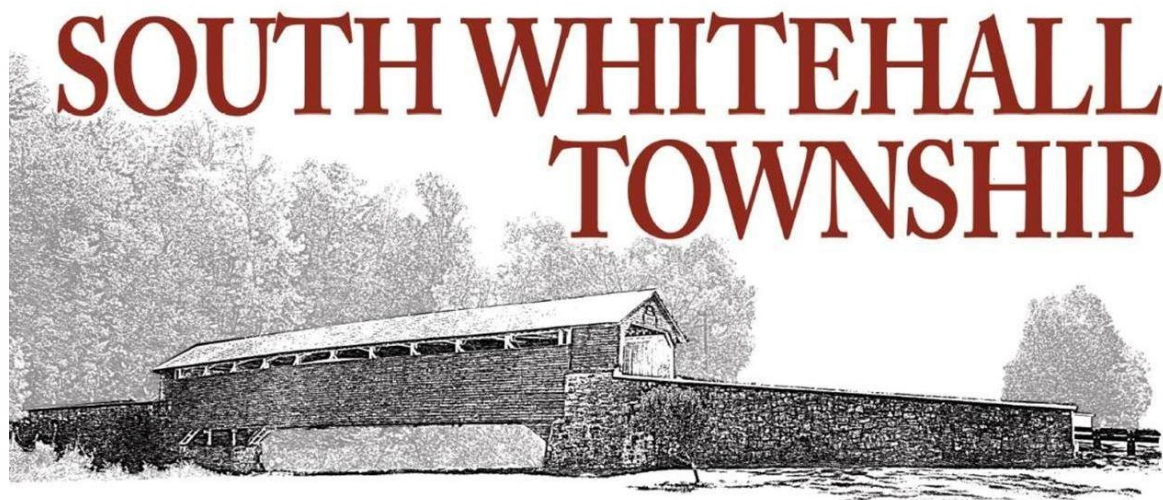


2021
Comprehensive
Plan Update

Phase 4 – Resource Protection Workbook



Comprehensive Plan Update: Working Groups Introductory Meeting

In March 2021, South Whitehall Township kicked off Phase 4 of the Comprehensive Plan Update. South Whitehall is excited to have community participation in the Phase 4 Working Groups: Housing; Transportation; Resource Protection; Community Facilities; and Community Utilities.

When did Phase 4 of the Comprehensive Plan Update begin?

The Comprehensive Plan Phase 4 Kickoff Meeting on March 31st, 2021 introduced the five Working Groups which reflect the required Plan Elements from the PA Municipalities Planning Code (MPC). Community members joined Township staff, elected officials, and the Lehigh Valley Planning Commission (LVPC) to learn more about how to engage in the Working Groups. The meeting reviewed work to date, and LVPC staff provided brief presentations during breakout sessions on existing conditions and how each topic fits into regional context.

What's next?

Community participation is needed to assess existing conditions and develop Working Group recommendations during Phase 4 of the Comprehensive Plan Update. The groups will follow the meeting schedule on the next page, where Working Group members will evaluate data and future scenarios, and build out recommendations for the Comprehensive Plan Update.

housing

transportation

community
facilities

community
utilities

resource
protection

**Comprehensive Plan Update:
Phase 4 Working Groups Timeline**

Introductory Virtual Meeting [All Working Groups together]: Tuesday, June 29th, 2021, 6-8PM



Meeting #1 – Existing Conditions [by Topic Area]: Week of July 12th



Meeting #2 – Recommendation Brainstorm with Subject Matter Experts from LVPC [by Topic Area] Virtual Meetings: Week of July 19th

7/19, 6-7:30PM: Community Facilities

7/20, (Sessions 1 and 2 running concurrently) 6-7:30PM: 1) Transportation 2) Housing

7/21, (Sessions 1 and 2 running concurrently) 5:30-7PM: 1) Resource Protection 2) Community Utilities



Meeting #3 – Develop Recommendations [by Topic Area]: Week of August 2nd



Concluding Meeting Working Groups [all Working Groups together]: Week of August 9th

Phase 4 Working Group Resources

- South Whitehall Comprehensive Plan Update Webpage: www.southwhitehall.com/compplan
- South Whitehall Township 2009 Comprehensive Plan: <https://www.southwhitehall.com/Home/ShowDocument?id=575>
- South Whitehall Township Comprehensive Plan Update “Where Should We Grow?” StoryMap: <https://storymaps.arcgis.com/stories/d7a161a6324c4b39beaa4af2eeafc24b>
- South Whitehall Township Comprehensive Plan Update Existing Conditions Report: https://ksand.southwhitehall.com/PDF/CompPlan/ExistingConditionsReport_20190618.pdf
- South Whitehall Township Comprehensive Plan Update Planning Trends Supplement: https://ksand.southwhitehall.com/PDF/CompPlan/PlanningTrends_Supplement.pdf
- Lehigh Valley Planning Commission (LVPC) and Lehigh Valley Transportation Study (LVTS) Comprehensive Plan and Long-Range Transportation Plan FutureLV: <https://www.lvpc.org/futurelv.html>
- March 31st Phase 4 Kickoff Meeting Recordings and Presentations here: <https://www.southwhitehall.com/departments/community-development/land-development/planning/comprehensive-plan-update/phase-4-kick-off-meeting>

Access All Resources on the Resource Protection Working Group webpage at www.southwhitehall.com/compplan/resourceprotection or with the QR Code:



Contact Information

Name	Title	Contact Info
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Michael Baker International		
Hannah Clark, AICP	Phase 4 Meeting Facilitator	Hannah.Clark@mbakerintl.com
Chris Rabasco	Phase 4 Meeting Facilitator	Chris.Rabasco@mbakerintl.com

Guiding Principles



Protect natural, historical, recreational, scenic, open space, and agricultural, amenities, resources, and assets.



Coordinate future land use, development, and redevelopment, in sync with the capacity of the road network and utilities to absorb changes.



Promote an effective continuation of opportunities, facilities and services for open space, parks, recreation, education, public safety, and wellness.



Promote techniques to limit the sprawling pattern of development, by advocating for land use with more effective smart growth attributes.



Coordinate with PennDOT, LVPC, and adjoining Municipalities, in order to alleviate existing problems and to avoid future conflicts, and to promote opportunities for alternative transportation such as bus service, ride sharing, bicycling, and walking.

MPC Guidelines: **Comprehensive Plan**

The Pennsylvania Municipal Planning Code (MPC) enables local jurisdictions to conduct a comprehensive planning process to identify areas where growth and development will occur so that a full range of public infrastructure services, including sewer, water, highways, police and fire protection, public schools, parks, open space and other services can be adequately planned and provided as needed to accommodate growth.

The comprehensive plan, consisting of maps, charts, and textual matter, shall include, but not be limited to, the following related basic elements:

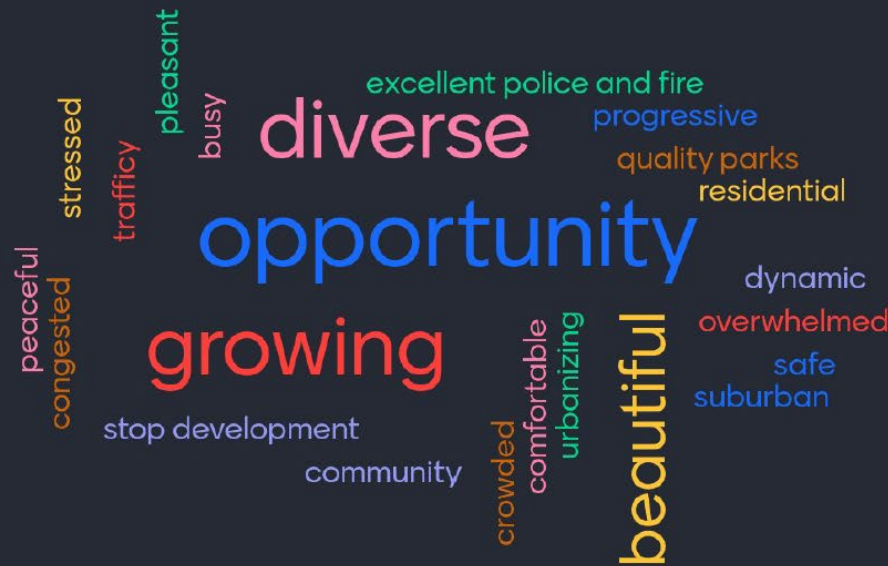
- Statement of objectives concerning future development, including, but not limited to, the location, character and timing of future development
- A plan for land use
- A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality
- A plan for movement of people and goods
- A plan for community facilities and utilities
- A statement of interrelationships among the plan components
- A discussion of short- and long-range plan implementation strategies
- A statement indicating that the existing and proposed development of the municipality is compatible with the existing and proposed development and plans in contiguous portions of neighboring municipalities
- A plan for the protection of natural and historic resources to the extent not preempted by federal or state law

The MPC requires that comprehensive plans shall be reviewed at least every ten (10) years.

South Whitehall Today:
Phase 4 Kickoff Meeting March 31, 2021

What is one word you would use to describe South Whitehall Township today?

Mentimeter



25

South Whitehall Future:
Phase 4 Kickoff Meeting March 31, 2021

What is one word you would use to describe your vision for South Whitehall Township 10 years from now?

Mentimeter



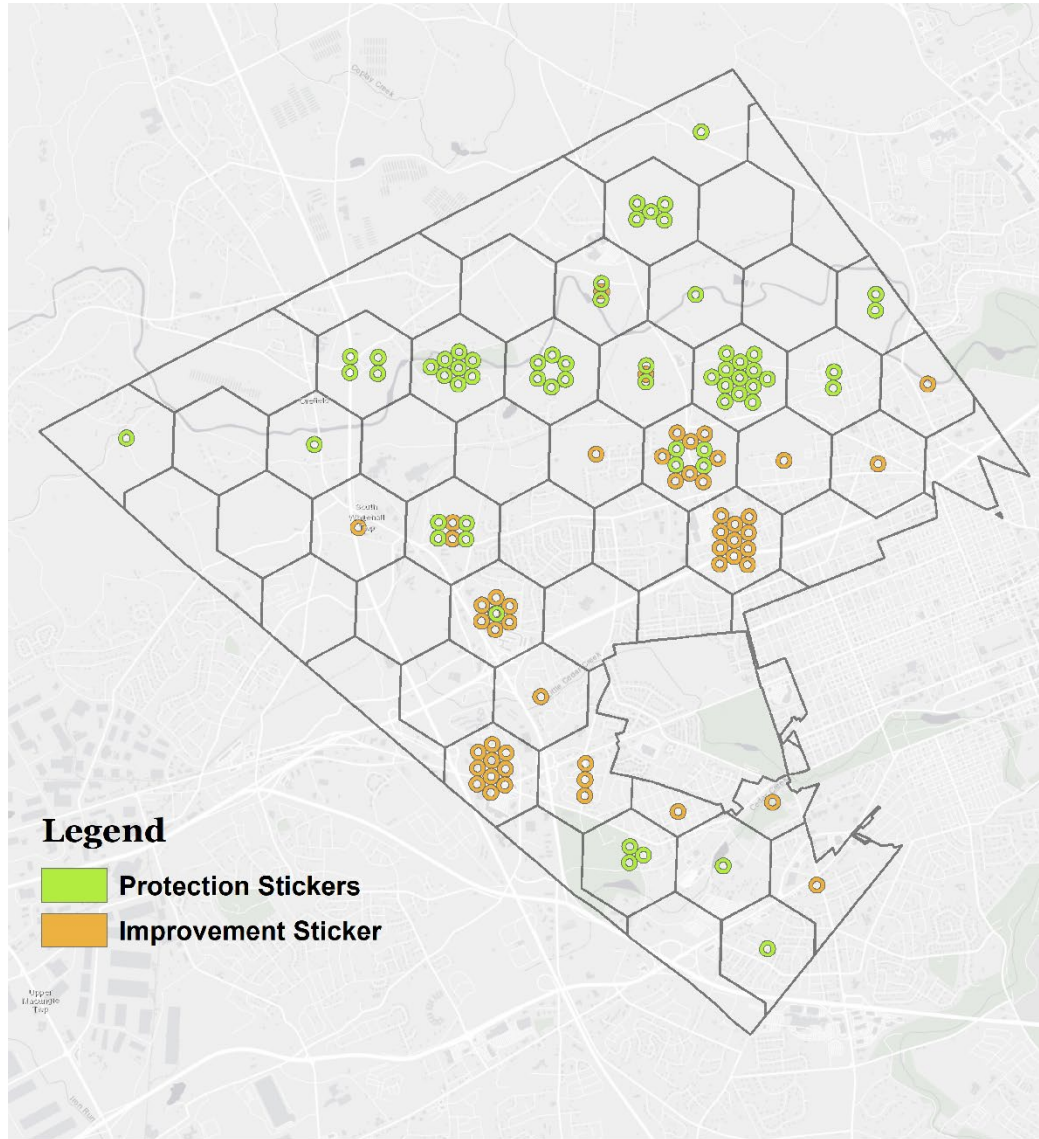
27



Framing Concepts

- 1. South Whitehall Growth and Future Land Use**
- 2. South Whitehall Economic Development Scenario presented by 4ward Planning**
- 3. South Whitehall Transportation Model presented by Keystone Consulting Engineers**

South Whitehall Township Growth and Future Land Use



WHERE SHOULD WE GROW?

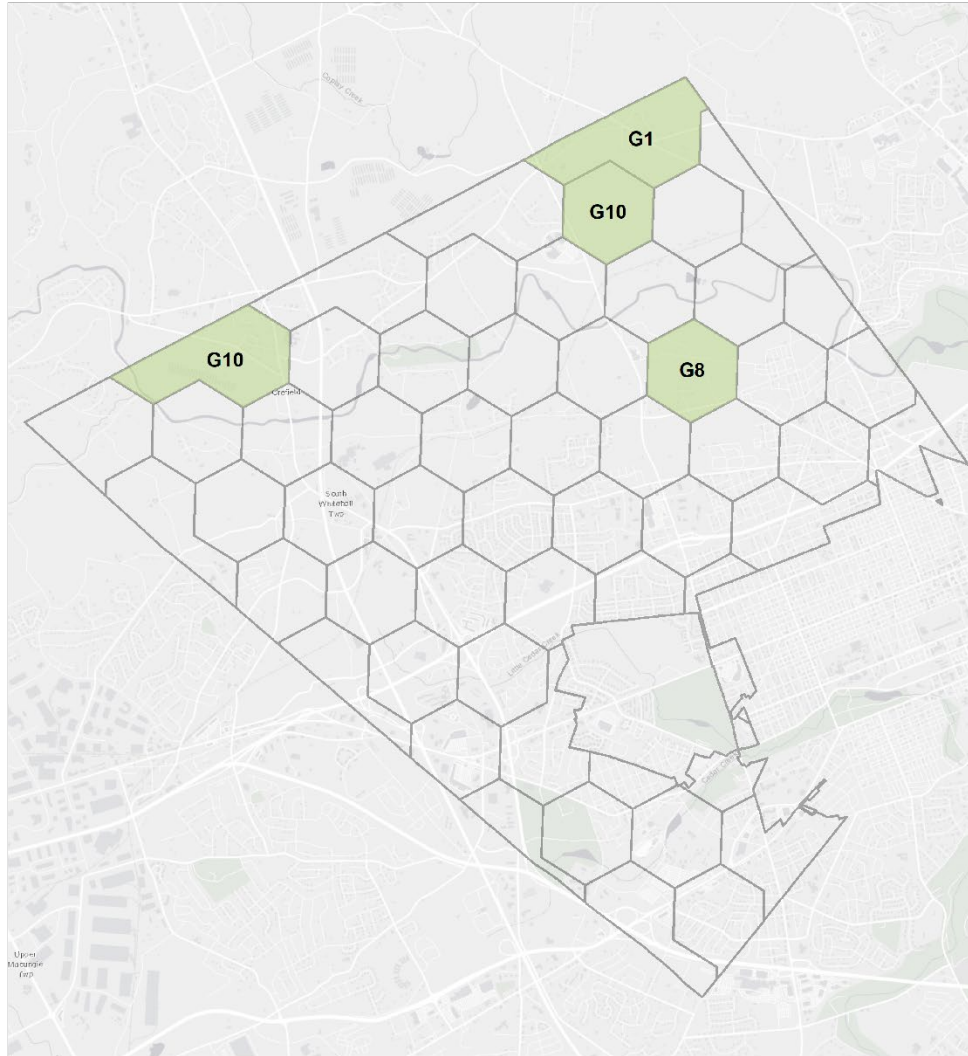
This map presents results of the “Where should we grow?” build out exercises conducted throughout South Whitehall Township. These included four public engagement meetings, two focus group meeting and a joint meeting between the Board of Commissioners and the Planning Commission. Participants were asked to accommodate future growth in population and jobs. This was accomplished by participants placing stickers on a map of South Whitehall Township divided into hexagons. Thus, answering the question “Where should we grow?”.

In addition to placing future population and jobs, participants were asked to indicate areas to protect and areas to improve. Each group was provided two green stickers (*protect*) and two orange stickers (*improve*). These were purposely limited to two each to encourage discussion and thoughtful placement among the groups.

This map of the South Whitehall Township is divided into hexagons. Each hexagon depicts an area of the township. These areas have been used to classify existing development. These hexagons were then used to determine where future development should occur.

How Should We Grow? – Survey Results

GREENFIELD



50.2% Encouraged

Single-Family Dwellings, Compact Arrangement, Central Green, Open Space Preservation

G1. Greenfield—Low Population—No Employment



51.6% Encouraged

Commercial/Retail Use, Multi-Tenant, Context-sensitive Architecture, Village-type setting

G8. Greenfield—No Population—Low Employment



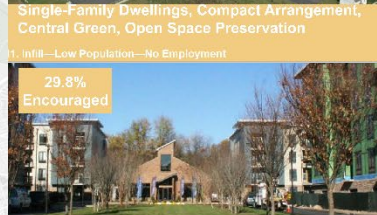
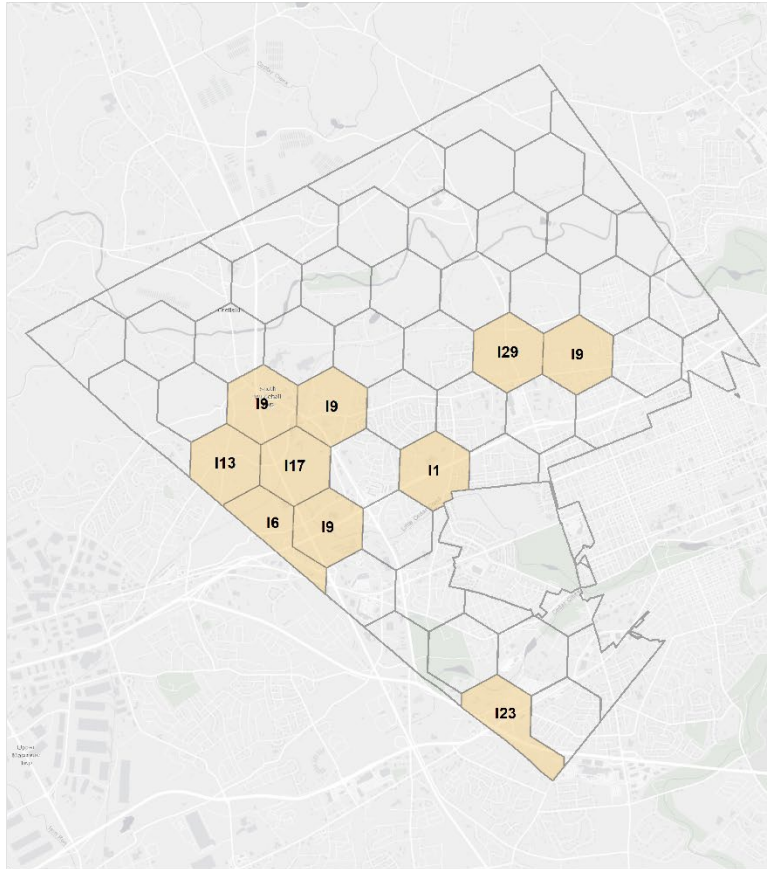
60.6% Encouraged

Single-Family Dwellings, Central Green

G10. Greenfield—Low Population—Low Employment

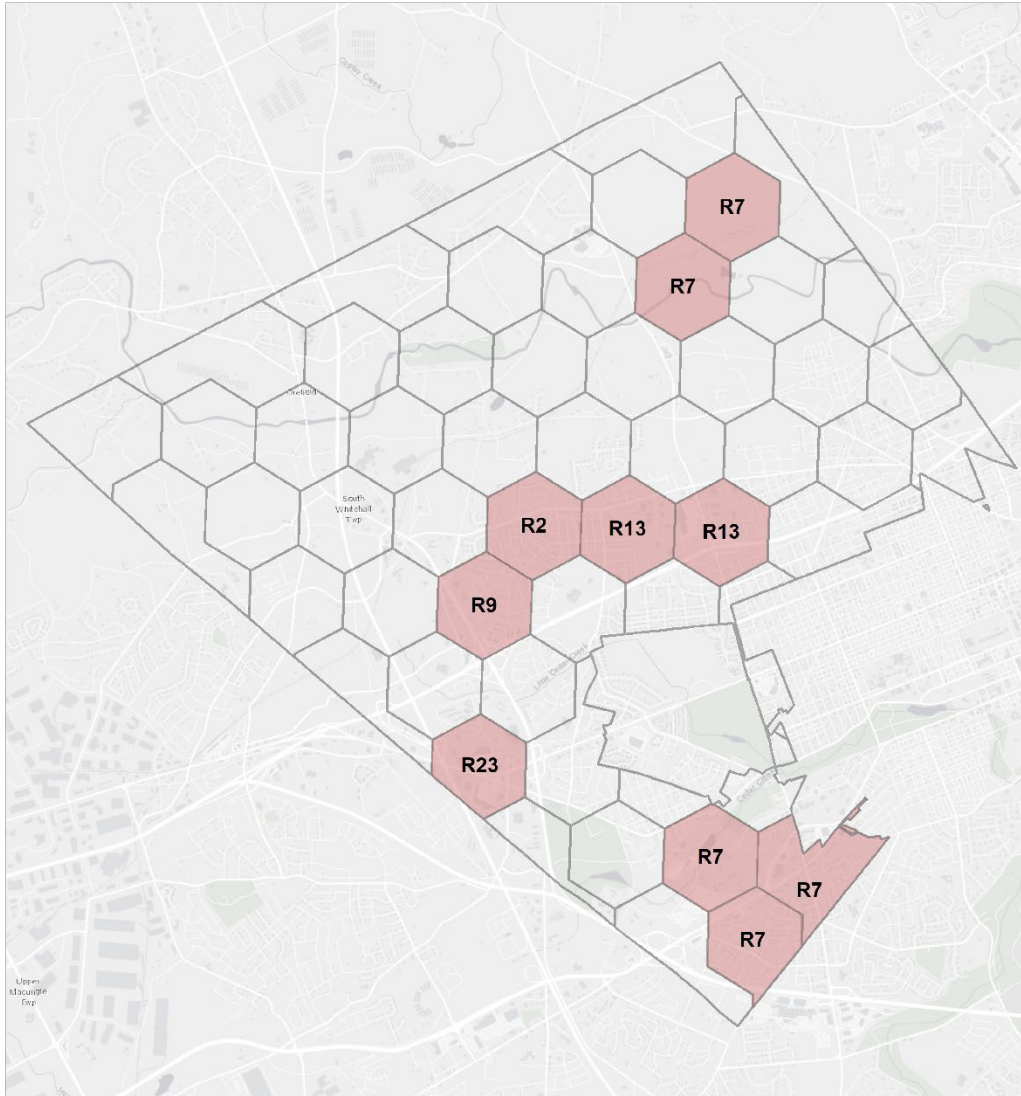
How Should We Grow? – Survey Results

INFILL



How Should We Grow? – Survey Results

REDEVELOPMENT



68.1% Encouraged	
R2. Redevelopment—Low Population—No Employment Single-Family Dwellings, Adaptive Reuse	
64.6% Encouraged	
R7. Redevelopment—No Population—Low Employment Commercial/Retail Use, Outdoor Dining, Adaptive Reuse	
48.8% Encouraged	
R7. Redevelopment—No Population—Low Employment Mixed Use, Adaptive Reuse	
54.4% Encouraged	
R3. Redevelopment—Medium Population—Low Employment Commercial/Retail Uses, Accommodates a variety of uses, Main Street Environment, Pedestrian Oriented, High quality Architectural Design/Materials	
53.1% Encouraged	
R12. Redevelopment—Low Population—Medium Employment Mixed Use, Central Open Space, Pedestrian Oriented	
R23. Redevelopment—Medium Population—High Employment	

South Whitehall Economic Development Scenario Presented by 4ward Planning



A fiscal impact analysis examines the linkage between local government revenue generated by new development and its resultant municipal service costs (e.g., police, fire, schools, sanitation, etc.). The outcome of such an analysis is to produce a project-related estimate of community service costs to projected revenues, a “cost-revenue ratio,” which will be positive (a revenue surplus), negative (a revenue shortfall), or neutral (break-even).

4ward Planning will evaluate the projected fiscal impacts (utilizing current service cost and tax rate metrics) for various build-out scenarios according to proposed zoning within South Whitehall Township.

Utilizing its proprietary fiscal impact model (inclusive of the latest residential multipliers identified within Pennsylvania), we will incorporate projected revenue and expenditure figures provided by the township and local school district, allowing for an examination of their relationship to existing land-use, employment, and population factors. 4ward Planning will then use the model to evaluate the projected fiscal impacts and potential public facility needs associated with various development scenarios (e.g., single-family detached housing; multi-family housing; shopping center development, professional/medical office; light industrial, etc.).

We will examine the following prospective outcomes:

- Estimate of development-generated capital needs/costs
- Estimate of development-generated municipal service costs/revenues
- Estimate of development-generated public-school district costs/revenues
- Estimate of development-generated public school-age children
- Estimate of development-generated employment (permanent)

4ward Planning will use one or a combination of qualitative and quantitative methods to conduct the fiscal impact analyses, based on the two fiscal impact methodologies most often employed by land-use practitioners: Per Capita Method and Case Study Methods.

The fiscal impact model is designed to perform sensitivity testing, such that changes to development type or intensity, value factors, etc. will update impact outputs.

The value of incorporating a fiscal impact analysis during the comprehensive planning process is to identify likely service and/or capital costs associated with permitted future development. In this way, comprehensive plan stakeholders can determine, in advance of development occurring, if the projected impacts will be detrimental or beneficial to the township and by what degree.

It should be understood, however, that the fiscal impact analysis model is based on currently known factors and, as such, cannot precisely predict future impacts; however, its utility is in illuminating the likely direction (positive or negative impact) and scale (how many new residents and school students; how many new employees; what increase in municipal and school district personnel might result; what new municipal and/or school district facilities might be required).

South Whitehall Transportation Model Presented by Keystone Consulting Engineers



An Evaluation of Future Traffic Impacts Associated with Planned Greenfield, Urban Infill, and Redevelopment in South Whitehall Township

Keystone Consulting Engineers, Inc. has prepared this traffic evaluation in support of South Whitehall Township’s comprehensive plan update. The purpose of this evaluation is to inform future planning efforts by identifying highlighting traffic impacts associated with greenfield, urban infill, and redevelopment in the areas identified during volunteer public workshop sessions. This evaluation will also provide various mitigating strategies that could be considered for areas where congested traffic conditions are anticipated.

The above noted analysis was performed in accordance with the following methodology:

- **Study Scope:** Critical intersections along the major roadway corridors within the Township have been identified to use as a basis of determining traffic impacts. These intersections were selected based on KCE’s local knowledge of the Township and based on guidance received from Township Staff.
- **2040 Base Traffic Conditions:** A 2040 Base Traffic Scenario was developed to use as a baseline by which to compare the impacts of a future Township development scenario. This base scenario was prepared as follows:
 - Existing traffic counts were compiled for the study intersections using traffic impact studies submitted to South Whitehall Township as part of various land development projects. Where existing traffic count information was not available from prior studies, KCE engaged Tri-State Traffic Data to perform new traffic counts, which were subsequently adjusted to account for fluctuations in traffic volumes resulting from the COVID-19 pandemic. The existing traffic volumes were then projected to the year 2040 using a static growth rate for Lehigh County as published by PennDOT’s Bureau of Planning & Research.
 - Anticipated traffic volumes from approved developments in the Township (not reflected in the above mentioned counts) were also obtained from submitted traffic studies and were layered onto the 2040 traffic projections to arrive at a 2040 base scenario. The quality of traffic flow was determined using the Intersection Capacity Utilization (ICU) method, which provides a quantitative index of intersection performance and also provides qualitative flow descriptions for Levels of Services (LOS) A through H, where LOS A indicates no congestion and LOS H indicates excessive prolonged periods of traffic congestion during peak periods.

South Whitehall Township Transportation Model - Continued

- **2040 Future Traffic Conditions:** A 2040 Future Scenario was developed based the greenfield, redevelopment, and urban infill conditions identified during the planning workshops. Specific locations where this traffic was expected to enter the roadway network were provided by Township Staff.
- **Trip Generation and Distribution:** Trip Generation for the various development types was determined using the ITE Trip Generation Manual, Tenth Edition, for representative land uses for retail, residential, and industrial land use types.
 - Trips generated from planned multi-use sites in the Township were reduced to account for internal (shared) trips between uses (an example of a shared/internal trip would be traveling to the grocery store and also stopping at the bank located on the same site as part of the same trip). Further, shared trips that were expected to occur between uses within the Township were also identified and generally accounted for in the analysis (an example of this would be a Township resident making a trip from their home to a retail shopping center located within the Township. In this event the trip originates and terminates within the Township and does not result in an external trip into or out of the Township).
 - The specified trip generation was also reduced to account for trips for retail uses being served by traffic that is already present on adjacent roadways. This is referred to as a “pass-by” trip (an example of a pass-by trip would be stopping for gas on the way home from work along the normal commuter route).
 - The analysis was limited to vehicular traffic, although it is generally recognized that other modal transportation choices would generally serve to reduce traffic impacts (i.e. LANTA bus service, Biking, and/or walking along sidewalks or other defined pedestrian routes).
 - The above noted trips were then distributed to the extents of the Township and/or to origins/destinations within the Township in a proportional manner in accordance with existing roadway traffic volumes and/or using engineering judgement.
- Anticipated traffic volumes from the future development types identified were then layered onto the 2040 Base traffic conditions and evaluated for quality of traffic flow using the above described Intersection Capacity Utilization method. Areas of significant degradation were noted and indicated as areas where special consideration is recommended to maintain the quality of traffic flow
- Since this evaluation was performed for planning purposes and was therefore not prepared to the rigors of a formal traffic impact study, specific mitigating improvements for areas anticipated to be affected by development traffic were not identified. However, structural mitigating improvements could generally include roadway widening/lane additions, interchange modifications, signal timing adjustments, and/or enhancement of alternate transportation modes and infrastructure, such as expanding public transportation routes, construction of sidewalks and/or bike paths, etc. Planning efforts could also be employed to help mitigate future traffic impacts including the encouragement of multi-use development to facilitate trip sharing. Lastly, travel-demand management strategies could be considered in an effort to influence driver behavior to reduce traffic congestion during peak periods (i.e. staggering of employment shift times, provision of incentives for ride-sharing, etc.).

Working Group Meeting #1: Existing Conditions

This meeting will focus on the current existing conditions for Resource Protection in South Whitehall Township. Relevant information will be discussed and presented from the growth, economic development, and transportation scenarios, the South Whitehall Township 2009 Comprehensive Plan, Comprehensive Plan Update Guiding Principles [2019], Comprehensive Plan Update Existing Conditions Report [2019], and the regional comprehensive plan FutureLV.

Goals

- **Identify significant data trends within South Whitehall Township**
- **Identify where updated data and/or additional information is needed**
- **Complete Existing Conditions Discussion Template**

Outcome

Solidify a baseline understanding of current data and information to best inform the recommendation process.

MPC Guidelines: **Resource Protection**

The PA Municipalities Planning Code (MPC), Act of 1968, P.L.805, No. 247 as reenacted and amended states in Article III, Section 301, that in the Preparation of Comprehensive Plans, in relationship to Resource Protection, shall include:

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

2009 SWT Comprehensive Plan Goal Themes & Statements: Resource Protection

Notes

Protection of Natural, Historic & Agricultural Resources

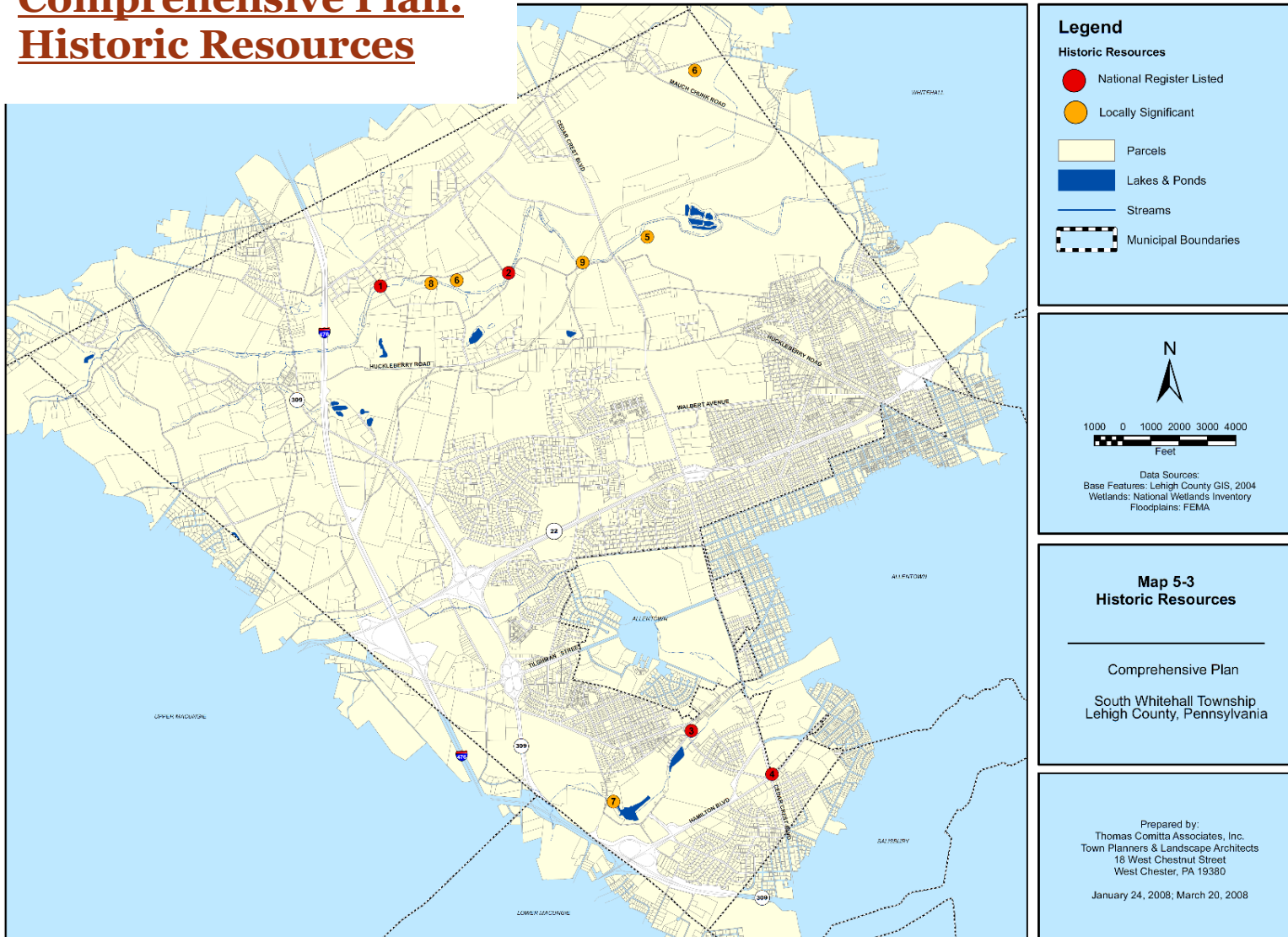
Goal:

Optimize the protection, conservation and preservation of natural resources, historic sites and farmland in a balanced land use approach.

Goal Statements

1. Protect water quality by incorporating the latest techniques for riparian buffer zones for streams, surface waters, and wetlands and providing protections for wellheads and recharge areas.
2. Consider effects of development on steep slopes and determine appropriate protection levels for steep slopes, while conserving the low, flatlands.
3. Evaluate appropriate protection levels for woodlands, and protection/replacement of shade trees and shade tree canopy.
4. Require additional investigation and studies for development proposed on sites that have underlying karst/carbonate geology.
5. Support and invest in the regional greenways concept to link the Township's "green infrastructure", which includes Covered Bridge Park.
6. Activate the South Whitehall Township Environmental Advisory Council (EAC).
7. Work with the Wildlands Conservancy, Lehigh County and others who can partner to conserve natural areas.
8. Promote historic preservation throughout the Township.
9. Preserve our covered bridges, historic barns, and historic neighborhoods, and visual amenities.
10. Document historical sites in order to ensure identification of all potential historical edifices and features.
11. Involve local historical societies, historians at local colleges and universities, and other interested parties in preservation efforts.
12. Explore state/county farm preservation programs as they might relate to South Whitehall Township farms.
13. Evaluate and increase percentage of South Whitehall land under preservation/conservation.
14. Assess the public's view on farmland preservation and use of taxpayer money to preserve more farms in South Whitehall Township.
15. Consider farmland protection through purchase of development rights.

2009 SWT Comprehensive Plan: Historic Resources



Legend

Historic Resources

- National Register Listed
- Locally Significant

- Parcels
- Lakes & Ponds
- Streams
- Municipal Boundaries

N

1000 0 1000 2000 3000 4000
Feet

Data Sources:
Base Features: Lehigh County GIS, 2004
Wetlands: National Wetlands Inventory
Floodplains: FEMA

**Map 5-3
Historic Resources**

Comprehensive Plan
South Whitehall Township
Lehigh County, Pennsylvania

Prepared by:
Thomas Comitta Associates, Inc.
Town Planners & Landscape Architects
18 West Chestnut Street
West Chester, PA 19380

January 24, 2008, March 20, 2008

2009 SWT Comprehensive Plan: Historic Resources Recommendations

Historic Preservation Recommendations:

Though not exhaustive, this initial inventory does demonstrate that the Township has a wealth of historic resources to consider going forward. The majority of these sites of interest are located in the northern tier, where the future development patterns are yet to be determined. The next ten to twenty years will present critical opportunities to preserve valued resources from the past and incorporate them into assets for the Township's future. Setting preservation goals and strategies before the development occurs gives the Township an opportunity to be proactive in prioritizing its preservation priorities and safeguards the legacy of South Whitehall Township for future generations.

There are several strategies that the Township and community can take to preserve these resources and protect the character of the area:

1. *Increase historic preservation awareness and education.* Provide access to education and encourage a greater awareness of the value of historic resources to the community's identity and history. This awareness should focus on preservation's role in maintaining a unique character and identity of South Whitehall, but also its contribution to economic viability through adaptive reuse and tourism.
2. *Conduct an inventory of historic sites and structures in the Township.* The inventory should categorize the resources and include a preliminary ranking of sites and structures that are locally important and that may be eligible for the National Register. An initial inventory is included in this chapter. Seek additional funding and technical assistance from the National Park Service, PHMC, Lehigh Valley Planning Commission and other agencies, while tapping local historic societies and residents for additional documentation. This inventory can be used as a tool for reviewing subdivision and land development applications or, ideally, as the framework for a historic preservation ordinance.
3. *Consider adopting an Historic Preservation Ordinance.* In considering a Historic Preservation Ordinance, the Township should evaluate the benefits of an ordinance that uses a tiered approach to place higher protections on resources of higher value. Resources are prioritized based on a developed ranking system that takes into account the type of resource (residential, commercial, rural, industrial, etc.), the structural and historic integrity of a structure, the degree to which it is threatened by development, economic decline, and link to the community, among others. The highest tier would be comprised of National and State designated properties and buildings. The mid and lower tiers could be determined as part of the historic sites and structures inventory. This would permit the Township to focus on protecting resources that have the greatest value to the community, while balancing them with new development.

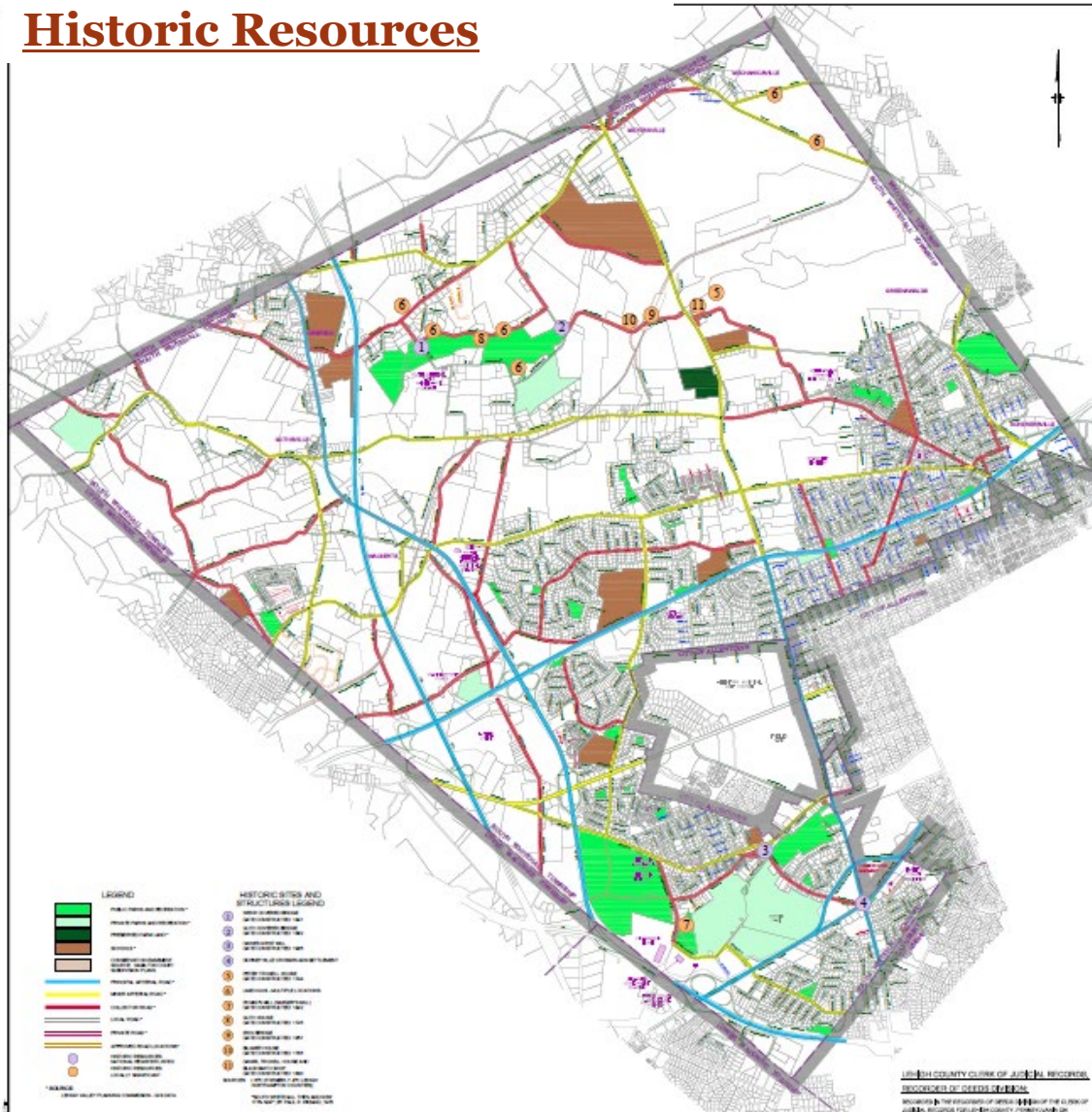
Provisions that might be included in a Historic Preservation Ordinance:

- a. Require review prior to demolition permits.
- b. Prohibit demolition by neglect.
- c. Include provisions for alteration of historic resources.
- d. Include provisions for use and adaptive re-use of historic resources.
- e. Incentives for the preservation of historic resources. One option to achieve this is through Open Space and Cluster Development, whereby historic resources can be incorporated into open space set asides with public access.

As part of developing the Ordinance, the Township would create a Historic Architectural Review Board (HARB) to administer design standards and guidelines and provide recommendations to the Township Planning Commission.

4. *Encourage rehabilitation of existing buildings.* As discussed in Chapter 6, the Township proximately 1,500 new housing units over the next 15 years. A small percentage of these can be achieved through rehabilitation. Rehabilitation not only allows for the continued viability of older buildings, which tend to be outdated in terms of the modern amenities, but also prevents blight and provides alternatives to the large lot single-family detached dwellings that dominate the Lehigh Valley outside of the Cities.
In order to encourage rehabilitation and renovation, some municipalities partner with local banks or other partners to offer low or no interest loans to residents. The Township may consider permitting the conversion of older single-family detached dwellings into multifamily dwellings as a conditional use or special exception in order to encourage their continued viability and add to the variety of housing available.
5. *Encourage adaptive reuse.* One of the greatest challenges to historic preservation is maintaining the viability of older structures. A proven technique is to permit a greater range of uses in historic buildings, especially if located in otherwise single-use districts. With this approach, a barn can be converted to a bed and breakfast, office, or antique shop, as long as other provisions for parking and compatibility with surrounding neighborhood are adhered to. Other examples of reuse that are often seen today is the reuse of a farmhouse as a community center or clubhouse in new residential subdivisions. Other features, such as walls and fences, can also be incorporated alongside new development. Adaptive reuse should be strongly encouraged in the ordinance and the feasibility of adaptive reuse examined by the landowner prior to demolition. The ultimate decision, however, is in the hands of the property owner.
6. *Incorporate historic properties into a South Whitehall Township Greenway Network*, in conjunction with other protected natural and scenic resources where location is feasible. Many historic structures are found adjacent to the Jordan Creek, an area of high interest for both future development and future preservation and conservation. Part of any zoning that permits higher density development, such as Traditional Neighborhood Development, should stipulate that historic resources should be preserved and maintained. South Whitehall Township could encourage property owners to consider adaptive reuse as an alternative to demolition.
7. *Consider designating historic properties as "sending areas" in a Transfer of Development Rights program.*
8. *Consider adopting overlay zoning districts over existing villages for the purpose of preserving and enhancing the unique character found there.* The overlay district would permit context sensitive infill and expansion of the villages.

2010 SWT Official Map: Historic Resources



LEGEND

- PUBLIC PARKS AND RECREATION *
- PRIVATE PARKS AND RECREATION *
- PRESERVED FARM LAND *
- SCHOOLS *
- CONSERVATION EASEMENT
SOURCE: HAMILTON COURT
SUBDIVISION PLANS
- PRINCIPAL ARTERIAL ROAD *
- MINOR ARTERIAL ROAD *
- COLLECTOR ROAD *
- LOCAL ROAD *
- PRIVATE ROAD *
- APPROVED ROAD LOCATIONS*
- HISTORIC RESOURCES
NATIONAL REGISTER LISTED
- HISTORIC RESOURCES
LOCALLY SIGNIFICANT

* SOURCE:
LEHIGH VALLEY PLANNING COMMISSION - GIS DATA

**HISTORIC SITES AND
STRUCTURES LEGEND**

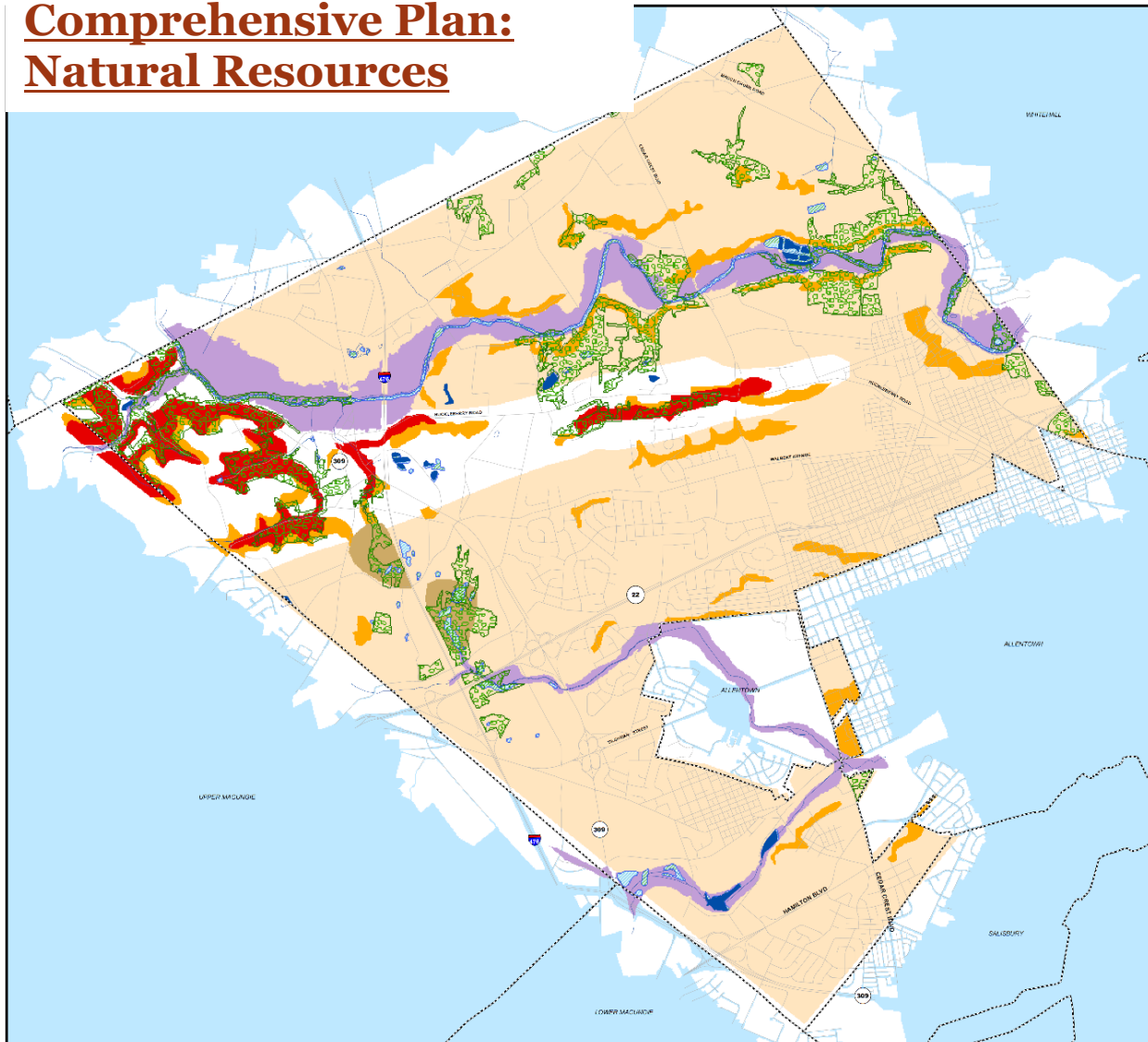
- 1 WEHR COVERED BRIDGE
DATE CONSTRUCTED: 1841
- 2 GUTH COVERED BRIDGE
DATE CONSTRUCTED: 1882
- 3 HAINES GRIST MILL
DATE CONSTRUCTED: 1905
- 4 DORNEYVILLE CROSSROADS SETTLEMENT
- 5 PETER TROXELL HOUSE
DATE CONSTRUCTED: 1744
- 6 LIME KILNS - MULTIPLE LOCATIONS
- 7 ROMIG'S MILL (SAEGER'S MILL)
DATE CONSTRUCTED: 1842
- 8 GUTH HOUSE
DATE CONSTRUCTED: 1745
- 9 IRON BRIDGE
DATE CONSTRUCTED: 1857
- 10 BLUMER HOUSE
DATE CONSTRUCTED: 1785
- 11 DANIEL TROXELL HOUSE AND
BLACKSMITH SHOP
DATE CONSTRUCTED: 1800

SOURCES: LVPC (FORMERLY JPC LEHIGH
NORTHAMPTON COUNTIES);

"SOUTH WHITEHALL THEN AND NOW
1776-1997", BY PAUL R. WIEAND, 1978

Notes

2009 SWT Comprehensive Plan: Natural Resources



Legend

- 100-Year Floodplains
- Hydric Soils
- Lakes & Ponds
- Streams
- Woodlands
- Wetlands
- Natural Area Inventory Sites
- Karst Geology
- Slope 15% - 25%
- Slope 25% +

N

1000 0 1000 2000 3000 4000
Feet

Data Sources:
Base Features: Lehigh County GIS, 2004
Wetlands: National Wetlands Inventory
Floodplains: FEMA

**Map 5-1
Natural Resources**

Comprehensive Plan
South Whitehall Township
Lehigh County, Pennsylvania

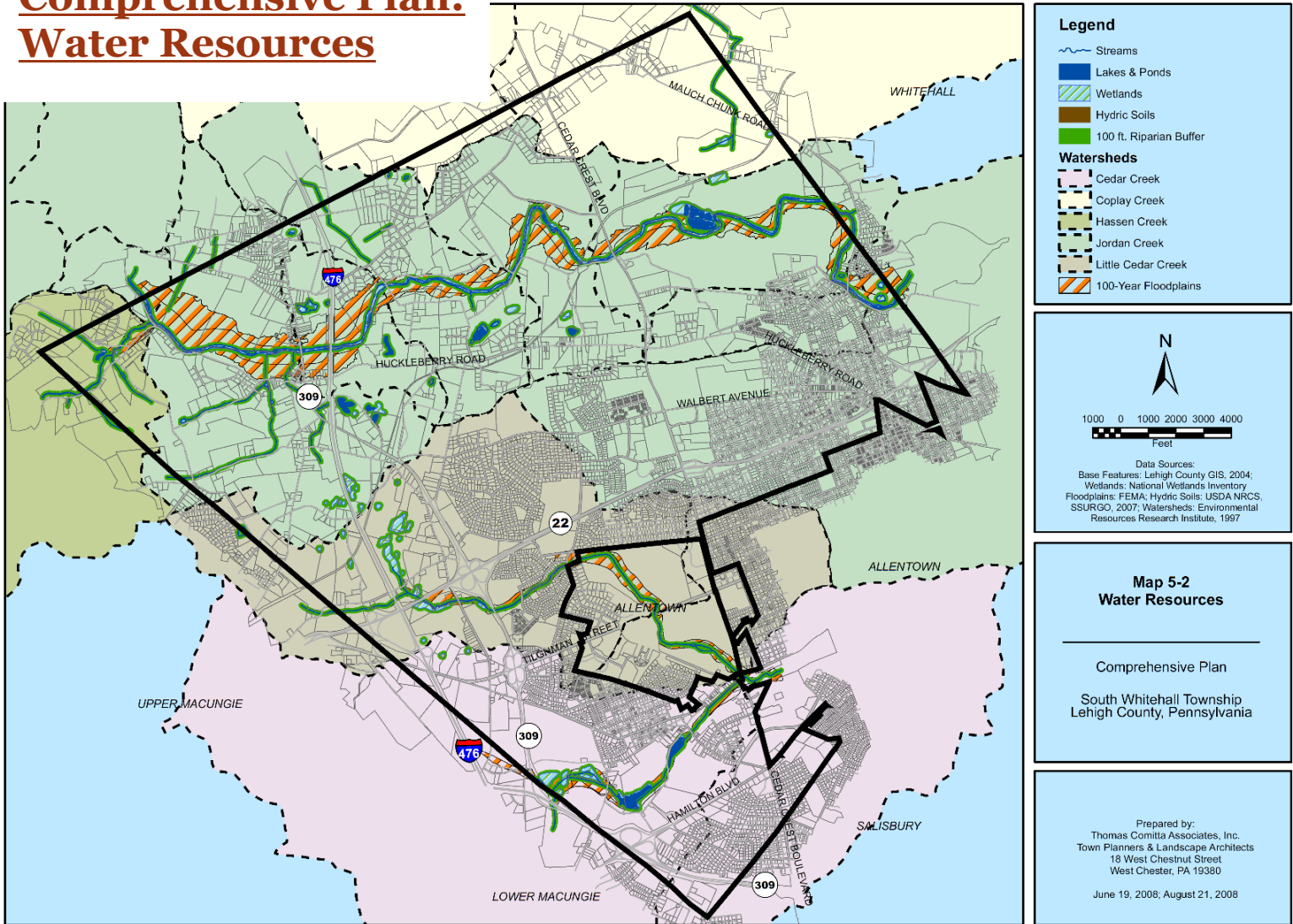
Prepared by:
Thomas Comitta Associates, Inc.
Town Planners & Landscape Architects
18 West Chestnut Street
West Chester, PA 19380

January 24, 2008; March 20, 2008;
April 17, 2008; August 21, 2008

Notes

2009 SWT Comprehensive Plan: Water Resources

Notes



2009 SWT Comprehensive Plan: Natural Resource Recommendations

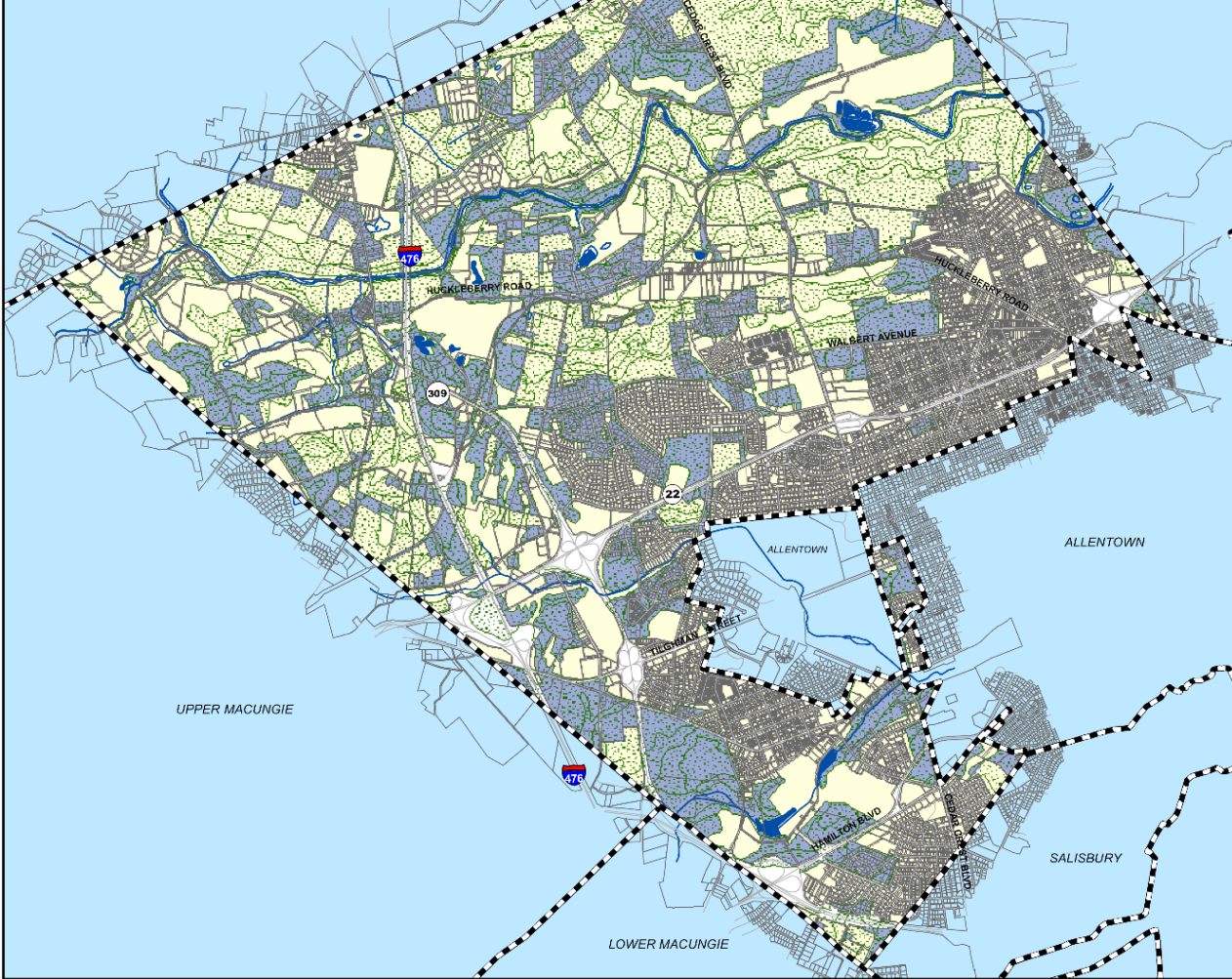
Natural Resource Recommendations

Unlike some Townships, South Whitehall does not have an abundance of natural resource constraints on development and those that do exist, tend to be concentrated geographically. This plan advocates that the Township's profusion of open, unconstrained land, be considered an opportunity to provide quality neighborhoods, community spaces, and employment opportunities, and to protect those resources, whose value in terms of function and beauty are less easily quantifiable.

1. Ordinance Amendments:

- a. *Amend the Zoning Ordinance to incorporate Riparian Buffers protections.* One of the most effective tools in preserving and reclaiming the quality of waterways are riparian buffers. Considered vital in the protection and enhancement of water quality, riparian buffers are an area of vegetation maintained along streams and water bodies that serve as a transition between the aquatic and the terrestrial environments. They protect water quality primarily by slowing and reducing stormwater runoff that erodes stream banks, and removing contaminants, particularly nitrogen and phosphorous, before they reach the stream. Forested buffers improve wildlife habitat and water quality by maintaining cooler temperatures through shading, and minimizing damage from floodwaters. Viewed as part of comprehensive system, these functions can reduce the need for costly, built infrastructure and are thus considered a valued part of a community's "green infrastructure". Beyond the important role riparian buffers play in preserving wildlife habitat, stormwater management, and water quality improvement, these buffers also provide great scenic and recreational value. Since riparian buffers follow stream corridors they serve as the links in a regional open space network or "greenway", providing opportunities for recreational trails and connections between other open space and cultural amenities. The LVPC recommends a buffer of 100 feet for major streams and rivers, e.g., the Jordan Creek. The Pennsylvania Department of Environmental Protection also strongly encourages a 100-foot buffer for most streams and water bodies, and 300 feet for those of Exceptional Value (EV) and High Quality (HQ). The DEP is currently considering an update to its Chapter 102 regulations to require these buffers statewide. These buffers are shown on Map 5-2 for demonstration purposes.
 - b. *Consider incorporating the Lehigh Valley Planning Commission model Wellhead Protection ordinance to help ensure a reliable, future water supply.* The purpose of this ordinance is to protect surface and groundwater supplies and includes the riparian buffer provisions discussed above.
 - c. *Maintain Floodplain and Wetland Protections in keeping with Best Practices and models.* In addition to maintaining an up-to-date floodplain ordinance, the Township may also consider amending the Zoning Ordinance to provide Township specific wetland protections, for those wetlands not associated with a floodplain area. These protections may include wetland buffers of between 35 and 50 feet and limitations on development on hydric soils found adjacent to existing floodplains or wetlands.
 - d. *Provide a two-tiered approach to protecting steep slopes:*
 - i. For slopes between 15% and 25%, provide maximum disturbance and impervious limitations on lots with a minimum site area of one to three acres depending on the availability of public sewer and water. Establish more stringent construction standards for controlling stormwater and erosion, with every effort made to prevent or mitigate any negative impacts of the development on the slope and surrounding properties.
 - ii. Prohibit development of slopes greater than 25%.
 - e. *Adopt standards for protecting woodlands, and protection/replacement of shade trees and shade tree canopy.*
 - i. Establish disturbance limitations for remaining woodland areas in the Township, based on a sliding scale that includes the overall size of the stand and the average size of trees within it. Provide additional standards for woodland areas located on or adjacent to steep slopes.
 - ii. Adopt tree protection standards, particularly for specimen trees larger than 24" diameter at breast height.
 - iii. Provide replacement standards for woodland and specimen trees that are removed as part of subdivision and land development plans.
 - iv. Require street trees in all new development.
 - f. *Require additional investigation and studies for development proposed on sites that have underlying karst/carbonate geology.*
 - g. *Amend the Zoning and Subdivision and Land Development Ordinances to require an Environmental Impact Assessment and Mitigation Report for certain developments.* This tool is commonly used to better assess and determine the impacts of development on the existing community and its resources, as well as potential mitigation strategies. Typically, the report is triggered and required by developments of a certain size and/or type (e.g., residential developments of five units or more or nonresidential development on 5 acres or larger).
 - h. *Establish additional limitations for development proposed in the designated Crackersport Ponds area and work with the County and LVPC on acquiring easements for this Natural Areas Inventory Site.*
2. *Support and invest in the regional greenways concept to link the Township's "green infrastructure", which could include Covered Bridge Park.* Proposed greenways should provide for connection between natural, agricultural and historic resources. The LVPC Comprehensive Plan for 2030 conceptually depicts the Jordan Creek and surrounding area as a "Major Park and Open Space Area."
 3. *Partner with variety of public and private agencies to advance conservation efforts for natural resources.*
 4. *Reactivate the South Whitehall Township Environmental Advisory Committee.* This Committee could take an advisory role in the review of applications to modify the provisions for environmental regulations, such as those proposed above. Recommendations would be provided to appropriate decision-making body.

2009 SWT Comprehensive Plan: Prime Agricultural Soils



Legend

- Prime Agricultural Soils (Classes 1, 2, and 3)
- Urban Development on Prime Agricultural Soils*
- Parcels
- Streams
- Lakes & Ponds

*Note: "Urban development" is defined as parcels in residential, commercial, industrial, institutional and recreational (i.e. tax exempt) land use as designated by the county tax parcel data.

N

1000 0 1000 2000 3000 4000
Feet

Data Sources:
Base Features: Lehigh County GIS, 2004
Wetlands: National Wetlands Inventory
Floodplains: FEMA

Map 5-4
Prime Agricultural Soils

Comprehensive Plan
South Whitehall Township
Lehigh County, Pennsylvania

Prepared by:
Thomas Comitta Associates, Inc.
Town Planners & Landscape Architects
18 West Chestnut Street
West Chester, PA 19380
July 17, 2008; August 21, 2008

Notes

2009 SWT Comprehensive Plan: Agricultural Resources Recommendations

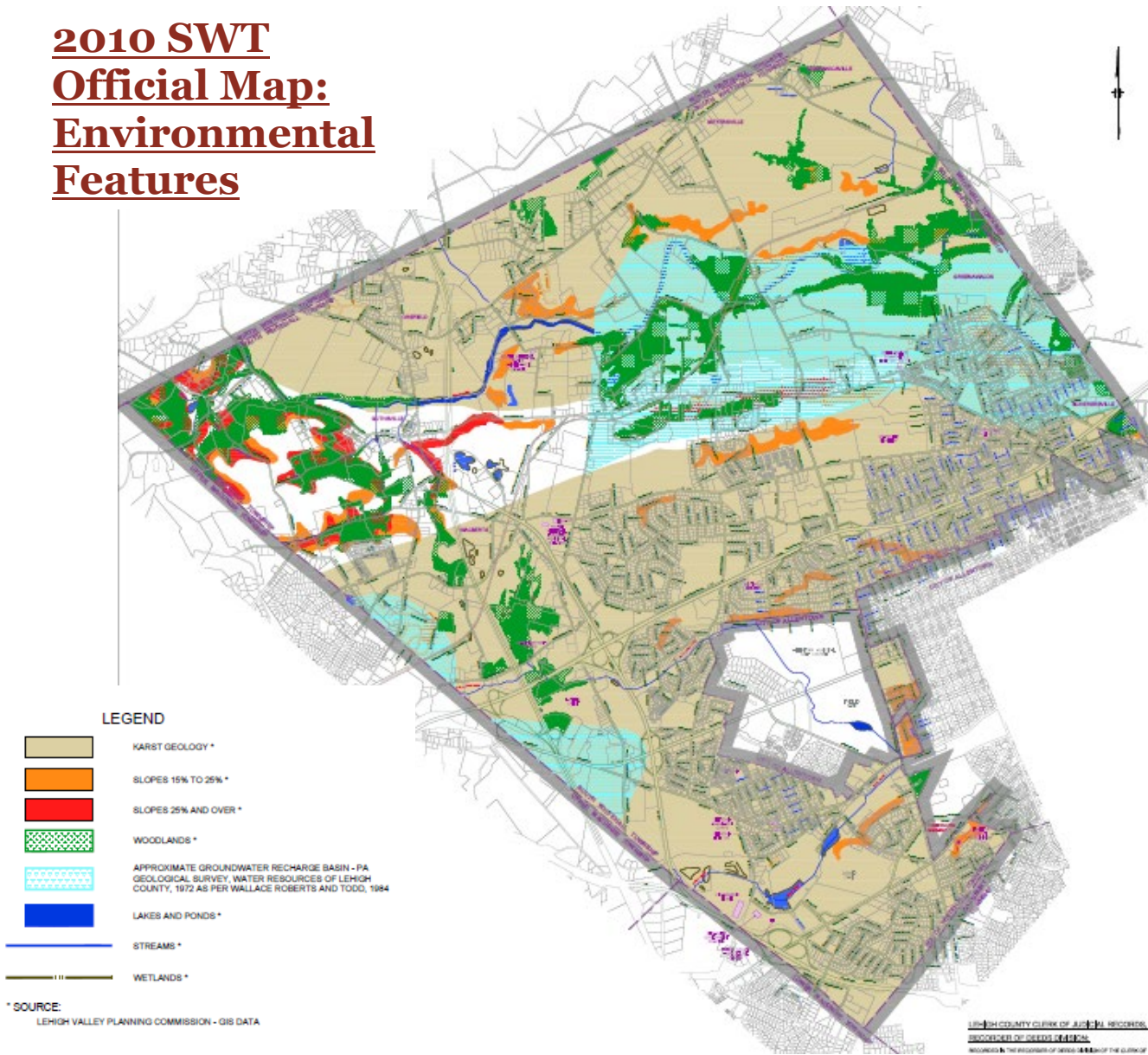
Notes

Agricultural Preservation Considerations

- 1) *Assess the public's view on farmland preservation and the use of taxpayer money to preserve more farms in South Whitehall Township.*
- 2) *Consider a municipal farmland preservation program through purchase of development rights (conservation easements).*
- 3) *Work with the County and State to facilitate farmland preservation measures.*
- 4) *Revise Township ordinances to ensure they support the normal operations of agricultural uses by:*
 - a) *amending nuisance provisions that infringe on a farmers' ability to perform necessary functions;*
 - b) *requiring agricultural buffers to ensure residential areas do not encroach on agriculture;*
 - c) *permitting agriculture support businesses in agricultural areas.*
- 5) *Provide education and outreach materials to farming and non-farming residents about the go to the Township and what it means to live near a farm.*

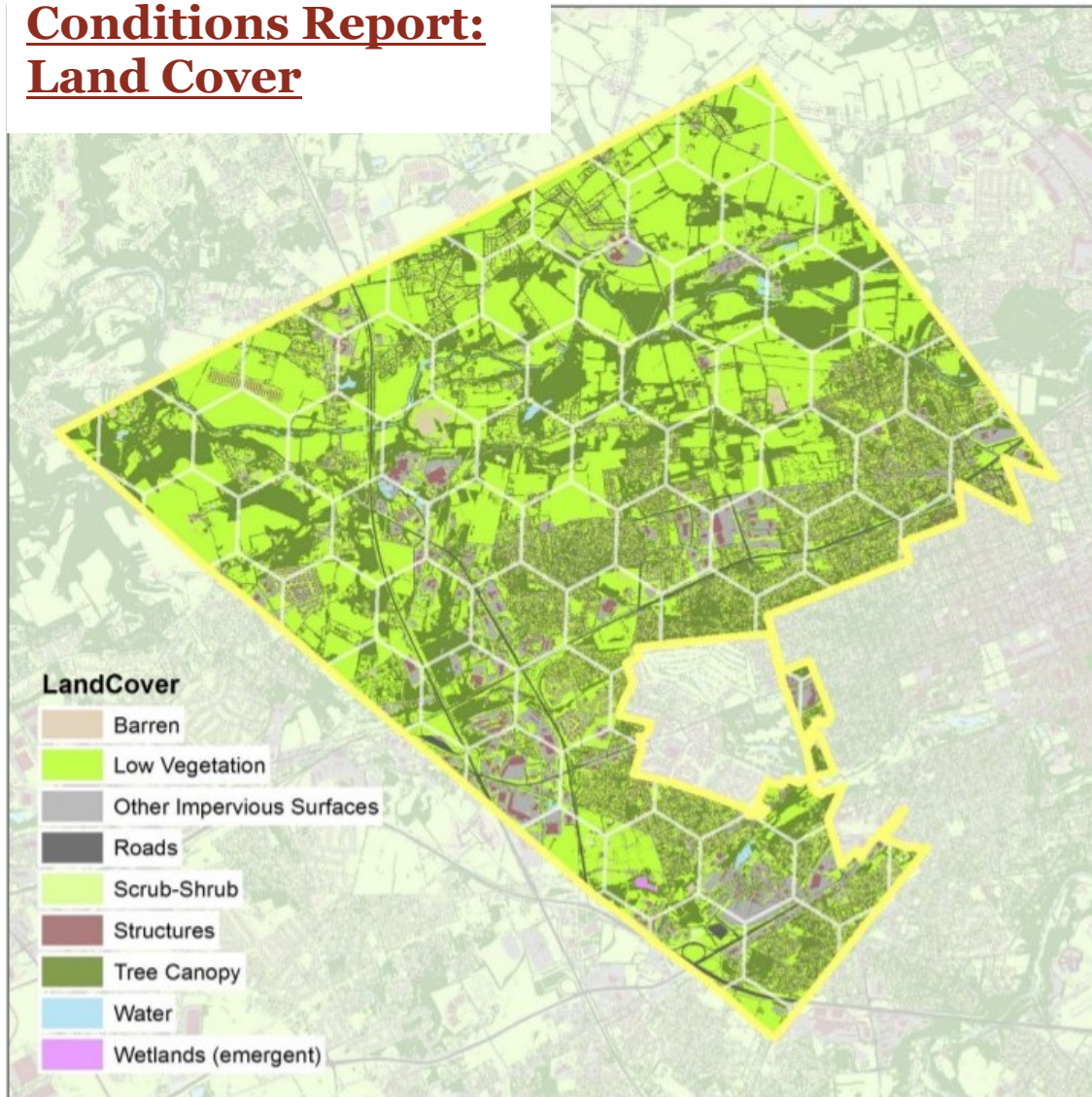
**2010 SWT
Official Map:
Environmental
Features**

Notes



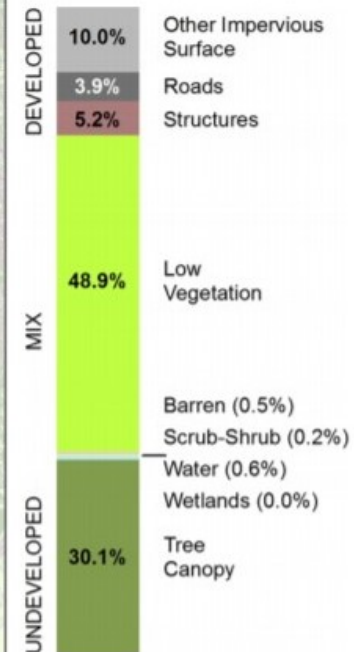
2019 Existing Conditions Report: Land Cover

Notes



Land Cover

Land cover is another tool that can be used to assess development use and patterns. Parcel are examined based on the physical characteristics of the land surface making it easier to determine developed lands from undeveloped lands. In SWT, there is a clear line of demarcation between lands north of the Huckleberry Ridge and those to the south.



"Low Vegetation" include agriculture, lawn areas, etc...

Resource Protection Today:
Phase 4 Kickoff Meeting March 31, 2021

What is a word you would use to describe Resource Protection in South Whitehall Township today?

Mentimeter



5

Discussion Template

1. What information or data is significant?

2. Why is it significant?

3. Where geographically is it significant?

4. Do you disagree with anything?

5. *Is anything surprising?*

6. *What are we missing?*

Key Takeaways – Working Group Meeting #1

Working Group Meeting #2: LVPC Subject Matter Experts

Subject Matter Experts (SMEs) from the Lehigh Valley Planning Commission (LVPC) will present relevant data, tools, and best practices to each working group. Participants will have a chance to discuss the ways to address problems in South Whitehall Township and move forward towards identifying recommendations with SMEs.

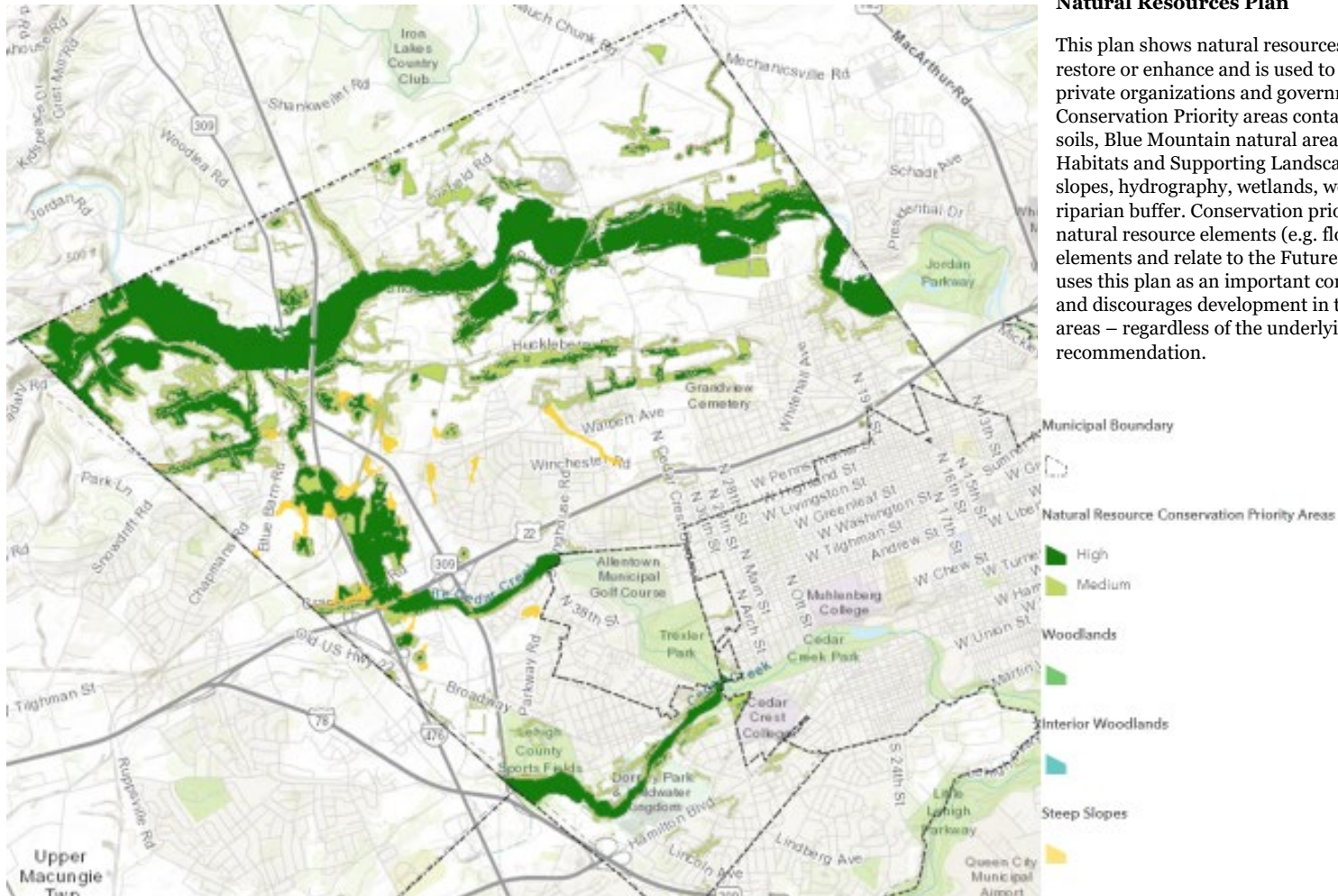
Goals

- **Review and discuss SME sourced data**
- **Learn about tools and best practices**
- **Identify initial recommendations**

Outcome

Create a high-level list of initial recommendations that will be prioritized and built out at Working Group Meeting #3.

FutureLV Data (LVPC): Natural Resources Plan

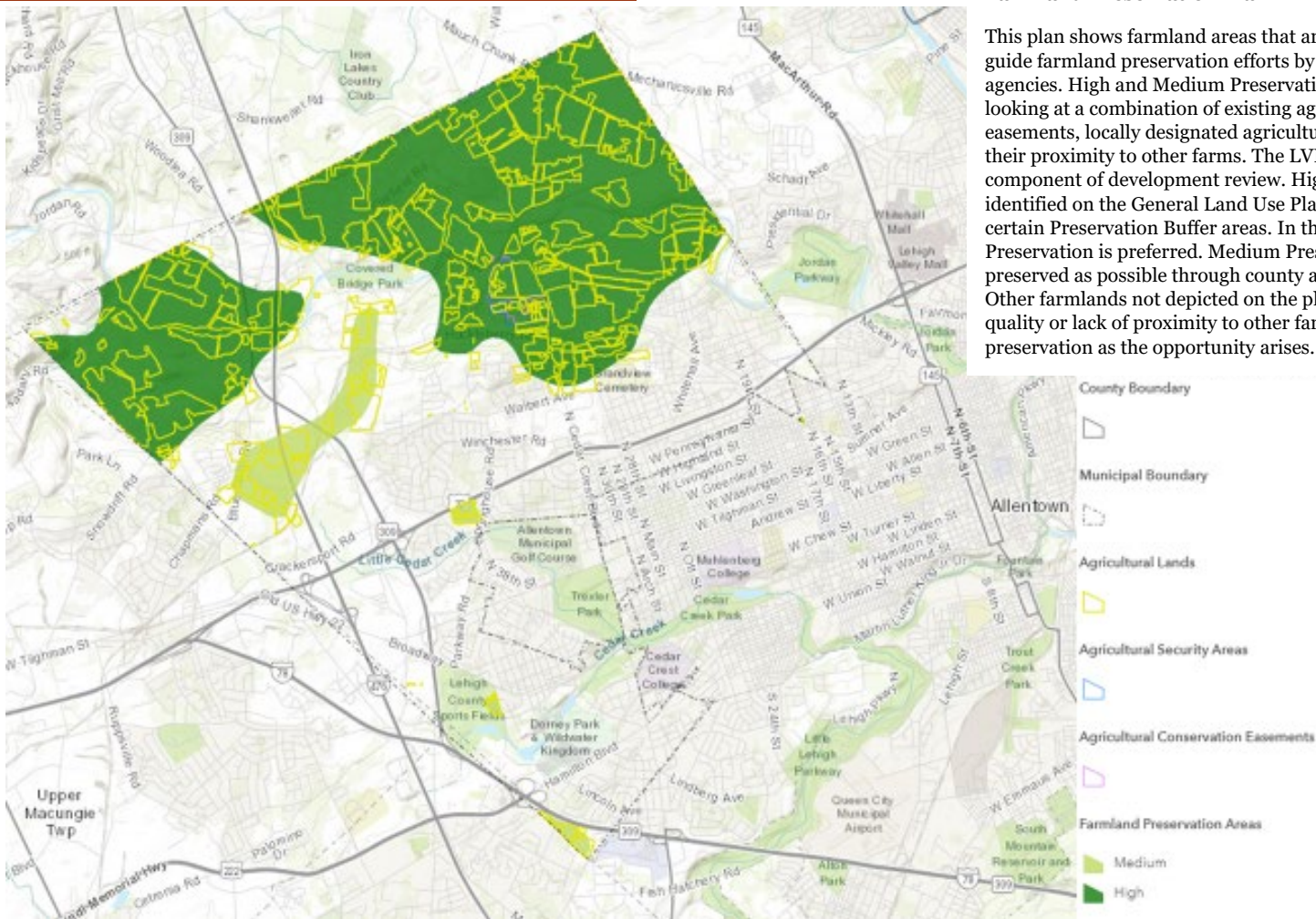


Natural Resources Plan

This plan shows natural resources that are important to conserve, restore or enhance and is used to guide conservation efforts by private organizations and government agencies. High and Medium Conservation Priority areas contain a mix of floodplains, hydric soils, Blue Mountain natural area, Natural Heritage Areas (Core Habitats and Supporting Landscapes), local natural areas, steep slopes, hydrography, wetlands, woodlands, interior woodlands and riparian buffer. Conservation priorities are based on how individual natural resource elements (e.g. floodplains) overlap with other elements and relate to the FutureLV goals and priorities. The LVPC uses this plan as an important component of development review and discourages development in the High Conservation Priority areas – regardless of the underlying General Land Use Plan recommendation.

Access the LVPC FutureLV’s Interactive Natural Resources Map here: <https://tinyurl.com/2fy6ct4w>

FutureLV Data (LVPC): Farmland Preservation Plan



Farmland Preservation Plan

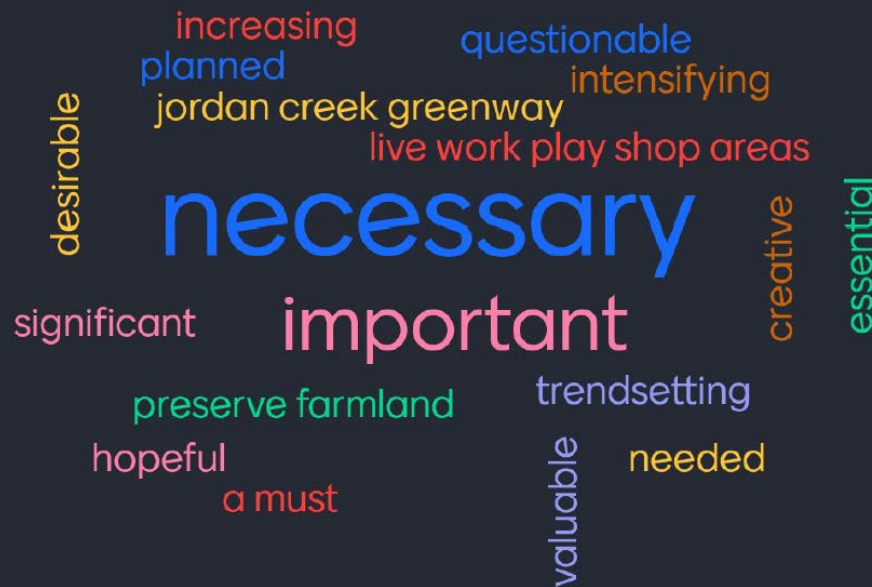
This plan shows farmland areas that are important to preserve, and is used to guide farmland preservation efforts by private organizations and government agencies. High and Medium Preservation Priority areas were identified by looking at a combination of existing agricultural lands, existing agricultural easements, locally designated agricultural security areas, high-priority soils and their proximity to other farms. The LVPC uses this plan as an important component of development review. High Preservation Priority Areas are identified on the General Land Use Plan either for Farmland Preservation or certain Preservation Buffer areas. In the Preservation Buffer area, Farmland Preservation is preferred. Medium Preservation Priority areas should be preserved as possible through county and agricultural easement programs. Other farmlands not depicted on the plan, either due to small size, lower soils quality or lack of proximity to other farmlands, should be considered for preservation as the opportunity arises.

Access the LVPC FutureLV's Interactive Farmland Preservation Map here: <https://tinyurl.com/jrj5baps>

Resource Protection Future:
Phase 4 Kickoff Meeting March 31, 2021

What is a word to describe Resource Protection in South Whitehall Township in next 10 years?

Mentimeter



Discussion Template

1. What is working well now in South Whitehall Township?

2. What are the problem areas? What SME tools/best practices are relevant to addressing these problems?

3. What recommendations based on SME tools and best practices should we carry forward to the Comprehensive Plan Update?

Recommendations:

1.

2.

3.

4.

Working Group Meeting #3: Prioritize and Develop Recommendations

Meeting #3 focuses on building out the recommendations identified in Meeting #2. Working Group members will prioritize their recommendations and develop recommendations utilizing the Recommendation Template.

Goals

- **Prioritize and assess recommendations**
- **Build out Recommendation Templates**
- **Prepare to present Recommendations at the Concluding Working Group Meeting**

Outcome

Prioritize recommendations and then identify key goals, key actions, leaders, partners, funding, and timeline. These recommendations will be presented to the South Whitehall Township Planning Commission at the Concluding Working Group Meeting, and will directly inform the Comprehensive Plan Update.

Prioritization Exercise

My Recommendation Prioritization	Final Working Group Recommendation Prioritization

Recommendation:	
Key Goals:	Key Actions:
Stakeholders	Funding Sources
Who Leads? Who Partners?	
Implementation Timeline (near-term, mid-term, or long-term):	
Measures of Success:	

Recommendation:

Key Goals:

Key Actions:

Stakeholders

Funding Sources

Who Leads?

Who Partners?

Implementation Timeline (near-term, mid-term, or long-term):

Measures of Success:

Recommendation:

Key Goals:

Key Actions:

Stakeholders

Funding Sources

Who Leads?

Who Partners?

Implementation Timeline (near-term, mid-term, or long-term):

Measures of Success:

Recommendation:

Key Goals:

Key Actions:

Stakeholders

Funding Sources

Who Leads?

Who Partners?

Implementation Timeline (near-term, mid-term, or long-term):

Measures of Success:

Recommendation:

Key Goals:

Key Actions:

Stakeholders

Funding Sources

Who Leads?

Who Partners?

Implementation Timeline (near-term, mid-term, or long-term):

Measures of Success:

Recommendation:

Key Goals:

Key Actions:

Stakeholders

Funding Sources

Who Leads?

Who Partners?

Implementation Timeline (near-term, mid-term, or long-term):

Measures of Success:

Summary

Working Group Members:

Spokesperson/Presenter for Working Group Concluding Meeting:

Highest Priority Recommendation:

Working Group Concluding Meeting

Each Phase 4 Working Group will present their recommendations to SWT staff and the Planning Commission to generate constructive feedback and discussion. The recommendations, feedback, and discussion will inform the drafting of the Comprehensive Plan Update.

Goals

- **Present recommendations**
- **Provide feedback and facilitate discussion**
- **Advance recommendations to Planning Commission drafting of Comprehensive Plan**

Outcome

Phase 4 will conclude with presentations of Working Group recommendations to the Planning Commission, informing the Comprehensive Plan Update.

Housing Recommendations Notes

Which recommendations are more or less important?

What did I like about these recommendations?

What can be improved?

Recommendation Priority Ranking

1.

2.

3.

4.

5.

Transportation Recommendations Notes

Which recommendations are more or less important?

What did I like about these recommendations?

What can be improved?

Recommendation Priority Ranking

1.

2.

3.

4.

5.

Community Facilities Recommendations Notes

Which recommendations are more or less important?

What did I like about these recommendations?

What can be improved?

Recommendation Priority Ranking

1.

2.

3.

4.

5.

Community Utilities Recommendations Notes

Which recommendations are more or less important?

What did I like about these recommendations?

What can be improved?

Recommendation Priority Ranking

1.

2.

3.

4.

5.

Resource Protection Recommendations Notes

Which recommendations are more or less important?

What did I like about these recommendations?

What can be improved?

Recommendation Priority Ranking

1.

2.

3.

4.

5.