COMPREHENSIVE PARKS, RECREATION & OPEN SPACE PLAN

North Whitehall Township, Lehigh County, Pennsylvania







UPDATE 2022

COMPREHENSIVE PARKS, RECREATION, AND OPEN SPACE PLAN UPDATE - 2022

This project was financed in part by a grant from the Keystone Recreation, Park and Conservation Fund under the administration of the Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

Study Committee Participants

Al Geosits, *North Whitehall Township Board of Supervisors*

Andrew Gildner

Mark Hills

Dennis Klusartiz, *North Whitehall Township Board of Supervisors*

Bob Korp

Joanne Lutz

Keaira Lutz

Katie Mericle

Chris Moughan

Rich Semmel

Brian Wildes

Mark Yatcilla

TOWNSHIP STAFF

Randy Cope, *North Whitehall Township Manager from July 2022*

Chris Garges, *North Whitehall Township Manager to July 2022*

Kayla Mack, *North Whitehall Township Planning Assistant*

With Assistance From

Urban Research & Development Corporation

81 Highland Avenue, Suite 120, Bethlehem, PA 18017

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A. GOALS & OBJECTIVES

The last Parks, Recreation, and Open Space Plan (PROSP) created for North Whitehall Township was adopted by the Township in 2009. Numerous changes in the Township and in the parks and recreation field created an identified need for the 2009 plan to be updated.

Land use in the Township has changed significantly since 2009. The Lehigh Valley Planning Commission (LVPC) tracks land use in the Lehigh Valley. The 2009 PROSP used LVPC data from 2005. In 2005, 56% of Township land was vacant or in use for agriculture or recreation. In LVPC's 2020 land use report, 36.5% of Township land was vacant or in use for agriculture or recreation.

Public perception of recreation has changed since 2009. In 2009 recreation was seen as a leisure activity. Within the past 5 years, which included the impact of a global pandemic, the public has begun to recognize that recreation provides multiple essential services. Parks and recreation benefit the environment, community health and local economy's.

There have been significant advances in data collection and in communications between recreation agencies since 2009. In 2009 National Standards were established to guide recreation agencies across the country. Today the National Recreation and Parks Association (NRPA) provides an on-line network for ideas, data and information sharing between recreation agencies. The NRPA's data is a valuable planning tool that can be used by recreation departments to compare their department to that of similar recreation departments across the country.

The Township has formed a Recreation Board, made up of resident volunteers, who provide ideas to the Township as to how parks might be improved. The following statement was adopted by the Recreation Board to inspire and motivate current and future board members.



MISSION STATEMENT

To promote environmental conservation, health and wellness, and to ensure social equity within community recreation, to create a quality of life that continues to measure and meet the recreational needs of our community.

The goals and objectives of this plan reflect the current concerns, needs and requirements of recreation in North Whitehall Township.

1. PLAN GOALS AND OBJECTIVES

a. UPDATE DEMOGRAPHIC AND LAND USE DATA

- Map recreation lands and service areas - service areas lie outside of a 10-minute walk to a park or recreation area
- List all current available recreation facilities, both public and private, with conditions and passive, active, and/or conservation recreation land uses
- List land uses from 2009 Recreation Plan and compare with current 2020 land uses
- Map physical features of the Township: slopes, hydrology, soils, bedrock, roads, streams, state identified critical habitats, riparian buffers and their conditions, vegetation, agricultural lands preserved or protected fishing locations

b. RECREATION OPPORTUNITIES ANALYSIS

- Compare park land, recreation facilities and programs with that of similar communities from across the country using NRPA data
- Create and distribute a community survey to assess recreation desires of Township residents

c. MEET OR EXCEED LVPC RECREATION LAND GOAL OF 6 ACRES PER 1000 RESIDENTS

- Use population projections to plan to provide park land that equitably serves all Township neighborhoods
- Identify lands with high potential for park use across all categories
- Use 10-Minute Walk Program to assess recreation availability throughout the Township
- Track NRPA metrics to match park lands being provided by similar municipalities

d. IDENTIFY HOW PARKS CAN PROMOTE CLIMATE RESILIENCY

- Map critical habitats, floodplains, wetlands, woodlots and forests
- Review MS4 Plan to identify projects in parks that can help to meet recommendations of the plan
- Look for opportunities to protect the environment
- Connect residents to nature at existing parks and potential park lands
- Use disease resistant native tree species for future planting
- Build energy consciousness into facilities design and park maintenance programs
- Protect and enhance riparian buffers
- Educate park visitors about environmental issues with interpretive signs.
- Use park land to create riparian buffers, improve water quality, and inform the public about the link between riparian buffers and water quality

e. DETERMINE CURRENT & FUTURE RECREATION NEEDS OF RESIDENTS

- Conduct a Township wide needs and interests survey
- Create a sustainable plan to provide for recreation needs, including exploring



Healthy RiparianBuffer

partnership opportunities and avoid duplication of services

- Evaluate facilities at various parks using visitor experience questions
- Explore opportunities to use existing park land not currently used for active recreation for use as passive environmentally supportive land.
- Convert large un-used lawn areas to meadow, transitional woodland or other environmentally supportive use.

f. DETERMINE CURRENT & FUTURE RECREATION PROGRAMMING NEEDS

- Survey residents before and after programs to evaluate success, willingness to repeat and suggestions for additional programs
- Determine staffing and facility needs to run programs of interest
- Use NRPA data to determine programs popular in other similar communities.
- Provide inclusion for residents with special needs

g. PROVIDE AND STRENGTHEN CONNECTIONS WITHIN COMMUNITY

- Identify what to connect; i.e., landlocked neighborhoods and community resources
- Identify where to connect; i.e., safe routes on and off-road, at signalized crossings and within easements
- Provide a multi-modal system of alternative transportation with consideration for cyclists, pedestrians, equestrians, watercraft and public transit users
- Identify a safe route to connect to the D&L trail from Fells Creek and Firehouse Park
- Identify safe routes to connect to the Jordon Creek Greenway and to Trexler Nature Preserve from Township neighborhoods crossing Routes 309 and under the PA Turnpike.



Lack of Pedestrian Safe Route to existing playground in Ormrod

h. PLAN FOR STRUCTURE OF FUTURE RECREATION DEPARTMENT

- Develop a plan to provide an economically sustainable, well-staffed department with the skills required to offer programs that residents desire

- Partner with community organizations and volunteers to expand programming resources
- Plan for future department organization, to include positions, skill levels and competitive salaries, using available record-keeping software to improve efficiency
- Work closely with Recreation Board to strengthen the organization so it is in a position to provide assistance where it is most needed
- Use the NRPA professional network for programming insights
- Review goals and priorities of the current PROSP to achieve set goals and objectives
- Plan to update Parks, Recreation, and Open Space Plans at minimal 10-year intervals
- Track budgeting and funds to be used for capital improvements
- Implement life cycle costing for facility repairs and replacements
- Use cost recovery to adjust user fees and costs to fund programming, seeking to recover a minimum of 25%.

i. IDENTIFY RECREATION BOARD PURPOSE AND STRUCTURE

- An effective Recreation Board should assist the municipality financially by reaching out to community businesses for funding assistance, serve as a liaison between the public and the Township, organize and recruit volunteers. The Recreation Board works closely with Township staff.
- Clarify the purpose, goals and objectives for both the Township recreation staff and Recreation Board volunteers
- Recreation Board members should seek membership in the National Association of Park Foundations to maximize their impact and effectiveness, with Township financial support as needed for education
- The Township should publicly recognize members who make a positive impact.



B. PUBLIC PARTICIPATION

Public participation is at the heart of this recreation plan. Engaging the public in the planning process leads to community consensus, resolution of potential areas of conflict and increases the motivation of citizens to participate in supporting proposed initiatives in the future. The following methods were used in this study to engage the public.

1. KEY STUDY COMMITTEE MEETINGS

COMMITTEE MEETING 1 began with introductions of Township Committee Members, Township staff, and URDC. Anticipated outcomes from Study Committee members were collected. Goals for the plan and plan objectives were reviewed. An overview of each park in Township's park system was provided and discussed. Key persons to interview were discussed.

COMMITTEE MEETING 2 reviewed report Section C, Community Background Data. A map of public recreation service areas revealed gaps in close-to- home recreation for some neighborhoods which led to a discussion about the importance of connections. A draft version of the Public Survey was presented for comment.

COMMITTEE MEETING 3 reviewed report Section D, Facilities Analysis. Current uses of park lands and available activities were analyzed and compared with NRPA data collected from similar communities. The first public meeting was planned.

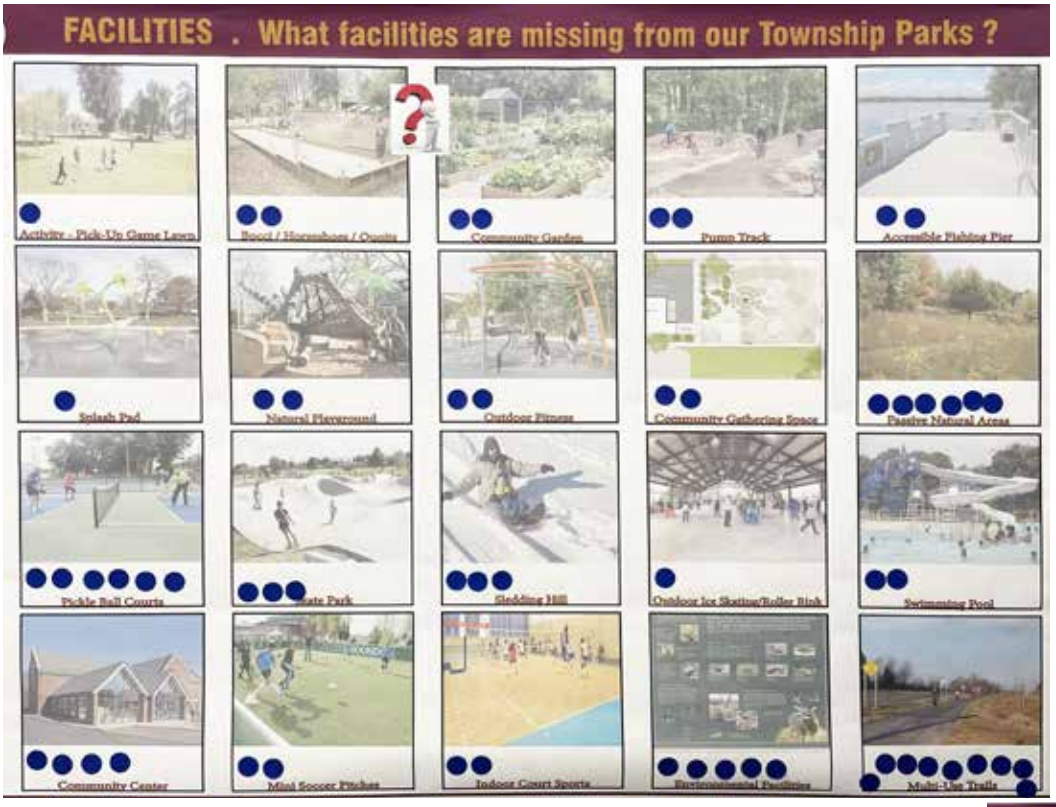
PUBLIC MEETING 1/COMMITTEE MEETING 4.
This meeting used an Open House format and was attended by 18 visitors, 7 committee members, and 2 Township staff members. The consultants were stationed at 4 tables with information and opportunities to vote on a topic at each station. The stations are highlighted below.

Station 1 presented park lands and park land use, illustrating gaps in service areas. Participants voted on how the Township should use recreation land. Conservation & open space was most strongly supported.



Station 2 presented two boards. One illustrated recreation opportunities currently unavailable in the Township and asked attendees to select all that they would use. Multi-use trails, pickle-ball courts and passive natural areas were the top three choices.

The second board listed programs currently unavailable in the Township and attendees selected all that they would use. Outdoor concerts and senior activities topped the list, with park clean-up events, health and wellness programs, community days and art-based events all tied for third.

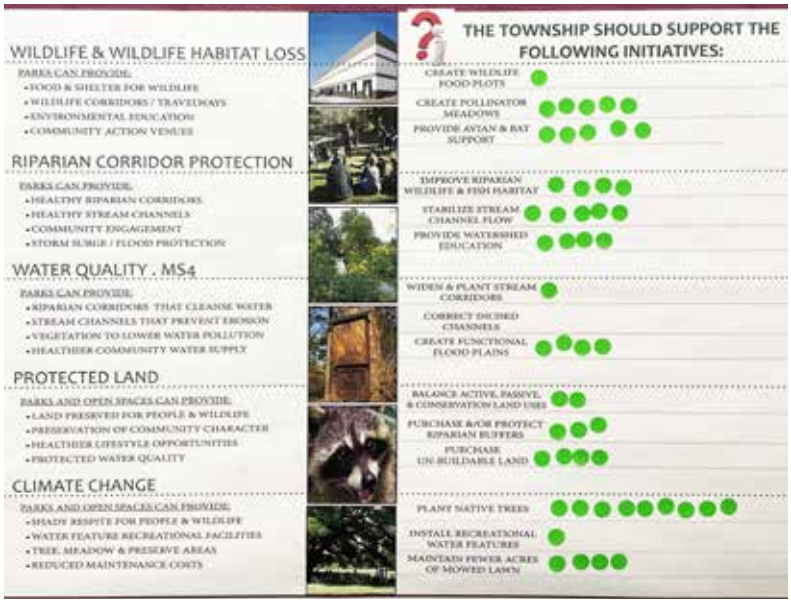




Station 3 presented 2 boards. The first graphed Township wide land uses in 2009 as compared with 2020, revealing the marked decline in agricultural lands. Residents were asked on a scale of 0% to 30% how much land the Township should seek to preserve. The response was a nearly unanimous 30%.



Station 3, Board 2 presented a graph of initiatives the Township could take to support the environment, asking which initiatives attendees would support. The top two responses were to plant native trees and create pollinator meadows, and all of the initiatives were supported with at least one vote.



Station 4 presented options for creating safe multi-modal connections on the Township's rural and suburban roads. Attendees were asked to indicate on a map where existing roads presented good conditions for making safe connections. Attendees were then asked to prioritize types of connections. The top three connections desired were Parks to Trails and Parks (19), Parks to Villages (7), and Parks to Neighborhoods (4).

COMMITTEE MEETING 5 reviewed the results of the public participation process and how responses will impact plan recommendations. Sections E and F of the report, maintenance planning and recreation department structure, were reviewed and discussed with the committee.

COMMITTEE MEETING 6 reviewed draft conceptual park plans for Independence, Neffs Valley and Laurys Firehouse Parks. Comments and resolutions are found in Section G of this report. The Committee talked about poor attendance for the first public meeting and recommended a second public survey. The second survey format would present 10-12 facilities and respondents would rank their most desired.

COMMITTEE MEETING 7 reviewed a draft of the second survey. Concept edits to Neffs Valley, Independence and Laurys Firehouse Park were reviewed, followed by draft concepts for Kolapechka, Levans, Johnson's Pond and Municipal Park. A disc golf course designer presented the committee with an idea to move the disc golf course currently at Neffs Valley Park to Johnson's Pond Wildlife Park. This idea met with committee approval. The format for the second public meeting was discussed.

PUBLIC MEETING 2/COMMITTEE MEETING 8. This meeting was a formal presentation of all concepts and renderings for the seven Township Parks. In attendance were 9 committee members, 2 Township staff members, and 18 visitors. A map illustrating the distribution of park land and facilities throughout the Township was presented to highlight the gaps in park service areas.

COMMITTEE MEETING 9. Comments from the second public meeting and responses from the second public survey were reviewed. Priorities and recommendations were reviewed for comment. The draft report and edits made to the concept plans were reviewed with estimated costs for the proposed work. The committee determined that the final draft report should be presented to the Board of Supervisors at the September 2022 meeting.

2. KEY PERSON INTERVIEWS

Key persons were identified by the study committee as Athletic Association presidents, Township personnel, members of Trout Unlimited Hokendaqua Chapter and the local Chamber of Commerce.

Primary issues noted by Athletic Association leaders were the inconsistency of Township assistance in grooming and prepping fields in spring. The Township Recreation Board provides each AA with a yearly grant of $5,000.00. The associations reported using the funds to assist with maintenance needs such as weekly mowing and edging. All teams reported decreasing enrollment leading to the temporary suspension of some programs or merging of some associations. Other programs have seen an increase in enrollment. These include baseball and T-Ball. Coaches are in short supply due to increasing regulations. The number of fields are currently adequate to meet demand.

Associations tend to compare their facilities to those in other communities in which they play. Fields in South Whitehall, Lower Macungie and Upper Macungie Townships were reported as in better condition than those offered by North Whitehall. Partnerships are forming between neighboring municipalities. North and South Whitehall Townships, as well as Upper Macungie Township all share the same school district.

Township personnel reported taking great pride in the care and maintenance of the parks and facilities. Public opinion is very positive when asked about the quality of the Township park maintenance. Public works reported the Township has the resources to provide them with equipment that helps them to provide better maintenance services, and that they are not opposed to attending training sessions to incorporate new facilities, like meadows or splash pads.

The Township Recreation Department is planning to expand programming options, and as planning and development progresses, they are looking forward to having a community gathering space to allow for large scale community events.

Trout Unlimited marked several places on a map where fish are stocked in the Jordan Creek for public fishing. The group reported that the potential for fishing in other Township creeks is poor. The majority of creeks do not carry a volume or depth of water that supports recreational fishing. The Lehigh River is great for fishing in the area designated as critical habitat for Ospreys, but access is difficult due to steeply sloped river banks. The group would love to see a formalized fishing access spot along the Lehigh River. They talked about the Johnson's Pond ADA trail project as a good concept, but maintenance has been lacking, and a fishing pier is really needed to allow fishing from a mobility device. The pond serves as a detention basin for runoff from the PA Turnpike, so the fish are most likely not safe to eat, but catch and release fishing is available.

The Chamber reported a healthy business climate in the Township. There are several large companies and a small office park. Restaurants, fitness clubs, hospital or out-patient facilities are lacking in the Township.

3. COMMUNITY SURVEY

a. FIRST PUBLIC SURVEY

The first public survey was available on-line and as a paper copy between the end of October and early December. A link to the survey was posted on the Township's web page and various social media outlets. Survey instructions were to complete one survey per household.

The survey was 25 questions in length, with the last 5 questions directed to demographic information. 188 respondents, or 1.2% of the Township's population, participated in taking this survey. The response rate can be considered a representative sample of the Township population. Respondent demographics aligned with community demographics. Seventy children under the age of 18, were reported by respondents. The majority of respondents were from the Schnecksville area, with an average age between 60 and 69, which is slightly higher than the Township's average age of 44.9.

The survey results are presented in Appendix A of this report.

b. SECOND PUBLIC SURVEY

The second public survey was available on-line and as a paper copy between early March and the end of April. A link to the survey was posted on the Township's web page and various social media outlets.

The survey was divided into 12 facilities the Township has the potential to implement within a 10 year timeline, and 3 facilities that may take longer to implement due to costs. The facilities were presented with illustrative photos. 225 respondents took the survey which did not have a demographic component. Survey results can be found in the appendix to this report.



C. BACKGROUND

1. COMMUNITY BACKGROUND



a. LOCATION, SIZE, CHARACTER, CONTEXT, HISTORY

North Whitehall Township is a Township of the second class, located in northeastern Pennsylvania in the Lehigh Valley region in the northeast section of Lehigh County. The Township is comprised of 18,240 acres, an area of approximately 28.5 square miles. (U.S. Census 2010 Data)

The Lehigh River forms the northeastern-most boundary for the Township and separates Lehigh from Northampton County. PA State Highway 145 runs through the eastern part of the Township from north to south, and State Highway 309 runs through the western part of the Township from north to south. The Pennsylvania Turnpike, Northeast Extension runs through the western portion of the Township from north to south. There is no direct turnpike access in the Township. Several two lane state routes traverse the Township from east to west. The City of Allentown is located south of North Whitehall Township in Lehigh County. The Cities of Bethlehem and Easton are southeast of the Township in Northampton County.

In 1810 the Township of Whitehall was divided into Whitehall, North and South Whitehall Townships. At that time, agriculture was the predominate land use. North Whitehall Township still presents a rural landscape of low hills dotted with small unincorporated villages, but development is beginning to change that rural feel along the primary traffic corridors. A brief description of the villages in the Township is offered below:



Village of Ballietsville

• BALLIETSVILLE is the oldest village in the Township dating back to 1750 and named after Paulus Balliet, who operated an Inn that also provided community services. The Colonel Steven Balliet House is eligible for the National Register of Historic Places. The village center is a sparse mix of older homes, with newer development outside the village center.

• IRONTON was founded with the discovery of iron ore which was mined until the late 1800's. Limestone mining continues in Ironton and several small abandoned mine sites remain. The village has a sparsely populated commercial feel, with a modern housing development surrounding the small village center.

• LAURYS STATION was the site of a large dam on the Lehigh River built in 1830. A hotel built in 1832 served as a Lehigh Valley Railroad Station. An amusement park operated in Laurys Station from 1891 until 1906 until continual flooding forced permanent closure. Laurys Station has a volunteer fire company, athletic association and two baseball fields. A commercial core of properties is dotted along S.R. 145, surrounded by newer housing to the west.

- NEFFS, originally known as Uniontown, was established by congregants of the Union Church built in 1797. The village is named after Abraham Neff, who operated multiple businesses and helped to layout the village. Neffs today is at the intersection of three state highways. A small dense cluster of older homes and commercial buildings is surrounded by newer neighborhoods outside the village center. Neffs has a volunteer fire company station with ballfields near the village. Neffs Bank built a ball field and playground which the Township helps to maintain.



Neffs Church

- ORMROD is located 1 mile east of the Ironton Elementary School and was established in 1898 along the industrial railroad line to provide homes for miners. These homes still line Ormrod's Main Street. Ormrod has an Athletic Association and a neighborhood park with 2 ballfields, a basketball court and a playground. The village center is surrounded by modern housing developments. A large mine still operates between Ormrod and Ironton.
- RISING SUN is a very rural village located at the intersections of Rising Sun Road and Old Post Road. A barn and homestead located here are eligible for the Historic Register of Places.
- SCHNECKSVILLE is the largest village in the Township located on State Highway 309. The village was settled in 1756 by Adam Schneck, whose log home still exists. The original homes built along Route 309 are being replaced with commercial developments, and suburban developments have spread out from the original village center. Schnecksville has a fire department with a new facility, a large baseball field and the Keystone State Quarter Midget Racing Club. The Schnecksville Fire Company has hosted a popular community fair each year since 1981.



Village of Schnecksville

- OREFIELD is located south of Schnecksville on State Highway 309. Half of Orefield is located in North Whitehall Township, the other half in South Whitehall Township. The village was founded when iron ore was discovered and mining began. The Ironton Rail system, created to haul iron ore from the quarries, maintained a rail segment that terminated in Orefield. Orefield is home to Shankweilers Drive In movie theatre, currently the oldest drive in theatre in operation in America today, and Jaindl Turkey Farms, who provide the White House with a Thanksgiving Turkey each year. The original village along Route 309 has transitioned to a commercial zone and new development is spreading out in the former agricultural fields that surround the town center.

b. GOVERNMENT STRUCTURE

North Whitehall Township is governed by a township manager, administrative staff, and a board of three elected supervisors. Supervisors are elected to six-year terms on a rotating basis, and receive a small compensation for their work. The Township manager reports to the supervisors, who meet monthly. All administrative personnel and Township department heads report to the Township Manager. Township staff attend volunteer board meetings to report meeting events.

Government departments include Public Works, Planning, Zoning, Sewage, Parks and Recreation, Finance and Taxes. Police services are provided by a State Police Troop M Bethlehem barracks. Four local volunteer fire companies, located in Schnecksville, Laury's Station, Neffs and Orefield (Tri-Clover) provide emergency service assistance. Volunteer boards include the Recreation Board, Zoning Hearing Board, Planning Commission, Farmland Preservation Committee, Open Space Board and the Ironton Rail-Trail Oversight Committee.

c. PARKS AND RECREATION HISTORY AND BACKGROUND

Records concerning the history of the parks in the Township have been lost, so the history presented here is what is known by current staff. The information that is available is on the next page:

- LAURYS FIREHOUSE PARK
  31.9 ACRES
  5328 Egypt Road, Laurys Station

  Laurys Firehouse Park land was acquired with assistance from DCNR and Lehigh County. Township funds were used to develop this park.



- NEFFS VALLEY PARK
  15.0 ACRES
  3545 Neffs Laurys Road, Schnecksville

  Park land which included existing facilities was acquired with DCNR and Lehigh County funds in 2006. Plans are underway to demolish the existing facilities which included a pool and other support buildings.



- INDEPENDENCE PARK
  8.77 ACRES
  3.6 ACRE ANNEX
  4400 Independence Drive
  Schnecksville

  Independence Park was developed with DCNR's assistance. The Township has acquired 3.6 acres on an adjoining parcel. Concept ideas for the adjoining parcel will be explored as part of this plan.



- JOHNSON'S POND WILDLIFE PARK
  20.2 ACRES
  4375 Coplay Creek Road
  Schnecksville

  One the Township's newer parks was designed as a passive recreation experience to provide fishing for the handicapped with assistance from a local eagle scout who installed an accessible crushed stone path.



- KOLAPECHKA & LEVANS PARKS
  Kolapechka Park - 22.6 ACRES
  4075 Coffeetown Road, Coplay
  Levans Park - 10.2 ACRES
  3421 Levans Road, Coplay

  The land was acquired in 2002 with a DCNR grant and developed in 2006 with a second DCNR grant. Kolapechka and Levans Parks are connected via a walking path. The two parks are near to the Township Municipal building and park, and the Ironton Rail Trail trailhead.



- MUNICIPAL PARK
  10.6 ACRES
  & IRONTON RAIL TRAIL
  3256 Levans Road, Coplay

  The Ironton Rail Trail was planned and developed as a partnership between Whitehall and North Whitehall Townships and Coplay Borough. Funding assistance was provided by DCNR and PennDOT. A DCED grant provided resources for a pavilion at the trailhead.



2. SOCIO-ECONOMICS

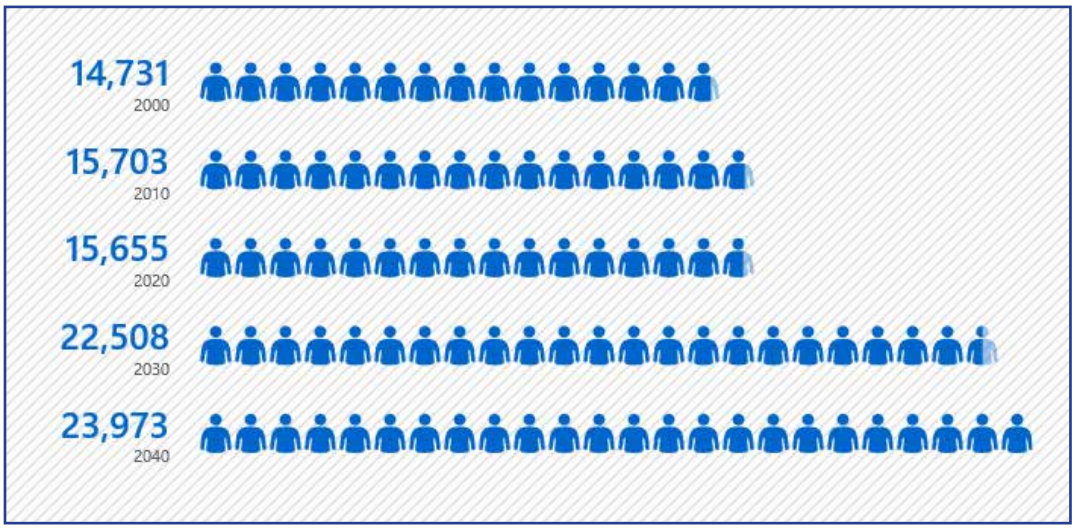
a. DEMOGRAPHIC TRENDS

This report compares North Whitehall Township demographic data from the 2009 Parks, Recreation, and Open Space Plan with current U.S. Census data. The 2009 report used data from the 2000 U.S. Census.

Demographic trends provide municipal leaders with information necessary to create relevant goals and priorities. A goal for any community should be to provide facilities that are equitable and accessible to all residents. A recreation goal for any municipality should be to provide facilities that are equally accessible to residents of all ages and abilities.

- POPULATION

  U.S. Census data for 2020 was used to report population. The population of North Whitehall Township for the year 2000 was 14,731, an increase of 36.1% from the Township's 1990 population. The population in 2010 increased 6.6% from 2000. The Township's 2020 Decennial Census population after redistricting was 15,655, a slight decrease (0.3%) from the 2010 population. Lehigh Valley Planning Commission projects the Township's population will reach 23,973 by the year 2040.



- POPULATION DENSITY

  North Whitehall Township is 18,240 acres or 28.5 square miles in size. Population density for the Township in 2000 was 517 persons per square mile, which increased to 549 persons per square mile by 2020, using U.S. Census population numbers. For comparison, population density per square mile for the neighboring City of Allentown was 5,742 in the year 2000, which increased to 6,991 by the year 2010.

- AGE

	2000 Census		2016 - 2020 Census	
	Count	Percentage	Count	Percentage
Persons Under 5 yrs.	884	6%	659	4.2 %
Persons Under 18 yrs.	3683	25%	3407	21.7%
Persons Aged 19-44	5156	35%	no data	----
Persons aged 45-64	3535	24%	no data	----
Persons aged 65-74	884	6%	no data	----
Persons aged 65+			2701	17.2%
Persons aged 75+	589	4%	no data	----

The population trends show a slight decrease in school-aged persons from 2000 to 2020. The largest increase was in persons aged 65 and over. Due to data migration issues there is no age breakdown data available for the Township. The data available does indicate that 56.9% of the Township's population is between the ages of 19 and 64, a slight decrease from the 2000 census.

A housing development boom in the Township in 2000 resulted in an increase in the population as shown in the 2000 census population numbers. New homes led to a corresponding increase in the youth population, and youth sports flourished. The children born in the early 2000's have grown, residential development slowed, and youth sports enrollments have declined. New developments are again being built which may result in an increase in the number of young families and children. The Schnecksville Elementary School is expanding it's facility to accommodate a larger student population. An active 55 community is being built in the Township. The Township Recreation Department will need to keep an eye on population trends to meet the needs of a changing population.

The Township should consider providing recreation activities that can be enjoyed by a wide range of ages and abilities such as pickle-ball and paved multi-use paths for walking and cycling. Programs that engage the entire community, such as Community Day events, which offer access and activities for all, should be considered.



- RACE

  Numbers from the 2009 Joint PROSP are used (based on data from the 2000 U.S. Census) and compared to the U.S. Census 2020 reported percentages of persons who identify with the following races.

RACE	2000	2019
White Alone	97.02%	88.70%
African American/Black Alone	0.83%	1.30%
Hispanic or Latino	1.66%	8.40%
American Indian/Alaska Native Alon	0.09%	0.10%
Asian/Hawiian/Pacific Islander	0.40%	
Asian Alone		0.40%
Native Hawaiian/Other Pacific Islander		0.20%
Two or More Races		2.50%
Foreign Born Persons		4.10%

In the 2009 plan, Asian/Hawaiian/Pacific Islander was a single category

Asian/Hawaiian/Other Pacific Islander	0.40%

Current Census Data (2020 estimates) separates and adds ethnic categories

American Indian and Alaska Native alone	0.2%
Asian Alone	2.0%
Native Hawaiian /Other Pacific Islander Alone	0.05%
Two or More Races	5.6%
Foreign Born Persons	3.5%

The Township remains largely white alone, but diversity is increasing, mirroring U.S. race trends. African Americans and Hispanic/Latino persons have identified histories in sports participation. Studies by the University of Utah's Aspen Institute show that Hispanics tend to be enthusiastic soccer fans and enjoy playing baseball. African Americans tend to view participation in football and basketball as a path to secure college scholarships or lucrative pro-sports careers. African Americans and Hispanics are historically less likely to participate in nature oriented outdoor activities such as hiking, camping and kayaking. Community based outreach programs have been working to introduce children from all demographics to the outdoors.

Post-pandemic studies by Aspen Institute indicate that childhood inactivity is once again on the rise.

- EDUCATION

  Residents of North Whitehall Township are well educated, and will make decisions not only based on information presented to them, but also on self guided research to confirm data presented. U.S. Census data presented is from years 2016-2020.

94.4% of Township residents aged 25 years or more have a HS diploma or higher
34.9% of Township residents aged 25 years or more have a Bachelor's degree or higher

The Township is home to Lehigh County Community College and Lehigh Valley Career and Technical Institute.

- HOUSING

  U.S. Census Data from 2016-2020 is compared with data from the 2009 Joint PROSP as available. The data shows a generally prosperous Township population with readily available access to the Internet. There was an increase in number of households and a stable number of persons per household. This is reflected in the overall increase in the population of the Township.

	2000	2016-2020
Owner Occupied Housing Unit Rate	96.4%	84.6%
Median Value -		
Owner Occupied Housing Unit	no data	$269,400
Median Gross Rent	no data	$ 1,077
Number of Households	5,473	6,258
Persons per household	2.6	3.06
Households where English is not primary language spoken- ages 5+ years	no data	6.2%
Households with a computer	no data	89.0%
Households with an Internet subscription	no data	83.9%

- POVERTY

  U.S. Census Data from 2016 - 2020. This data was not collected during the 2009 Joint PROSP. The Township's population has **4.6%** of persons living at or below poverty income levels. There are no Environmental Justice areas in the Township as identified by the state of Pennsylvania.

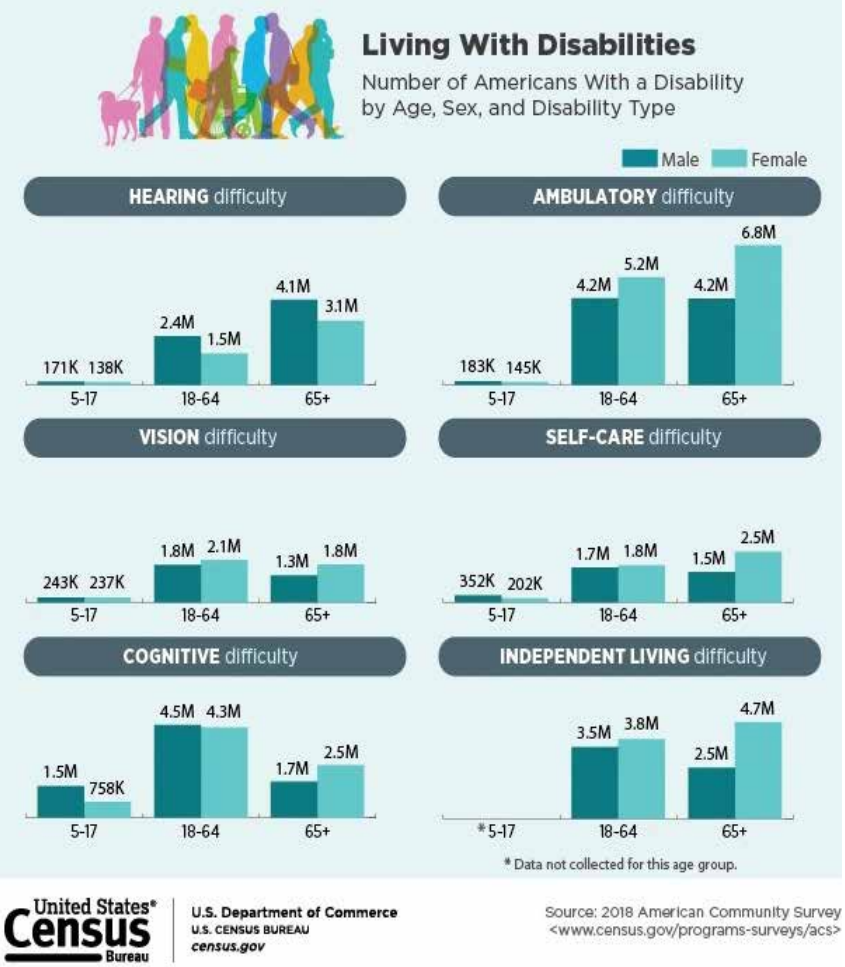
Median HH income (in 2019 dollars)	**$ 86,820**
Per capita income in past 12 months (2019 dollars)	**$ 45,576**

- HEALTH

Data for population with a disability from U.S. Census 2016-2020. Data for population without health insurance from American Community Survey 2020 5-year estimates. This data was not available during the writing of the 2009 Joint PROSP.

The data shows that the Township's percentages of persons with a disability align with that of the US population. The two largest health providers in the Lehigh Valley have limited facilities in the Township.

Population suffering with a disability under age 65	**9.2%**
Population without health insurance, under age 65	**3.4%**



b. ECONOMIC TRENDS

All data in this category is from U.S. Census 2016-2020 except as noted. This type of data was not collected during the 2009 Joint PROSP. This data reveals the Township's percentages of working individuals.

Persons in the Civilian Labor Force, who are over age 16	65.1%
The mean travel time to work for those workers aged 16 yrs.+	28.1 minutes
Employer firms located in the Township as of 2017.	269

Data from U.S. Economic Census 2016-2020

Total Accommodation and Food Service Sales 2017 ($1000)	12,264
Total Health Care and Social Assistance Receipts/Revenue 2017 ($1000)	103,746
Total Transportation and Warehousing Receipts/Revenue 2017 ($1000)	43,791
Total Retail Sales 2017 ($1000)	116,103
Total Retail Sales per Capita 2017	7,113

Businesses in the Township include: Jaindl Turkey Farms; Horwith, a trucking company; Orefield Cold Storage (OCS Logistics), cold storage and transport; Lehigh Carbon Community College, Lehigh Career and Technical Institute, SAGE Truck Driving School (post-secondary educational facilities) and Swagelok Products, manufacturers of tube fittings and components. The Township has an office park where 2 new warehouses totaling 1.3 million square feet were recently installed for UNFI, a wholesale food distributor. Commercial and retail businesses are expanding, primarily along the Route 309 corridor.

The D&L Trail and Trexler Nature Preserve are located in the Township. These facilities draw visitors from across the Lehigh Valley and from other states. This plan will examine ways that the Township might use recreation to improve the economy of local businesses.

3. PHYSICAL CHARACTERISTICS

a. LAND USE

The 2009 Joint Parks and Recreation Plan noted land uses in the Township as reported in 2005 by Lehigh Valley Planning Commission. 2020 Land Use Data was also provided by Lehigh Valley Planning Commission. There is a discrepancy of 246.7 acres between these years which may be attributable to data accuracy advances made since 2009 and rounding errors. The land use changes reveal significant loss of agricultural and vacant lands.

LAND USE CATEGORIES	2009 LAND USES - ACRES		2020 LAND USES - ACRES	
Parks & Other Outdoor Recreation (inc. Trexler)	1,725.90	9.4%	1,376.90	7.4%
Residential Use - TOTAL	5,067.60	27.7%	8,567.60	46.2%
Residential	*0.00*	*not separated*	*5,285.50*	*28.50%*
Rural Residential	*0.00*	*not separated*	*3,282.10*	*17.70%*
Agriculture & Vacant	8,543.30	46.6%	5,397.10	29.1%
Commercial & Retail	224.20	1.2%	207.60	1.1%
Transportation, Communication, & Utilities	1,092.70	6.0%	216.20	1.2%
Right of Way	*0.00*	*not provided*	1,061.50	5.7%
Public & Quasi Public	608.30	3.3%	652.70	3.5%
Office & Business	*0.00*	*not provided*	43.70	0.2%
Industrial & Manufacturing	1,048.70	5.7%	1,038.90	5.6%
Wholesale and Warehousing	4.80	0.03%	*0.00*	*Not provided*
	18,315.50		18,562.20	

b. NATURAL FEATURES

The Township lies in the physiographic Ridge and Valley province in the Great Valley section of Pennsylvania, which is comprised of low hills and valleys. Pennsylvania keeps and collects data on endangered native flora and fauna. Data for North Whitehall Township was collected in 1999 and 2005 as part of the Lehigh County Natural Areas Inventory. There are four areas of Environmental Significance located within North Whitehall Township.

- #3 - Trexler Hollow. Two endangered plant species are located in Trexler Nature Preserve. Originally found along the steep banks of the Jordan Creek, these species are threatened by road construction, deer browsing and invasive vegetation such as Autumn Olive, which thrives in the Preserve.
- #7 - Rockdale Cliffs. This 2-mile stretch of forested slope along the Lehigh River near Laury's Station is home to the Ebony Sedge. Wooded steep slopes protect this habitat, but it is threatened by agricultural operations that provide little protection from storm water run-off that can uproot under-story vegetation.
- #8 - Clearview Road Riverbank. Along the banks of the Lehigh, at the terminus of Clearview Road, was historically home to three sensitive plant species that grew in the cobbles and sand deposited on the river bank. Two of these species were last documented in 1997 and the Veiny Pea has not been seen since 1964. Flooding, deer browse and invasive vegetation are threats to these native species.
- #14 - The Laurys Station Floodplain is a long stretch of narrow forested floodplain along the Lehigh River which is home to the osprey, a small bird of prey often seen hunting fish on open water. The Osprey nests in trees and snags. Protecting water quality protects this beautiful bird of prey. Storm water and agricultural run-off can carry pesticide residue which has been linked to the decline of the osprey. Government bans on certain pesticides have resulted in osprey populations showing signs of recovery.



c. CULTURAL AND MAN MADE FEATURES

Transportation corridors include the PA Turnpike North East Extension, accessible from the south on Route 309. PA State Highways 309, 329, 873, and 145 also traverse the Township creating a functional transportation network. The recent addition of over 1 million square feet of warehouse space east of Independence Drive has added to the increasing road congestion.

Historic properties in North Whitehall Township that are eligible for registry on the list of historic places: Kenneth Watring Barn, Colonel Steven Balliet House, Ironton Elementary School (formerly Parkland Elementary School) and the SR 4003 Bridge on Kernsville Road.

Other places and structures of historic interest are Shankweilers Drive-In, which was the second drive-in movie theatre built in America in 1934. Operations ceased during the pandemic, and the popular and iconic drive-in, once America's oldest operating drive-in, is now for sale.

Rex Covered Bridge is listed on the National Register of Historic Places. It is a 150' long Burr Truss Bridge, built in 1858. The bridge crosses the Jordan Creek and is the longest remaining covered bridge in Lehigh County. The bridge has been strengthened with steel reinforcements.

Covered Bridges within Trexler Nature Preserve lands and owned by Lehigh County are Schlicher's Covered Bridge and Geiger's Covered Bridge.



Rex Covered Bridge



Schlicher's Covered Bridge

d. ENVIRONMENTAL ISSUES AND STORM WATER

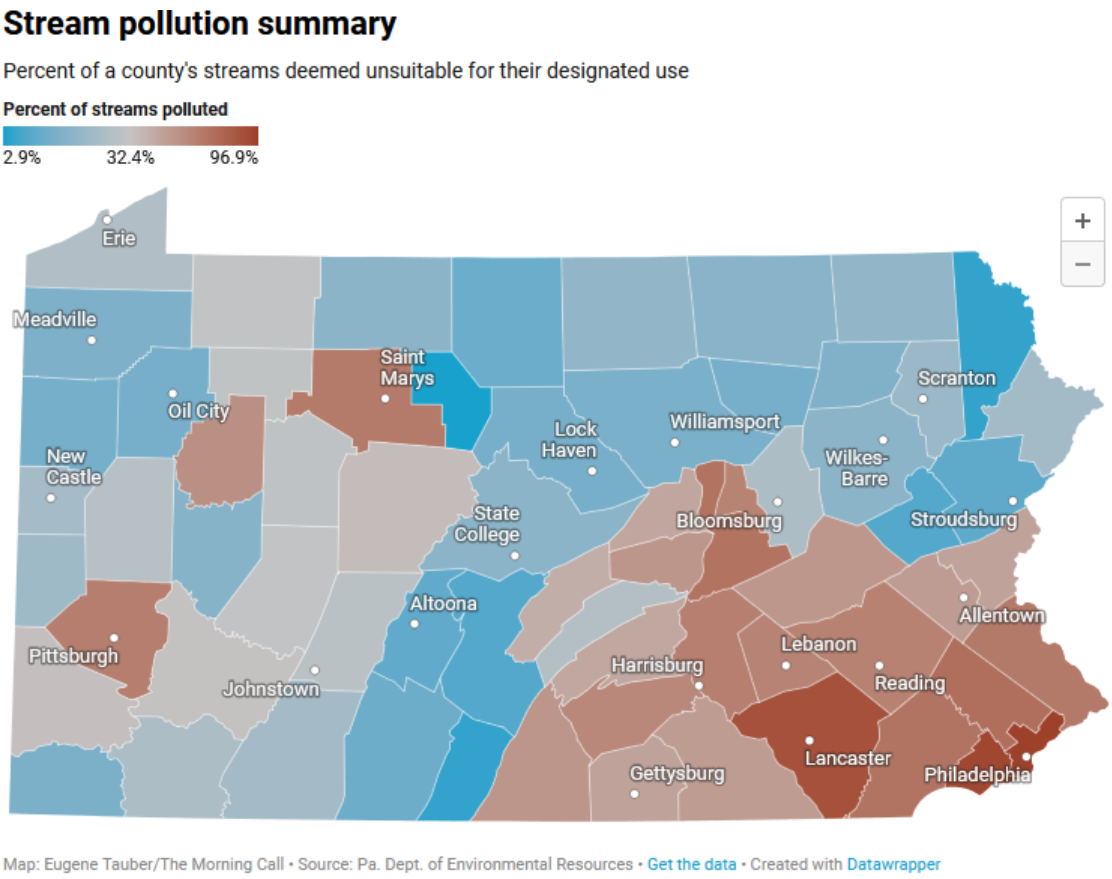
- WATER QUALITY

  Nearly all homes and businesses in North Whitehall Township are served by on-site sewage systems consisting of a septic tank and drain-field.

  A 93-acre site, added EPA's Super Fund Priorities List in 1983, is located in Ironton. Open pit mining of iron ore began in the late 1800's, and from 1967-1981 the site was used to dump municipal and industrial waste. All storm water from site and water from the aquifer are treated prior to continuing downstream. Environmental contaminants are measured at quarterly intervals and a water quality report provided at 5-year intervals. Similar contaminated sites where pollutants have been cleaned to acceptable levels have been re-purposed as solar parks, environmental and recreation venues. Redevelopment guidelines can be found on DEP's web page.

  Other abandoned quarries have been re-purposed as private recreational venues, such as Ranger Lake and Lehigh Valley Sporting Clays.

  A study by PA DEP mapped streams across the state of Pennsylvania to indicate where water quality has been negatively impacted and where high water quality can still be found. Lehigh County's streams are of lesser quality according to this map found on the following page.



- COMMUNITY FEATURES MAPS

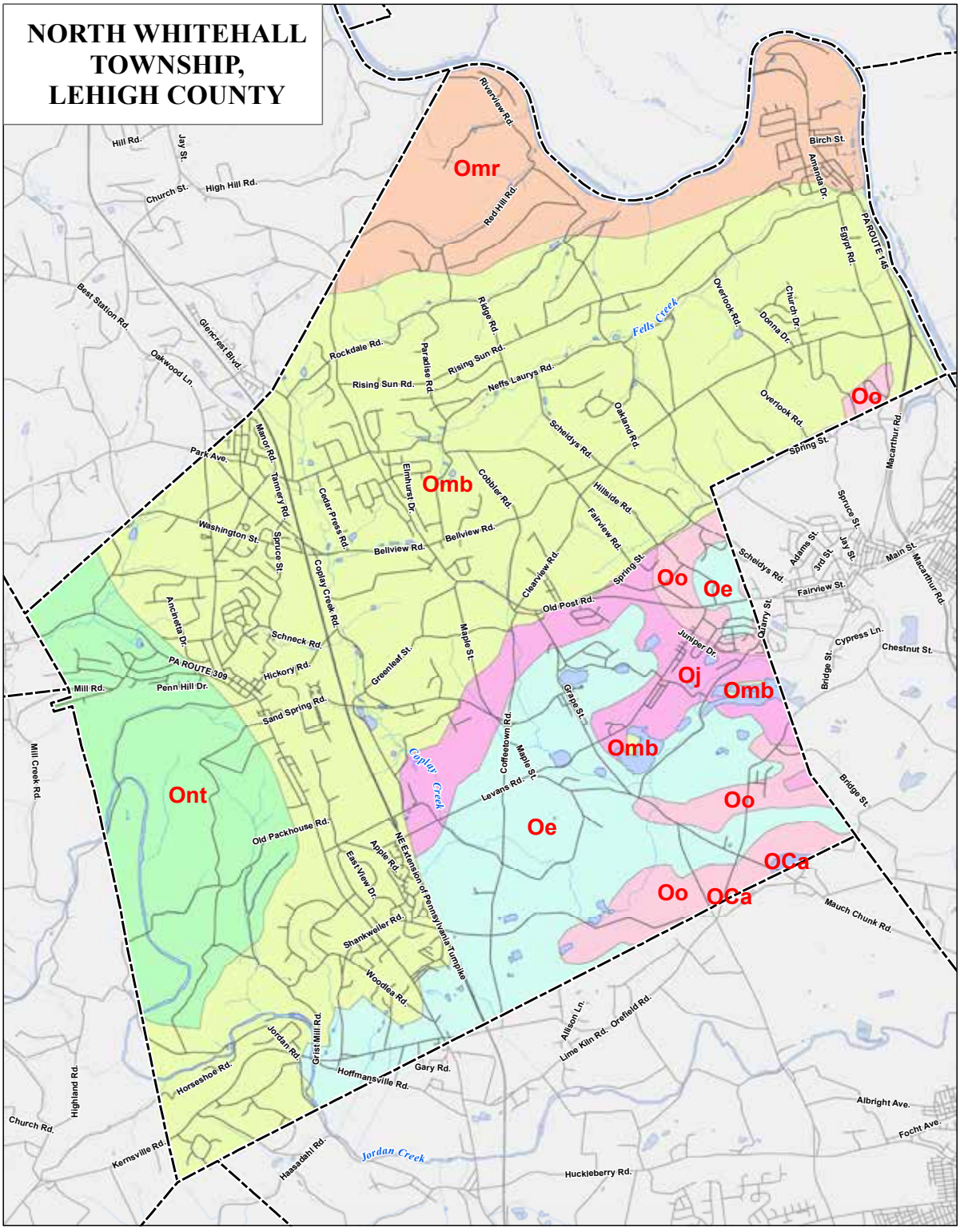
  Four maps follow this page illustrating the geology, natural features, community facilities and park service areas in the Township.

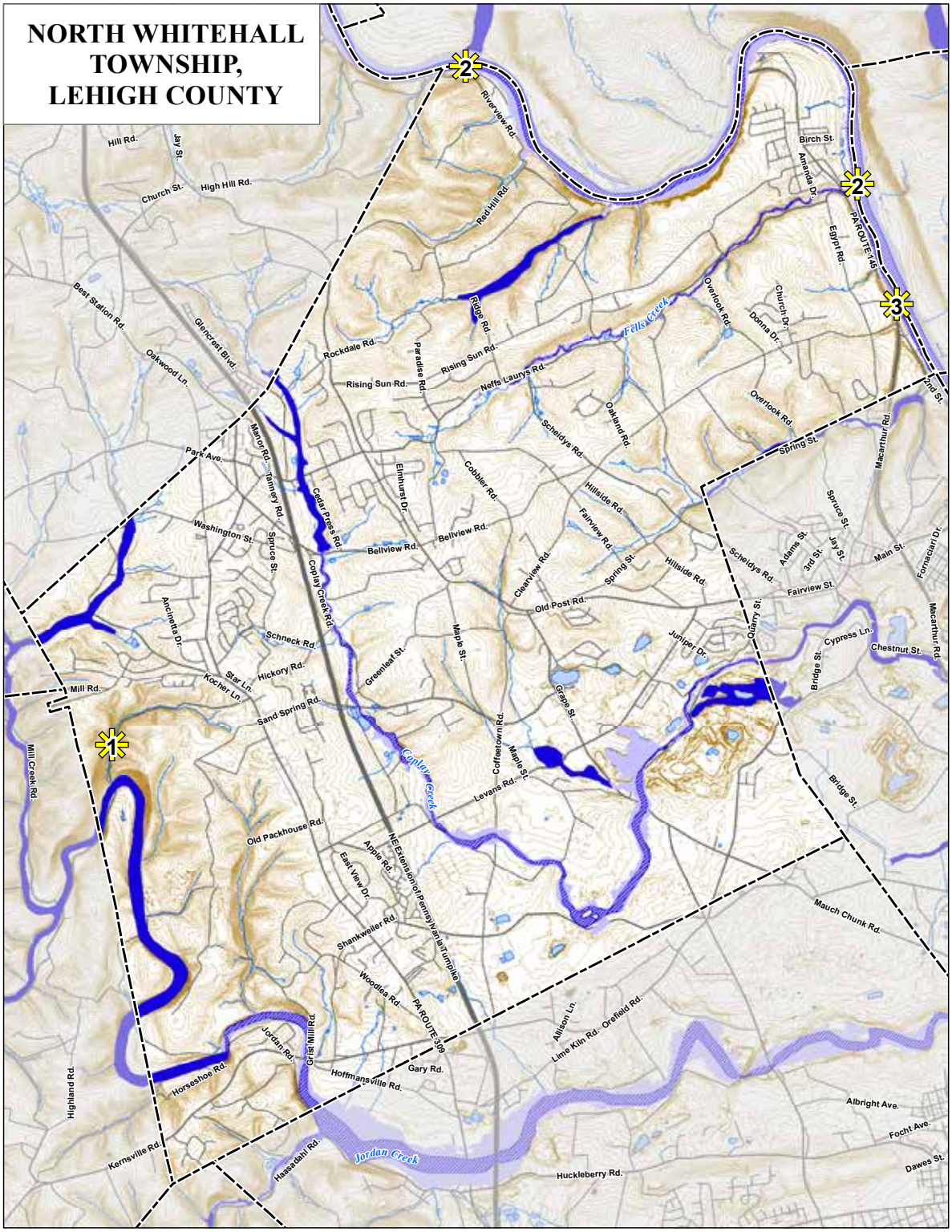
  The **Geology Map** reveals Limestone/Karst bedrock underlying the south-eastern part of the Township where mining was prevalent. The northern and eastern parts of the Township are shales and stone/and siltstone bedrock.

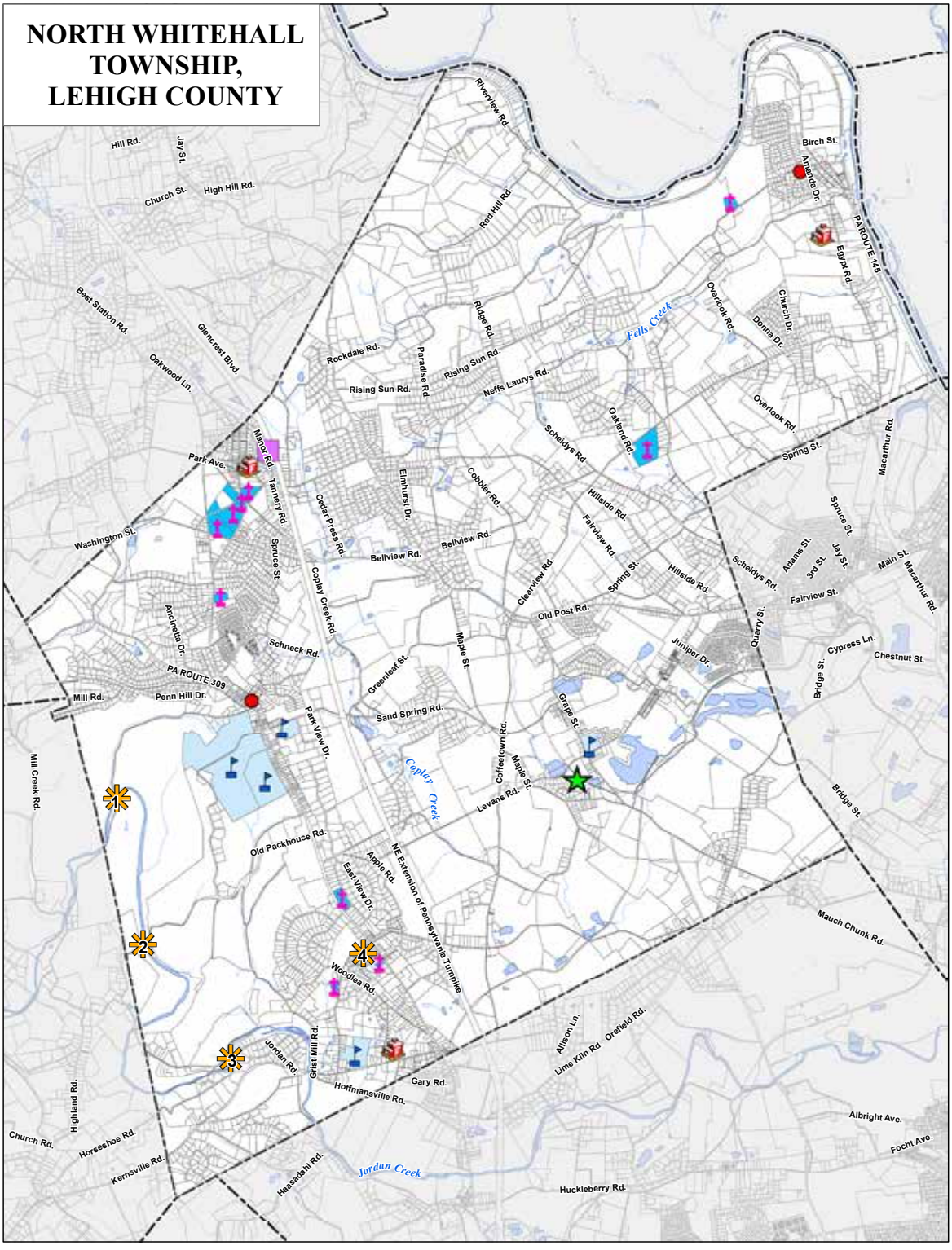
  The **Natural Features Map** illustrates the hilly topography of the Township, riparian corridors and the Natural Heritage Areas. Riparian corridors offer potential for conservation greenways and alternative transportation corridors. Fish stocking locations are the Jordan Creek in the Trexler Nature Preserve and east of Ranger Lake.

  The **Community Facilities Map** locates villages, transportation corridors, historic bridges, schools and municipal facilities. Community centers and resources provide a starting point when looking for opportunities to create a connected community.

  The **Public Recreation Service Areas Map** shows the location of public recreation areas including Trexler Nature Preserve. Circles represent Township park service areas, based on the distance a person might walk to visit a park. Parks with land areas of more than 10 acres show a one-mile service area radius, and parks under 10 acres show a half-mile service area. The state has adopted NRPA's 10-minute Walk Program which aims to provide a local park within a 10-minute walk from all residents in a community. The areas not covered by a circle highlight under-served neighborhoods. The circles on the map do not indicate that safe pedestrian/bicycle facilities are present.


NORTH WHITEHALL TOWNSHIP, LEHIGH COUNTY
Omr
Omb
Ont
Oo
Oe
Oj
OCa
Riverview Rd.
Red Hill Rd.
Hill Rd.
Jay St.
Church St.
High Hill Rd.
Birch St.
Amanda Dr.
PA ROUTE 145
Egypt Rd.
Best Station Rd.
Glencrest Blvd.
Oakwood Ln.
Rockdale Rd.
Ridge Rd.
Rising Sun Rd.
Paradise Rd.
Fells Creek
Overlook Rd.
Church Dr.
Donna Dr.
Neffs Laurys Rd.
Scheidys Rd.
Oakland Rd.
Park Ave.
Manor Rd.
Tannery Rd.
Elmhurst Dr.
Cobbler Rd.
Hillside Rd.
Fairview Rd.
Spring St.
Macarthur Rd.
Spruce St.
Washington St.
Cedar Press Rd.
Bellview Rd.
Clearview Rd.
Adams St.
3rd St.
Main St.
Old Post Rd.
Fairview St.
Quarry St.
Juniper Dr.
Cypress Ln.
Chestnut St.
Bridge St.
Amarinetto Dr.
Schneck Rd.
Coplay Creek Rd.
Maple St.
Greenleaf St.
PA ROUTE 309
Hickory Rd.
Penn Hill Dr.
Mill Rd.
Sand Spring Rd.
Grape St.
Coffeetown Rd.
Coplay Creek
Levans Rd.
Mill Creek Rd.
Old Packhouse Rd.
NE Extension of Pennsylvania Turnpike
Apple Rd.
East View Dr.
Shankweiler Rd.
Woodlea Rd.
Mauch Chunk Rd.
Allison Ln.
Lime Kiln Rd.
Orefield Rd.
Jordan Rd.
Grist Mill Rd.
Horseshoe Rd.
Hoffmansville Rd.
Gary Rd.
Highland Rd.
Church Rd.
Kernsville Rd.
Haasadahl Rd.
Jordan Creek
Albright Ave.
Focht Ave.
Huckleberry Rd.
OCa Allentown Dolomite
Oe Epler Formation of the Beekmantown Group
Oj Jacksonburg Limestone
Omb Bushkill Member
Omr Ramseyburg Member
Ont New Tripoli Formation
Oo Ontelaunee Formation of the Beekmantown Group
GEOLOGY
Feet
0 1,650 3,300 6,600
SOURCE:
PASDA, ESRI and Lehigh Valley Planning Commission.
Urban Research & Development Corporation
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URDC


NORTH WHITEHALL TOWNSHIP, LEHIGH COUNTY
Hill Rd.
Jay St.
Church St.
High Hill Rd.
Riverview Rd.
Red Hill Rd.
Birch St.
Amanda Dr.
PA ROUTE 145
Egypt Rd.
Church Dr.
Donna Dr.
Overlook Rd.
Fells Creek
Ridge Rd.
Rising Sun Rd.
Rockdale Rd.
Paradise Rd.
Neffs Laurys Rd.
Oakland Rd.
Scheidys Rd.
Overlook Rd.
2nd St.
Macarthur Rd.
Spring St.
Beat Station Rd.
Glencrest Blvd.
Oakwood Ln.
Park Ave.
Marion Rd.
Tannery Rd.
Elmhurst Dr.
Cedar Press Rd.
Cobbler Rd.
Hillside Rd.
Fairview Rd.
Bellview Rd.
Washington St.
Spruce St.
Coplay Creek Rd.
Clearview Rd.
Spring St.
Hillside Rd.
Scheidys Rd.
Adams St.
3rd St.
Jay St.
Main St.
Fairview St.
Old Post Rd.
Juniper Dr.
Cherry St.
Cypress Ln.
Chestnut St.
Bridge St.
Macarthur Rd.
Fornaciari Dr.
Ancinetta Dr.
Schneck Rd.
Hickory Rd.
Star Ln.
Kocher Ln.
Mill Rd.
Sand Spring Rd.
Greenleaf St.
Maple St.
Grape St.
Coffeetown Rd.
Maple St.
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PA ROUTE 309
Mauch Chunk Rd.
Bridge St.
Allison Ln.
Lime Kiln Rd.
Orefield Rd.
Jordan Rd.
Grist Mill Rd.
Horseshoe Rd.
Gary Rd.
Hoffmansville Rd.
Highland Rd.
Albright Ave.
Focht Ave.
Kernsville Rd.
Hassadahl Rd.
Jordan Creek
Huckleberry Rd.
Dawes St.
1
2
2
3
Floodplain Zone
Special Flood Hazard Area inundated by 100-year flood; no base flood elevation determined.
Special Flood Hazard Area inundated by 100-year flood; base flood elevation determined.
Floodway area in Zone AE.
10 ' Contours
Streams
Water Bodies
Lands of Environmental Significance:
1. Trexler Hollow .2. Laury's Station Floodplain. 3. Clearview Road Riverbank
Natural Features
0 1,650 3,300 6,600 Feet
SOURCE: PASDA, ESRI and Lehigh Valley Planning Commission.
Urban Research & Development Corporation
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Community Facilities

- Post Office
- Church
- Municipal Building
- School
- Water Authority
- Fire Company

Historic Sites

Listed Historic Sites

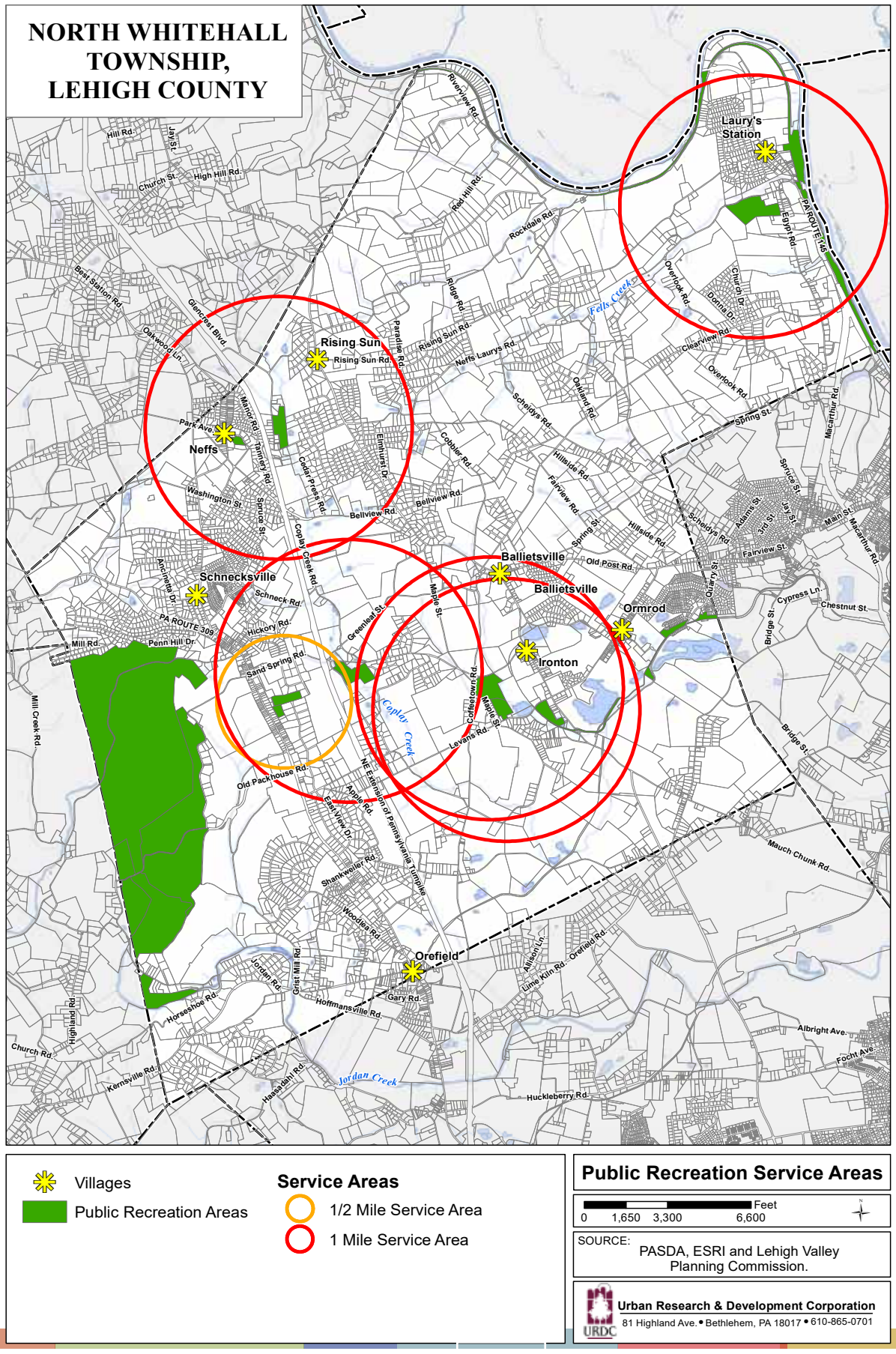
1. Schlicher's Bridge
2. Geiger Covered Bridge
3. Rex Covered Bridge
4. Shankweiler's Drive-in

Community Facilities & Historic Sites

Feet
0 1,650 3,300 6,600

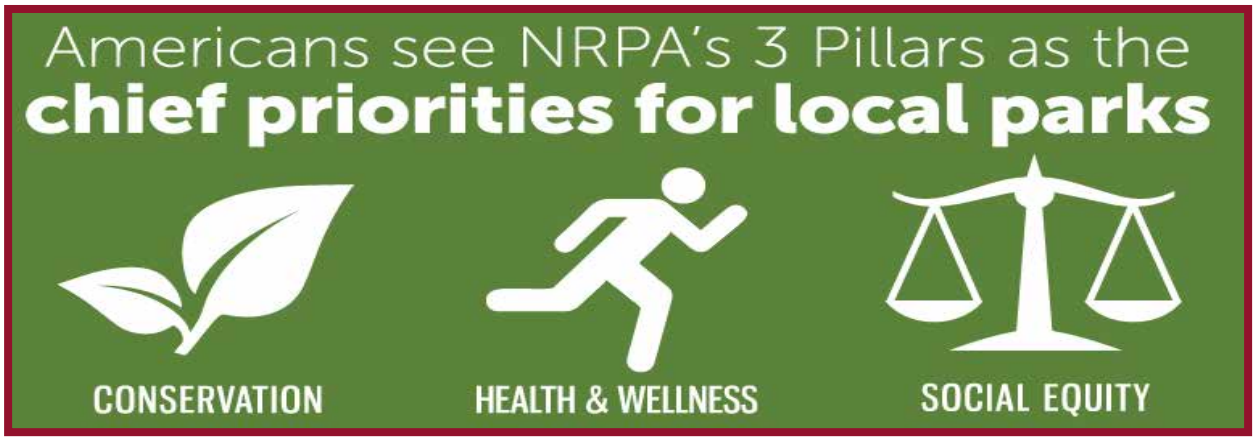
SOURCE: PASDA, ESRI and Lehigh Valley Planning Commission.

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NORTH WHITEHALL TOWNSHIP, LEHIGH COUNTY
Laury's Station
Rising Sun
Neffs
Schnecksville
Ballietsville
Ormrod
Ironton
Orefield
Villages
Public Recreation Areas
Service Areas
1/2 Mile Service Area
1 Mile Service Area
Public Recreation Areas
Feet
0 1,650 3,300 6,600
SOURCE:
PASDA, ESRI and Lehigh Valley Planning Commission.
Urban Research & Development Corporation
81 Highland Ave. • Bethlehem, PA 18017 • 610-865-0701

4. EXISTING PLANNING DOCUMENTS

Existing plans that promote the Three Pillars of the National Recreation and Parks Association (NRPA); Health and Wellness, Conservation and Diversity are listed below. These plans were referenced in the funding application for this report:



a. THE PA STATE OUTDOOR RECREATION PLAN (SCORP)

This plan examines recreation at the state level, in terms of how recreation can meet the needs of health and wellness, conservation, connecting people to the outdoors, and other criteria. The goals of this PROSP will meet the needs identified by the state by connecting neighborhoods to local parks and trails, and by identifying potential trail corridors; by protecting riparian buffers and environmentally sensitive areas and will promote health and wellness by offering a range of recreation available to all ages and abilities.

b. FUTURE LV REGIONAL PLAN

This Lehigh Valley Planning Commission Document proposes growth management tactics to protect assets and improve quality of life in the Lehigh Valley. The plan recommends the implementation of environmental protections and recommends ways to strengthen recreation based and agricultural businesses. The plan recommends ways to build physical and mental community health into future development plans.

c. LEHIGH COUNTY LIVABLE LANDSCAPES

This plan is dedicated to the preservation of open space. This PROSP plan will provide and maintain an accessible and interconnected park, trail and recreation system. This plan will also advance county natural, recreational, agricultural and historic resources, and recommend marketing to promote use through partnerships.

d. LEHIGH VALLEY GREENWAYS

This plan established the Lehigh Valley as a Conservation Heritage Area of statewide significance. This PROSP will identify greenway corridors in the Township and will recommend ways to protect and connect these corridors, providing public access where appropriate.

D. FACILITIES AND OPEN SPACE INVENTORY & ANALYSIS

1. PARK LAND AND OPEN SPACE MAP

North Whitehall Township contains park and conservation lands under multiple types of ownership. Types of recreation facilities are described briefly below.

a. TOWNSHIP PARKS

The Township owns seven parks which are generally larger than 10-acres and many are larger than 20 acres. The Township owns conservation land or open space that may or may not be available for public use.

b. TOWNSHIP TRAILS

The Township owns and maintains two miles of the Ironton Rail Trail, a popular paved multi-use trail that links several local communities. The Ironton Rail Trail, Jordan Creek Greenway and the D&L Trail.

c. COUNTY RECREATION

County Parks are large land areas designed to provide activities that draw visitors from a large geographical area. Trexler Nature Preserve is owned and maintained by Lehigh County.

Lehigh County also maintains the D&L Trail and

d. QUASI-PUBLIC ORGANIZATIONS AND SCHOOLS

Quasi-public recreation is a facility that is financially supported by the public and is available for public use at pre-determined times. Quasi-public facilities may also include fees. Quasi-public agencies in North Whitehall Township include schools and fire companies.

e. PRIVATE

Private facilities can be a variety of facility types, may be managed by for-profit or non-profit agencies and may charge a fee for the use of their facilities.

The following map inset shows recreation lands in the Township identified by ownership. Spots identified by Trout Unlimited as good for fishing are identified on the map.



Jordan Creek Greenway Trail



Trexler Nature Preserve

2. RECREATION FACILITIES AND OPEN SPACE INVENTORY

a. RECREATION FACILITY TYPES

Recreation facilities are defined by the type of recreation opportunities they provide. The Environmental Protection Agency (EPA) identifies types of recreation based on the disturbance to the land and environment that is required to create the facility. Recreation facilities are defined as Active, Passive and Conservation.

- Active facilities are structured activities that require specific facilities, courses, fields or equipment. Athletic fields, paved courts, and playgrounds fall into this category. These facilities significantly alter the existing ecosystem and do not provide support for wildlife or for the environment.



- Passive facilities most often do not require spaces defined by size and grade regulations. Passive recreation facilities place minimal stress on a site's resources. Passive facilities can also provide ecosystem service benefits and are highly compatible with natural resource protection. Pavilions, benches and observation areas are passive facilities as well as trails, bridges, boardwalks and disc golf courses. ADA regulations require these facilities to be accessible in part to disabled individuals.



Bench at Laurys Firehouse Park

- Conservation lands may provide public access or may be closed to public access. Conservation land facilities are designed to have limited impact on a site's resources and are preserved as closely as possible to their natural state for the purposes of resource protection and public education. Passive facilities are often added to conservation lands to provide for public access to these areas.



Pond at Johnson's Wildlife Park

b. NORTH WHITEHALL TOWNSHIP PARKS AND RECREATION FACILITIES

The following two charts list the active and passive recreation facilities that are owned and maintained by North Whitehall Township.

The Township provides fields to serve organized athletics. Playgrounds are well-designed and serve two primary age groups. There are paved walking path loops with benches in most of the parks. The parks are well landscaped with large formal paved parking areas that include ADA compliant parking and access aisles. All of the Township's facilities are well maintained by the Township Public Works Department.

Indoor recreation options are limited by available facilities and staff. The Township building offers yoga in one of the meeting rooms.

TOWNSHIP ACTIVE RECREATION FACILITIES TABLE

Owned and maintained by Township					
TOWNSHIP PARKS	**Acres**	**Qty.**	**Active Recreation**	**SIZE**	**Support Elements**
Independence Park	8.77	1	Baseball/Softball	60'	Bleachers, Fence, Dugouts, Shed
		1	Lacrosse/Soccer	60 yds x 100 yds	
		2	Playground Areas	Ages 5-12, 2-5	Mulch Surface
		2	Sand Volleyball	29.5' x 59'	Nets
Kolapechka Park	22.6	1	Baseball	90'	Bleachers, Fence, Dugouts, Shed
		1	Baseball/Softball	65'	
		2	Playground Areas	Ages 5-12, 2-5	Mulch Surface
		1	Playground Area	Universal Design	Unitary Rubber Surface
Levans Park	10.2	1	Soccer	60 yds x 100 yds	Portable Bleachers
Laurys Firehouse Park	31.9	1	Baseball	90'	Bleachers, Fence, Dugouts, Shed
		1	Baseball/Softball	60'	
		1	Lacrosse/Soccer	60 yds x 100 yds	
		2	Basketball	84' x 50'	Poles, Nets
		2	Playground Areas	Ages 5-12, 2-5	Mulch Surface
Municipal Park	10.6	1	Baseball	90'	Bleachers, Fence, Dugouts, Shed
		1	Baseball/Softball	65'	
		3	Basketball	88' x 50'	Lighting
Neffs Ballfield	5.3	1	Baseball/Softball	60'	Fence, Benches
		1	Basketball Court	84' x 50'	Poles and Nets
		1	Playground	Ages 5-12	Mulch Surface



INDEPENDENCE PARK



MUNICIPAL PARK

TOWNSHIP PASSIVE RECREATION FACILITIES TABLE

Owned and maintained by Township					
TOWNSHIP PARKS	**Acres**	**Qty.**	**Passive Recreation**	**Size**	**Support Elements**
Independence Park	8.77	1	Paved Walking Trail	6' Wide, .4 miles	Benches, Trees
		2	Pavilions	60' x 30'	Tables
		2	Horseshoe Pits	6' x 48'	Fines Suface
		2	Portable Restrooms	Unisex & ADA	Contract Cleaning
	3.6	---	Undeveloped Acres		Existing Trees
Kolapechka Park	22.6	1	Paved Pathway	8' Wide, .5 mile loop	Benches, Trees
		2	Dog Park Areas	6000 SF Each	Fence, Obstacles
		1	Pavilion	60' x 30'	Tables, Trash
		2	Portable Rest Rooms	UniSex & ADA	Contract Cleaning
		1	Stream and Wetland	Unknown	Narrow Buffer
		1	Barn	Maintenance Use	
Levans Park	10.2	1	Paved Pathway	8' wide, .25 mile loop	Benches, Trees
		1	Barn	Maintenance Use	
		1	Wetland Area	Unknown	Native Vegetation
Laurys Firehouse Park	31.9	1	Playground Pavillion	60' x 30'	Tables
		1	Paved Pathway	8' Wide, .6 mile loop	Benches, Trees
		2	Portable Restrooms	Unisex & ADA	Contract Cleaning
			Open Space	Hillside, Woods, Fells Creek Parcel	
Municipal Park	10.6	1	Community Room	In Twnsp Bldg, small programs, i.e., Yoga	
		2	Portable Rest Rooms	Unisex & ADA	Contract Cleaning
		1	Connecting Path to the Ironton Trail		5' wide
Neffs Valley Park	15.0	1	Coplay Creek Corridor	Unknown	Riparian Buffer
		1	Disc Golf Course	9-Hole	Baskets, Tees, Signs
			Park Planning underway		
Johnson's Pond Wildlife Park	20.2	1	Pond, Pond buffer, and Wooded Area		Interpretive Sign
		1	Stone Path	6' wide	Bench
Ironton Rail Trail	15.7	1	Multi Use Paved Trail	10' Wide, 2 miles	Parking
Total Township Park Land	**143.87**				



JOHNSON'S POND WILDLIFE PARK



NEFF'S VALLEY PARK



KOLAPECHKA PARK



& LEVANS PARK



LAURYS FIRE HOUSE PARK

c. TOWNSHIP OPEN SPACE

The Township does own a number of small open space parcels, which are not publicly accessible.

TOWNSHIP OPEN SPACE	ACRES
Timberidge Open Space	1.72 acres
Lehigh River Open Space	0.9 acres
Grist Mill Open Space	13.4 acres
	16.02 acres

d. NORTH WHITEHALL TOWNSHIP TRAILS

There are three trail/greenway corridors within North Whitehall Township. The Township owns and maintains a 2-mile stretch of the Ironton Rail Trail, which is accessible from a trailhead parking area adjacent to the Township's Municipal Park. The Ironton Trail is supported by an active and dedicated volunteer committee which counted 30,000 trips in 2021.

e. COUNTY PARKS AND FACILITIES

County Parks are large land areas designed to provide activities that draw visitors from a regional area. A regional park typically has a minimum service area of a 3-mile radius. Trexler Nature Preserve is owned and maintained by Lehigh County and is located in North Whitehall Township. The park attracts visitors for hiking, fishing, mountain biking, wildlife viewing, miles of trails and one of the best fishing spots in the Township. The Lehigh Valley Zoo is located within the preserve. The recreation opportunities provided by this park substantially add to the quality of life in North Whitehall Township.

The County also maintains the Delaware and Lehigh Trail through the Township, including the formal parking and boat launch near the village of Laurys Station. Tubing, kayaking and canoing are all very popular in the spring and summer months, with several outfitters offering shuttle services, trips and rentals. This facility is well-used throughout the year.

The Jordan Creek Greenway is being developed by Lehigh County. The trail will follow the Jordan Creek, connecting Trexler Nature Preserve to the City of Allentown. Portions of this trail are completed, with a portion of the trail from Trexler to Rex Covered Bridge scheduled for 2022 construction. The greenway will be owned and maintained by Lehigh County.

LEHIGH COUNTY	Acres	Qty.	Recreation Facilites	Size	Support Elements
Delaware & Lehigh Trail Corridor	97.9	1	Multi Use Trail	10' Wide Compacted Gravel	Fencing, Signs
		1	Boat Launch	12' x 25'	Parking Area
Trexler Nature Preserve and Zoo	1432.6	1	Natural Trails, Paved Paths, Zoo, Bison Enclosure, Fishing, Mountain Biking, Picnicking		



BUFFALO at TREXLER NATURE PRESERVE



D&L TRAIL - LEHIGH RIVER ACCESS

f. QUASI - PUBLIC FACILITIES

The athletic associations that serve Township youth were originally formed by the five volunteer fire companies in the Township. These organizations built athletic fields and playgrounds on their land to provide youth sports programs. Fire company-based athletic associations (AA's) include Ormrod Playground Association, Schnecksville AA, Orefield AA, Laurys Station AA, Tri-Clover AA and Neffs AA. North Parkland AA and the Parkland Soccer Club were established later and also provide youth sports programs. Most of the athletic associations do not follow strict geographical boundary lines with the exception of North Parkland AA.

Quasi-public athletic associations in the Township are partially supported wtih municipal funds and Township staff assist with event marketing and seasonal field maintenance. The associations are responsible for dragging the fields after games. The Township provides weekly field grooming for athletic association fields and offers yearly grants to assist with maintenance needs. Township staff schedules the use of the sports fields.

The fire companies can sell their land, which would eliminate access to a field the Township depends on to provide youth sports facilities. This plan may recommend that the Township take steps to acquire right of first refusal agreements to ensure athletic association land and facilities remain Township recreation assets.

School property is owned by the Parkland School District. There are three elementary schools in the Township with limited land and recreation opportunities available to the public. Schnecksville Elementary, located adjacent to Independence Park, offered baseball and soccer fields but school expansion work eliminated use of the facilities and it is certain if the fields will remain available for athletic organization use when construction is complete. Ironton Elementary and Kernsville Elementary offer courts and playgrounds, but no athletic fields.

This table outlines the Quasi-Public recreation facilities in the Township.

QUASI PUBLIC	Acres	Qty.	Recreation Facilites	Size	Support Elements
Old Post Fields	20	2	T-Ball	50'	
		1	Flag Football	60 yds x 20 yds	
		3	Soccer Field	60 yds x 100 yds	
Schnecksville Fire Company Field	7	1	Baseball	90'	Bleachers, Fence, Dugouts, Shed
Keystone State Quarter Midget	4	1	Quarter Midget Race Car Dirt Track	264' long Track	Bleachers, Lighting, Concessions
Laurys Firehouse Athletic Association	4.5	1	T-ball	50'	Bleachers, Fence, Lighting, Shed
		1	Softball	60'	
Tri-Clover Fire Company Fields	10.2	1	Baseball	90'	Bleachers, Fence, Lighting, Dugouts
		1	Softball	60'	
Omrod Playground	32	1	Baseball	90'	Bleachers, Fence, Lighting, Dugouts
		1	Softball	60'	
		1	Playground Area	Ages 5-12	Mulch Surface
		1	Basketball Court	84' x 50'	Lighting
North Whitehall Ambulance Corps	1.9	1	Social Hall, event venue		
SCHOOLS					
Lehigh Carbon Community College	61.9	1	Baseball	90'	Bleachers, Fence, Dugouts, Shed
		1	Softball	60'	
		2	Soccer	60 yds x 100 yds	Bleachers, Shed
		4	Tennis Courts	78' x 27'	Fence, Nets
Ironton Elementary	9.7	2	Basketball	84' x 50'	
		1	Walking Path	6' wide, 900 ft. long	compacted stone
		1	Playground Area	Ages 5-12	Safety Surface
		1	Multi-Use Field	50 yds x 40 yds	fence
Kernsville Elementary	19.8	2	Basketball Courts	84' x 50'	
		3	Playground Areas	Ages 5-12	Safety Surface
Schnecksville Elementary	17.3	Under Construction - anticipated to be completed in 2022			

g. PRIVATE RECREATION

There are 2 fish and game clubs and one rod and gun club in the Township that offer social engagement and a variety of outdoor activities. Iron Lakes, a large golf course facility, had offered a winter sports dome, however, the property was recently sold and it is uncertain how operations and offerings will change. Two privately owned swimming pools offer memberships for residents. Lehigh Valley Sporting Clays offers target shooting routes which surround an abandoned quarry. Service areas for these facilities is varied.

Private facilities in the Township provide outdoor activities, midget race car driving, indoor social clubs, shooting and archery practice venues.

Currently, there are no YMCA facilities, hospital-operated health clubs, or private indoor fitness facilities in the Township. The closest private gym facility is located about 6 miles from the center of North Whitehall Township in Allentown.

The following table outlines the private recreation opportunities available to Township residents.

PRIVATE	Acres	Recreation Facilites
Grouse Hall Fish and Game Association	29.7	Lake, Stocked Trout and Warm Water Fishes, Target Shooting, Food, Social Hall and Events
Coopechan Fish and Game Club	32.5	Lake, Stocked Trout and Warm Water Fishes, Food, Social Hall, Picnic Grove, Outdoor Event Venue
Ranger Rod and Gun Club	71.1	Large Lake, Boating, Target Shooting, Archery, Food, Merchandise, Social Hall, Events
Iron Lakes Country Club	126.4	18-Hole Championship Golf Course, Event Center, Social Hall, Food, Winter Dome
Iron Lakes Practice Center	4.5	Driving Range, Merchandise
Spring Hill Mini Golf	1.9	Minature Golf Course, Concessions
Lehigh Valley Sporting Clays	134.0	Outdoor Target Shooting Courses for various skill levels, around an abandonned Quarry, Merchandise, Rentals, and Ammunition
Orchard View Swim Club	13.5	Swim Club offering Limited Number of Memberships, Outdoor Swimming Pool, Lessons, Bathhouse, Basketball Court
Valley Youth House	37.2	Camp Experiences, Trails, Outdoor Pool offering Family seasonal passes, Soccer, Softball, Basketball
Kids Peace Campus and Recreation Area	249.8	Football Field, Clubhouse, Baseball, Sand Volleyball, Track, Basketball, Soccer, Playground, Administrative Offices
Church Spring Park	10.7	Playground, Shed, Picnicing
Sand Spring Park	7.7	Open Space within a Residential Development, Tennis and Basketball Courts
Schnecksville North Open Space	3.6	Open Space within a Residential Development, no facilities
Union Church Open Space	13.9	Former Picnic Grove, currently un-used
Fitness Central	1.6	Fitness Store, Cycling Equipment, Weekly Organized Cycling Events
Mantz Conservation Easement	182.2	Privately held land with Conservation Easement, first large land area in North Whitehall Township dedicated to Conservation

3. TOWNSHIP FACILITY CONDITIONS & REGULATORY COMPLIANCE

a. CONDITIONS, REQUIRED UPGRADES, MAJOR REPAIRS

Five of the Township's seven parks have been thoughtfully designed and planned. These include Independence, Laurys Firehouse, Kolapechka, Levans, and Municipal Park. All facilities in the Township are in very good condition, are well kept, updated and well maintained. The public works department provides an excellent level of care for the parks and trails.

The two parks that are in need of planning for upgrades and repairs are Neffs Valley and Johnson's Pond. Neffs Valley is a recent park acquisition and the Township is in the process of planning improvements. Johnson's Pond is an informal, passive wildlife park with an accessible crushed stone path to provide fishing access for the disabled. This park contains several acres that are un-developed and are still leased for farming.

Independence Park is the only Township park served by water and electricity. This limits the Township's ability to host events and festivals at other parks.

Utilities are needed at the Township's remaining parks to allow for event hosting and use for group activities. The Township uses temporary rental sanitary facilities at all of the parks to provide rest rooms. The Township is planning to add water and electric utility upgrades to Kolapechka Park, the Township's most centrally located and popular park. Utilities will allow the Township to rent the pavilion at the park, and to host athletic and community events.

The Township is considering contracting with mobile concession units for a trial period during peak attendance at scheduled events to add to user enjoyment and provide additional revenue.

b. SAFETY COMPLIANCE

The Township inspects the playgrounds and surfacing in the spring and throughout the season of heaviest use. Engineered hardwood surfacing is replaced, leveled and compacted to regulation depths. There are no exposed concrete footings or grass shoots popping through the play surfaces at the Township's parks. Public Works employees watch for any trees that may present a danger to the public and trim overhanging branches. An arborist is brought in to consult in situations where there is a question as to the public danger. Identification, parking, warning and rules signs are well placed and easy to read.



Example of a playground inspection



Universal Playground Design - Kolapechka

c. AMERICANS WITH DISABILITIES ACT

Most all Township Park paths are paved and meet or exceed the 5-foot ADA minimum for surface width. Where existing slopes allow, path slopes follow ADA criteria for 5% longitudinal and 2% cross slopes. The courts, athletic fields and parking lots at the Township's parks meet ADA criteria and are connected by paved accessible paths. The only exception is the Township's standard backed bench that does not provide armrests that are required to meet ADA compliance guidelines.

Playground surfaces at the parks are engineered hardwood mulch which is installed to be an ADA compliant surface. The Township's first inclusive play area was installed in 2019 at Kolapechka Park. The new play area features two new swing sets, one with adaptive seats, and one with saucer seats, all with a poured-in-place rubber safety surface. Two local girl scouts raised awareness of the need and raised the funds needed to implement the project.

At Johnson's Pond the crushed stone trail designed for ADA complaint fishing access has lawn grass creep into and over the path. Fishing from a mobility device is difficult without a boardwalk or stationary pier from which to fish. Parking is available at an informal stone lot.

The Township provides portable restroom facilities at their parks due to a lack of public sanitary lines. One ADA compliant portable unit, and one uni-sex portable unit are provided at each park. Portions of the Township are served by water from the Northampton Borough Municipal Authority (NBMA) and Lehigh County Authority (LCA). The majority of the Township is served by well water.

d. UNIVERSAL/INCLUSIVE DESIGN STANDARDS

The Township is examining universal design for future park facility development. Improvements would include signs with braille, seating areas designed with the different needs of the hearing and visually impaired in mind. Selecting facility colors that can provide visual clues for the hearing impaired, and providing sound-rich areas can elevate the park experience for the visually impaired.

The committee offered the suggestion to provide small shelters at athletic facilities outfitted with small accessible tables to provide shady observation areas for the disabled.



Braille Wayfinding Sign in a park.



Universal bench pad with ADA compliant benches.

e. PROVIDING SAFE COMMUNITY CONNECTIONS

Current conditions on the Township's rural roads and highways limit their use for safe alternative transportation. Expanding highways make planning and providing off-road community connections challenging. On-road alternative transportation can be dangerous, without proper attention to available safety measures, such as flashing beacons, crosswalks with safety islands, or designated bicycle lanes. Well planned and engineered traffic calming measures and additional signalization help to provide safe crossings.

- WHAT TO CONNECT
  - i. Connect Recreation and Community Facilities to each other.
  - ii. Connect villages and neighborhoods to existing parks, trails and community facilities.
  - iii. Connect villages and neighborhoods to commercial centers and work locations.

- CONNECT USING EXISTING ROADWAY SYSTEM

  Work with traffic planners, engineers and PennDOT to identify how to safely connect parks, community services, villages, and neighborhoods. The Township is planning for future connections as development pressures are mounting, and actions can be taken to ensure a safe pedestrian and bicycle network for the future.
  - i. Restore sidewalk systems in villages, providing ADA ramps, crosswalks, and pedestrian signalization
  - ii. Select roads with adequate shoulder width to provide safe pedestrian and bicycle lanes underneath highway bridge supports; 3-4' is required for a one-way bicycle lane, 6' minimum width for a sidewalk.
  - iii. Examine potential to work with land owners to allow for off-road pedestrian/ bike paths that follow existing roads
  - iv. Use portable barriers, delineators, paint and other low-cost temporary measures to create pedestrian pathways and measure their success.

- CONNECT USING EXISTING HYDROLOGY SYSTEM

  Streams and creeks are often used to protect riparian buffers while providing recreation benefits. In North Whitehall Township, the D&L follows the Lehigh and the Jordan Creek Greenway Trail will follow the Jordan Creek. The Coplay Creek in the Township may provide a potential greenway route for an off road trail where riparian buffer slopes are not too severe.
  - i. Examine existing creek routes, slopes, and availability of riparian buffer land.
  - ii. Coplay and Spring Creeks are potential greenway trails.
  - iii. Connect adjacent neighborhoods to greenway trails.
  - iv. Work with land owners to provide riparian buffer protections and potential trail corridor easements.

- CONNECT USING EXISTING EASEMENTS / OVERHEAD UTILITY EASEMENTS.

  A major electrical overhead easement passes through the Township from southwest to northeast, crossing the Lehigh River to a large power station. The land under the lines cannot be used for building or planting anything above a 10' height. The utility companies may be open to leasing these lands for trail use with the cooperation of the land owners who have opened this land to the power company.

- CONNECT THROUGH NEW DEVELOPMENT

  New residential developments provide an avenue for the Township to negotiate off road connections and sidewalk systems that promote walkability and connectivity. New developments can play an important role in providing pieces of a trail network. The Township should amend its zoning and subdivision and land development ordinances to require developers to include sidewalks, bike lanes and trail connections as part of their development plans. The Township should require full ROW dedication consistent with existing regulations.

- CONNECT USING EXISTING DEVELOPMENT

  The dense village settings of Schnecksville, Orefield, Ormrod and Neffs were planned with inconsistent concrete curbing and sidewalks. Development of multi-resident units and commercial transitioning in the villages has resulted in interruptions to the existing pedestrian walkway systems. Walkways have not been maintained or have been removed. Sidewalks are in poor condition in many villages and do not meet accessibility standards. The existing sidewalk network that remains provides a starting point for connecting village centers to parks, trails and other Township community resources. These are more densely populated areas in the Township and are found on state highways which are highly visible to the public and dangerous for residents who might wish to walk or bike to a community resource.

  In some developed neighborhoods, streets may be wide enough to accommodate bicycle and pedestrian lanes, which can be used to connect to trails or easements. Existing lot or land owners may be willing to provide easements to allow connections.



Ormrod Village street improvements would connect people to an existing park and improve pedestrian safety.





Opportunities to increase community walkability and safety - Orefield and Neffs

4. PARK AND RECREATION FACILITY ANALYSIS

a. NRPA's PARK SERVICE AREAS

The National Recreation and Parks Association (NRPA) has developed standards for park classification and areas served by each park classification.

Parks that are smaller in size than 10 acres are classified as Neighborhood Parks. These parks are limited in what they can provide and have a service area of 1/2-mile radius. Parks larger than 10-acres in size are classified as Community Parks. They often provide multiple types of facilities, both active and passive, and have a service area of a 1-mile radius. Parks larger than 50-acres are considered to be Regional parks. Parks in the Township are generally larger than 10-acres and many are larger than 20 acres.

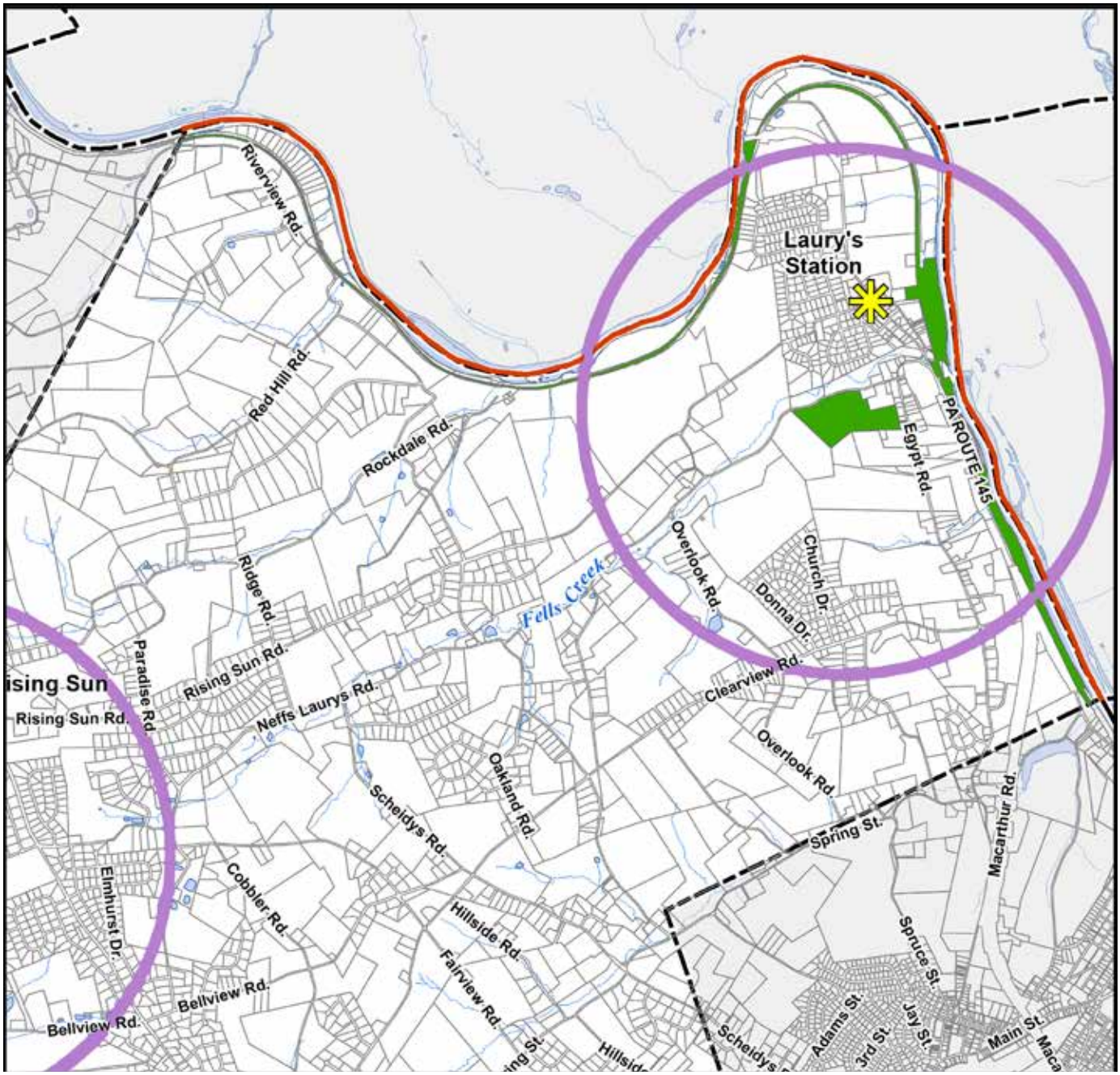
Service areas are defined as distances a person might be willing to walk or bike to access a park. NPRA began a program to encourage municipalities to provide recreation within a 10-minute walk from all residents within their jurisdiction. The state has adopted the 10-minute walk initiative. Service area radii mapping helps communities to define areas where park land and facilities are insufficient.

The Trust for Public Land with DCNR and WeConservePA has mapped areas of greatest need for park access. Their data concludes that only 41% of the residents of North Whitehall Township are within a 10-minute walk to a local park.

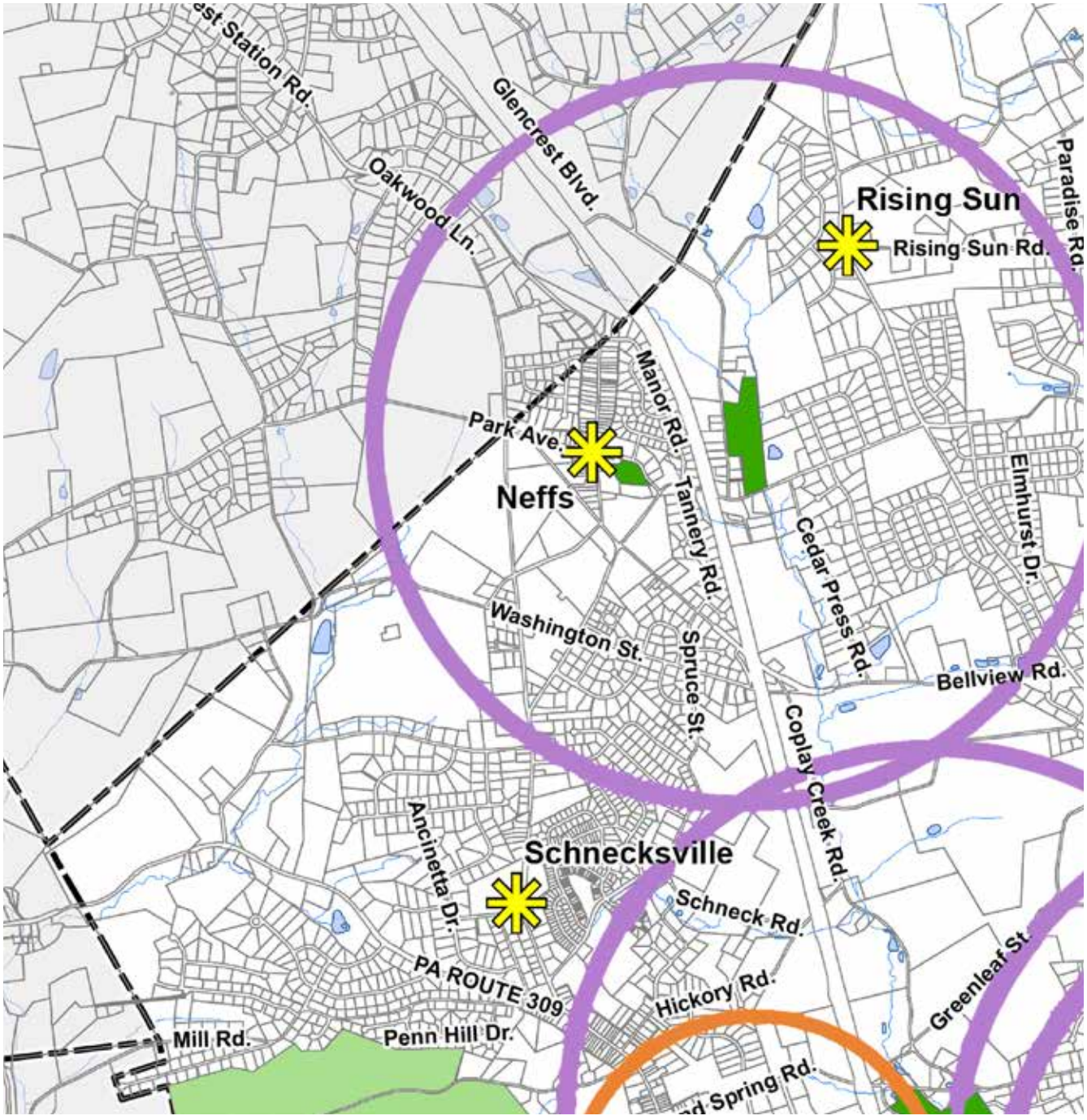


Most residents in the Township drive to the parks because safe on or off-road connections are not available. The maps on the following pages examine the different sections of the Township and identify where parks and connections to parks may be needed.

This map highlights the North-East section of the Township. The village of Laurys Station is closest to Laurys Firehouse Park, the D&L Trail and Lehigh River boat launch, and some of the best fishing on the Lehigh River in the Township. These recreation venues are cut off from residents due to S.R. 145 which has limited shoulders, poor sight distances and no traffic signals, and the Fells Creek which is cut into the landscape featuring a deep ravine. Road improvements would be required to provide a safe S.R. 145 crossing. This map highlights a large service area gap in the north central part of the Township. Although it is rural now new housing developments are planned.

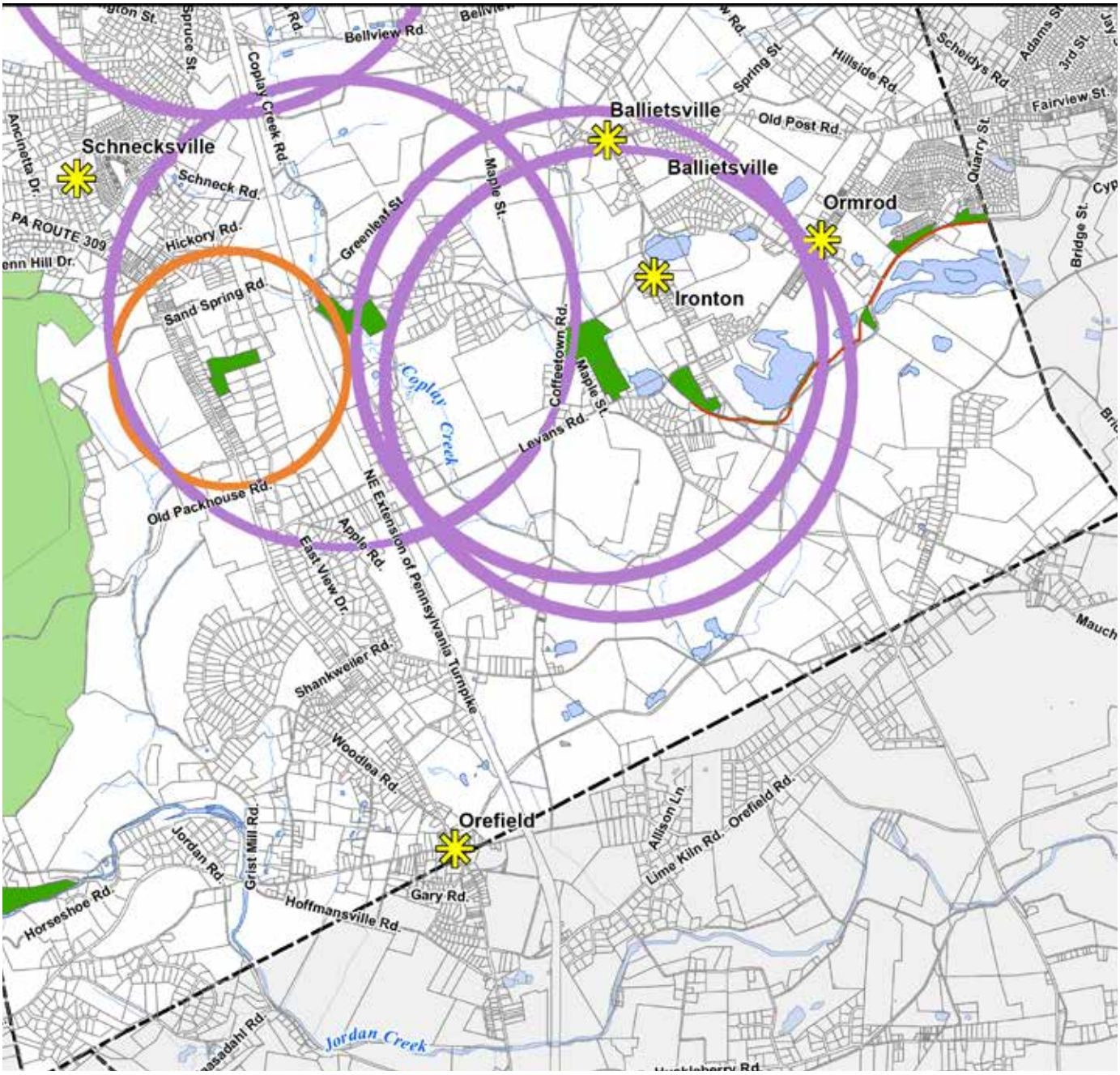


This map shows central to west portion of the Township, including the PA Turnpike and Route 309 corridors. The Township parks serving these residents are Neffs Valley and Neffs Ballfield. The Village of Schnecksville, the largest in the Township, is closest to Trexler Nature Preserve but lacks connections to county and local park facilities. The village of Neffs will benefit from Neffs Valley park improvements as they are completed if a safe connection under the Turnpike can be established. The existing streets in these villages are not pedestrian or bicycle friendly.



This map of the southern portion of the Township features Kolapechka, Levans, Municipal parks and the Ironton Trail offering substantial recreation opportunities for the villages of Ironton, Ballietsville and Ormrod. These recreation opportunities are accessible by vehicle only as the roads do not provide safe routes for pedestrians or cyclists.

The village of Orefield, the second largest village in the Township, is adjacent to both Trexler Nature Preserve and the Jordan Creek Greenway; however, the roadways leading to these facilities were not designed for pedestrians or cyclists to travel safely. Residents of Orefield do not have access to a local park or recreation facility. Access could be provided to the Jordan Creek Greenway on local roads, but local park facilities, especially youth athletic fields are needed in this part of the Township.



b. NRPA PARK AND FACILITY METRICS

The National Recreation and Parks Association (NRPA) collects data from recreation agencies across the country and makes the data available to all recreation departments. Recreation agencies can compare their park land and program offerings across multiple metrics including population, parks maintained, budgets, population densities, acres of parkland, employees and area of the country.

The following seven metrics were used to analyze North Whitehall Township's recreation facility, park land and programming offerings; population under 20,000, less than 10 parks maintained, a recreation budget of less than .5 million, a population density between 500-1500 persons per square mile, less than 10 full-time staff, Township municipal structure, and Mid-Atlantic location. The following tables illustrate how the Township compares to recreation agencies with similar metrics.

i. RESIDENTS PER PARK.

Township Pop: 15,655	NRPA U.S. Average	Township
7 PARKS	2,277 residents/park	2,236 residents/park

ii. ACRES OF PARKLAND PER 1000 RESIDENTS

Township Parkland	NRPA US Average	Township
140.3 acres	8.7 acres/1000 residents	9.0 acres/1000 residents

NRPA metrics show that the Township has fewer residents per park, but also fewer acres of park land per 1000 residents. The Lehigh Valley Planning Commission has set a goal for Lehigh Valley municipalities of 6 acres per 1000 residents, which the Township currently exceeds. The Township will need to decide which agency metrics to follow.

iii. Facility Prevalence:

The following table below offers average population numbers generated by NRPA that municipalities similar to the Township require to support these typical recreation facilities.

The Township is on pace with baseball fields and tot-lots and ahead of the average with the new dog park. The Township is behind the average for football, field hockey and lacrosse fields. Some of the Township's existing fields serve multiple sports and quasi-public organizations offer additional baseball and soccer fields that were not included due to ownership, so the need for additional fields is not an issue for the Township at this time. The largest facilities gap is in the area of sport courts, such as tennis and pickle-ball, and playgrounds are needed in the service gap areas. The only other courts in the Township are located at the community college, and they are not open to the public. The Township 's population is less than the average size for communities that do provide outdoor ice rink, swimming and skate park facilities. The Township does allow ice skating on Johnson's Pond and recognizes a lack of youth facilities.

Facility	# Owned by Twp	Avg Population per Facility across the 7 Metrics	Township	Needed to Meet Averages
90' Baseball	3	1 per 12,431	1 / 3,914	0
60' Baseball	3	1 per 4,939	1 / 5,218	0
Softball	2	1 per 8,559	1 / 15,655	0
Basketball	5	1 per 5,487	1 / 3,131	0
Field Hockey	0	1 per 6,217	0	2.5
Football	0	1 per 13,238	0	1
Lacrosse	1	1 per 8,629	1 / 15,655	1
Full Size Soccer	1	1 per 8,080	1 / 15,655	1
Youth Soccer	1	1 per 4,913	1 / 15,655	2
Cricket	0	1 per 81,954	0	0
Synthetic Turf Field	0	1 per 19,557	0	0
Playgrounds	3	1 per 3,251	1 / 5,218	2
Totlots	3	1 per 8,192	1 / 5,218	0
Tennis Courts	0	1 per 4,508	0	3.5
Skate Park	0	1 per 22,742	0	0
Outdoor Ice Rink	0	1 per 41,236	0	0
Outdoor Swimming	0	1 per 24,711	0	0
Dog Park	1	1 per 25,908	1 / 15,655	0
Community Garden	0	1 per 15,507	0	1

The public survey for the Township Comprehensive Plan, distributed prior to the public survey for this report, asked respondents to name recreation facilities the Township should provide. The public response was a community center and indoor gym. Townships close to North Whitehall have indoor community centers and local businesses that have assisted with the development of these expensive endeavors.

Alternatives are to partner with a neighboring municipality to share use of facilities. The high school offers a winter month gym and swim program for residents on weekends, and the community college offers resources for Township resident students. There are no private indoor gym facilities in the Township.

The following table indicates the Township is close to a population total that would be able to support an indoor community facility.

iv. COMMUNITY CENTER

Township Existing	NRPA Average Pop/Facility	Township Population
1 Municipal Bldg.	1/13,715	1/15,655

v. RECREATION

Township Existing	NRPA Average Pop/Facility	Township Population
No Facilities	1/15,012	0/16,346

5. PUBLIC INPUT CONCERNING RECREATION, FACILITIES & CONDITIONS

a. PUBLIC SURVEY 1

Questions addressing park lands and existing facilities received the following responses: (A copy of the two public surveys can be found in the Appendix).

- Respondents rated satisfaction levels for existing facilities at Township parks. Top-two box results ranked Kolapechka at 86%, Independence at 81%, Laury's Firehouse Park at 67%, Levans at 64% and Municipal park at 53%. The lowest levels of satisfaction were Johnson's Pond at 38% and Neffs Valley at 32%. Johnson's Wildlife Park has an informal development when compared with the Township's other parks. Neffs Valley Park has not been developed.
- Facilities most visited by respondents were Ironton Trail 75%, D&L Trail 38%, paved park paths 51%, Trexler trails 45%, playgrounds 39%, accessible playground 31%, and 19% use the dog park. The least favored recreational activity was sledding and cross country skiing selected by 4-5% of respondents. 87% of respondents were park visitors. 85% of respondents believe it should be a priority for the Township to provide recreation land and facilities for residents.
- Organized athletics were used by 20% of respondents, who most use baseball, basketball, softball, T-ball, lacrosse, with football team participation least popular.
- Barriers that prevent park use were listed as restrooms, unfamiliarity with park locations and lack of shade, but 43% of respondents listed they were not impacted by barriers. If respondents had $1000 to spend on recreation they would spend it in the following categories: $550 for conservation land, $450 for connections and $420 to develop new recreation facilities.
- Half of the respondents who use a private recreation facility are members of Iron Lakes Country Club, 30% reported membership in one of the 3 rod and gun clubs, and 28% visit Lehigh Valley Sporting Clays. 23% belong to a gym or other fitness club outside of the Township, and 20% are members of Orchard View Swim Club.
- 89% of respondents supported conservation on existing park lands not currently being used for recreation facilities. Initiatives most strongly supported were to provide habitat for pollinators, birds, bats and add wildlife corridors.
- Respondents support using recreation lands for passive and conservation uses vs. additional active and organized athletic facilities.
- Facilities most desired for development by survey respondents were selected as: outdoor pool 36%, pickle-ball 33% and tennis courts 14%, nature education 30%, winter activities, outdoor ice skating and community gardens all 28%, and community center 27%. The lowest ranking was 3% for Gaga-ball pit, but as survey respondents averaged 60-70 years in age they may be unfamiliar with this facility.
- Write in comments supported land preservation, safe connections, conservation initiatives, shade trees, activities for teens and young adults, more programs, a community center, an outdoor pool and the re-development of Neffs Valley Park.



b. PUBLIC MEETING 1

Public meeting attendees voted overwhelmingly to use recreation lands for passive and conservation purposes instead of adding athletic fields. When asked what percentage of land from 0% to 30% the Township should preserve, the public unanimously chose 30%.

Facilities most selected for future development at Township parks were: multi-use trails - 9 votes, pickle-ball and passive recreation - 6 votes each, environmental facilities - 5 votes, community center - 4 votes, sledding and skate park - 3 votes each, activity lawn, boccie, community gardens, pump park, fishing pier, nature play, outdoor fitness, gathering space, pool, mini soccer pitches, indoor sport courts - each with 2 votes, and splash pad, outdoor ice/roller rink - 1 vote each.

The meeting was not well attended, so the committee decided an additional public survey should be distributed to get a second response regarding facilities most desired.



Natural Area with Nesting Box



Multi-Use Trails

c. PUBLIC SURVEY 2

This survey presented 12 facilities that ranked at the top in the first public survey and asked respondents to rank the 12 from most to least preferred. The facilities were grouped into two groups - the first was faculties that require fewer resources to design and install, and the second group was facilities that are currently outside of the Township's resources to provide.



Signalized Pedestrian Crossing



Destination Accessible Playground

The top 12 attainable facilities ranked as follows: safe community connections, natural areas with educational components, destination playground, community gathering space, splash pad/cooling stations, outdoor racket courts, outdoor fitness areas, lawn/picnic games, winter activities, youth facilities-skate park/BMX park and community gardens.

d. KEY PERSONS

Key persons from athletic associations responded that soccer fields and indoor basketball courts are needed for youth sports. There is a need for night lighting to extend playing time. A community center operated independently from the school district is strongly desired, as is a community pool. A community center would allow more indoor sports to be practiced during winter months. The future of the Iron Lakes winter sports dome is uncertain, and although the facility was expensive, it provided options for winter months.

A local business owner of fitness equipment sales recommended a pump park in the 3-acre area adjacent to Independence Park. They would strongly support a multi-municipal community and aquatic center.

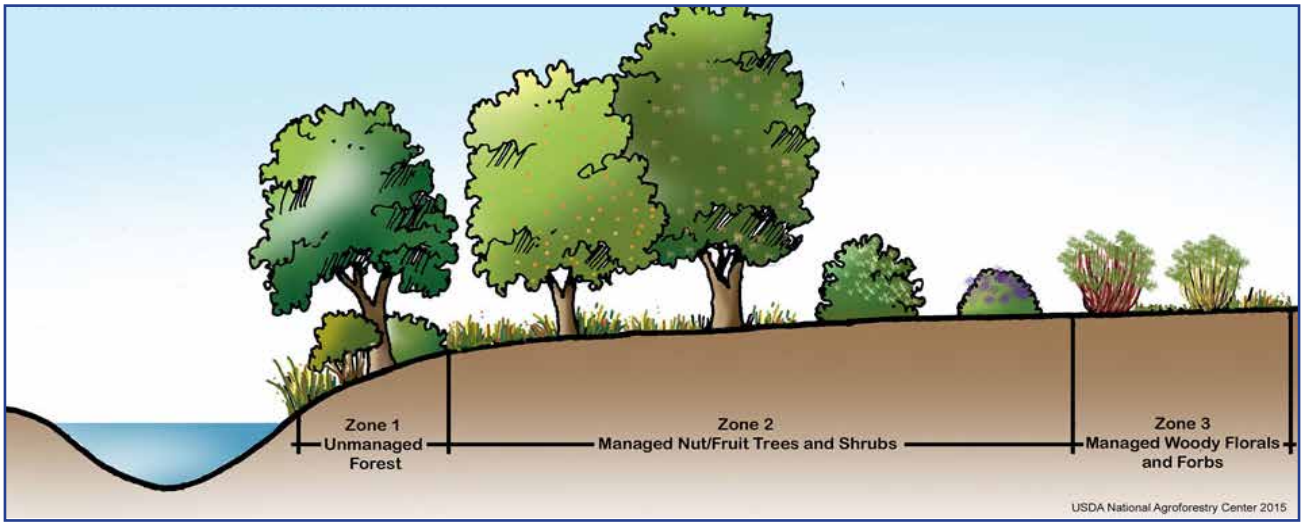
The municipal leaders interviewed said they would support what the public desires as long as the improvements are sustainable and within the Township's current financial and staffing capacity to install and to maintain.

e. PUBLIC MEETING 2

The second public meeting was a presentation format and featured the plan concepts for all seven of the Township's parks.

The public responded well to all of the ideas and concepts presented. The improvements shown in the concepts reflected the facilities most desired by the public and attainable for the Township. The concepts are shown and discussed in Section H of this report.

A discussion was held that reflected the need for public involvement through joining the Recreation Board and ways to make the Recreation Board more effective through partnerships and fund raising. The importance of working towards shared goals with the Township's recreation personnel was also discussed and the public expressed interest.



HEALTHY WOODED RIPARIAN BUFFER WITH BUFFER ZONES

6. RIPARIAN FOREST BUFFERS

The majority of the Township's water is supplied by wells. The importance of protecting streams, wetlands and aquifers can not be overstated. Cleaning polluted water is complex and expensive, while natural systems do the job very well as designed.

a. RIPARIAN BUFFER MAP

A healthy riparian buffer consists of no less than 2 zones, is 50-100' deep, and provides a vegetated floodplain area where water can rise and fall protected from erosion by trees and grasses, with dense trees that shade the water and keep it cool. A healthy forest riparian buffer supports native wildlife, amphibian and fish populations. Health streams reduce flood impacts and enhance property values, trees sequester carbon and improve air quality, the vegetation filters sediment and pollutants from storm water runoff.

Two primary creeks that run through the Township are the Coplay and Jordan Creeks. Coplay Creek runs nearly the entire length of the Township. Both the creek and its tributaries lack riparian buffer on one or both sides for the majority of it's route through the Township. The Jordan Creek runs through the Trexler Nature Preserve and the south western corner of the Township. The creek lacks riparian buffer on one or both sides as it passes through the Township.

Kolapechka, Levans and Municipal Parks contain Coplay Creek tributaries, while Neffs Valley and Johnson's Pond contain the main stem of the Coplay Creek.

A map of North Whitehall Township's riparian buffers indicating their location and condition follows this page. The map indicates where a riparian forest buffer is lacking on both sides of a creek, lacking on just one side of a creek, and where there is an adequate forest buffer.



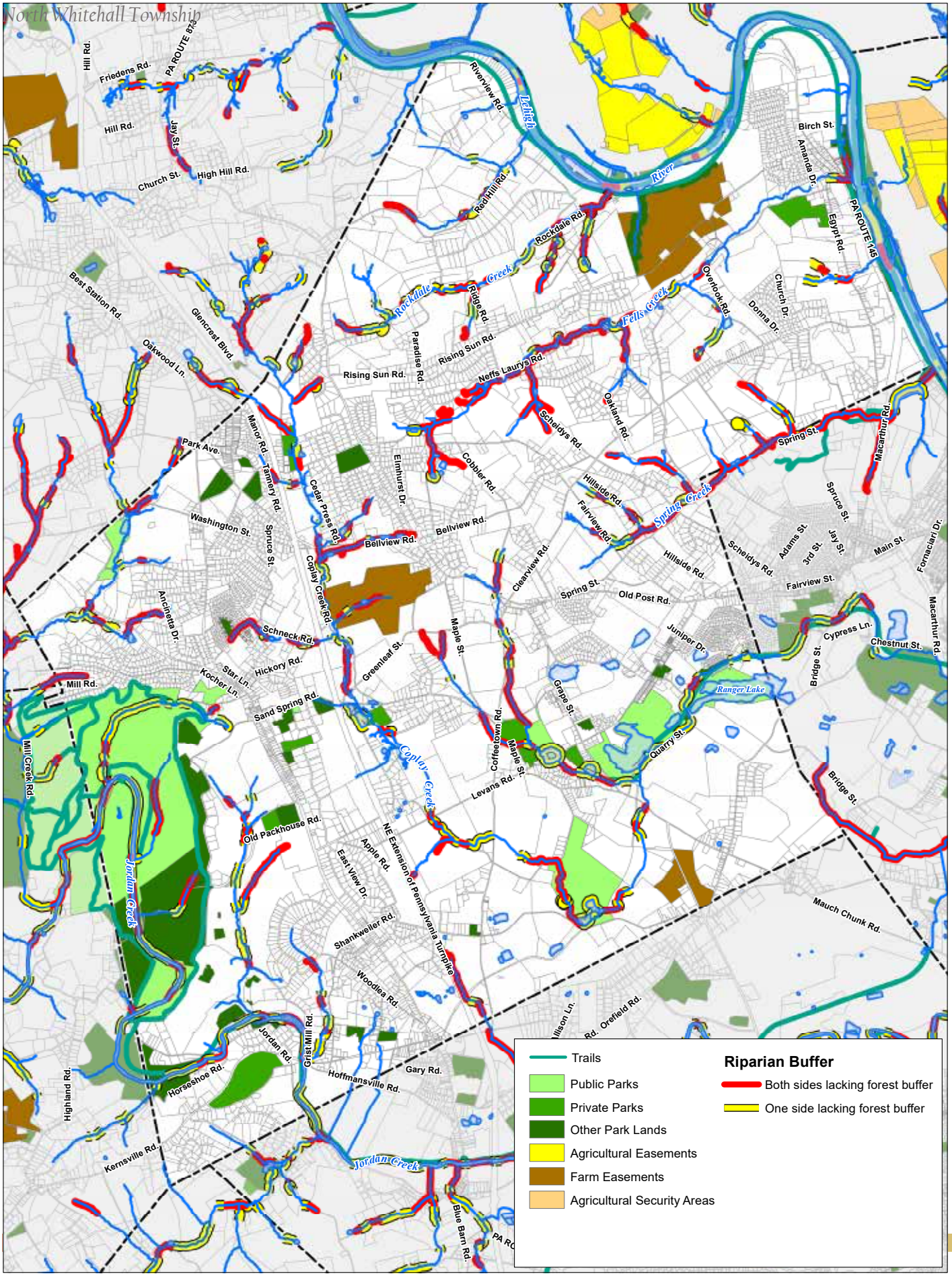
Coplay Creek - Two sides missing buffer



Coplay Creek - One side missing buffer



Jordan Creek - Both sides healthy buffer


North Whitehall Township
Trails
Public Parks
Private Parks
Other Park Lands
Agricultural Easements
Farm Easements
Agricultural Security Areas
Riparian Buffer
Both sides lacking forest buffer
One side lacking forest buffer
Lehigh River
Rockdale Creek
Fells Creek
Spring Creek
Coplay Creek
Jordan Creek
Ranger Lake
Hill Rd.
Friedens Rd.
PA ROUTE 873
Jay St.
Church St.
High Hill Rd.
Riverview Rd.
Red Hill Rd.
Birch St.
Amanda Dr.
Egypt Rd.
PA ROUTE 145
Rockdale Rd.
Best Station Rd.
Glencrest Blvd.
Oakwood Ln.
Ridge Rd.
Paradise Rd.
Rising Sun Rd.
Neffs Laurys Rd.
Overlook Rd.
Church Dr.
Donna Dr.
Park Ave.
Manor Rd.
Tannery Rd.
Cedar Press Rd.
Elmhurst Dr.
Cobbler Rd.
Scheidys Rd.
Oakland Rd.
Spring St.
Macarthur Rd.
Washington St.
Spruce St.
Bellview Rd.
Hillside Rd.
Fairview Rd.
Clearview Rd.
Adams St.
3rd St.
Jay St.
Main St.
Fornaciari Dr.
Old Post Rd.
Fairview St.
Ancineta Dr.
Schneck Rd.
Coplay Creek Rd.
Maple St.
Greenleaf St.
Juniper Dr.
Cypress Ln.
Chestnut St.
Bridge St.
Grape St.
Quarry St.
Mill Rd.
Star Ln.
Kocher Ln.
Hickory Rd.
Sand Spring Rd.
Mill Creek Rd.
Coffeetown Rd.
Levans Rd.
Old Packhouse Rd.
Apple Rd.
East View Dr.
NE Extension of Pennsylvania Turnpike
Shankweiler Rd.
Mauch Chunk Rd.
Woodlea Rd.
Grist Mill Rd.
Jordan Rd.
Horseshoe Rd.
Gary Rd.
Hoffmansville Rd.
Highland Rd.
Kernsville Rd.
Blue Barn Rd.
Orefield Rd.

b. TOWNSHIP RIPARIAN PROTECTIONS

Township zoning ordinance Section 504 established setbacks and buffers from surface waters.

504.A to protect the quality and purity of surface waters, preserve physical access to surface waters in case of future public or semi-public acquisition, minimize erosion and sedimentation, preserve the natural storm water drainage system of the area, conserve sensitive wildlife and aquatic habitats, preserve vegetation along waterways and provide for setbacks that can be used as required yard areas for a land use.

504.B.1. No off-street parking, loading or unloading area, or commercial or industrial storage or display area shall be located within 50 feet of the top of the bank of any other major surface water. Major surface waters in the Township that require a 50 foot buffer are identified in 504.B.2 as the Jordan, Fells, Spring, Copeechan, and Coplay Creeks.

504.E. Riparian Buffers shall be maintained along the shore of all natural watercourses. At least 35' wide from top of stream bank to uphill edge, although a width of 50 to 100 feet is strongly encouraged. Conservation of existing forested stream side areas shall occur within at least a 100' width.

c. STATE RIPARIAN PROTECTIONS

The Pennsylvania Clean Streams Law, Act 162 of 2014 applies to NPDES Individual Permit applicants who propose work within a special protection watershed or to any earth disturbance within 100 feet of a surface water. The act requires an offset of any reduction in the total square footage of the buffer zone that would have been utilized as a best management practice, with a replacement buffer elsewhere along special protection waters in the same drainage list and as close as is feasible to the area of disturbance at a ratio of one-to-one.

The state publication "Riparian Buffer Preservation" lists the following approaches that municipalities can implement to protect riparian buffers and local water quality.

- Purchase the land through fee simple acquisition.

  i. Fee simple land ownership provides land owners with mineral rights, water rights, development rights, etc. that may be separated from the others and transferred, with ownership retained by the land owner.

  ii. In some jurisdictions, "rights" may be sold to public or non-profit agencies through purchase of an agricultural conservation easement or a development rights program. Riparian or other environmentally sensitive lands may be 'traded' for other less environmentally sensitive lands.

  iii. A parcel containing a riparian corridor may be purchased by a municipality, sub-divided so the riparian corridor is retained by the municipality, and the remaining land re-sold.

- Create conservation easements along riparian corridors

  i. There are many considerations for both the land owner and the easement holder in this type of transaction.

ii. Pennsylvania has created Act 330 and Act 153 to support conservation easements. Act 153 gives authority to municipalities to purchase conservation easements to protect sensitive resources and permits the use of various taxing schemes to raise funds for open space and agricultural land acquisitions.

iii. Landowners are protected from liability if the easement is open to the public for a recreational use.

- Planning tools that incorporate riparian buffer preservation:

  i. The Pennsylvania Planning Code Act 247 specifies planning tools that may be used to regulate land use and the acceptable purposes of land use regulation.

  ii. The Code gives authority to municipalities to protect water and other environmentally sensitive resources through comprehensive planning and zoning ordinances and an Official Municipal Map.

  iii. An Official Municipal Map designates land that the municipality intends to purchase for public use. The municipality becomes legally obligated to purchase a property within 12 months of an expressed intent to develop the land. If the municipality fails to complete the land purchase, the designation becomes void.

- Establish Riparian Buffer Ordinances

  i. Create a riparian buffer overlay as part of the Township's planned revision to the Zoning Ordinance to protect riparian buffers.

  ii. A riparian corridor conservation overlay can establish the intent and extent of the district, defines protection zones, permitted uses, and remedies for non-conforming uses. Careful choices in language can prevent legal challenges.

  iii. Engagement of citizen groups can strengthen the protection of riparian buffers on private properties.

- Create development regulations that promote conservation of riparian buffers

  i. The Code, Article V, gives municipalities methods to protect riparian areas in new developments through regulation or incentives. A greenway corridor including a trail can benefit the development and the watercourse.

  ii. Developers may be encouraged to consider conservation development early in the planning process. These methods cluster housing on a property, leaving more land for open space vs. under individual ownership.

  iii. Transferable Development Rights (TDR) can be sold to developers, providing off-site compensation for reducing development density on an environmentally sensitive property for use on a less environmentally sensitive property.

  iv. Municipalities can award developers increased density if a development protects sensitive land and can also employ density penalties to encourage conservation. When density limits are established in zoning ordinances, a higher density might be allowed in a conservation development.

7. PROTECTING OPEN SPACES

The Township is working to improve open space preservation. The public has voiced nearly unanimously during the preparation of both the Township Comprehensive Plan and this Parks Recreation and Open Space Plan, that they do not support large developments like warehouses or big box stores. The public does support the preservation of farmlands and open spaces.

a. AGRICULTURAL PRESERVATION PROGRAM

In 2019, the votes of the Township approved an assessment of 0.1 mill of property tax to be used for Farmland and Open Space Preservation. This assessment was estimated to generate about $140,000.00 dollars annually.

A Farmland and Open Space Preservation Committee was formed by Township Resolution and By-Laws adopted. The Mission of this Committee is to aid the Board of Supervisors in preservation of both agricultural and open space lands.

The Committee has been working to encourage farm owners to have their land designated into the Agricultural Security Area. A property entered into ASA can apply to the County Agricultural Land Preservation Program. The Township assessment is also intended to provide assistance to the County program so that more properties can be preserved. A preserved property can not be developed for any purpose other than farming or timber harvesting.

Maps created by Keystone Consulting Engineers, showing the Township's Agricultural Security Easements and Conservation Easements are located on the following page.

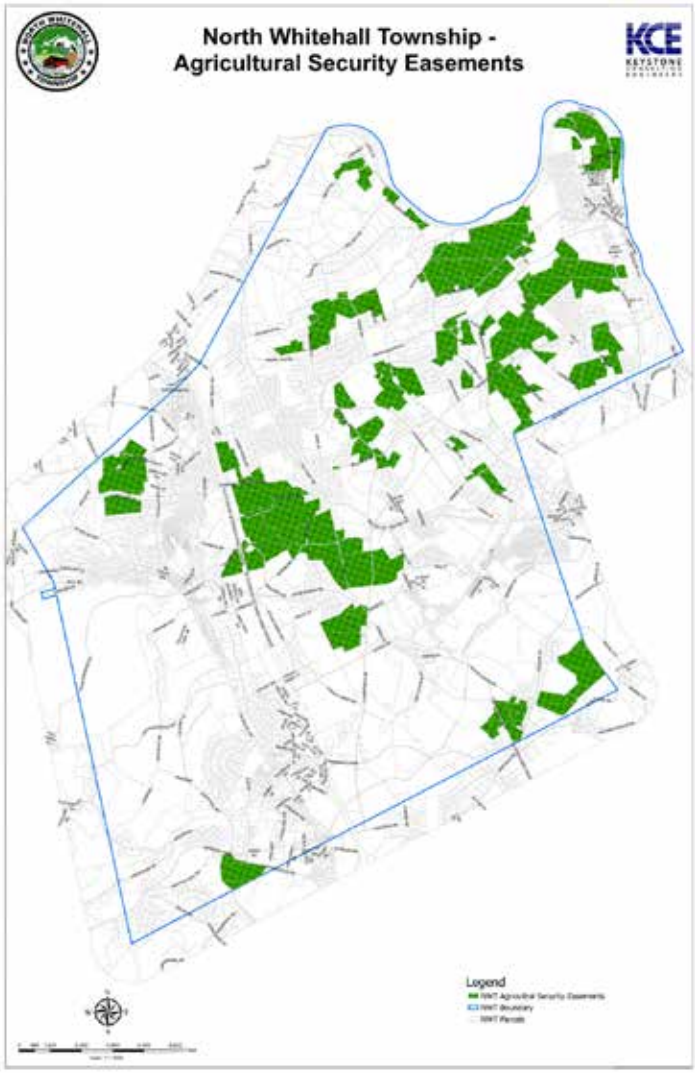
These maps were created in 2022 as the Township was beginning to work with land owners and Lehigh County to preserve additional farmland in the Township.

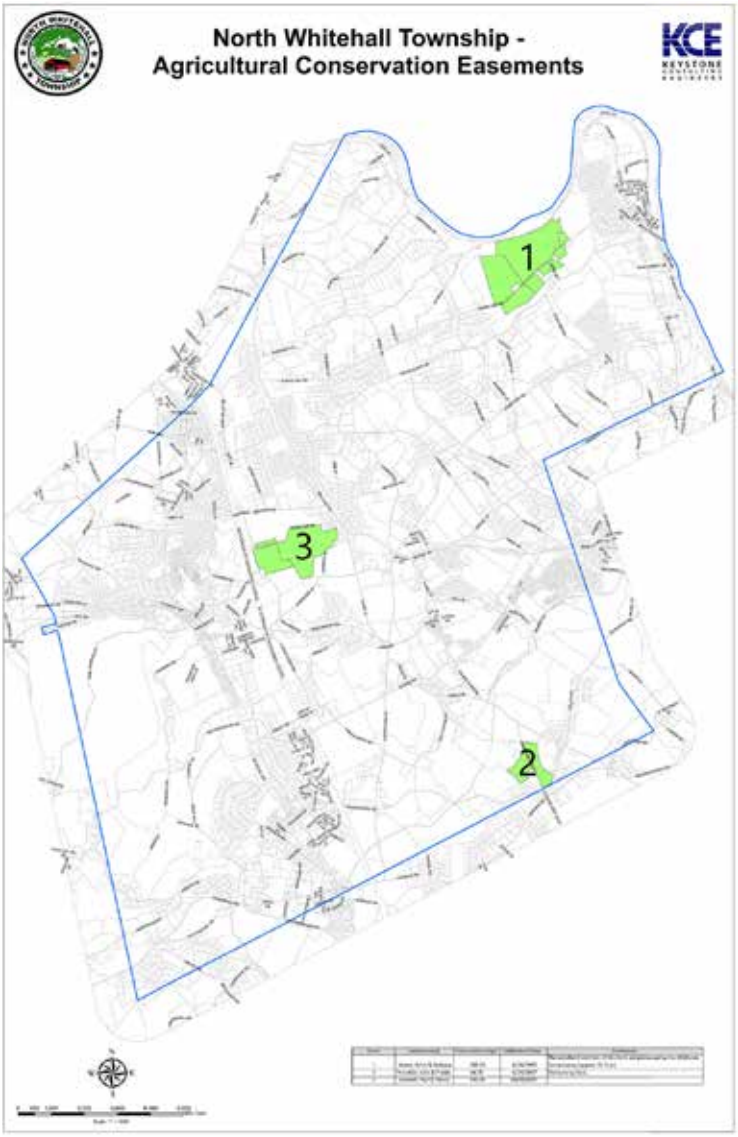
b. OFFICIAL MAP

The Township is proposing to create an official map. This would allow them to target properties that should be preserved from residential, industrial or commercial development. The Township would target known state designated critical habitats, wooded or wetland areas best retained for conservation and properties that could serve as parks to meet the needs of residents living the Service Area gaps.

c. RIGHT OF FIRST REFUSAL

The Township has proposed that once target properties such as conservation, critical habitat or recreation lands are identified on a map, they should seek to enter into a Right of First Refusal Agreement with the current owners, which would provide the Township with knowledge of potential sales of properties of interest so opportunities to purchase are not lost and can be taken advantage of.


North Whitehall Township -
Agricultural Security Easements
KCE
KEYSTONE
Legend


North Whitehall Township -
Agricultural Conservation Easements
KCE
KEYSTONE
1
2
3

E. FACILITIES MAINTENANCE

1. PARK MAINTENANCE DEPARTMENT

Park maintenance currently falls under the direction of the Township's Public Works Department. The department is divided into three sub-departments, Roads, Parks and Fleet/Facilities which are responsible for the maintenance and installation of infrastructure and facilities in the Township. The staff is made up of 11 permanent full-time employees, who receive union wages. Two to four students are hired during the spring and summer to help with grass cutting and grounds maintenance. No volunteers assist with park maintenance.

a. MAINTENANCE TASKS AND SCHEDULING

Mondays are designated machine maintenance days. There is a full-time mechanic on staff with inspections performed off-site. The equipment owned by the department is in good condition and is of good quality.

The roads department installs paving at the parks when funding is available. In 2020 development money allowed the Township to pave the Ironton Trail and trailhead.

Lawns are maintained without chemicals or fertilizers, unless an infestation occurs. Mowing all the parks and public properties takes three days and three to four men, if weather permits. The Ironton Trail is mowed once per week from the trailhead to the Township line.

The Township parks staff installed the soils and plants in the rain garden outside of the municipal building entrance. The design and specifications were provided by a local landscape contractor.

The Township parks department maintains 10 athletic fields. The Township owns seven of those fields, and maintains three other fields which they do not own. The parks department will drag and maintain the fields at the Township parks on a weekly basis at best. The staff attempts to honor special requests for sports field maintenance. All Township fields are prepped at the start of the playing season with in-field mix. One staff person will work a full day to drag all 10 Township fields. Two staff are required for a full week to perform the spring field topsoil and laser leveling at all 10 fields. The athletic organizations are responsible for striping their fields, dragging them after each game, and for regular field mowing. Most organizations hire outside contractors to mow their fields. The Township maintenance staff attempts to rotate through the parks on a weekly basis for field maintenance.

Special events are set up and cleaned up by Public Works. A weekend event typically requires four staff members to be present for the full day. Weekend staff receives overtime pay rates. One weekend event example the North Whitehall Public Works Department assists with is the Parkland High School e-cycling event.

b. RECORD KEEPING

Maintenance schedules and records are kept on paper. A weekly schedule is created and then handed out to team leaders to work from. There is no formal maintenance plan.

2. EQUIPMENT LIST

The department has no trouble securing Township approval for purchases of necessary equipment. Team leaders make recommendation for purchases and the Public Works Director makes the final decision and requests the recommended equipment purchase.

In 2021 a bobcat-mounted snowblower was purchased to clear paved trails in the winter, work which was previously done with a backhoe. The department removes snow from the Ironton Rail Trail and paved park pathways. Roads remain the first priority for clearing, then parking lots, trails and lastly park paths. The new snowblower will allow trails and paths to be cleared while roads are being cleared.

2001 - Kubota Tractor with bucket and hoe

2007 Purchases

John Deere i200 field groomer, Land Pride Slit Seeder, Drag Box, Aerator

2010 - John Deere zero turn mower - 60" deck

2017 Purchases

John Deere zero turn mower - 60" deck, Exmark Lazer Zero Turn Mower - 72" Deck

Toro 41000 Wide Area Mower Lift Deck

2019 Purchases

John Deere 1600 Wide Area Mower Lift Deck

2020 Purchases

Bobcat UTV 5600

2021 Purchases

Bobcat Zero Turn Mower - 72" Deck



2020 Purchase: Bobcat UTV 5600



2021 Purchase: Bobcat Zero Turn Mower

3. RISK MANAGEMENT

Park staff perform visual inspections of all facilities in the early spring of each year looking for code compliance and safety issues. This includes items such as shade tree conditions, burnt out light fixtures, damaged signs, vandalism and walking surface irregularities. Inspections are performed periodically in the summer and into the fall months.

4. PUBLIC PERCEPTION

The level of satisfaction with park maintenance was asked of public survey respondents. The top two box results revealed that Independence and Kolapechka Parks achieved a 100% satisfaction rating, and the Ironton Rail Trail a 96% satisfaction rating by the public. Parks with lower numbers of visitors seem to receive lower scores - 48% for Laury's Firehouse Park, 66% for Levans Park, 36% for Municipal Park. The lesser developed Neffs Valley and Johnson's Pond are minimally developed and received the lowest satisfaction levels.

The Key Person interviewees thought the parks should receive better care, particularly the athletic fields. Other perceived needs are utilities, such as night lighting and permanent restroom buildings, which are necessary to run programs. The porta-johns are viewed as unsightly and it was reported that they are sometimes full before their scheduled cleaning.

5. MAINTENANCE PLANNING

The Township Public Works Department does not have a formal maintenance plan. As the Recreation Department grows, a formalized maintenance plan should to be created in order to maintain the high level of maintenance Township residents have come to expect from the Public Works Department.

- The plan will include the Recreation Department mission, with goals and objectives specific to the maintenance department.
- The plan will include inventory lists of land, facilities, buildings, mechanical equipment and maintenance equipment.
- The plan will address scheduling of tasks: routine, preventative, contracted services and work that requires specialized skills.
- The roles, responsibilities, skill levels and anticipated staff training needs shall be noted and referenced for hiring, training and regularly scheduled employee evaluations.
- Training time and certifications should be addressed in the plan to ensure staff is equipped to handle maintenance of specialty landscapes and future facilities planned for future development. Warranties and manufacturers' recommended maintenance procedures should be kept on file and referenced when creating schedules. Records of all maintenance tasks performed with employee names and the facility should be maintained.
- A risk management plan should apply to special event maintenance and to daily hazards found in parks that may include structurally damaged and dangerous trees, wildlife sightings, vandalism, trail wash-outs, flooding and mechanical features that break down.
- Protocols for construction projects such as tree planting details, signs and locations, benches, path materials and widths, and sports field amenities should be developed and followed.
- Maintenance quality should be evaluated annually to ensure there is adequate staff and equipment to maintain the current level of quality.
- Costs to provide the various levels and types of maintenance should be tracked to evaluate for potential cost saving measures or for requesting budget increases. Costs to provide assistance with special events should also be evaluated.

F. RECREATION DEPARTMENT

1. MISSION STATEMENT

A recreation agency is guided by a well thought out mission statement, goals and objectives. The mission statement crafted for the department as a result of this study is

TO PROVIDE A COMPREHENSIVE SYSTEM OF QUALITY PARKS, RECREATION FACILITIES, OPEN SPACES AND TRAILS WHILE OFFERING DIVERSE PROGRAMS TO PROMOTE HEALTHY LIFE STYLES, ENCOURAGE COMMUNITY INVOLVEMENT, AND FOSTER ENVIRONMENTAL STEWARDSHIP

This statement is a reflection of the comprehensive planning completed during the course of this study, and will guide the recreation department through the next 10 years. The goals of Township are reflected in this statement.



2. ADMINISTRATION

The current administrative structure in North Whitehall Township is directed by three elected Township Supervisors, with a municipal manager and full-time planning assistant who report to the Supervisors. Part-time staff assist the various Township departments: planning, zoning and finance, and as needed. Township staff participate in Lehigh County's work to plan and implement the Jordan Creek Greenway and Trexler Nature Preserve projects.

The planning assistant was hired in 2021 to develop a recreation department. The Township assistant serves as Township liaison to the Ironton Rail Trail oversight committee and the Township Recreation Board by attending meetings. The assistant is responsible for improving the Township's on-line presence, event marketing and outreach by subscribing to multiple media outlets and providing printed resources. The assistant has also been successful in applying for grant funding to improve park signs as well as other efforts.

The Township Recreation Board was approved by an amendment. The board consists of six volunteer members who meet bi-monthly. There are no formal guidelines the recreation board follows and some members have dropped out because they feel they are not making a difference. The board awards annual grants to the athletic associations to help meet their needs, with the funds coming from the Township. The current board is seeking to be more effective in helping the Township to meet goals and make improvements to the Township's park lands and facilities. Board vacancies are filled by advertising on the Township's website. Applicants submit an application.

This report will provide a basic outline of typical recreation department tasks to provide guidelines that Township staff may reference in the future.

a. PLANNING helps communities prepare for future growth, opportunities, and recreation related purchases. The Township has several planning efforts in place, including updates to the Township Comprehensive Plan and the Comprehensive Parks Recreation and Open Space Plan. The Township is planning to write an Open Space Action Plan to assist the Farmland Preservation Committee in moving forward with preservation. The public has been engaged in all of these planning efforts by well-advertised surveys and public meetings. Tasks that the Township is currently engaging in are noted. This is presented as a reference and guide for future recreation department growth.

Other types of plans a recreation department may reference or may write include:

Comprehensive Plan. A community-wide plan, presenting short and long-term goals across a wide range of topics. The Township is completing a Comprehensive Plan update.

Master Plan. Typically a site-specific land use and facility development plan that may include natural resource management and conservation efforts, depending upon the site. Township parks that may benefit from master planning include Neffs Valley and Johnson's Pond to facilitate the addition of an 18-hole disc golf course.

Strategic Plan. Creates a mission and a vision for the community. Core values are identified as well as beliefs. The result is an Action Plan to meet community goals.

Security and Safety Plans. These plans are important for parks and community buildings. The plan will recommend an inspections schedule, an evacuation plan, meet Fire Protection Code requirements and review safety items such as signs. The plan will address potential liability issues to maintain a high standard of public safety. Event security and safety standards may be a part of these plans.

Natural Resource Management Plan. These plans may be created to manage large wooded acres, environmentally sensitive areas, riparian corridors and steep slopes. Consultations with environmental professionals and foresters will result in a vegetation management plan, mapping and a plan to preserve significant environmental assets. This plan may integrate with MS4 permit requirements.

Capital Improvements Plan. Capital improvements are based on community planning. These projects should seek to provide facilities and services that result in a high level of customer satisfaction. Plans will detail improvements, identify the community benefits, project life cycles of the proposed improvements, estimate costs and identify possible funding sources. The plan can be completely needs-based or fiscally constrained or a blend of the two approaches, but the context should be clearly stated.



b. POLICIES & PROCEDURES

Policies detail how a department will handle various situations with an overview of expectations for a positive outcome and for staff engagement. Examples of policy a typical recreation department is required to follow are: ADA, OSHA, EID, IBC and DBE. Specific examples might include special event policies; for Township use of facilities, and for outside entity use of Township facilities. The Township has these types of policies in place.

Procedures detail how a policy is to be carried out. Procedures should be written to promote fairness, consistency and compliance with laws and guidelines, for example, a Standard Operating Procedure.

Risk Management Plans include safety inspection data and procedures for accident/incident reporting.

c. MAINTENANCE

Management is responsible for developing standards and objectives for parks maintenance staff. The standards should include how acceptable staff performance levels are determined and what maintenance levels the public should anticipate. Written maintenance plan components include: goals, objectives, site inventories, task lists, standards, regulations, schedules, equipment and supplies. Work records should be retained along with any comments and observations that require follow-up. The Township recreation and public works departments should create a maintenance plan that will maintain or improve current standards for the future.

d. INFORMATION SYSTEMS

Technology and data collections allow for more efficient functioning between staff and sub-departments. External information will include transactions involving planned activities, such as registrations, scheduling, member systems and payment processing. Internal information will include work orders, inventory, project management and staffing schedules. Events require extra records that track participants, professional staff, vendors, costs and other event specific data. The Township does use software to collect particiant information.

e. CUSTOMER SERVICE

Customer relations are vital to a successful recreation department. It is important for staff to know how to successfully handle both expressed needs and complaints of the public. Client contact should reflect the stated values of the department. Customer service tasks include:

i. Training staff – set training outcomes, teach department goals, define performance standards, review complaint reporting and handling, create standard program assessment, which might be an exit interview, survey or follow-up evaluation form.

ii. Handing Complaints - receive complaints with empathy, acknowledge the problem, forward the issue to a supervisor and promptly follow-up with the customer.



f. COMMUNICATIONS

i. INTERNAL

Should communicate vision, support relationships, collaborate and advocate to staff and all coordinating departments. This includes communications with the public and recreation support groups, boards, committees. The Township uses several social media outlets to accomplish recreation department communications.

ii. EXTERNAL

A Marketing Plan is a detailed description of how the market mix will be implemented to facilitate an exchange of resources, so the goals of both participants and the agency are satisfied.

The marketing plan should recognize that different market sectors have unique responses to different forms of advertisements, payment and schedule options. Seniors respond best to simple print or email ads that illustrate their cohorts engaged in activities that appear challenging and offer socialization during times when families, young adults, and teen populations may not be available. Young adults respond to social media posts and activities that offer individual physical challenge and provide social interaction. Examples are skate parks and e-sports programs.

A Marketing Plan will include the following elements:

- Market Mix – product, price, place, promotion
- Market Positioning – uniqueness, quality, location, promotion, loyalty
- Branding – reflective of image, mission, increases loyalty
- News releases – a mini-story for a media interview.

g. PARTNERSHIPS

Partnerships can be formed with other recreation providers, businesses, quasi-public agencies, or non-profits. These relationships can expand resources and help to avoid duplication of services. Partnerships offer advantages in multiple areas including funding, programming, capital development, park facility offerings and volunteerism.

Partnerships need to be guided by agreements with agreed-upon policies and procedures and shared values. Elements of a good partnership include a formal agreement between the parties, an understanding of each others missions and values, and monitoring to keep initiatives moving forward. Parks and recreation department staff can engage with their communities by serving as volunteers with outside organizations.

i. FUNDING

Funding partners offer short to mid-term financial assistance for development, acquisition, and planning efforts. Requirements are determined by the agency offering the assistance.

ii. BOARDS/FOUNDATIONS

Boards should work closely with the municipal department, sharing mission and vision. The recreation department should clarify it's needs and agreements should identify expectations. A strong parks foundation can be one of the best assets for community recreation.

An offshoot of the NPRA, the National Association of Park Foundations offers training for recreation support organizations seeking to become more effective in working to improve their community recreation facilities through funding and partnerships. A Recreation Board or Park Foundation can be a non-profit corporation. The Board can seek, collect and transmit funds to the Township for parks and recreation improvements and programs.

iii. PROGRAMMING PARTNERS

Programming partners may offer to host educational programs at a Township facility to benefit an educational cause. The Citizen Science Program is a good example. The department may be responsible to provide supplies, advertising and compensation to the organization.

iv. FACILITIES DEVELOPMENT

Colleges and museums may partner with parks to create displays and activities for installation in parks that offer insight into history, cultural or environmental issues. These displays benefit the sponsor by drawing attention to the program or offering.

3. PERSONNEL

Agency needs must be explained and met by all staff members. The organizational structure of the department will develop as staff are added. Volunteers are considered to be unpaid staff members. Hiring quality employees and retaining them is important for the success of the department. Tasks that administrative or human resource employees are responsible for include:

a. RECRUIT by creating job descriptions with clear scope, responsibilities and expectations. Applications should be based on the open position and references should be checked.

b. INTERVIEW each candidate based on the job description, with a standard assessment questionnaire to reduce bias. Individual experiences, competency and situational actions reflect potential fit with the department's overall mission and values.

c. TRAIN employees to create a learning environment and communicate the agency mission. Training ensures continuity of quality programs with well trained competent staff.

d. STAFF SUPERVISION

Personnel records should include each staff member's job history, evaluations, accidents, disciplinary actions and recognitions. Staff should be recognized for creative ideas and for meeting goals. Grievances should be handled with empathy.

e. VOLUNTEERS need on-going recruitment, knowledge of agency mission, appreciation and awards events. The Recreation Board can provide very effective assistance in meeting this need.

f. NRPA AGENCY METRICS

A comparison with a similar recreation department regarding staffing reveals the Township provides fewer staff members than the average. The number below includes office staff and public works employees.

	POP UNDER 20000 (15655)	ACRES OF PARKLAND MAINTAINED (140)	POP DENSITY 500-1500 /SQ MILE (512)	MID-ATLANTIC REGION	NWT CURRENT
FULL-TIME STAFF (& EQUIVALENT)	10	38.6	35.7	22.5	6
FTE'S / 10,000 RESIDENTS	10.3	8.9	8.1	5.6	6

4. PROGRAMS AND SERVICES

North Whitehall Township is limited in programming services by available staff and facilities. The Township is reaching out to neighboring communities to share resources. South Whitehall and Upper Macungie Township held a joint Summer Youth Recreation Program in 2022.

a. NRPA DATA AND CURRENT PROGRAMMING

NRPA data reveals that over half of all recreation departments that match the Township's 7 metric values offer the following regularly scheduled programs:

Special Events	Safety Training	Social Recreation Events
Team Sports	Aquatics	Racket Sports
Fitness Classes	Performing Arts	Health & Wellness Classes
Cultural Classes	Individual Sports	Martial Arts
Visual Arts	Trips & Tours	Golf (Northeast U.S.)

Current North Whitehall Township programming includes yoga, Seniors Day and Veterans Day events. The yoga program has 14 participants and is held in a room in the municipal building that can accommodate 20 participants. The program may soon outgrow the space available.

Over half of all recreation departments that match the Township's 7 metric values offer targeted programs in these areas:

SUMMER CAMP	SENIOR PROGRAMS	TEEN PROGRAMS
DISABLED POPULATIONS PROGRAMS		AFTER SCHOOL PROGRAMS

The Township partnered with successfully with South Whitehall and Upper Macungie Township to run a summer camp program utilizing Parkland Area School District Facilities. 124 children from North Whitehall Township attended the program.

b. CURRENT PARTICIPATION

Participation in youth sports is increasing for T-ball. Enrollment has been declining for baseball, softball and football programs. The Orefield and Schnecksville Athletic Associations have combined due to decreased enrollment. Soccer and basketball have steady enrollments. Athletic association presidents reported a shortage of soccer fields and indoor basketball courts. The number of volunteer coaches has been declining due in part to excessive regulation protecting children. This may limit youth community recreation program offerings in the future. Pay-to-play recreation continues to grow, however, these leagues segregate participants based on economic station. Township athletic associations reported little need for sponsoring youth who could not afford to participate in community programs.

The Ironton and D&L Trails have strong and growing reputations as excellent facilities and participation continues to grow. In 2021 the Ironton Trail recorded 300,000 trips along its route. Fitness Central, a private business, offers weekly cycling meet-ups. They use the Ironton Trail for group rides and report between 10 and 30 participants weekly.

c. IMPROVING PARTICIPATION

The goal is to provide quality at the level of the individual to gain and retain customers. Programs generally evolve through the following steps:

i. PLAN/CREATE

Programs should be based on trends, interests, needs and successes with other agencies. Each program should have a defined purpose, whether to educate, improve health & wellness or to provide a community service, such as a clean-up day.

ii. FACILITATE

Program goals & objectives shall be defined. A target population should be identified, with staffing needs, facility needs, registration processes and times. Resources should match anticipated program needs. Costs should be determined. Rules, themes, partners and program access should be factored in, with procedures to deal with any issues that may arise.

iii. MARKET.

Continue to use methods most successful, such as the Township newsletter and social media outlets. Conduct regular surveys to measure how people are being reached. Explore options and potential barriers to reach residents who do not participate.

iv. EVALUATE

Post program, question both participants and staff as to program success and thoughtful improvement suggestions. Run a cost analysis.

4. FINANCE

Finance tasks that typically fall under parks and recreation operations are presented below as a guide for future recreation department growth. Tasks that the Township staff perform now are noted.

a. PURCHASING – refers to all methods used to purchase supplies, equipment and services. Formal contracts are generally entered into with suppliers, who can be regular suppliers or one-time suppliers. Purchasing cards may be issued for specific types of items and credit

cards for large purchases. Small purchases can be made with cash on hand, and procedures need to be in place to keep records for cash out and cash replenishing. The Township has procedures in place for purchasing.

b. INCOME & EXPENSES

Track all forms of department income and the source; taxes, grants, rentals, program fees, admissions fees, sponsorships, donations, etc. Expenses may include department salaries, wages, purchases, service fees, training fees, etc. Methods used to track finances differ for internal or external expenses or revenues, i.e. department, event or program levels.

The Township assigns .1 mil of municipal tax for recreation department use. Land developers are assessed fees that are dedicated for recreation department needs and improvements.

Budgets – These provide income and expense information to inform planning and the overall municipal budget. The Township has a general fund that includes recreation department expenses.

- General Fund Budget – sets aside a fixed number or a percentage of tax revenues for recreation and parks, for public works and for open space/environment.
- Recreation Department Budget - tracks annual overall revenues and expenses.

Income Statements. These track profitability of specific programs.

Allocation/Expenditure. Tracks purchases approved against what was actually spent. These are typically completed quarterly.

Cash Flow – this type of report provides an evaluation of revenues vs expenses, which can be generated seasonally, annually and can be used to analyze specific events. The Township does analyze program event costs.

Balance Sheets - The department's assets and liabilities.

Project/Program Reports – revenues vs expenditures per program.

Program Break Even Analysis - Reports the fixed costs of a program, costs which do not change regardless of the number of participants, building costs, insurance, utilities and advertising. Fixed costs are compared with the variable costs, which are tied to the number of participants, supplies and staff.

Forecasting – this type of report looks at the break even analysis to respond if the program did or did not break even, and if it was a revenue gain or loss. The goal is to break even, covering costs or to make a small profit.

c. ALTERNATIVE FUNDING

Sources cna be gratuitous (grants), earned income (fees), or contract based (% of revenues from food trucks, concessions, etc.) Staff should record expenses, revenues, attendance, complaints, and any issues with private contractors or concessionaires. All contracts should provide scope, oversight, performance standards and methods to ensure proper facility clean-up and maintenance.

There are opportunities for park and program sponsorships, underwriting, limited advertising, and adopt-a-park programs. Sponsors should share the departments values. Sponsorships should be sold on an annual basis with annual reviews that demonstrate value for both parties.

d. CASH HANDLING

Create policies and procedures for handling each revenue source in-house and at each facility, with collection and deposit procedures.

e. DATA

The collection of data aids with future planning. Data that can be tracked includes program attendance, room counts, cash and maintenance needs or issues. The Township keeps records of attendance, program costs and revenues.

f. NRPA AGENCY METRICS

A comparison with a similar recreation departments meauring aspects of finances r e v e a l s that the Township has a smaller operating budget, spends less per capita and per acre of land than agencies with similar metrics. The Township has larger personnel expenditures but maintains a smaller staff than similar agencies. The Township receives more of it's recreation dollars from the General Tax Fund than the average agency.

	POP UNDER 20000 (15655)	ACRES OF PARKLAND MAINTAINED (140)	POP DENSITY 500-1500 /SQ MILE (512)	MID-ATLANTIC REGION	NWT CURRENT
OPERATING EXPENSES BUDGET (in Millions)	1.2	1.7	1.5	2.5	0.5
OPERATING COSTS PER CAPITA	114	97	82	65	31.94
OPERATING COSTS PER ACRE OF LAND MAINTAINED (140)	8000	15700	6650	4031	3571
DISTRIBUTION OF OPERATING EXPENSES					
Personnel	51%	52%	52%	57%	70%
Operations	41%	40%	39%	35%	16%
Capital Dev	6%	6%	6%	4%	14%
SOURCES OF OPERATIONS FUNDING					
General Tax Fund	60%	65%	62%	69%	76%
NWT - Capital Fund	---	---	---	---	14%
Earned Revenues	26%	22%	22%	22%	10%
Dedicated Levies	6%	6%	9%	2%	---
Other Dedicated Fees	2%	2%	2%	1%	---
Grants	2%	2%	2%	3%	---
Sponsorships	1%	1%	1%	0%	---
% RECOVERY OF OPERATING EXPENSES (non-Tax Revenue)	25.30%	23.80%	20.50%	24.90%	10%

G. PARK IMPROVEMENT CONCEPTS & COST ESTIMATES

1. LAURYS FIREHOUSE PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data.

Residents most desire natural areas designed to support wildlife and provide environmental education. Residents desire outdoor racket court sports. There are no rentable or event pavilions at Laurys park. Residents want an outdoor pool to cool off during the anticipated longer hotter summers, which is a long term goal. The addition of a splash facility would meet the needs for cooling in this part of the Township.

The park is well developed with formalized parking, 2 playgrounds, basketball courts, a soccer field, two baseball fields, a walking looped path, a moderately sloped hill and storm water facilities. The park has an accessible water line at the entrance to the park, and electrical service is nearby. Land for additional recreation facilities is limited.

The concept plan for Laurys Firehouse Park:

- removed one entrance to a parking area to accommodate two pickle-ball courts with two access points and fencing, adjacent to the basketball courts. The second entrance to the parking area was retained and no parking spaces were removed.
- removed a parking turn around loop to accommodate an event pavilion and gathering space. No parking spaces were removed.
- added a splash pad sized for 20-25 people with access from the existing playground and located near an existing water line and electrical power source.
- added a permanent restroom building centrally located to all facilities
- converted the sloping mowed lawn to a meadow with a nature path connecting to the existing paved paths, and included a sledding area on the hill.
- enhanced the existing wooded buffer and converted the mowed lawn swales to vegetated swales.
- added a second pavilion as shown on the original master plan close to one of the existing baseball fields.
- lighting for the fields and basketball courts was discussed as a need for this park
- replaced the existing wood fiber playground surface with a flexible rubber unitary play surface
- added a universal bench pad and replaced non-compliant armless benches with ADA compliant benches on bench pads

This concept was approved by the committee after the addition of the universal design improvements and the playground surfacing upgrade. There were no negative public comments.

1. LAURYS FIREHOUSE PARK - Pickleball Court Rendering



ESTIMATED COST OF RECOMMENDED IMPROVEMENTS

LAURYS FIREHOUSE PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

Description of Work	Quantity	Unit Costs	Totals
Pickleball Courts			
Demo parking entrance to create space for pickleball courts.	200 SY	50 SY	$ 10,000.00
Bituminous paving for two pickleball courts, with court surfacing and line stripping.	545 SY	130 SY	$ 70,850.00
Permanent commercial grade posts and nets	2 EA	5500 EA	$ 11,000.00
7' ht. vinyl chain link fence surrounding courts.	340 LF	110 LF	$ 37,400.00
6' wide bituminous ADA compliant path connecting to pickleball courts. Approximately 140' long.	95 SY	75 SY	$ 7,125.00
Shelter/Restroom			
Permanent accessible restroom building with two sides and a maintenance chase on concrete pad.	1 LS	90000 EA	$ 90,000.00
Universal design area with small shelter and table. Consider placement near athletic fields.	1 EA	40000 EA	$ 40,000.00
Pavilion Option A			
30' x 60' Pavilion on concrete pad	1 EA	150,000 EA	$ 150,000.00
Pavilion Option B			
Remove parking circulation loop.	250 SY	50 SY	$ 12,500.00
Paved gathering space, ADA compliant, approx. 55' x 60' in size	370 SY	175 SY	$ 64,750.00
24' x 44' pavilion on concrete pad	1 EA	85,000 EA	$ 85,000.00
Spray Park/Splash Pad			
Splash pad sized for 20-25 users (750-800 sf) with utility shed for equipment. NIC utility connections	1 EA	160,000 - 225,000 EA	$ 120,000 - $ 180,000
4' ht. aluminum fencing and gate for splash pad. Approx.165' length based on pad radius of 16'.	165 LF	55 LF	$ 9,075.00
10' wide concrete ADA compliant path surround	145 SY	225 SY	$ 32,625.00
Convert all or portions of existing playground to rubber safety surface. Includes removal of existing mulch	1 SY	250 SY	$ 250.00
Pathways			
Mowed lawn paths through new hillside meadow.	700 LF	0 SY	$ -
Create uniform grade for sledding hill, install berm for safe stopping	1 LS	15000 LS	$ 15,000.00
Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
Meadow/Trees			
Conversion of Lawn to Meadow, including mowed swales to vegetated swales and no-mow basins	13 AC	130 AC	$ 1,690.00

LAURYS FIREHOUSE PARK					
	2.5" caliper native trees for shade and wildlife habitat. Exact number and placement to be determined.	1 EA	950 EA	$	950.00
	Other Considerations				
♿	ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors			
	Dark Sky Compliant Lighting for sports fields and basketball courts	Minimally $70,000 for basic recreation field LED lighting package. Costs impacted by number of poles, pole heights, lighting levels desired, meter and wire requirements, etc.			
	Solar lighting for pathways and parking areas. Security Lighting. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.			
	Permit and Engineering Fees	Typically between 15 to 25% of cost of construction			
	Storm Water BMP costs	Cost factors include increase in impervious cover, capacity of existing BMP's, experience of engineer			
	Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.			



2. NEFFS VALLEY PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data. This park is closest to Schnecksville, a large village with poor access to recreation. The park is the site of a private aquatic facility that closed due to structural issues with the pool. The Township has a demolition permit for the pool and associated buildings that remain on the site. A 9-hole disc golf course was added to this park by resident volunteers.

Residents most desire natural areas designed to support wildlife and provide environmental education. The Coplay Creek runs through this park and there is a wet lawn area at the southern end of the park. Residents desire outdoor racket court sports and community gardens. There are no pavilions at this park. This area of the Township lacks a playground, and NRPA data supports more playgrounds in the Township. Residents want more multi use trails and connections. The Township has an opportunity to create a greenway along the Coplay Creek using the existing roadway system. The Coplay Creek Greenway Trail could begin at Neffs Valley Park. The park has existing water and electrical services, and sanitary needs were met with a drainfield.

There were two concept plans for this park, given that it is a blank slate. Both plans proposed parking, pickle-ball courts, community gardens, a nature playground, pavilions near the community gardens and the pickle-ball courts, an enhanced riparian buffer, a multi-use trail, accessible walking paths through the woods, a connection to the future housing development and meadow areas. One of the concepts relocated some of the disc golf tees and nets to avoid conflict with proposed uses. The disc golf residents did not approve and a discussion resulted. Residents came to the concept presentation meeting and were comfortable with the proposed improvements. They spoke about some drainage issues that the Township may be able to address.

The final concept plan for Neffs Valley Park:

- added parking along Park Valley Road
- added a multi-use trail beginning at the proposed parking area, crossing the Coplay Creek and continuing south
- added four fenced pickle-ball courts, a small pavilion and evergreen screening for the neighboring residents. The courts may need a drainage layer underneath for stability.
- added a quarter acre community garden area with a small pavilion, a shed, water source line and accessible paths through the gardens. Providing a number of raised beds was discussed.
- added accessible nature paths with access to the Creek and a connection to a proposed residential development east of the park.
- added a nature playground
- enhanced the riparian buffer, removing existing parking.
- added meadow planting to large un-programmed areas
- supported the relocation of the disc golf course to Johnson's Wildlife Park as was recommended by the disc golf residents

This concept was approved by the committee after changes were made and there were no negative public comments.

NEFFS VALLEY PARK CONCEPT VIEW



ESTIMATED COST OF RECOMMENDED IMPROVEMENTS

NEFFS VALLEY PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

Description of Work	Quantity	Unit Cost	Totals
Parking			
Paved parking with 2 ADA compliant spaces and access aisles, for a total of 48 spaces.	1440 SY	75 SY	$ 108,000.00
Riparian buffer			
Riparian buffer planting along Coplay Creek for a minimum width of 50' on both sides.	1600 LF	4 LF	$ 6,400.00
Low Tech Processes Based stream flow controls to restore floodplain hydrology	5 EA	1200 EA	$ 6,000.00
ADA Accessible Nature Path			
6' wide ADA compliant loop through wooded area, not including potential connection to new residential development. Approx. 840' loop.	560 SY	55 SY	$ 30,800.00
Pathways and Multi-Use Trail			
Bridge crossing Coplay Creek and floodplain.	1 EA	85000 EA	$ 85,000.00
10' wide bituminous ADA compliant multi-use path, intended as beginning of Coplay Creek Greenway. Approximately 480' long.	535 SY	75 SY	$ 40,125.00
6' wide bituminous paths to proposed recreation facilities and providing creek access	715 SY	75 SY	$ 53,625.00
Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
Universal design area with small shelter and table. Suggested placement: near nature playground	1 EA	40000 EA	$ 40,000.00
Nature Playground			
Nature playground for all ages and abilities	1 EA	95000 EA	$ 95,000.00
Community Garden			
1/4 acre community garden with 35 plots, including 2 raised beds with handicapped access	1 LS	25000 LS	$ 25,000.00
7' deer fencing surrounding garden area	840 LF	10 LF	$ 8,400.00
Storage shed (12' x 28') on pad for equipment with overhang for shaded seating	1 EA	45000 EA	$ 45,000.00
Pickleball Courts			
Two bituminous double pickleball courts with sport coating and line stripping. (4 courts total)	996 SY	130 SY	$ 129,480.00
Permanent commercial grade posts and nets	4 EA	5500 EA	$ 22,000.00
Install 7' vinyl coated chain link fence surrounding courts.	540 LF	110 LF	$ 59,400.00
Pickleball court pavilion on concrete pad - approx. 26' x 32'	1 EA	80,000 EA	$ 80,000.00

NEFFS VALLEY PARK				
Meadow/Trees				
Conversion of Lawn to Meadow	3.5 AC	130 AC	$	455.00
2.5" caliper native trees for shade and wildlife habitat. Exact number and placement to be determined. Include screening trees for neighbors.	1 EA	950 EA	$	950.00
Other Considerations				
ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors			
Solar lighting for pathways and parking areas. Security Lighting as needed. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.			
Permit and Engineering Fees	Typically 15 to 25% of construction costs.			
Storm Water BMP costs	Cost factors include increase in impervious cover, capacity of existing BMP's, experience of engineer			
Site Utilities - Water, Electricity and Sanitary	Cost factors include proximity to source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.			



3. INDEPENDENCE PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data. This park is within an office/industrial complex between Schnecksville and Orefield. Access to the park requires crossing Route 309 or using State Highways with limited shoulders. The Carbon Lehigh Intermediate Unit walks special needs kids to the playground regularly.

The park is well developed with formalized parking, a playground with a tot-lot, a soccer field, lawn games, two pavilions, a baseball field, two sand volleyball courts and accessible walking paths. The park has existing water and electrical services, and sanitary needs were met with a drainfield.

There is no room to add any new facilities, to convert un-used lawn area to meadow or add trees.

The Township owns an additional 3-acre parcel adjacent to the existing Independence Park. The area was previously used as an agricultural orchard and has restrictions placed on future use due to chemicals found in the soils. The restrictions do not allow for excavation so any proposed facilities would need to be elevated above the current ground elevation.

A key person recommended a BMX or pump track for the site. The public has voiced support for youth facilities in the Township. This type of facility is created with hills and valleys which could be built up on the site.

The final concept plan for Independence Park:

- built up all proposed elements with room for grading down to existing elevations on all sides
- added parking
- added an accessible loop path connecting back to the existing pathways in Independence Park
- added a one quarter acre pump/BMX park with accessible paths to parking
- added a tricycle track for younger visitors
- added a universal bench pad and ADA compliant benches
- added meadow and the retention of existing trees if possible

Both the committee and the public approved the concept plan as it was originally presented with no negative comment.

INDEPENDENCE PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

Description of Work	Quantity	Unit Costs	Totals
BMX / Pump Park			
1/4 acre BMX/Pump Park with paved track	1 LS	150000 - 200,000 LS	$ 150,000.00 - $200,000.00
Trike Track			
Paved trike track with striping. Approx. 400' loop.	450 SY	80 EA	$ 36,000.00
Parking			
Paved parking lot with 22 parking spaces including one Handicapped space with access aisle.	660 SY	75 SY	$ 49,500.00
Pathways			
6' wide paved ADA compliant loop path connecting to Independence Park path. Approx. 900' long.	600 SY	75 SY	$ 45,000.00
6' wide paved ADA compliant path to connect to BMX/pump park. Approx. 250' long.	170 SY	75 SY	$ 12,750.00
Paved 10' x10' universal bench pad sized for 2 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
Meadow/Trees			
Conversion of Lawn to Meadow	2.5 AC	130 AC	$ 325.00
Other Considerations			
ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors		
Paved universal design area with small shelter and table. Consider placement near pump track.	1 EA	40000 EA	$ 40,000.00
Fill material - excavation not permitted on this site	Fill material to build elevation for improvements will include stone and topsoil		
Consider solar lighting for pathways and parking areas. Security Lighting as needed. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.		
Carl Street improvements to improve public access	Township Public Works department		
Permit and Engineering Fees - site restrictions may require additional compliance measures.	Typically 15 to 25% of construction costs.		
Storm Water BMP costs	Cost factors include increase in impervious cover, capacity of existing BMP's, engineering		
Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.		
Existing Park Improvements			
Permanent Restrooms	Consider for the developed part of the park		
Convert all or part of existing playground to rubber safety surface. Includes removal of existing mulch	1 SY	250 SY	$ 250.00

3. INDEPENDENCE PARK - BMX/Pump Park Rendering



4. JOHNSON'S POND WILDLIFE PARK - Disc Golf Tee Rendering



4. JOHNSON'S POND WILDLIFE PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data. This park is in a rural section of the Township close to Kolapechka/ Levans and Municipal Parks. The park's service area extends the Township's accessible parks area to the west. Johnson's Pond is the Township's first passive park.

Coplay Creek passes through this park with an existing wooded riparian buffer. There are two ponds with an accessible stone pathway to access the ponds and an informal parking gravel lot. The creek is hidden from the ponds by vegetation and the creek bed has steep slopes on each side making creek access difficult. The ponds receive storm water runoff from the PA Turnpike, so warm water fish are found there. The opposite side of the creek from the ponds are rocky steep ledges, and above those are several acres still used for farming. The farmed land is accessible from a residential cul-de-sac. Storm water from the cul-de-sac drains through the farm field to the creek.

The public favors natural areas and Johnson's Pond Wildlife Park offers a riparian corridor, steep slopes, dense woods and an opportunity for fishing. The public supports winter sports and the Township has approved Johnson's Pond for ice skating. The disc golf resident volunteer would welcome the opportunity to design an 18-hole course at Johnson's Pond. The course would offer terrain and obstacle challenges and would replace the existing 9-hole course currently at Neffs Valley Park. The park needs an accessible platform for the disabled to be able to fish into the deeper waters of the pond. The paths have been overgrown by grasses and are no longer visible. Parking needs to be formalized and the pond buffer enhanced. No utilities or permanent restrooms were proposed.

The final concept plan for Johnson's Pond Wildlife Park:

- added formalized parking
- added paved accessible paths to pond access points
- added accessible fishing piers
- recommends replacement of existing benches with ADA compliant benches
- added the opportunity for an 18-hole disc golf course

The 18-hole golf course could potentially be damaging to the forest floor due to the amount of foot traffic a popular course attracts. Paths/routes through the forested areas would need to be reinforced and delineated with other areas protected. Stream crossings would need to be added and additional parking may be required. These issues should be discussed and resolved prior to installation of the equipment.

Both the committee and the public approved the concept plan as it was originally presented with no negative comment. Everyone approved of the idea to use the park for disc golf.

JOHNSON'S POND WILDLIFE PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

Description of Work	Quantity	Unit Costs	Totals
Parking			
Paved off-street parking with 17 parking spaces including 1 Handicapped space with access aisle.	540 SY	75 SY	$ 40,500.00
18" wooden guard rail along Coplay Creek Road	975 LF	30 LF	$ 29,250.00
Pathways			
6' wide paved ADA compliant pathway from parking to access both ponds - approx. 650' long.	550 SY	75 SY	$ 41,250.00
Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
Fishing Access			
Handicap accessible fishing pier or piers, pre-cast concrete piers are most cost effective.	480 SF	60 SF	$ 28,800.00
18 Hole Disc Golf Course			
Disc golf post sleeves for relocated baskets	18 EA	750 EA	$ 13,500.00
Concrete disc golf pads - 5 ft wide x 12 feet long	18 EA	1800 EA	$ 32,400.00
Considerations: Designate paths through woods to prevent unchecked ground erosion from foot traffic. Reinforce paths with geo-grid, use boardwalk in Coplay Creek floodplain and wetland areas. Install native groundcovers to designate off-path areas. Meadow paths may be mowed			
Coplay Creek bridge crossings	Costs will be determined by floodplain width, bridge materials and type of construction. Poor creek/site access may add to costs.		
Meadow/Trees			
Conversion of lawn to meadow	8 AC	130 AC	$ 1,040.00
2.5" caliper native tree for shade and wildlife habitat. Exact number and placement to be determined.	1 EA	950 EA	$ 950.00
Other Considerations			
ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors		
Additional Parking area in Cul-de-sac or within upland farmed area	Costs will include striping if existing cul-de-sac space is used. Costs for new parking will include engineering, stormwater and paving.		
Consider solar lighting for pathways and parking areas. Security Lighting as needed. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.		
Permanent Restrooms - compostable or pump out units. Water required for cleaning of units.	Consider near parking as use increases.		
Permit and Engineering Fees	Typically 15 - 25% of construction costs.		
Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.		

5. KOLAPECHKA PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data.

Residents most desire natural areas designed to support wildlife and provide environmental education, and outdoor racket court sports. Residents want an outdoor pool to cool off during the anticipated longer hotter summers, which is a long term goal. The addition of a splash facility would meet the needs for cooling in this area of the Township. More shade trees are needed at this park which is open and without an existing wooded area. Residents also support opportunities to engage in winter sports.

Kolapechka Park is centrally located serving the villages of Ballietsville, Ironton and the western half of Ormrod. Kolapechka is connected to Levans park via a paved walking path. A tributary to the Coplay Creek runs on the eastern border of the park. The park is well developed with formalized parking, a playground, tot-lot and new accessible playground with a unitary rubber safety surface, a new dog park, two baseball fields, an accessible walking loop path, storm water facilities and a barn. The park has no utility services to facilities, but the Township planned to install a water line and connect electrical services in 2022. The Township would like to use this park to host community day events. A permanent restroom location could not be finalized so the concept plan shows two potential locations. Land for additional recreation facilities is limited at this park.

The final concept plan for Kolapechka Park:

- enhanced the riparian buffer along the Coplay Creek tributary
- added two potential permanent restroom locations
- added two fenced tennis courts with two access points
- added a splash pad adjacent to the existing accessible playground
- added mass plantings of native shade trees
- added no-mow areas and converted mowed swales to vegetated swales
- added a short hill for sledding
- recommended filling of an ice skating pond created in the original construction but not used
- added a universal bench pad, a sheltered bench/table pad for athletic event viewing, and recommends ADA compliant benches with backs and arms

The committee and the public approved of this concept with no negative comment.

5. KOLAPECHKA PARK - Splash Pad Rendering



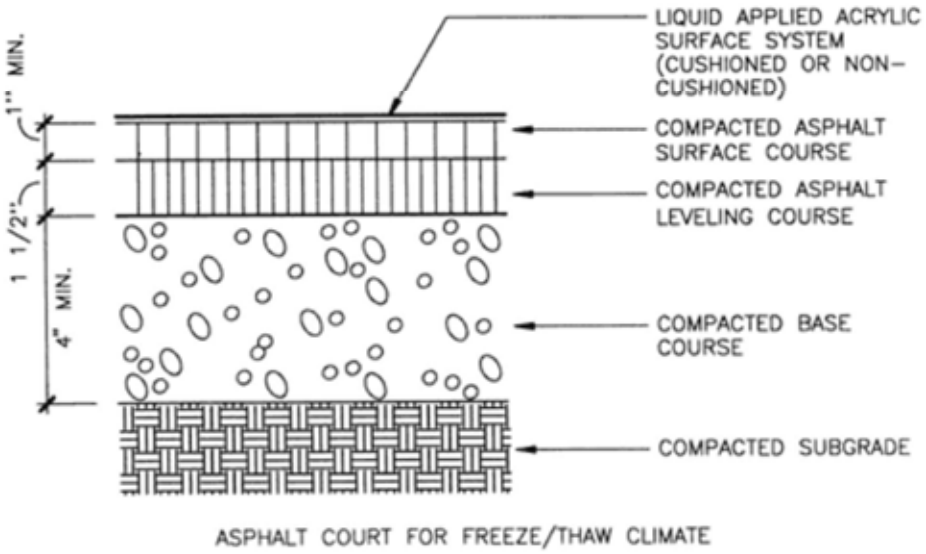
ESTIMATED COST OF RECOMMENDED IMPROVEMENTS

KOLAPECHKA PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

Description of Work	Quantity	Unit Costs	Totals
Tennis Court Options			
Tennis Courts - Bituminous Construction, Full Size Double Court - 120' x 120' with 6" apron	1 LS	60,000 LS	$ 60,000.00
Full Size Double Tennis Courts - Post Tensioned Concrete Construction - 120' x 120' with 12" apron	1 LS	120,000 LS	$ 120,000.00
Permanent Heavy Duty Post and Net set	2 EA	1,500 EA	$ 3,000.00
Acrylic Color Surfacing and Line Striping	1600 SY	40 SY	$ 64,000.00
8' Chain Link Fencing with two Gates.	600 LF	110 LF	$ 66,000.00
6' wide paved ADA compliant paths connecting to tennis courts at two locations. Approx. 120' long.	80 SY	75 SY	$ 6,000.00
Spray Park / Splash Pad			
Splash pad sized for 15-20 users (700-725 sf) with utility shed for equipment. NIC utility connections	1 EA	120,000 - 180,000 EA	$ 120,000 - $ 180,000
4' ht. aluminum fence with gate for splash pad. Approx 160' length based on 15' pad radius.	160 LF	55 LF	$ 8,800.00
10' wide concrete ADA compliant path surround	140 SY	225 SY	$ 31,500.00
Shelters/Restrooms			
Universal design area with small shelter and table. Consider placement near athletic facilities.	1 EA	40000 EA	$ 40,000.00
Permanent accessible restroom building with two sides and a maintenance chase on concrete pad.	1 EA	90000 EA	$ 90,000.00

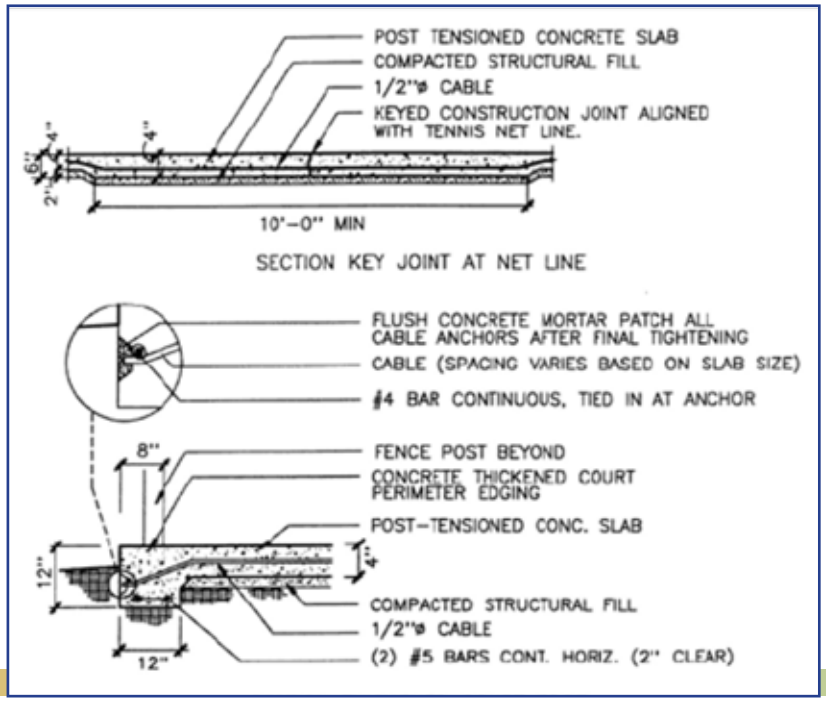
Bituminous Tennis Court Construction Detail



ASPHALT COURT FOR FREEZE/THAW CLIMATE

KOLAPECHKA PARK				
Meadow/Trees				
Conversion of Lawn to Meadow, include conversion of mowed swales to vegetated swales.	10 AC	130 AC	$	1,300.00
Improve riparian buffers along un-named drainage channels to Coplay Creek, create wildlife corridors.	1200 LF	4 LF	$	4,800.00
2.5" caliper native trees for shade and wildlife habitat. Number and placement to be determined.	1 EA	950 EA	$	950.00
Other Considerations				
ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1,200 to 2,500 and up. Consider burgundy benches to match Township colors			
Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$	825.00
Solar lighting for pathways and parking areas. Security Lighting. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.			
Dark Sky Compliant Lighting for sports fields and basketball courts	Minimally $70,000 for basic recreation field LED lighting package. Costs impacted by number of poles, pole heights, lighting levels desired, meter and wire requirements, etc.			
Permit and Engineering Fees	Typically 15 to 25% of construction costs.			
Storm Water BMP costs	Cost factors include increase in impervious cover, capacity of existing BMP's, experience of engineer			
Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.			

Post tensioned Concrete Tennis Court Construction Detail



6. LEVANS PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data.

Residents most desire natural areas designed to support wildlife and provide environmental education. The public supports a community gathering/event area. Levans has undeveloped land and is connected to Kolapechka, which may present an opportunity. More shade trees are needed to cool this park which is open and without an existing wooded area. Mowing could be greatly reduced by converting lawn to meadow. There may be an opportunity to install a recreation facility for teens/ young adults as this park serves different neighborhoods than Independence Park does. A BMX park was recommended for Independence Park.

Levans Park is centrally located serving the villages of Ballietsville, Ironton and the western half of Ormrod. Levans is connected to Kolapechka Park via a paved walking path. A tributary to the Coplay Creek runs on the northern border of the park, between Kolapechka and Levans Parks. The park is modestly developed with formalized parking, a lacrosse field, an accessible walking loop path, storm water facilities and a barn. The park has two adjacent gas pipeline easements that run at an angle across the southern part of the park, limiting uses for that area. There are no utilities currently in this park.

The initial concept for Levans included an amphitheater near the junction of the two parks with screening for the residents who live adjacent to the park. Two neighbors of the park strongly objected to the location due to anticipated noise and crowds near to their homes. They suggested moving the facility to another part of the park that was not so close to their back yards. There was no comment on the other recommendations of this concept plan.

The final concept plan for Levans Park:

- enhanced the riparian buffer along the Coplay Creek tributary
- added an amphitheater/gathering space
- recommended using the existing barn for restroom and concessions
- added a skate park
- added mass plantings of native shade trees
- converted mowed swales to vegetated swales
- converted mowed lawn to wildflower meadows and wet meadow areas
- added universal bench pads, sheltered bench/table pad for event viewing, and recommends ADA compliant benches with backs and arms

The committee approved of the revised concept with no negative comment.

LEVANS PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

	Description of Work	Quantity	Unit Costs	Totals
	Gathering Space			
	Event pavilion/stage approx. 45' x 14' in size. Pre-fabricated wooden structure. Not included in cost are ground surfacing, utilities or installation fees.	1 EA	240000 EA	$ 240,000.00
	1/4 acre paved seating area for gathering space.	Costs will depend on materials used - concrete, stamped bituminous, reinforced lawn or other.		
	Paved path connecting community space to parking. 10' wide for stage equipment access and 6' for pedestrian paths. Approximately 500' long.	445 SY	75 SY	$ 33,375.00
	Active Recreation Options			
A	Concrete constructed skatepark - approx. cost/SF	1 SF	45-55 SF	
B	Permanent Rink for Winter Ice hockey/summer street hockey (Master plan created ice skating pond area in Kolapechka Park)	1 EA	60000 EA	$ 60,000.00
	10' wide paved park surround for seating	140 SY	75 SY	$ 10,500.00
	Meadow/Trees			
	Conversion of Lawn to Meadow and Wetland Meadow, and swales to vegetated no-mow swales	4 AC	130 AC	$ 520.00
	2.5" caliper native tree for shade, wildlife habitat and screening of neighbors. Exact number and placement to be determined.	1 EA	950 EA	$ 950.00
	Other Considerations			
	Reuse of barn for concessions, permanent restrooms or indoor event space	Architectural consultant and structural analysis will be required to determine feasibility and estimated costs		
	ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors		
	Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
	Solar lighting for pathways and parking areas. Security Lighting as needed. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.		
	Permit and Engineering Fees	Typically 15 to 25% of construction costs.		
	Storm Water BMP costs	Cost factors include increase in impervious cover, capacity of existing BMP's, experience of engineer		
	Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.		

6. LEVANS PARK RENDERING - Amphitheatre/Gathering Space



6. LEVANS PARK - Skatepark Guidance

The legendary skateboarder Tony Hawk, offers skate park equipment, videos, and skate park information on his website Tony Hawk.com. The website includes a link to The Skatepark Project, a non-profit formarly known as The Tony Hawk Foundation.

The Skatepark Project works with community groups and municipalities to to create safe and inclusive public skateparks. The site offers a wealth of information for anyone looking to design and build a skatepark. The Skatepark Project offers a competitive grant program. The local communities of Allentown, Quakertown, Reading and Kutztown have recieved funding.

The following information is provided on the website, and is offered here in summary to provide an introduction to skatepark cost considerations.

Skateparks cost money to make, maintain and remove at the end of their useful life. The cost of these three costs is known as the "total cost of ownership."

The following comparison of TCO has been generated for communities who are choosing between a concrete park and a park on an asphalt pad equipped with steel ramps., using 2021 estimated costs.

The concrete park would potentially cost $400,000 to design and build, would cost $2,000 per year to maintain, has a lifecycle of 20-years, and would cost $10,000 to demolish.

The park equipped with steel ramps would potentially cost $200,000 to build, would cost $6,000 per year to maintain, has a lifecycle of 8 years, and would cost $5,000 to demolish.

The total cost of ownership per year for the concrete park is estimated at $22,500 per year for 20 years.

The total cost of ownership per year for the steel ramp park is estimated at $31,625 per year for 8 years.



7. MUNICIPAL PARK

All concepts created for the Township looked at facilities most desired by residents as determined through the public participation process and facilities lacking when compared with similar communities using NRPA data.

Residents desire multi-use trails and natural areas. Municipal Park is centrally located serving the villages of Ballietsville, Ironton and the western half of Ormrod. Municipal Park supports 2 baseball fields and 3 lighted basketball courts, and a trail head for the Ironton Rail Trail on 10 acres. There is limited room for additional recreational facilities.

The only opportunity to improve recreation at the park would be to improve access to the sports fields and courts. The Township installed a paved path from the fields to the Ironton Trail parking lot in 2021. The fields and courts remain unconnected to parking and to each other.

The final concept plan for Municipal Park:

- added a permanent restroom building
- added an ADA compliant paved path connected to the existing path and to the two ball fields to the basketball courts and to the Ironton Rail Trail
- converted mowed lawn to meadow
- added universal bench pads, sheltered bench/table pad for event viewing, and recommends ADA compliant benches with backs and arms

The committee and the public approved of the concept with no negative comment.

7. MUNICIPAL PARK RENDERING -

Shelter with Accessible Table and Path to Faciliites



ESTIMATED COST OF RECOMMENDED IMPROVEMENTS

MUNICIPAL PARK

The quantities shown are approximate. Costs are based on 2022 construction costs including prevailing wage rates and installation. Costs are intended to serve as a guide and not for construction.

	Description of Work	Quantity	Unit Costs	Totals
♿	**Shelter/Restroom**			
	Universal design area with small shelter and table. Suggested placement: near athletic fields	1 EA	40000 EA	$ 40,000.00
	Permanent accessible restroom building with two sides and a maintenance chase on concrete pad.	1 LS	90000 EA	$ 90,000.00
♿	**Pathways**			
	6' paved ADA compliant path connecting parking, ballfields and basketball courts. Approx. 300' long.	200 SY	75 SY	$ 15,000.00
	Paved 10' x10' universal bench pad sized for 2 - 6' benches. Bench costs estimated separately.	11 SY	75 LS	$ 825.00
	Meadow/Trees			
	Conversion of Lawn to Meadow	2 AC	130 AC	$ 260.00
	2.5" caliper native tree for shade and wildlife habitat. Exact number and placement to be determined.	1 EA	950 EA	$ 950.00
	Other Considerations			
♿	ADA compliant benches will have a back and arm rests. Select a style and color for Township parks to create sense of place.	Costs depend on materials and style, ranging from 1200 to 2500 and up. Consider burgundy benches to match Township colors		
	Solar lighting for pathways and parking areas. Security Lighting as needed. Costs depend on type of luminaire, style, materials and light level	Solar light maintenance includes battery replacement approx. every 5-7 yrs. at a cost of 1,000 per fixture.		
	Permit and Engineering Fees	Typically 15 to 25% of construction costs.		
	Site Utilities - Water, Electricity and Sanitary	Costs include proximity to existing source line or pole, trenching, meters, pumps, filters, conduit/pipe and engineering fees.		

Bench Examples





Native Trees for Pennsylvania

BASSWOOD-*Tilia americana:* 60'-80' ht., 30'-60' sp. Adaptable to soil conditions and light.
DOGWOOD-*Cornus florida*: 20'-40' ht., 20'-25' sp. Prefers moist, rich, acid soils and partial sun.
FRINGE TREE-*Chionanthus virginicus*: 12'-20' ht. and sp. Adaptable to soil conditions, prefers partial shade.
HORNBEAM-*Carpinus caroliniana*: 20'-35' ht. and sp. Adaptable to soil conditions, prefers full to part sun.
YELLOWWOOD-*Cladrastus kentukea*: 35'-50' ht., 40'-55' sp. Adaptable to soil conditions, prefers full to part sun.
BLACK GUM-*Nyssa sylvatica*: 40'-60' ht., 30-50' spread. Prefers moist, well drained acid soils and full to part sun.
RIVER BIRCH-*Betula nigra*: 35'-40' ht., 30'-35' sp. Prefers moist, well-drained acid soil, full to part sun.
PIGNUT SHAGBARK HICKORY-*Carya glabra*: 60'-80' ht.,30'-50' sp. Adaptable to soil conditions, full to part sun.
SWEETBAY MAGNOLIA-*Magnolia virginiana*: 20'-30' ht.,15'-20' sp. Moist, rich, well-drained soil, full to part sun.
HEDGE MAPLE-*Acer campestre*: 25'-40' ht. and sp. Adaptable to soil conditions, prefers full sun to partial shade.
MAPLES-*Acer rubrum, saccharum*: Red, Sugar. 50'-75' ht., 30-40' sp. Acid soils, adaptable to light and moisture.
RED OAK-*Quercus rubra*: 60'-80' ht., 45'-65' sp. Prefers slightly moist, well drained acid soils and full sun.
WHITE OAK-*Quercus alba*: 50'-80' ht. and sp. Prefers slightly moist, well drained acid soils and part sun.
REDBUD-*Cercis canadensis*: 25'-35' ht. and sp. Adaptable to soil conditions, prefers full sun to partial shade.
SERVICEBERRY-*Amelanchier laevis*: 20'-30' ht.,15'-20' sp. Prefers moist well-drained acid soils, full to part sun.
ATLANTIC WHITE CEDAR-*Chamaecyparis thyoides*: 60'-80' Ht., 15'-30'sp. Moist to wet soils in full to part sun.
EASTERN RED CEDAR-*Juniperus virginiana*: 30'-40' ht., 10'-20' sp. Adaptable to soil conditions, prefers full sun.
EASTERN WHITE CEDAR-*Thuya occidentalis:* 40'-60' ht.,15'-30' sp. Adaptable to soil moisture, well-drained loams and full sun.
BALD CYPRESS-*Taxodium distichum*: 50'-70' ht., 20'-30' sp. Moist to wet acidic soils in full to part sun.
JACK PINE-*Pinus banksiana*: 35'-50' ht., 30'-40' sp. Adaptable to soil conditions, full sun.
EASTERN WHITE PINE-*Pinus strobus*: 60'-80' ht., 20'-30' sp. Adaptable to soil moisture, acidic soil and full sun.
VIRGINIA PINE-*Pinus virginiana*: 20'-40' ht., 15'-30' sp. Adaptable to soil conditions, acidic soil and full sun.
WHITE SPRUCE-*Picea glauca*: 35-50' ht. 15'-20' sp. Adaptable to soil conditions, acidic soil and full sun.


Red Oak


Fringe Tree


Virginia Pine

H. IMPLEMENTATION



IMPLEMENTATION GUIDELINES & ACTION PLAN

COMPREHENSIVE PARKS, RECREATION, AND OPEN SPACE PLAN UPDATE
Definitions
VISION – Long Range Vision *To provide a comprehensive system of quality parks, recreation facilities, open spaces and trails while offering diverse programs to promote healthy life styles, encourage community involvement and foster environmental stewardship.*
MISSON – Direction and Purpose of the Agency *To provide quality parks and recreation facilities, open spaces and trails, and to offer diverse programs that improve quality of life, engage the community and protect the environment.*
PURPOSE – *To promote healthy lifestyles, encourage community involvement, and foster environmental stewardship.*
GOALS – global outcome, what is being accomplished *Specific goals listed in areas of Land, Facilities, Connections, Sustainability and Recreation Department*
OBJECTIVES – "Measurable" Statements that lead to the accomplishment of the goal *Action Items that follow each of the recommended goals*



I GOAL: Provide an equal distribution of recreation land throughout North Whitehall Township providing park access to all residents

(Reflects Plan Goals A & C: Update Demographic and Land use data, Meet or Exceed LVPC Recreation Land Goal)

ACTION ITEM 1. PURCHASE LAND TO MEET CURRENT AND FUTURE RECREATION NEEDS, PROVIDING SAFE ACCESS TO PARKS FOR ALL	
STEPS	Time-Frame
Work with landowners of identified parcels, including fire companies and the school district, to enter into Right of First Refusal Agreements to maintain recreation land currently available to the Township.	Months 0-24
Establish a goal for recreation land acres based on population, using NPRA average of 8.7-acres per 1000 residents or LVPC recommendation of 6-acres per 1000 residents.	Months 0-24
Follow recommendations of the Comprehensive Plan to create an Official Township Map	Months 0-24
Use Service Area map to prioritize recreation land target parels in areas outside of the 10-minute walk service areas and closest to larger population centers.	Months 0-24
Consider best uses to identify potential recreation lands based on their suitability for active or passive recreation or conservation facilities	Months 0-24
Consider purchase of isolated pockets of farmland, vacant land, paper streets, or easements for use in creating connections or open space.	Months 0-24
Consider Heleva Landfill Site as future recreation land. Research community success stories.	Months 0-24
Coordinate with Recreation Board for fund raising and community awareness	Months 0-24

★ **PRIORITY ACTION.**

Explore potential to purchase scrap yard property on Sand Spring Road and Chuck Wagon Drive In property on Mauch Chunk Road

Superfund Site Remediation is regulated by the U.S. Environmental Protection Agency, (EPA). The EPA guides clean-up and monitoring and creates a plan for re-development of the site when clean up activites are close to compatible with the use that the site is zoned for. The Superfund Redevelopement Initiative provides case studies in each area of the country that illustrate re-use and redevelopment successes. The BoRit Asbestos Superfund Site in Whitpain Township, Montgomery County, is a 32-acre site that is re-used as a waterfowl preserve, with future plans for a public park and open space as clean up continues. The re-use plan for this site was guided by a community advisory group who recieved the EPA's Citizen Excellence in Community Involvement Award.

I Goal: Equal Distribution of Recreation Land

ACTION ITEM 2. PRESERVE AND PROTECT LAND FOR CONSERVATION AND OPEN SPACE	
STEPS	Time-Frame
Establish reasonable and sustainable goals for a percentage of Township land to be preserved as open space.	Months 0-24
Add high value conservation lands to Township maps using state, regional, and local data bases. Map critical habitat for threatened or endangered species, riparian corridors, wetlands, woodlands and steep slopes.	Months 0-24
Work with existing land owners to preserve and protect riparian corridors following the PA DEP guidelines presented in this report.	Years 2-5
Require Township Planning Commission to reference conservation lands mapping when considering development requests and the impact of the proposed development. Require developers to provide accurate assessments of environmental impacts to critical habitats, and verify developer paid assessments with Township assessments.	Months 0-24
Work with Open Space Board to identify lands that are fallow, vacant, abandoned, or neglected for purchase consideration. Small parcels can be useful in creating a network of green corridors throughout the Township, and providing a safe transportation network for wildlife.	Months 0-24
Research methods to replace municipal tax base lost when closing open space land to development.	Years 2-5
Educate the public about the benefit conservation lands provide to the community, including economic, health and water quality benefits.	Months 0-24
Provide access to conservation/open space lands for public environmental education and/or passive recreation uses. Partner with environmental groups to provide programs and events.	Years 2-5

PRIORITY ACTION.

Strengthen ordinances and zoning regulations to protect riparian buffers, steep slopes, woodlots and other sensitive habitats.

I Goal: Equal Distribution of Recreation Land

ACTION ITEM 3. MONITOR RECREATION LAND NEEDS AND LAND LOST TO DEVELOPMENT	
STEPS	Time-Frame
Monitor progress of land use goals as recommended by this report	Seasonally
Review data used to guide recreation decision making on 5-year cycle; population and demographic trends, athletic program enrollment, athletic field needs, new trending facilities. Coordinate this work with Recreation Board members and compare with collected program participant responses.	On Going Process
Update Parks, Recreation and Open Space Plan on 10-year cycle	On Going
Update land use, conservation and recreation maps annually. Use maps to plan for equal distribution of recreation opportunity throughout the Township	Annually

Funding Opportunities	
Grant Program	Program Area
DCNR Grants	Community Recreation and Conservation Planning
	Land Acquisition and Conservation
	Riparian Forest Buffer
DCED Grants	Greenways, Trails and Recreation Program (GTRP)
The Land and Water Conservation Fund (LWCF)	State and Local Assistance Program
The Conservation Fund	Land Conservation of Recreation Areas



II GOAL: Provide safe, accessible and well-maintained recreation facilities and opportunities throughout the Township

(Reflects Plan Goals B & E: Recreation Opportunities Analysis, Determine current and future recreation needs of residents)

ACTION ITEM 1. PLAN NEW RECREATION FACILITIES IDENTIFIED IN PUBLIC PARTICIPATION PROCESS	
STEPS	Time-Frame
Prioritize facility development based on public priority, implementation time and cost. Balance improvement projects and new development projects.	Months 0-24
Balance recreation projects throughout the Township using recreation service area mapping to ensure equal distribution of facilities and recreation opportunities.	Years 2-5
Create a capital improvements budget to provide a consistent municipal funding stream to be used for implementation of recreation improvements.	Months 0-24
Form relationships with funding agencies, state government leaders and media outlets to promote awareness of recreation projects.	Months 0-24
Balance recreation, conservation, and sustainability in park planning and development efforts.	Years 2-5
Create sustainable development plans using environmental firms to assess, plan, implement and monitor wildlife support areas, engineering firms to manage storm water naturally and support environmental goals.	Years 2-5

ACTION ITEM 2. PLAN FOR APPROPRIATE FACILITY DEVELOPMENT ON NEW LAND	
STEPS	Time-Frame
Create Master Site Development Plans for all newactive or passive recreation lands working with consultant teams.	Years 2-5
Develop Conservation Management Plans for new lands to be preserved as open space.	Years 2-5
Equip Township recreation planners with information on standard recreation facility sizes, grade requirements, support facilities, parking, access and utility needs to assist with land assessment.	Years 5-10
Implement Life-Cycle costing to prepare for facility upgrades or replacements.	Months 0-24
Seek partnership opportunities for funding and implementation support to accomplish costly recreation goals. Recreation Board may serve to provide public outreach to support Township's recreation goals.	On Going Process

II Goal: Distribute Facilities Equitably throughout the Township

ACTION ITEM 3. PLAN FOR FUTURE RECREATION TRENDS	
STEPS	Time-Frame
Subscribe to National Recreation and Parks Association for current recreation trends, sustainability initiatives, operations and programming insights.	Months 0-24
Utilize Recreation Planning documents to monitor progress towards goals.	Continuous
Coordinate with Recreation Board to track recreation interests of residents, to generate community support and to form partnerships to accomplish goals.	Continuous
Require ADA compliance and Universal Design standards in park facility design and implementation projects.	Months 0-24
Use Capital Development budget to determine feasibility and priorities	Months 0-24
Create maintenance plan that ensures staff and equipment are available to maintain new facilities. Offer staff training for natural vegetation and conservation land management, splash pad and aquatics facility maintenance etc. prior to implementation, for advance insight into maintenance and sustainability needs.	Years 2-5

★ **PRIORITY ACTION.**
Develop Master Site Plan for Neffs Valley Park

Funding Opportunities	
Grant Program	Program Area
DCNR Grant	Park Rehabilitation and Development
	Community Recreation and Conservation Planning
DCED Grant	Greenways, Trails and Recreation Program (GTRP)
National Recreation and Park Association	The Skatepark Project Grants
Keystone Fund	Conservation and Recreation Grants

Partnership Opportunities
Carbon Lehigh Intermediate Unit (CLIU)



III GOAL: Promote sustainability and combat future impacts of climate change

(Reflects Plan Goal D: Identify how parks can promote climate resiliency)

ACTION ITEM 1. PROTECT NATURAL RESOURCES AND CRITCAL HABITATS	
STEPS	Time-Frame
Protect woodlands, riparian corridors, steep slopes and critical habitats from development with strengthened codes and ordinances, land acquisition and public support and education.	Continuous
Reduce mowed lawn and impervious surfaces on municipal lands. Work with engineers to design storm water management systems that support wildlife.	Years 2-5
Convert mowed lawn not used for recreation purposes to wildlife habitat. Install interpretive educational signs to explainbenefits of changes to the landscape and aesthetic.	Months 0-24
Maintain and enhance wildlife corridors and/or habitat using native plant species. Create plans guided by environmental professionals that support indigenous or threatened plant and animal populations. Explore use of native tree species comfortable in higher temperature zones as recommended by US Department of Forestry.	Years 2-5
Create sustainability plans for management of natural areas to reduce presence of invasive vegetation pests, exploring measures such as Integrated Pest Management and organic treatments. Consult with environmental professionals.	Years 2-5

ACTION ITEM 2. PROTECT PARK VISITORS FROM CLIMATE EXTREMES	
STEPS	Time-Frame
Provide shade at existing parks to ensure that facilities such as play equipment and benches do not heat to uncomfortable levels in the sun	Months 0-24
Provide public access to water, install cooling stations and plant clusters of native shade trees and evergreens at the parks	Years 2-5
Select equipment that conserves water during operations	Years 2-5
Design structures to take advantage of summer breezes, sun angles and natural light	Years 2-5

III Goal: Promote Sustainability and Combat Impacts of Climate Change	
ACTION ITEM 3. PROMOTE SUSTAINABILITY IN FACILITY DESIGN AND MATERIALS SELECTION	
STEPS	Time-Frame
Select compostable toilet facilities, supply hand sanitizer stations vs. sinks, install water metering or sensor driven faucets to conserve water use	Years 2-5
Source materials locally, consider transportation distances and fuel consumption to increase sustainability	Months 0-24
Select supplies and products that are sustainably produced, contain recycled components and can be recycled or composted at the end of their useful life.	Months 0-24

Funding Opportunities	
Grant Program	Program Area
DCNR Grant	Community Recreation and Conservation Planning
	Riparian Forest Buffer
DCED Grant	Greenways, Trails and Recreation Program (GTRP)
The Nurture Nature Center	
Lehigh County Conservation District	

Partnership Opportunities
Penn State Extension
Local universities and colleges
Local wildlife support groups/non-profits
Land Trusts and Environmental Professionals



IV GOAL: Provide creative and unique programs to meet the needs of residents of all ages and abilities

(Reflects Plan Goal F: Determine current and future recreation programming needs)

ACTION ITEM 1. DEVELOP LIST OF PROGRAMS THAT CAN BE ADEQUATELY STAFFED AND HOSTED WITH EXISTING RESOURCES	
STEPS	Time-Frame
Reference planning documents to prioritize programs most requested by residents, i.e. Community days, Nature walks, Walking Meet-ups, Park clean-up events, Outdoor Performances, and Senior Wellness Events.	Months 0-24
Create programs for target populations using Recreation Board, National Recreation and Park Association and community outreach as resources	Months 0-24
Create partnerships for alternate indoor facility options; i.e. fire halls, private recreation facilities, adjoining municipality spaces, school district facilities.	Months 0-24
Consider vacant buildings or barn conversion to expand indoor facility availability	Months 0-24

ACTION ITEM 2. BUILD PARTICIPATION LEVELS	
STEPS	Time-Frame
Offer free introductory sessions for new programs	On Going
Encourage participants to bring friends, offering incentives such as a free class, fee reduction or coupon from local business sponsors	On Going
Survey participants for post program feedback and respond to feedback with program improvements. Thank participants for recommendations.	On Going
Market programs using all available media outlets. Newsletter was marketing material referenced by survey respondents as preferred information source. Organize press releases to highlight popular programs.	On Going
Develop strategies to reach target populations. Reference NRPA resources for targeted marketing tips.	On Going



IV Goal: Provide Creative Unique Programs

ACTION ITEM 3. CREATE PARTNERSHIPS TO PROVIDE QUALIFIED PROGRAMS	
STEPS	Time-Frame
Partner with adjacent municipalities to share facilities and resources.	Continuous
Partner with groups serving special populations; Special Olympics, Senior and Youth centers, Family shelters, etc.	Continuous
Engage local qualified instructors or special interest groups to run programs (i.e.- Trout Unlimited - fishing at Johnson's Pond, Local Audobon - Bird walks)	Continuous
Partner with private recreation facilities to offer programs - helps private facility build clientele and provides potential funding partner for Township. (ie., gun safety at LV Sporting Clays, boating safety at Ranger Lake…)	Continuous
Create of Memorandum of Understanding with school district and LCCC for use of facilities during non-school hours	Months 0-24

ACTION ITEM 4. CREATE AN E-SPORTS PROGRAM	
STEPS	Time-Frame
Reach out to communities offering e-sports to research program needs, costs and anticipated revenues	Months 0-24
Engage college or high school student or IT professionals as volunteers to assist with set up and program supervision	Months 0-24

ACTION ITEM 5. ESTABLISH COST RECOVERY BASED PROGRAM PRICING	
STEPS	Time-Frame
Provide high quality unique programs that residents respond well too	Continuous
Perform market analysis to create fair pricing by comparing with similar offerings, NRPA data, and client reactions. Aim for 25% cost recovery.	Continuous
Analyze direct and indirect program costs	Continuous
Offer reduced rates as applicable to provide equitable access to programs	Continuous
Raise rates when necessary with advance notice and justification	Continuous

Funding Opportunities	
Grant Program	Program Area
NRPA	Lists current programming grant opportunites

Partnership Opportunities
Private recreation providers (Lehigh Valley Sporting Clays, Ranger Lake)

V GOAL: Provide and strengthen connections within the Township and to regional connections

(Reflects Plan Goal G: Provide and strengthen community connections)

ACTION ITEM 1. STRENGTHEN WALKABILITY WITHIN VILLAGES	
STEPS	Time-Frame
Assess existing sidewalk conditions in villages. Create an improvements plan for safe accessible sidewalk systems, ADA compliant crosswalks, street trees, signalization and signs	Months 0-24
Prioritize connection improvements in each village that access existing recreation facilities	Months 0-24
Implement façade programs and funding source for sidewalk and pedestrian improvements to initiate the revitalization of village centers. May encourage residents to purchase older village properties vs newly developed	Years 2 - 5
Work with PennDOT to create slow speed zones and safe pedestrian and bicycle travel areas and crossings	Continuous
Research revitalization funding programs to restore vibrancy of village centers	Continuous

★ **PRIORITY ACTION.**

Prioritize connections in villages with existing recreation facilities and provide safe connections along busy road corridors.

ACTION ITEM 2. CREATE MAP OF SAFEST POTENTIAL ALTERNATIVE TRANSPORTATION ROUTES	
STEPS	Time-Frame
Map alternative transportation routes for on and off-road multi-use trails. Select roads that offer opportunities for widening with minimal grading.	Months 0-24
Search GIS and ownership records for paper streets and easements that are potential alternative transportation corridors. Does Brader Lane continue to Neffs Laurys Road as a paper street?	Months 0-24
Consider potential routes for and needs of equestrian riders.	Months 0-24
Develop guidelines for on-road and trail use of electric scooters, skateboards, roller bladers and other mobility devices. These may dictate a need for additional trail width, special lanes, speed restrictions, right-of-way rules to protect pedestrians or dogs, and penalties for violators	Months 0-24
Provide trail support facilities such as parking areas, seating, shade, cooling stations, restrooms and wayfinding signs.	Years 2-5

V Goal: Provide Community Connections

ACTION ITEM 3. PRIORITIZE CONNECTIONS TO EXISTING TOWNSHIP AND LOCAL COUNTY RECREATION FACILITIES	
STEPS	Time-Frame
Prioritize implementation by existing conditions, development obstacles, potential number of users and costs	Months 0-24
Strenghten ordinances and zoning laws that require developers to provide safe connections designed to proper grade and width for a multi-use trail through new developments.	Years 2-5
Work with PennDOT to create safe road shoulders on PennDOT roads	Continuous
Work with PennDOT to ensure new bridges are designed with on-bridge or under-bridge accessible routes for pedestrians and cyclists.	Continuous
Work with land owners that have streams on their properties to create conservation greenways with or without trails for alternative transportation	Years 2-5
Work with agricultural land owners to provide D&L access using farm roads and/or utility easements	Years 2-5
Work with PennDOT to develop a safe ped/bike crossing of State Route 145 at Rising Sun Road, including signalization, warning signs, speed tables, slower speed limits, crosswalks, etc.	Years 2-5

★ **PRIORITY ACTION.**
Create off or on road multi-use trail connection between Municipal and Levans Parks.

Funding Opportunities	
Grant Program	Program Area
DCNR Grant	Trail Grants
DCED PA	Greenways, Trails and Recreation Program (GTRP)
	Community Development Block Grant, LSA Grant
Rails to Trails	Referrals and Information on Local Funding Sources
PennDOT	Transportation Enhancement Grants
T-Mobile	Hometown Grants
Lehigh Valley Greenway	Mini Grants

Partnership Opportunities
PennDot
Community Wealth.org

VI GOAL: Plan for Future of Township Recreation Department

(Reflects Plan Goal H: Plan for structure of future recreation department)

ACTION ITEM 1. OPERATIONS - PLAN FOR FUTURE GROWTH AND EXPANSION OF RECREATION FACILITIES AND SERVICES	
STEPS	Time-Frame
Create plans to guide operations; Security and Safety, Capital Improvements, Maintenance, Marketing, Communications Plans	as needed
Train one staff member as a certified playground safety inspector (CPSI).	Months 0-24
Develop Policies and Procedures to meet compliance guidelines, promote energy efficiency, manage events and track processes, improve customer relations, handle partnerships and engage concessionaires for mutual benefit.	as needed
Engage professionals for park and trail planning, feasibility studies, permitting, storm water management and conservation initiatives.	As needed
Equip Recreation Board members with tools and knowledge to provide financial support and community outreach	Months 0-24

ACTION ITEM 2. OPERATIONS & MAINTENANCE - MANAGE PARK LAND, FACILITIES, OPEN SPACES AND TRAILS	
STEPS	Time-Frame
Follow existing plans created for parks and recreation facilities; reference comprehensive plans, park master plans, open space plans and trails plans.	Continuous
Fund the creation of new planning initiatives as needed	Continuous
Track the progress of short, mid and long-term planning goals	Continuous
Use social media outlets to track progress towards goals, and coordinate with Recreation Board for funding support towards goals	Continuous
Track funding sources and potential sources for improvements	Continuous
Prepare annual Capital Improvements Budget	Annually
Support maintenance staff with equipment and training necessary to maintain new facilites	as needed
Support athletic associations with field maintenance to provide quality fields and facilities for Township youth matching those available to neighboring communities.	Continuous

VI Goal: Recreation Department Structure

ACTION ITEM 3. MANAGE FINANCES TO SUSTAIN DEPARTMENT	
STEPS	Time-Frame
Request budget increases to support staffing needs, competitive salaries, program supplies, facility rentals, equipment purchases, planning or capital improvements budgets.	Annually
Use cost saving strategies for purchase of supplies, equipment and services. Negotiate with suppliers and rental rates, work with qualified volunteers.	Continuous
Track revenue and income streams for department budgeting	Continuous
Create cash management procedures - per revenue source, event, and site	Continuous
Work with Recreation Board to secure sponsorships, build relationships with local and regional businesses, create a strong team of volunteers, and provide community outreach	Continuous
Collect data on attendance, room counts, cash pays, staff needs, facility costs and maintenance costs per program or event to support cost increase requests.	Continuous

★ **PRIORITY ACTION.**

Raise Recreation Development Fees to be competitive with those of adjoining municipalities.

ACTION ITEM 4. PROVIDE ADEQUATE QUALIFIED STAFF TO MEET THE NEEDS OF THE DEPARTMENT	
STEPS	Time-Frame
Recruit, train, supervise, reward, and engage employees to improve retention. Have a path of upward mobility available.	Continuous
Pay competitive salaries. Research what other communities are offering for similar position and skills.	Continuous
Support staff with training in areas of interest, cover membership costs, certificates, seminars or continuing education	as needed
Work with Recreation Board to coordinate and train volunteers.	Continuous

Funding Opportunities	
Grant Program	Program Area
Pennsylvania Recreation & Park Society (PRPS)	RecTAP Grants
Partnership Opportunities	
National Recreaiton and Parks Assocation (NRPA)	

VII GOAL: Create and support a strong effective Recreation Board

(Reflects Plan Goal I:)

ACTION ITEM 1. IDENTIFY ROLE OF RECREATION BOARD	
STEPS	Time-Frame
Formalize the relationship between the Recreation Board and the Township Recreation Department. These entities should share goals and priorities.	Months 0-24
Create policies and procedures to guide the formation of the Recreation Board, that define its purpose, relationship with Township, number of members, roles and responsibilities during planning and development, and handling of finances.	Months 0-24
Identify methods of communication and management of funding between groups.	Months 0-24

ACTION ITEM 2. SUPPORT RECREATION BOARD MEMBERS	
STEPS	Time-Frame
Provide initial financial support for Recreation Board by paying National Association of Park Foundation membership fees, training fees, seminars, and marketing materials needed.	Months 0-24
Encourage public participation and transparency in all Recreation Board activities and initiatives. Recreation Board should be an active partner in Township recreation planning, with access to planning documents.	Continuous
Recognize board members, volunteers and accomplished goals in communications with residents.	Continuous
Offer board members discounted programs and host recognition events	as needed
Work with recreation board to establish yearly goals and objectives that align with Township recreation goals and objectives.	Annually

PRIORITY ACTION

Establish a Recreation Board to support the recreation goals of the Township through fundraising, creation of partnerships, and volunteer engagement.

Partnership Opportunities
National Association of Park Foundations (NAPF)
Foundation for Sustainable Parks & Recreation (FSPR)

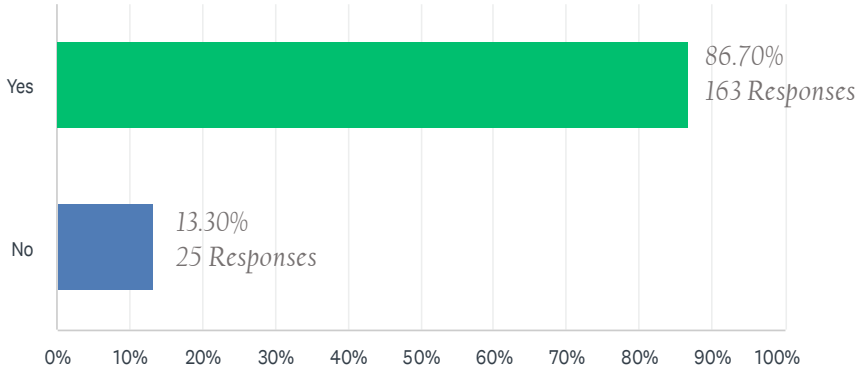
APPENDIX

NORTH WHITEHALL TOWNSHIP PUBLIC SURVEY SUMMARY RESULTS

A public survey was made available to the public on-line and as a paper version from October 25, 2021 to December 15, 2021. 188 respondents took the survey. The purpose of this survey was to inform the Committee as to how the parks are currently used, what facilities are most used, and how satisfied or not residents are with available facilities and maintenance. Demographic information was also collected. The results of that survey are shown below.

Q1 Have you and/or any members of your household visited any of the Township's Parks in the past 12 months? If you answer No, please skip to Question 4.

Answered: 188 Skipped: 0



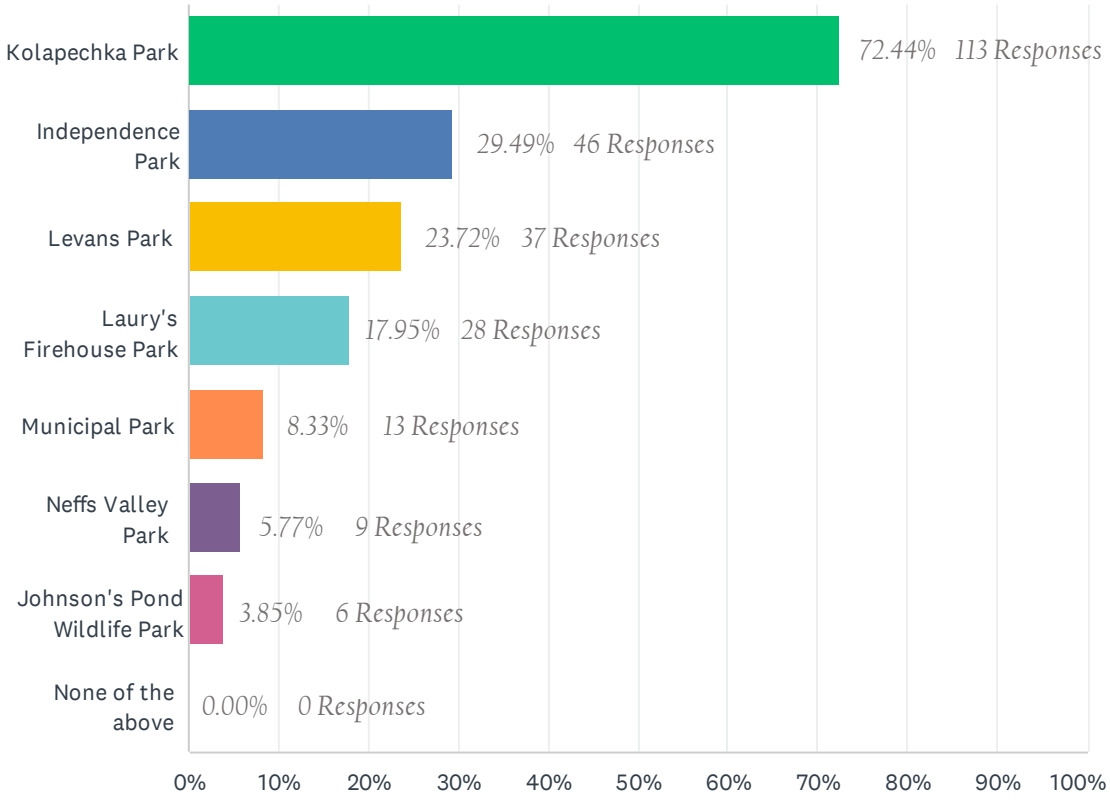
ANSWER CHOICES	RESPONSES	
Yes	86.70%	163
No	13.30%	25
Total Respondents: 188		

Q2 How would you rate your level of satisfaction with maintenance at the Township's parks?

Answered: 162 Skipped: 26

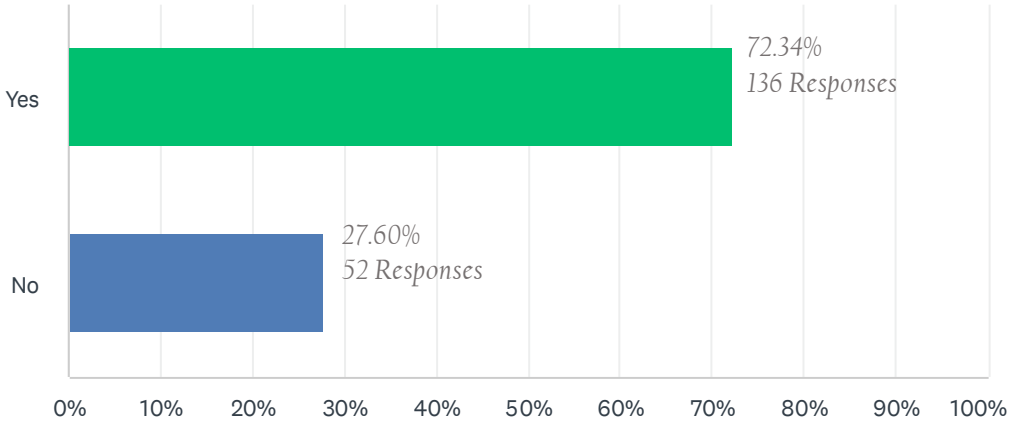
	JOHNSON'S POND WILDLIFE PARK	LAURY'S FIREHOUSE PARK	INDEPENDENCE PARK	NEFF'S VALLEY PARK	LEVANS PARK	MUNICIPAL PARK	KOLAPECHKA PARK
Very satisfied	12.50% 16	28.13% 36	39.84% 51	10.16% 13	40.63% 52	18.75% 24	81.25% 104
Satisfied	12.96% 7	20.37% 11	62.96% 34	5.56% 3	25.93% 14	18.52% 10	44.44% 24
Neither satisfied nor dissatisfied	68.97% 20	55.17% 16	24.14% 7	44.83% 13	48.28% 14	55.17% 16	13.79% 4
Dissatisfied	15.38% 2	0.00% 0	15.38% 2	76.92% 10	7.69% 1	7.69% 1	7.69% 1
Very dissatisfied	0.00% 0	0.00% 0	0.00% 0	100.00% 7	0.00% 0	0.00% 0	0.00% 0

Q3 Which of the Township's Parks do you and/or members of your household visit most frequently?



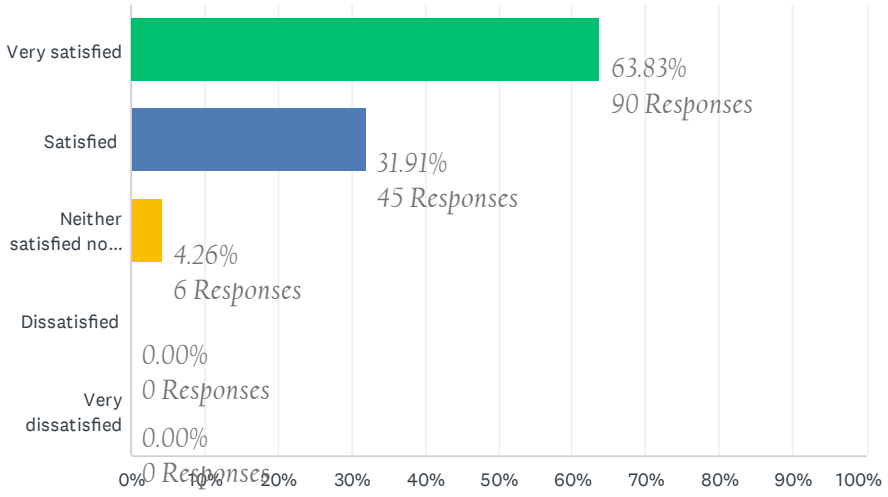
Q4 In the past 12 months, have you and/or members of your household visited the Ironton Rail-Trail or the Trail head parking area in the Township ? If your answer is NO, please skip to Question 6.

Answered: 188 Skipped: 0



Q5 How would you rate your level of satisfaction with the maintenance of the trail and trail head parking area in the Township?

Answered: 141 Skipped: 47



ANSWER CHOICES	RESPONSES	
Very satisfied	63.83%	90
Satisfied	31.91%	45
Neither satisfied nor dissatisfied	4.26%	6
Dissatisfied	0.00%	0
Very dissatisfied	0.00%	0

Q6 How would you and members of your household rate your level of satisfaction with the available recreation opportunities and facilities at the Township's Parks? Please respond for all parks that you and members of your household visit.

Answered: 168 Skipped: 20

	VERY SATISFIED	SOMEWHAT SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	TOTAL RESPONDENTS
Kolapechka Park	66.42% 89	19.40% 26	8.96% 12	1.49% 2	3.73% 5	134
Independence Park	45.19% 47	35.58% 37	16.35% 17	1.92% 2	0.96% 1	104
Levans Park	43.21% 35	20.99% 17	28.40% 23	2.47% 2	4.94% 4	81
Laury's Firehouse Park	43.06% 31	23.61% 17	33.33% 24	1.39% 1	0.00% 0	72
Neffs Valley Park	15.25% 9	16.95% 10	44.07% 26	11.86% 7	11.86% 7	59
Municipal Park	24.53% 13	28.30% 15	43.40% 23	3.77% 2	0.00% 0	53
Johnson's Pond Wildlife Park	21.15% 11	17.31% 9	50.00% 26	11.54% 6	0.00% 0	52

Q7 Over the past 12 months, which of the following recreation activities available in the Township have you or members of your household visited? If you have not visited any of these facilities, skip to Question 8.

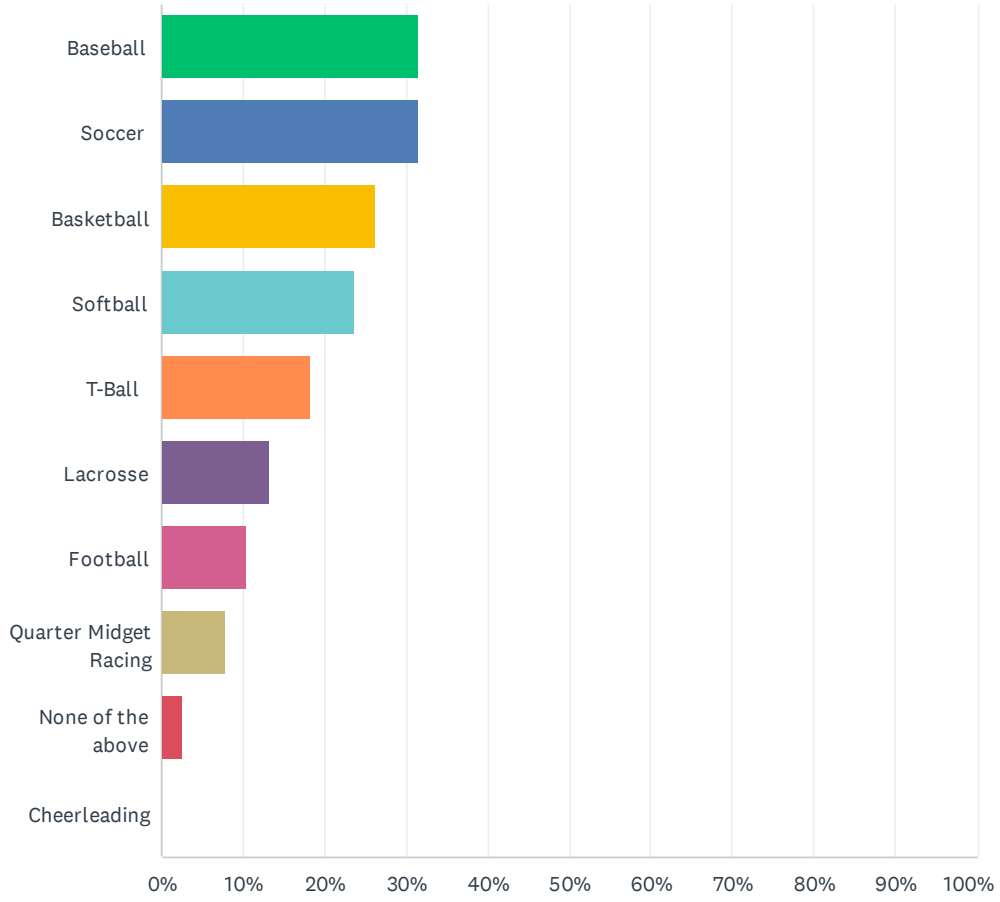
Answered: 170 Skipped: 18

ANSWER CHOICES	RESPONSES	
Ironton Rail Trail	74.71%	127
D&L Trail	53.53%	91
Paved Paths in Parks	51.18%	87
Hiking Trails at Trexler	45.29%	77
Playgrounds	38.82%	66
Kolapechka Accessible Playground	30.59%	52
Dog Park	18.82%	32
Basketball Courts	14.71%	25
Free Pavilions in the Township Parks	13.53%	23
Picnicking	11.76%	20
Baseball Fields	10.00%	17
Disc Golf Course	8.24%	14
Soccer Fields	7.65%	13
D&L Boat Launch	7.06%	12
Fishing	7.06%	12
Softball Field	6.47%	11
Mountain Biking at Trexler	5.88%	10
Lacrosse Field	5.29%	9
Sledding	4.71%	8
Rented Pavilion Independence Park	4.12%	7
Cross Country Skiing	4.12%	7
Have Not Visited	0.00%	0
Total Respondents: 170		



Q8 Over the past 12 months, which types of organized athletic activities have you and/or members of your household participated in? If you have not participated in organized athletics, please skip to Question 10.

Answered: 38 Skipped: 150



ANSWER CHOICES	RESPONSES	
Baseball	31.58%	12
Soccer	31.58%	12
Basketball	26.32%	10
Softball	23.68%	9
T-Ball	18.42%	7
Lacrosse	13.16%	5
Football	10.53%	4
Quarter Midget Racing	7.89%	3
None of the above	2.63%	1
Cheerleading	0.00%	0
Total Respondents: 38		

Q9 Please select all barriers that prevent you/and or members of your household from visiting the Township's parks or using Township Park facilities.

Answered: 148 Skipped: 40

ANSWER CHOICES	RESPONSES	
We experience no barriers that prevent us from using the parks	42.57%	63
Lack of Permanent Rest Room Buildings	33.78%	50
We do not know where all of the parks are	16.89%	25
Not enough shade	15.54%	23
Facilities do not provide electricity or running water	8.78%	13
Facilities I/we are most interested in are not available	6.76%	10
No Programs of Interest	6.08%	9
There is a lack of security	4.73%	7
Facilities are not well maintained	3.38%	5
Parks are closed when I/we have time to visit	2.70%	4
Lack of universal design choices	2.03%	3
Poor Access to Facilities	1.35%	2
Lack of WiFi	1.35%	2
Lack of Transportation	0.68%	1
Total Respondents: 148		

Q10 Which Recreation Facilities would you/and or members of your household want to see developed in the Township's existing parks, or on new recreation lands the Township may develop in the future?

Answered: 173 Skipped: 15

ANSWER CHOICES	RESPONSES	
Outdoor Swimming Pool	35.84%	62
Pickleball Courts	32.95%	57
Nature Education/Natural Areas	29.48%	51
Outdoor Ice Skating	28.32%	49
Winter Activities	27.75%	48
Community Gardens	27.75%	48
Community Center	26.59%	46
Outdoor Fitness Equipment	19.65%	34
Additional stream access	16.76%	29
Splash Pad	16.76%	29
Tennis Courts	13.87%	24
Indoor Basketball	13.87%	24
Additional pond access	13.29%	23
Playground Ropes Equipment	11.56%	20
Community Gathering Space	10.98%	19
The Township does not need additional recreation facilities.	9.25%	16
Bocce, Quoits, Horseshoes	8.67%	15
Youth Fitness Equipment	8.67%	15
Skate Park	8.09%	14
Open Lawn for Pick Up Games	8.09%	14
Lawn Volleyball Courts	7.51%	13
Drone/model plane flying	7.51%	13
Fishing Pier	6.94%	12
Indoor Racquet Sports	6.94%	12
A Pump Park/BMX Dirt Bike Course	5.78%	10
Gaga Ball Pit	2.89%	5
Mini Pitch Soccer	0.00%	0
Total Respondents: 173		

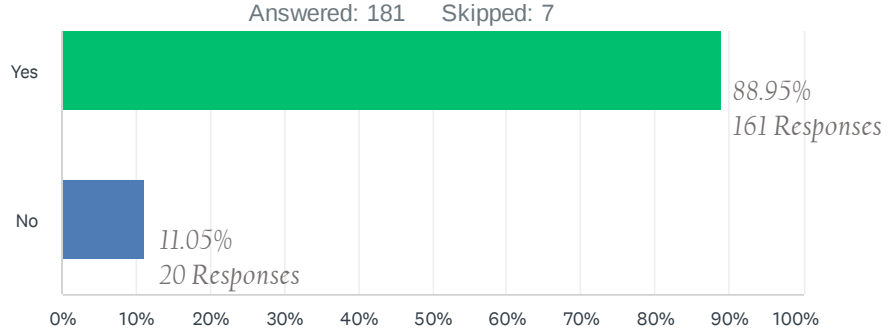
Q11 If you selected facilities in Question 11 above, which would you/and members of your household use most often? Please write-in the three top facilities you would most likely use.

Answered: 120 Skipped: 68

ANSWER CHOICES	RESPONSES	
Most Often	100.00%	120
Second Most Often	87.50%	105
Third Most Often	67.50%	81

Q12 Would you/and or members of your household support environmental protection or enhancement within the Township's Parks? This would be on land not currently used for active recreation.

Answered: 181 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	88.95%	161
No	11.05%	20
TOTAL		181

Q13 If you answered YES to Question 13 above, how would you and/or members of your household rank the following conservation efforts? Please rank from 1-5/6, with 1 being most important. Include any write-ins in your ranking

Answered: 153 Skipped: 35

	1	2	3	4	5	6	TOTAL RESPONDENTS
Bird Habitat	29.66% 43	29.66% 43	19.31% 28	10.34% 15	7.59% 11	6.90% 10	145
Pollinator Habitat	46.15% 66	20.28% 29	18.18% 26	7.69% 11	4.90% 7	6.29% 9	143
Wildlife Corridors	35.66% 51	20.98% 30	25.17% 36	10.49% 15	7.69% 11	3.50% 5	143
Native Vegetation on Slopes to Steep for Recreation	19.72% 28	14.08% 20	19.72% 28	27.46% 39	18.31% 26	4.93% 7	142
Riparian Buffers	16.67% 20	12.50% 15	16.67% 20	18.33% 22	34.17% 41	5.83% 7	120
Other Conservation Measure	18.99% 15	7.59% 6	10.13% 8	5.06% 4	8.86% 7	49.37% 39	79

Q14 If you and/or members of your household have participated in recreation programs offered by the Township, how would you rate your level of satisfaction with those programs? If you have not participated, please skip to Question 16.

Answered: 34 Skipped: 154

	VERY SATISFIED	SOMEWHAT SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	SOMEWHAT DISSATISFIED	VERY DISSATISFIED	TOTAL
Senior Day	39.13% 9	21.74% 5	34.78% 8	4.35% 1	0.00% 0	23
Veterans Day	23.08% 3	7.69% 1	53.85% 7	7.69% 1	7.69% 1	13
Summer Day Camp	23.53% 4	29.41% 5	41.18% 7	0.00% 0	5.88% 1	17
Yoga	43.75% 7	12.50% 2	43.75% 7	0.00% 0	0.00% 0	16

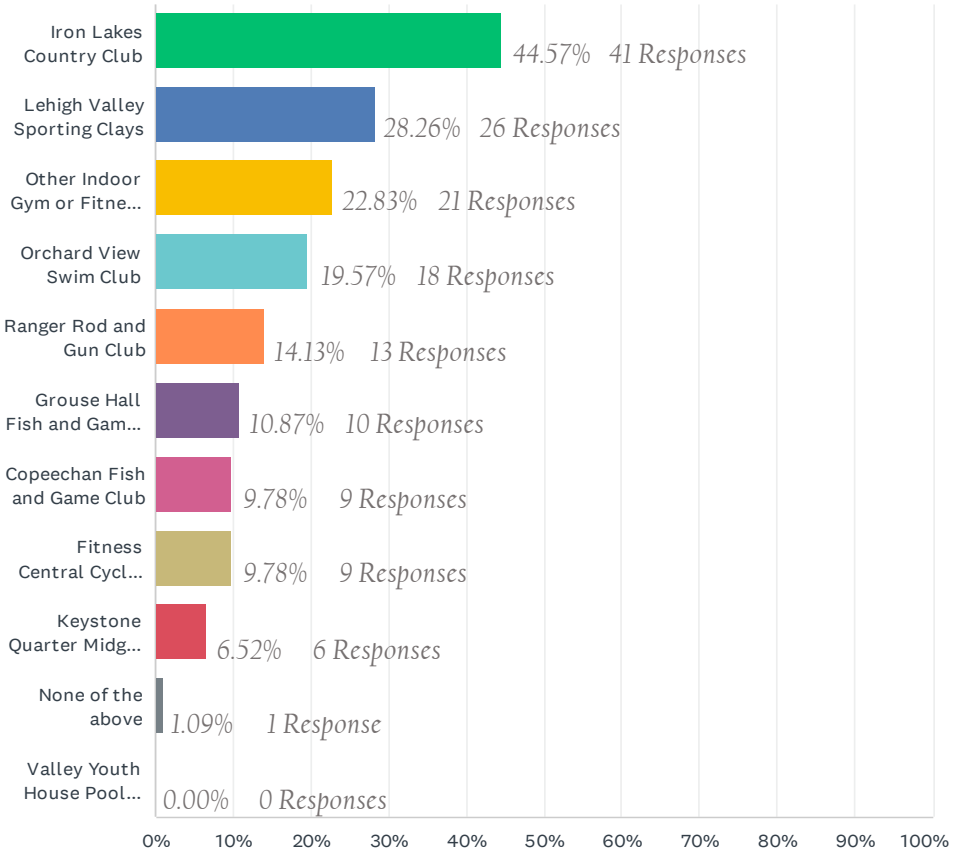
Q15 What types of programs would you and/or members of your household participate in if offered? Please select all that apply.

Answered: 167 Skipped: 21

ANSWER CHOICES	RESPONSES	
Community Days	47.90%	80
Nature Walks	46.71%	78
Walking Programs	41.32%	69
Indoor Fitness Programs	29.94%	50
Park Clean Up Events	29.94%	50
Outdoor Performance Venues	29.34%	49
Art Programs	25.75%	43
Aquatic Activities	25.75%	43
Senior Wellness Programs	25.75%	43
Support A Cause Days at a Park	22.75%	38
Bird Watching Programs	22.16%	37
Adult Sports Leagues	19.76%	33
Indoor Climbing Venues	18.56%	31
After School Programs	14.97%	25
Dog Agility Programs	13.17%	22
Adult Obstacle Races	11.98%	20
Geocaching	11.38%	19
Martial Arts	5.39%	9
Would not participate.	2.99%	5
E-Sports	2.99%	5
Bio-Blitz Events	1.80%	3

Q16 Do you and or members of your household belong to or visit any of the following private recreation facilities? Please select all that apply. If you do not belong to or visit these private facilities, please skip to Question 18.

Answered: 92 Skipped: 96



ANSWER CHOICES	RESPONSES	
Iron Lakes Country Club	44.57%	41
Lehigh Valley Sporting Clays	28.26%	26
Other Indoor Gym or Fitness Classes	22.83%	21
Orchard View Swim Club	19.57%	18
Ranger Rod and Gun Club	14.13%	13
Grouse Hall Fish and Game Association	10.87%	10
Copeechan Fish and Game Club	9.78%	9
Fitness Central Cycling Events	9.78%	9
Keystone Quarter Midget Race Club	6.52%	6
None of the above	1.09%	1
Valley Youth House Pool Membership	0.00%	0
Total Respondents: 92		

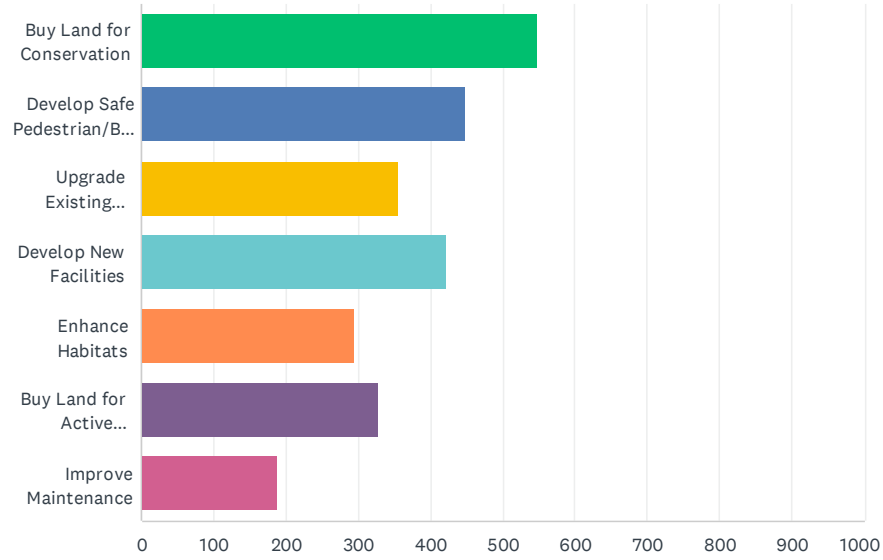
Q17 How do you/and members of your household learn about Township parks, programs, and events? Please select all that apply.

Answered: 173 Skipped: 15

ANSWER CHOICES	RESPONSES	
Newsletter	69.36%	120
Email from Township	35.84%	62
Township Website	31.21%	54
Friends and Family	31.21%	54
Township Social Media Pages	21.97%	38
Not aware of Township Parks or Programs	8.67%	15
Newspaper	8.67%	15
Athletic Associations	8.67%	15
Township Digital Sign	8.09%	14
Total Respondents: 173		

Q18 If an additional 1,000 dollars were available to the Township for Parks, Recreation, and Open Space, how would you allocate the funds? Please write in numbers in relevant categories that add up to 1000 in total.

Answered: 156 Skipped: 32



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Buy Land for Conservation	548	43,800	80
Develop Safe Pedestrian/Bicycle Connections to & between Parks	447	31,284	70
Upgrade Existing Facilities	355	22,368	63
Develop New Facilities	421	21,485	51
Enhance Habitats	295	15,060	51

Q19 When compared with other Township responsibilities and services, how important is it to you and members of your household that the Township plan, maintain, and continues to develop recreation and open space lands?

Answered: 184 Skipped: 4

ANSWER CHOICES	RESPONSES	
Extremely important	57.61%	106
Very important	27.17%	50
Somewhat important	11.41%	21
Not so important	2.17%	4
Not at all important	1.63%	3
TOTAL		184

Q20 Please check one box that best describes where you live:

Answered: 187 Skipped: 1

ANSWER CHOICES	RESPONSES	
Schnecksville	42.25%	79
Orefield	13.37%	25
Route 329/Old Post Corridor	10.70%	20
Clearview/Neffs Laury/Rising Sun Road Corridor	9.63%	18
Laury's Station	6.95%	13
Ironton	5.88%	11
Neffs	4.81%	9
Ormrod	3.21%	6
North of Rising Sun Road	1.07%	2
Ruchsville	1.07%	2
Mauch Chunk Road Corridor	0.53%	1
A neighboring community	0.53%	1
Do not live in North Whitehall Township	0.00%	0
TOTAL		187

Q21 Counting Yourself, how many people are in your household

Answered: 184 Skipped: 4

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Under Age 5	1	22	27
Ages 5-9	1	35	34
Ages 10-14	1	21	28
Ages 15-19	1	40	32
Ages 20-24	1	31	33
Ages 25-34	1	38	36
Ages 35-44	1	65	53
Ages 45-54	1	70	51
Ages 55-64	1	98	68
Ages 65-74	1	95	67
Ages 75 to 84	1	16	19
Over Age 85	0	5	14
Total Respondents: 184			

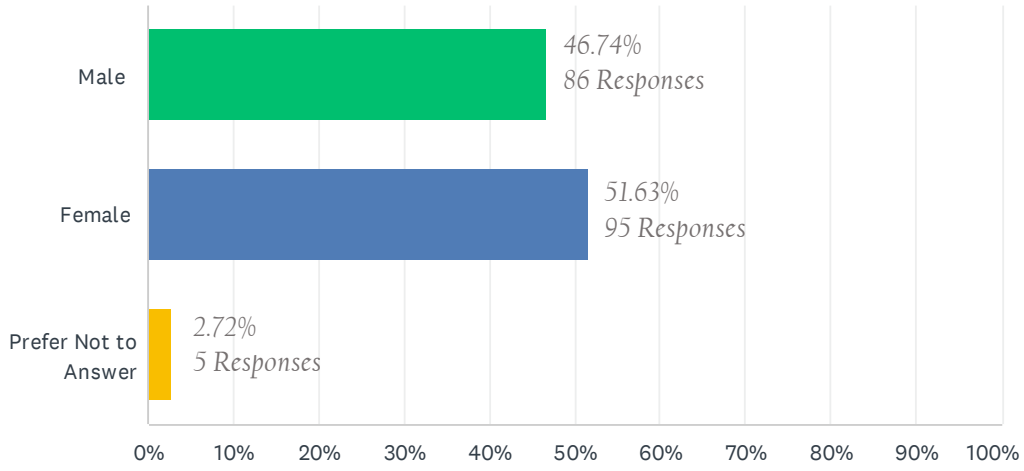
Q22 What is your current age?

Answered: 183 Skipped: 5

ANSWER CHOICES	RESPONSES	
Under 18	0.55%	1
18-29	2.19%	4
30-39	13.11%	24
40-49	16.39%	30
50-59	20.77%	38
60-69	34.97%	64
70-79	10.93%	20
80-89	1.09%	2
90 or older	0.00%	0
TOTAL		183

Q23 What is your gender/or gender you most identify with?

Answered: 184 Skipped: 4



ANSWER CHOICES	RESPONSES	
Male	46.74%	86
Female	51.63%	95
Prefer Not to Answer	2.72%	5
Total Respondents: 184		



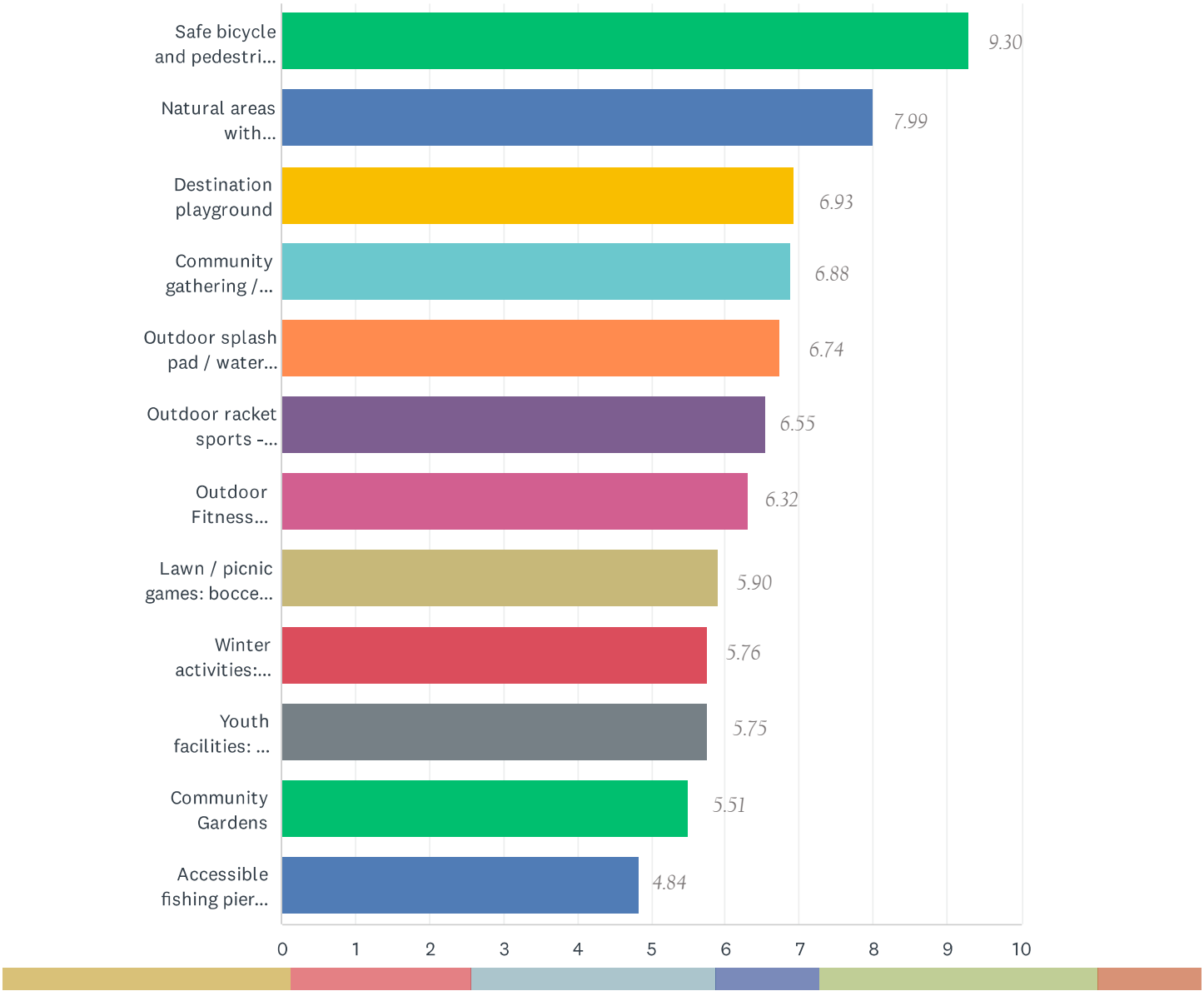
PUBLIC SURVEY 2 - SUMMARY RESULTS

The purpose of the second survey was to get a second opinion of what recreational facilities the public was most interested in. The committee felt there were too few persons at the first public meeting to verify the results of the first survey and requested a second public survey. 227 respondents took this survey, which was available from March 17, 2022 to April 27, 2022 both online and as a paper version. The results of this survey are shown on the following pages.

The committee wanted the facilities presented to fall into two categories dependant upon the degree of implementation required; facilities listed as short-term to mid-term are those that the Township has the land and financial ability to implement within 1 to 10 years, while faciliites listed as long-term are outside of the Township's current available resources to implement.

Q1 Please rank these short to mid-term recreation facilities in the order of importance based on what you or persons in your household would personally use. (1 being most important and 12 being least important) Examples of each facility will be shown below.

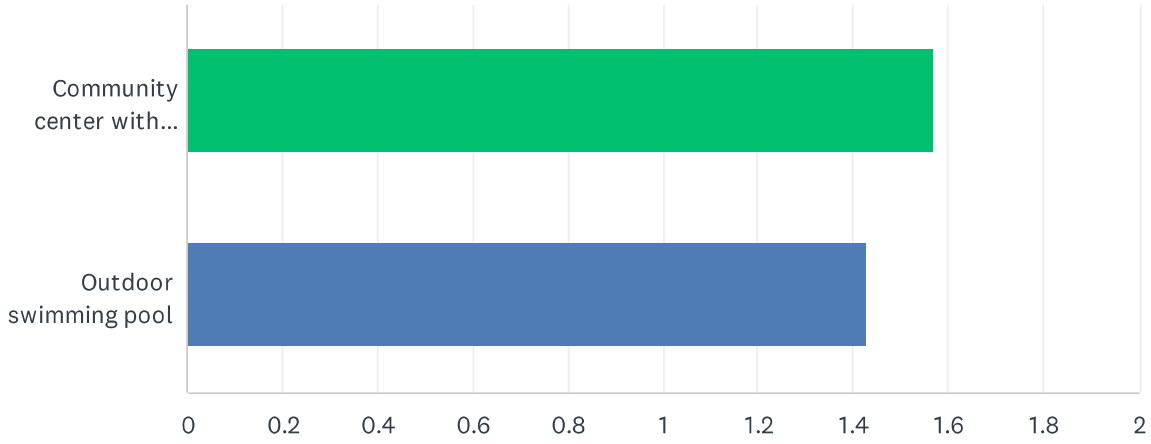
Answered: 225 Skipped: 2



	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	SCORE
Safe bicycle and pedestrian connections between recreation facilities and communities	29.22% 64	21.46% 47	8.22% 18	9.13% 20	5.48% 12	9.13% 20	4.57% 10	2.74% 6	4.57% 10	2.28% 5	1.83% 4	1.37% 3	219	9.30
Natural areas with educational components: meadows, rain gardens, native tree plantings, bat and bird houses	20.55% 45	10.96% 24	10.50% 23	8.22% 18	9.59% 21	6.85% 15	7.76% 17	5.48% 12	5.94% 13	6.39% 14	3.65% 8	4.11% 9	219	7.99
Destination playground	6.82% 15	15.45% 34	5.00% 11	10.45% 23	6.82% 15	9.09% 20	7.27% 16	10.91% 24	9.09% 20	9.09% 20	6.82% 15	3.18% 7	220	6.93
Community gathering / event space	6.76% 15	8.56% 19	9.46% 21	12.16% 27	11.26% 25	9.01% 20	6.31% 14	7.21% 16	8.56% 19	8.11% 18	10.36% 23	2.25% 5	222	6.88
Outdoor splash pad / water feature / cooling stations	9.68% 21	10.60% 23	12.44% 27	6.91% 15	5.07% 11	5.53% 12	7.83% 17	6.45% 14	10.14% 22	10.60% 23	8.76% 19	5.99% 13	217	6.74
Outdoor racket sports - pickleball, tennis courts	12.33% 27	6.85% 15	7.31% 16	8.68% 19	5.94% 13	10.50% 23	10.05% 22	5.94% 13	4.57% 10	7.76% 17	8.22% 18	11.87% 26	219	6.55
Outdoor Fitness Equipment: Obstacle courses, street workout	3.21% 7	5.50% 12	11.01% 24	7.80% 17	8.72% 19	9.63% 21	8.72% 19	12.39% 27	14.68% 32	9.63% 21	5.05% 11	3.67% 8	218	6.32
Lawn / picnic games: bocce, quoits, horseshoes, gaga, P-6	1.36% 3	5.43% 12	5.43% 12	9.95% 22	11.31% 25	8.60% 19	13.57% 30	9.50% 21	6.33% 14	12.67% 28	10.86% 24	4.98% 11	221	5.90
Winter activities: sledding, cross country skiing	2.30% 5	1.38% 3	8.76% 19	8.76% 19	7.37% 16	11.98% 26	12.90% 28	11.52% 25	9.68% 21	7.37% 16	9.68% 21	8.29% 18	217	5.76
Youth facilities: BMX park, skate park, street hockey rink, active lawn area	4.57% 10	5.94% 13	7.31% 16	8.22% 18	9.13% 20	7.31% 16	8.68% 19	5.02% 11	10.05% 22	10.50% 23	11.42% 25	11.87% 26	219	5.75
Community Gardens	1.39% 3	4.63% 10	7.41% 16	7.87% 17	12.50% 27	8.80% 19	7.41% 16	9.72% 21	6.94% 15	6.02% 13	10.65% 23	16.67% 36	216	5.51
Accessible fishing pier, stream access	3.15% 7	4.50% 10	9.01% 20	2.25% 5	7.21% 16	3.60% 8	5.86% 13	13.06% 29	7.66% 17	8.56% 19	11.71% 26	23.42% 52	222	4.84

Q2 Please rank these long-term implementation recreation facilities in the order of importance based on what you or persons in your household personally would use. (1 being most important and 2 being least important) Examples of each facility will be shown below.

Answered: 200 Skipped: 27



	1	2	TOTAL	SCORE
Community center with indoor gym	57.36% 113	42.64% 84	197	1.57
Outdoor swimming pool	43.00% 86	57.00% 114	200	1.43

DISCUSSION OF SURVEY RESULTS

Survey results were analyzed along with other public participation methods. The public participation results are discussed as related to future recreation planning in the Township in Section D, pages D20-22.

The following page shows a ranking of Recreation Opportunities supported by the public in both survey's and the first public meeting.

SHORT TERM (5 Yrs) to MID-TERM (5-10 Yrs) IMPLEMENTATION PERIOD				
RECREATION OPPORTUNTIES	Survey 1	Public Meeting	Survey 2	**TOTALS**
Bike Paths thru the Township	-----	50%	49%	**99%**
Nature Education/Natural Areas	29%	33%	31%	**93%**
Pickleball Courts	33%	33%	19%	**85%**
Winter Activities	28%	17%	4%	**49%**
Community Gardens	28%	11%	6%	**45%**
Destination / Adventure Playground	12%	11%	22%	**45%**
Outdoor Fitness Equipment	20%	11%	8%	**39%**
Splash Pad	17%	1%	20%	**38%**
Community Gathering Space	11%	11%	15%	**37%**
Skate Park	8%	17%	10%	**35%**
Outdoor Ice Skating	28%	1%	4%	**33%**
Fishing Pier / Pond Access	13%	11%	8%	**32%**
Bocce, Quoits, Horseshoes	9%	11%	7%	**27%**
Pump Park/BMX Dirt Bike Course	6%	11%	10%	**27%**
Additional stream access	17%	-------	8%	**25%**
Tennis Courts	14%	-------	9%	**23%**
Open Lawn for Pick Up Games	8%	1%	------	**9%**
Lawn Volleyball Courts	8%	-------	------	**8%**
Drone/model plane flying	8%	-------	------	**8%**
Gaga Ball Pit	3%	-------	------	**3%**

LONG TERM (10+ Yrs.) IMPLEMENTATION PERIOD				
RECREATION OPPORTUNTIES	Survey 1	Public Meeting	Survey 2	**TOTALS**
Community Center	27%	22%	57%	**106%**
Outdoor Swimming Pool	36%	11%	43%	**90%**
Indoor Basketball	14%	11%	------	**25%**
Indoor Racquet Sports	7%	11%	------	**18%**
Mini Pitch Soccer	0%	11%	------	**11%**