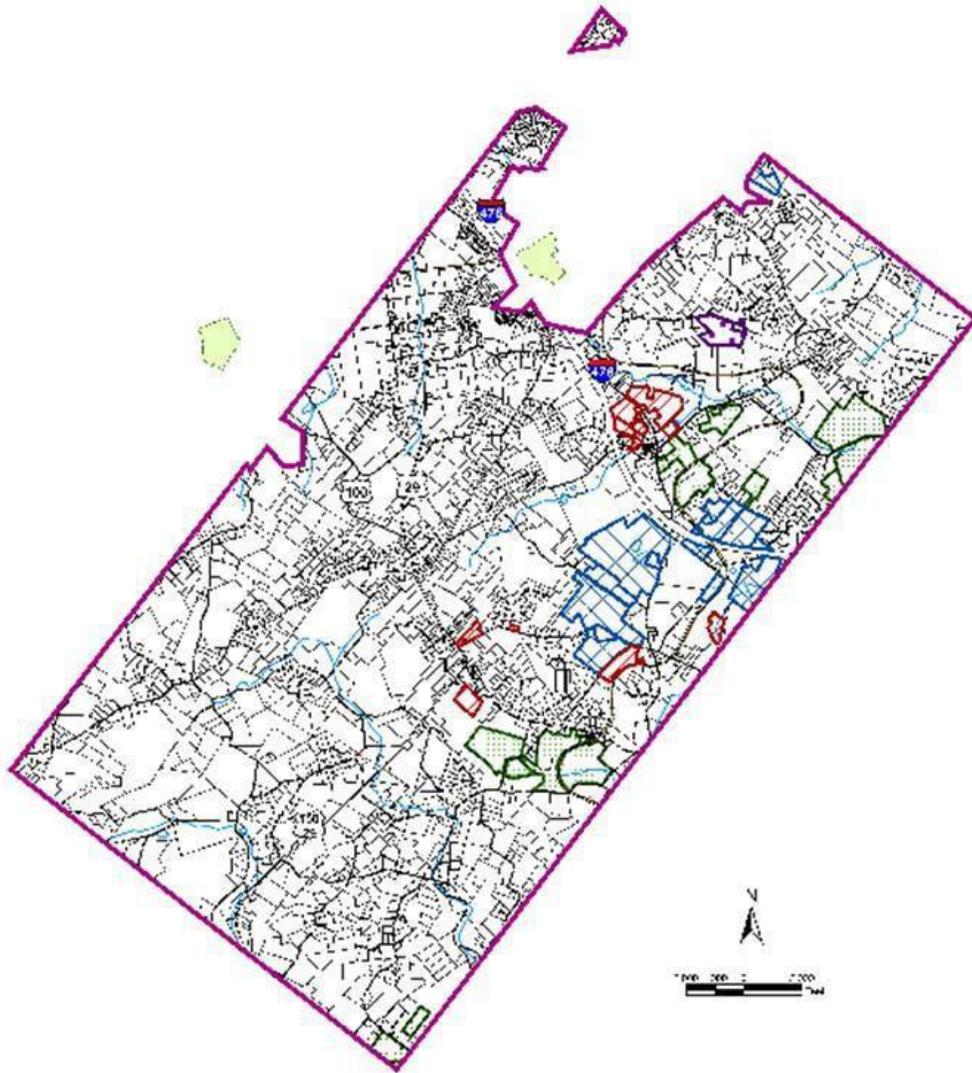


Upper Milford Township Park, Recreation, and Environmental Plan

Upper Milford Township, Lehigh County, Pennsylvania

Final Plan April 5th, 2018



Upper Milford Township

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Table of Contents

Executive Summary-----	4-5
Project Methodology-----	6
Goals and Objectives-----	7
Overview-----	7-11
Demographics-----	11-13
Study Criteria-----	14-18
Recreation Needs-----	18-20
Park and Recreation Inventory and Analysis-----	20-39
Park Maintenance Inventory and Analysis -----	40-45
General Recommendations-----	46-55
Survey Results -----	56-83

Executive Summary



In 1992, Upper Milford Township and the Wildlands Conservancy prepared a Park, Recreation, Open Space and Environmental Plan (PROSEP). To reflect changes in land development and land use, as well as need to create data for a geographical information system (GIS). The Township commissioned an update in Spring 2003 and again in Spring 2017.

In 2003 the Township's Recreation Commission added one goal:

Seek to preserve the rural character and to protect natural and environmentally sensitive areas.

Township residents responded to the 2003 Recreation Needs Survey confirming satisfaction with existing facilities and a desire to preserve the rolling, rural landscape character of the Township. This was reconfirmed through a 2017 Upper Milford Township run survey.

The Township's two main active recreation facilities, Lenape and Jasper Parks, provide Township residents neighborhood and community level recreation needs. Both facilities provide playgrounds, ballfields, pavilions, concession stands, parking, restrooms, running water, and picnic areas.

Jasper Park's archaeological site continues to be a 'hidden' gem in the Township, requiring action to preserve and educate residents about the site's significance to the regions history. Lenape Park overlooks surrounding farm fields which the Township should actively pursue for acquisition and preservation. The Harold G. Fulmer III Nature Preserve and Churchview Park provide land preservation and passive recreation opportunities to be developed. The County-owned Seem Seed Farm preserves a significant agricultural landscape in the heart of the Township. Cooperative efforts between the County and the Township will need to flourish in order to protect this resource for agriculture and complimentary recreation activities.

The compilation and creation of many GIS layers informs the Township to better review future land development applications and encourage environmental conservation efforts. Detailed inventory, analysis, and recommendations are included in this plan to assist the Township in planning and implementing park, recreation, and environmental protection initiatives over the next ten years.

Project Goals

1. Organize and administer park and recreation services in a way which insures year-round attention to both current and newly proposed programming and facility initiatives.
2. Develop and operate a comprehensive program of recreation and park activities that continue the traditionally strong athletics component for youth while branching into other areas for more interest to the overall population.
3. Modernize existing facilities at Jasper and Lenape Parks to increase accessibility, improve signage and parking, rebuild, or repair existing facilities, and take better advantage of untapped program potentials at each site.
4. Pursue a program of gradual expansion of the existing park system in order to maintain a balanced mix between sustained growth of the Township and the current rural quality of life with recreational activities.
5. Expand current volunteer efforts to maximize programming and upkeep of key park facilities in a cost effective manner.
6. Seek to utilize County, State, and Federal grant programs along with private and local municipal resources in order to help provide the funding necessary for a parks and recreation system that meets the needs of Township residents.
7. Expand current publicity efforts to make Township residents more aware of Public Park and recreation offerings, as well as the array of private, commercial, quasi-public and neighboring municipality choices available to satisfy recreational needs.
8. Seek to preserve the rural character and to protect natural and environmentally sensitive areas.



Project Methodology

Project Timeline

In March 2003, Upper Milford Township solicited proposals to prepare an update to their 1992 Park, Recreation, Open Space, and Environmental Plan. The Wildlands Conservancy, author of the 1992 study, was selected from four (4) proposals received to prepare the plan update. The project was initiated in April of 2003, was adopted in February 2004. This current update was done in conjunction with the revision of the Townships Open Space Plan and organized by the Recreation Committee by revising and distributing the Park and Recreation Survey completed in 2003.

Site Reconnaissance

Throughout the planning process, the consultant conducted a number of field visits. These visits included members of the Recreation Commission, Public Works Parks Caretakers and the Township Secretary, in the form of Spring and Fall Park Tours. Site visits were completed on foot to note existing park features and amenities (2017). A vehicle survey was completed to identify vistas, non-Township owned recreational facilities, and general understanding of the Township landscape (2003).

Public Comment

1. Press Release

Local newspapers, the Morning Call and East Penn Press, both covering Upper Milford Township, published a press release about the project prior to the mailing of the surveys in 2003. In 2017 the Newsletter, Township website and Township Facebook page carried the link for the online survey. Three paper surveys were turned into the Township office and entered into the online data.

A second press release was sent prior to presentation of the Draft plan (2003) and (2017). Both press releases are included in the appendix.

2. Committee/Public Meetings

Monthly meetings were held at the Township building each third Monday of the month, corresponding with the Recreation Commission's regularly scheduled times. Township residents were encouraged to attend the meetings to receive information and provide input on desired recreation improvements. Meetings were well attended by the Committee with participation of the Township Manager and Township residents.

3. Recreation Needs Survey

The Recreation Commission, with the consultant, prepared a written survey to solicit resident responses to current recreation issues. The survey was based on the previous 1992 survey, to monitor changes in resident responses. In May 2003, the Township mailed 3,927 surveys to Upper Milford Township households. Over a two-week period, 494 surveys (12.6%) were completed and returned to the Township. In 2017 the online survey garnered 95 results and the tally and information garnered is included in the back of this book.

Geographical Information System

Geographic information systems, coined GIS, links written data or facts with geography by specifying locations on a map. Vast amounts of data became accessible for analysis and study quickly, compared to previous mapping overlay techniques. Information is organized in layers which can be turned on and off, depending on a particular study. Roads, streams, topography, soils, zoning, tax parcels, utilities, political boundaries, and other information can be reviewed individually or together. Updates and new releases of raw data are easily added. GIS provides the Township with expandable management tools for its parks and open space. This study transitions recreation and open space data to this management resource for the Township.

Goals and Objectives

The Committee reviewed the 2003 PROSEP goals and objectives and determined they remain valid for this study,

Those goals are:

1. Organize and administer park and recreation services in a way which insures year-round attention to both current and newly proposed programming and facility initiatives.
2. Develop and operate a comprehensive program of recreation and park activities that continue the traditionally strong athletics component for youth while branching into other areas for more interest to the overall population.
3. Maintain existing facilities at Jasper and Lenape Parks and increase accessibility, improve signage and parking, rebuild, repair existing facilities, and take better advantage of untapped program potentials at each site.
4. Pursue a program of gradual expansion of the existing park system in order to maintain a balanced mix between sustained growth of the Township and the current rural quality of life through recreational spaces.
5. Expand current volunteer efforts to maximize programming and upkeep of key park facilities in a cost effective manner.
6. Seek to utilize County, State, and Federal grant programs along with private and local municipal resources in order to help provide the funding necessary for a parks and recreation system that meets the needs of Township residents.
7. Expand current publicity efforts to make Township residents more aware of Public Park and recreation offerings, as well as the array of private, commercial, quasi-public, and neighboring municipality choices available to satisfy recreation needs.
8. Seek to preserve the rural character and to protect natural and environmentally sensitive areas within our park system.

Overview

Upper Milford Township

Upper Milford Township, founded in 1738, is located in the southwest corner of Lehigh County. The Township is bordered by Salisbury and Upper Saucon Townships to the northeast; Lower Milford Township to the southeast; Hereford Township, Berks County to the southwest; Lower Macungie Township and Macungie Borough to the northwest; and Emmaus Borough is carved out of the Township to the north. It is approximately 18.1 square miles, or 11,370 acres large, bisected by Routes 100 and 29 and the Northeast Extension (Rt. 476) of the Pennsylvania Turnpike. Most residents reside in single-family dwellings spread throughout the Township, separated by steep, wooded slopes or open agricultural farmland. Small concentrations of homes are in the villages of Zionsville, Shimerville, Vera Cruz, Old Zionsville, and Powder Valley. Most businesses can be found along State Routes 100 and 29. The wooded south mountain ridge is a predominately natural feature in the rolling landscape of Upper Milford Township.

Zoning

The Upper Milford Township Zoning Ordinances (ZO) and Subdivision and Land Development Ordinances (SALDO) were written in June 1985 and updated in June 1992 and 2010. Subsequent amendments have been made to both documents. The Township is currently involved in a Joint Municipal Comprehensive Plan planning process with Lower Milford and Lower Macungie Townships and Alburdis, Macungie, and Emmaus Boroughs. The Township anticipates updating these ordinances in the next few years to address findings of several studies currently being completed.

A majority of the Township is zoned Rural Agricultural (R-A). South Mountain is zoned a South Mountain Conservation (SM-C) District. Small, concentrated, commercial districts dot the Route 100/29 corridor. Rural-Suburban Residential (RS-R), Suburban Residential (S-R), Commercial (C), and Industrial (I) Zones tightly congregate the northwestern corner of the Township, adjacent to Upper Macungie Township and Emmaus Borough municipal boundaries.

Land Use

Type	1988		2000		2014*		Change 1988-2014	
	Acres	%	Acres	%	Acres	%	Acres	%
Agriculture/Vacant	6,921.4	60.0	5,885.7	51.0	5081	44.0	(1840.40)	(27)
Residential	3,687.9	32.0	4,387.3	38.0	4949	43.0	1261.10	35
Transportation/Utilities/Comm.	565.8	4.9	593.9	5.1	740	7.0	174.20	31
Wholesale/Warehousing	114.4	1.0	116.4	1.1	5	.04	(114)	(99)
Public/Quasi-Public	87.2	0.8	90.7	.8	146	1	58.8	68
Commercial	69.2	0.6	75.5	.7	73	.5	3.8	6
Parks and Recreation	66.1	0.6	361.8	3.1	464.4	4	398.30	603
Industrial	26.1	0.2	26.1	.2	79	.5	52.9	203
TOTAL	11,537.4	100	11,537.4	100	11537.4	100		

Land Use

*Based on updated land use interpretation by Lehigh County Assessment Office and LVPC Comparison

Lehigh Valley Planning Commission, Estimate Existing Land Use 2000

The following chart illustrates the specific properties used to determine the Parks and Recreation Land Use calculation:

Parks and Recreation Land Use

Site Name	Acreage		Acreage		Type of Park	Ownership
	Total	Active Recreation	Public Use	Private Use		
Township Owned:						
Churchview Park	17.00	14.00	17.00	0.00	Community	County
Harold G. Fulmer Nature Preserve	60.11	0.00	60.11	0.00	Open Space	Township
Jasper Park	26.70	10.00	26.70	0.00	Community	Township
Lenape Park	12.10	12.10	12.10	0.00	Neighborhood Park	Township
King's Highway School	5.00	2.00	5.00	0.00	Neighborhood Park	Township
Proposed Kohler Park	2.5	.25	2.5	0.00	Neighborhood Park	Township
Total Acreage	120.91	38.10	120.91	0.00		
Privately Owned:						

Burkhart Preserve	25.30	0.00	25.30	0.00	Land Preserve (conservancy owned)	Private nonprofit
LCCD Project	61.00	0.00	0.00	61.00	County Natural Area	County
Milford Bible Camp	31.00	5.00	0.00	31.00	Church Camp	Private Nonprofit
Mystic Chain Park	3.40	0.00	0.00	3.40	Open Space	Private Nonprofit
The Fields at Indian Creek Trail	1.00	0.00	1.00	all	Linear Park	The Fields At Indian Creek HOA
Upper Milford South Mountain Property	15.60	0.00	15.60	0.00	County Natural Area	County
Emmaus Borough South Mountain Property	18.00	0.00	0.00	18.00	County Natural Area	County
Victory Valley Camp	40.30	10.00	0.00	40.30	Church Camp	Private Nonprofit
Total Acreage	209.50	20.00	40.90	168.60		

Table 6 – 2 LVPC, Inventory of Parks and Other Outdoor Recreation Sites; May 2002

Table modified to include the column for Public Use and Private Use also to separate Township and Private; Shimerville Recreation was removed from the original table because that use is no longer available. Also modified to separate Township owned.

Landscape Character

The Township is primarily a mix of single family residential and active agricultural intertwined by wooded hillsides. Winding narrow paved roads traverse the slopes and pass over small streams in every direction. Large tracts of land still dominate the landscape; however, small residential parcels are being carved out along major roads.

UMT Park and Recreation Overview

Upper Milford Township currently maintains three (3) active recreation parks totaling 63.30 acres within the Township. Additionally, the Township owns 60.11 acres of undeveloped open space. An active Recreation Commission meets monthly to discuss activities in the Township. The Upper Milford Youth Association is an independent organization which operates the athletic programs within the Township. The Township Manager, Recreation Commission, and Public Works Staff manage and maintain Township parks.

In 1991-92, Upper Milford Township retained Wildlands Conservancy to prepare a Township-wide Park, Recreation, Open Space, and Environmental Plan. Township Recreation Commission, staff, and supervisors have used this plan to assist in furthering the recreation opportunities within the community. Recent acquisitions, changes in development patterns, and resident desires, warranted updating the plan.

2017 sees revisions to the existing Park Recreation and Open Space Plan and creates the Upper Milford Township Park and Recreation Plan to compliment the Upper Milford Township Open Space Plan.

Cultural/Historic Sites

A Township Historical Committee meets during the year to discuss local history and events. The Township maintains a portion of the Indian Jasper Quarries. The other sites are privately owned.

Upper Milford Township has many cultural resources, of which the following have been identified:

Heussmann Residence	Klan Grist Mill and Dam
Church Horse Stable	Shelly's Saw Mill
Cunningham Home	Vera Cruz Railroad Station
Goodman Residence and Barn	Lime Kilns
Elmer Graber's Log Home	Stahl Homestead
Haltzman Residence	Private Farmstead
Old Zionsville UCC	Indian Jasper Quarries (east)
Seem Residence	Indian Jasper Quarries (west)
Robert Smith Home	Salem United Methodist Church
St. Peters Union Church	Mennonite Church School
Upper Milford Mennonite Church Zion's	Zionsville Church School
Evangelical Lutheran Church	Berg School (later St Peters Church School)
Erwin Residence	Kriebel (Yoder's School)
Cook Residence Miller Grist Mill	Schwartz' School
Wolf Residence	Bildhaus (Brunner's School)
Leapson Residence	Kern's School
Wetherhold Residence	Ortts School
Private Residence	Koch's School
Snyder Residence	Miller Mill School
Grist Mill	Schantz's Mill School
Frey's Grist Mill	Powder (Schuberts School)
Vera Cruz Hotel	Geissinger School
Vera Cruz Store	Berger (Kemmerer School)
Vera Cruz-Dillinger Tunnel	Sigmund (Hampton's School)
Powder Valley School House	Vera Cruz School
Zionsville Railroad Station	

Cultural Resource Inventory

A Cultural Resource Inventory (CRI) is the first step in documenting the Townships rich history. Many of the sites listed above have been located in a GIS data set as part of this project. However, Upper Milford Township should complete a detailed written survey of all cultural resources in the Township and update the GIS data. The CRI will assist in monitoring these significant sites and in preserving these resources from loss. The CRI is important for land owners seeking to acquire state and federal grants and low interest loans, to upkeep and maintain their property.

Township Parks

Upper Milford Township owns three (3) active recreation parks and two (2) passive/open space parks. Lenape and Jasper Parks with a wide variety of active recreation opportunities are centrally located in the Township. Churchview Park contains a single loop, paved trail, originally intended for rollerblades and bicyclists. The rest of Churchview Park, Fulmer Preserve, and the wetland tract are Township owned open spaces which currently are not improved for access. After construction the Township will add the community park at The Fields at Jasper Ridge and the Trail at the Fields at Indian Creek.

Adjacent Parks

Parks outside the Township provide Upper Milford Township residents additional recreational opportunities. Macungie Memorial and Emmaus Community Parks are used by residents of Upper Milford Township as neighborhood and community parks.

The 2003 Recreation Needs Survey respondents indicated Macungie Memorial Park as one of the most visited parks outside the Township. The swimming pool, band shell, indoor basketball court, and active events calendar provide recreational opportunities not available in Upper Milford Township. The more populated sections of Upper Milford Township are close to Emmaus Community Park, which has a public swimming pool and yearly events. Kalmbach Park and Pool Wildlife Sanctuary offer nature trails and environmental education courses which are not currently provided in the Township. The Rodale Fitness Trail in Trexlertown, west of the Route 100 and 222 intersection, is a well-used facility providing a 1.3 mile paved trail and indoor velodrome. All of these facilities expand the recreational opportunities afforded to Upper Milford Township residents. In 2017 the survey results showed the most used facilities outside of Upper Milford Township are The Emmaus Community Park and The Allentown Parkway.

Demographics

Demographic Analysis

According to the U.S. Census Bureau, the Upper Milford Township population growth slowed in the 1990s. In 1990, the U.S. Census tabulated 6,304 residents in the Township, which showed a 24% increase of 1,209 residents from the 1980 Census. In 1990, one-quarter of working age residents (16 years of age or older) traveled 30 minutes or more to work. Only 225 residents worked in the Township and only 120 residents worked at home. Eleven percent (11%) of the population was over the age of 65. Children and teens made up 29% (1,846) of Township residents.

In 2000, the Township population increased by 585 residents or only 9%. The male to female ratio has remained almost split, 50/50. In 2000, 2,514 households were counted with 90% being owner-occupied. The average household size is 2.81 persons. The Township continues to maintain a working age population with only 12% being 65 or older. Children and teens make up 26.7 % (1,843) of Township residents, a decline in the overall number of children in the Township.

On February 23, 2003, the Lehigh Valley Planning Commission (LVPC) released Municipal Population Increase Forecasts for Lehigh and Northampton Counties. Bruce Newling's population forecast method estimates population growth based on an inverse relationship between population growth over a specific period of time and population density. In refining this forecast, the LVPC's calculations are based on zero urban population growth, subdivision activity, agricultural easements,

and security areas and natural resources. The latter two (2) particularly impact Upper Milford Township, which contains several large farms under agricultural easements or county ownership (Seem Seed Farm) and limiting natural features.

In 2010 the U.S. Census data reporting showed the population of Upper Milford Township at 7292. Of those 7292 residents 60% of the working population commuted an average of 25 minutes from home. There were 2793 households that average to a household size of 2.61 persons. Of those residents the Township has a ratio of male to female still at 50/50 with a large majority of working age. Of the resident population, 1471 were under 18 years of age and 1166 were over 65 years of age. There was again an 8% decline in the number of children in the Township.

POPULATION FORECAST 2000-2040

	2000 Census	2010 Census	2020 Forecast	2030 Forecast	2040 Forecast	2000- 2040 Change	% Change
Upper Milford Twp.	6,889	7,292	8,382	9,012	9,642	2753	29
Lower Milford Twp.	3,617	3,775	4,252	4,541	4,859	1,242	26
Lower Macungie Twp.	19,220	30,633	33,749	37,011	40,596	21,376	53
Emmaus Borough	11,313	11,211	11,607	12,088	12,676	1,363	11
Macungie Borough	3,039	3,074	3,210	3,364	3,537	498	14
Lehigh County	312,090	349,497	385,710	427,162	469,975	157,885	34

Source: U.S. Census Bureau, Decennial Census 2000,2010; LVPC Projections 2020, 2030, 2040
 In 2010 the U.S. Census data reporting showed the population of Upper Milford Township at 7292. Of those 7292 residents 60% of the working population commuted an average of 25 minutes from home. There were 2793 households that average to a household size of 2.61 persons. Of those residents the Township has a ratio of male to female still at 50/50 with a large majority of working age. Of the resident population, 1471 were under 18 years of age and 1166 were over 65 years of age. There was again an 8% decline in the number of children in the Township.

According to these estimates, Upper Milford Township may see a slow rate of population growth compared to neighboring Townships and even the County as a whole.

POPULATION GROWTH 1980-2000, UPPER MILFORD TOWNSHIP

Subject	1980	1990	2000	2010*	1980-2010 Change	% Change
Total Population	5,013	6,304	6,889	7292	2279	46
Age under 19	1,601	1,846	1,843	1787	186	12
Age 20-64	3,004	3,906	4,201	4375	1371	46
Age 65+	417	552	845	1130	713	171
Median Age	32.3	-	40.5	46.0	13.7	43
Total Households	1,644	2,196	2,514	2822	1178	72
Average Household Size	3.05	2.92	2.74	2.65	(.40)	(14)
Total Housing Units	1,698	2,222	2,576	2931	709	32

Table 5 – 4 * U.S. Census Bureau * Census Quick Facts

Transportation

The development and growth of neighboring townships impacts Upper Milford Township roads. Vehicular traffic has and will continue to increase over the next decade. Primarily, State Routes 100 and 29 will increase in traffic through the Township, along with arterial gathering roads as GPS navigation finds shorter routes from point “A” to point “B”. For pedestrians and wildlife, this will further create a crossing barrier. Other roads directly connected to this route will also be impacted as people search for the “quickest” route. The increased automotive use of Township roads directly impacts the safety of residents. A majority of resident workers travel beyond the Township for employment. In addition, employment centers (commercial and industrial areas) are concentrated along the Route 100 and 29 corridors. The Township should continue to work with the Pennsylvania Department of Transportation (PennDOT) to review road conditions, congestion, and safety concerns along these state maintained routes.

Development

A number of factors attribute to this slow growth. One, the economy of the 1990s and late 2000’s did not facilitate a rapid growth in the housing market in this area. Higher mortgage rates and more readily available housing in neighboring Townships resulted in reduced growth in Upper Milford Township.

Secondly, the land in Upper Milford Township does not lend itself to traditional residential subdivision. Steep slopes, alluvial soils, and wetlands significantly impact lands available for development and in particular on-site septic systems. Most of the Township does not have access to public sewage, thus limiting land development. Future plans to provide public sewer for the villages of Powder Valley, Shimerville, Old Zionsville, and Zionsville could significantly impact these areas and their surrounds. If public sewer facilities/authorities are built, facility design should provide for the needs of the community and confine development to these village areas.

Study Criteria

The initial step in analyzing Township Parks and Open Space is to classify existing facilities. Park classification generally determines park facility resources, level of maintenance requirements, and resident service area. Existing township parks are classified and then analyzed to determine if they meet existing and projected needs.

1. Park Descriptions

a. Neighborhood Park (Jasper Park, Lenape Park and Proposed Kohler Park)

A neighborhood park provides basic recreation options for a limited, localized service area. The park can range in size from approximately 5 to 10 acres. The park generally will service a ¼- to ½-mile radius. Most park users are able to walk or bike safely between home and the park, requiring minimal parking and support facilities. The park may include some playground equipment, a ballfield/multipurpose field, a picnic table/small covered pavilion, and loop walking trail. Facilities often match those of interest or need of the immediately surrounding community.

b. Community Park (Jasper Park and Lenape Park)

A community park provides recreational options for a broader audience. The park can range in size from 20 or more acres. Typically, this park serves residents living a ½-mile to 3 miles away. Since most park users drive or bike to this facility, parking and support facilities are required. A community park usually includes playground equipment, baseball/softball fields, multipurpose fields, paved tennis and/or basketball courts, picnic tables and pavilion(s), and specialized recreation options. Support facilities include restrooms, potable water, and parking.

c. Linear Parks/Trails (The Fields at Indian Creek Trail)

A linear park often encompasses a trail system established as a thread linking several sites, neighborhoods, or features together. The system can be just a couple hundred feet to miles long. A system often includes trailheads or points of access. A trailhead typically includes parking, information in the form of signage or kiosk, restrooms, and potable water.

d. Specialized Facility (Churchview Park)

A recreation facility provides a specific recreation activity. The facility often draws users beyond the local community and typically beyond the Township. The facility requires parking, restrooms, and potable water since most users are not within local walking distance.

d. Greenways (8-acre Wetland)

Often the terms “greenways” and “linear parks” are used interchangeably. A very critical difference should be understood when defining recreation areas and open space in Upper Milford Township. Unlike a linear park, a greenway may not provide linear access or trails nor is it bound or defined by property boundaries. A greenway may simply be preserved open space, providing a conduit for natural systems. A typical greenway will include the riparian buffer of a stream. A greenway, unlike a linear park, may not necessarily be publicly owned. As a result, public and private partnerships develop to provide a cohesive linear green network through the community.

e. Open Space (Harold G. Fulmer III Nature Preserve and The Fields at Indian Creek Trail)

Open space is Township, resident, county, or HOA owned land which provides passive recreational facility. These parks preserve the community’s landscape character and protect valuable natural or cultural resources. Full Township ownership or Conservation Easement Ownership secures the property from being developed and provides total control over management. Service roads and multipurpose trails are developed to aid in access, maintenance, enjoyment and security of the Natural area.

Parks, Open Space, and Pathways Classification Table

Parks and Open Space Classification

Classification	General Description	Location Criteria	Size Criteria
Mini Park	Used to address limited, isolated or unique recreational needs.	Less than a 1/4 mile distance in residential setting	Between 2,500 sq. ft. and 1 acre in size
Neighborhood Park	Neighborhood Park remains the basic unit of the park system and serves as the recreation and social focus of the neighborhood. Focus is on informal active and passive recreation.	1/4 to 1/2 mile distance and interrupted by non-residential roads and other physical barriers.	5 acres is considered minimum size; 5 to 10 acres optimal.
School Park	Depending on circumstances, combining parks with school sites can fulfill the space requirements for other classes of parks, such as neighborhood, community, sports complex, and special use.	Determined by the location of school district property.	Variable-depends on function
Community Park	Serves a broader purpose than neighborhood park. Focus is on meeting community-based recreation needs, as well as preserving unique landscapes and open spaces.	Determined by the quality and suitability of the site. Usually serves two or more neighborhoods and 1/2 to 3 mile distance.	As needed to accommodate desired uses. Usually between 30 and 50 acres.
Greenways	Lands set aside for preservation of significant natural resources, remnant landscapes, open space and visual aesthetics/buffering	Resource, availability and opportunity.	Variable.
Linear Parks	Effectively tie park system components together to form a continuous park environment.	Resource availability and opportunity.	Variable
Sports Complex	Consolidates heavily programmed athletic fields and associated facilities to larger and fewer sites. Strategically located throughout the community.	Variable - dependent on specific use.	Variable
Special Use	Covers a broad range of parks and recreation facilities oriented toward single-purpose use.	Variable - dependent on specific use.	Variable
Private park/ Recreation Facility	Parks and recreation facilities that are privately owned yet contribute to the park and recreation system.	Variable - dependent on specific use.	Variable

Park Trail	Multipurpose trails located within greenways, parks, and natural resource areas. Focus is on recreational value and harmony with natural environment.	Type 1: Separate/single-purpose hard surface trails for pedestrians or bicyclists/in-line skaters. Type 2: Multipurpose hard-surfaced trails for pedestrians, bicyclists/in-line skaters. Type 3: Nature trails for pedestrians. May be hard or soft surfaced.
Connector Trails	Multipurpose trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is as much on transportation as it is on recreation.	Type 1: Separate/single-purpose hard surface trails for pedestrians or bicyclists/in-line skaters located in independent R.O.W. (e.g. old railroad R.O.W.) Type 2: Separate/single purpose hard surface trails for pedestrians or bicyclists/in-line skaters. Typically located within road R.O.W.
On-Street Bikeways	Paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic.	Bike Route: Designated portions of the roadway for the preferential or exclusive use of bicyclists.
All-Terrain Bike Trail	Off-road trail for all terrain (mountain) bikes	Single-purpose loop trails usually located in larger parks and linear parks.
Cross- Country Ski Trail	Trails developed for traditional and skate-style cross-country skiing.	Loop trails usually located in larger parks and linear parks.
Equestrian Trail	Trails developed for horseback riding	Loop trails usually located in larger parks and linear parks. Sometimes developed as multi-purpose with hiking and all terrain biking where conflicts can be controlled.

2. National Recreation and Park Association (NRPA) Review

In 1983, the National Recreation and Park Association published minimum recreation facility standards based on population. These standards reflect a few activities, leaving a majority of park amenities undetermined. Subsequently, it was found that these calculations, although creating a starting point for discussion, often provided results that did not relate to community needs. As a result, the 1995 NRPA removed population based standards and suggested utilizing community input to determine local recreation needs.

Recreation trends change over time and population growth most significantly impacts recreation needs. Population growth proportionally increases recreation demand in number of users and requested diversity.

The Township currently has 38.79 acres of active recreation, 17 acres of underdeveloped parkland and 68.06 acres of passive open space in addition to 435 acres of County open space. Generally, the National Recreation and Park Association recommend 6.25 to 10.5 acres of active open space per 1,000 residents. With 7,292 residents in the year 2010, the Township should have 45.57 to 76.55 acres. A projected population growth of an additional 1720 residents by 2030. Subsequently, the Township's current 38.79 acres for recreation space is currently 6.78 acres below the National recommended standard, and by 2030, there will be a 10.75 to 18.06 acre deficit.

Upper Milford Township is primarily a rural community with clusters of dense development. As a result, using Township population data relative to National Standards is simply a guide. The most successful and direct method for determining park and recreation needs is to directly assess the community. Recreation Needs Surveys provide answers to past and present recreation needs and trends.

3. Lehigh County Parks -

In 1990, the Lehigh Valley Planning Commission, with assistance from Wildlands Conservancy, prepared a park plan for Lehigh County – Lehigh County Parks 2000. An update was completed in 1997, expanding and revising the recommendations from the previous edition. The county plan identified and reviewed existing “close to home” parks for each municipality, including mini-parks, neighborhood parks and community facilities. The Plan recommended Upper Milford Township acquire 25 additional acres, based on the year 2010 population forecasts and a 6.25 acres per 1000 residents formula. In addition, the following recommendations were made:

a. Churchview Park

The county leased 17 acres to Upper Milford Township for 99 years. The land, improved by Upper Milford Township, reduced the active park land deficit to 8 acres. This assumed the park be developed to meet neighborhood or community recreation standards.

b. Potential Park and Open Space Sites

Between 1990 and 1996, LVPC reviewed sixty sites that were offered to the County for purchase. The review was based on a park site rating system of sixteen criteria, including tract size, suitability, cost, and access.

c. Greenways

Ten potential greenway systems were identified in Lehigh County. Portions of the South Mountain/Lehigh Mountain Greenway are within Upper Milford Township. The continuous woodland cover is not connected through Upper Milford, reflecting development and transportation corridors which pass through the South Mountain range in Upper Milford. South Mountain is a dominate landscape feature in Upper Milford Township and the surrounding Lehigh Valley. Wildlands Conservancy monitors large tracts of land currently under conservation easement in adjacent Upper Saucon and Salisbury Townships.

d. Rails-to-Trails

Although the active rail line in Upper Milford was not identified, the Plan strongly supports preservation of these linear corridors.

e. Seem Seed Farm

Lehigh County acquired 435 acres of farmland in Upper and Lower Milford Townships. In 1991, the Lehigh County Conservation District developed a demonstration project on 61 acres of the county land just south of the Pennsylvania Turnpike and east of Churchview Road. In 1994, Upper Milford Township signed a 99 year lease for 17 acres of the county land at the corner of Kohler and Churchview Roads to develop needed active recreation. The remaining land is actively farmed or covered in woodland. The Plan recommends further development of passive recreation near the existing two ponds. Picnicking and fishing are suggested as possible developed activities. This project is suggested to be developed and managed in conjunction with the Township. Since the property is county-owned, the facility would be available to all county residents.

Recreation Needs

Surveys conducted in 1992, 2003 and 2017 all showed similar responses.

1. 1992 Recreation Needs Survey

In 1991-92, Wildlands Conservancy mailed 2000 surveys to Township residents. Of the 500 responses collected (25% return), respondents chose bicycle trails, volleyball courts, basketball courts, nature trails, neighborhood parks, and nature programs as the “most important” activities for outdoor recreation. A majority of respondents (55%) resided in the Township for more than ten years. Responding households comprised of approximately 40% under the age 25, 46% between 25 and 55, and 13% over 55. The Emmaus Community Park was the most frequently visited park by respondents, over any park in Upper Milford. Only 25% responded to using Township parks more than several times a year, yet 48% of respondents’ children use the parks more than several times a year. Location, activities, and programs rated high in attracting users to the park. A majority of respondents (61%) would pay additional taxes to improve Township parks.

2. 1999 Lehigh Valley Land Use Public Opinion Survey

The Lehigh Valley Planning Commission prepared, mailed, and tabulated a survey to 4,000 Lehigh and Northampton registered voters. A total of 1,078 surveys (27%) were returned. Generally, respondents noticed a decline in the quality of life in Lehigh County, attributed to increased crime and deterioration of Allentown Central District. Respondents (91.4%) agreed it is important to preserve farmland in the Lehigh Valley. When comparing this question to the LVPC 1988 survey, the response was up in 1999 by 9.8%. In 1999, almost 85% of the respondents recommended the County do more to preserve farmland. In addition, 86.7% agreed new industrial development should occur on previously developed sites or brownfields. Expanded development of parks and recreation facilities in the County was agreed by 68.2% of the respondents. These responses provide a County wide sentiment to preserve open space and farmland. A complete summary of the results are available from the Lehigh Valley Planning Commission.

3. 2003 Recreation Needs Survey

In 2003, Upper Milford Township mailed 3,927 surveys to Township residents. There were 494 surveys returned (13% return).

Summary/Findings

Overwhelmingly, respondents repeatedly expressed a desire for preservation of open space and rural landscape character. This response has directed the focus of this study towards open space preservation.

The following summaries are based on Township resident responses to the survey. A breakdown of survey responses is included in the report appendix. Please note, the number of responses to some questions will differ from total responses received resulting from multiple answers provided by several family members on a single survey or questions not answered:

Over 50% of the respondents have resided in Upper Milford Township for 16 years or more. With minimal new development occurring within the community, this would be expected.

Almost half (46%) of the respondents' households comprise of working age (20-55) adults. The remaining household members are under the age of 20 (29%) and at or nearing retiring age of 56 and older (24%). The respondent household age group membership corresponds to the 2000 U.S. Census age breakdown, confirming our survey does sample the Township residents proportionally.

When asked how residents felt about existing park and recreation facilities, 72% noted they were satisfied. In concert, when asked about open space and farmland preservation, 65% of respondents were satisfied with current preservation plans. This decrease in level of satisfaction from the 1992 survey does illustrate residents are concerned about open space preservation and the need to do more.

The respondents were asked to identify which facilities in and around the community they recently used in the past year. Jasper Park was visited by the most respondents but only by two (2) more than Macungie Memorial Park. Jasper Park provides the greatest diversity of recreation options at any one Township park. The numerous variety of events at Macungie Memorial Park each year would understandably entice Township residents to attend. Emmaus Community Park was selected third and was followed by Lenape Park. The Pool Wildlife Sanctuary and the Rodale Fitness Trail were both visited more than Churchview Park. The use of the Fitness Park and the Pool Wildlife sanctuary, both offering walking in conjunction with another activity (either fitness or education), is more desired by residents than simply a walking trail as provided at Churchview Park. With almost 25% of the respondents visiting Churchview Park, the need for places to safely walk is evident.

Facility location and recreation options are the two (2) top reasons residents visit Township parks. Jasper and Lenape Parks are located near concentrations of population, so their use, as expected, would be greater. However, residents access these parks both by walking and driving. If we remove a portion of the respondents who walk to Lenape and Jasper Parks, then a majority of respondents who drive to a park would visit Macungie Memorial more frequently than a Township park.

Macungie Memorial does offer some facilities not offered at Upper Milford's Parks – swimming pool, band shell, indoor gym, and organized events.

Almost half of the respondents identified the Rural Landscape as their reason for living in Upper Milford Township. Family, friends, and the school district were the next two (2) reasons respondents cited for living in Upper Milford Township. This clearly illustrates the importance respondents place on the rural landscape character of Upper Milford Township.

A third of respondents would be willing to pay higher taxes to support improved or expanded recreational facilities. In addition, about a quarter of the respondents belong to an outdoor recreation organization.

When asked to rank the importance of different activities, adults listed undeveloped open space as most important. Children ranked neighborhood parks just above undeveloped open space.

Almost half of the respondents selected Public Parks as the most frequently used source for recreation while a quarter choose a private source (at home play equipment). This would conclude, respondents do utilize and value the Township recreational facilities for outdoor recreation. While in urban settings it would be assumed residents rely on public parks and open space for outdoor recreation, respondents in Upper Milford confirmed their need for parks as well. One-third (1/3) of the respondents did express an interest and need for a facility similar to the Macungie Institute.

In response to the quality of life in their neighborhood, protecting open space, preserving environmentally sensitive areas, and requiring preserved open space of new developments were overwhelmingly selected. In addition, respondents wished the Township would do more to protect open space (72%), preserve farmland (76%), and protect sensitive areas (71%). Fifty-eight percent (58%) of the respondents believe the Township should do more for trails. No respondents felt the Township should do less for open space protection or

protection of sensitive areas. This again reaffirms the desire to preserve the landscape character of the Township.

When asked to describe their ideal recreational facility, 2/3 of respondents selected open space and natural/wooded areas over active play areas, picnic areas, and a community center combined.

Respondents (264 verses 143) were in favor of creating an Environmental Advisory Committee (EAC). This is a positive initiative towards directing future development towards preservation of sensitive areas.

In conclusion, survey respondents overwhelmingly supported preservation of Upper Milford Township's rural landscape character.

4. 2017 Recreation Committee Survey

Early in 2017 the Recreation Committee drafted and published an online survey which was advertised in the Township Newsletter. There was an overwhelming response that nature trails and passive activities, along with maintaining the facilities that are already in our parks rated very highly with residents. 71.74% of respondents would like to see the Township maintain existing park and recreational facilities. 53.68% wanted nature/hiking and fitness trails. Jasper Park is the most used of the Township parks. Emmaus Community Park is still the most popular park for residents outside the Township, along with the Allentown Parkway.

At the time of the survey residents were not in favor of paying a higher tax specifically earmarked for parks and recreation in light of the recent passing of a higher Earned Income Tax dedicated to Open Space Preservation.

Inventory and Analysis - Park, Recreation, and Open Space Facilities

Parks can generally be classified as either 'active' or 'passive.' Active recreation typically organizes two (2) or more participants to complete structured activities such as tennis, basketball, baseball, or soccer. These formal activities require specific playing surfaces to safely complete the activity. In contrast, passive recreation activities are often informally completed by individuals. Hiking, fishing, bird-watching, and picnicking require an undefined amount of space and minimal development. Upper Milford Township has five (5) park and open space facilities. Two (2) parks are developed and provide primarily active recreation components. The other three (3) parks are either underdeveloped (Churchview Park) or undeveloped (Harold G. Fulmer III Nature Preserve and 8-Acre Wetland).

The Township has economized its active recreational facilities by locating and combining park facilities to serve both local and neighborhood and wider or community park needs. Jasper Park and Lenape Park provide active recreation for Vera Cruz and Zionsville villages respectively. Narrow roads and absence of sidewalks and trails limits the walkable service area these two (2) major parks cover. Most residents living outside the ½-mile neighborhood service radius have to drive to any recreation facility. Both Lenape and Jasper Parks provide community park facilities for the entire Township with an acceptable 3-mile service radius.

It should be recognized that many residents living near Emmaus actually live within the ½-mile neighborhood park service radius for Emmaus Community Park. In addition, both Emmaus and Macungie Memorial Parks serve portions of Upper Milford for community recreation.

In anticipation of future population growth, the Township needs to actively pursue expansion of land holdings adjacent to their existing facilities.

In contrast, passive recreation opportunities have been developed on a limited basis and require attention. Developing a stronger passive recreation program at each facility is suggested. Developing basic improvements to the Harold G. Fulmer III Nature Preserve, and expanding uses at Churchview Park will begin to address current passive recreation needs.

The average life of a park, recreation, open space plan is approximately ten years. Recommendations for each park are separated into three categories: priority, short term, and long term. Priority recommendations pertain to issues which deal with user safety, low startup cost or pre-requisite for short and long term recommendations. Short term recommendations target small projects and/or more eminently required improvements. Long term recommendations reflect park projects which require significant planning and can be implemented as funding becomes available.

The following information documents present site features and recreational activities for each of the Township Park and Open Space Parcels. Recommendations for improvements and land acquisition follow each park description.

Existing Park Overview Chart					
Item	Lenape Park	Jasper Park	Churchview Park	Harold G. Fulmer III Nature Preserve	Municipal Center
Location	Old Zionsville	Vera Cruz	Kohler and Churchview Roads	Vera Cruz	Old Zionsville
Watershed	Hosensack Creek	Leibert Creek	Hosensack Creek	Leibert Creek	Hosensack Creek
Facility Type	<i>Developed</i> Neighborhood/Community Park	<i>Developed</i> Neighborhood/Community Park	<i>Underdeveloped</i> Specialty Park	<i>Underdeveloped</i> Open Space	Neighborhood Park
Use	Active Park	Active/Passive Park	Active Park/ Farmland	Farmland/Open Space/Passive Recreation	Active Park
Size	12.1 Acres	26.69 Acres	17 Acres	6-.11 Acres	1 Acres
Level of Maintenance	High	High	Medium	Low	High
Facilities Parking Lot	16-/paved	7-/gravel	36/paved	2/gravel	Paved
Soccer Fields	2	3	-	-	-
Multipurpose Field	1	-	-	-	-
Paved Tennis Courts	3	-	-	-	-
Paved Volleyball Courts	3	-	-	-	-
Sand Volleyball Courts	2	-	-	-	-
Net Enclosed Batting Cage	1	1	-	-	-
Baseball Fields (chain-link Fencing/Bleachers/Enclosed dugouts)	2	1 (9-')	-	-	-
Single Play Apparatus Tot Lot	1	1	-	-	1
Paved Basketball Court	1	-	-	-	1
Restroom Facility (men's/Women's)	M-2T & 1U/F-3T	M-2T & 1U/F-3T	1 port-o-let	-	During office hours
Concession Building	1	1	-	-	-
Covered Pavilion	1 (3-' x 4-')	2 (3-' x 4-')	-	-	-
Picnic Tables	14	23	-	-	2
Water Fountains	2	2	-	-	-
Elevated Grills	2	4	-	-	-
Water Spigot/hydrant	1	2	-	-	-
Sets of Horse Shoe Pits	2	1	-	-	-
Play Structures	1	1	-	-	1
Spring Rocking Animals	3	2	-	-	-
Swings	4	4	-	-	-
Child Swings	2	2	-	-	-
Benches (Concrete ends/Wooden Slats or metal)	16	16	3	-	2
Flagpole	1	1	-	-	1
Kiosk	1	1	1	-	-
Entrance Gate	1	1	2	-	-
Fence	Split Rail	Split Rail	Split Rail	-	-
Fitness Trail	-	1	-	-	-
Soft Trail	.25 Miles	-.25 Miles	-	1.5- miles	-
Paved Trail	-	-	.5- Miles	-	-
Park Sign	1	1	1	1	-
Regulation Sign	1	1	1	1	1
Other Sign	-	3 (Quarry Regulation)	-	-	-
Other Features	1 Millstone	Native American Statue/Jasper Quarries/Woodland	Farmland/Woodland	Farmland/woodland/wetland	Municipal Building
Other Structures	Small Well Pump Shed	Old Restroom Building	-	-	-
Topographical Survey Master Plan.	X	X	X	X	X

Lenape Park

Location:	Old Zionsville
Address:	6102 Kings Highway South, Zionsville, PA
Description:	Lenape Park is classified as a community park, which also provides neighborhood park amenities for the village Old Zionsville. The facility is well equipped, providing Township residents with a diversity of recreational facilities.
Access:	Kings Highway South
Watershed:	Hosensack Creek, Cold Water Fishery
Boundaries:	North – Residences fronting Kings Highway Northwest – Old Zionsville United Church of Christ Cemetery West – Residences fronting Fountain Road South – Open Farmland East – Open Farmland A dense hedgerow planting borders the park to the west and south. A buffer planting of evergreen trees and flowering crabapples line the eastern border. Forsythia shrubs and split-rail fence border a portion of the northern property line.
Landscape Character:	The park is moderately sloping toward a small stream at the southern property line. Shallow sloping terraces accommodate play areas with short sections of steep slopes transition between terraces. Most of the site is maintained as open lawn, except for the hedgerows to the west and south. The grass is tall on either side of the small creek along the southern boundary.
Lot:	Square, flag lot – one (1) parcel
Size:	12.1 Acres
Soils:	CgC2 (Entrance/Parking lot) Chester gravelly silt loam , 8-15% slopes, deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high watertable, 3+ feet, fair for building. MmB2 (Soccer fields) Montalto silt loam , 8 to 15% slope, deep and fine textured dark brown, well-drained surface soil, red subsoil, moderately erodable, fair agricultural soil. Depth to bedrock 2.5 – 10 feet, depth to high water table, 3+ feet, fair for building. GnB2 (Pavilion area, lower field) Glenville silt loam , 3-8% slope, deep well-drained dark-grayish brown silt loam, mottled subsoil, generally suitable for agriculture. Depth to bedrock 3-20 feet, depth to high water table, 1.5 feet, unsuitable for building with high water table. WsA (Hedgerow/stream) Worsham silt loam , 0-3% slope, poorly drained dark grayish-brown soil, with mottled subsoil. Slow permeability. Depth to bedrock 4-10 feet, depth to high water table 0 feet, unsuitable for building with high water table.
Level of Maintenance:	High (Facility components maintained to meet facility needs.)

Facilities (Existing):

- 160-car paved parking lot
- 2 soccer fields
- 1 multipurpose field
- 3 paved tennis courts
- 3 paved volleyball courts
- 2 sand volleyball courts
- 1 net enclosed batting cage
- 1 (90') baseball fields (chainlink fencing/bleachers/enclosed dugouts 1)
- (75') baseball fields (chainlink fencing/bleachers/enclosed dugouts 1)
- single play apparatus tot lot
- 1 paved basketball court
- restroom facility (mens/womens)
- concession building
- 1 covered pavilion (30' x 40')
- 14 picnic tables
- 2 water fountains
- 2 elevated grills
- 1 water spigot/hydrant
- 2 sets of horseshoe pits
- play structure
- 3 spring rocking animals
- 4 swings
- 2 child swings
- 16 benches (concrete ends with wooden slats)
- 1 millstone
- well and small building enclosure
- flagpole
- kiosk
- entrance gate
- split-rail fence
- Walking Trail

Conditions:

Parking lot: Asphalt paved parking lot. Turn-around space.

Entrance: Narrow, paved, and curb-lined entrance. Entry sandwiched between existing two-story home and cemetery plots/graves. Access jointly used by residence to access rear parking area/garage and cemetery service access. Open culvert on western edge reduces turning radius.

Signage: Small painted aluminum brown with white lettering signs are located at the entrance on Kings Highway.

Tennis Courts: Chain link fence is stretched. Rust stains evident. Asphalt surface cracks repaired and recolor coated Fall 2016.

Concession Building: New Concession stand built in 2004. Block building with overhanging roofed pavilion area and equipment storage.

Restroom Facility:	White painted block with forest green trim. Modern, recently constructed building providing separate facilities for men (2 toilets/1 urinal) and women (3 toilets). Well water, on-site septic system, and electric services provided.
Basketball Court:	No fence enclosure.
Private Property Sign:	The placement of several orange and black “Private Property” signs along the western property line partially delineate an undefined property border.

Recommendations (Lenape Park):

Priority -

Entrance

Replace drainage culvert to widen turning radius on western edge.

Property Line Delineation

Improve existing landscaping along northern park boundary to screen parking lot from residents and strengthen property line delineation.

Land Acquisition (see detail section below)

Contact adjacent owners regarding park plan and objects. Prepare preliminary agreements.
Explore funding options/apply for grants.

Signage

Design signage standards for all Township parks.
Install larger, two-sided sign at park entrance.
Print a map of Upper Milford Twp. showing other parks and points of interest (post in Kiosk).

Funding

Apply for funding to assist with park expansion – particularly Lehigh County Land Acquisition Fund.
Transportation Enhancements Grants – sidewalk improvements along Kings Highway will improve park user safety and access.

Water Quality Testing

Continue monitoring well water quarterly during the open seasons as directed by DEP.

Short Term -

Park Master Plan

Update a site topographical survey.
Prepare a detailed master plan identifying future park improvements.

Basketball Court

Install fence enclosure to contain missed balls.

Tennis Courts

Replace chain link fence.
Plant shade trees along east side (native trees – such as honey locust and green ash).

Landscaping

Add trees in and around playground to provide more shade.

Widen riparian buffer along stream by reducing mowing, encourage native grasses/perennials.

Turn-around

Install Best Management Practices (BMPs) in the form of a detention basin in the center of the turn-around circle – direct stormwater drainage from parking lot to BMP (plant with stormwater management appropriate native plants)

Long Term -

Parking Lot

Upgrade parking lot to meeting current Township standards.

Install BMPs to control stormwater runoff (infiltration basins, bio-retention swales, pervious paving, etc.).

Install trees and islands to reduce heat generated by the asphalt paving.

Playground

Future playground equipment should provide for ADA accessibility.

Excavate and replace fiber safety surface material.

Land Acquisition (Lenape Park):

Existing Entrance Improvement

Acquisition of parcels adjacent to the existing park entrance will not cost effectively provide for a wider park entrance. Cemetery plots on one side and an in-ground pool and fence enclosure on the other prevent widening the road in either direction. Other parcels on Kings Highway could provide space to enter the park; however, a significant grade change would require modifying the park layout, thus escalating construction cost and reducing parking space.

Park Expansion

Acquisition of land adjacent to Lenape Park will preserve open space surrounding Old Zionsville village, allow for a safer entrance into the park, and accommodate expansion of park facilities.

One (1) parcel has been identified as critical additions to the park.

Parcel One: This parcel is located east of the park. A single-family residence faces Kings Highway with the remaining land used for growing produce for a local market stand. Its frontage on Kings Highway could provide a much improved access into the park, although this would require major driveway improvements to connect to the existing parking areas. The land could be used to expand recreational fields in the future. In addition, by acquiring this parcel, the Township secures potential future use of the land for a community septic system absorption area. This could potentially save local residents huge expenses over the installation of a sewage system that would connect to Lehigh County Authority and the City of Allentown. The existing home could be subdivided from the parent tract and then rented, used by the township or sold.

Jasper Park

Description:	Jasper Park is a community park, which also provides neighborhood park amenities for the village of Vera Cruz. The facility is well equipped, providing Township residents with a complete complement of recreational facilities. Large mature trees shade over half the site.
Location:	Vera Cruz
Address:	4960 Vera Cruz Rd North, Emmaus, PA 18049
Access:	Vera Cruz Road
Watershed:	Liebert Creek, High Quality Cold Water Fishery
Boundaries:	North – Residences fronting Vera Cruz Road West – PA Turnpike Northeast Extension South – Residences fronting Vera Cruz Road and Main Road West East – Residences fronting Vera Cruz Road and park access drive
	<p>A mature woodland dominates much of the site. An open hedgerow and cleared woodlands provide spaces for pavilions, restroom facilities, and concession building. A baseball field and play area are located in a clearing northeast of the woods. The northern and eastern boundaries are defined primarily by fragments of private property structures and plantings. A stone and mature vegetated hedgerow delineate the soccer fields from the adjacent park land and residences fronting Main Road West. A pine tree buffer screens the southern edge of the soccer field to adjacent parcels fronting Vera Cruz and Main Roads.</p>
Landscape Character:	The hilltop site gradually slopes away toward its property lines. Two-thirds (2/3) of the site is maintained as open lawn, with the wooded portion at the center of the site. The Girl Scout field, north of the wooded area, is mowed less frequently.
Lot:	Irregular square – four (4) separate parcels
Size:	26.69 Acres
Soils:	<p>ChB (woodland) Chester very stony silt loam, 0-8% slope, well drained silt loam soil with large boulders and excessive stones throughout, .5-2 inches layer of black organic topsoil, slow runoff. Depth to bedrock 4-20 feet, depth to high water table 3+ feet, fair for building. Large stone quantity impractical for plowed crops, typically wooded areas.</p> <p>CgB2 (turnpike boundary, soccer fields, concession, pavilion, and playground) Chester gravelly silt loam, 3-8% slopes, deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building.</p> <p>CgD3 (Baseball infield) Chester gravelly silt loam, 15-25% slopes, deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building.</p> <p>CgC2 (Baseball outfield and Girl Scout Field) Chester gravelly silt loam, 8-15% slopes, deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building.</p>

GnB (open field, fitness area) **Glenville silt loam**, 3-8% slope, dark grayish-brown silt loam upland soil with few rock fragments, mottled dark brown subsoil, fairly well suited for agriculture. Depth to bedrock 3-20 feet, depth to high water table 1.5 feet, unsuitable building site with seasonal high water table.

Level of Maintenance:	High (Facility components maintained to meet facility needs.)
Facilities (Existing):	70+ car gravel parking lot (undefined spaces) 3 soccer fields 1 net enclosed batting cage 1 (90') baseball fields (chain-link fencing/bleachers/enclosed dugouts) restroom facility (men's/women's)
Conditions:	Concession building Old restroom building (guttled)
Parking lot:	2 covered pavilions (30' x 40') 23 picnic tables 2 water fountains
Entrance:	4 elevated grills 2 water spigot/hydrant play structure 3 spring rocking animals 4
Turn-a-round:	swings 2 child swings
Trails:	16 benches (concrete ends with wooden slats) Native American Statue Fitness stations
Signage:	Walking trails +/- 5' wide (asphalt and stonedust) Volleyball (portable) grass Perennial border flagpole kiosk entrance gate jasper stone quarries well (water supply) Gravel parking lot. A split rail fence partially defines the parking lot edge. Parking spaces are not delineated.

Three (3) adjoining residences share a narrow paved entrance drive with park users. A large hedge along the northern edge of the entrance separates the drive from the playground.

The pavement is in poor condition – severely cracked.

A turn around area has traffic going around a center island within the parking lot.

Sections of paved trail from the parking area to the ballfield is in poor condition – uneven and severely cracked.

Small painted aluminum brown with white lettering park identification sign is located at the entrance on Vera Cruz Road.

- Restroom Facility: White painted block with forest green trim. Modern, recently constructed building provides separate facilities for men (two toilets/one urinal) and women (three toilets). Well water, LCA Connected sewer, and electric services provided.
- Court Recreation: Typically, a community and neighborhood park provides court recreation, however, Jasper Park does not currently provide any paved court activities. Limited space and potential archaeological significance precludes construction of this amenity on current park land.

Recommendations (Jasper Park):

Improvements target upkeep of existing recreation elements and preservation of archaeological artifacts.

Priority -

Signage

- Design standard signage for all Township parks.
- Install larger, two-sided signs at park entrance.
- Upgrade existing covered kiosk with map of Upper Milford Township showing other parks and points of interest.

Entrance Land Acquisition (see detail section below)

- Contact adjacent owners regarding park plan and objects. Prepare preliminary agreements.
- Explore funding options/apply for grants.

Funding

- Apply for funding to assist with park expansion – particularly Lehigh County Land - Acquisition Fund.
- Transportation Enhancements Grants – sidewalks/trails in Vera Cruz Road will improve park user safety and access.

Riparian Buffer Restoration

- Inventory existing vegetation surrounding Liebert Creek.
- Remove invasive species.
- Plant native plants as necessary to re-establish a healthy vegetative buffer.

Water Quality Testing

- Continue monitoring well water quarterly during the open seasons as directed by DEP.

Jasper Quarries

- Establish Township policies in conjunction with county, state, and federal agencies in preserving this nationally significant resource.
- Survey the archaeologically significant portions of the park to record and monitor future changes to the landscape.
- Adopt policies addressing public access which limits site disturbance and preserves the landscape.
- Develop an educational program which informs the public of the site’s natural resource and archaeological significance.

Short Term -

Site Survey

- Order a site topographical survey - a detailed plan of existing grades, vegetation, features, property boundaries, and roads - so as to plan future improvements.

Park Master Plan

Prepare a detailed master plan to direct future park improvements and assist in allocating future funds.

Play Area

Replace lifted/deteriorated timber edging.

Excavate and replace compacted and decayed fiber safety surface.
Include ADA accessible equipment when upgrading.

Entrance Approach

Re-design entrance to Penn DOT standards.

Remove a section of the hedgerow, group the flagpole with the kiosk, so the park name painted on the pavilion is in the background and becomes the focus as one enters the park.

High Water / Wet Areas

Determine extent of high water table along Liebert's Creek.
Establish native riparian buffer.

Pavement

Repave entry loop around Indian Statue "island" planting.

Repave pedestrian walk from the parking area to the ball field. Expand paved surface to accommodate handicap accessibility for spectator seating.

Land Acquisition (see detail section below)

Contact adjacent owners regarding park plan and objects.
Prepare preliminary agreement.
Explore funding options/apply for grants.

Long Term -

Court Recreation

Purchase land contiguous to the park to construct two (2) tennis courts and a basketball court on previously disturbed (not archaeologically sensitive) sites.

Parking Lot

Upgrade parking and entry circle to meet current Township standards.

Install alternative stormwater management practices to control stormwater runoff (infiltration basins, pervious paving, etc.).

Conservation Easement

Place a conservation easement on the park to protect the archeological site. It would require that a certified archeologist and the Pennsylvania Historic and Museum Commission (PHMC) be notified.

Land Acquisition (Jasper Park):

Even though development surrounds Jasper Park, portions of adjacent parcels should be considered for purchase.

Parcel One: This parcel is located at the southern end of the existing soccer fields. Purchase a portion of this parcel to increase necessary greenspace. A maintenance/service access easement from Vera Cruz Road to this parcel would be recommended; however, paved access to this area would not be suggested. Purchase of the entire parcel includes the former Township Recreation Hall would require major road improvements offsetting any benefit to a second vehicular entrance.

Parcel Two: The rear portion of this parcel is informally used by the park, as it currently divides the parking area from the soccer fields. Recommend purchase of the rear section of this parcel to secure contiguous land ownership.

Parcel Three: This parcel is directly north of the existing park entrance and drive. The parcel provides necessary space to widen the entrance drive and provide a greater park presence from Vera Cruz Road. A widening of the park entrance would accommodate space for pedestrians and future connections to the Harold G. Fulmer III Nature Preserve across the Road. A larger sign could be placed on Vera Cruz Road with the additional road frontage. The area behind the building could provide an area for tennis and basketball courts.

Churchview Park

Description:	Churchview Park is a specialty park, providing an asphalt paved loop trail for cyclists and walkers.
Location:	Intersection of Kohler Road and Churchview Road
Address:	4602 Kohler Road, Zionsville PA
Ownership:	Lehigh County, under lease by Upper Milford Township for 99 years (lease originated June 1994)
Access:	Kohler Road
Watershed:	Hosensack Creek, Cold Water Fishery
Boundaries:	North – Churchview road, across from open farmland (Seem Seed Farm) West – Kohler Road, across from open farmland and woodland South – Large Track Residential East – Railroad Line
Landscape Character:	The entire site slopes to the lower southeastern corner of the site. Mature woodland hedgerows surround the southern and eastern boundaries. A large woodland bisects the site and separates the site into three (3) distinct areas. The northern section of the property, at the intersection of Kohler and Churchview is an open, gently sloping meadow. The southern open area is a large open lawn with a small detention basin in the southeastern corner.
Lot:	Rectangular lot – one (1) parcel
Size:	17 Acres
Soils:	CgC2 (Lawn area/parking area) Chester gravelly silt loam , (8-15% slopes) deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high watertable, 3+ feet, fair for building. ChB (woodland) Chester very stony silt loam , (0-8% slope) well drained silt loam soil with large boulders and excessive stones throughout, .5-2 inches layer of black organic topsoil, slow runoff. Depth to bedrock 4-20 feet, depth to high water table 3+ feet, fair for building. Large stone quantity impractical for plowed crops, typically wooded areas. CgC2 (upper meadow) Chester gravelly silt loam , (8-15% slopes) deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building. CgD2 (upper meadow) Chester gravelly silt loam , (15-25% slopes) deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, steep for building. CgB2 (upper meadow) Chester gravelly silt loam , (3-8% slopes) deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building.

Level of Maintenance:	Medium (Facility components maintained to meet facility needs.)
Facilities (Existing):	36-car paved parking lot asphalt paved loop trail entrance gates split rail fence covered kiosk portable handicap accessible restroom

Recommendations (Churchview Park):

Churchview Park is an underutilized park parcel in the Township. Diversity in park activities and adjustments in park maintenance will increase park usage and justify annual maintenance costs.

Priority -

Site Survey

Order a site topographical survey. A detailed plan of existing grades, vegetation, features, property boundaries, and roads will provide the basis for future planning and construction.

Park Master Plan

Prepare a detailed Master Plan to plan for future park improvements and assist in allocating future funds for necessary and desired park improvements.

Events

Offer the park to organizations for outdoor concerts, flea markets, festivals, etc. The Township could charge a fee to cover clean-up, etc., and extra parking could be in the field near Churchview Road.

Provide additional restroom facilities (either temporary or permanent restroom/storage facility)

Plantings

Remove deer browsed plantings to eliminate unnecessary maintenance.
Install native, deer-resistant plants around parking area to reduce heat generated by the asphalt.

Extend the hedgerow planting along Kohler Road in and around rocks. This planting will eliminate the tedious trimming currently required.

Maintenance

Removal and monitoring of invasive plant species.

Short Term -

Trail

-Expand the existing loop trail to the upper section of the park.
-Vary trail surfaces to encourage a variety of users and skill levels. A soft (stone dust) trail surface would contrast the existing hard asphalt trail.

Landscaping

-Plan and install a plant arboretum, including an educational, self-guided tour with signage and plant labels.
-Replace the outer perimeter of trail with meadow grasses (less maintenance costs, attracts wildlife, adds interest).

Long Term -

Pedestrian Access

Prepare a Township-wide trail plan to develop pedestrian connections between Township facilities. A trail south on Kohler Road could connect to and continue north on Kings Highway to Lenape Park. Great vistas can be enjoyed from the upper sections of Kohler Road and Kings Highway, making this a potentially enjoyable walking route. The trail would also provide many residents access to both Lenape and Churchview Parks.

Harold G. Fulmer III Nature Preserve Park

Description:	Underdeveloped park, located at the northern edge of Vera Cruz. In 1997, Harold G. Fulmer donated almost 35 acres to the Township for preservation.
Location:	Intersection of Vera Cruz Road and Quarry Road
Address:	3620 Quarry Road North, Emmaus, PA 18049
Access:	Vera Cruz Road and Quarry Road
Watershed:	Liebert Creek, High Quality Cold Water Fishery
Boundaries:	North - Quarry Road with residences and woodland across West – Vera Cruz Road and residences fronting Vera Cruz Road South – Main Road East, pond and residence East – woodland, stream Much of the land is tilled farmland, located on a small ridge. The land slopes steadily to the north and south. Edge of roads, fields, and hedgerows help to define some park boundaries; however, the actual parcel boundary is unclear in the landscape.
Landscape Character:	The park is moderately sloping to the north and south. Open fields with mature woodland hedgerows characterize most of the site. Double rows of majestic spruce and a cleared pipeline right-of-way contrast with the otherwise rural landscape.
Lot:	Square, irregular (two parcels)
Size:	34.9 Acres
Soils:	CgB2 (upper tilled field) Chester Gravelly Silt Loam , (3-8% slopes) deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building. CgC2 (upper tilled field) Chester Gravelly Silt Loam , 8-15% slopes, deep soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, fair for building. WgB2 (former pond/wetland) Washington Silt Loam (3-8% slope) well drained, deep, dark-brown silty clay loam. Depth to bedrock 4-60 feet, depth to high water table 3+ feet. Excellent agricultural soils. Cautious for building due to sink holes. CgD3 (eastern edge) Chester Gravelly Silt Loam , (15-25% slopes) shallow soils, well drained, runoff is medium to rapid, fair agricultural soil. Depth to bedrock 4-20 feet, depth to high water table, 3+ feet, steep for building. WsA (wetland/stream corridor) Worsham Silt Loam , (0-3% slope) poorly drained dark grayish-brown soil, with mottled subsoil. Slow permeability. Depth to bedrock 4-10 feet, depth to high water table 0 feet, unsuitable for building with high water table.
Level of Maintenance:	Low

Vegetation:	Lawns, Fields leased to a local farmer. Open fields tilled. Trees, Existing mature hedgerows – no maintenance
Facilities (Existing):	2 car gravel parking, mown trails
Conditions:	Actively farmed, natural

Recommendations Harold G. Fulmer III Nature Preserve (Fulmer Tract Park):

This park is currently underdeveloped. Recommendations correspond with the Fulmer Preserve Concept Plan.

Priority -

Park Name

- In purchasing the additional parcels it was asked of the Township to name the park to “Harold G Fulmer III Nature Preserve”.

Signage

- Design standard signage for all Township parks.
- Installed signs on Main Road East and Quarry Dr. Necessary to install directional signage along Vera Cruz Road..

Entrance Land Acquisition (see detail section below)

- Contact adjacent owners regarding park plan and objects.
- Prepare preliminary agreement.
- Explore funding options/apply for grants.

Riparian Buffer Restoration

- Inventory existing vegetation surrounding Liebert Creek.
- Remove invasive species.
- Install native, deer-resistant plants to re-establish a healthy vegetative buffer.
- Coordinate with adjacent land owners on riparian buffer enhancements and proper maintenance.

Perimeter Buffer Planting

- Meet with adjacent property owners pertaining to buffer/hedgerow planting on park land.
- Plant buffer with native, deer-resistant plants to begin establishment.

Short Term -

Parking

- Construct a small parking area and bus turnaround to accommodate residents and school groups.
- Use Stormwater Best Management Practices (BMPs) as an educational, demonstration park (bio-retention swales, infiltration basins, etc.).
- Design parking area to not impact the site.

Signage

- Develop and install interpretive signage or brochure explaining the site’s archaeological, cultural, and natural significance.

Trails

- Contact Scout or youth organizations to assist in trail educational signage. Add Trail Markers.
- Construct wetland boardwalk and overlook gazebo and bridge.
- Install Bird habitat area

Long Term -

Funding

- Seek potential funding sources to build project elements, using conservation minded materials.

Conservation Easement

- Place a conservation easement on the park to protect the archeological site. It would require that a certified archeologist be present for any ground disturbance and that the Pennsylvania Historic and Museum Commission (PHMC) be notified of any construction.

Municipal Center Park

Description: Neighborhood Park

Location: At the Old Kings Highway School

Address: 5671 Chestnut St Zionsville PA 18092

Access: From Municipal Center Parking Lot

Watershed: Hosensack Creek Watershed

Boundaries: Residential sites, and Cedar Crest Blvd

Size: 1 Acre

Level of Maintenance: Medium (Maintenance of play area.) Vegetation: Grass lawn, planted
Trees and shrubs

Wetland None

Facilities: Play Structure, Sliding Board, Picnic Tables and Benches, Basketball Court.

Recommendations: Municipal Center Park:

Short Term -

Keep maintaining play structure and surrounding area.

Long Term –

Replacement of play structure with tot lot equipment.

Trail at the Fields at Indian Creek [in process of construction]

Description: Linear Park located within The Fields at Indian Creek Development HOA Property.

Location: along the old Golf Cart path along Cedar Crest Blvd within the Fields at Indian Creek

Address: Cedar Crest Blvd and Lower Macungie Road Emmaus PA 18049

Access: From Sidewalk on Cedar Crest Blvd

Watershed: Liebert Creek, High Quality Cold Water Fishery

Boundaries: Residential sites, and Cedar Crest Blvd

Size: 2.5 Acres

Level of Maintenance: Low (Maintenance of walking trail only.) Vegetation: Grass lawn, planted trees and shrubs

Wetland Along creek

Facilities: All access pathway

Recommendations: Trail at the Fields at Indian Creek:

This parcel is currently being redeveloped.

Short Term -

Ownership: This easement will be owned by the Township once the improvements for the Fields at Jasper Ridge are completed. The Township will then be responsible for maintenance and routine care of the park property. The HOA will maintain the drip irrigation field and stormwater facilities directly adjacent to the park.

[Proposed] Park at the Fields at Jasper Ridge

Description:	Neighborhood Park located within The Fields at Jasper Ridge Development.
Location:	Between the Salem Ridge Development and Mink Estates
Address:	Off of Road “A” within the Kohler Tract Development
Access:	Municipal Parking lot. ADA accessible
Watershed:	Liebert Creek, High Quality Cold Water Fishery
Boundaries:	Residential sites, municipal parking lot
Landscape Character:	Site is excavated for park and drip irrigation.
Lot:	Rectangular, irregular
Size:	2.5 Acres
Level of Maintenance:	Medium (Facility components maintained to meet facility needs.)
Vegetation:	Grass lawn, planted trees and shrubs
Wetland	None
Facilities:	17-car paved parking lot Asphalt paved loop trail Entrance gates Split rail fence Covered kiosk Basketball Court

Recommendations [Proposed] Park at the Fields at Jasper Ridge:

This parcel is currently undeveloped.

Short Term -

Ownership

- This parcel will be owned by the Township once the improvements for the Fields at Jasper Ridge are completed. The Township will then be responsible for maintenance and routine care of the park property. The HOA will maintain the drip irrigation field and stormwater facilities directly adjacent to the park.

Township Wetland

Description:	Undeveloped open space. A land-locked parcel, covered in woodland and dense vegetation with a small stream passing through the center.
Location:	Eastern Township boundary, south of Conservation District Demonstration project on the Seem Seed Farm lands
Address:	4191 Dillingersville Road, Zionsville, PA
Access:	None
Watershed:	Hosensack Creek, Cold Water Fishery
Boundaries:	Surrounding woodland and active farmland
Landscape Character:	Site is flat
Lot:	Rectangular, irregular
Size:	8 Acres
Soils:	GnB2 (upper areas) Glenville Silt Loam , (3-8% slopes) Silty clay loam. Seasonal water table at or near surface, depth to bedrock 3-20 feet, depth to high water table 1.5 feet, unsuitable for building. Aw (stream banks) Atkins Silt Loam , (0-3% slopes). Deep, poorly drained very dark gray silt and clay loam. Nearly level and within flood plain areas. Depth to bedrock 3-35 feet, depth to high water table, 0 feet, unsuitable for building.
Level of Maintenance:	None
Vegetation:	Wetland-Existing overgrown – no maintenance
Facilities (Existing):	No site improvements
Conditions:	No improvements

Recommendations (Township Wetland):

This parcel is currently undeveloped.

Short Term -

Ownership

- This parcel was donated to the Township June 26, 1984 with the understanding the Township retain the parcel for at least 20 years. In the past 19 years, the Township has been unable to maintain or even utilize this parcel. The land-locked wetland site is not conducive for park development or improvements. Site inaccessibility further complicates access, maintenance, and management. Two options for the Township to consider include:
 1. Considering the Township's current liability and future maintenance costs, selling this parcel to an adjacent land owner, with the understanding it will never be developed, is an option to be explored. As part of the negotiation, the buyers may enter into a conservation easement for their entire parcel with Lehigh County. The monies from the sale of this parcel can be used to purchase other lands more critical to its park, recreation, and open space programs in Upper Milford.

Park Maintenance Inventory and Analysis

Facilities and Equipment Maintenance

Overview

During site visits in the spring and fall each year, the Township parks were found to be well-maintained. Lawn areas mowed, edges trimmed, pavilions painted, play equipment working, restrooms functioning, and paved areas swept.

Lenape, Jasper, Municipal Center, the Fields at Jasper Ridge and the trail at the Fields at Indian Creek Parks

Township staff maintains all park facilities. Most of the work is during the spring, summer, and fall, at which time three (3) additional employees are retained to assist with this work.

Churchview Park

The Township contracts maintenance of Churchview Park to outside sources. A private landscape maintenance company is contracted annually to mow and trim lawn areas. The upper meadow is cut by a local farmer for hay. The portable toilet is rented and maintained by a private company.

Harold G. Fulmer III Nature Preserve

The Harold G. Fulmer III Nature Preserve is leased to a local farmer who maintains the fields. The Township staff provides shoulder maintenance. Township staff mow trails and trim trees.

Wetlands Tract

No maintenance is performed at this site.

Staff

The Township has six (6) full time public works employees, one (1) full-time park “gate keeper,” and five (5) summer help staff.

Park maintenance tasks are completed in addition to other Township work, including road maintenance. In addition to weekly mowing, trimming, and cleaning, the summer assistance completes repairs and painting as necessary.

A full time “park keeper” daily opens and closes each park facility. All three (3) active parks have metal gates securing park entrances. The park gate keeper checks all parks and ensures all park patrons have left the facility prior to locking the gates at night. This is completed 365 days per year.

Equipment

The Township currently owns and maintains the equipment it requires to perform routine maintenance tasks.

This includes:

Mower and Trailer Tractor

Trimmers

Chipper

Chainsaws

Backhoe
Dump Truck
Pickups
Boom Mower
Street Sweeper
Fertilizer/Pesticide Applicators
Shovels, Picks, Brooms, etc.
Trimmers, Lopers, Clippers

Most of the equipment is stored and maintained at the main Township facility. Small equipment (trimmers, rakes, shovels, etc.) are stored at Lenape and Jasper Parks. No storage is presently available at Churchview or Harold G. Fulmer III Nature Preserve.

Existing Maintenance – Task Summary

	<i>Lenape and Jasper</i>	<i>Municipal Center</i>	<i>Churchview Park</i>	<i>Harold G. Fulmer III Nature Preserve/Trail at The Fields at Indian Creek</i>
<i>Tasks performed by Township staff.</i>				
Pavilion cleanup	weekly	weekly	-	N/A
Restroom Open	seasonal	seasonal	seasonal	N/A
Restroom Checked	daily	daily	daily	N/A
Restroom Cleaned	3-4/week	3-4/week	-	N/A
Restroom Locked	seasonal	seasonal	N/A	N/A
Trash cans emptied	1/week	1/week	1/week	N/A
Gates opened and locked	daily	daily	daily	N/A
Courts swept	1/week	1/week	N/A	N/A
Court maintenance/surfacing	as needed	as needed	N/A	N/A
Play surface – raked and supplemented	annually	annually	N/A	N/A
Painting	annually	annually	N/A	N/A
Tree trimming	as needed	as needed	as needed	as needed
Shrub trimming	annually	annually	as needed	as needed
Lawns mowed	weekly	weekly	weekly	as needed
Playing Fields mowed	weekly	weekly	N/A	N/A
Fertilization	1/year	1/year	1/year	N/A
Field aeration	1/year	1/year	N/A	N/A
Weed control lawns	1/year	1/year	1/year	N/A
Herbicide (paths/infield)	3/year	3/year	N/A	N/A
Leaf pickup/removal	annually	annually	annually	N/A
Snow plowing	as needed	as needed	as needed	N/A
<i>Tasks performed by Others.</i>				
Restroom facilities	-	-	rented	N/A
Cleaned	-	-	weekly	N/A
Lawn mowing	-	-	weekly	N/A
Trimming	-	-	weekly	N/A
Tree care/removal	as needed	as needed	as needed	N/A
Field use	N/A	N/A	leased	Leased/HOA

Recommendations

Equipment

Labor to complete routine maintenance tasks can be saved by purchasing critical equipment. Time spent currently to repair older equipment or time spent operating/moving this equipment could be reduced and time spent on other necessary tasks.

Aerator – The Township currently rents an aerator. The Township will continue to coordinate the rental of this equipment so it can perform this task twice annually. Field aeration is important in reducing athletic field compaction. A heavily compacted field can be a hazard to players as well as compromise turf quality.

Park Management/Assessment

Tree Replacement Program – In order to maintain a healthy woodland and vegetative cover, it is important to annually study the health of existing large trees. Species, age, and overall health and condition should be assessed and documented by a Township tree survey/report. This report provides a starting point for tree replacement. In conjunction with an overall master plan, future plantings can be installed to maintain a park's shade and landscape value. For example, large shaded areas for picnicking should be inter-planted with younger trees which will replace those trees currently covering the area.

Woodland Management – Groves of trees and hedgerows require maintenance and planning to ensure healthy vegetation. Invasive plants smother desired plants from establishing. Invasive plants should be removed immediately and areas re-inspected annually for any re-growth. The invasive plants tend to become a monoculture, creating poor environments for wildlife. A diversity of plant material provides food and shelter necessary for a healthy habitat.

Shrubs and Shrub Borders – Shrubs require regular trimming to maintain a manicured look which adds to Township maintenance costs. As shrubs and shrub borders are replaced or newly installed, shrub species should be chosen which do not require trimming except for the occasional grooming. Additionally, any existing shrubs that have enough space to grow to their natural size and shape should be allowed to do so.

Riparian Buffer Maintenance – The land and vegetation parallel on either side of a stream is considered its riparian buffer. The size of the buffer will depend on adjacent land uses, topography, vegetative cover, and soils. Ideally, the buffer should be as wide as possible, minimally 50 feet wide on each side.

A healthy riparian buffer will provide a number of valuable mechanics to a stream. A thick vegetative cover filters water sheet flowing across the land, prior to entering the stream. The trees shade and thus cool the stream,

enhancing native aquatic life and reduces algae growth. The vegetation slows the flow of water runoff, reducing stream bank erosion. In addition, plant root systems stabilize banks reducing high water erosion.

Removal of invasive plants will be the first critical task in re-establishing a healthy native plant community. The linear stream corridor does not start or stop at the property line, so it is important to work with neighboring property owners in re-establishing a healthy plant community.

Staff

Based on the existing and anticipated work loads for park maintenance, an additional full time person is needed. This person should be hired to primarily perform park maintenance and management tasks.

Park Maintenance/Management Staff Person - Generally, park maintenance tasks are completed to maintain operational park facilities. The outsourcing of portions of the work has reduced the need to hire additional staff. However, existing staff are unable to perform all maintenance tasks required. Specific tasks, such as aeration or field fertilization, should be completed twice annually instead of once annually. In addition, other management tasks have not been completed, such as riparian buffer management, tree inventory and assessment, and invasive plant species identification and removal. It is recommended a park manager/maintenance person be added to the Township staff.

Tasks could include:

- i. Inventory invasive plants at Township parks.
- ii. Create invasive plant removal schedule.
- iii. Install native plants.
- iv. Oversee park improvements.
- v. Perform routine maintenance tasks.
- vi. Orchestrate volunteer work projects.
- vii. Assist with other routine public works projects.
- viii. Assist with environmental management

Seem Seed Farm

In 1992, Lehigh County purchased the Seem Seed Farm which is in Upper and Lower Milford Townships. The Seem Family sold its farm to the County at a reduced rate with the understanding the land would be used for farming and open space. The 453.5 acres of open fields, woodland and wetlands are located near German, Churchview, and Kohler Roads.

In 1991 and 1994, two portions of the land were used to create the Lehigh County Conservation Demonstration Project on 61 acres and 99 year lease of Churchview Park on 17 acres. Both projects supported recommendations from the *Lehigh County Parks -2000* study to expand the recreational uses of the Seem Seed Farm. The remaining portions of land are either cultivated or preserved open space.

The *Lehigh County Parks – 2005* study further encourages recreational uses of the land. Recreation uses compatible with active farming have co-existed for years on the Seem property. Many residents currently enjoy such recreational activities as: fishing, horseback riding, mountain biking, snowmobiling, tobogganing, cross-country skiing, hiking, dog walking and bird watching. These uses respect the active farming of the land by minimizing crop damage and respecting land conservation.

Until recently, Lehigh County leased the land to the Seem Seed Company. A recent request for proposals solicited potential leasee's and land uses for the property. After sorting through a wide variety of land use proposals (from farming to golf courses), the committee and later the County Commissioners, narrowly agreed to lease the land to Dennis P. Trexler Farms/Leroy C. Stahler, Inc of Center Valley for a period of 10 years. This agreement charges the leasee \$81 per acre for an annual fee of \$35,235 to Lehigh County.

Upper Milford Township residents need to cooperate with Lehigh County in safeguarding this resource. The multi-municipal comprehensive plan is currently studying options to preserve this area.

Greenways

In 1998, the Commonwealth of Pennsylvania ordered a PA Greenways Study under Executive Order 1998-3. A February 2003 update identified spine greenways or linear trails which covered 50 miles in length and included two (2) or more counties. These spines provide state-wide linkages, which municipalities can implement local system connections. In 1999, Lehigh County completed a Natural Areas Inventory. The Department of Conservation and Natural Resources (DCNR) plans to develop a county-wide greenway plan in 2004 for Lehigh County. The website www.pagreenways.org is a clearing house of information for local communities concerning greenway networks across the state.

Upper Milford Township is partly in the Schuylkill River Watershed and Greenway, 1 of 21 state designated greenways/trails. The Delaware and Lehigh Canal corridor is a second greenway. The Township's watershed contributes to this historic transportation route. Upper Milford Township should identify Township greenway corridors and their long-term potential connections to statewide greenways.

Restoration/Preservation

Many respondents of the Recreation Needs Survey indicated they would volunteer for outdoor recreation activities. Community volunteers, coupled with local schools, universities, Township staff, and non-profit organizations, could work to accomplish the inventory, assessment, repair and maintenance of the Township's landscape. Restoration of an abandoned cultural site, re-forestation of a disturbed wetland, re-establishment of a cleared riparian buffer will collectively begin the preservation and healing process for the cultural and natural landscape. Local newspaper

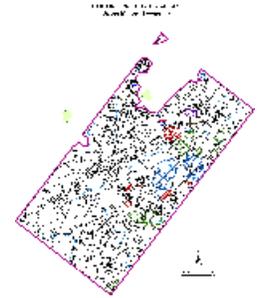
articles, a newsletter, website updates, and Township meeting announcements could further educate residents on efforts underway or initiatives requiring additional support. Identifying projects, assessing project's needs, and gathering support are critical efforts in organizing and managing Upper Milford Township's natural and cultural resources. An EAC could undertake this role as a leader in carrying these types of projects from beginning to end and overseeing the township's restoration and preservation efforts.

General Recommendations

Upper Milford Township needs to actively pursue preservation of interconnected, naturally sensitive, and agriculturally significant lands with the Township. Productive farmland, natural habitats, groundwater, stream water quality, woodland habitats, rural character, scenic road corridors, and public vistas are all susceptible to irrevocable damage if not identified and protected.

Recommended Actions:

- ***Utilize Conservation Mapping***
 - Existing Park Lands*
 - Potential Park Lands*
 - Scenic Areas and Cultural Sites*
- ***Delineate Scenic Areas***
- ***Create a Historic/Scenic Touring Route***
- ***Protect Watershed Resources within existing parks***
- ***Restore and Preserve Sensitive Natural Areas/Riparian Buffers***
- ***Recognize and Protect County-Designated Natural Areas***
- ***Consider Kings Highway School Park Future***
 - ***Develop a Township-wide Trail Plan***
- ***Establish Regional Trail Connections***
- ***Educate Residents about Township Natural and Cultural Resources***
- ***Acquire Parkland to Improve Parks Expand Active Recreation Opportunities***



Lenape Park Recommendations

Priority -

Improve Kings Highway Entrance

Explore Acquiring Adjacent Lands

Develop and Install Uniform Signage System

Apply for Funding/Grants

Monitor Well Water Quality



Short Term -

Prepare a Park Master Plan

Improve Basketball Court

Landscaping Construct



Long Term -

Improve Playground



Land Acquisition –

Park Expansion

Acquire land adjacent to Lenape Park to accommodate expansion of Park Facilities, preserve open space surrounding Old Zionsville village, and provide a safer entrance into the park.



Jasper Park Recommendations

Priority -

Develop and Install Uniform Signage System

Explore Land Acquisition

Apply for Funding/Grants

Restore Liebert Creek Riparian Buffer

Monitor Well Water Quality

Preserve, protect and enhance Jasper Quarries



Short Term -

Prepare a Site Survey

Complete a Park Master Plan

Upgrade Play Area

Improve Entrance Approach

Resurface Pavements



Long Term -

Consider Court Recreation

Improve Parking Lot

Establish Conservation Easement



Land Acquisition -

Parcel One. The rear portion of this parcel is informally used by the park, as it currently divides the parking area from the soccer fields.

Parcel Two. Parcel north of existing entry drive.

Parcel Three. The Pennsylvania Turnpike blasted through the center of the Jasper Quarries years ago, leaving a portion of this archaeological site on the west side of the now sunken highway.



Churchview Park Recommendations

Priority -

Prepare a Park Master Plan

Encourage Events

Install Plantings



Short Term -

Expand Trail

Maintain meadow plantings



Long Term -

Township Trail Connection

Wetland Site Recommendations

This parcel is currently undeveloped.

Short Term -

*Consider Alternate Ownership with continuous
Conservation Easement*



Harold G. Fulmer III Nature Preserve Recommendations

Priority -

- Develop and Install Uniform Signage System*
- Explore Entrance Land Acquisition*
- Apply for Funding/Grants*
- Restore Riparian Buffer*
- Plant Perimeter Buffer (Hedgerow)*



Short Term -

- Develop Informational Signage*
- Maintain and expand Trails*



Long Term -

- Construct a Boardwalk/Gazebo*



Public Works/Maintenance Recommendations

Equipment -

- Continue to rent aerator*

Maintenance Management Tasks -

- Initiate a Tree Replacement Program / Manage Woodlands*
- Reduce Laborious Maintenance Tasks*
- Maintain Riparian Buffer*
- Hire a Park Maintenance/Management Staff Person*



Based on the goals, the following specific recommendations are categorized by goal.

1. Organize and administer park and recreation services in a way which insures year-round attention to both current and newly proposed programming and facility initiatives.

Specific Goal

- a. Expand Township maintenance and management services (*see maintenance section*).

2. Develop and operate a comprehensive program of recreation and park activities that continue the traditionally strong athletics component for youth while branching into other areas for more interest to the overall population.

Specific Goal

- a. Historic/Scenic Touring Route

Upper Milford Township uniquely offers a diversity in cultural and natural resources. A circuit of significant views, sites, and features along a specified route would encourage awareness to these features and an appreciation to see them preserved. A preliminary touring route has been identified on the map of potential conservation lands. The tour should be developed and presented in a brochure and on the Township's website, providing a map locating the route and points of interest. Images and short paragraphs of text can explain important features and sites.

3. Maintain existing facilities at Jasper, Lenape, and Churchview parks to increase accessibility, improve signage and parking, rebuild, and repair existing facilities, and take better advantage of untapped program potentials at each site.

Specific Goal

See comments listed in individual park sections.

4. Pursue a program of gradual expansion of the existing park system in order to preserve dwindling open space within the Township and maintain a balanced mix between sustained growth of the Township and the current rural quality of life.

Specific Goal

See comments listed in individual park sections. Township-wide Trail Plan

Survey respondents did identify a need for walking and biking trails in the Township. A trail plan will be involved and require resident participation as trails can be a sensitive issue. Concerns for safety, liability, and maintenance will need to be reviewed and addressed on a general and individual basis. A dialogue should be developed between trail users and landowners to identify key issues and resolve foreseen conflicts.

The existing road network along steep banks, stream embankments, and wetlands complicate road widening for sidewalks, trails, or shoulders in many places. Homes, barns, walls, and the like are occasionally built at the roads edge as well. This complexity of existing site conditions clearly indicates a need to develop a Township-wide trail plan to assist in future development and improvements. A plan will identify sections of trail which may be completely off-road, circumventing difficult or impossible areas.

The trail plan must provide priority, short, and long term trail options, so a network can be started and established immediately. Once the trail plan is complete, new development, road projects, and funding can be used to complete trail sections overtime. The plan, completed in GIS, can identify and designate the complexity of each section. As trail sections are built, the connecting “difficult” sections become more manageable

Regional Trail Connections

Commission a joint-municipal trail master plan with neighboring communities. Trail connections can become critical linkages in reducing traffic congestion on local and state roads as well as provide safe paths for residents to access community parks and open space both in and around the Township. A number of trails currently exist or are planned in the immediate area. Efforts should be made to provide linkages to these adjacent systems, providing a network of trails for resident use.

Linear Greenway (Long Term)

Initiate a dialogue between East Penn Railway, Inc. John Nolan (owner/operator) and the Township.

The rail corridor is active and is anticipated to remain for some time. However, a right of first refusal should be sought with the land owner so the Township has the opportunity to acquire this

Land for future preservation and possible recreational use. Portions of the rail right-of-way may not be on land owned by the railroad, but rather occupy privately owned land with limited easement for rail use. The legal implications can be reviewed at the time of acquisition and negotiations will be required with all adjoining property owners. The potential to create a trail connection from Emmaus to East Greenville and the Perkiomen Creek would be a significant connection. A pedestrian/bicycle trail adjacent to the rail line, separated by a fence, should be explored as the rail remains active.

Seem Seed Farm

Recent proposals by potential land tenants illustrate a broad diversity of uses which may not necessarily meet local sentiment. The County has signed the ten year agricultural lease. However, planning to assess and determine the best future use of the land should be completed during this next ten year period.

Upper Milford Township should strengthen its dialogue with Lehigh County and the Farmland Preservation Board regarding future use of the 435 acres in Upper Milford Township. In order to avoid undesired uses, the Township needs to pro-actively coordinate with the County to safeguard this large agricultural holding. Neighboring residents have formed a Friends of the Seem Seed Farm with an interest in preserving the land’s agricultural use. Both the Township 2003 and Lehigh County 1999 resident surveys determined people want a rural landscape preserved in the Lehigh Valley, and here is an opportunity for the Township and County to uphold that consensus.

The concurrent writing of the multi-municipal comprehensive plan should direct future uses of these County owned lands, and their immediately surrounding areas, by supporting continuation of the agricultural landscape.

Milford Park and Victory Valley

It is recommended that Upper Milford Township actively pursue conservation easements on these parcels currently used for recreation. The easement would permit additions/expansion to existing or future programs, limit non-recreational programs, or provide the Township with a right of first refusal.

5. Expand current volunteer efforts to maximize programming and upkeep of key park facilities in a cost effective manner.

Specific Goal

- a. According to the Township Needs Assessment Survey, 25% of the respondents would volunteer with park and recreation activities. The Township should identify those activities which could be offered with the support of volunteers and then solicit residents for support and assistance.
6. Seek to utilize County, State and Federal grant programs in order to help provide the funding necessary for a parks and recreation system that meets the needs of Township residents.

Specific Goal

- a. Lehigh County Grants Program

Lehigh County offers municipalities assistance in locating and preparing grant applications for projects. Their interactive website sorts hundreds of potential grants. The county's grant specialists will assist in preparing joint municipal grant applications. As grant requirements and application deadlines change, the county's grant assistance constantly updates their database.

www.lehighcounty.org

- b. Transportation Grants

The Pennsylvania Department of Transportation offers Enhancement grants for projects pertaining to pedestrian and bicycle trails, archaeology, historic preservation, landscape beautification, and similar projects all relating to surface transportation. These grants are offered bi-annually.

- c. State and Federal Grants

A list of state and federal grants are summarized in the appendix of this report. The reader should understand that grant application processes, amounts, and deadlines change annually and the descriptions should be used as a guide to locate up-to-date information.

7. Expand current publicity efforts to make Township residents more aware of public park and recreation offerings, as well as the array of private, commercial, quasi-public, and neighboring municipality choices available to satisfy recreation needs.

Specific Goal

Gathering, organizing, and sending information about Upper Milford Township parks and recreation is an important task, necessary in encouraging support and participation. A Township park and recreation director would normally accomplish this task; however, Upper Milford, at this time, does not staff this position. The Park and Recreation Committee and Township Manager should solicit and direct volunteers efforts to supplement those tasks already being completed. If community support and interest increase, the Township may consider retaining part-time staff to manage the park and recreation facilities, news, and activities.

- a. Township Website

The Township recently established a website (www.uppermilford.net). This is the most economic and speedy way to provide Township residents information pertaining to Township parks and recreation. General park information, updates, events, and even reservation requests can be completed on-line.

- b. Email List/E-Newsletter

As internet and Email use increases, the affordability and reliability of providing information to targeted individuals is vastly emerging as the standard for communication and news. A quarterly or even monthly group Email or e-newsletter sent to interested residents is a fast, economical and user targeted method for disseminating information about Township park and recreation news. A link on the Township's website can allow residents to place their Email

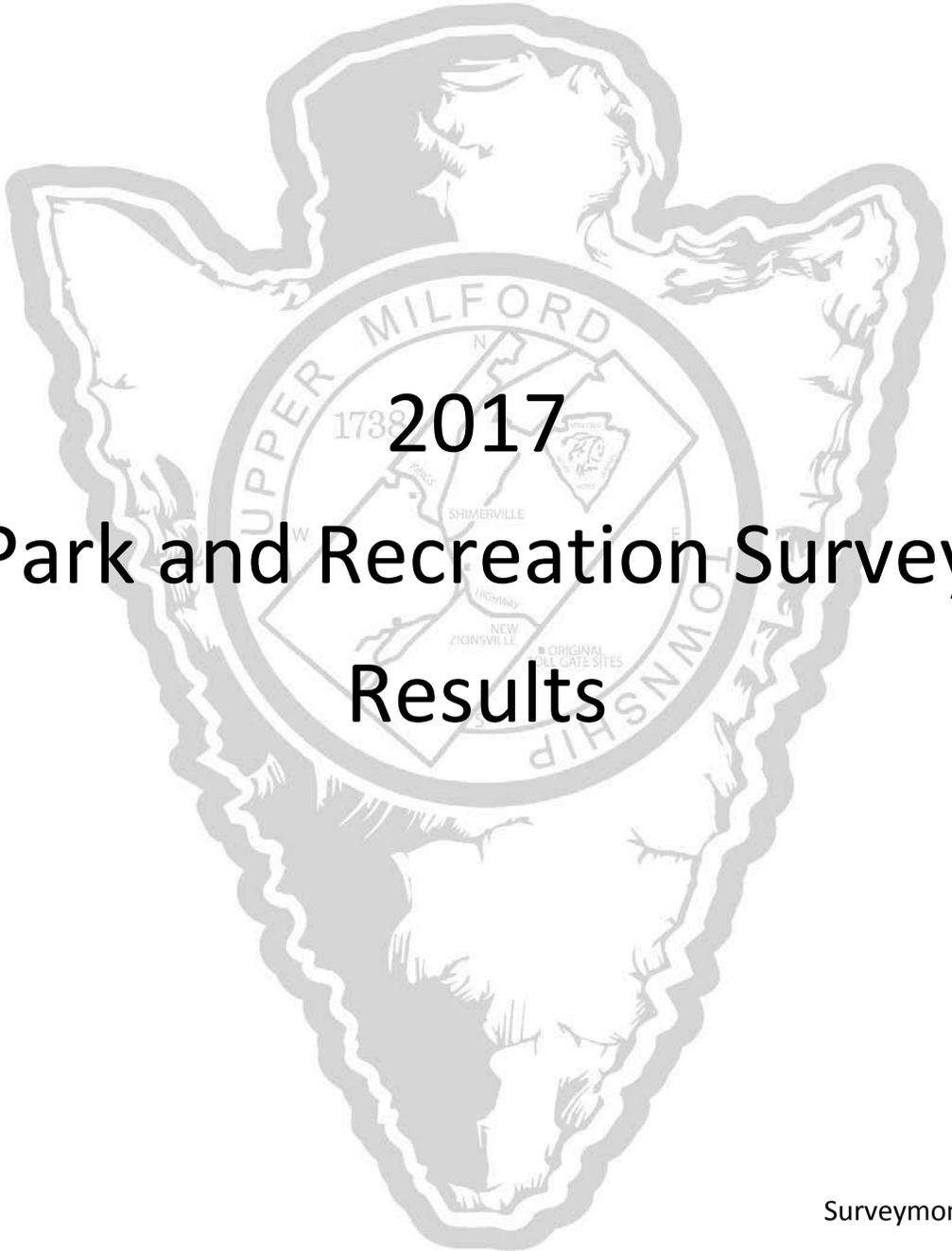
address on the list. Links in the newsletter can provide resources for additional information, contacts, and feedback - all within a few clicks and a few minutes.

c. Newsletter

The information in the Township Newsletter should be brief, providing pertinent facts. Information should include an interesting fact or 'breaking news,' current activities/events, meeting dates and times, additional information source, and contact information. A Special Edition section targeting park and recreation activities would be another option sent annually about upcoming yearly events.

Significant Parcel Landowner/Resident Education

A dialogue needs to be established with landowners immediately. The Township needs to provide information, educating the land owner the existing resource identified on their land. The Wildlands Conservancy could be a liaison between the Township and the landowner as well.



2017
Park and Recreation Survey
Results

SurveyMonkey.com

March 27th – May 8th 2017

Parks and Recreation

Q1 How long have you been a resident of Upper Milford Township?

Answered: 95 Skipped: 0

#	Responses	Date
1	7 years	5/8/2017 11:55 PM
2	30 years	5/8/2017 12:17 PM
3	40 yrs	5/8/2017 10:58 AM
4	15 years	5/8/2017 9:59 AM
5	55	5/8/2017 9:30 AM
6	since March 2015	5/6/2017 4:29 AM
7	53 years	5/3/2017 1:20 PM
8	2 years, 2 months	5/3/2017 4:47 AM
9	57 years	5/3/2017 4:33 AM
10	31 years	5/2/2017 4:15 PM
11	11 years	5/2/2017 1:30 AM
12	2002	4/30/2017 7:22 AM
13	5 years	4/27/2017 2:45 PM
14	11 years	4/27/2017 6:07 AM
15	2 years	4/21/2017 4:14 AM
16	4 months	4/20/2017 2:01 AM
17	21 years	4/20/2017 1:12 AM
18	13 years	4/19/2017 1:00 PM
19	53 years	4/19/2017 11:36 AM
20	2 years	4/19/2017 7:22 AM
21	12 years	4/19/2017 6:57 AM
22	35	4/19/2017 6:42 AM
23	57 years	4/19/2017 6:18 AM
24	6 years	4/19/2017 3:58 AM
25	15	4/19/2017 3:27 AM
26	3 years	4/17/2017 7:36 AM
27	8 years	4/17/2017 4:36 AM
28	1	4/16/2017 5:36 AM
29	6 years	4/14/2017 5:33 AM
30	13 years	4/13/2017 3:05 AM
31	21 years	4/12/2017 11:39 AM
32	24 years	4/7/2017 3:33 AM
33	thirty years	4/7/2017 1:28 AM
34	24 years	4/6/2017 9:03 AM

Parks and Recreation

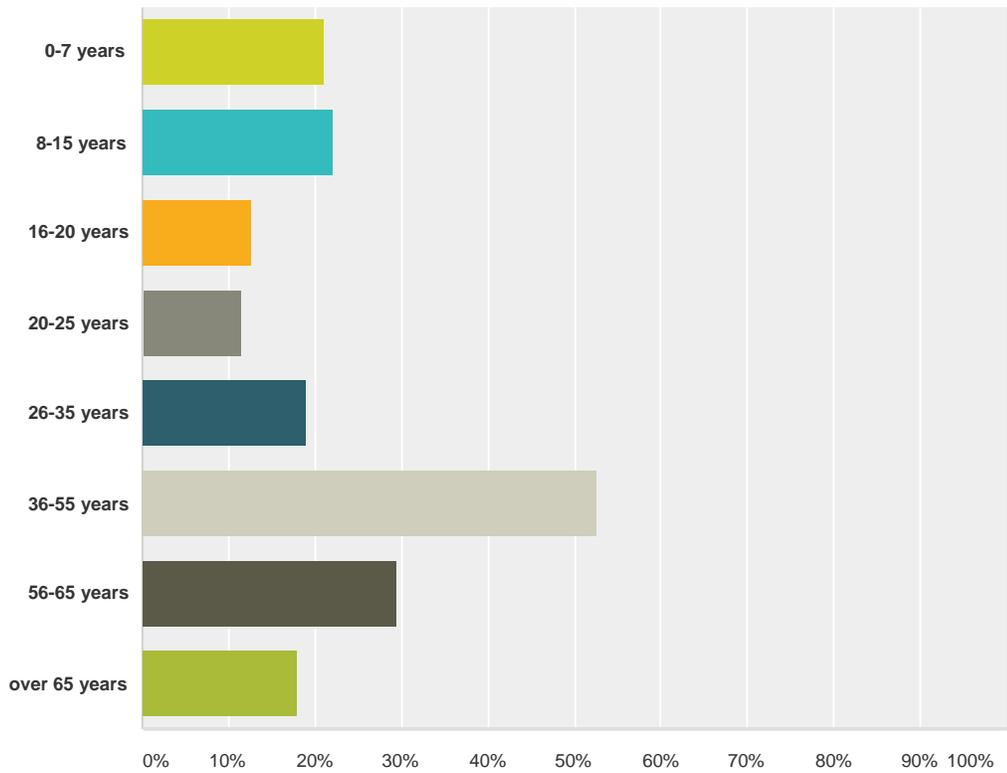
35	1 year	4/4/2017 2:49 PM
36	3 months	4/4/2017 1:34 PM
37	12 yrs.	4/4/2017 12:23 PM
38	6 years	4/3/2017 12:44 PM
39	16 years	4/3/2017 4:48 AM
40	25	4/2/2017 2:50 AM
41	25	4/2/2017 2:49 AM
42	35 years	4/2/2017 12:16 AM
43	5 years	4/2/2017 12:05 AM
44	65 years	4/1/2017 11:30 AM
45	57 years	4/1/2017 8:46 AM
46	35 years	4/1/2017 2:35 AM
47	9 years	3/31/2017 12:15 PM
48	7 years	3/31/2017 8:55 AM
49	24years	3/31/2017 8:19 AM
50	11 years	3/31/2017 2:58 AM
51	40 years	3/30/2017 7:50 PM
52	4 years	3/30/2017 12:10 PM
53	20 years	3/30/2017 10:51 AM
54	5 years	3/30/2017 9:02 AM
55	17 years	3/30/2017 7:56 AM
56	Almost 4 years	3/30/2017 4:45 AM
57	38 years	3/30/2017 12:24 AM
58	37 years	3/29/2017 10:45 PM
59	23 years	3/29/2017 1:08 PM
60	3.5 years	3/29/2017 12:22 PM
61	34 years	3/29/2017 12:08 PM
62	17 years	3/29/2017 11:01 AM
63	33 years	3/29/2017 8:39 AM
64	1 year	3/29/2017 5:42 AM
65	12 years	3/29/2017 4:55 AM
66	10 years	3/29/2017 12:07 AM
67	10	3/28/2017 11:00 PM
68	31years	3/28/2017 12:54 PM
69	2.25 years	3/28/2017 11:54 AM
70	35 years	3/28/2017 11:33 AM
71	5 years	3/28/2017 10:20 AM
72	5 years	3/28/2017 10:15 AM
73	15	3/28/2017 9:00 AM
74	17 years	3/28/2017 8:47 AM
75	25 years	3/28/2017 7:19 AM

Parks and Recreation

76	40+	3/28/2017 6:01 AM
77	40 years	3/28/2017 5:55 AM
78	18 Years	3/28/2017 3:46 AM
79	13	3/27/2017 3:43 PM
80	59	3/20/2017 1:00 AM
81	9 years	3/18/2017 4:23 PM
82	34 years	3/18/2017 4:22 PM
83	11 years	3/18/2017 3:06 PM
84	14 years	3/18/2017 2:05 PM
85	2 years	3/18/2017 10:48 AM
86	40years	3/18/2017 6:50 AM
87	7 years	3/18/2017 2:38 AM
88	34 years	3/18/2017 2:07 AM
89	2	3/18/2017 1:15 AM
90	18 years	3/18/2017 12:56 AM
91	9 years	3/18/2017 12:37 AM
92	2 years, 7 months and counting	3/17/2017 2:37 PM
93	31 years	3/17/2017 1:32 PM
94	18	3/17/2017 1:21 PM
95	7 years	3/17/2017 11:36 AM

Q2 Please indicate the age groups represented in your household.

Answered: 95 Skipped: 0

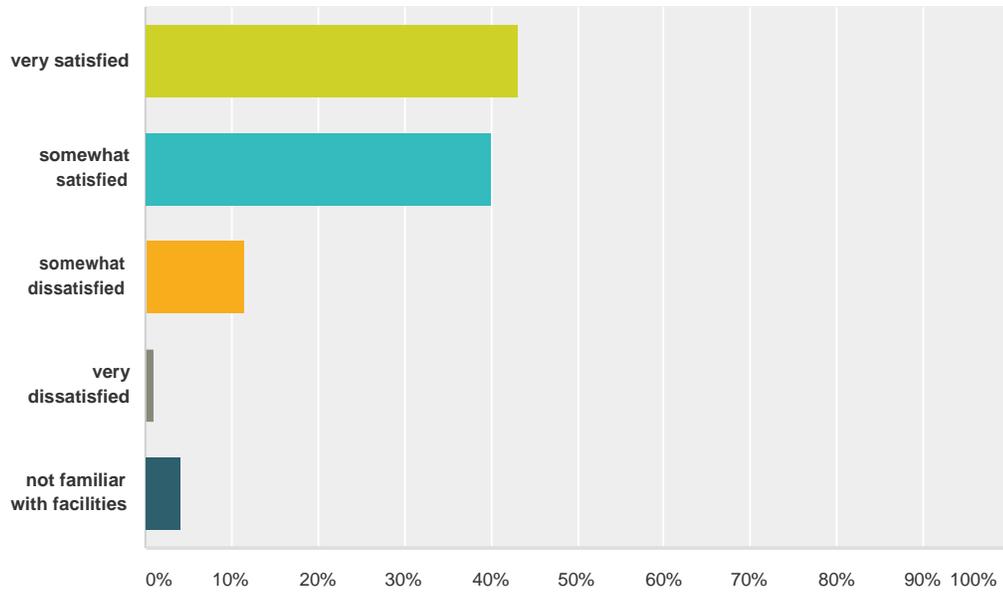


Answer Choices	Responses
0-7 years	21.05% 20
8-15 years	22.11% 21
16-20 years	12.63% 12
20-25 years	11.58% 11
26-35 years	18.95% 18
36-55 years	52.63% 50
56-65 years	29.47% 28
over 65 years	17.89% 17
Total Respondents: 95	

Parks and Recreation

Q3 Generally, how satisfied are you with the parks and recreation facilities available in Upper Milford Township?

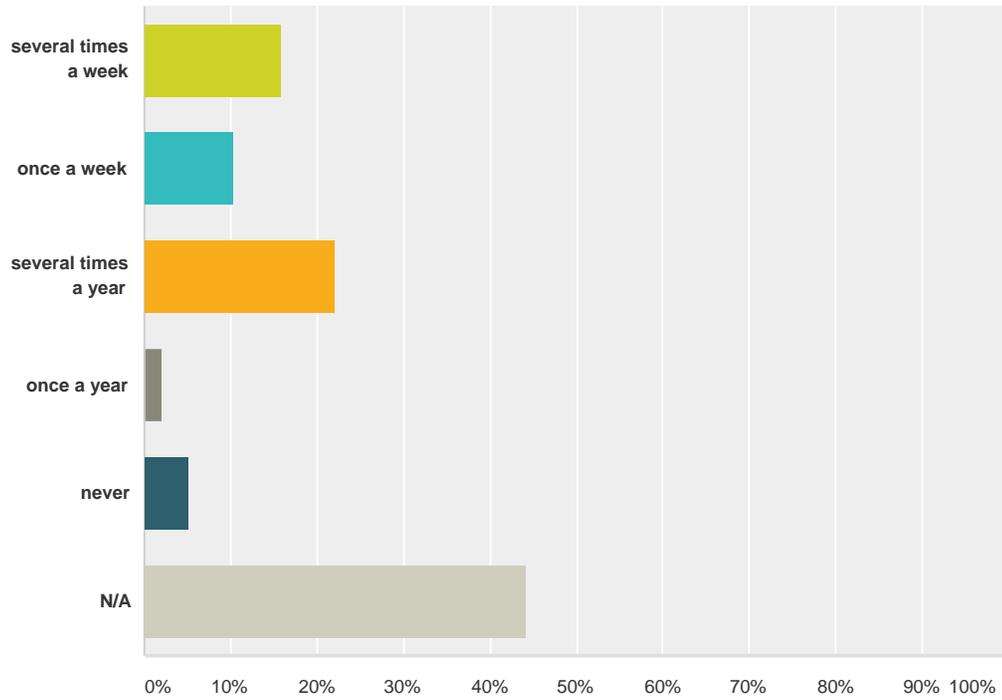
Answered: 95 Skipped: 0



Answer Choices	Responses	
very satisfied	43.16%	41
somewhat satisfied	40.00%	38
somewhat dissatisfied	11.58%	11
very dissatisfied	1.05%	1
not familiar with facilities	4.21%	4
Total		95

Q4 How often do members of your household use Township parks, recreation programs, and facilities? Children ages 0-12 years

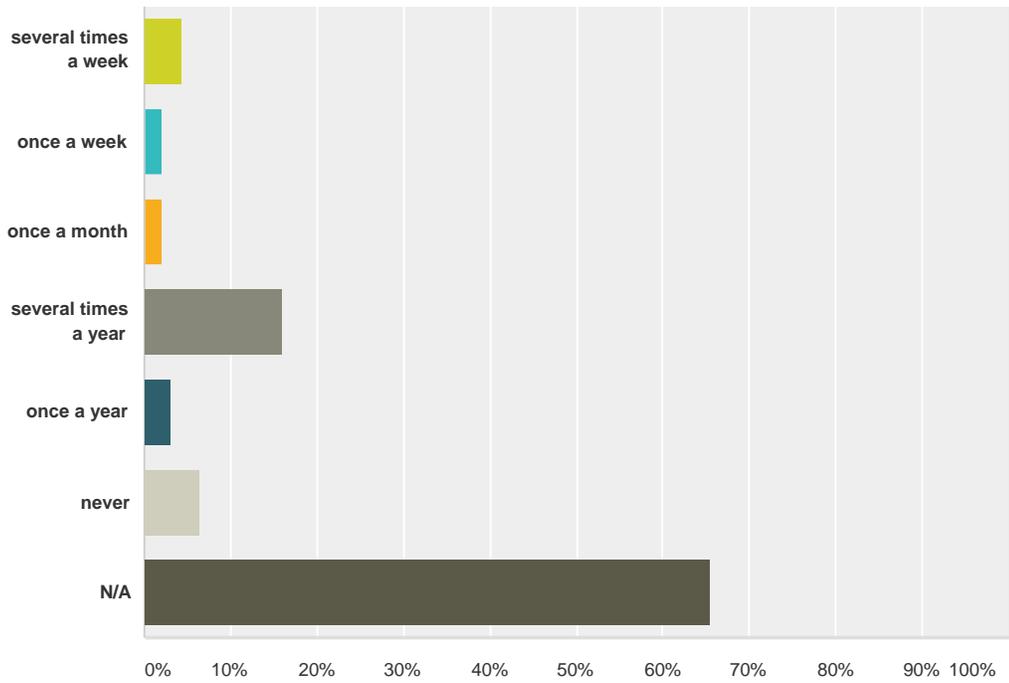
Answered: 95 Skipped: 0



Answer Choices	Responses
several times a week	15.79% 15
once a week	10.53% 10
several times a year	22.11% 21
once a year	2.11% 2
never	5.26% 5
N/A	44.21% 42
Total	95

Q5 How often do members of your household use Township parks, recreation programs, and facilities? Children ages 12-18

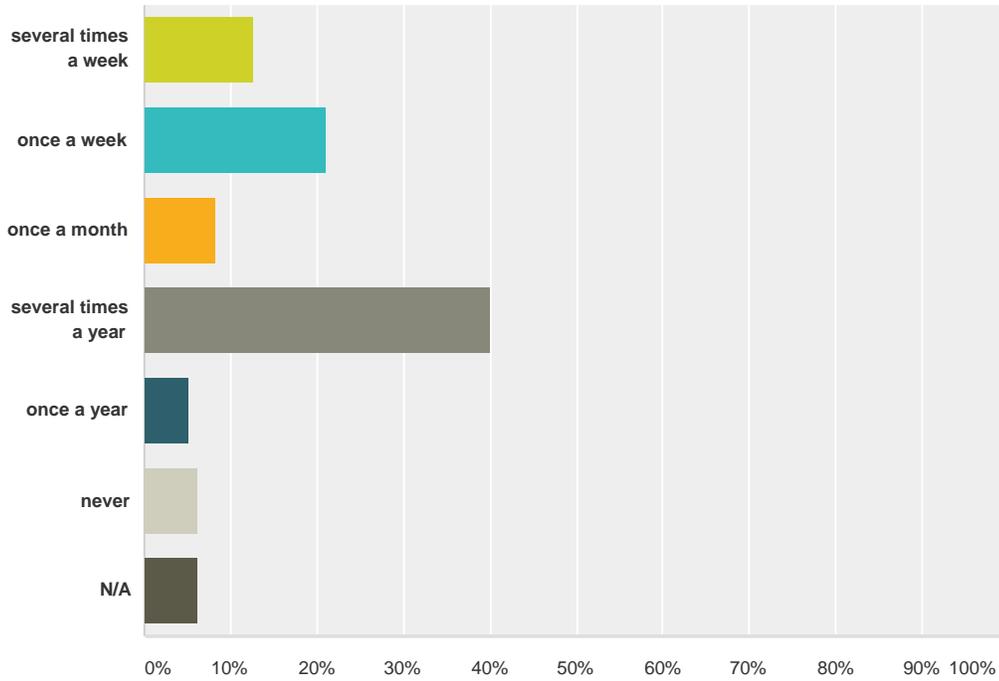
Answered: 93 Skipped: 2



Answer Choices	Responses	
several times a week	4.30%	4
once a week	2.15%	2
once a month	2.15%	2
several times a year	16.13%	15
once a year	3.23%	3
never	6.45%	6
N/A	65.59%	61
Total		93

Q6 How often do members of your household use Township parks, recreation programs, and facilities? Adults ages 19-99

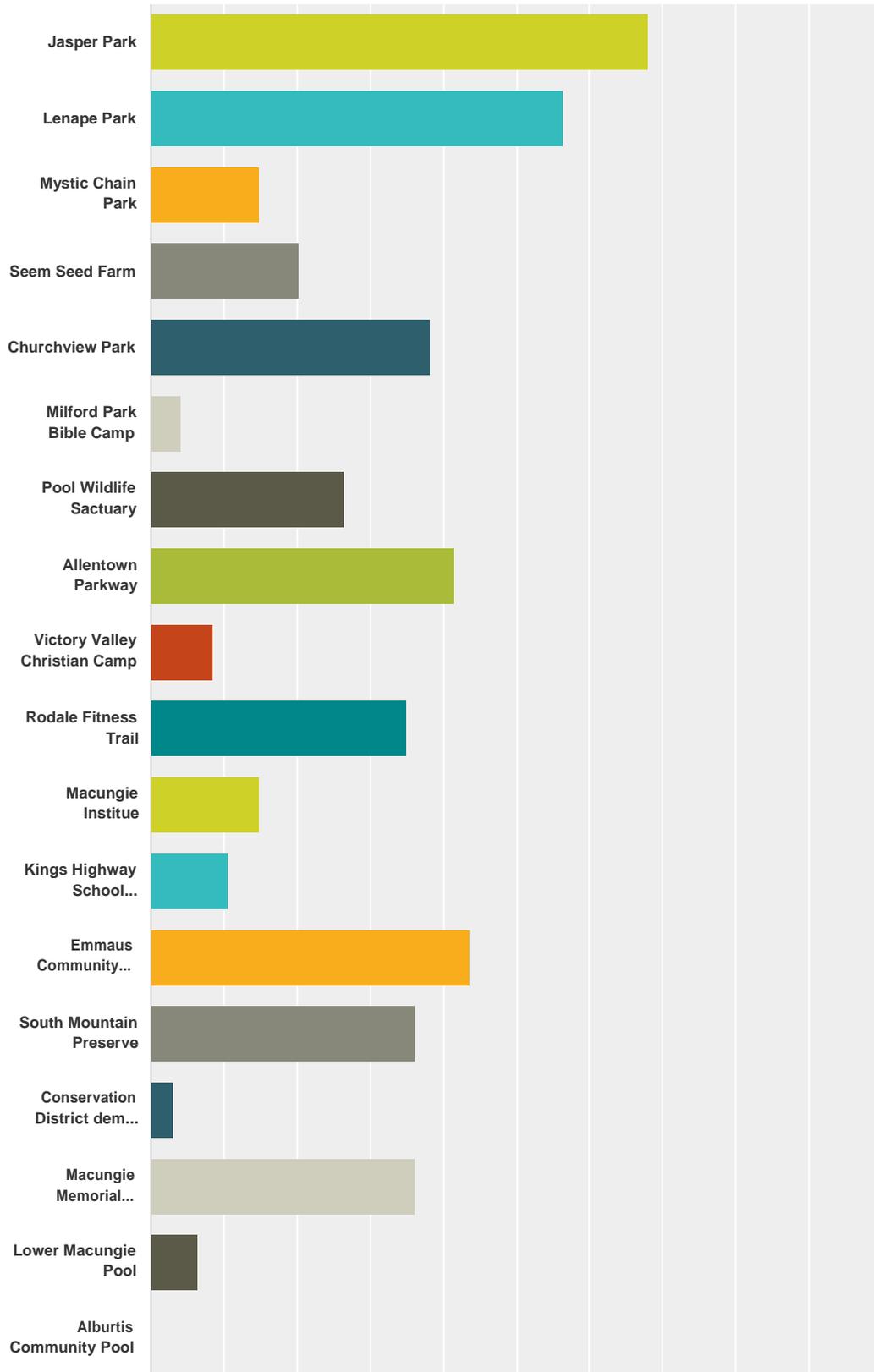
Answered: 95 Skipped: 0



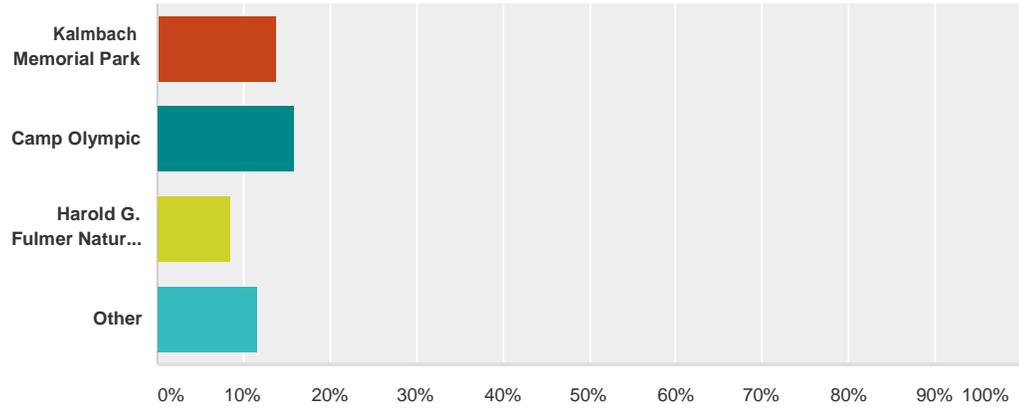
Answer Choices	Responses	Count
several times a week	12.63%	12
once a week	21.05%	20
once a month	8.42%	8
several times a year	40.00%	38
once a year	5.26%	5
never	6.32%	6
N/A	6.32%	6
Total		95

Q7 Please indicate which community, public or private facilities do you and your household have used in the past year?

Answered: 94 Skipped: 1



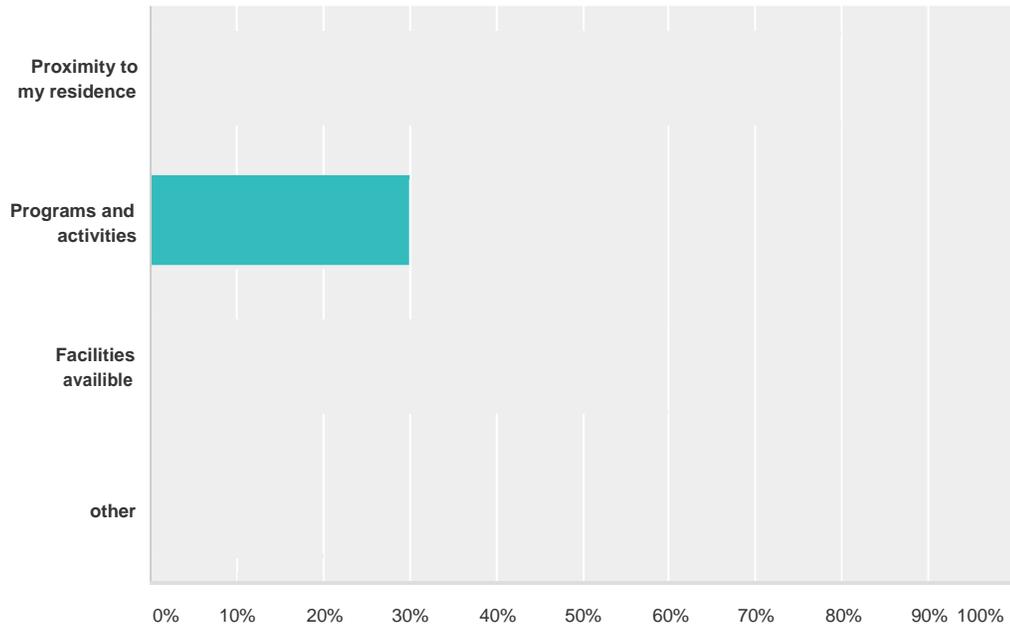
Parks and Recreation



Answer Choices	Responses	
Jasper Park	68.09%	64
Lenape Park	56.38%	53
Mystic Chain Park	14.89%	14
Seem Seed Farm	20.21%	19
Churchview Park	38.30%	36
Milford Park Bible Camp	4.26%	4
Pool Wildlife Sactuary	26.60%	25
Allentown Parkway	41.49%	39
Victory Valley Christian Camp	8.51%	8
Rodale Fitness Trail	35.11%	33
Macungie Institue	14.89%	14
Kings Highway School Playground	10.64%	10
Emmaus Community Park/pool	43.62%	41
South Mountain Preserve	36.17%	34
Conservation District demo Park	3.19%	3
Macungie Memorial Park/pool	36.17%	34
Lower Macungie Pool	6.38%	6
Alburtis Community Pool	0.00%	0
Kalmbach Memorial Park	13.83%	13
Camp Olympic	15.96%	15
Harold G. Fulmer Nature Preserve	8.51%	8
Other	11.70%	11
Total Respondents: 94		

Q8 What features influence your decision to use a Township park?

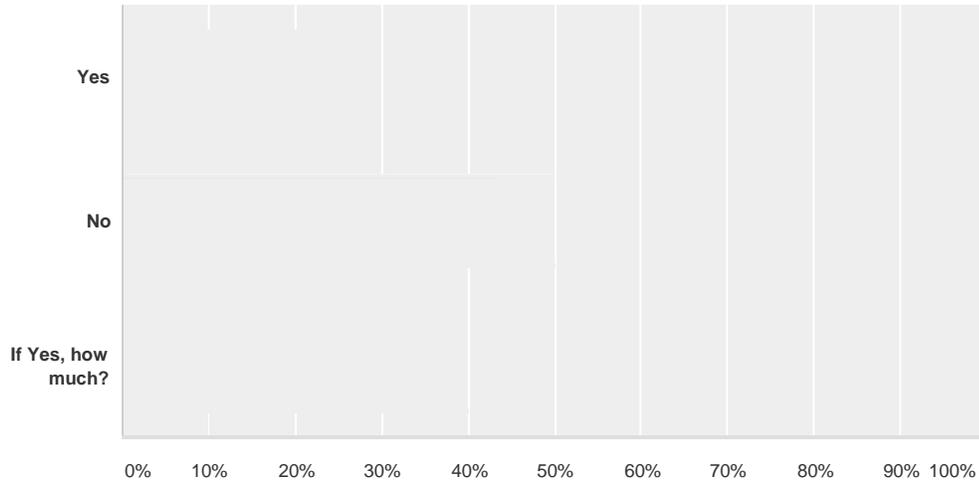
Answered: 91 Skipped: 4



Answer Choices	Responses	Count
Proximity to my residence	78.02%	71
Programs and activities	30.77%	28
Facilities available	51.65%	47
other	16.48%	15
Total Respondents: 91		

Q9 Would you be willing, as a resident of the Township, to pay more in taxes to support improved and expanded facilities and programs?

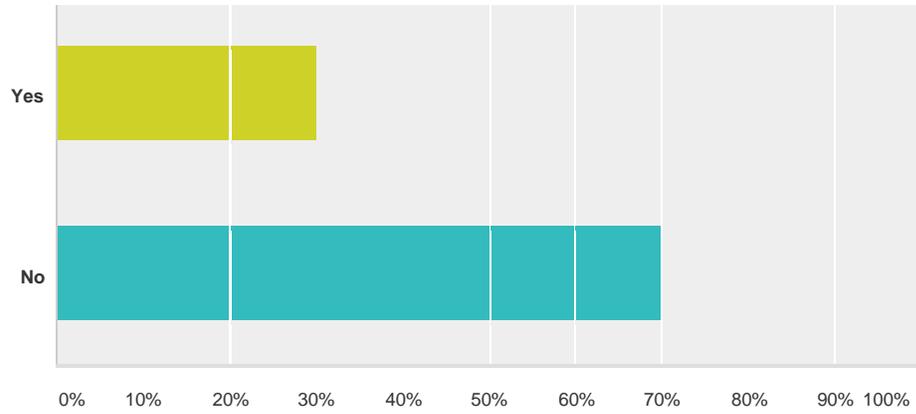
Answered: 92 Skipped: 3



Answer Choices	Responses	
Yes	22.83%	21
No	43.48%	40
If Yes, how much?	33.70%	31
Total		92

Q10 Are you a member of any organization or group involved with any type of outdoor recreation activity?

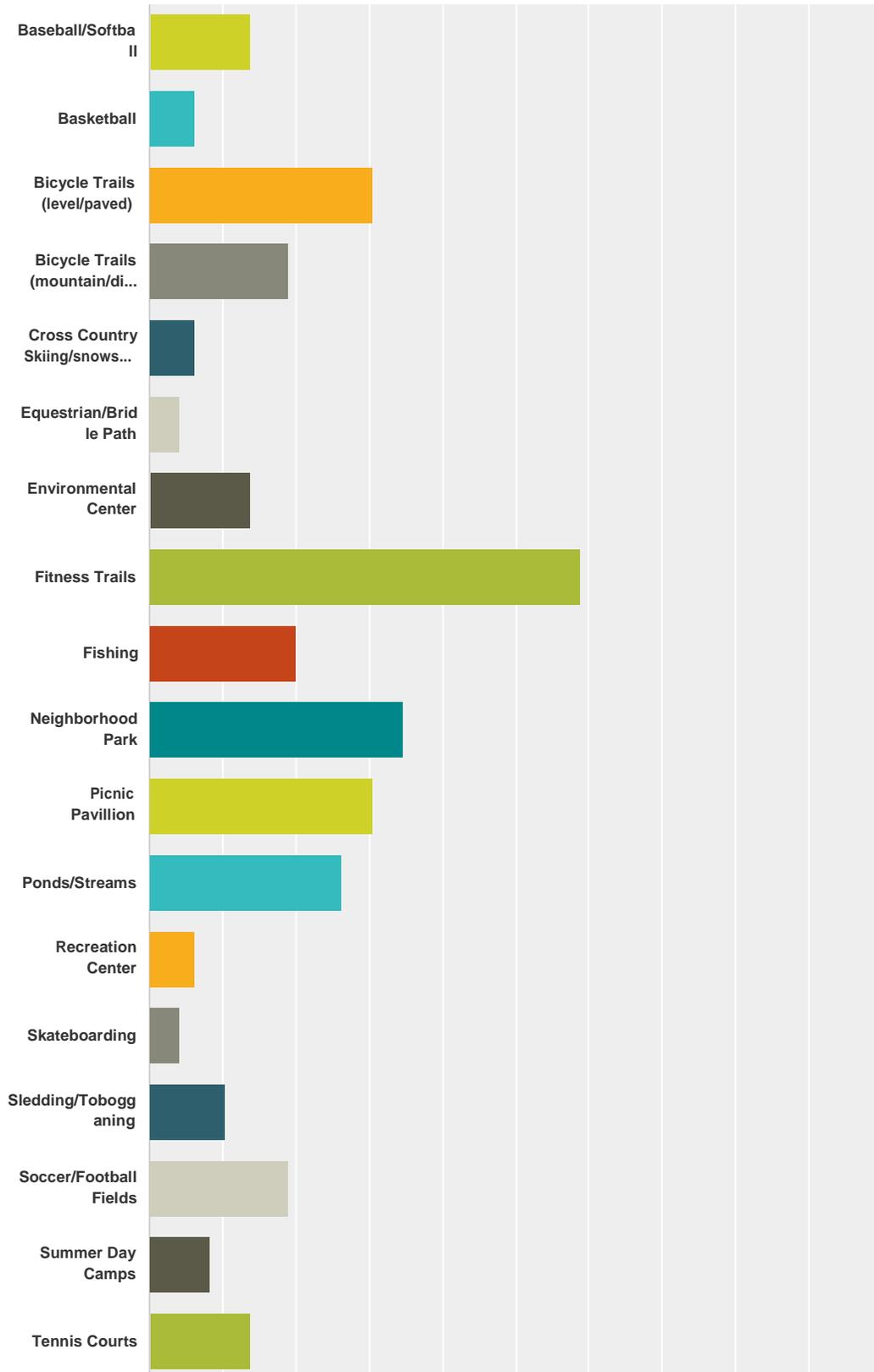
Answered: 94 Skipped: 1



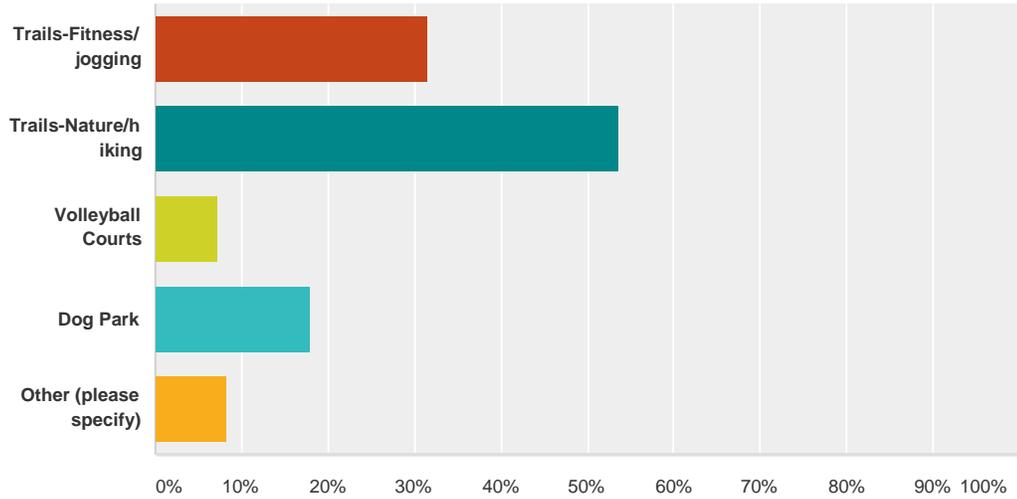
Answer Choices	Responses
Yes	29.79% 28
No	70.21% 66
Total	94

Q11 Please indicate which of these activities or facilities your family participates in or uses at our local parks

Answered: 95 Skipped: 0



Parks and Recreation



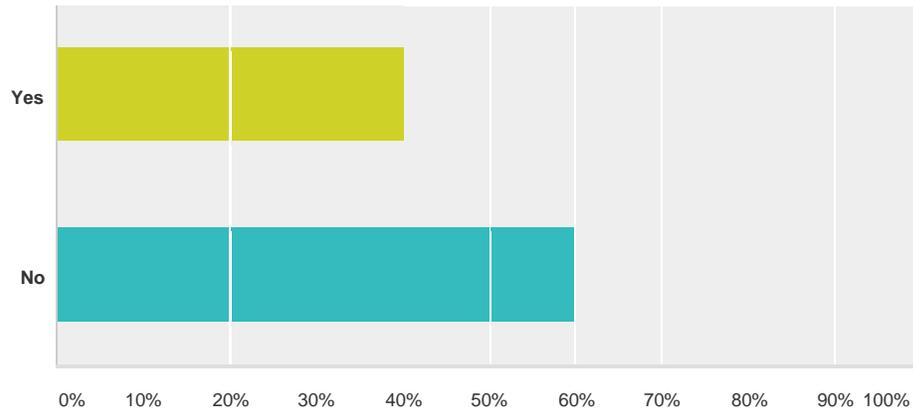
Answer Choices	Responses	
Baseball/Softball	13.68%	13
Basketball	6.32%	6
Bicycle Trails (level/paved)	30.53%	29
Bicycle Trails (mountain/dirt)	18.95%	18
Cross Country Skiing/snowshoeing	6.32%	6
Equestrian/Bridle Path	4.21%	4
Environmental Center	13.68%	13
Fitness Trails	58.95%	56
Fishing	20.00%	19
Neighborhood Park	34.74%	33
Picnic Pavillion	30.53%	29
Ponds/Streams	26.32%	25
Recreation Center	6.32%	6
Skateboarding	4.21%	4
Sledding/Tobogganing	10.53%	10
Soccer/Football Fields	18.95%	18
Summer Day Camps	8.42%	8
Tennis Courts	13.68%	13
Trails-Fitness/jogging	31.58%	30
Trails-Nature/hiking	53.68%	51
Volleyball Courts	7.37%	7
Dog Park	17.89%	17
Other (please specify)	8.42%	8

Parks and Recreation

Total Respondents: 95

Q12 If Upper Milford Township provided a facility and/or building for community groups, would you or an organization in which you participate, use such a facility for meetings/events/programs?

Answered: 85 Skipped: 10

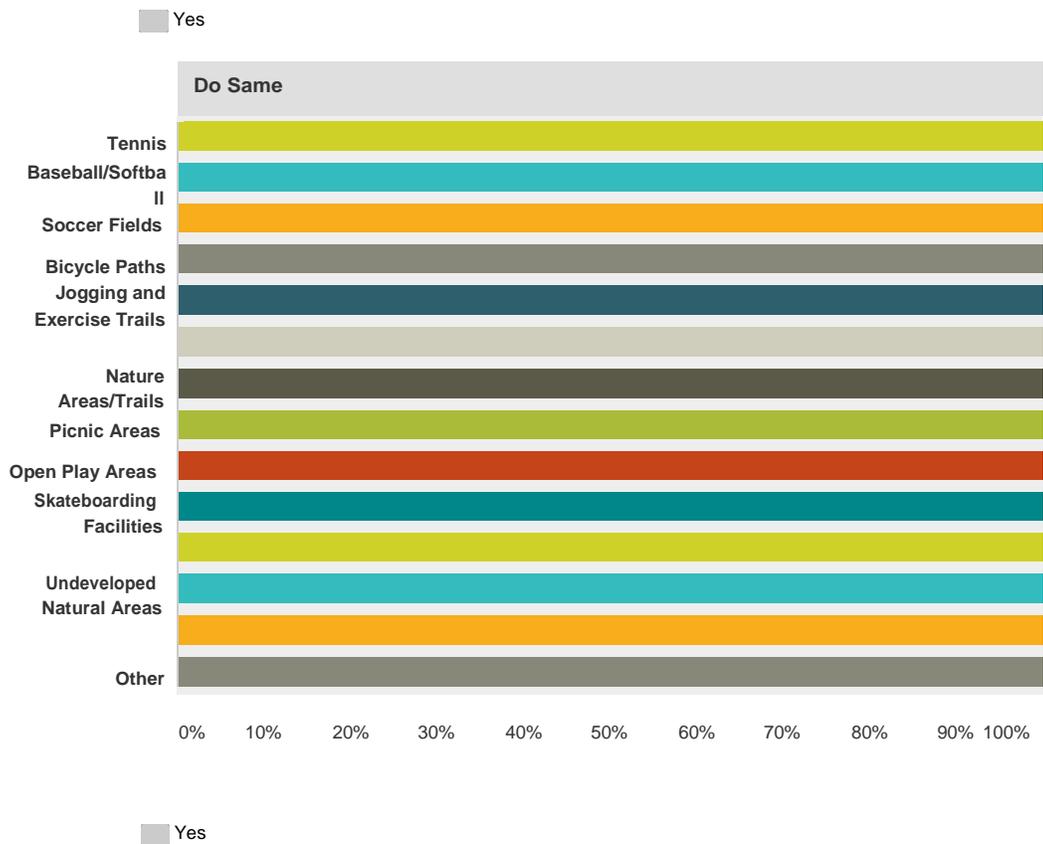
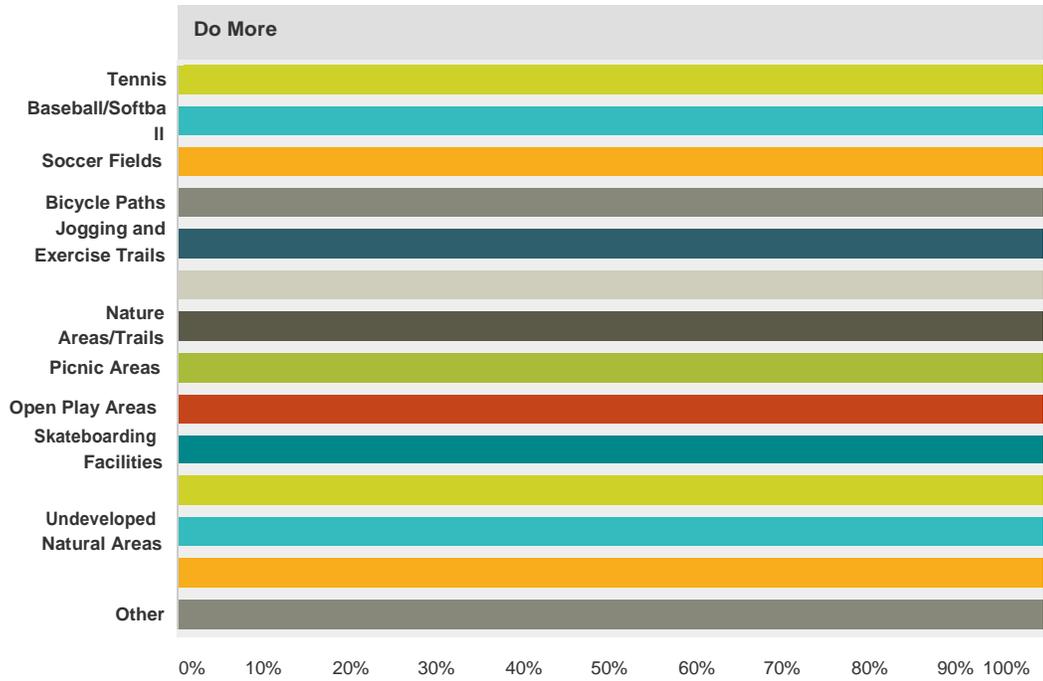


Answer Choices	Responses
Yes	40.00% 34
No	60.00% 51
Total	85

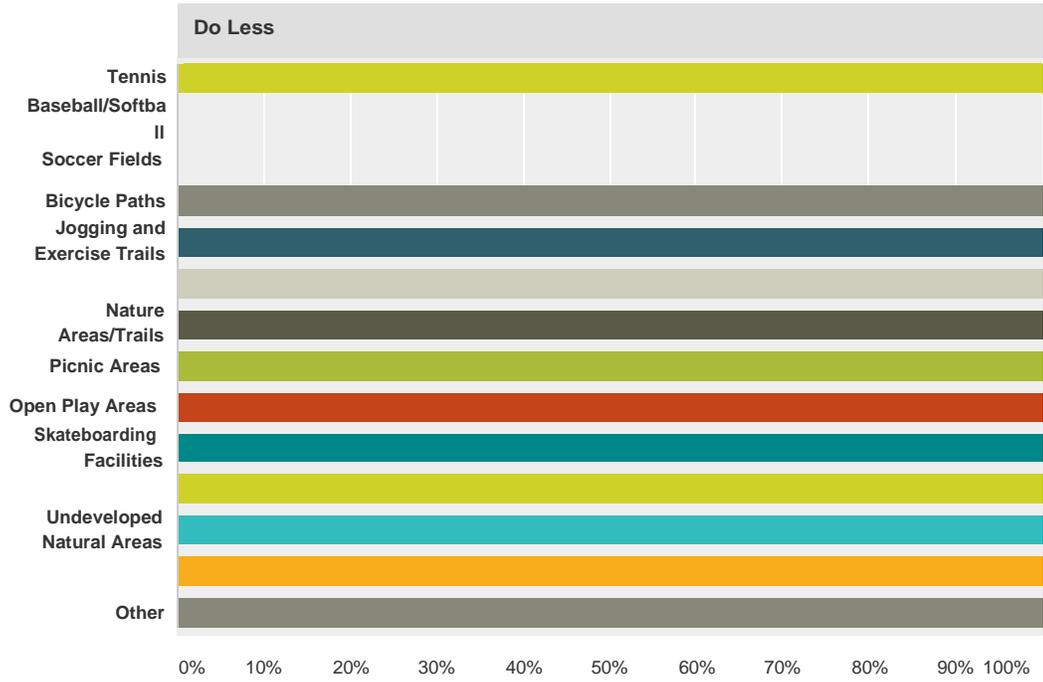
Parks and Recreation

Q13 Of the activities you or your family participate in at the local parks please rate the following.

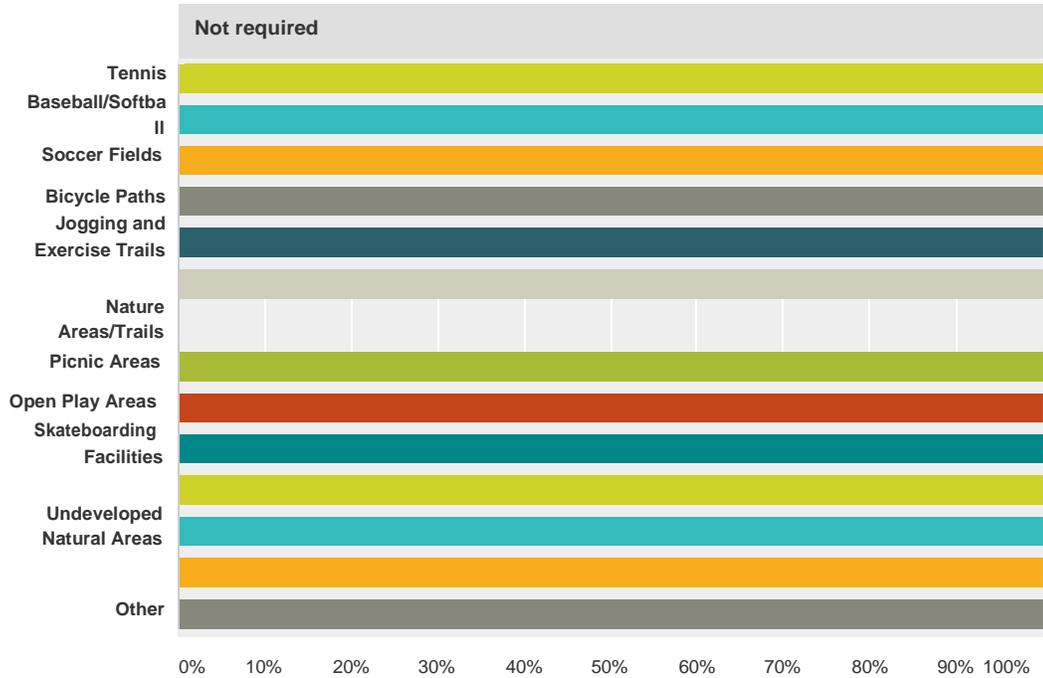
Answered: 71 Skipped: 24



Parks and Recreation



Yes



Yes

Do More		
	Yes	Total
Tennis	100.00% 4	4

Parks and Recreation

Baseball/Softball	100.00% 8	8
Soccer Fields	100.00% 10	10
Bicycle Paths	100.00% 31	31
Jogging and Exercise Trails	100.00% 31	31
Basketball Courts	100.00% 6	6
Nature Areas/Trails	100.00% 44	44
Picnic Areas	100.00% 12	12
Open Play Areas	100.00% 19	19
Skateboarding Facilities	100.00% 5	5
In-Line Skating Facilities	100.00% 3	3
Undeveloped Natural Areas	100.00% 26	26
Recreation/Community Centers	100.00% 9	9
Other	100.00% 4	4
Do Same		
	Yes	Total
Tennis	100.00% 11	11
Baseball/Softball	100.00% 17	17
Soccer Fields	100.00% 16	16
Bicycle Paths	100.00% 8	8
Jogging and Exercise Trails	100.00% 13	13
Basketball Courts	100.00% 15	15
Nature Areas/Trails	100.00% 12	12
Picnic Areas	100.00% 20	20
Open Play Areas	100.00% 14	14
Skateboarding Facilities	100.00% 8	8
In-Line Skating Facilities	100.00% 7	7

Parks and Recreation

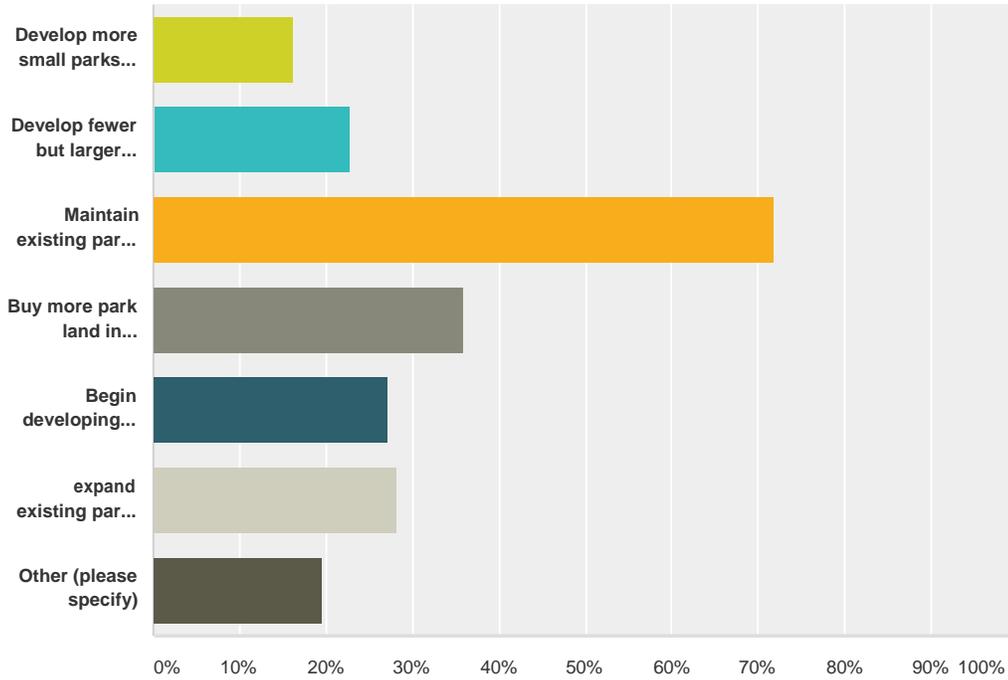
Undeveloped Natural Areas	100.00% 14	14
Recreation/Community Centers	100.00% 14	14
Other	100.00% 4	4
Do Less		
	Yes	Total
Tennis	100.00% 2	2
Baseball/Softball	0.00% 0	0
Soccer Fields	0.00% 0	0
Bicycle Paths	100.00% 1	1
Jogging and Exercise Trails	100.00% 1	1
Basketball Courts	100.00% 1	1
Nature Areas/Trails	100.00% 1	1
Picnic Areas	100.00% 2	2
Open Play Areas	100.00% 2	2
Skateboarding Facilities	100.00% 4	4
In-Line Skating Facilities	100.00% 4	4
Undeveloped Natural Areas	100.00% 2	2
Recreation/Community Centers	100.00% 1	1
Other	100.00% 1	1
Not required		
	Yes	Total
Tennis	100.00% 11	11
Baseball/Softball	100.00% 6	6
Soccer Fields	100.00% 7	7
Bicycle Paths	100.00% 4	4
Jogging and Exercise Trails	100.00% 4	4

Parks and Recreation

Basketball Courts	100.00% 6	6
Nature Areas/Trails	0.00% 0	0
Picnic Areas	100.00% 4	4
Open Play Areas	100.00% 4	4
Skateboarding Facilities	100.00% 11	11
In-Line Skating Facilities	100.00% 13	13
Undeveloped Natural Areas	100.00% 1	1
Recreation/Community Centers	100.00% 9	9
Other	100.00% 5	5

Q14 The Township tries to provide quality park and recreation services to all residents. It often has to make difficult choices on how to develop and operate parks. Would you encourage the Township to:

Answered: 92 Skipped: 3

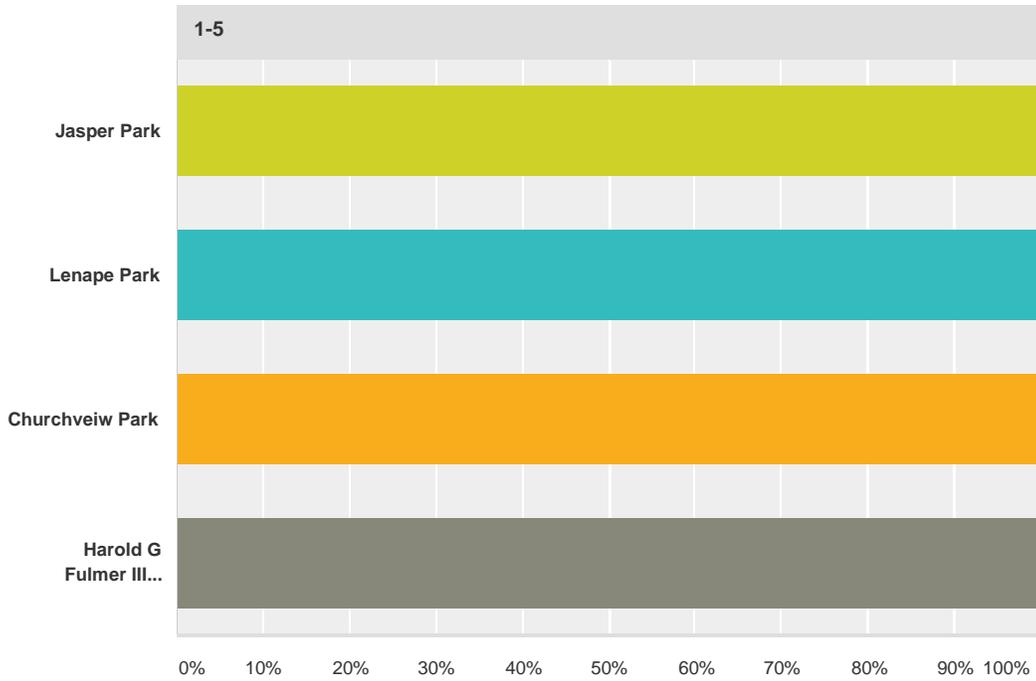


Answer Choices	Responses
Develop more small parks used by neighborhood and community residents	16.30% 15
Develop fewer but larger parks that are used by all Township residents	22.83% 21
Maintain existing park and recreational facilities	71.74% 66
Buy more park land in developing areas	35.87% 33
Begin developing vacant or undeveloped park lands	27.17% 25
expand existing park and recreational facilities	28.26% 26
Other (please specify)	19.57% 18
Total Respondents: 92	

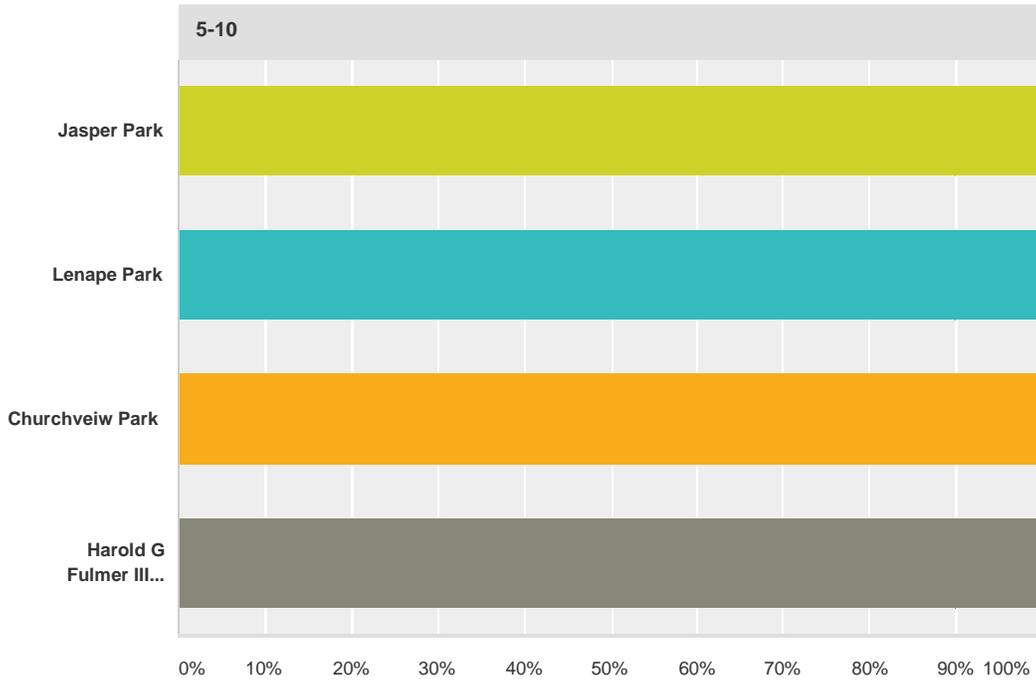
Parks and Recreation

Q15 How many times in the last 12 months have you visited one of Upper Milford Township's parks?

Answered: 82 Skipped: 13

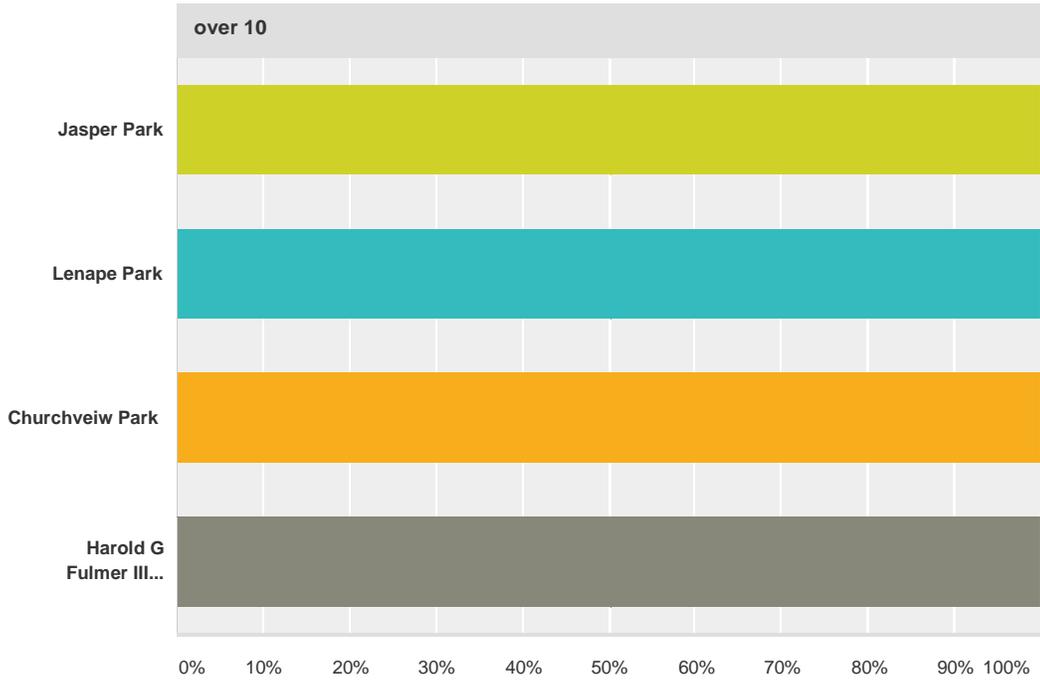


yes

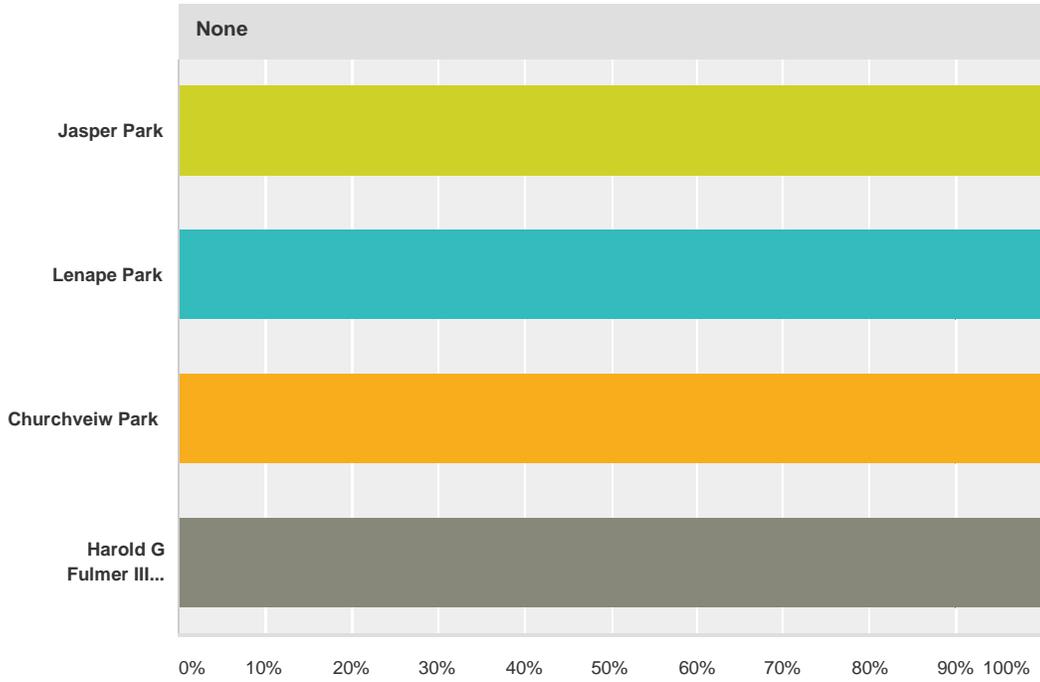


Yes

Parks and Recreation



Yes



Yes

1-5		
	yes	Total
Jasper Park	100.00% 36	36

Parks and Recreation

Lenape Park	100.00% 20	20
Churchveiw Park	100.00% 22	22
Harold G Fulmer III Preserve	100.00% 10	10
5-10		
	Yes	Total
Jasper Park	100.00% 8	8
Lenape Park	100.00% 10	10
Churchveiw Park	100.00% 4	4
Harold G Fulmer III Preserve	100.00% 2	2
over 10		
	Yes	Total
Jasper Park	100.00% 13	13
Lenape Park	100.00% 20	20
Churchveiw Park	100.00% 15	15
Harold G Fulmer III Preserve	100.00% 4	4
None		
	Yes	Total
Jasper Park	100.00% 12	12
Lenape Park	100.00% 12	12
Churchveiw Park	100.00% 24	24
Harold G Fulmer III Preserve	100.00% 32	32

Q16 Would you be interested in volunteering in our parks or for our recreation committee, if so Please add your contact information.

Answered: 14 Skipped: 81

RESOLUTION NO. 2018- 025

A RESOLUTION OF THE BOARD OF SUPERVISORS OF UPPER
MILFORD TOWNSHIP, LEHIGH COUNTY, PENNSYLVANIA
ADOPTING AND APPROVING THE 2018 UPPER MILFORD
TOWNSHIP PARK, RECREATION, AND ENVIRONMENTAL PLAN

WHEREAS, on or about February 5, 2004, the Board of Supervisors of Upper Milford Township previously adopted a Park, Recreation, Open Space and Environmental Plan (“PROSEP”); and

WHEREAS, to reflect changes in land development and land use, as well as a need to create data for a geographical information system, the Township commissioned an update to the PROSEP; and

WHEREAS, the Township engaged the Wildlands Conservancy to assist the Upper Milford Township Recreation Commission in revising the PROSEP; and

WHEREAS, the Board of Supervisors are desirous of adopting the 2018 Upper Milford Township Park, Recreation and Environmental Plan as its official Park and Recreation Plan.

NOW, THEREFORE, be it resolved as follows:

1. The aforementioned recitals are incorporated herein by reference as fully as though the same were set forth herein at length.
2. The Board of Supervisors of Upper Milford Township hereby adopts and approves the 2018 Upper Milford Township Park, Recreation and Environmental Plan as the official Park and Recreation Plan for Upper Milford Township.

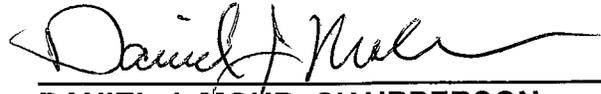
ADOPTED THIS 5th DAY OF April, 2018.

ATTEST:

THE BOARD OF SUPERVISORS OF
UPPER MILFORD TOWNSHIP



SECRETARY



DANIEL J. MOHR, CHAIRPERSON



ROBERT C. SENTNER, VICE CHAIRPERSON



JOYCE K. MOORE, SUPERVISOR