete listing of problem areas and develop a plan of attack to rectify them.

Bicycle and Pedestrian Facilities

Despite recent efforts, facilities designated for walking and biking as a means of transportation are few and far between within the study area. Alternatives to motorized transportation are limited within the Fleetwood-Maiden creek-Richmond area. Furthermore, the volume and speed of motor traffic on the major roads make cycling and walking dangerous along these routes. Within Fleetwood Borough a network of sidewalks exists along most streets and Maiden creek Township's facilities are geared more towards the recreational user rather than the commuter. Gaps or missing links, poor conditions of certain segments, malfunctioning pedestrian signals and areas not easily accessible to physically handicapped persons hinder the maximum efficient use of these sidewalks by pedestrians. Sidewalks in Richmond Township's village areas have similar problems and sidewalks within the newer subdivisions of Maiden creek Township do not connect to anywhere. No formal pedestrian and bicycle trails now exist within the study region. However, the Berks County Greenway, Park and Recreation Plan (December 2007) and Maiden creek Township's Comprehensive Open Space and Recreation Plan (December 1990) identifies potential trails and connectors that could provide users with other options rather than motorized travel.

As part of the update to the Berks County Bicycle and Pedestrian Transportation Plan of 2010 a list of informal on-road bicycle routes was established and identified in the maps for this chapter. The routes identified were put together from input gathered from various stakeholders/committee members that were part of the planning process for the Bicycle and Pedestrian Transportation Plan update.

Missing Links

Missing links or *Gaps* as they might be referred to are contributors to an inefficient and unsafe pedestrian circulation system or network. These gaps serve as barriers for people walking to work, the store, or even children walking to school. Maintenance and the condition of the network is a major concern for bicycle and pedestrian transportation users. Examples of maintenance and condition issues include:

- Shoulder cutting to remove trees and overgrowth for increased visibility
- Shoulder, road, and curb ramp sweeping for cinders, glass and other debris
- Replacing missing signs or installing new ones
- Keeping paved shoulder edges and sidewalks in good condition
- Maintaining clear sidewalk and intersection access, particularly during inclement winter weather
- Proper sidewalk ramp construction

The maps associated with this section show the bicycle and pedestrian network that exists in the region. As mentioned earlier in this section, most, if not all of the sidewalks are located within Fleetwood Borough with some located within the newer subdivisions of Maiden Creek Township. Greater effort should be given to provide for more connections between facilities and areas of interest. Maintenance should be done or a comprehensive maintenance schedule developed in order for the existing network to continue to work as an alternative transportation mode for its users.

Presence and Condition of Road Shoulders

The presence and condition of road shoulders is an important aspect when talking about bicycle and pedestrian friendly communities. Proper maintenance of these facilities enables bicyclists and/or walkers to safely and efficiently use the shoulders of the roads for transportation purposes. Municipalities should (if not already doing so) incorporate into their maintenance schedules the clearing of shoulders of debris and snow during winter months. Some thought should be given to creating a database of transportation assets, including deteriorated shoulders, so that an efficient and cost effective maintenance schedule can be incorporated into the existing road maintenance schedule of the municipalities.

Richmond Township has a large Mennonite population that uses the shoulders of the roads for bicycle transportation and horse-drawn buggy. An effort should be made to accommodate this population of users by identifying the most heavily used sections and keeping them maintained for their safe and efficient use. Municipalities should continue to work with PennDOT when doing road improvements to incorporate shoulder maintenance and development into proposed projects.

Developers should be required to improve shoulders along the frontages of their tracts when they develop. In addition, the Municipalities could take it upon themselves to improve shoulders along existing roads. Shoulders should be a minimum of 4 ft. wide, or the minimum width necessary to provide for trails in accordance with the guidelines in the Statewide Bicycle and Pedestrian Master Plan. Simple shoulder improvements go a long way in promoting bicycle commuting and short-trip use and are a valuable tool in congestion management.

Sight and other Limitations at High Volume Intersections

A number of intersections have been identified by the Planning Committee that they consider to be dangerous or unsafe because of speed and visibility issues. The following is a list of these hazardous intersections:

Richmond Township

- Kutztown Road (SR 222) / Kempsville Road
- Kutztown Road (SR 222) / Krause Road
- Kutztown Road (SR 222) / Farmers Drive
- Kutztown Road (SR 222) / Richmond Road
- Kutztown Road (SR 222) / Richmaiden Road
- Kutztown Road (SR 222) / School Road
- Eagle Road / Kempsville Road
- Eagle Road / Moselem Springs Road (SR 662)
- Maiden creek Road / Moselem Springs Road / SR 143 / Hard Hill Road
- Maiden creek Road / Richmond Road
- Fleetwood Lyons Road / Deka Road / Mertz Road / Weaver Road
- Pleasant Hill Road / Park Road
- Pleasant Hill Road / Crisscross Road / South View Road
- Keller Road / Park Road
- Kutztown Road / Schuler Road
- Kutztown Road / Crystal Cave Road
- Moselem Springs Road / Scheiry Road
- Crystal Cave Road / Knittle Road
- Fleetwood Lyons Road / Baldy Road
- Fleetwood Lyons Road / Oakhaven Road
- Fleetwood Lyons Road / School Road
- Fleetwood Lyons Road / Dryville Road
- School Road / East Vine Street
- Moselem Springs Road / Forge Hill Road
- Moselem Springs Road / Lake Road
- Hard Hill Road / Sieger Road
- Hard Hill Road / Becktree Road
- Hard Hill Road / Virginville Road
- School Road / Schuler Road
- Ruth Road / Dryville Road
- Lenhart Road / Park Road
- Crisscross Road / Lenhart Road
- Moselem Church Road / Schoyer

Maiden creek Township

- SR 222 / SR 73
- Tamarack Boulevard / SR 222

- Pleasant Hill Road / SR 222
- Maiden creek Road / SR 73
- Pleasant Hill Road / Maiden creek Road
- Park Road / Hill Road
- Park Road / East Wesner Road
- SR 73 / West Wesner Road / Mountain Spring Road

Fleetwood Borough

- Main Street (SR 1010) / North Franklin Street (SR 662)
- Main Street (SR 1010) / Richmond Street (SR 662)
- Main Street (SR 1010) / Willow Street
- Main Street (SR 1010) / Beech Street
- Richmond Street (SR 662) / New Alley
- Main Street / Fleetwood Lyons Road (SR 1010)

Although this is a large list of problem intersections and can be quite overwhelming when you consider the cost and time associated with rectifying all of these problem areas. Municipalities can make it a more manageable task by prioritizing these intersections into high, medium and low categories and advancing their efforts where they are needed the most. Consideration should be given to developing such a list/program and working with PennDOT, where appropriate, to alleviate these problem intersections starting with the worst ones first. Also keep in mind that sometimes a simple fix is all that is needed rather than a complete reconstruction. A comprehensive list should take this into account.

PUBLIC TRANSPORTATION

Public transportation provides transportation choice, particularly for individuals who do not drive, and therefore is an important component within the transportation and land use framework. One typical issue that is sometimes overlooked is whether bus stops are easily accessible. In suburban communities bus stops can sometimes be located in areas without sidewalks or other pedestrian amenities.

BARTA Bus Routes and Park ‘N Ride Service

The Berks Area Regional Transit Authority (BARTA) operates a fixed route bus service from the City of Reading to the East Penn Manufacturing Inc. site in Richmond Township. Currently this service provides transportation along the SR 1010 (Park/Fleetwood Lyons Road) corridor bisecting the planning region and making stops depending on demand. There are two designated bus stop locations within the Borough of Fleetwood along Main Street. One stop is located at Franklin Street and the other is located at Richmond Street. Both are signed bus stop locations erected by the Borough for use along BARTA’s existing route. Maiden creek Township has one bus stop along Park Road at Buy Rite Liquidators. This bus service is predominantly a transportation tool for workers associated with East Penn Manufacturing Inc. There is no Park ‘N Ride Facilities located within the planning region.

Paratransit Service

BARTA provides door to door van service under their Special Services Division to anyone in Berks County physically unable to use regular bus service. The BARTA Special Services program provides ADA related paratransit services as well as service for a number of other programs such as the Medical Assistance Transportation Program (MATP), Office of Aging trips to places such as Senior Centers and nursing homes and trips for Mentally Handicapped/Mentally Retarded clients. Special Services are also available for individuals that are not associated with a support funding program. In these instances, the individual pays a fare for the transportation service. If the passenger is enrolled in any of the support funding programs, Special Services will bill that funding agency for related trips.

Commuter Service

Commuter Services of Pennsylvania currently operates within the region. They are a non-profit agency whose main goal is to provide transportation alternatives for commuters, other than driving alone, by reaching out to employers so that they can help their workforce find those options. By creating these other options for commuters, they can improve air quality, decrease congestion and increase safety on highways. More information can be found on their website at: www.pacommuterservices.com.

Long-Distance Bus Service

Long distance, inter-city bus service is provided by Capital Trailways and Bieber Tourways. Capital Trailways provides daily service from Reading to Philadelphia with a direct route and a route with stops depending on the time of departure. A route between Reading and Lebanon and Harrisburg via U.S. 422 is also available with service to Allentown and Pottsville. Bieber Buses provide service between Kutztown and Reading, plus offer routes to Atlantic City and New York.

AVIATION

Reading Regional Airport

The nearest airport is the Reading Regional Airport approximately ten miles away. There are three charter services based at Reading. Additionally, there are Corporate and other general aviation aircraft operating out of the airport. Commercial commuter passenger service to Philadelphia and Pittsburgh was available as recently as 2004 but has since been discontinued.

Need for Airport Hazard Zoning Overlay District

Pennsylvania Law (Act 1984-164) requires municipalities located within an airport hazard area to have zoning regulations in place to prevent hazards to air navigation.

Neither Richmond Township, Fleetwood Borough nor Maiden creek Township is impacted by an airport hazard area.

RAIL SERVICE AND AT-GRADE CROSSINGS

Railroad Locations

The availability of rail service is an important aspect for a region's economic development potential. Currently there is no passenger rail service that is available in the region but freight service is readily available as a line passes through the southeastern portion of Maiden creek Township through Fleetwood Borough and southeastern Richmond Township. This line is the main freight rail line running from the Lehigh Valley to the New York City area and beyond. There is also a spur located in Maiden creek Township that services a quarry operation near Lake Ontelaunee. Some consideration should be given to extending this spur to encourage future industrial and commercial development within the region. Municipalities should utilize the availability of rail access throughout the region to encourage more industrial and commercial development.

Industries Served

Currently there are four industries serviced by rail within the planning region. East Penn Manufacturing Inc., F.M. Brown and Sons, Lehigh Cement Company's Evansville plant and Sunsweet Growers Inc.

Crossing Locations

There are numerous locations where rail lines cross the region's roads. Most of the crossings are considered "at-grade" crossings because the road and rails are level with each other when they intersect. Also identified within this plan are two "grade-separated" crossings where the rail line passes over the road on a bridge. The transportation map associated with this section identifies the existing "at-grade" and "grade-separated" rail crossings.

Crossing Issues

Through meetings with the Joint Comprehensive Plan Committee five railroad crossings were identified. They are listed below with the reasons they are considered dangerous by the planning committee:

- Walnuttown Road – visibility
- South Beech Street – speed, careless attention
- Ridge Street – speed, careless attention, visibility
- Weavers Road Rail Overpass – height restriction/low bridge
- Dryville Road Rail Overpass – height restriction/low bridge

FUNCTIONAL CLASSIFICATION AND FEDERAL AID STATUS

How a particular highway is used determines the function that it serves in the system. Highway and roadway classification are based on analysis of the volume of traffic using the facility, the type of trip provided, the length of the trip, and the speed of the trip.

The principal arterial system consists of a commercial road network of continuous routes having the following characteristics:

- Serve the corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
- Provides connections to all, or nearly all, urban areas of 50,000 and over population and a large majority of those with population of 25,000 and over.
- Provide an integrated network without stub connections except where unusual geographies of traffic flow conditions dictate otherwise (e.g., internal boundary connections and connections to coastal cities).

Principal Arterial System – The principal arterial system is divided into the following two subsystems:

Interstate System - The interstate system consists of all presently designated routes of the Interstate System located outside small urban and urbanized areas.

Other Principal Arterial System - This system consists of all non-Interstate principal arterial highways located outside small urban and urbanized areas.

Minor Arterial System - The minor arterial system should, in conjunction with the principal arterial system, form a network having the following characteristics:

- Link cities and towns (and other generators, such as a major resort area, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county service.
- Be spaced at such intervals, consistent with population density, so that all developed areas are within a reasonable distance of an arterial highway.
- Provide service to corridors with trip lengths and travel density greater than those predominately served by rural collector or local systems. Minor arterial highways therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.

Collector Road System – The collector routes carry local traffic between minor streets and arterials and provide land access service and traffic circulation in residential neighborhoods, commercial and industrial areas.

Local Road System - The local road should have the following characteristics: (1) Serve primarily to provide access to adjacent land; and (2) Provide service to travel over relatively short distances as compared with collector roads or other highway systems. Local roads will, of course, constitute the rural mileage not classified as part of the principal arterial highway, minor arterial, or collector road systems.

HIGHWAY FUNCTIONAL CLASSIFICATIONS AND RECOMMENDED DESIGN FEATURES			
<u>Classification</u>	<u>General Provisions</u>	<u>Right-of-Way Width (ft.)</u>	<u>Cartway Width</u>
Interstate Expressway	55+ MPH Limited Access No Parking Noise Barrier/Buffer (where required)	Minimum 120; however, may be wider based on local conditions and design	Minimum four 12' wide travel lanes with 10' wide shoulders capable of supporting heavy vehicles
Arterial (Principal and Minor)	35-65 MPH Some access controls to and from adjacent development. Encourage use of reverse and side street frontage and parallel access road. No Parking	80	48-52 feet; 12' wide travel lanes with shoulders in rural area and curbing in urban areas
Collector (Major and Minor)	25-35 MPH Some access controls to and from adjacent development. Parking permitted on one or both sides.	60	34-40 feet; 12' wide travel lanes with stabilized shoulders or curbing; 8' wide lanes provided for parking.
Local	15-35 MPH No access control to and from adjacent development. Parking permitted on one or both sides.	53	28-34 feet with stabilized shoulders or curbing; cartway widths can be reduced based on interior traffic patterns.

Roads are classified on the Transportation Map. The following is the list of each existing type of functional classification in the Region based on the PennDOT criteria:

Arterials: PA Route 222, PA Route 73, Park Road/Fleetwood Lyons Road (SR 1010)

Collectors: PA Route 662, PA Route 143, Moselem Springs Road, Maiden creek Road, Pleasant Hill Road, Dryville Road, Crystal Ridge Road, Crystal Cave Road, Richmond Road, School Road, Walnuttown Road, Poplar Road, Saucony Road

Local Roads: all other roads

TRAFFIC COUNTS AND TRUCK PERCENTAGES

Traffic Volumes and Patterns

Traffic volumes are determined through traffic counts taken at specific locations within a transportation corridor. The volume is usually portrayed in terms of annual average daily traffic (AADT). This represents the average count for a 24 hour period, factoring in any fluctuations due to the day of the week or month of the year. The AADT is an important factor that, in conjunction with the previous factors outlined, helps in determining the functional classification of a road. For the purpose of this plan we are using 2009 traffic volume data which is based on the most current count information available.

Information available on traffic volumes is important in determining the potential for capacity problems. Roads that are not used for the purpose for which they are intended can experience capacity problems. This is particularly evident in areas experiencing a significant amount of new development without concurrent upgrades to the transportation corridors. Capacity problems become particularly evident when the number of lanes is reduced and traffic is funneled from a roadway with a higher number of lanes to one with a lower number of lanes.

In addition to the increased development in the Region, capacity on the Region's roads is also heavily influenced by traffic originating outside the area. Roads in the region that experience capacity problems are PA Route 222, PA Route 73, SR 1010 and PA Route 662, because these roads are carrying traffic to Township locations as well as regional traffic at increasingly higher volumes. Traffic volumes are beginning to increase on other roads throughout the region as well.

There are several factors contributing to the traffic impact in the Region. There is regional traffic, which includes trucks, tourists, and commuters going to Allentown and New Jersey and employment centers, local traffic patronizing businesses in Fleetwood, Richmond and Maiden creek as well as residents of outlying areas using PA Route 222 as a route to the Reading area and vice versa.

Highest average daily traffic volume in the Region is PA Route 222 in Maiden creek Township just east of PA Route 73, at 26,324. Another section of PA Route 222 just east of PA Route 662 has a high volume of 23,173. SR 1010 has high volume with AADT counts west of PA Route 73 of 13,922 and east of PA Route 73 of 13,252. PA Route 73 also has significant counts of 8,598 and 8,683 through the village of Blandon north and south of the intersection with SR 1010.

AADT numbers for selected roads can be found on the transportation map associated with this section. When referencing this map one should take into consideration that these numbers are averages and may be only for one direction of traffic. This is the reason that there may be some discrepancies in volume numbers between different sections of the same roadway that are relatively close in proximity.

Major Traffic Routes and Parallel / Relief Routes

As discussed in the prior paragraph the region's most heavily traveled route is the PA Route 222 corridor that bisects the whole region. This route is used by commuters both coming from the City of Reading and to the City for work and or business. This is the major, if not only, direct route between the City of Reading and Allentown and is considered a highly congested corridor.

Because of this corridor's documented volume and increased travel times more and more people are trying to find ways to bypass the corridor. Consequently this causes high volumes on roads that are not accustomed to seeing this type of volume. The major parallel/relief route away from PA Route 222 in the region is SR 1010 (Park Road/Fleetwood Lyons Road) and it is seeing an ever increasing amount of traffic as people try to find alternatives to PA Route 222. People are also using Maiden creek Road (SR 1005) as another parallel/detour route around the heavily congested Route 222 corridor.

Access Management

Access management problems are situations where conflicts between mobility and access are, or will be, intense and result in congestion and safety problems. Access management problems typically occur on roads serving high volumes, high speed traffic, and abutting intense trip generating uses. An example of an access management problem would be where commercial development occurs on a road and the mobility of traffic is adversely affected by the increase in driveways from adjacent land to the road on which the land fronts. As the number of driveways increases, the safety and efficiency of the road can decrease. Access management will be an increasing concern on the roads in the Region in the future. The biggest concerns in the area are PA Route 222 and Route 1010 (Park Road). Access management has been an issue in the past and continues to plague the Region with increased businesses along the corridors and increased traffic along the Routes. Consideration should be given to adopting an access management ordinance as part of the municipal SALDO requirement.

The major elements in access management include the following:

- Driveway design standards
- Reduce number of entrances to roads
- Traffic Impact Analysis where development is proposed
- Left turn lanes and right turn lanes constructed at road and driveway intersections
- Install medians
- Adequate parking lot/internal circulation design in developments
- Shared access to properties
- Interconnect properties developed along roads
- Service roads paralleling Route 222 or Park Road
- Improve intersection design/spacing
- Acceleration and deceleration lanes at access drives
- Signalized high volume driveways
- Control of access
- Direct development access roads to signalized driveways
- Prohibit inappropriate turning movements

More information on access management ordinances can be found in PennDOT Publication 574 “Access Management Model Ordinances for Pennsylvania Municipalities Handbook” updated February, 2006.

TRAFFIC CONTROL DEVICES

Signal Locations

Traffic signal locations within the region are displayed on the map. In total there are eight traffic signals within the Fleetwood-Maiden creek-Richmond region.

BRIDGES

Bridges serve as critical links in the highway system providing crossings of rivers, streams, railroads, and other highways. Within Berks County, the Pennsylvania Department of Transportation maintains an inventory of 858 bridges. Of these bridges, 639 with lengths of 8 feet or more lie on State highways and are maintained by the State and the remaining 219 are on municipal highways and have a length of 20 feet or greater. Data collected by the Berks County Planning Commission indicates that as many as 150 additional bridges between 8 and 20 feet in length located on municipal roads throughout the County may not be included in this inventory because they are not required to participate in the National Bridge Inspection Program. The municipality in which they are located maintains the majority of these structures.

Maintaining the bridge network is important because of diversions in travel created when bridges have posted limits or need to be closed. Not only is the movement of people and goods adversely affected, emergency vehicle response times can be increased greatly due to bridge restrictions.

As bridges age, they deteriorate physically. Bridges that are found to have deterioration to one or more of their major components are referred to as being Structurally Deficient. Although this deterioration is present, Structurally Deficient bridges are considered safe as long as used within any posted limits. Bridges may also become Functionally Obsolete due to evolving design standards. Examples of functional obsolescence are a bridge with a narrow width or one with a height limit that is insufficient of accommodating today's taller vehicles. Based on PennDOT's records from December 2007, within Berks County, 99 (15.5%) of the state bridges are Structurally Deficient and 205 (32.1%) are Functionally Obsolete. Of the inventoried local bridges in the County, 70 (32.0%) are Structurally Deficient and 77 (35.2%) are Functionally Obsolete.

PennDOT District 5-0 has promoted preventative maintenance activities on bridges to extend the useful life of the bridge. These activities include scour protection, minor bridge deck rehabilitation, and spot painting. However, because these activities do not bring bridges fully up to current standards, Critical Bridge funds cannot be used for these activities. They are intended to extend the life of the bridge and postpone a more costly major rehabilitation or replacement. RATS will consider these needs and make funds available whenever possible to support preventive maintenance activities on bridges. Municipalities should also consider developing a detailed maintenance schedule and work with PennDOT, where appropriate, to evaluate, rehabilitate and/or replace any bridge within their municipal boundaries as necessary.

Information on existing bridge conditions, including posting status, is important for municipalities and counties dealing with aging bridge issues. General bridge information such as location, use (rail, road, pedestrian/trail), condition, historic status, and crossing type (at-grade verse grade separated) can be found on the Pennsylvania Department of Transportation's website as well as the Berks County Planning Commission's (broken down to the county level) website under Transportation at: www.co.berks.pa.us/planning.

State Owned

The State Department of Transportation owns a total of 23 bridges located throughout the study region. Of those 23 bridges 14 are found in Richmond Township, eight in Maiden creek Township and one within Fleetwood Borough. Of these 23, five of them are deemed structurally deficient, four functionally obsolete and one is closed to vehicular traffic. The bridge that is closed is the Lake Ontelaunee West Shore Drive Bridge in Maiden creek Township. This bridge is currently in the design phase and slated for rehabilitation.

County Owned

The County of Berks owns three bridges within the study area. All three are located on the local road network. All three of these bridges are posted with weight restrictions.

Locally Owned

There are a total of five bridges within the study region that are owned by the municipalities. Of these five bridges, two are posted with weight restrictions. The municipalities should include these bridges in their maintenance and capital improvement program.

PARKING

Parking is always a concern in densely populated areas like villages and boroughs and the same goes for the study area. For the most part the study area is made up of suburban communities where parking is not or may not be an issue. Where it could become an issue is in the Borough of Fleetwood where houses are closer together with narrower streets and a commercial district. Close attention should be given to where parking supply appears to be an issue.

Where parking is an issue, some thought should be given to creating an inventory of existing parking facilities. The existing conditions inventory should identify shared parking opportunities and how land uses are utilizing shared parking. In suburban communities, where expansive parking lots are often the norm, parking lot utilization during peak demand times should be noted. In addition to determining whether present and future parking needs are being met, this evaluation can guide future parking development through shared parking ordinances or modifications to parking supply requirements.

ACT 247 (SECTION 501 – 506A OF MPC)

Act 209 Transportation Impact Fees

The Municipalities Planning Code (MPC) allows municipalities to assess a traffic impact fee provided they have adopted a traffic impact fee ordinance. Also, municipalities involved in a Joint Comprehensive Plan can adopt a joint traffic impact fee. With a traffic impact fee system in place, a municipality can collect fees to finance improvements to the road system.

The Municipalities Planning Code indicates that when municipalities have prepared a multi-municipal plan, to allow for the provision of transportation capital improvements in a cooperative manner, the municipalities may cooperate to enact joint transportation impact fee ordinances.

In municipalities where traffic impact fee systems are not in place, financial contributions from developers for road improvements should be negotiated. Developer-financed road improvements at existing intersections and along road segments could correct current deficiencies and mitigate traffic increases associated with new development. The following table identifies the steps involved in setting up and implementing an impact fee ordinance.

SUMMARY OF THE STEPS FOR IMPLEMENTING
TRAFFIC IMPACT FEE ORDINANCE

Task	Responsible Entity
<p>1. Establish Transportation Service Area and appoint an advisory committee. <i>Note: Committee must be at least 7 members, can be the <u>entire</u> Planning Commission, with ad hoc members if necessary to meet the 40% builder/realtor requirement. Other than this, the committee <u>cannot</u> contain municipal officials or employees.</i></p>	Governing Body
<p>2. Public Notice of Intent to implement a Traffic Impact Fee Ordinance. <i>Note: This allows for fees to start being collected <u>and</u> starts an 18 month clock, by which time the Ordinance must be adopted.</i></p>	Governing Body
<p>3. Committee oversees preparation of Land Use Assumptions plan, holds public hearing, forwards to Governing Body for adoption.</p>	Impact Fee Advisory Committee
<p>4. Committee oversees preparation of Roadway Sufficiency Analysis and forwards to Governing Body for approval.</p>	Impact Fee Advisory Committee
<p>5. Committee oversees preparation of Capital Improvements Plan, holds public hearing, forwards to Governing Body for approval.</p>	Impact Fee Advisory Committee
<p>6. Impact Fee Ordinance text developed and Ordinance adopted.</p>	Governing Body

Before incurring the up-front costs of implementing a transportation impact fee ordinance, municipalities should consider several issues related to existing traffic conditions and projected land development activity to help determine whether the investment would indeed be worthwhile. A municipality should conduct a feasibility or cost-benefit analysis of these issues before proceeding with the implementation of an impact fee ordinance. The analysis should focus on the following factors:

- Future land use projections

- Review of proposed road improvements
- Traffic volumes and roadway capacity
- Potential revenue generation from impact fees

A municipality that chooses to adopt an impact fee ordinance must complete a series of reports: Land Use Assumptions, Roadway Sufficiency Analysis, and a Capital Improvements Plan. Each report requires action by a Traffic Impact Fee Advisory Committee and governing body after receiving public comment. It is critical that a municipality meet all of these legal requirements of the MPC so that land development applicants cannot challenge the legality of impact fee implementation procedures.

With all that being said, adopting a transportation impact fee ordinance involves complying with certain regulations and completing specific studies which represent a significant investment by the municipality. We cannot fit a total description and guidance about traffic impact fees within this document however PennDOT has developed a handbook called Transportation Impact Fees: A Handbook for Pennsylvania's Municipalities to assist municipalities in:

- Understanding the background of impact fee use in Pennsylvania
- Determining the feasibility of impact fees for their community
- Understanding the process required by the MPC to establish an impact fee ordinance
- Administering the program after ordinance adoption
- Developing ordinance language
- Funding and implementing a capital improvement plan

A copy of this document can be found by contacting PennDOT or the Berks County Planning Commission for more assistance regarding the traffic impact fee handbook.

Official Map

The Official Map is a planning implementation tool and a strategy that municipalities can use for making sound land use decisions. The Official Map as authorized by Article IV of the MPC is a graphic depiction of elements of the Municipality's Comprehensive Plan, in this case Joint Comprehensive Plan. The Official Map can show existing and proposed roads, watercourses and public grounds, public parks, playgrounds, open space reservations, pedestrian ways and easements, transit right-of-ways, flood control and stormwater management areas, drainage easements, and properties to be held by public bodies when these elements are part of the Comprehensive Plan.

Rather than having just a listing of public needs and elements of those needs in the Comprehensive Plan, the Official Map will show interested parties what is intended and how it will affect their property or development proposal. It allows all parties to work in concert with each other as they move toward their individual goals. Most important it puts the Municipality in the position of being able to accomplish the elements of its Comprehensive Plan and it can help to inform citizens of prior thought to community

needs and changes when a development proposal is brought forward. It can be used to reserve land that cannot be purchased immediately and can be used when seeking funding sources to purchase those lands or other rights.

LIQUID FUELS AND OTHER FUNDING

General Funding Discussion

The Municipal Liquid Fuels Program funds a range of projects to support municipalities' construction, reconstruction, maintenance and repair of local roads and streets. Funds are only available to municipalities that submit annual reports and make deposits and payments or expenditures in compliance with the Liquid Fuels Tax Act.

The amount of a municipality's allocation is based on its population and miles of roads on their approved Liquid Fuels Inventory. To be placed on the system a road must have minimum of 33' right-of-way in a township and 16' in a borough. The "cartway" (drivable surface) must be a minimum width of 16', and the road must be a minimum of 250' in length. If the road is a dead end, it must have cul de sac (turnaround) at the end with a minimum 40' radius.

To continue to receive Liquid Fuels funds, a road must be maintained in such a condition that it can be driven safely at 15 mph.

PennDOT's Transportation Enhancement Program is another source of funding for a variety of transportation related projects. Projects must fall into one or more of twelve eligible categories. Within these categories, projects must have a relationship to the surface transportation system. An example would be the rehabilitation of an historic train station. Also, a project may function as a component of a transportation system-such as a bike/pedestrian path.

Proposals must be for a complete, identifiable, usable facility or activity. Funds are not available for partial projects that cannot function as a complete and useful activity. Funding is available, however, for a particular phase of a multi-phase project. The program is designed to fund transportation related projects that are over and above what is considered routine construction and maintenance.

Asset Management

As transportation planners and metropolitan planning organizations (MPOs) evaluate current system conditions and alternate future scenarios to make informed decisions on allocating resources, they must balance funding realities with mobility needs; public expectations; and community, legislative, and environmental considerations. Transportation Asset Management (TAM) provides a valuable tool to maximize system performance, improve customer satisfaction, and minimize life-cycle costs.

From increased vehicle miles traveled, growing population, and greater congestion to aging infrastructure and escalating operating costs, today's challenging circumstances put

demands greater than ever on transportation networks. The goal of a TAM program is to minimize the life-cycle costs for managing and maintaining transportation assets, including roads, bridges, tunnels, rails, and roadside features. As defined by the American Association of State Highway and Transportation Officials' Subcommittee on Asset Management, "TAM is a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively through their life cycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision-making based upon quality information and well defined objectives." Through the use of management systems, engineering and economic analysis, and other tools, MPOs and transportation agencies can more comprehensively view the big picture and evaluate collected data before making decisions as to how specific resources should be deployed. TAM principles and techniques should be applied throughout the planning process, from initial goal setting and long-range planning to development of a Transportation Improvement Program and Statewide Transportation Improvement Program and then through to operations, preservation, and maintenance.

LINKING LAND USE AND TRANSPORTATION

General Discussion

The idea of linking transportation and land use is an important factor in creating, maintaining and in some cases redeveloping vibrant, sustainable communities. PennDOT has been working to ensure that transportation improvement projects are born out of a sound planning process that truly links transportation planning decisions with community land use decisions. Effective implementation of planning at the local level helps strengthen the partnership between municipalities and PennDOT in establishing a sustainable transportation/land use environment for the future. More information can be found on linking land use and transportation and the tools to implement it in PennDOT's handbook entitled Improving the Land Use – Transportation Connection through Local Implementation Tools. This handbook is a valuable tool and designed to provide the support necessary to strengthen the implementation phase of any planning effort, thereby supporting municipal and county officials in their efforts to integrate transportation and land use and improve the overall sense of place of Pennsylvania's many communities.

SMART TRANSPORTATION

General Discussion

Smart Transportation is a new approach to roadway planning and design, in which transportation investments are tailored to the specific needs of each project. The different contexts – financial, community, land use, transportation, and environmental – determine the design of the solution. The best transportation solution arises from a process in which a multi-disciplinary team, considering a wide range of solutions, works closely with the community. Inclusive of context-sensitive solutions (CSS), Smart Transportation also encompasses network connectivity, and access and corridor management. It will help communities adapt to the new financial context of constrained resources.

LAND USE POLICIES IN THE REGION

In preparing this plan, Fleetwood Borough, Maiden creek Township and Richmond Township considered comprehensive planning policies, zoning policies and development trends within their boundaries, adjacent municipalities and Berks County. The following section summarizes these existing planning and zoning policies.

Existing Zoning

Fleetwood Borough

R-1 Low Density Residential – permits single family detached homes on 10,000 square foot lots. Allows single family semi-detached, on 5-acre minimum tracts with at least 4,000 square foot lots per unit, by conditional use. Also allowed by condition on 5-acre minimum tracts are; townhouses at a maximum density of 12 units per acre, apartments at a maximum density of 16 units per acre.

R-2 Medium Density – permits single family detached homes on 6,000 square foot lots. This district permits semi-detached and duplexes on 4,000 square foot lots per unit. Also permits townhouses and apartments under the same conditions as the R-1 district.

C-1 General Commercial – permits a range of retail, service and offices uses without stipulating a specific minimum lot size. There are minimum set-backs, parking and off-street loading requirements. Within this district, residences in commercial buildings, gas stations, car washes and wholesale businesses are permitted with zoning hearing board approval. Townhouses and apartments are permitted under the conditions outlined in the R-1 and R-2 districts, provided that these developments are for senior citizen housing only.

I-1 Industrial – permits wide range of industrial uses. No specific minimum lots size is stipulated. There are minimum set-backs, parking and off-street loading requirements. Commercial businesses strictly related to a specific industrial use are permitted, but all residential uses are prohibited.

Maiden creek Township

A Agriculture – specifically for agricultural uses, except special intensified agriculture. All single family residential is governed by a sliding scale. Berks County considers this district Effective Agriculture due to the limitations placed upon uses other than agriculture.

R-1 Low Density Residential – permits single family residential on 2 acre lots.

R-2 Moderate Density Residential – permits single family, single family semi-detached, two-family by right. 1.5 acres lots with on-lot sewer and water, 10,000 square

feet with central sewer and water. Planned Residential Developments are allowed by special exception.

R-2A High Density Residential – permits single family, two-family on lots from 15,000 to 5,000 square feet. Multi-unit, townhouse and Planned Residential Developments are allowed by special exception.

R-3 Village Density Residential – permits single family, single family semi-detached, two family, multi-unit and townhouse on lots of 1.5 acres with on-lot sewer and water, 10,000 square feet with central sewer and water. Planned Residential Developments are allowed by special exception.

R-4 Multi-Family Residential – permits single family, single family semi-detached, two-family, multi unit, and townhouse on lots of 1.5 acres with on-lot sewer and water, 10,000 square feet with central sewer and water. Planned Residential Development and Mobile Home Parks are allowed by special exception.

C-R Commercial – Residential – permits day to day retail needs of the immediate area, including small offices and businesses and restaurants. Single family, single family semi-detached and multi-family are allowed on lots of 1.5 acres with on-lot sewer and water, 10,000 square feet with central sewer and water.

C-1 Local Commercial – permits commercial uses that are generally geared towards the local area.

C-2 Regional Commercial – permits larger commercial uses on 10 acre lots.

I Industrial – permits a combination of heavy commercial and industrial uses on lots of 50,000 square feet.

SIA Special Intensified Agriculture – permits mushroom production and composting along with other industrial uses.

Richmond Township

R-C Rural Conservation – permits single family on lots of 2 to 4 acres based upon net-out for steep slopes. Cluster Development is allowed by special exception on 50 acres. (currently in process of updating this language)

R-A Rural Agriculture – specifically for agricultural uses. Single family residential is allowed by conditional use and is subject to a sliding scale. Berks County considers this Effective Agricultural Zoning due to the limitations placed upon uses other than farming. (currently in process of updating this language)

R-1 Low Density Residential – permits single family on lots of 1.5 acres with on-lot sewer and water and .5 acres with central sewer and water. Cluster Development is allowed by special exception on 50 acres.

TN Traditional Neighborhood – permits single family, single family semi-detached, two family, two family semi-detached on lots of 1.5 acres with on-lot sewer and water and .5 acres with central sewer and water. Cluster Development and Mobile Home Parks are allowed by special exception. Mobile Home lots must be a minimum of 5,000 square feet.

R-2 Medium Density Residential – permits single family, on lots of 1 acre with on-lot sewer and water, 10,000 square feet with central sewer and water.

C-1 Village Commercial – permits local retail and businesses. Single family, single family semi-detached, conversions, multi-family, townhouse are allowed by special exception. Lot sizes are 1 acre with on-lot sewer and water, 10,000 square feet with central sewer and water. Multi-family developments require 5 acres. Townhouse developments require 3 acres.

C-2 Commercial – permits retail, services, business on lots of 10,000 square feet.

L-I Light Industrial – permits office, storage, warehousing on lots of 20,000 square feet.

I Industrial – permits heavy commercial and general industrial uses. Lot sizes are 1 acre with on-lot sewer and water, 20,000 square feet with central sewer and water. Residential uses are prohibited.

Adjacent Municipalities

At the present time there are no major conflicts between Fleetwood-Maiden creek-Richmond area’s land use policies and the planning or zoning policies governing adjacent lands. Following are the adjacent zoning categories:

Greenwich Township – This municipality shares the northeastern boundary with Richmond Township starting at Virginville running to the Maxatawny Township boundary. There are three zoning categories along the boundary; Agricultural Preservation, and Rural and Public Recreation/Open Space. Berks County considers the Agricultural Preservation zoning Effective Agricultural Zoning due to its limitations on uses other than farming.

Maxatawny Township – This municipality shares most of their eastern boundary with Richmond Township. There are seven zoning categories along the boundary; Agricultural Preservation, Agricultural Residential, Medium Density Residential, Residential, Light Industrial and Industrial.

Lyons Borough – This municipality shares their entire western boundary with a portion of Richmond Township’s eastern boundary. There are three zoning categories along the boundary; Low to Medium Density Residential, Planned Mixed Development and Light Industrial.

Rockland Township – This municipality shares their central northern boundary with Richmond Township. The entire boundary line area is considered Rural Conservation. There is also an EP-3 Steep Slope Overlay along parts of this boundary.

Ruscombmanor Township – This municipality shares their entire northern boundary with portions of all three municipalities. There are five zoning categories along the boundary; Residential, R-2 and R-2A are Multi-Family Residential, and LI-1 and LI-2 are Limited Industrial.

Muhlenberg Township – This municipality shares their most northern tip with Maiden creek Township’s most southwestern boundary. There is only one zoning category along the boundary, Low Density Residential.

Ontelaunee Township – This municipality shares their eastern boundary with Maiden creek Township’s entire western boundary. There are six zoning categories along this boundary; Rural, A-1 Agricultural, A-2 Agricultural, A-3 Agricultural, Low Density Residential and General Commercial.

Perry Township – This municipality shares the central and eastern portions of their southern boundary with the entire northern boundary of Maiden creek Township and the western portion of Richmond Township’s northern border. There is only one zoning category along the entire boundary, Rural-Agriculture. Berks County considers this zoning category Effective Agricultural Zoning due to the limitations on uses other than farming.

Berks County Comprehensive Plan

The Fleetwood-Maiden creek-Richmond Joint Comprehensive Plan is generally consistent with the Berks County Comprehensive Plan, Vision 2020. The County is currently in the process of updating their Comprehensive Plan.

Overall, the Vision 2020 Future Land Use Plan and the Future Land Use Plan of the Fleetwood-Maiden creek-Richmond Joint Comprehensive Plan are calling for preservation of agriculture and environmentally sensitive lands and promoting future growth and development in the same general areas.

SUMMARY OF ASSETS AND CONCERNS

The Fleetwood-Maiden creek-Richmond area’s strengths and weaknesses are the basis for preparing a plan to guide the area’s future growth and preservation. This Plan attempts to capitalize on each municipality’s assets and identify ways to overcome or mitigate concerns. This Plan is the vision to planning for the future.

The following summary of assets and concerns reflects the themes most frequently cited by municipal officials, community leaders and residents who provided input into this plan. Citizen participation initiatives included public meetings, surveys given out to residents, surveys pick-up at local municipal offices and post offices, and interviews with municipal officials and other community and business leaders.

Assets

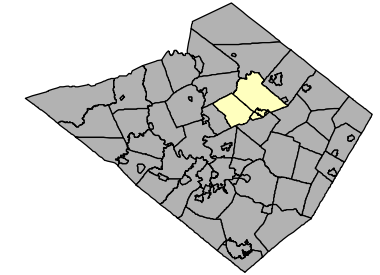
- Quality of Life is a genuine advantage due to the area’s combination of scenic beauty, school system, recreational opportunities, rural environment, strong agricultural community, and small town, village character.
- A Strong Sense of History, particularly involving the area’s Pennsylvania German and Quaker heritage along with the farming, industrial and railroad history of the area.
- Effective Agricultural Zoning in Maiden creek and Richmond is currently protecting a significant part of the two Townships’ prime farmland from suburban development and helping to preserve the area’s farming and farm economy. This is also supported by the Berks County Agricultural Easement Program and the Berks County Conservancy Agricultural Easements.
- Affordable Housing in the area supplies ample choice and opportunity to both prospective homeowners and renters. The area in the Borough has a ready supply of existing affordable homes and the areas in the southeastern section of Richmond and Maiden creek Townships have ample supply of both new and existing housing in a variety of sizes and types.
- Park System and Open Space found in the area are very well used and provide a different recreational opportunities for residents.
- Intergovernmental Cooperation between the municipalities through this planning effort will hopefully extend into other areas of mutual interest.

Concerns

- Residential Development in the Region has had a major affect upon the Fleetwood-Maiden creek-Richmond area’s rural and agricultural environment and increased service need from municipalities and the school district.
- Rapid Growth along the Route 222 Corridor, from the City of Reading to the City of Allentown, has contributed to traffic congestion, created hazardous ingress/egress conditions and resulted in some unforeseen residential and commercial development. In addition, the lower cost of housing in Berks County contributes to the increase of residents that live in Berks County, but travel to

- work outside the County. Other contributing factors include a lack of road enhancement projects to the Corridor to improve capacity and development pressures from areas outside of the region.
- Failing Septic Systems in Virginville and Ruscombmanor Township (near Fleetwood's water source) are a health hazard and concern to Fleetwood, Richmond and all downstream users of the waters that flow from the Maiden Creek Watershed to the Schuylkill River and beyond.
 - Continuing to conserve farmland and other open space, including sensitive natural areas such as steep slopes, woodlands, habitat, riparian buffers and flood prone property, is an important issue in preserving the area's unique character.
 - More Business/Industrial Development is needed in the appropriate locations that provide family supporting jobs and stimulate the area's economy. This includes various types of manufacturing, research and development and other professional services.
 - More Public Parkland and Improvements to Existing Parkland were viewed by many residents as a genuine need in the area. Residents are interested in parkland, hiking and biking opportunities and open space.
 - Historic Structures and Farms, which many residents listed specific structures or farms as "treasures", in the area should be preserved and/or protected.
 - Traffic Congestion in other areas of the Townships and Borough, not just Rt. 222, are a concern for the safety and movement of both residents and persons traveling through the area.

Transportation Network



Roadway Functional Classifications*

- Principal Arterial Freeways
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Railroad
- Inactive Railroad
- Streams
- Municipal Boundaries

* Numbered road segments indicate estimated daily traffic count volumes: August 2010
 Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

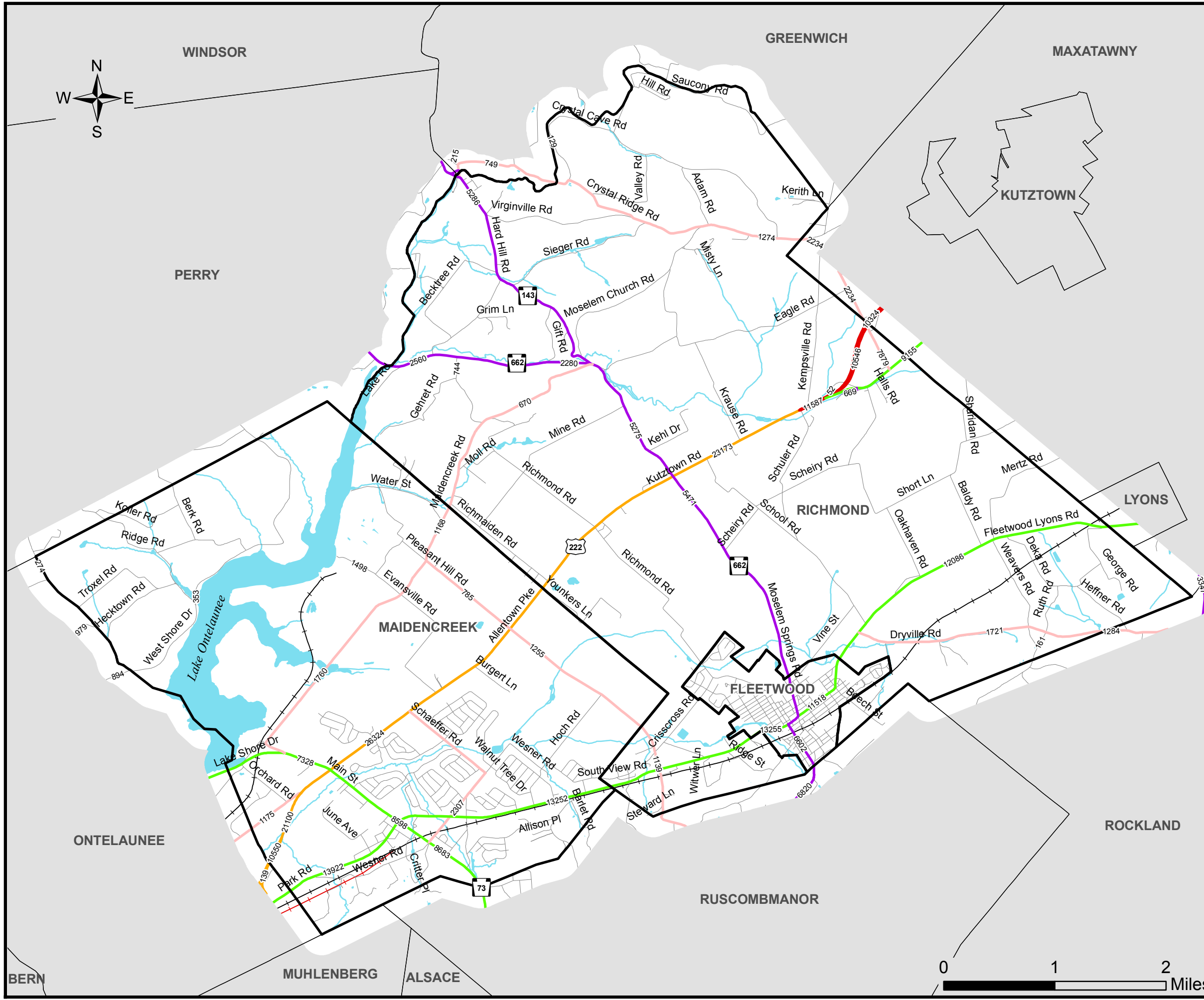
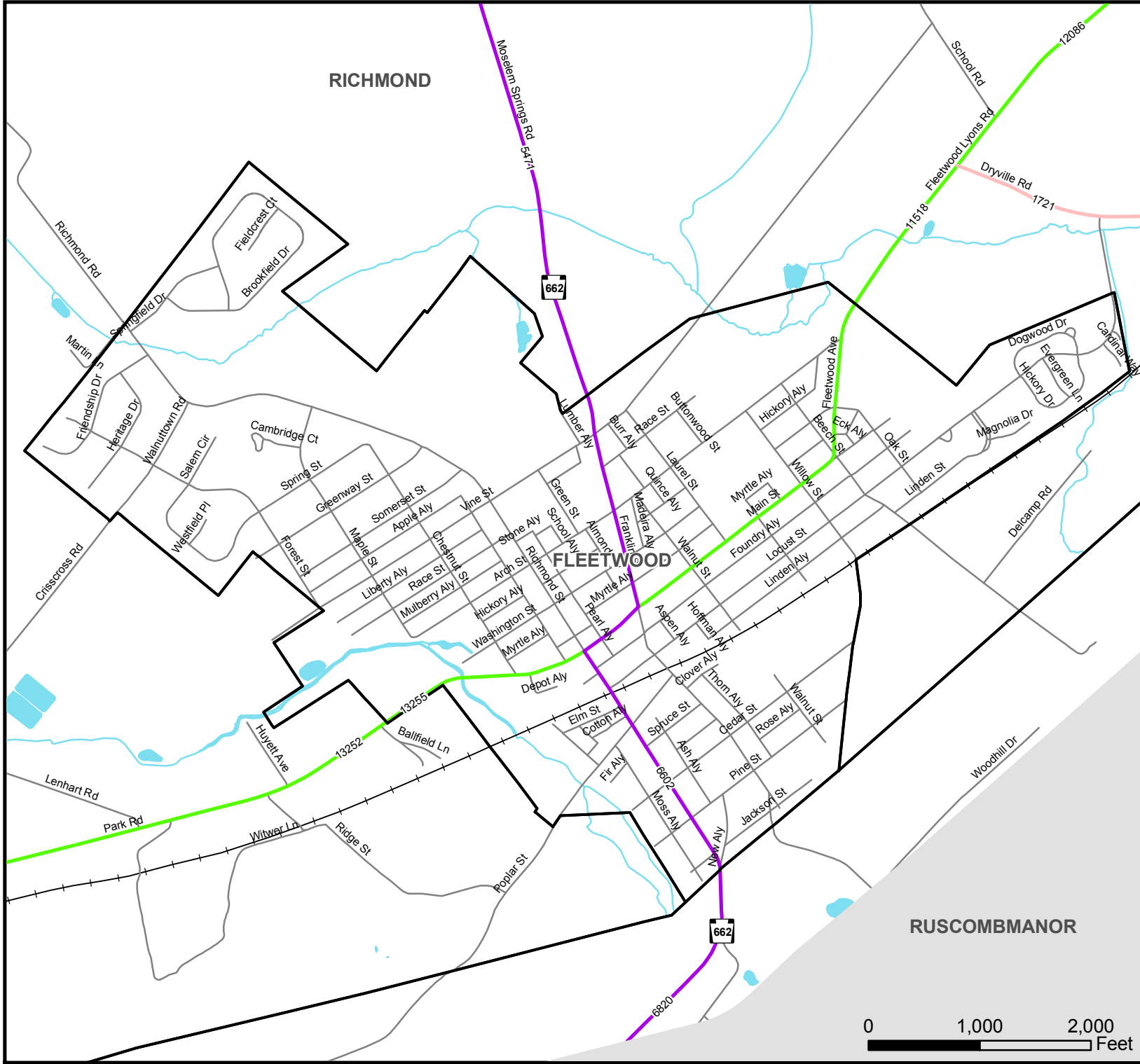


FIGURE 10-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Transportation Network



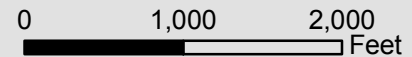
Roadway Functional Classifications*

- Principal Arterial Freeways
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Railroad
- Streams
- Municipal Boundaries

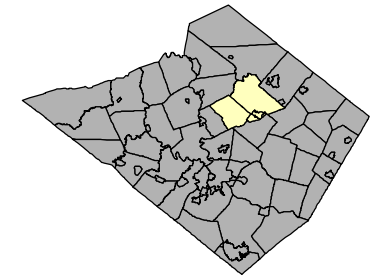
* Numbered road segments indicate estimated daily traffic count volumes: August 2010

Source data:
Base data - Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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Zoning



Zoning District Category*

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Industrial
- Industrial / Commercial
- Agriculture
- Effective Agriculture
- Rural
- Public Recreation / Open Space
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad

* Zoning district categories represent the individual ordinance designations and are not composite.

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, Fleetwood Borough, Maiden Creek Township, Richmond Township

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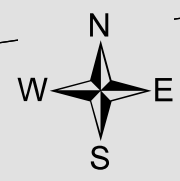
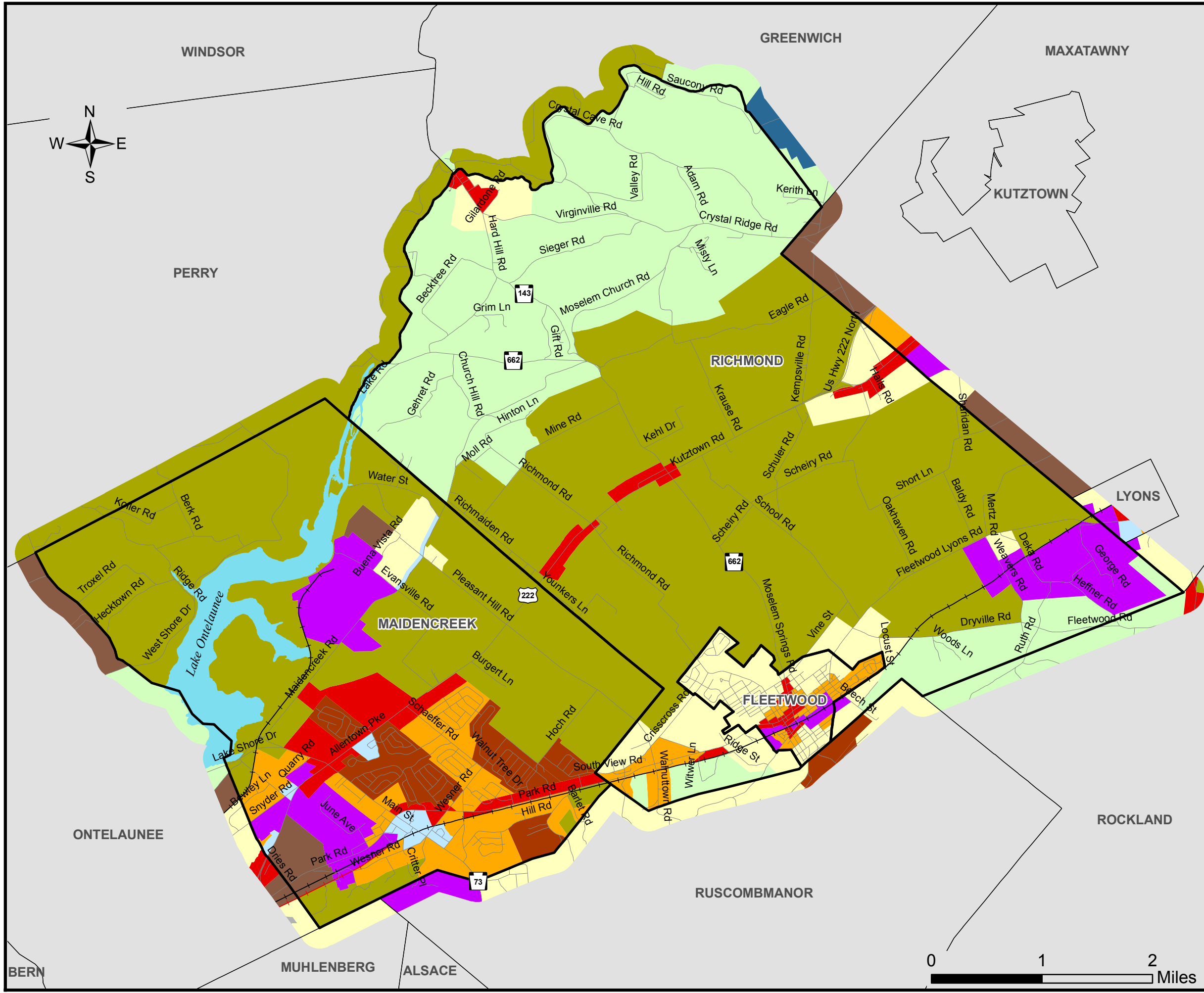
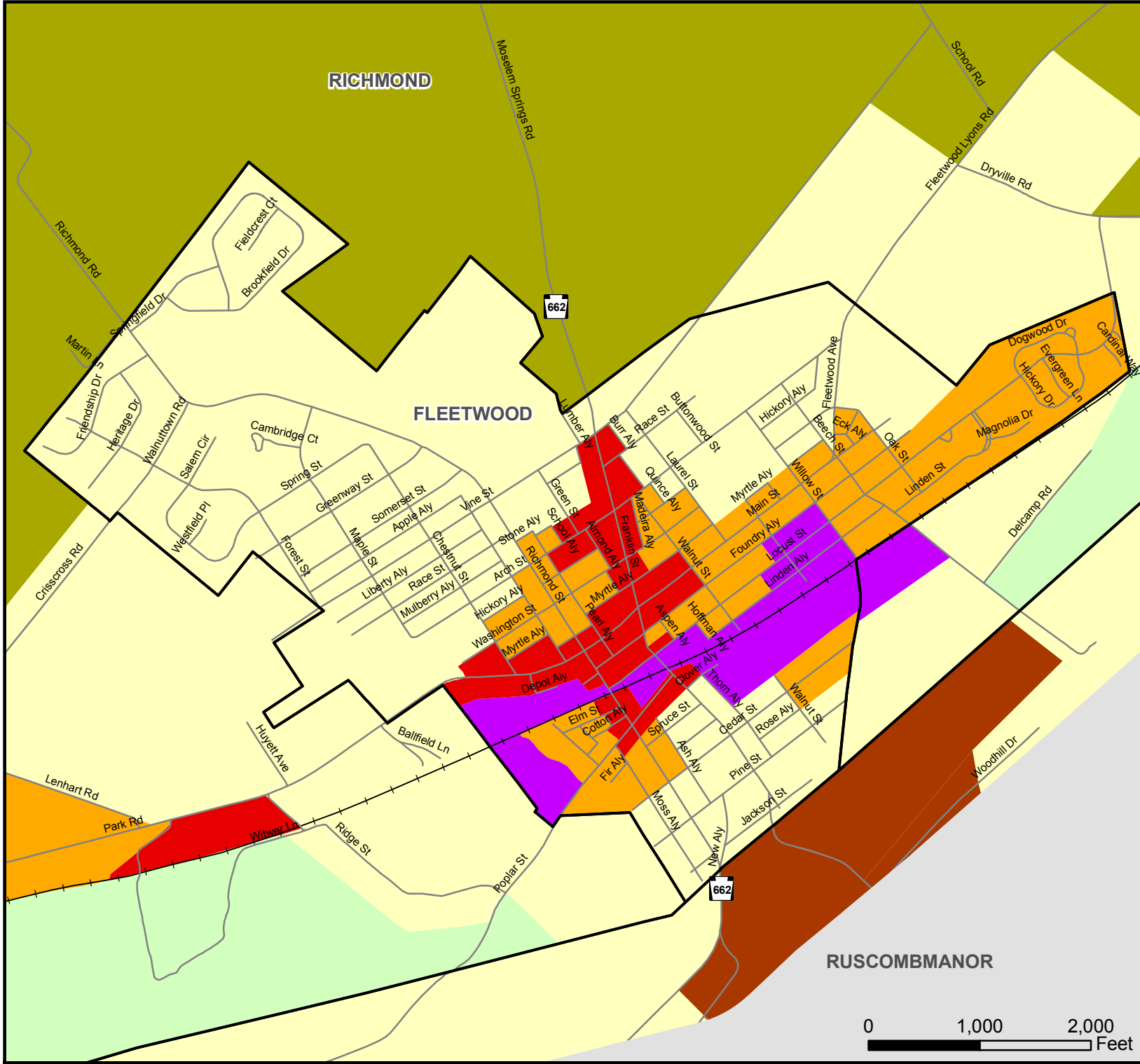


FIGURE 11-B

Fleetwood, Maiden Creek, Richmond
 Joint Comprehensive Plan Update
 September 2011

Fleetwood Borough Zoning



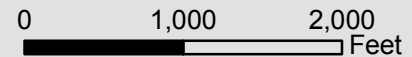
Zoning District Category*

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Industrial
- Industrial / Commercial
- Agriculture
- Effective Agriculture
- Rural
- Public Recreation / Open Space
- Municipal Boundaries
- Roads
- Railroad

* Zoning district categories represent the individual ordinance designations and are not composite.

Source data:
 Berks County Planning Commission, Berks County GIS,
 Berks County Department of Emergency Services, USDA
 NRCS

Published by the Berks County Planning Commission
 BAB 9/11



**A PLAN
FOR THE FUTURE**

A PLAN FOR THE FUTURE

The following goals and objectives provide guidance and direction for the growth and conservation of the Fleetwood-Maiden creek-Richmond area. The goals portray the Borough's and Townships' visions about the future of their area. The objectives are more specific statements about how the goals can be achieved.

Land Use Goal – Encourage land use patterns that provide a balanced variety of uses ensures compatibility between uses and respects the area's environmental resources.

Objectives

- Provide land for well-regulated development that is compatible with the surrounding uses.
- Accommodate residential and non-residential uses that will further the revitalization of downtown Fleetwood and support the Fleetwood Borough Architectural Overlay District.
- Require development layouts and designs that preserve important natural areas and open spaces within a tract of land.
- Direct new development towards areas with public sewer and water.
- Provide compatible types of development and uses to the adjacent municipalities.

Housing Goal - Provide opportunities for a variety of safe, well-maintained and affordable housing for all residents of Fleetwood, Maiden creek and Richmond.

Objectives

- Provide a variety of housing types and densities using environmentally sensitive layouts and design features.
- Concentrate housing in areas best suited for residential development.
- Preserve and enhance existing housing through proper maintenance and rehabilitation, especially within the older villages of Virginville, Blandon, Walnuttown and Fleetwood Borough.
- Encourage the rehabilitation and re-use of historic homes.

Environmental Conservation Goal – Conserve and protect the area's sensitive natural resources.

Objectives

- Preserve natural and scenic resources using a combination of regulations and voluntary initiatives.
- Direct growth away from environmentally sensitive areas such as steep slopes, floodprone lands, endangered species and woodlands.

- Preserve permanent open space in conjunction with future development.
- Identify opportunities to further link the network of publicly accessible passive greenways and open spaces in the area.
- Raise public awareness about the need to conserve the area’s unique natural environment.

Agricultural Preservation

Objectives

- Preserve concentrations of farms by continuing to promote Effective Agricultural Zoning, preferential real estate assessment, agricultural security areas, purchase of development rights by the County and others, and other farmland preservation techniques.
- Minimize non-farm activities near agricultural areas that cause conflicts with normal farming practices.
- Prohibit public sewer and water extensions into the area’s most productive agricultural areas.
- Provide additional, suitable, supplemental income opportunities in agricultural areas.
- Promote the agricultural products of the area.

Historic Preservation Goal – Preserve and enhance the area’s historic resources.

Objectives

- Increase public awareness about opportunities to preserve properties that are connections to the area’s unique heritage.
- Protect the character of Fleetwood and local villages by encouraging development compatible with existing architectural styles and patterns.
- Preserve historic resources using incentives for re-use.
- Use regulations that prohibit demolition by neglect and require a delay when applying for demolition of a historic structure.
- Support the efforts of local and county historic interest groups to identify and protect historic resources in the area.

Community Services and Facilities Goal – Continue to provide municipal-related functions at levels commensurate with the needs of the local residents and businesses.

Objective

- Continue to work with the Fleetwood Area School District to ensure future needs.
- Provide public sewer and/or water facilities where needed for public health or economic development purposes that do not encourage inappropriate growth.
- Support and expand the cooperation between different providers of police, fire and emergency services that will maintain service levels and are cost effective.

Fleetwood Borough – Maiden creek Township – Richmond Township Joint Comprehensive Plan
A Plan for the Future

- Work with community groups, private sector and adjoining municipalities to provide public recreation in a cost-effective manner.
- Create maintenance programs and capital budgets to ensure that all areas of the Townships and Borough continue to receive adequate road maintenance and other public work services.

Transportation Goal – Provide for the safe, efficient and convenient movement of people and goods throughout the Fleetwood-Maiden creek-Richmond area.

Objective

- Work with PennDot and local developers to ensure local roads and intersections retain capacity to safely accommodate increased traffic volumes.
- Work with PennDot and others to address existing safety concerns such as improper road alignment, intersections and hazardous access points to Rt. 222.
- Work with BARTA and Commuter Services to raise public awareness about the advantages of public transit, carpooling and other alternative means of commuting.
- Encourage the expansion of shoulders and development of trails and pathways to promote pedestrian and bicycle travel.
- Preserve sufficient right-of-way along Rt. 222 for future widening by increasing setbacks and requiring new development to dedicate right-of-way where appropriate.

Economic Development Goal – Create jobs and broaden the real estate tax base by maintaining existing responsible businesses and attracting new ones appropriate for the area.

Objectives

- Work together as a region to ensure that land areas designated for business are large enough, have good road access and have adequate water and sewer to attract and maintain business in the area.
- Encourage adaptive reuse of vacant or underutilized properties, especially in and around the older existing developed areas.
- Communicate with existing businesses to determine if there are specific issues that are affecting the businesses.
- Work with local businesses and area educational providers to ensure an adequate and trained local workforce.
- Make sure that local regulations do not unnecessarily overburden responsible businesses in the growth areas.
- Promote the areas' historic, agricultural and natural resources for tourism and encourage businesses that rely on and enhance these resources.

Inter-municipal Cooperation Goal – Explore additional opportunities to cooperate with neighboring municipalities in providing municipal services.

Objectives

- Improve communication and cooperation between the Townships and Borough concerning provision of public sewer and water service.
- Seek ways to reduce municipal costs through shared services, shared equipment, and joint purchasing.
- Make use of State grant incentives that give preference to municipalities that practice inter-municipal cooperation.
- Meet on an annual basis to discuss the Joint Comprehensive Plan and the implementation of the Plan.

Plan Interrelationships

The Joint Comprehensive Plan addresses the following major topics

- Land Use and Housing
- Environmental Conservation
- Agricultural Preservation
- Historic Preservation
- Community Services and Facilities
- Parks and Recreation
- Transportation
- Economic Development
- Inter-municipal Cooperation.

The planning components listed above are interrelated. Planning and capital programming actions taken in any one of these areas are likely to affect one or more of the other planning components. For instance, land use decisions often affect circulation patterns and community services, such as public utilities and recreation needs.

Timing of Development

The timing of development will depend upon the market for development. Currently, due to the recent economic recession the market is depressed. Development is also dependent upon the availability of public sewer and water systems. The majority of new construction in the area will take place in the areas that have public sewer and water systems.

The Joint Comprehensive Plan addresses development patterns for the next ten years. The three municipalities should meet on an annual basis to review progress of implementation of the Action Program. Every three to five years the municipalities should review the Plan to determine if there is a need to update the Plan. Fleetwood, Maiden creek and Richmond should carefully review the Plan and determine if there are any regulations that need to be updated to reflect the Plan.

LAND USE AND HOUSING PLAN

The Land Use and Housing Plan recommends appropriate types of densities of residential and non-residential uses that should be encouraged in each municipality.

The following categories are shown on the accompanying Future Land Use map (Fleetwood Borough, due to the scale is also shown on a separate larger scale map) and described in the following text.

Residential Areas

- Rural Conservation
- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Multi-Family Residential

Residential/Mixed Use Areas

- Commercial/Residential
- Town Center
- Village

Business and Industrial Areas

- Commercial
- Local Commercial
- Industrial
- General Industrial

Agricultural Areas

- Agriculture
- Special Intensive Agriculture

Other Areas

- Community Facilities
- Streams and Water Bodies
- Public Recreation

Residential Areas – The following six residential areas provide for a variety of housing types and densities. Each municipality has different conditions that require varied regulatory controls dependant upon the placement and impact of the housing type and density.

Rural Conservation

The Rural Conservation area mainly includes the steeply sloped, heavily wooded portions of Richmond that are least suited for development. These areas are found in the northern and extreme southern ends of the Township. Low density single family detached homes and agriculture should be the primary uses permitted in these areas.

Single family homes would be permitted on 2 acre minimum lot sizes. Minimum lots sizes would increase to 3 dependent upon the amount of construction proposed on slopes between 15-25% and be increased to 4 acres where building construction is proposed on slopes 25% or greater. If building sites are proposed on less than 15% slope, clustering would be encouraged whereby the minimum lot size would be reduced to one acre in exchange for the developer permanently preserving 40% of the entire tract in open space.

The permanent open space would not have to be dedicated to the Township. It could remain as part of private lots, be dedicated to a conservancy or be dedicated to a homeowners' association, at the discretion of the Richmond Township Board of Supervisors. The intent is that most of these open spaces would remain in their natural state requiring little maintenance. Open spaces that are not forested should be planted to eventually become forested.

Rural Residential

The Rural Residential area mainly includes those areas in Maiden creek and Richmond Townships that are not proposed for public sewer and water service. These areas are found in Evansville, near Irish Mountain at the boundary with Muhlenberg and Ruscombmanor Townships, along the Fleetwood Lyons Road at its intersection with Dryville Road and also at its intersection with Weavers Road, and near Kutztown Road and Oakhaven Road. Single family homes would be permitted on 1.5 to 2 acre lots sizes.

Low Density Residential

The Low Density Residential area would designate land for single family homes on 1.5 acre lots. Clustering would be strongly encouraged by permitting .5 acre lots if the development is served by central sewer (and central water if available) and the developer preserves approximately 40% of the entire tract in open space. These areas are found in Richmond Township outside of Fleetwood Borough on the east, south and west sides. It is preferred that these areas be connected to the existing public sewer and water systems provided these sewer and water systems have capacity.

Low Density Residential –with Traditional Neighborhood District Overlay

The Low Density Residential area designates land for single family homes on 1.5 acres. New developments in this area should be connected to public sewer and water and it is preferred that the developer use the Traditional Neighborhood Design Overlay Option. This would allow for single family homes on .5 acre lots and semi-detached homes on .25 acre lots. This area is located on the south side of Fleetwood Borough. The “traditional” styles of development compatible with the existing Fleetwood Borough environment would be encouraged. “Traditional Neighborhood” development recreates the best features of older developments such as the following:

- Pedestrian scale development that encourages walking and bicycling.
- A mix of housing types with smaller front yard setbacks and unenclosed front porches that promotes interaction among neighbors.
- Commons or common open space that is a focus for community life.
- Placement of garages and off-street parking along rear alleys, or to a rear corner of a lot with a side driveway.
- Avoiding excessively wide streets and intersections.
- Home designs that incorporate older styles of architecture.
- Street tree plantings.
- Lot widths that are narrower than are commonly provided today.

With this option the developer preserves approximately 40% of the entire tract in open space.

Medium Density Residential

The Medium Density Residential area would accommodate a variety of housing types, including single family homes, semi-detached, townhouses, and multi-family units. Single family homes with on-lot wells and septic systems would require 1 to 1-1/2 acre lots. Single family homes served by public sewer and water would be permitted on 10,000 square foot lots. Clustering of the homes would be strongly encouraged either as a cluster development or a Planned Residential Development and approximately 40% of the tract be set aside in permanent open space. Semi-detached, townhouse and multi-family developments would be required to have public sewer and water and thereby be permitted at higher densities of up to 4 to 6 units per acre. In Richmond Township Mobile Home Parks are allowed in this district at 5,000 square foot lots.

Transfer of development rights (TDR) could be used to achieve densities higher than 4 to 6 units per acre in the Medium Density Residential area. The TDR technique permits landowners in locations designated for conservation (“sending areas”) to sell their development rights to developers who use these rights to build in designated “receiving areas” at densities higher than zoning would otherwise permit. Central sewer and water are needed in the receiving areas so that developers can achieve the densities they need to make TDR financially feasible. In Richmond and Maiden creek, the areas designated as Agriculture and Rural Conservation could be established as TDR sending areas.

Medium Density Residential – Traditional Neighborhood District Overlay

This designation is found in the central-southern portion of the area in Fleetwood Borough and Richmond Township. The Medium Density Residential area would accommodate a variety of housing types, including single family homes, semi-detached, townhouses, and multi-family units. New developments in this area should be connected to public sewer and water and it is preferred that the developer use the Traditional Neighborhood Design Overlay Option. This would allow for single family homes at densities of 4 to 6 units per acre. Clustering of homes would be strongly encouraged and approximately 40% of the tract be set aside in permanent open space. Semi-detached, two-family, townhomes and apartments are allowed at densities of up to 6 to 8 units per acre. The “traditional” styles of development compatible with the existing Fleetwood Borough environment would be encouraged. “Traditional Neighborhood” development recreates the best features of older developments such as the following:

- Pedestrian scale development that encourages walking and bicycling.
- A mix of housing types with smaller front yard setbacks and unenclosed front porches that promotes interaction among neighbors.
- Commons or common open space that is a focus for community life.
- Placement of garages and off-street parking along rear alleys, or to a rear corner of a lot with a side driveway.
- Avoiding excessively wide streets and intersections.
- Home designs that incorporate older styles of architecture.

- Street tree plantings.
- Lot widths that are narrower than are commonly provided today.

With this option the developer preserves approximately 40% of the entire tract in open space.

High Density Residential

The High Density Residential area would accommodate each of the uses allowed in the Medium Density Residential area. Within the Borough multi-family units are allowed, either in the form of new apartment structures at a maximum density of 8 to 10 units per acre or carefully regulated conversion units that take into consideration quality of life issues. The High Density Residential area is also found within Maiden creek Township. This area also accommodates the same types of uses, but includes Planned Residential Development options, and the densities are slightly less. Densities within the Township would be 3 to 8 units per acre. All of the above development is targeted for public sewer and water.

Multi-Family Residential

The Multi-Family Residential area is only found within Maiden creek Township. This area is located at the intersection of Hill and Lee Spring Roads, abutting the Ruscombmanor Township boundary. Most of the area is undeveloped, except for a Mobile Home Park. All forms of residential development are allowed within this area, including Mobile Home Parks. It is anticipated that this area will have public sewer and water service. With on-lot sewer and water the lot sizes are 1.5 acres per unit. With public sewer and water lot sizes would range up to 5 units per acre.

Residential/Mixed Use Areas – these are areas that are found within the older parts of the three municipalities. Generally, when they were originally founded there was a variety of uses found within a small area. People generally lived where they worked and shopped. There are three districts in this category.

Commercial/Residential

The purpose of the Commercial/Residential area is to encourage the maintenance and growth of selected businesses along with the full range of residential uses. The majority of these areas are built out, therefore this district is proposing to take advantage of the existing buildings and allow small commercial uses such as professional offices, personal services and small retail stores within existing buildings; provided that the size of the use, its business hours and associated traffic patterns are taken into consideration. Within the Borough, this area is adjacent to the Town Center District and consideration of the Architectural Overlay District requirements need to occur. In Maiden creek Township the largest area with this designation is Blandon, however there are other smaller areas scattered throughout the Township. All of the designated areas in this designation are in the public sewer and water service areas, except for Evansville.

Town Center

The Town Center area would provide for both residential and certain non-residential uses. Residential uses in this area would be the same as those permitted in the High Density Residential area. Non-residential uses encouraged in this area would include a variety of retail, service and office uses. Zoning regulations would be used to ensure that the size and type of specific business uses are compatible with downtown Fleetwood and are consistent with the Architectural Overlay District requirements. For instance, new auto repair facilities are not an appropriate Town Center use. Special provisions would also be enacted that would promote mixed uses such as commerce on the first floor with upper story apartments.

Village

The Village designation is found in Virginville and in one area of Maiden creek on the north side of Park Road. This area would allow for small, neighborhood oriented retail, services and office uses in combination with a variety of residential uses. This area is very similar in nature to the Town Center District and therefore should also limit uses that are not compatible, along with the promotion of mixed uses of commerce and apartments where appropriate.

Business and Industrial Areas – These areas are lands devoted to commerce and manufacturing. These are the main shopping and employment areas of the three municipalities. There are four districts in this category.

Commercial

Commercial areas are designed to accommodate a variety of larger retail and service uses, including more intensive and highway oriented uses that are not appropriate for a village environment. Commercial areas are limited to areas that are found along Rt. 222 and an area along the south side of Park Road just west of Fleetwood. An important goal of this plan is to restrict unplanned growth of business uses in strip development fashion along Rt. 222. The intent is to allow Rt. 222 to mainly serve through traffic over the long-term.

Local Commercial

The local commercial category is designed to accommodate those businesses that are geared more towards the local residents. This district is found along portions of Rt. 222, Rt. 73 and Park Road in Maiden creek Township. It does not include uses such as shopping malls and other larger commercial uses.

Industrial

The Industrial category is found in Fleetwood Borough and Richmond Township. The areas found within the Borough are mostly existing and service industries such as Sunsweet Growers, Inc. and F. M. Brown and Sons. In this part of Fleetwood regulations should encourage the retention and expansion of these and other existing employers. Also, reuse of older industrial buildings should be encouraged by allowing a wide range of uses as long as they are compatible

with the adjacent areas. The area in Richmond is located west of East Penn Manufacturing, along the railroad and on the south side of the Fleetwood Lyons Road. Environmentally responsible light industry such as warehousing, electronics, research and development, office uses and other types of industry that is similar and compatible with the area.

General Industrial

The General Industrial area is found in four places within the Townships. The Lehigh Cement Company, for the most part, uses the first two areas. One area is located along Eagle Road and is used for quarrying, while the other is located in Evansville and contains both a quarry and processing facility. There are a few other businesses in the Evansville area, including W.D. Zwicky and Sons and Custom Milling and Consulting. The third area generally encompasses the East Penn Manufacturing lands. East Penn is the second largest employer in the County. This facility has research and development, recycling and manufacturing of batteries. The other large area is west of Blandon from the railroad north crossing over Rt. 222 and ending near the Maiden creek Municipal Building. This area includes the Excelsior Industrial Park, parts of the Giorgio mushroom operation and distribution facilities. Operations that are related to food processing and construction industries are the most prominent. The general industrial district is where the more intensive and noxious types of industrial uses should occur.

Agricultural Areas – These are areas that are intended for the continuation of farming and to reduce incompatible uses. It is important to make sure that the regulatory language for agriculture does not conflict with Pennsylvania Statutes.

Agricultural **

The Agriculture area is the largest category within this joint planning area. This district is dedicated to preserving the best farmland from conversion to other non-farming uses. Both Maiden creek and Richmond Townships currently have Effective Agricultural Zoning and use a sliding scale to control the amount of residential growth in the area. This is one of the strongest forms of protection for the agricultural community allowed by Pennsylvania Law. The existence of the strict regulations within this district has helped to encourage the preservation of prime farmland, existing farms and to avoid conflicts between farms and homes. Large numbers of properties within this district are also enrolled within an Agricultural Security Area. Act 43, the Agriculture Security Law, helps to protect farmers from nuisance regulations. Enrollment within the Agricultural Security Area also enables a farmer to apply to have their development rights purchased by the County and State. Large swaths of land in both Townships and even a small portion in Fleetwood have been eased.

Special Intensified Agriculture**

The Special Intensified Agricultural area recognizes the mushroom production facilities within Maiden creek Township. In addition to accommodating mushroom production, it allows for other, similar uses that are both agricultural and industrial in character, such as a mulching operation. There are two areas located in the Township, one is on the north side of Evansville and the other is along the east side of Dries Road.

Other Areas – This Plan also designates area for Community Facilities, Public Recreation and Streams and Water Bodies.

Community Facilities

Community Facilities include municipal buildings, schools, churches, fire companies, and the Fleetwood Borough’s sewer treatment plant.

Public Recreation

Public Recreation includes all of the public parks and Gamelands located within the area and certain private recreational opportunities.

Streams and Water Bodies

These areas are shown on the map and should receive additional protection through riparian buffers, plantings and where possible should include Greenway Corridors.

ENVIRONMENTAL CONSERVATION PLAN

Through discussions with the planning committee at public meetings and the public surveys conducted as part of this planning process most residents identify closely with the rural environment in the Fleetwood-Maiden creek-Richmond area. Local residents view the area’s farmland, wooded hillsides, creek valleys and scenic views as important assets worthy of protection. Once these assets are lost to development, the character of the area is changed forever. Accordingly, environmental conservation is a major goal of the Joint Comprehensive Plan.

The Value of Open Space

Open spaces serve the following essential functions, among others, in the area:

- Maintaining adequate groundwater through recharge and preserving ground water quality, particular concern is for those areas with on-lot water and the area surrounding Lake Ontelaunee.
- Providing an important aesthetic relief from built up locations and rapidly developing areas.
- Preserving areas of scenic beauty, such as the view from the northern and southern higher elevations into the valley.
- Preserving lands that are not naturally suited for development, such as steep slopes, floodplains, wetlands and other environmentally sensitive lands.
- Providing land for passive recreation, a need expressed by the residents that were interested in walking, hiking and biking areas.
- Preserving habitats for healthy populations of birds, fish and other wildlife.

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The following policies will help ensure that future development results in a minimal impact upon the region’s natural environment.

Only approve developments that respects the natural features of each site.

Each parcel varies greatly in the amount and type of development that it can naturally support. Certain areas, such as steep slopes and floodplains should remain completely in open space. The municipalities should consider the following guidelines when updating their regulations and reviewing subdivision and land development plans.

GUIDELINES FOR PROTECTING IMPORTANT NATURAL FEATURES

NATURAL FEATURES (TYPE & DESCRIPTION)	POTENTIAL PROBLEMS IF NOT PROTECTED	STRATEGIES FOR PROTECTION
Steep Slopes – Steep slopes of 15% have 15 feet of vertical change for every 100 feet of horizontal distance. Very steep slopes of 25% rise vertically 25 feet of 100 feet. Steep slopes are sometimes wooded and found along creeks. Steep slopes are prevalent throughout Richmond north of Eagle Road and Mine road and along some portions of the Township’s southern boundary.	<ul style="list-style-type: none"> • Difficulty of maintaining and snowplowing steep roads. • Higher costs of buildings. • High rate of septic system failures. • Increased erosion and runoff. • Winter driving hazards from steep roads and driveways. • Disturbance of scenic areas. • Increased costs to extend public water and sewer lines. 	<ul style="list-style-type: none"> • Use special precautions during building. • Site houses on the most suitable land, while keeping steep slopes in open space. • Keep natural vegetation intact. • Enforce municipal regulations that protect steep slopes. • Require larger lot sizes in steep areas. • Limit building on steep slopes of 5% to 25% and prohibit building on very steep slopes of 25% and above.
Groundwater – Groundwater is stored underground after entering through the soil or seeping from creeks. Maintaining the quality of this water is important because both private wells and public water systems are dependent upon groundwater. Residents of both Walnuttown and Virginville have reported problems with groundwater induced by local development.	<ul style="list-style-type: none"> • Polluted groundwater. • Dry wells. 	<ul style="list-style-type: none"> • Continue to control the percentage of lots covered by buildings and paving. • Ensure remaining septic systems are designed and operated properly. • Monitor underground storage tanks for leaks. • Avoid polluted stormwater runoff. • Avoid high volume withdrawals of groundwater. • Identify areas most feasible for future public water and sewer.
Floodplains – Areas that are prone to flooding include both legally designated floodplains and land along drainage channels. Significant 100-year floodplains in the areas that lie along the Maiden Creek, Sacony Creek, Moselem Creek, Willow Creek and unnamed tributaries.	<ul style="list-style-type: none"> • Increased flooding in other areas. • Loss of potential public recreation area. • Threats to important wildlife and bird habitats. 	<ul style="list-style-type: none"> • Prohibit construction of new structures within the 100-year floodway (which is the actual main flood channel) and along the adjacent 100-year flood-fringe. Prohibit construction within 50 to 100 feet of the centerline of a stream (depending on stream size). • Seek to preserve buffers of natural vegetation immediately adjacent to creeks and drainageways. • Seek to preserve more land along

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<p>Wooded Areas – Concentrated areas of mature tree growth are found throughout the region’s steeply sloped lands noted above and in other scattered locations.</p>	<ul style="list-style-type: none"> • Increased surface temperatures. • Loss of important bird and wildlife habitats. • Loss of hunting areas. • Loss of air purification. • Increased erosion and runoff. • Loss of scenic resources. • Noise and incompatible development may become more noticeable. 	<p>local streams and drainageways.</p> <ul style="list-style-type: none"> • Restrict cutting of trees during building to the building envelope and immediately adjacent areas. • Seek to preserve tree stands in public or private open space. • Seek replanting of trees that must be cut down.
<p>Shallow Depth to Bedrock – Areas with shallow soils and bedrock close to the surface are frequently found in steeply sloped locations.</p>	<ul style="list-style-type: none"> • Higher construction costs. 	<ul style="list-style-type: none"> • Avoid building in these areas.
<p>Natural Drainage Channels – Smaller natural channels that carry stormwater to local creeks during heavy storms exist throughout the region.</p>	<ul style="list-style-type: none"> • Increased flooding. • Erosion of soil. 	<ul style="list-style-type: none"> • Preserve adequate width along channels in open space. • Preserve erosion.
<p>Hydric Soils – Hydric soils, often located in the region’s wetland areas, have a shallow depth to the seasonally high water table.</p>	<ul style="list-style-type: none"> • Flooded basements. • Disturbance of natural drainage • Poor foundation stability. • Failed on-lot septic systems. 	<ul style="list-style-type: none"> • Continue to enforce local, state and federal wetland regulations. • Place on-lot septic systems and buildings outside these areas. • Waterproof basements of existing buildings. • Carefully design all facilities.

Clarify and strengthen the zoning regulations that protect the following areas:

Steep Slopes

Zoning regulations should have disturbance limits for steep slopes of 15-25% and even more restrictive limits for 25% and above. These regulations should specifically direct construction activities to flatter lands.

Wooded Areas

Encourage developers to preserve existing stands of trees that:

- are within ten feet of a proposed vehicle cartway, driveway, approved stormwater detention basin (unless the species is appropriate for a naturalized basin), paved area, and on-lot septic system.
- are within twenty-five feet of the foundation of an approved structure.
- are within an approved utility corridor.
- are dead or pose a clear danger to a structure, utility or public improvement.
- are a hazard to vehicular sight distance.

Protect trees during construction. Require that heavy equipment avoid the root systems of the trees that are to remain. This can be accomplished by flagging the drip edge of trees to identify where the root systems extend to and will prevent roots compacted by equipment, materials or change in grade level. Require replacement of trees with mature trees where trees were destroyed or damaged.

Stream Corridors

Floodplain regulations are designed to limit property damage during flooding events. Stream corridor protection measures actually help to protect the integrity of the stream itself. Regulations that help stabilize stream banks, reduce sediment, reduce nutrients that might pollute the stream, protect wildlife habitats and help to lower stream temperatures are important ways to protect and return streams to their original natural state. Municipalities should adopt minimum riparian buffers for stream protection. The width depends upon the stream classification, the higher quality the stream the larger the buffer needed to protect the stream.

Conservation Easements

Promote conservation easements as a less expensive way to protect open space areas. The purchase of easements allows for the property to still be on the tax rolls, private ownership of the physical land, less expensive form of preservation, and potential of receiving grant funds to help with purchase costs.

Use a variety of zoning techniques that set aside open space during subdivision and land development.

Zoning and subdivision and land development regulations can be used to establish permanent open spaces on tracts of land being developed. The resulting ownership can be preserved in public, private, non-profit or homeowner's association. When preserving open space the municipality should look for opportunities to connect these areas together into contiguous tracts.

The following are tools that promote the better design of developments. All of these options promote preservation of portions of the parcel that contain the site's sensitive natural areas. The developer would preserve and protect these areas from development. Generally the lot sizes become dependent upon the amount and type of sensitive features found on each specific site, this is called net-out of resources. Giving the developer an incentive to use these options is helpful in promoting the idea. The incentive does not have to be more lots, it could be smaller lots.

- Cluster options
- Planned Residential Design
- Conservation By Design

Density Transfer

This is usually called Transfer of Development Rights (TND). It allows a property owner in one part of an area to sell the development rights of their parcel to a developer in an area that has infrastructure and is targeted for growth. In this way, a property in the Agricultural or Rural Conservation area would be preserved.

Mandatory Dedication

Municipalities can use subdivision and land development regulations to require that developers donate land (or fees in lieu of land) for recreation. This preserved recreation land would also have open space value. This is not just for residential land; fees can be assessed for commercial and industrial land, also.

Encourage developers to use neighborhood design standards in conjunction with new developments.

The municipalities should encourage developers to design single family and other residential cluster subdivisions that ensure the following:

- Adequate contiguous open space exists to have a noticeable impact.
- Views from the road include open space rather than only homes and driveways.
- A site's features such as topography, vegetation, environmentally sensitive areas, and view are carefully considered in deciding how and where open space and homes are located.
- Open space is provided within neighborhoods for groups of 10 or more dwellings.
- Setbacks are established between neighborhoods and from certain site features such as roads, croplands and floodplains.

The following additional guidelines should be considered on how best to design and locate residential structures, adjacent open space and complementary landscaping. The guidelines are divided into four topics; site planning, architecture, landscape architecture and signage. All four sections should be used together when planning and reviewing new development proposals in the area.

Site Planning

- Orient uses to minimize objectionable views, such as service areas and the backs of buildings, from roadways and from scenic overlooks,
- Match scale and character of buildings and other uses to the scale and character of the site and the surrounding environment/area,
- Minimize impervious cover and encourage best management practices,
- Provide scenic overlooks wherever possible,
- Provide landscaping, especially around parking areas,
- Place utilities underground,

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- Minimize grading by the use of retaining walls, building orientation and running with contours,
- Avoid placement of buildings on ridgelines to protect views and woodlands, and
- Use curved driveways when developing in wooded areas to obscure the view of the house from the road.

Architecture

- Minimize the height of the proposed structure on ridgelines and in very visible locations,
- Reduce the building mass by breaking up the building into smaller components,
- Use indigenous building materials, such as stone, that mimic the historic structures of the area,
- Use compatible, earth tone colors that blend with the existing environment,
- Design structures to fit the topography rather than excessively grading the site, and
- Use pitched roof design features.

Landscape Architecture

- Minimize removal of existing trees, especially on ridgelines and along riparian buffer areas,
- Establish vegetative buffers adjacent to roadways,
- Screen objectionable views,
- Maximize parking lot landscaping and include best management practices to help reduce stormwater runoff and improve water quality, and
- Use native plant materials.

Signage

- Use materials that are compatible with the proposed or existing buildings and landscaping elements,
- Locate signs consistently throughout the development and group where possible,
- Avoid bright colors and internally illuminated signs, and
- Minimize temporary signs.

Amend each municipality's subdivision and land development ordinance to require the developers to use the following four steps towards better subdivision design.

Typically a developer is concerned with the number of lots that can be provided on a single tract of land, placement of homes and the layout of roads. Although the environmental factors are usually noted on the site plans, little consideration is given to other elements of the site, that may include a historic stone fence line, old apple orchard, or a stand of very large trees, features that can be preserved and help to represent and symbolize the rural character of the area. By conducting a more intensive analysis of the site, looking more closely at both the environmental

factors and other elements present on each site, developers should be able to achieve adequate densities without sacrificing rural character.

The following four steps are an effective sequential approach towards more conservation oriented design.

1. Identify Primary and Secondary Conservation Areas – Primary areas include sensitive natural areas: steep slopes over 25%, floodplains, streams and their buffers, wetlands, and habitats of rare, threatened and endangered species. Secondary areas include: slopes between 15-25%, scenic views, important local vegetation, unique geologic features and wet soils, historic structures, among other areas.
2. Identify Locations for Development – Next; locate potential development areas which include the remaining land left over after the primary and secondary conservation areas are identified. Carefully consider siting new homes, using the criteria discussed in the previous pages. Provide flexibility in lot sizes to accommodate placement.
3. Layout Roads and Trails – Show a road alignment that would most efficiently access all new homes. Also consider developing trails that link residents with the open space and other contiguous open space or trail networks.
4. Delineate Lot Lines – The final step involves delineating the boundaries of each lot, a step often done first in a development process.

AGRICULTURAL PRESERVATION PLAN

Agriculture is critically important to the economy and lifestyle of the Fleetwood-Maiden creek-Richmond area. Maiden creek and Richmond have established strong agricultural zoning regulations, formed agricultural security districts and facilitated acquisition of farmland development rights in an effort to preserve the region’s viable agricultural industry. Though some change is inevitable, preserving viable and productive farms is a major goal of this comprehensive plan. Effective agricultural zoning is the single most important agricultural preservation technique that a municipality can implement. Agriculture is an “industry” that requires land to operate, once land is developed the agriculture “industry” cannot operate. The following are additional recommendations on how to preserve the land in the region and help maintain a viable local agricultural industry.

- Encourage businesses and residents to buy local farm produce and products. Keeping farming profitable is a key to encourage the conservation of agriculture.
- Work with the farming community to address their concerns over issues that impede farming in the area.
- Maintain effective agricultural zoning, as shown on the Future Land Use Map. Use the sliding scale method and density transfer.
- Ensure ordinances protect and do not hinder agricultural uses within agriculture, conservation and rural areas.
- Encourage and aid the purchase of development rights and donation of conservation easements by working with the local landowners, the Berks County Planning

Commission, Berks County Agricultural Land Preservation Board, the Berks County Conservancy and other similar groups.

- Continue to maintain and encourage farmers to be part of the Agricultural Security Areas.
- Prevent central water and sewer service from entering areas that are proposed for agricultural preservation and conservation.
- Interact with the local, state and federal elected officials to ensure that the local views regarding farming are promoted.
- Use careful design and placement of residential structures to help reduce conflicts between farms and residences.
- Continue to support and work with farm service organizations including the Farm Service Agency (FSA) Natural Resources Conservation Service (NRCS), Berks County Conservation District, Berks County Cooperative Extension Service, 4-H, Granges, Farmers Associations and other such organizations.
- Permit a reasonable variety of farm-based businesses and smaller scale home based businesses, provided that they do not have a detrimental effect to the area or create heavy traffic. These businesses can offer important supplemental sources of income to farmers.

COMMUNITY SERVICES AND FACILITIES PLAN

The municipalities each provide, or help to provide, a variety of community related services and facilities to their residents. These include:

- **Municipal Buildings**
- **Emergency Management (police, fire and rescue)**
- **Public Water and Sewer Service**
- **Education**

Changing needs and rising costs challenge the municipalities to continue to deliver basic services, while trying to keep taxes down. Cost effective management, continued efforts to foster more regional cooperation will be necessary in the future to maintain the efficient delivery of community services that local residents expect. The following recommendations are proposed to help coordinate the continued efficiency and selected expansion of community services and facilities in the area.

Municipal Buildings

- Continue to maintain the existing municipal buildings and renovate or expand as necessary, and
- Continue to seek additional tenants for the Fleetwood Community Services Center, which contains the Borough's administrative offices and police station. Both non-profit and private local offices are appropriate and will help to defer the cost of upkeep of such a large structure.

Police, Fire and Rescue

- Continue to support the regional police forces within the area. Both the Northern Berks Police Force and the Fleetwood Police Force, which has an inter-municipal agreement to service Richmond Township. They should continue to evaluate the need for programs and personnel that help to deter crime, work with the schools and provide more effective services.
- Maintain financial contributions to local fire protection and rescue services. The area's local fire departments of Virginville, Blandon, Walnuttown and Fleetwood need to cooperate amongst themselves to provide the most responsive and efficient emergency services to the region. Municipalities should review fire department budgets and future recommendations for purchases to make sure that there is not duplication of equipment in the region.

Public Water and Sewer Service

- The municipalities should fully cooperate with each other and areas adjacent to the region to analyze how to best provide sewer and water extensions throughout the Fleetwood-Maiden creek-Richmond area. The municipalities should work together to avoid incremental, unplanned infrastructure extensions that may conflict with local and regional land use goals.
- The municipalities should contact each other when updating their Act 537 Sewage Facilities Plans and cooperate with each other to:
 - Determine recommended service area,
 - Determine where the sewer capacity is available or will need to be expanded,
 - Consider alternative sewer disposal methods,
 - Estimate capital and operating costs,
 - Identify various cost sharing formulas for improvements needed, and
 - Evaluate potential funding sources.
- Determine the most efficient manner of extending public water service where needed to implement the Future Land Use Plan. Discuss the need for bulk water purchase agreements and other basic financial and organization questions so that extensions can be initiated.
- Participate in local organizations, such as the Maiden Creek Watershed Association and others, that monitor local water quality.

Education

- Continue to coordinate with the Fleetwood School District regarding their facilities, safety issues and recreational uses at the district facilities.
- Fleetwood Borough, Maiden creek Township and Richmond Township should meet with the School District on a regular basis to identify current issues and future needs so that cooperation can occur to address issues and needs of both the District and the Municipalities.

HISTORIC PRESERVATION PLAN

The buildings and other structures that are remnants of the area’s heritage and early development are prevalent throughout the Fleetwood-Maiden creek-Richmond area. Local history and culture, as described in the Background Section and shown on the Historic Resources Map, are a source of local pride in all three municipalities.

Preserving the Historic Environment

The area has a wealth of historic structures and places, as identified in the Background Section. There are sites on the National Register of Historic Places that are formally certified as having national historic significance. There are many other National Register eligible sites, locally important sites and concentrations of historic buildings within the area. The following recommendations are intended to help preserve historic resources and conserve the rural and village qualities of the area.

- Continue to maintain the inventory within the Plan of historic resources and convey any new information to the Berks County Planning Commission for their Countywide Inventory.
- Investigate the availability of funds and partnerships to create an historic facade improvement program.
- Encourage historic façade easements to preserve key historic structures.
- Participate in marker programs that identify historic structures, places and events.
- Establish sign requirements that complement and enhance the area’s historic character. Zoning regulations, such as the Borough’s Architectural Overlay District, can establish sign requirements for size, material, lighting, and placement.
- Maintain key gateways to the Borough and Townships to promote the area’s history and enhance community pride.
- Make productive re-use of historic buildings to ensure their continued use and maintenance, while being sensitive to the architectural characteristics of the exterior and site.
- Implement the Fleetwood Borough Architectural Overlay District.
- Avoid demolishing buildings that contribute to the area’s historic small town charm. Adopt regulations that help to prevent demolishing buildings that are viable for re-use.
- Encourage developers of new homes to reflect the scale, proportions, spacing, setbacks and materials traditionally found in the Fleetwood-Maiden creek-Richmond area.

Historic Form

Fleetwood-Maiden creek-Richmond area’s historic value extends beyond historic structures. The area’s countryside, villages and Borough are examples of an historic farm and town development pattern no longer prevalent in most areas. The land use, agricultural preservation and open space conservation recommendations contained elsewhere in this comprehensive plan are designed to act in concert with suggested historic preservation initiatives to help preserve the area’s historic development pattern.

PARKS AND RECREATION PLAN

This section is intended to serve as the official recreation plan for Fleetwood and Richmond. Maiden creek Township has its own separate Open Space and Recreation Plan. This section and the inventory and needs analysis in the Background Report of this plan provides the basis under the Pennsylvania Municipalities Planning Code (Act 247, as amended) for Fleetwood and Richmond to require developers to donate either land or fees for recreation purposes. Recommendations in this section are designed to help accomplish the following objectives.

- **Expand local recreational programming.**
- **Establish more parkland in appropriate locations.**
- **Improve recreational facilities available at existing parks.**
- **Enhance administration of the area’s parks and recreation functions.**
- **Improve maintenance and safety at local parks.**
- **Conserve vital greenway segments.**

Recreation Lands and Facilities

- Acquire land in Richmond Township to establish a Township owned community park.
- Require athletic associations to wholly or jointly fund construction of any athletic fields in the new park.
- Identify those park facilities, such as the Fleetwood Borough swimming pool, that may be used on a more regional basis and work with the other municipalities to promote its use to their citizens.

Recreation Maintenance

- Require athletic associations to help maintain the fields that they use.
- Continue to conduct regular safety inspections at existing municipal parks and keep up to date with all new safety standards.
- Identify areas where the parks and facilities would be able to be made accessible to persons with disabilities and upgrades under the Americans With Disabilities Act.

Recreation Finance

- Amend the Richmond Township Subdivision and Land Development Ordinance to require residential developers to donate land or fees in lieu of land for recreation.
- Review Fleetwood Borough’s Subdivision and Land Development Ordinance, and revise if necessary, and strengthen the Borough’s mandatory dedication regulations so that fees can be substituted for land and the regulations apply to all residential developments.
- Determine if the municipalities want to add other types development uses for dedication of land and/or fees.
- Apply for state grants to enhance the parks and facilities in the area.

Recreation Programs

- Support the continuation and expansion of the current recreation programs.

Recreation Administration

- Establish a committee in Richmond Township to address recreation needs.
- The municipalities should work with each other to maximize the recreational opportunities of the region without duplicating services.

Greenways

- Work with Berks County, local conservation groups and local landowners to establish greenways along:
 - Abandoned rail lines paralleling the Maiden Creek between Virginville and Lake Ontelaunee.
 - Local greenways along creek tributaries that will connect the public schools, residential areas and other areas. An example would be Willow Creek.
 - Review the Berks County Greenway, Park and Recreation Plan, to determine if there are other important greenway interconnections that would benefit the area.
- Use a combination of the following techniques other than fee simple acquisition to establish rights-of-way for greenway corridors:
 - Conservation and access easements
 - Stream setback/buffer regulations
 - Donation or mandatory dedication

TRANSPORTATION AND CIRCULATION PLAN

GOAL: To achieve a safe, efficient, multi-modal, and cost-effective regional circulation system that will enhance pedestrian and bicycle movement; ease vehicular travel within the municipalities; minimize adverse impacts on residential neighborhoods; promote economic development; enhance the safety, mobility and livability of road corridors in the Region; and relieve congestion.

OBJECTIVES:

Streets, Highways and Bridges

- Prepare a prioritized program for road repaving and reconstruction in the Region instead of responding to these needs on an emergency, as-needed basis only.
- Prepare a prioritized program for repair and maintenance for municipality owned bridges.
- Establish and implement Capital Improvements Programming for roadway and bridge maintenance and, if necessary, replacement.

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- Use the highway design guidelines contained in the Transportation and Circulation Section of this plan when planning and reviewing new roads or road improvements
- Identify and set priorities for projects which are appropriate for inclusion in Berks County's Long Range Transportation Plan and the Transportation Improvement Program.
- Emphasize the need for PennDOT and transportation planning entities in Berks County, including the Reading Area Transportation Study (RATS), to support the recommendations of this Joint Comprehensive Plan with regard to needed improvements of state transportation facilities.
- Facilitate movement through the Region and into and out of the Region's communities.
- Define/identify industrial sites within the region and establish one universal truck route to service these sites.
- Obtain enhanced infrastructure rights-of-way and corridors for future road, trail, and other improvements, particularly during the planning process and highway occupancy permit process for developments.
- Establish consistent road signage policies.
- Establish design standards for roads and driveways and for building setbacks within the Region based on functional classification and need for future road improvements.
- Preserve the scenic, historic, and cultural road corridors in the Region.
- Enhance streetscapes along road corridors in the boroughs and villages.
- Identify opportunities to interconnect roads and walkways, provide alternative traffic routes, and facilitate emergency access when new developments are under construction.
- Consider/investigate the development of an official map where appropriate and coordinate individual maps with adjacent municipalities.
- Ensure that roads in agricultural areas may continue to accommodate agriculturally related vehicles and tractors.
- Engage and work with PennDOT in widening shoulders along routes 222 and 1010.
- Engage PennDOT about changing the designation of SR1010 to a PA Route.
- Investigate/determine the feasibility of extending Evansville Road so that it is a direct connection between Route 222 and Maiden creek Road.

Congestion Management and Mitigation

- Work with PennDOT to rectify Route 222, 662, 73 and SR 1010 congestion issues by:
 - Limiting direct highway access wherever feasible by using common entrances to adjacent business properties rather than multiple driveway cuts.
 - Controlling the size and location of signs to preserve vision triangles.
 - Requiring additional setback and appropriate landscaping along the highway to reduce highway noise and distraction to motorists.
 - Aligning driveways on opposite sides of the highway wherever possible instead of allowing staggered access points within close proximity of each other,
- Work with PennDOT and developers to ensure local roads and intersections remain safe and able to accommodate current and projected traffic volumes.
- Encourage business developments to share controlled ingress and egress to adjacent major roads such as PA Routes 222, 73, and 662 and SR 1010 as well as local collector roads.
- Review the appropriateness of implementing a joint traffic impact fee program.
- Manage access along the Region’s roads.
- Consider adoption of access management ordinances as a part of municipal Subdivision and Land Development (SALDO) requirements.
- Improve the efficiency of traffic flow and the safety of the Region’s roads and their intersections.
- Establish the responsibilities of developers for transportation improvements.
- Establish a mechanism to require traffic impact studies for industrial, commercial, and residential developments.
- Address impacts of land uses and new development on major road corridors in the Region.
- Mitigate impacts of non-residential traffic on residential neighborhoods

Public Transit

- Encourage use of mass transit through cooperative efforts with BARTA and area businesses
- Promote awareness about BARTA door-to-door van service for people that are physically not able to use regular BARTA service.

- Promote/Encourage the use of the Commuter Services of Pennsylvania Program for employer and commuter transportation to and from work.

Bicycle and Pedestrian

- Shoulders along roads should be constructed, widened or improved as necessary. Developers should improve shoulders along their properties.
- Promote future development of greenways and trails that will further walking, bicycling and other alternative transportation modes.
- Plan for safe and accessible routes of travel for pedestrians, bicyclists, individuals with disabilities, the elderly, plain sect populations and those without automobiles.
- Improve pedestrian safety in the Region by developing, improving and expanding the sidewalk system in residential areas.
- Consider a phased sidewalk replacement program in Fleetwood Borough starting with the areas most in need.
- Continue working with the Fleetwood Area School District to ensure adequate and safe pedestrian and bicycle access to all schools in the area.
- Consider/study the feasibility of connecting the Willow Creek Elementary School with the Fleetwood Borough Park using a pedestrian trail.
- Consider the installation of school zone speed limit signs and increased pedestrian amenities along Crisscross/Walnuttown Road for student bicycle and pedestrian safety as outlined in the Willow Creek Elementary School Safe Routes to School Final Report Dated February 2010.

Rail

- Use the availability of railroad access to promote economic and industrial development within the region.

ECONOMIC DEVELOPMENT/DOWNTOWN REVITALIZATION PLAN

Recommended land use policies in the Fleetwood-Richmond-Maiden creek area are based on the concept of preserving the area’s overall environment and quality of life. Within this context, local planning should support the area’s economy and the growth of local businesses. Maintaining existing jobs, creating new jobs, and enhancing tax revenues from business development and farming are important ingredients in a healthy local economy. A variety of industry, commerce, service oriented businesses and agriculture is important in maintaining a healthy and strong job base within the area.

Regional Business Development

- Ensure that the areas shown on the Future Land Use Map for business development have appropriate sewer and water service access.
- Work with the different economic development agencies to promote available areas for business development. The Chambers of Commerce, Industrial Development Authority, Berks County Community Development, Berks Economic Partnership and other entities are vital in promoting available buildings and space.
- Work with existing local businesses to ensure that their needs for infrastructure are met.
- Work with existing local businesses to determine future needs for business expansion and retention.

Downtown Fleetwood Revitalization

- Establish a Main Street Program in Fleetwood Borough.
- Implement the recommendations and regulations of the Architectural Overlay District. These recommendations cover the regulations of design, signage, materials, location, lighting, new construction, demolition, parking, among other requirements. The District also includes adjacent residential neighborhoods that are key in supporting the downtown revitalization.

Pedestrian Circulation

- All local business areas should consider construction of sidewalk systems that are handi-cap accessible.
- Existing sidewalks should be extended to link to new local business areas.
- Pedestrian circulation paths, where sidewalks are not needed, should link schools, local businesses and residential areas. These should be made of a material that allows wheel-chair accessibility.

Parking

- Locate parking areas to the sides or backs of buildings.

- Use landscaping to buffer perimeters and also require best management practices to help stormwater infiltration and quality. Depressed planting areas achieve this and provide needed shade for reduction of temperatures.
- Consider using pervious pavement or concrete to promote infiltration of stormwater.

Utilities and other Amenities

- Bury utility lines wherever possible, place behind buildings or in back of roadside vegetation when they cannot be placed underground.
- Locate delivery areas, service bays and outdoor storage at the rear or side of a building.
- Place trash dumpsters at the rear of buildings and screen them from view with aesthetically pleasing methods.
- Position air conditioning units, satellite dishes and other building equipment in the least visible areas.
- Construct fencing as low as possible, make it open instead of opaque and build it of wood, ornamental iron, brick or fieldstone rather than metal, plywood or concrete.

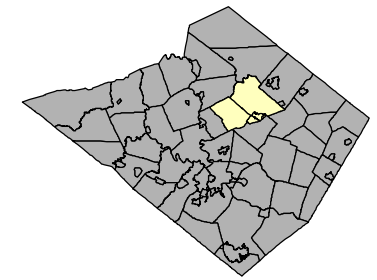
ENERGY CONSERVATION PLAN

This Plan recognizes that energy conservation practices and techniques are important to address as fossil fuels become more depleted and energy costs continue to rise. Locating commercial and certain types of industrial areas near residential development can help minimize the dependency on the automobile, provided sidewalks and infrastructure for pedestrian traffic is available. Fleetwood Borough and some of the developments within the Townships have sidewalks and crosswalks that help pedestrians maneuver. Sidewalks allow the school students residing in the Borough and other areas to walk home or to visit the local parks. Expansion of the sidewalk system will allow for safer access to community facilities within the region. Another area to address automobile fossil fuel consumption, in the future, may be to incorporate infrastructure that can accommodate electric powered vehicles.

As energy costs increase, it will become important to address solar, wind, and geothermal energy options. To maintain our neighborhood and regional community character, energy conservation techniques and practices will have to be addressed. Something as simple as permitting laundry to be hung outside on a line to dry, using window shades, and positioning home sites can have a large impact on saving energy. By examining and incorporating energy conservation techniques and practices into municipal documents in the future, residents may become more aware of the opportunities and different ways to save energy. It is important to keep in mind that energy conservation begins with education and incorporation.

Energy conservation technology is always changing. The changes can include improvements to the technology itself, different installation methods, or different designs. The continuous changes to the technology over time make it more affordable and easier to regulate in a variety of districts. The municipalities in this Plan should continually review the various options for energy conservation and alternative options to foster ideas on regulating for energy conservation uses. The continual review will also help municipal officials stay current and up-to-date on energy conservation technology.

Future Land Use



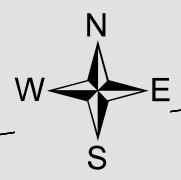
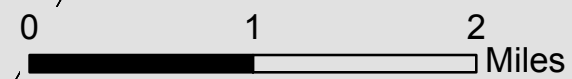
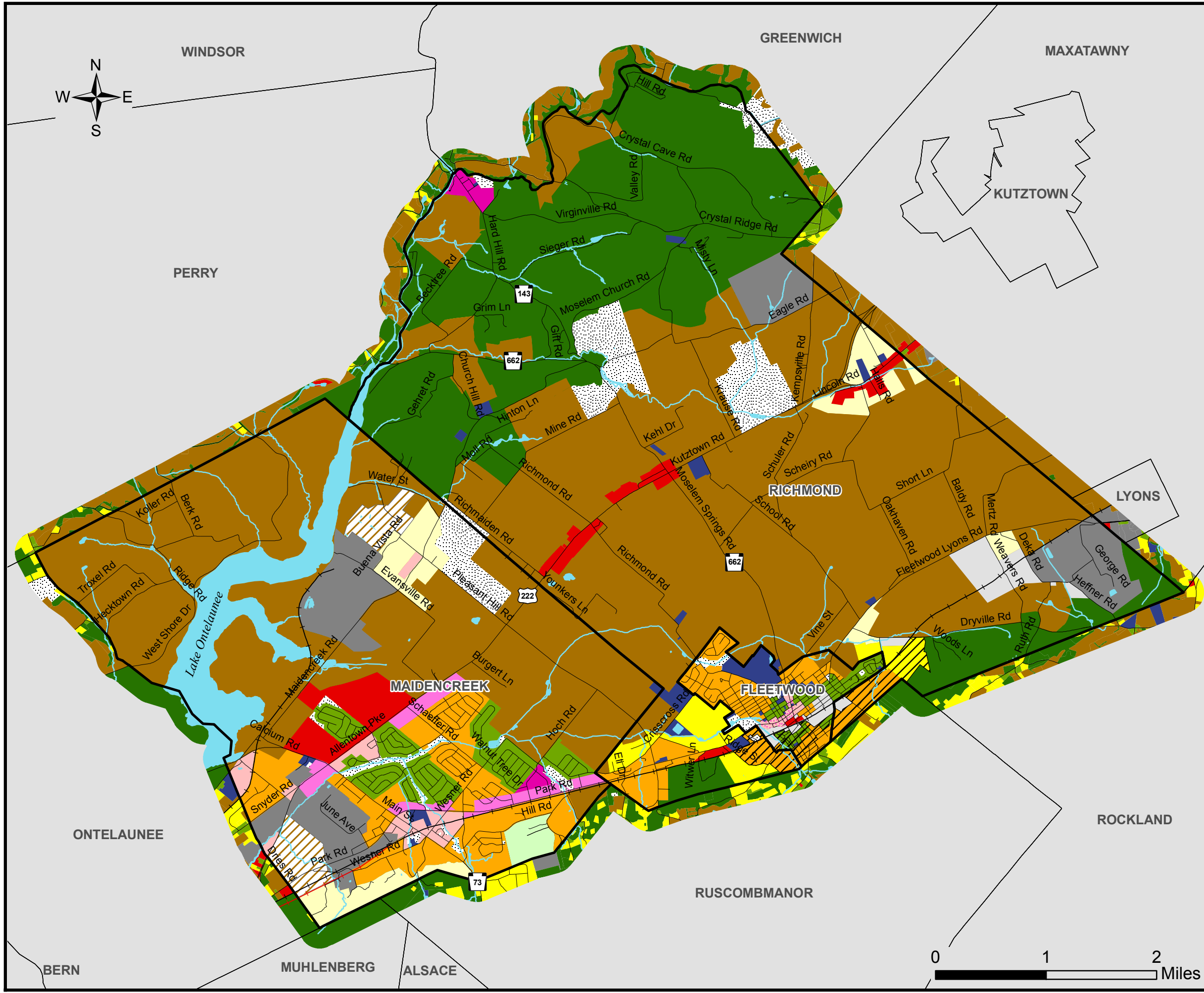
Future Land Use

- Agricultural
- Special Intensified Agricultural
- Commercial
- Local Commercial
- Commercial/Residential
- Community Facilities
- Streams and Water Bodies
- Industrial
- General Industrial
- Rural Conservation
- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Multi-Family Residential
- Public Recreation
- Town Center
- Village
- Traditional Neighborhood District Overlay
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services

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WINDSOR

GREENWICH

MAXATAWNY

PERRY

KUTZTOWN

RICHMOND

LYONS

MAIDENCREEK

FLEETWOOD

ROCKLAND

ONTELAUNEE

RUSCOMBANOR

BERN

MUHLENBERG

ALSACE


FIGURE 12-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Future Land Use



Future Land Use

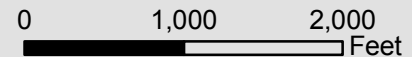
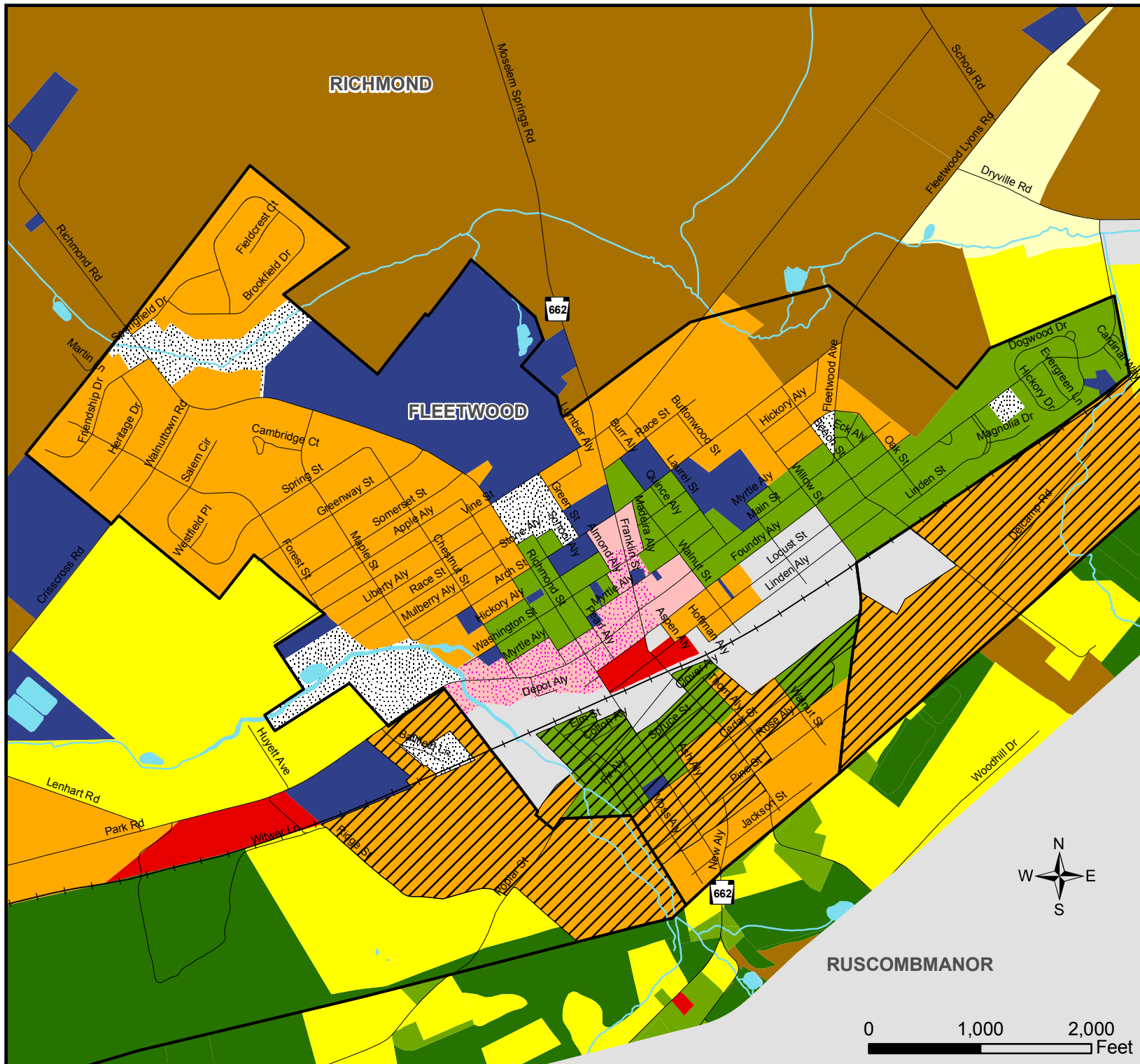
-  Agricultural
-  Special Intensified Agricultural
-  Commercial
-  Local Commercial
-  Commercial/Residential
-  Community Facilities
-  Streams and Water Bodies
-  Industrial
-  General Industrial
-  Rural Conservation
-  Rural Residential
-  Low Density Residential
-  Medium Density Residential
-  High Density Residential
-  Multi-Family Residential
-  Public Recreation
-  Town Center
-  Village
-  Traditional Neighborhood District Overlay
-  Municipal Boundaries
-  Roads
-  Railroad

Source data:
Base data - Berks County Planning Commission, Berks
County GIS, Berks County Department of Emergency
Services

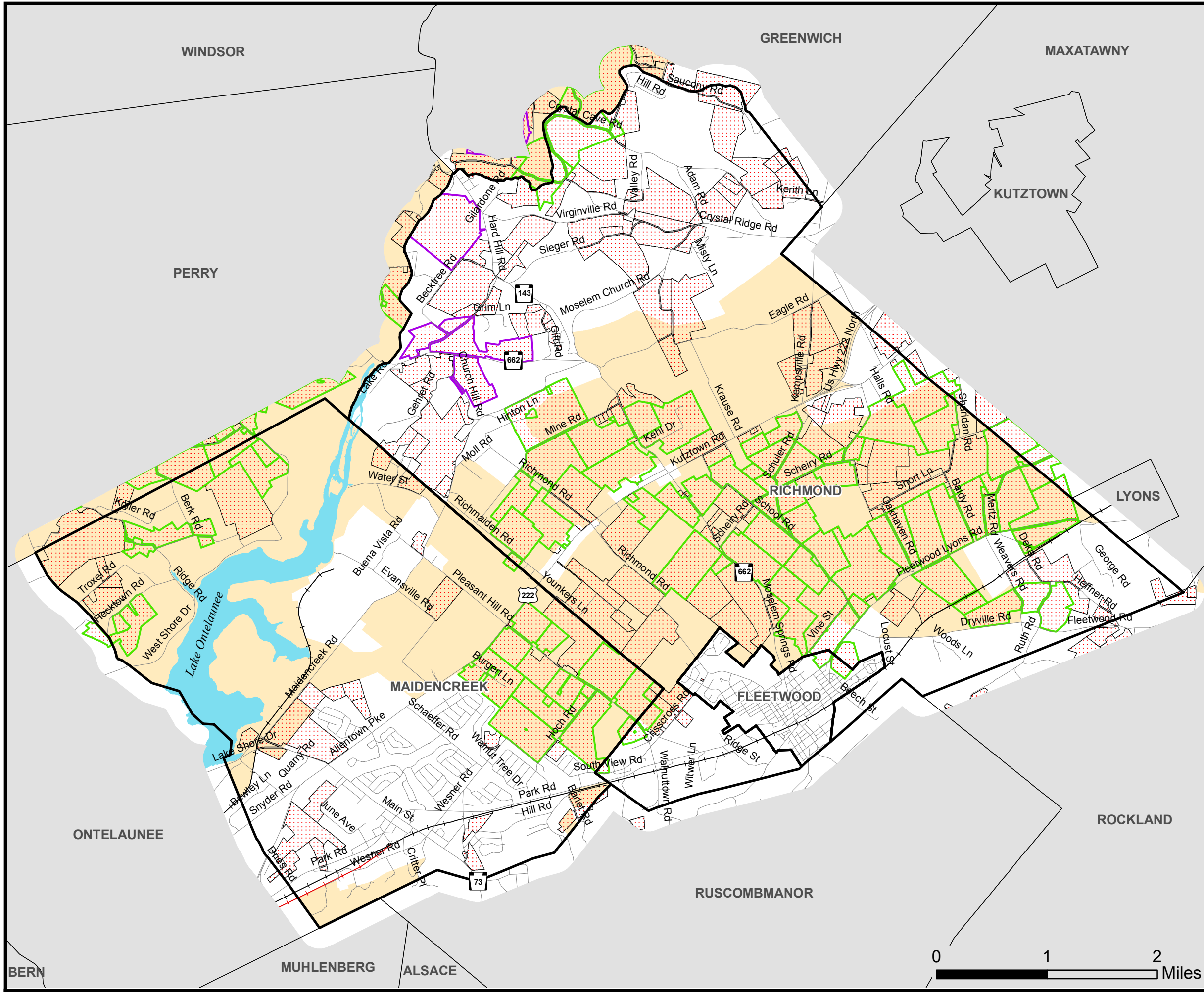
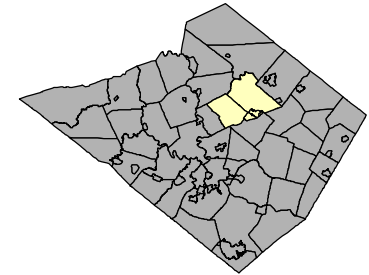
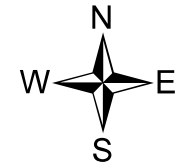
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Agricultural Preservation



Legend

- Berks County Agricultural Easements
- Berks Conservancy Agricultural Easements
- Agricultural Security Areas
- Effective Agricultural Zoning
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, Berks County Conservancy

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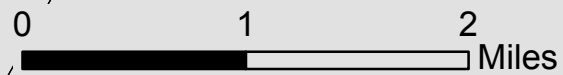
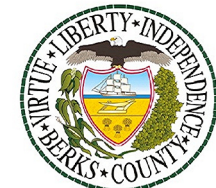


FIGURE 13-B

Fleetwood, Maiden creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Agricultural Preservation

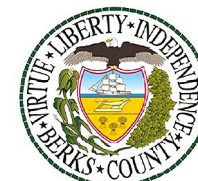


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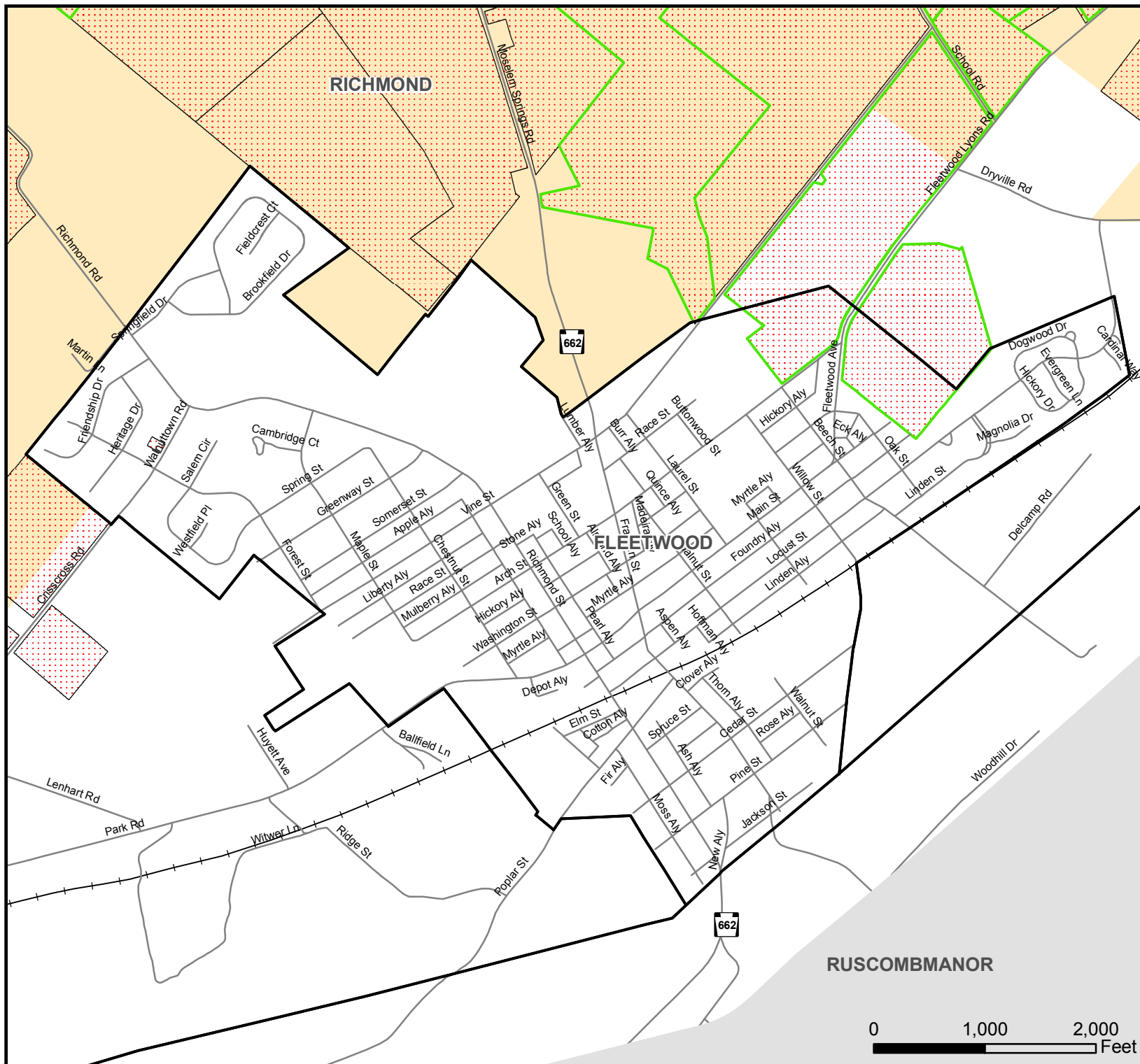
- Berks County Agricultural Easements
- Berks Conservancy Agricultural Easements
- Agricultural Security Areas
- Effective Agricultural Zoning
- Municipal Boundaries
- Roads
- Railroad

Source data:
Berks County Planning Commission, Berks County GIS,
Berks County Department of Emergency Services, Berks
County Conservancy

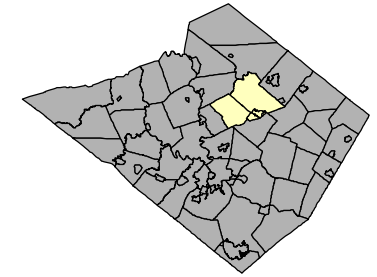
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Transportation Improvements



Legend

- ★ Project in Process
- ⊕ Intersection Improvement
- ⊗ Railroad Intersection Improvement
- Bridge Improvement (Functionally Obsolete)
- ⊕ Bridge Improvement (Structurally Deficient)
- Structurally Deficient and Functionally Obsolete
- Planned Roadway Improvements
- - - Potential Trail Connection
- Potential Railroad Extension
- Roads
- Railroad
- Inactive Railroad
- Streams
- ▭ Municipal Boundaries

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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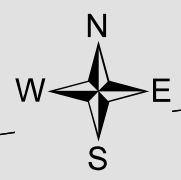
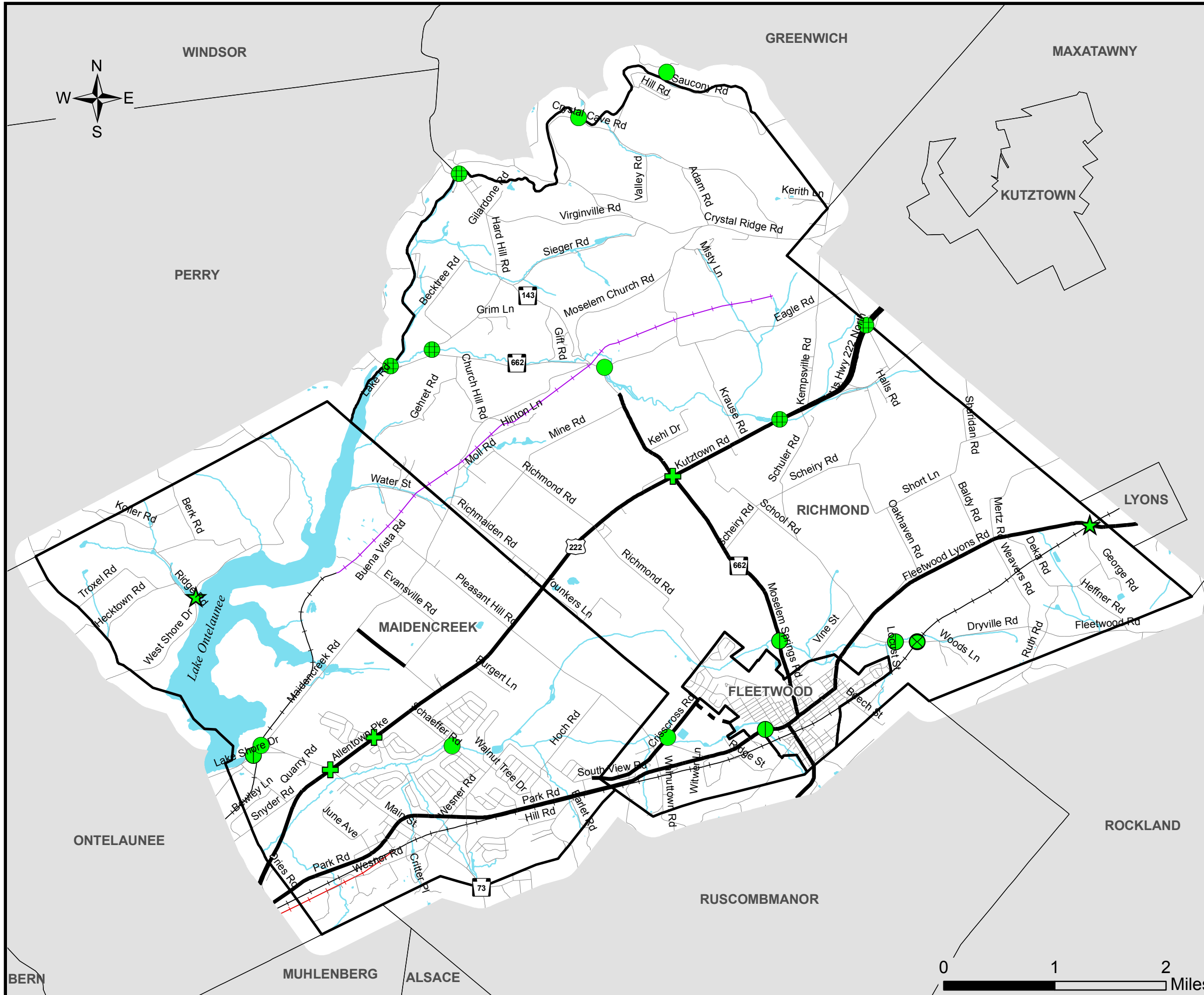
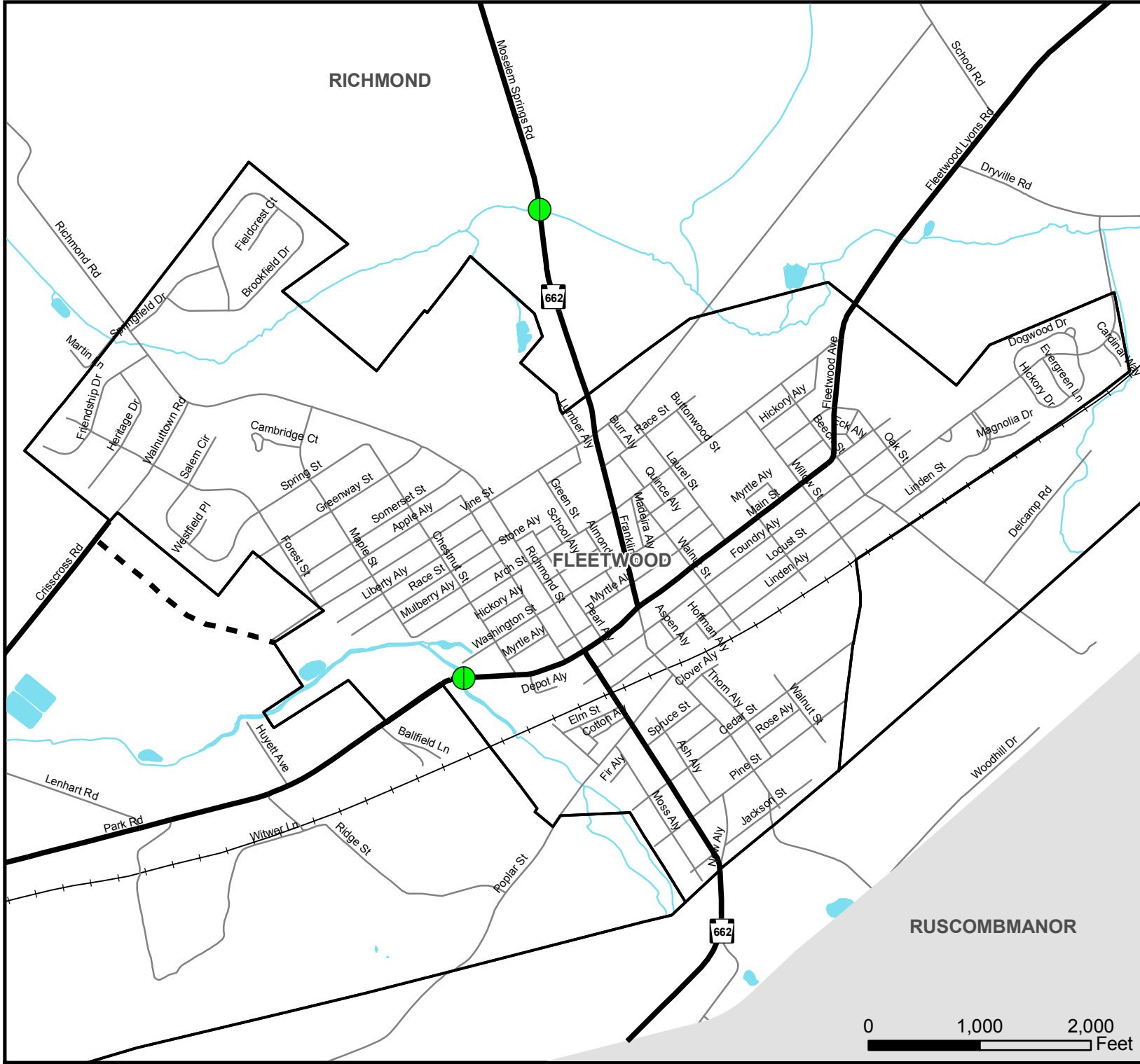


FIGURE 14-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Transportation Improvements

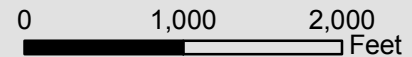


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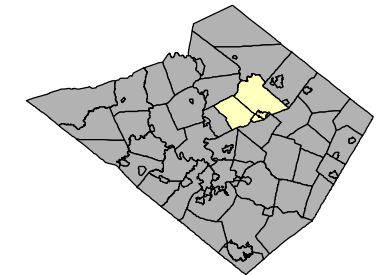
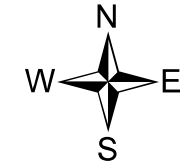
- Bridge Improvement (Functionally Obsolete)
- Planned Roadway Improvements
- Potential Trail Connection
- Roads
- Railroad
- Streams
- Municipal Boundaries

Source data:
Base data - Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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Transportation Multi-Modal Network



Legend

- Sidewalks
- Barta Routes
- Bike Routes
- Roads
- Railroad
- Inactive Railroad
- Municipal Boundaries

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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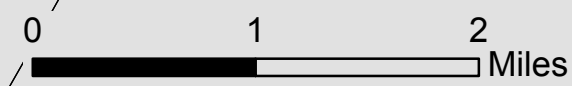
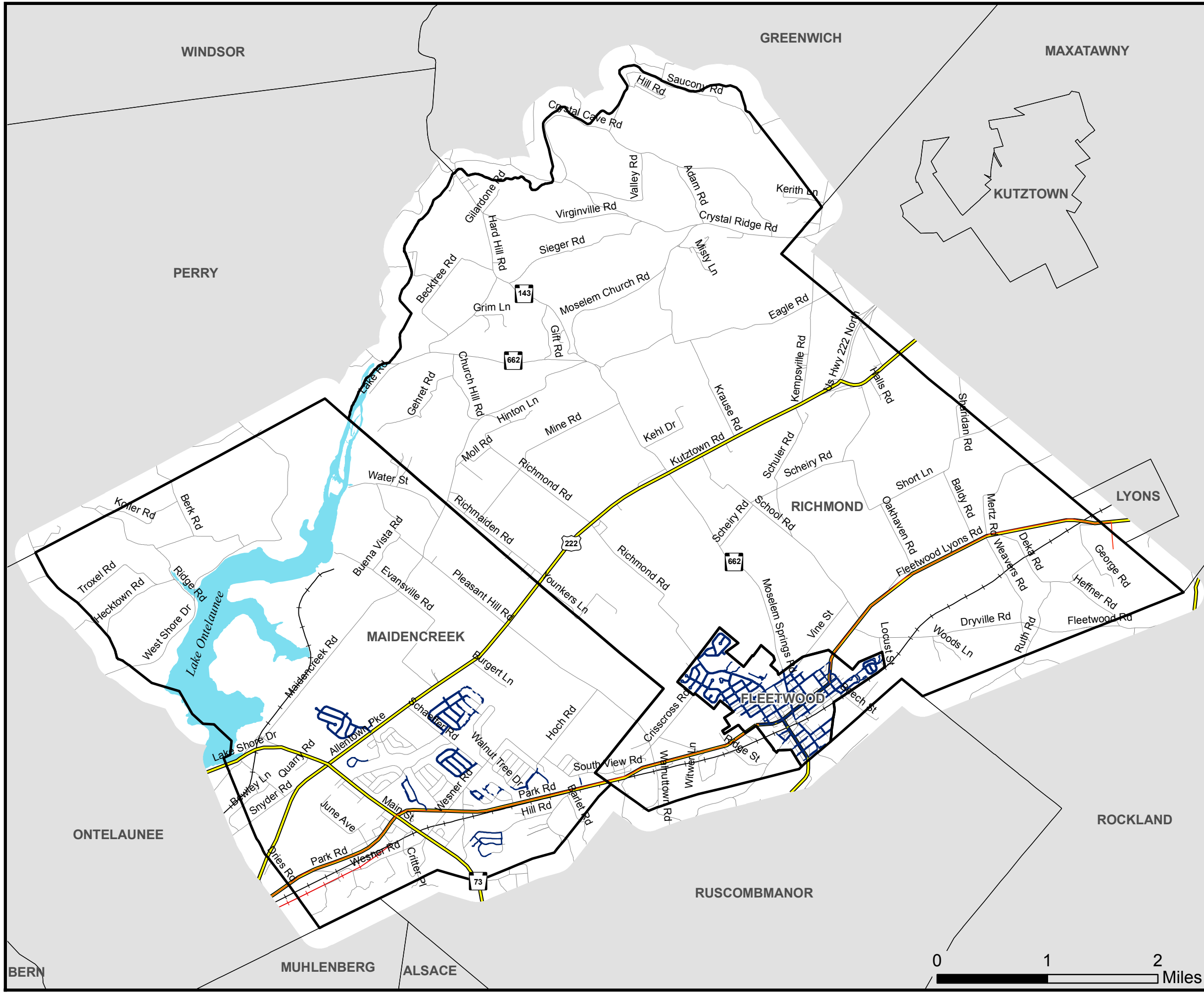
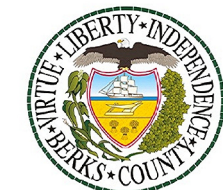
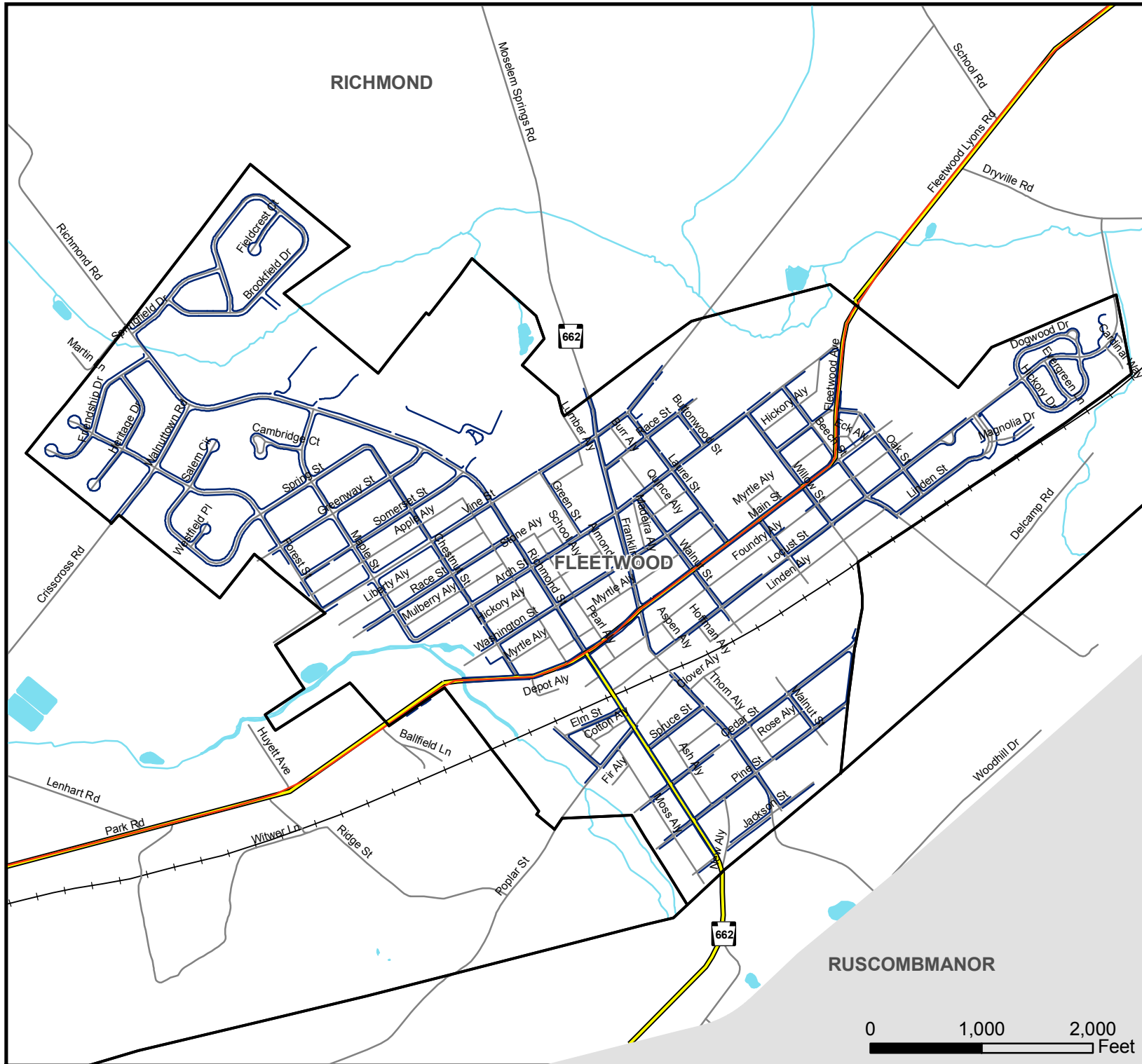


FIGURE 15-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Transportation Multi-Modal Network



Legend

- Sidewalks
- Barta Routes
- Bike Routes
- Roads
- Railroad
- Streams
- Municipal Boundaries

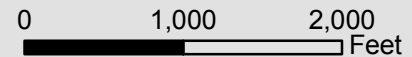
Source data:
Base data - Berks County Planning Commission, Berks
County GIS, Berks County Department of Emergency
Services, PennDOT

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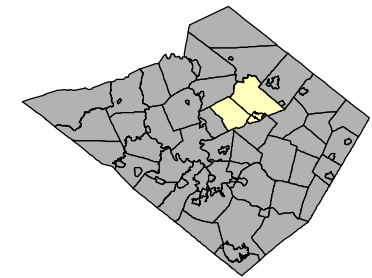
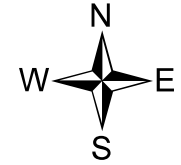
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Transportation Bridges and Railroad Crossings



Legend

- State Bridges
- Local Bridges
- AT Grade Railroad Crossings
- Grade-Separated Railroad Overpass
- Traffic Signals
- Municipal Boundaries
- Roads
- Railroad
- Inactive Railroad
- Streams

Source data: Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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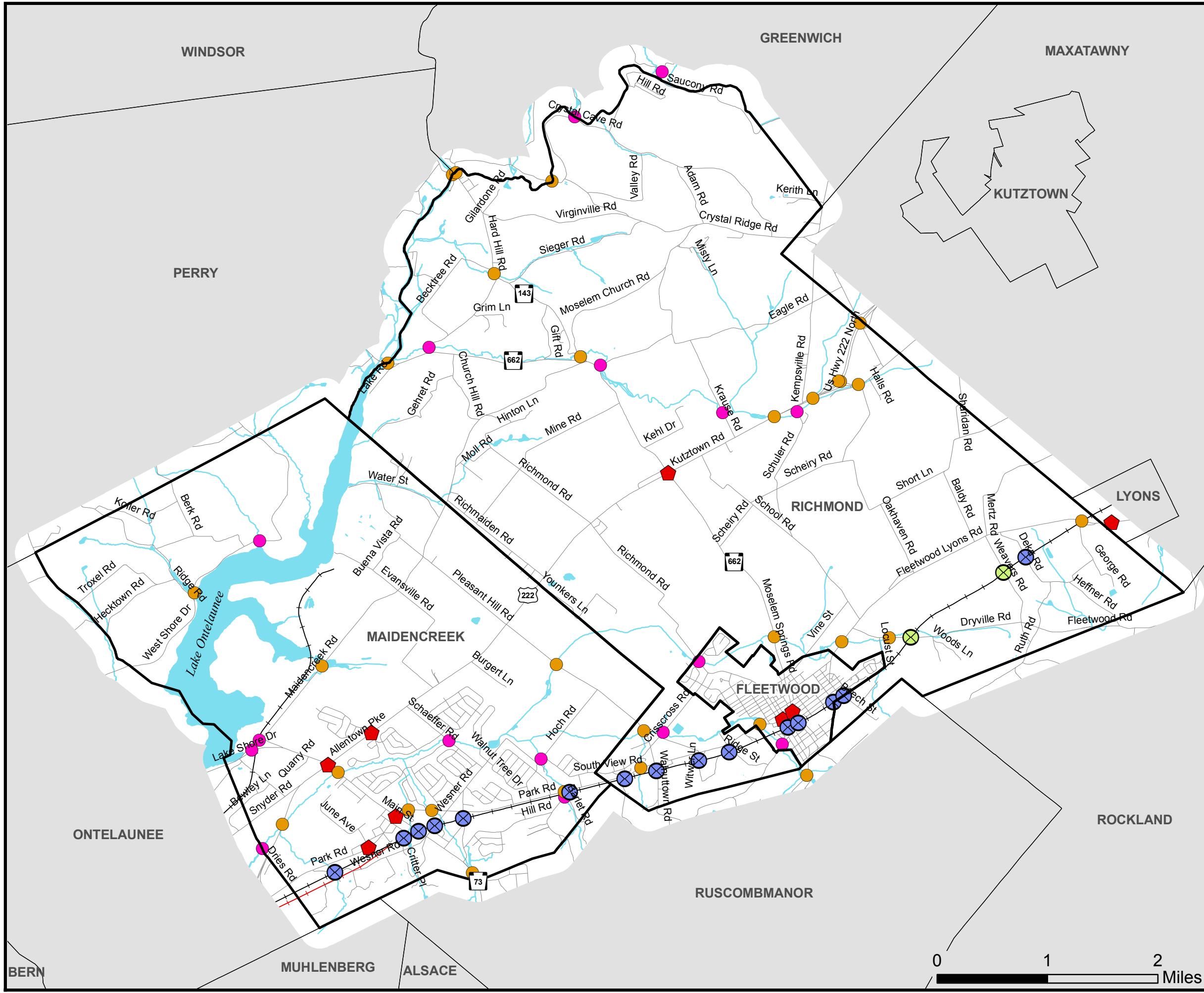
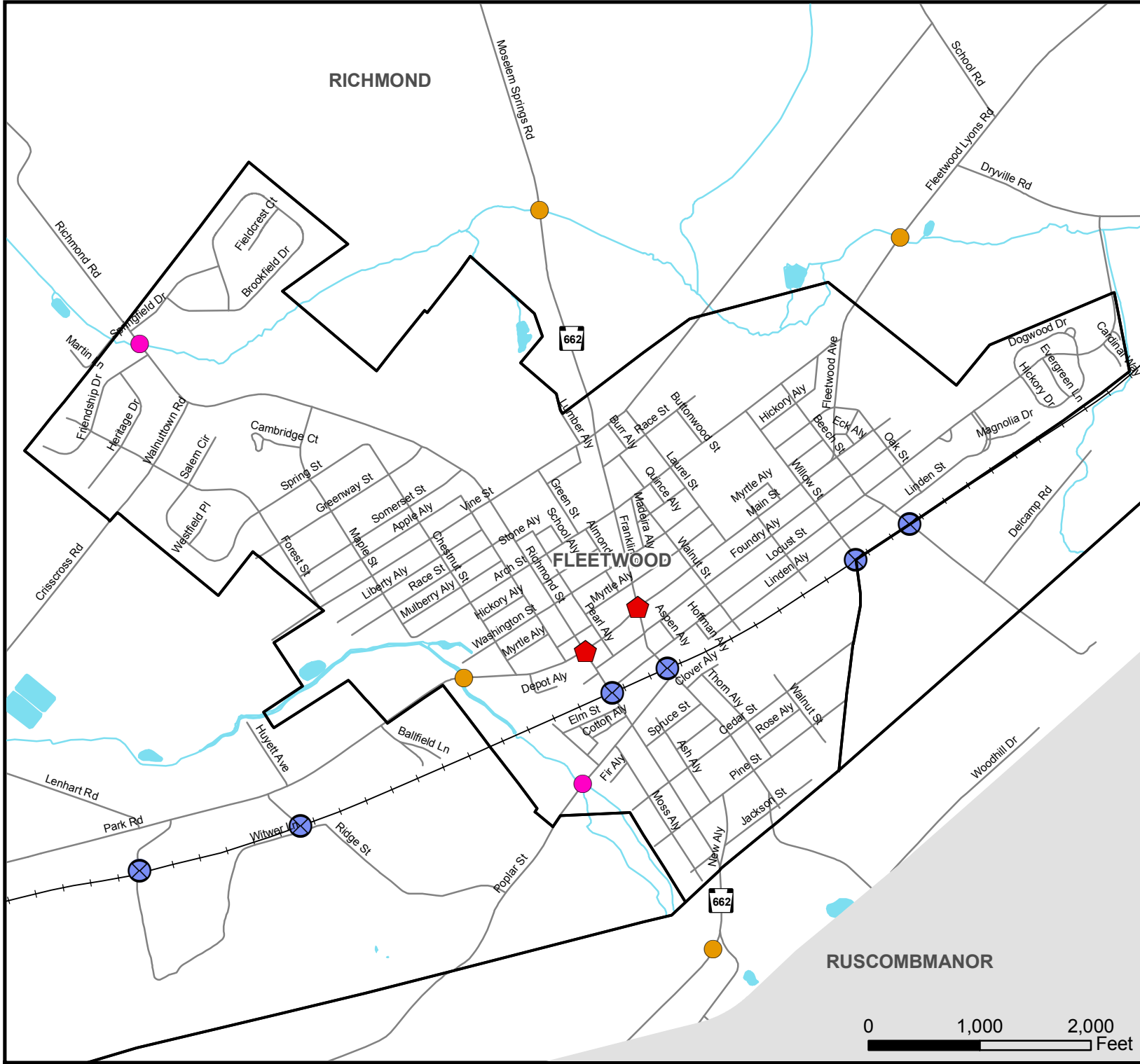


FIGURE 16-B

Fleetwood, Maiden Creek, Richmond
Joint Comprehensive Plan Update
September 2011

Fleetwood Borough Bridges and Railroad Crossings

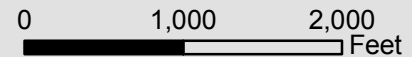


Legend

- State Bridges
- Local Bridges
- ⊗ AT Grade Railroad Crossings
- ⬠ Traffic Signals
- Municipal Boundaries
- Roads
- Railroad
- Streams

Source data:
Base data - Berks County Planning Commission, Berks County GIS, Berks County Department of Emergency Services, PennDOT

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ACTION PROGRAM

ACTION PROGRAM

The Action Program includes a prioritized summary of this Joint Comprehensive Plan's recommendations. A responsible party is identified to oversee the implementation of each recommendation. The Action Program also describes general timeframes for implementation, which regulations to implement the recommendation through and other actions by each municipal planning commission and governing body.

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Transportation Plan				
Prepare a prioritized program for road repaving and reconstruction in the Region instead of responding to these needs on an emergency, as-needed basis only	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Prepare a prioritized program for repair and maintenance for municipality owned bridges	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Establish and implement Capital Improvements Programming for roadway and bridge maintenance and, if necessary, replacement		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Use the highway design guidelines contained in the Transportation and Circulation Section of this plan when planning and reviewing new roads or road improvements	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Identify and set priorities for projects which are appropriate for inclusion in Berks County's Long Range Transportation Plan and the Transportation Improvement Program		X		Township Supervisors, Borough Council, Municipal Planning Commissions, RATS, PennDOT
Emphasize the need for PennDOT and transportation planning entities in Berks County, including the Reading Area Transportation Study (RATS), to support the recommendations of this Joint Comprehensive Plan with regard to needed improvements of state transportation facilities	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, RATS, PENNDOT
Facilitate movement through the Region and into and out of the Region's communities	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions
Define/identify industrial sites within the region and establish one universal truck route to service these sites		X		Township Supervisors, Borough Council, Municipal Planning Commissions BCIDA

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Obtain enhanced infrastructure rights-of-way and corridors for future road, trail, and other improvements, particularly during the planning process and highway occupancy permit process for developments	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions
Establish consistent road signage policies	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Establish design standards for roads and driveways and for building setbacks within the Region based on functional classification and need for future road improvements		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Preserve the scenic, historic, and cultural road corridors in the Region	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Enhance streetscapes along road corridors in the boroughs and villages		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Identify opportunities to interconnect roads and walkways, provide alternative traffic routes, and facilitate emergency access when new developments are under construction	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Consider/investigate the development of an official map where appropriate and coordinate individual official maps with adjacent municipalities		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Ensure that roads in agricultural areas may continue to accommodate agriculturally related vehicles and tractors	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Engage and work with PennDOT in widening shoulders along routes 222 and 1010		X		Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT, RATS
Engage PennDOT about changing the designation of SR1010 to a PA Route	X			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT, RATS

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Investigate/determine the feasibility of extending Evansville Road so that it is a direct connection between Route 222 and Maidencreek Road		X		Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT, RATS
Work with PennDOT to rectify Route 222, 662, 73 and SR 1010 congestion issues by:				
Limiting direct highway access wherever feasible by using common entrances to adjacent business properties rather than multiple driveway cuts	X			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT, RATS
Controlling the size and location of signs to preserve vision triangles	X			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Requiring additional setback and appropriate landscaping along the highway to reduce highway noise and distraction to motorists		X		Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Aligning driveways on opposite sides of the highway wherever possible instead of allowing staggered access points within close proximity of each other			X	Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Work with PennDOT and developers to ensure local roads and intersections remain safe and able to accommodate current and projected traffic volumes	X			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Encourage business developments to share controlled ingress and egress to adjacent major roads such as PA Routes 222, 73, and 662 and SR 1010 as well as local collector roads	X			Township Supervisors, Borough Council, Municipal Planning Commissions, PennDOT
Review the appropriateness of implementing a joint traffic impact fee program		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Manage access along the Region's roads	X			Township Supervisors, Borough Council, Municipal Planning Commissions

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Consider adoption of access management ordinances as a part of municipal Subdivision and Land Development (SALDO) requirements		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Improve the efficiency of traffic flow and the safety of the Region's roads and their intersections		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Establish the responsibilities of developers for transportation improvements	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Establish a mechanism to require traffic impact studies for industrial, commercial, and residential developments	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Address impacts of land uses and new development on major road corridors in the Region	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Mitigate impacts of non-residential traffic on residential neighborhoods		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Encourage use of mass transit through cooperative efforts with BARTA and area businesses	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, BARTA
Promote awareness about BARTA door-to-door van service for people that are physically not able to use regular BARTA service	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, BARTA
Promote/Encourage the use of the Commuter Services of Pennsylvania Program for employer and commuter transportation to and from work	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, BARTA, Commuter Services of PA
Shoulders along roads should be constructed, widened or improved as necessary. Developers should improve shoulders along their properties	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions
Promote future development of greenways and trails that will further walking, bicycling and other alternative transportation modes	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Plan for safe and accessible routes of travel for pedestrians, bicyclists, individuals with disabilities, the elderly, plain sect populations and those without automobiles	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions
Improve pedestrian safety in the Region by developing, improving and expanding the sidewalk system in residential areas		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Consider a phased sidewalk replacement program in Fleetwood Borough starting with the areas most in need		X		Borough Council and Planning Commission
Continue working with the Fleetwood Area School District to ensure adequate and safe pedestrian and bicycle access to all schools in the area	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Fleetwood Area School District
Consider/study the feasibility of connecting the Willow Creek Elementary School with the Fleetwood Borough Park using a pedestrian trail	X			Township Supervisors, Borough Council, Municipal Planning Commissions, Fleetwood Area School District
Consider the installation of school zone speed limit signs and increased pedestrian amenities along Crisscross/Walnuttown Road for student bicycle and pedestrian safety as outlined in the Willow Creek Elementary School Safe Routes to School Final Report Dated February 2010		X		Township Supervisors, Borough Council, Municipal Planning Commissions, Fleetwood Area School District
Use the availability of railroad access to promote economic and industrial development within the region	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Businesses, Rail Road Owners
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Land Use and Housing Plan				
Revise Borough and Townships Zoning Ordinances to reflect Future Land Use Plan	X			Township Supervisors, Borough Council, Municipal Planning Commissions

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Revise Borough and Township Subdivision and Land Development Ordinances to reflect Future Land Use Plan		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Review the Joint Comprehensive Plan		X	X	Township Supervisors, Borough Council, Municipal Planning Commissions
Update the Joint Comprehensive Plan			X	Township Supervisors, Borough Council, Municipal Planning Commissions
Environmental Conservation Plan				
Amend the Townships Zoning Ordinances to strengthen protection of steep slopes, wooded areas, stream corridor protection and other environmental areas.	X			Township Supervisors, Borough Council, Municipal Planning Commissions
Continue promoting conservation easements	ONGOING			Municipal Planning Commissions, Local Conservation Organizaitons
Encourage a variety of zoning techniques to preserve open space in subdivisions and land developments	ONGOING			Municipal Planning Commissions
Encourage developers to use neighborhood design standards	ONGOING			Municipal Planning Commissions
Amend Borough and Townships subdivision and land development ordinances to require developers to use better subdivsion design procedures		X		Township Supervisors, Borough Council, Municipal Planning Commissions
Agricultural Preservation Plan				
Encourage buisnesses and local residents to use local farm products	ONGOING			All municipal officials, business leaders, residents, Berks Co. Chamber of Commerce
Maintain effective agricultural zoning with the Townships	ONGOING			Township Planning Commissions
Ensure ordinance's protect and do not hinder agricultural uses	ONGOING			Township Planning Commissions

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Encourage the purchase of development rights and donation of conservation easements	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Berks Co. Ag Land Board, BCPC, Berks County Conservancy
Continue to encourage property owners to voluntarily join the Agricultural Security Areas in Maidencreek and Richmond Townships	ONGOING			Township Planning Commissions
Exclude central sewer and water service from farming and conservation areas	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Sewer and Water Entities
Permit a reasonable variety of farm-based businesses in farming areas	X			Municipal Planning Commissions
Community Services and Facilities Plan				
Continue to seek additional tenants for the Fleetwood Community Services Center	X			Borough Council
Continue to maintain existing Township Municipal Buildings	ONGOING			Township Supervisors
Evaluate Police Programs in the region and look to improve programs and services where possible as needs and issues arise.		X		Police Chiefs, Township Supervisors, Borough Council
Maintain financial contributions to local volunteer fire companies and rescue services while working with them to coordinate their services on a regional basis	ONGOING			Township Supervisors, Borough Council
Ensure that the Townships and Borough cooperate concerning future public water and sewer extensions	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Sewer and Water Entities
Coordinate future Act 537 Sewerage Facilities Plan Updates with adjoining municipalities		X		Township Supervisors, Borough Council, Municipal Planning Commissions, Sewer Authorities

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Determine the most efficient way to extend public water service to areas of Richmond Township		X		Township Supervisors, Borough Council, Municipal Planning Commissions, Fleetwood Borough Water Dept.
Participate in ongoing monitoring of water quality and groundwater in the local areas	ONGOING			Municipal Planning Commissions
Continue coordinating with the Fleetwood School District regarding issues and needs	X			Municipal Planning Commissions, Citizens
Historic Preservation Plan				
Maintain and update the inventory of historic resources	ONGOING			Municipal Planning Commissions., BPC
Investigate potential funding for a historic façade improvement program		X		Committee
Investigate a program for conservation easements for historic facades	ONGOING			Committee
Participate in a marker program that identifies historic structures, places and events	ONGOING			Committee
Maintain and sign the key entrances to the individual communities in the region.		X		Committee
Encourage productive use or re-use of historic buildings	ONGOING			Municipal Planning Commissions
Implement the Architectural Overlay District	X			Borough Council , Borough Planning Commission
Encourage historic preservation and provide design guidelines to residents		X		Committee and Municipal Planning Commissions
Avoid demolition of historic buildings by amending regulations to include protection	X			Township Supervisors, Borough Council, Municipal Planning Commissions, Zoning Officer
Retain the historic architectural character of existing buildings and encourage the design of compatible additions and new construction	X			Committee
Ensure future public improvements reflect the historic qualities of the existing area			X	committee
Parks and Recreation Plan				

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Acquire land for a Township Park		X		Richmond Township Supervisors, Planning Commission, Recreation Committee
Require local athletic associations to wholly or jointly fund construction of athletic fields in new park		X		Richmond Township Supervisors, Planning Commission, Recreation Committee
Evaluate the availability of programs and facilities to be used on a regional basis, thereby expanding funding for maintenance of facilities	X			Municipal Planning Commissions, Recreation Boards/Committee
Require athletic associations to help maintain the parks that they use	ONGOING			Recreation Boards/Committee
Continue safety inspections at all parks and keep up to date with new guidelines	ONGOING			Recreation Boards
Be aware of obligations at existing recreation areas under the Americans with Disabilities Act	ONGOING			Recreation Boards
Amend the Richmond Township Subdivision and Land Delopment Ordinance to require developers to donate land or fees for recreation	X			Richmond Township Supervisors, Planning Commission, Recreation Committee
Review and strengthen the Fleetwood Borough Subdivision and Land Development Ordinance with regard to mandaotry dedication regulations for recreation	X			Fleetwood Borough Planning Commission
Apply for grants that become availabe for acquisition of park land, expansion of programs and potential coordination of services	ONGOING			Township Supervisors, Borough Council, Recreation Boards/Committee
Support the continuation and expansion of existing recreation programs	ONGOING			Township Supervisors, Borough Council, Recreation Boards/Committee
Establish a Richmond Township recreation committee to identify moving forward with recreational opportunities	X			Richmond Township Supervisors, Planning Commission, Recreation Committee

Fleetwood-Maidencreek-Richmond Action Plan				
Recommendation	Immediate (1st Year)	Short-Range (2nd thru 4th Year)	Longer-Range (5th Year and Beyond)	Primary Responsible Party
Work with the Berks County Conservancy, BCPC, local conservation groups and local landowners to help establish greenways along identified corridors	ONGOING			Municipal Planning Commissions, Recreation Boards/Committee
Use a combination of techniques other than fee simple acquisition to establish right-of-way for greenway corridors	ONGOING			Municipal Planning Commissions, Recreation Boards/Committee
Economic Development/Downtown Revitalization Plan				
Ensure the organizational and planning resources are in place to extend public water and sewer service to appropriate business areas	X			Township Supervisors, Borough Council, Municipal Planning Commissions, Sewer and Water Entities
Initiate a marketing effort that will promote resources and availability in the Fleetwood-Maidencreek-Richmond Area	X			Local Business Groups
Establish a Main Street Program in Fleetwood		X		Borough Council , Borough Planning Commission
Work with existing local businesses to ensure that their current and future needs for infrastructure are met.	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions, Sewer and Water Entities
Work with existing local businesses to ensure that their current and future needs for for business retention and expansion are met.	ONGOING			Township Supervisors, Borough Council, Municipal Planning Commissions
Energy Conservation Plan				
Continually review and update municipal ordinances so that they do not impede standard energy conservation initiatives	ONGOING			Municipal Planning Commissions
Encourage developers to use energy conservation construction guidelines in new and renovated buildings	ONGOING			Municipal Planning Commissions

APPENDIX

Capital Improvements Planning

Capital improvements planning includes financial analysis of past trends in the community, present conditions, and a projection of the community's revenues and expenditures, debt limit and tax rates, to determine what the financial capabilities of the municipality are. It also includes a capital improvements program which establishes a system of priorities. The final element is the capital budget which lists the schedule of improvements over a 5-year period based on the community's financial capacity and availability of grant money.

In the capital improvements program, capital expenditures are separated from operational expenditures. Operational expenditures are those for administration, salaries, maintenance and similar functions, and are short term. Capital expenditures are for assets which have a substantial value compared to the total municipal budget and are expected to provide service for a number of years. The purchase of land or the construction of a building is an example of a capital expenditure.

The capital improvements program schedules the purchase of capital items in a systematic manner rather than allocating a large amount of money for all expenditures in one year. Based on the assessment of future needs, future expenditures are planned so that the municipality can anticipate these major expenditures prior to the budget year. The program is based on identified capital needs, goals for capital acquisitions, and a priority list of all proposed capital expenditures.

A time frame is established for the capital improvements program. Five-year programs are typical. Every year the schedule for capital improvements must be revised and updated as necessary, based on the current municipal priorities. For each project included in the program, estimated costs must be established and a budget prepared.

Benefits of capital improvements programs include:

- It helps assure that projects will be based upon the ability to pay and upon a schedule of priorities determined in advance.
- It helps assure that capital improvements are viewed comprehensively and in the best public interest of the municipality as a whole.
- It promotes financial stability by scheduling projects at the proper intervals.
- It avoids sharp changes in the tax structure by the proper scheduling of projects.
- It facilitates the best allocation of community resources.
- It helps to better plan municipal budgeting through economic downturns.

Official Map (excerpts from the MPC)

The governing body of each municipality has the power to make an official map of all or a portion of the municipality which may show elements of the Comprehensive Plan with regard to public lands and facilities, and which may include, but need not be limited to:

1. Existing and proposed public streets, watercourses and public grounds, including widenings, narrowings, extensions, diminutions, openings or closings.
2. Existing and proposed public parks, playgrounds, and open space reservations.
3. Pedestrian ways and easements.
4. Railroad and transit rights-of-way and easements.
5. Flood control basins, floodways and floodplains, stormwater management areas and drainage easements.
6. Support facilities, easements and other properties held by public bodies undertaking the elements described in the Comprehensive Plan.

The governing body may make surveys and maps to identify the location of property, trafficway alignment or utility easement by use of property records, aerial photography, photogrammetric mapping or other method sufficient for identification, description and publication of the map components. For acquisition of lands and easements, boundary descriptions by metes and bounds must be made and sealed by a licensed surveyor. (The surveying is required prior to acquisition of land or easements not at the time of placement upon the Official Map.)

The adoption of any street lines or other public lands as part of the official map does not constitute the opening or establishment of any street nor the taking or acceptance of any land, nor does it obligate the municipality to improve or maintain any such street or land. The adoption of proposed watercourses or public grounds as part of the official map does not constitute a taking or acceptance of any land by the municipality.

For the purpose of maintaining the integrity of the official map of the municipality, no permit shall be issued for any building within the lines of any street, watercourse, or public ground shown or laid out on the official map. No person shall recover any damages for the taking for public use of any building or improvements constructed within the lines of any street, watercourse, or public ground after the same shall have been included in the official map, and any such building or improvements shall be removed at the expense of the owner. However, when the property of which the reserved location forms a part, cannot yield a reasonable return to the owner unless a permit shall be granted, the owner may apply to the governing body for the grant of a special encroachment permit to build.

The governing body may fix the time for which streets, watercourses and public grounds on the official map shall be deemed reserved for future taking or acquisition for public use. However,

the reservation for public grounds shall lapse and become void one year after an owner of such property has submitted a written notice to the governing body announcing his intentions to build, subdivide or otherwise develop the land covered by the reservation, or has made formal application for an official permit to build a structure for private use, unless the governing body shall have acquired the property or begun condemnation proceedings to acquire such property before the end of the year.

GOVERNMENTAL PROGRAMS

The following is a list of some of the County, state and federal programs for community and economic development. Programs can be modified or eliminated over time, so it is necessary to contact the responsible agency for availability and eligibility information.

- **Berks County**

 - **Joint Comprehensive Planning Program**

 - **Joint Zoning Ordinance Program**

- **Pennsylvania Department of Community and Economic Development**

 - **Community Development Block Grant Program (CDBG)** – This program provides financial and technical assistance to aid communities in their community and economic development efforts. Activities include housing rehabilitation, community facilities, infrastructure, public services, economic development and planning. The activities are to benefit areas containing a majority of low to moderate income persons and administered by Berks County.

 - **Communities of Opportunity** – This program is for state-funded grants for community and economic development and the development or rehabilitation of housing.

 - **Infrastructure Development Program** – This program provides grants and low interest financing for the construction of public and private infrastructure needed for business to locate or expand to a specific site. It also provides financing for infrastructure costs to redevelop former industrial sites, including site clearance costs.

 - **Inter-municipal Project Grants Program** – This program provides grants for increasing the efficiency and effectiveness of municipal services.

 - **Industrial Sites Reuse Program (Brownfields)** – This program provides grant and low interest loan financing for environmental site assessment and remediation work at former industrial sites.

 - **Community Economic Revitalization Program** – This program is intended to fund infrastructure improvements, community revitalization, building rehabilitation, and demolition of blighted structures, in order to increase community tax base and promote community stability.

Main Street Program – This program is intended to promote business retention and development and preserve the historic character of a community’s downtown. A downtown business organization is created and a Main Street manager is hired. Grants can be received for façade restoration, signage programs and design assistance. The program can then be followed by the development of an Elm Street Program.

Elm Street Program – This program is intended to improve residential areas that are directly adjacent/connected to the Main Street area.

Downtown Pennsylvania Program – This program provides management to organize and implement a Business District Authority. The Authority provides financing for services in Commercial areas.

Home Investment Partnership Program – This program provides financial assistance to municipalities for expanding the housing supply for low income persons.

Small Business First Program – This program provides low interest loans for projects such as site acquisition, building construction, machinery, and working capital for businesses of less than 100 employees.

Local Government Capital Projects Loan Program – This program provides low interest loans for equipment and municipal facilities.

State Planning Assistance Grant Program – This program provides matching funds for comprehensive plans and special studies and plans.

Small Business Incubator Program – This program provides loans and grants for facilities in which a number of new businesses operate under one roof and share services and equipment.

Shared Municipal Services Program – This program provides matching grants for cooperative municipal efforts to increase the efficiency of public services.

- **Pennsylvania Department of Conservation and Natural Resources**

Urban Forestry Grants – This program provides grants for tree planting projects.

Community Grant Program – This program provides grants for comprehensive recreation and park planning, greenways and master site development planning. Acquisition and Development Grants can be used for the rehabilitation and development of parks and recreation facilities and acquisition of land for park and conservation purposes.

The Conservation Corps Program – This program provides funding for labor for community projects such as trail improvements.

Rivers Conservation Grant Program – This program provides grants for river conservation plans and non-acquisition, non-development implementation projects.

Acquisition and Development Grants can be used for land acquisition and the development of river conservation projects.

Heritage Parks Grant Program – This program promotes public/private partnerships to preserve and enhance natural, cultural, historical and recreational resources to stimulate economic development through heritage tourism. Grants are awarded for purposes such as feasibility studies, development of management action plans, specialized studies, and implementation projects and management grants.

SYMMS Recreational Trail Program – This program provides matching funding for the acquisition, development and maintenance of motorized and non-motorized trails.

Rails to Trails, PA Program – This program provides matching grants for feasibility studies, plans, acquisition and improvement of former railroad lines for recreational trails.

- **C2P2** – This program provides a matching grant for completing Open Space and Recreation Plans. Where municipalities apply to complete a joint plan there is a higher opportunity for funding. There is also funding for specific projects through this grant program. Under this program smaller grants with lower or no matches are available to municipalities that are less than 5,000 residents for playground projects.

- **Peer Study** – This program helps municipalities to look at joint opportunities for open space and recreation.

- **PA Department of Environmental Protection**

Stream Improvement Program – This program provides design and construction projects to eliminate imminent threats due to flooding and streambank erosion.

- **Pennsylvania Historical and Museum Commission**

Local History Grants – These grants support public programs, research and writing, educational and commemorative.

Keystone Historic Preservation Grants – This program provides matching grants to groups that are rehabilitating or restoring historic properties that will be open and accessible to the public.

Historic Preservation Grants – This program supports non-construction activities and cultural resources surveys, National Register nominations, technical and planning assistance, and educational programs.

Certified Local Government Grants – This program provides matching grants and technical assistance to protect and regulate historic districts.

- **Pennsylvania Department of Transportation**

Transportation Enhancements Program

The program provides funding for programs such as provision of facilities for pedestrians and bicycles; acquisition of scenic easements or historic sites; landscaping or other scenic beautification; historic preservation; rehabilitation and operation of historic transportation buildings, structures or facilities.

Hometown Streets / Safe Routes to School

The program provides funding for non-motorized improvements for pedestrians and bicycles that promote walking/cycling within the community and between houses and schools.

**FLEETWOOD BOROUGH
MAIDENCREEK TOWNSHIP
RICHMOND TOWNSHIP
JOINT COMPREHENSIVE PLAN**

BERKS COUNTY, PENNSYLVANIA

This Plan was adopted by:
Fleetwood Borough: September 2011
Maidencreek Township: September 2011
Richmond Township: September 2011

This Plan was prepared by the Fleetwood, Maidencreek and Richmond Joint
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