

Tomorrow's Palmer

Sustaining the Legacy



2018 Comprehensive Plan

Prepared in cooperation with:
Environmental Planning & Design, LLC
and Johnson, Mirmiran & Thompson, Inc.



EPD | Environmental
Planning & Design, LLC

Landscape Architects
Community Planners
Urban Designers

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RESOLUTION NO. 2018- 03

A RESOLUTION OF THE TOWNSHIP OF PALMER, NORTHAMPTON COUNTY, PENNSYLVANIA, ADOPTING THE COMPREHENSIVE PLAN PREPARED FOR THE PALMER TOWNSHIP BOARD OF SUPERVISORS AND THE PALMER TOWNSHIP PLANNING COMMISSION PURSUANT TO ACT 247 OF 1968 AS AMENDED, ARTICLE XI OF THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, AS THE OFFICIAL COMPREHENSIVE PLAN FOR THE TOWNSHIP OF PALMER.

WHEREAS, the Pennsylvania Municipalities Planning Code grants the governing bodies of Pennsylvania municipalities authority to develop, adopt and implement a Comprehensive Plan; and

WHEREAS, the Palmer Township Board of Supervisors contracted with Environmental Planning & Design, LLC (EPC) and created a Steering Committee to assist the Planning Commission to prepare a Comprehensive Plan and to adopt the Comprehensive Plan pursuant to the powers granted by the Pennsylvania Municipalities Planning Code; and

WHEREAS, EPC, the Steering Committee, Planning Commission and Board of Supervisors have completed the procedural process set forth within Article XI of the Pennsylvania Municipalities Planning Code required prior to the adoption of the Comprehensive Plan; and

WHEREAS, the comments received from the public through surveys and at public meetings, and from the Lehigh Valley Planning Commission have been duly noted; and

WHEREAS, the Planning Commission has reviewed and recommended the approval of the Comprehensive Plan that addresses community objectives, current and future land use, community amenities, infrastructure and regional relationships; and

WHEREAS, the Comprehensive Plan has also proposed an action plan with respect to planning, zoning ordinances, subdivision regulations, operations and capital improvements and governmental collaboration; and

WHEREAS, the Comprehensive Plan also incorporates data with respect to demographics, land policy analysis, existing zoning and land use, environmental characteristics, transportation, public infrastructure, and community facilities; and

WHEREAS, the Township will undertake specific policies and actions for implementation of the Comprehensive Plan within a reasonable timeframe following the adoption of said Comprehensive Plan; and

WHEREAS, the Township will charge the administrative staff personnel with providing periodic updates on planning matters to the Board of Supervisors; and

WHEREAS, a copy of the Comprehensive Plan which includes the text, maps and charts and any other items which form the whole of the Comprehensive is attached hereto as Exhibit "A";

NOW THEREFORE BE IT RESOLVED AND ENACTED BY THE PALMER TOWNSHIP BOARD OF SUPERVISORS that the Comprehensive Plan attached hereto as Exhibit "A" be adopted as the Official Comprehensive Plan for Palmer Township, and that all prior Comprehensive Plans are hereby repealed.

1. The terms and conditions of this Resolution shall become effective as of the date hereof.

RESOLVED AND ENACTED this 23 day of January, 2018, by Palmer Township by and through its Board of Supervisors.

ATTEST:



Christopher S. Christman, Secretary

TOWNSHIP OF PALMER

By: 

David E. Colver, Chairman

Table of Contents

<i>Acknowledgments</i>	iv
<i>Preface</i>	1
Palmer Proud	1
<i>Vision</i>	7
Overview.....	7
Influences to Date	8
Community Survey - Key Take-Aways	12
Relationships of Goals, Objectives and Recommendations	13
Goals	14
<i>Action</i>	17
Overview.....	17
Recommendations.....	18
<i>Influences</i>	47
Land Use	47
Transportation	51
Community Input.....	54
Benchmarking.....	66
<i>Appendix</i>	



Acknowledgments

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** The Township thanks all of the residents and business owners for participating in the planning process

Preface

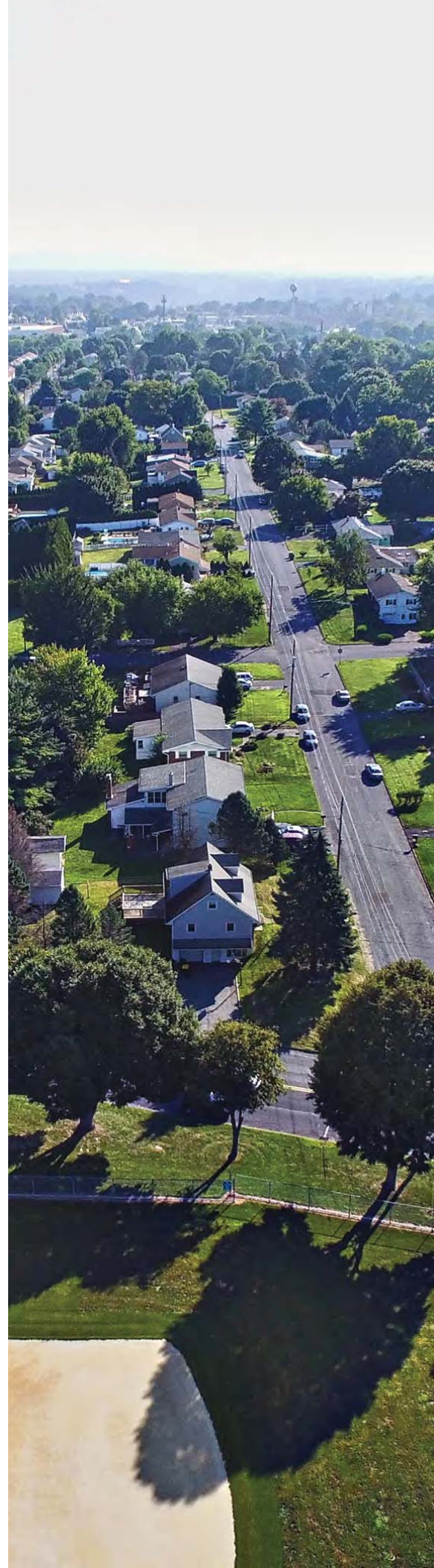
Palmer Proud

OVERVIEW

Palmer Township residents treasure their tight-knit, inclusive sense of community that has distinguished the Township for generations and share a sense of pride in public improvements. The Township's balanced tax base has enabled residents to enjoy and expect a high level of quality of service for many decades. Like all established expectations, the challenge comes in maintaining these services. Many influences are shaping ways in which the municipality balances its needs and expectations. In the coming decade, there will be discussion and actions that are pivotal in shaping future Township decisions.

As part of this planning process, residents, along with the Comprehensive Plan's Steering Committee, appointed and elected officials, have generated many ideas and scenarios considering how the community functions and thrives today and what possibilities are in store for the Township's future. If there was one word that captures the essence of tomorrow's Palmer, it is 'balance' – balance of physical changes and policies with fiscal allocations, balance of residential and non-residential impacts, balance of community and regional demands.

The 2017 Comprehensive Plan is different from the Township's 2011 Comprehensive Plan and other previous planning work. Past work examines land use patterns, however, in response to the Township's continued growth, this Comprehensive Plan takes a deeper look in analyzing remaining land available for development in the Township. From this examination, the Township explores opportunities of balancing redevelopment, enhanced connections and technical policies with considerations of future revenues and expenses, retiring debt service as well as leveraging investments made in the road, sewer and water infrastructure. The Plan calls out recommendations that touch all aspects of the community - everything from land use to parks and recreation. It aims to ensure that what distinguishes Palmer for the next generation of residents is the community's commitment to responsible decision-making and responsive service to its residents and businesses.





WHAT IS A COMPREHENSIVE PLAN?

- It is both a document and a process.
- It is a public policy guide for big picture thinking about what a makes a community more than just a place to live and work.
- It is an implementable document that helps a community prepare for and manage population changes (both growth and loss), business development patterns, traffic changes and neighborhood vitality.
- It initiates discussions and planning processes to assist in the coordination of major public investments.
- It identifies the goals and strategies for growth and conservation of a community.
- It reflects Pennsylvania's laws and guidelines for Comprehensive Plans - both the essential and detailed content that encourages growth in a conscientious and coordinated manner.
- *It is a planning initiative that differs from a zoning ordinance in that it is adopted as a resolution rather than as an ordinance or law. The comprehensive plan serves as preparation for action, whereas the zoning ordinance is a legal instrument that is used to implement regulations and provisions that are consistent with the principles of the adopted comprehensive plan.*

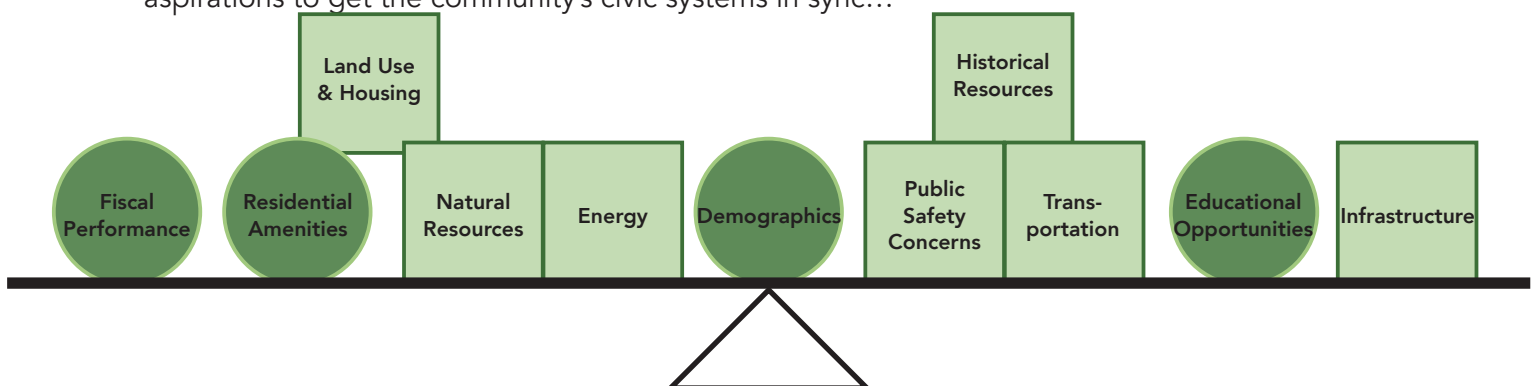
A Comprehensive Plan aims to build on opportunities to further excel the community's realistic needs and abilities to address:

- Land use relationships and related ordinance policies
- Economic development and vitality
- Community identity
- Infrastructure
- Storm water management
- The public realm
- Other amenities and assets

More than a decade ago, Michael Chandler, a Virginia Tech Professor and Community Planning Extension Specialist penned "preparing an Implementable Comprehensive Plan." As part of its publication in the Spring 1995 Planning Commissioners Journal, a series of questions established the distinguishing aspects of an implementable planning document.

- Is the plan realistic?
- Is the plan comprehensive?
- Is the plan specific?
- Is the plan linked with related functions?
- Does the plan link public and private interests?
- Is the plan citizen-focused?
- Is the plan understandable?
- Is the plan problem- and solution-specific?
- Is the plan change-specific?
- Is the plan current?

As Pennsylvania's Department of Community and Economic Development calls upon these questions for communities to consider, it is in creating an implementable comprehensive plan, that implementation – not preparation – of a comprehensive plan must be the target, the end. Foremost, a Comprehensive Plan strikes a balance between competing or conflicting needs/ aspirations to get the community's civic systems in sync...





So, A Comprehensive Plan is Really About the Process!

For Palmer Township, the three components of its work include:

- Assessing current conditions and fact-finding
- Gathering community thoughts about aspirations and perceptions
- Outlining recommendations for action

In considering feedback received from nearly 1,000 residents during the comprehensive plan's 8-month span of analysis and development of initial recommendations (August 2016-March 2017), those participating in the process shared a number of important insights. The community's most commonly expressed perceptions are that Palmer Township is a notable place because of its:

1. Quality of homes and neighborhoods
2. Efficient/satisfactory services
3. Plentiful and well paying jobs in market
4. Efficient transportation
5. Accessible and diverse parks and recreation programs

Further, the range of comments expressed included:

Capturing these impressions set the stage for considering what influential planning factors are. As such, Palmer is a community with an incredible amount of pride and involvement in community-related activities. The Township's balanced tax base lets residents enjoy the parks and active recreation. There is an expectation of a high level of quality of service and like all established expectations, the challenge is maintaining them. Although residents enjoy parks and active recreation, there is limited connectivity between many facilities and a low distribution of green space.

The 2017 Comprehensive Plan is different from previous plans; this Plan explores redevelopment. The perception of traffic congestion problems is less of a concern than the safety issues. This is especially true at key intersections including Rt. 22/25th Street. Freemansburg Ave, William Penn Highway and 25th Street that have a need for balancing land use, curb appeal and road capacity. Further, there are no discernible/memorable gateways to the community.

The community continues to grow and the populations is ever-evolving; everyone seems to be looking for information in a different manner in different times and different level of detail. Adjusting to the continuing evolving methods of communication, for any municipality, is an on-going challenge. With that comes the necessity for understanding how to communicate policies and projects. This puts more focus on how to get the word out and make as convenient and informative as possible.

These words represent what Palmer means to its residents:





Vision

Overview

The community's housing stock, vibrant business settings, active citizens and committed community leaders are all attributes that contribute to Palmer Township's long-term sustainability. The area's wealth of civic and educational resources provides a foundation for maintaining a high quality of life that residents have come to know.

Many components of change currently impact the community. The primary purposes of the comprehensive planning process are to identify issues, define opportunities and formulate strategies that will address, leverage and forge implementation efforts. The community's challenges can undoubtedly be transformed to opportunities.

This Plan defines a series of strategies formulated to address issues that can be solved through collaboration among community leaders, Township departments, local institutions and businesses, residents, regional stakeholders and agencies of the Commonwealth. In planning through the lens of tomorrow's Palmer, the community can ensure its successes continue in the decades ahead.



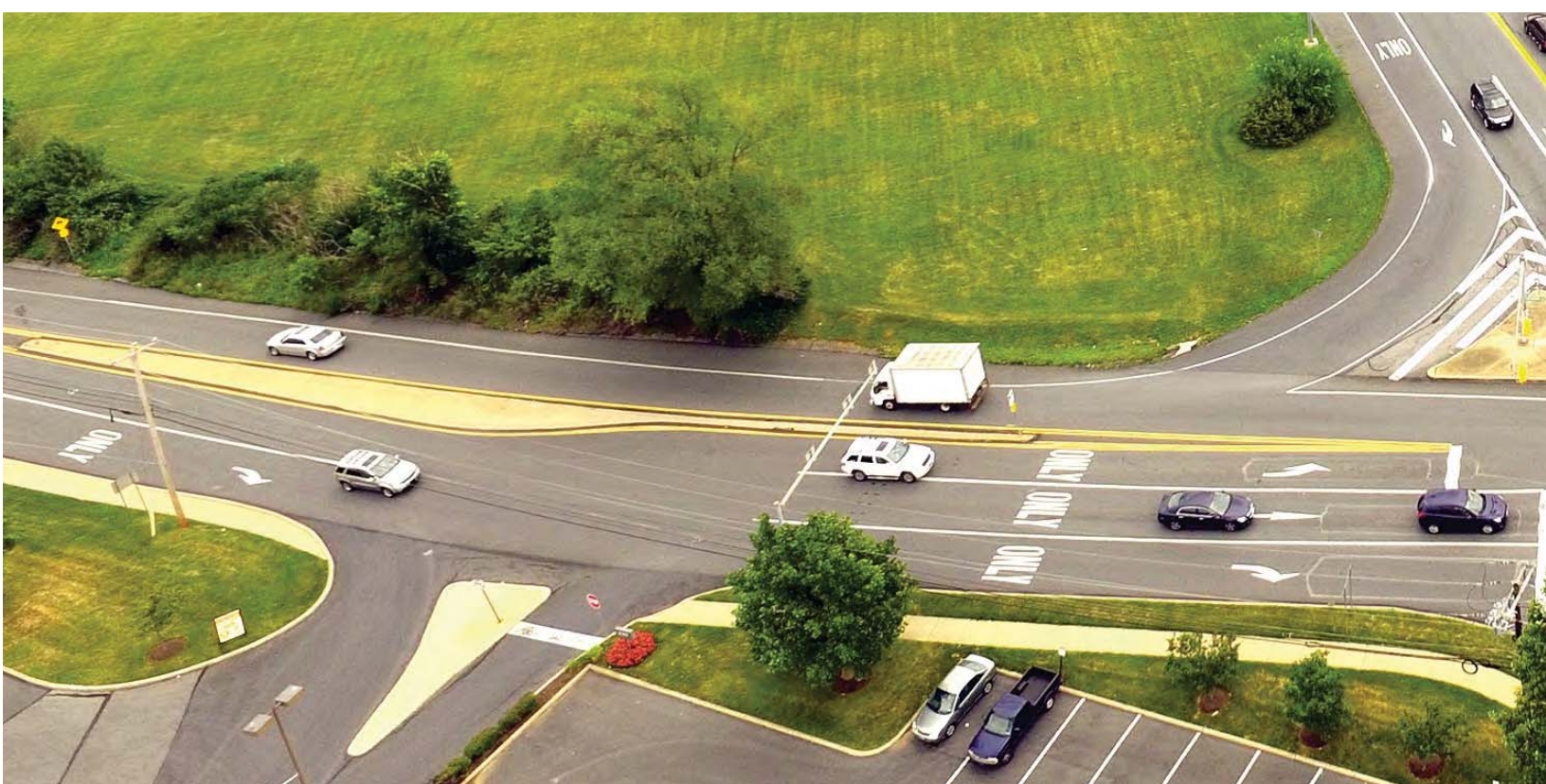
Influences to Date

Capturing the public's thoughts and impressions set the stage for the Township to identify ways in which the community's assets can best be maintained and enhanced.

A. LAND USE AND HOUSING

The community is very family-oriented with some neighborhoods consisting of the community's oldest housing stock as well as its oldest residents. It is important to keep up maintenance and understand who the next generation of home-owners will be in those neighborhoods.

Neighborhoods are distinguishable based on their housing age and densities. Of the 6,600 acres within the Township, approximately 2,500 acres are developed as residential land uses. With 8,366 dwelling units (2010 US Census) housing 20,691 residents (2010 US Census; with 21,469 estimated in the 2016 US Census), there are approximately 3.35 dwelling units per acre and 8.3 residents per residential acre (2010-2016) in Palmer Township. Further, the dynamics and patterns of decisions among the Township's maturing population may also influence housing in the decade ahead. In breaking away from the predominance of long-established housing products and neighborhoods built to generally serve growing families, the Township acknowledges the need for the housing products in the community that are attractive to those looking for or transitioning to one-level living, smaller lots, and more condominium style products where maintenance required. There are



few areas within the Township where a neighborhood contains a mixture of densities. As Palmer and its neighbors are growing up, including being on the cusp of needing to deal with redevelopment, collaboration will be a key to the communities' collective success in dealing with regional-scale impacts that may arise.

Through recent land development applications, some have expressed aversion to higher density development.

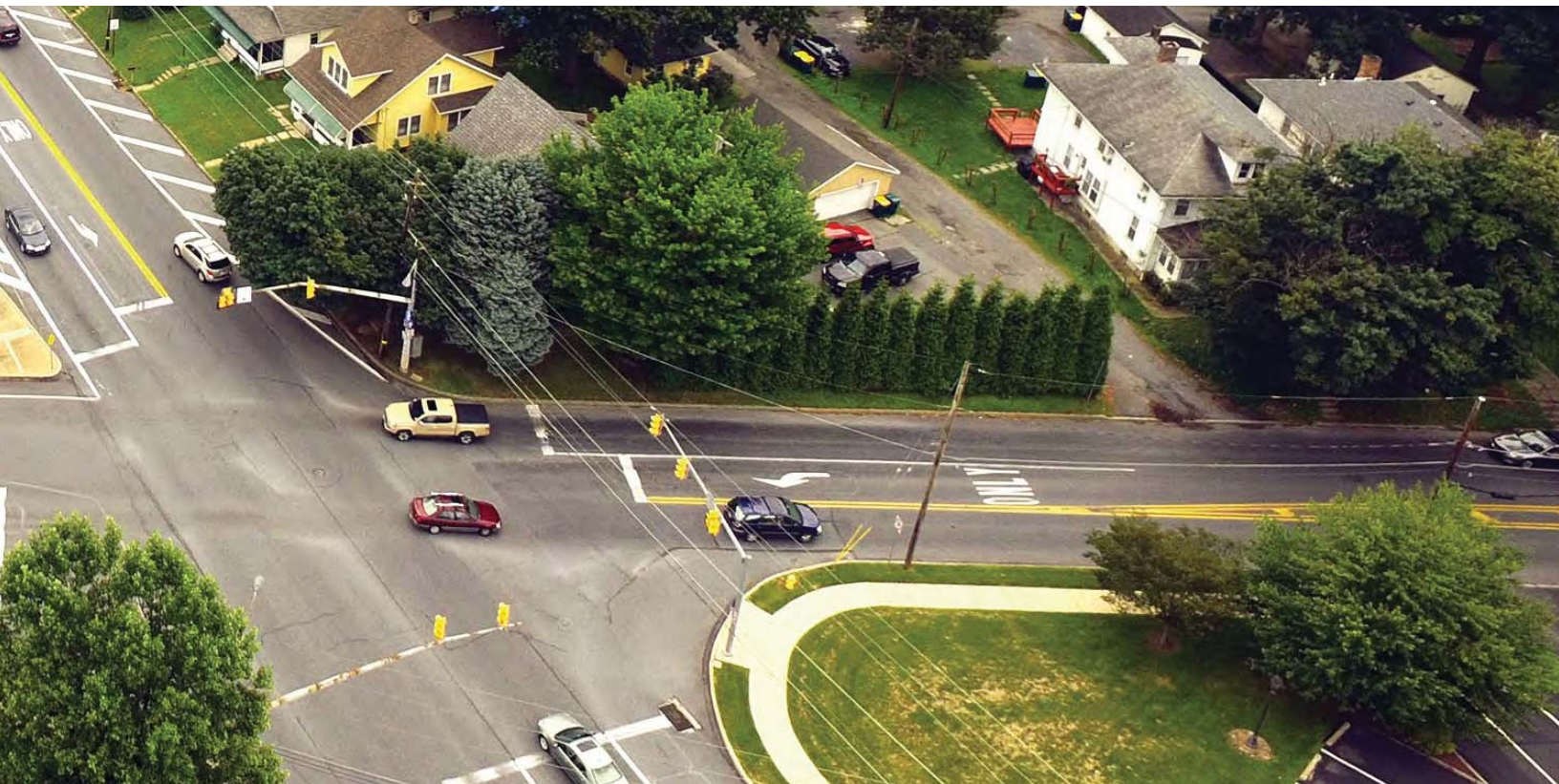
Non-industrial/warehouse businesses are generally located along the 3 major corridors – 248, William Penn and Freemansburg. There is ample space available for non-residential development; this type of development is fundamental to the community's balanced tax base and quality opportunities for employment.

B. ECONOMIC DEVELOPMENT

The 33 interchange has been the catalyst for development in the Township's northern portion and for strengthening the municipality's future tax base.

The 33 corridor is regionally significant and brings economic power and potential to the community and the region.

As a complement to regional business, Old William Penn and 248 serve everyday community needs; on these corridors, vacancies are minimal and land values are high.





C. TRANSPORTATION/MOBILITY

Palmer is trail rich; while a few disconnects exist in the trail network, it results in a well-connected community to which many other municipalities aspire.

Traffic problems, arising from both local as well as regional travelers, include peak hour congestion and safety issues; at peak hours (and instances of accidents), when back-ups occur, few route alternatives exist without neighborhoods being negatively impacted. Navigating portions of the Township's transportation network is not always intuitive. Further, there are no discernible or memorable gateways to the community. The perception of traffic congestion problems is less of a concern than the safety issues at key intersections including Rt. 22/25th Street. Freemansburg Ave, William Penn Highway and 25th Street. There is a need for balancing land use, curb appeal and road capacity.

While LANTA's system is a strong, well developed system, the routes and number of stops within the Township are limited; Palmer residents comprise a minimal portion of overall system ridership.

D. RECREATION

The Township has an established history of protecting green spaces; some criticism has occurred in more recent decades about the extent to which recreation assets are designated for short- and/or long-term purposes.

Although residents enjoy parks and active recreation, there is limited connectivity between many facilities and a low distribution of green space. In some cases, there has been difficulty in achieving interconnected open spaces through legislative policy.

E. NATURAL SYSTEMS AND OPEN SPACE

Residents continue to express their desire for existing natural systems that are intact to be retained and their desire for improving the way in which open spaces can be connected.



F. CIVIC APPRECIATION

Palmer Township is composed of many life-long residents. There is a tremendous level of volunteerism and an unprecedented level of community involvement, resulting in a Township whose proactive mentality is focused on positive results and “making things happen.” Residents, as a whole, take deep pride in being part of the Palmer community.

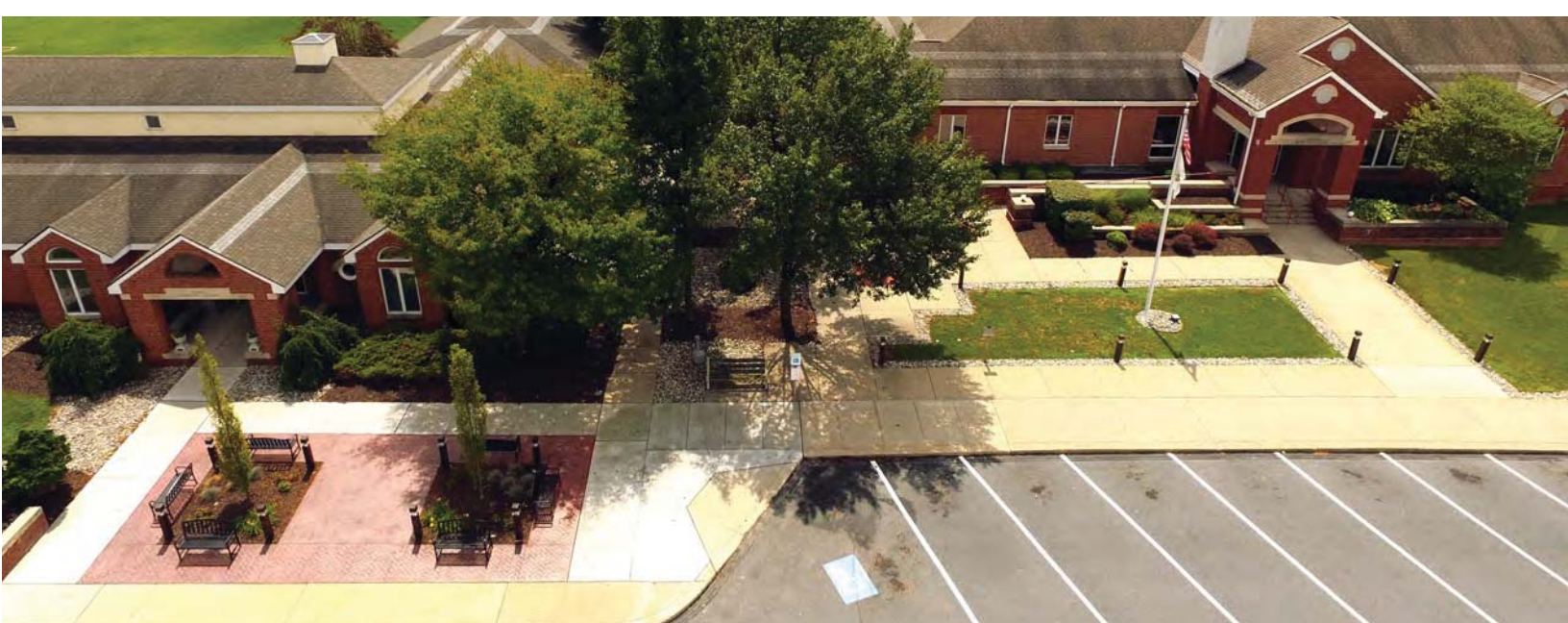
The commitment and quality exhibited throughout Easton Area School District’s faculty, programming/services and athletics are magnets for attracting new residents as well as retaining residents; hence, there is a connection between the school district and life-long residency.

While the community has a deep-rooted, rich character, it is challenging to translate Palmer into one phrase; a discernible brand or identity capturing “Palmer Township” has yet to be realized.

G. MUNICIPAL SERVICES

The community continues to grow and attract those from the surrounding region. With ample system capacities, water and sanitary sewer infrastructure is generally a non-issue in context of future development scale.

The Township consistently delivers high quality services. Getting the word out about these important accomplishments is subtle. What are the best ways in which the community will be able to share information with everyone in the myriad of ways in which people seek it - different manners, different times and different levels of detail? Adjusting to the continuing evolving methods of communication, for any municipality, is an on-going challenge. With that comes the necessity for understanding how to communicate policies and projects. This places more focus on how to get the word out and make as convenient and informative as possible.





Community Survey

Key Take-Aways

The Township conducted a community-wide survey in 2016. More than 700 households shared their feedback and opinions helping the Township to understand resident outlooks.

RESPONDENTS EXPRESSED:

1. Like it here and are committed to stay here for the long-term
2. Have great appreciation of parks and trails
3. Favor that the pace of future development slows down and is less intense
4. Perception of decreased traffic safety and increased congestion are of concern
5. Want more trails and connectivity

...AND THEIR FOCUS FOR PALMER'S FUTURE IS ON:

- Quality Housing
- Housing Affordability
- Increased Trails & Sidewalks
- Safer Bike/Pedestrian Connections
- Intersection Improvements
- Corridor Improvements
- Parks & Open Spaces
- Improve Quality And Character Of Development
- Lower Density Development
- Additional Senior Care/ Living Opportunities
- On-Going Maintenance Of Recreation Facilities
- Alleviating Traffic Congestion
- Public Transportation
- Healthy Business/Jobs
- Land Conservation
- Community Events
- Information Dissemination
- Stormwater Management
- Sustainability Practices

When Goals Lead to Actions

*Palmer Township: where quality neighborhoods, green spaces
and services enhance life, work and play.*

GOALS

1. Describe an idea or sought after end
2. Are non-specific/general statements
3. Are the foundation to which policies should refer

Example: Enhance mobility by encouraging trail development

THESE LEAD TO OBJECTIVES

1. Advance a goal's specific purpose, aim, ambition or element
2. Describe the end state of the goal, its purpose, or a course of action necessary to achieve it.
3. Are generally non-quantifiable
4. Suggest a course of action or "should, will"
5. May indicate general criteria to be followed in developing policy

Example: Expand the system by 5 miles

THESE LEAD TO RECOMMENDED ACTIONS

1. Describe how an objective will be carried out
2. Describe method or provide guidelines
3. Are usually measurable and/or time sensitive
4. May have a cost associated with it
5. Identify responsible parties

Example: Construct link X, Y, Z



Goals

A. LAND USE AND HOUSING

1. Provide housing opportunities for a full range of ages, family types and accessibility needs
2. Establish policies that support fiscally marketable redevelopment and re-use of previously developed sites
3. Support well planned and compatible land uses that are concurrent with infrastructure availability, environmental sensitivities and surrounding density patterns

B. ECONOMIC DEVELOPMENT

1. Safeguard the community's established, business-friendly atmosphere
2. Encourage compatibility of established development within the Township and new entrepreneurial efforts
3. Promote a variety of development scales, densities and land use patterns that reinforce the community's desirable character



C. TRANSPORTATION/MOBILITY

1. Identify and address pedestrian safety needs, congestion, traffic flow challenges and safety concerns where they exist
2. Support integrated, safe bicycle/trail networks to support recreation and connectivity of community assets and neighborhoods
3. Improve transit ridership convenience and safety between areas of employment, shopping, neighborhoods and transit stops

D. RECREATION

1. Provide a wide range of active and passive recreation areas and facilities that are well-distributed throughout the Township
2. Enhance offerings with other non-athletic forms of recreation including inclusive play and those which support residents of all capabilities.

E. NATURAL SYSTEMS AND OPEN SPACE

1. Protect natural and dedicated open space areas and riparian corridors, inclusive of floodplains, as a cohesive, interconnected system

F. CIVIC APPRECIATION AND MUNICIPAL SERVICES

1. Continue emphasizing civic values and pride to the future generations of Township residents
2. Reinforce the significance of the community's multiple civic centers or hubs as destinations for recreation, community gathering and commerce.
3. Establish a sense of arrival when entering Palmer Township
4. Encourage energy resourcefulness through balancing efficient land use and transportation relationships
5. Align development with accessible infrastructure service
6. Continue delivering quality public services
7. Facilitate discussions with neighboring communities when dealing with regionally significant development and improvements
8. Maintain fiscal responsibility relative to the Township's tax base when considering rezoning requests and development approvals
9. Promote sustainability as a guiding principle in Township decision-making



Action

Overview

From analysis and observations identified throughout the comprehensive planning process, numerous realistic opportunities exist. Recommendations are rooted in both policy and physical actions that address a range of activities or themes. Some of the projects, policies and actions will require collaboration while others can be completed at the Township Department-level.

Projects and policies will sometimes require the commitment and cooperation of civic leaders, authorities, residents, institutions and businesses. As resources are available, each project or policy will be prioritized into different timeframes. Example timeframes include:

- Immediate 1 to 2 years;
- Short-Term >2 to 5 years;
- Long-Term > 5 years; and
- On-Going.

The listing of recommendations should be updated as progress is made and refined to reflect shifts in priorities or planning efforts. Because of the nature of various actions and the potential influence of the community's actions on others, Palmer Township should convene at least every other year to evaluate progress and reprioritize actions along with needs for collaboration.

Recommendations

LAND USE

Palmer Township is multi-centered. The vibrancy and vitality of the community can be seen from its long established southern neighborhoods and locally oriented business corridors to its northern reaches of more regionally-oriented businesses. As development has grown and the community approaches its build-out, the future community "core" is evolving to focus on where culture and recreation become intertwined – in the vicinity of Palmer Elementary School and the Charles Chrin Community Center of Palmer Township.

The Township's land use, density patterns and network of roads shape the way in which these multiple centers function. As part of the planning process, the four landscapes that emerge included:

- A – Freemansburg** Corridor Neighborhoods
- B – William Penn** Corridor Neighborhoods
- C – Northwood**
- D – 33**

Within each of these landscapes there are opportunities for enhancing the relationships between existing and future land use development and/or redevelopment. As planning decisions are made in the upcoming years, context to these four landscapes will enable policies to be considered in relationship to development scale, general land use as well as access patterns.


A significant element shaping the Township's future character is in its land use patterns. A number of land use planning policies are recommended.

1. Overlays

To encourage quality development that supports a continued balanced tax base, the Township should create and adopt a series of zoning overlays that enhance existing zoning provisions. These include the Freemansburg Avenue Overlay, the William Penn Overlay, the Eastern Gateway Overlay, the Nazareth Overlay and a Riparian Overlay.


ZONING OVERLAYS


LEGEND

 Palmer Township (6,614 Acres)

 Rivers/Streams/Ponds


ZONING OVERLAYS


 Nazareth/248
(77 Acres/124 Lots)


 William Penn Highway
(86 Acres/92 Lots)


PROPOSED ZONING OVERLAYS:

MAP AND TEXT ADDITIONS

 Eastern Gateway
(55 Acres/13 Lots)

 Freemansburg Subdistrict "A"
(60 Acres/99 Lots)

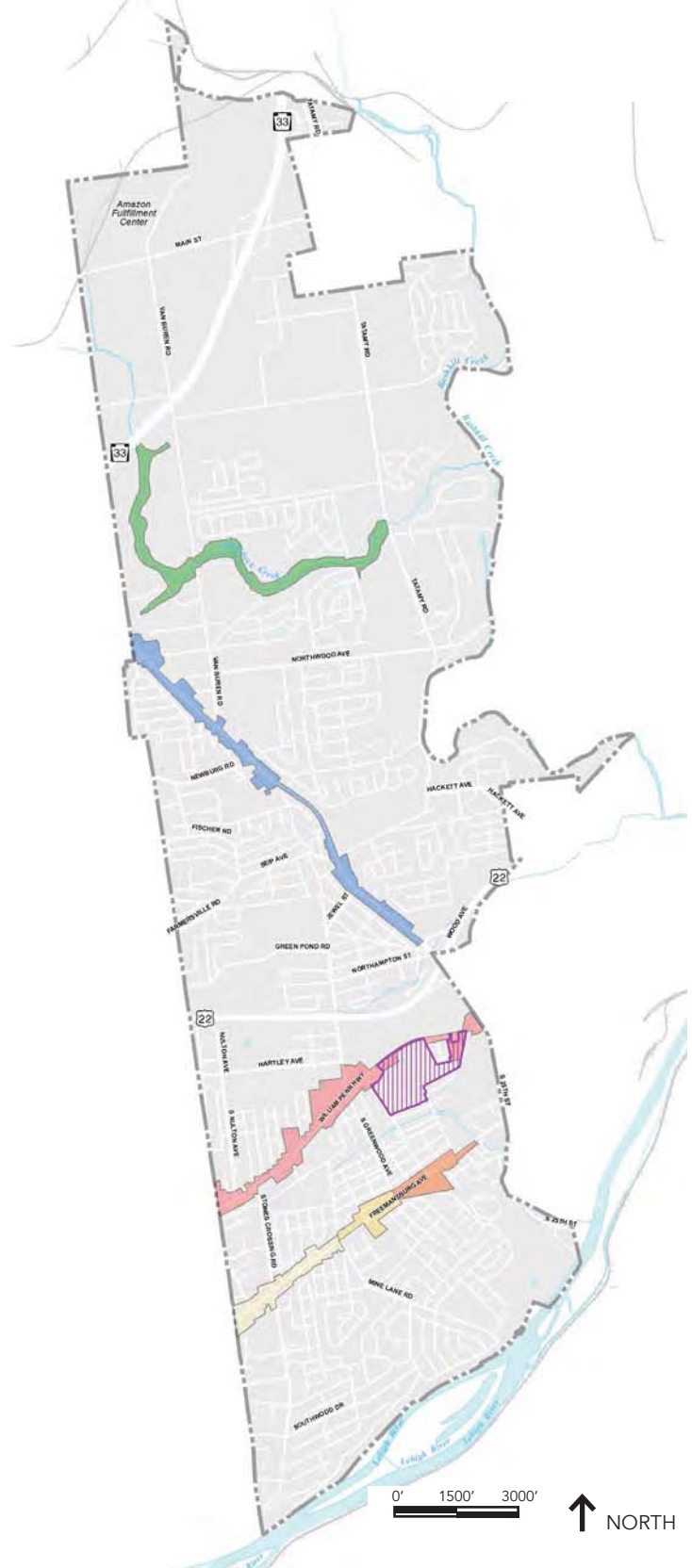
 Freemansburg Subdistrict "B"
(38 Acres/66 Lots)

 Freemansburg Subdistrict "C"
(17 Acres/22 Lots)

 Riparian Buffer
(83 Acres/30 Lots)

Prepared by:

EPD Environmental
Planning & Design, LLC





Recommendation: Develop a Freemansburg Avenue Overlay

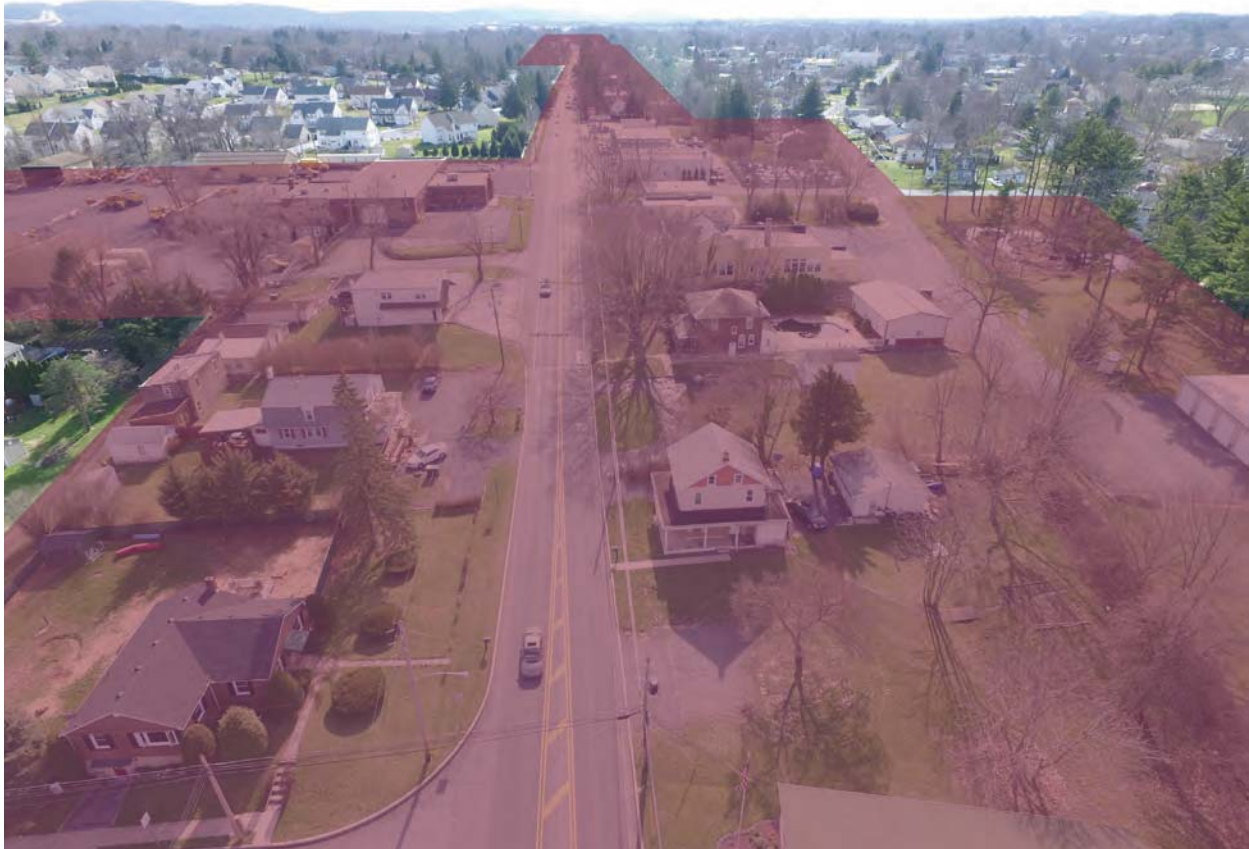
Freemansburg Avenue is similar to the William Penn corridor 20 years ago. However, a real challenge is that Freemansburg Avenue possesses a more extensive mixture of land uses. This overlay can build on the types of successes experienced to date in the William Penn Overlay while focusing on the unique aspects and extent of mixed use development/redevelopment. This Overlay has the opportunity to integrate additional non-residential and infill development into the corridor and considers the intricate presence of existing residential development.

The Overlay can introduce specific, effective controls for improving access relationships, land use compatibilities and the way in which parking is located and relates to redevelopment.

An important aspect of this overlay will also be in identifying opportunities to make redevelopment be trail-oriented and creative ways for addressing environmental conditions where portions of this area are impacted by contamination. Through a mixed use overlay, the Township could consider the conditional use application process as well as the ways in which pedestrian connectivity can be extended to surrounding and nearby established campus and suburban development.

Freemansburg Avenue Overlay

Identify opportunities for refined setbacks, bufferyards, lot consolidation, orientation and parking locations.



Recommendation: Create the Eastern Gateway Overlay

Accessible from 25th Street, Route 22, Greenwood and William Penn, all roads lead to an area of established industrially oriented uses. As a viable portion of the community, this area is anticipated to undergo redevelopment in years to come. Proactively preparing for such a change will enable the Township to plan for future anticipated commerce-oriented mixed use. The opportunity of looking at this 'gateway' in a different way will allow the community to evaluate options for development types and scale that complement its accessibility and surrounding land uses.






Retail/Office/R&D
Higher Density Residential

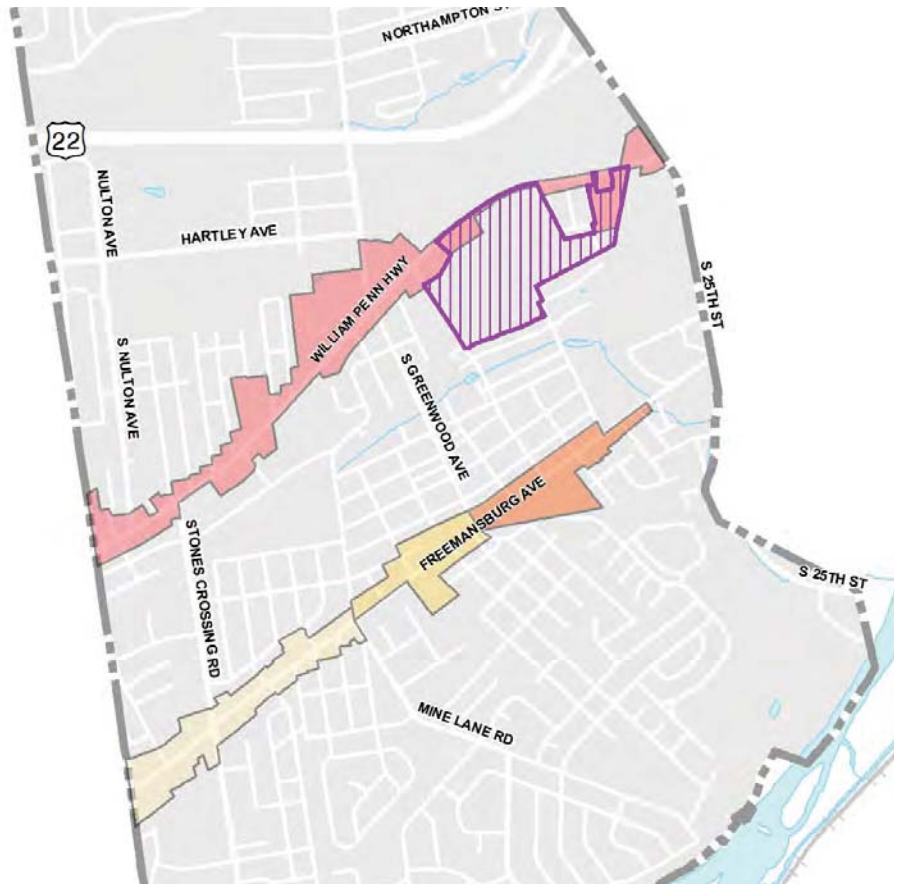




Recommendation: Amend the William Penn Overlay

Zoning along the William Penn corridor in Palmer Township was originally created as a transition district. The way in which neighboring Bethlehem Township has approached development along this corridor has resulted in more investment. Building upon these patterns, there is opportunity for Palmer Township to amend its William Penn Overlay. This Overlay update is intended to encourage lot consolidation and larger-scale development within the corridor. The Township should update provisions associated with lot size, maximum building size, front yard landscape standards, bufferyards, ingress/egress, impervious standards, signage and parking design. The scales and dimensional criteria identified in Bethlehem Township should be considered to introduce consistency as redevelopment and infill opportunities arise.

-  William Penn Highway
(86 Acres/92 Lots)
-  Eastern Gateway
(55 Acres/13 Lots)
-  Freemansburg Subdistrict "A"
(60 Acres/99 Lots)
-  Freemansburg Subdistrict "B"
(38 Acres/66 Lots)
-  Freemansburg Subdistrict "C"
(17 Acres/22 Lots)



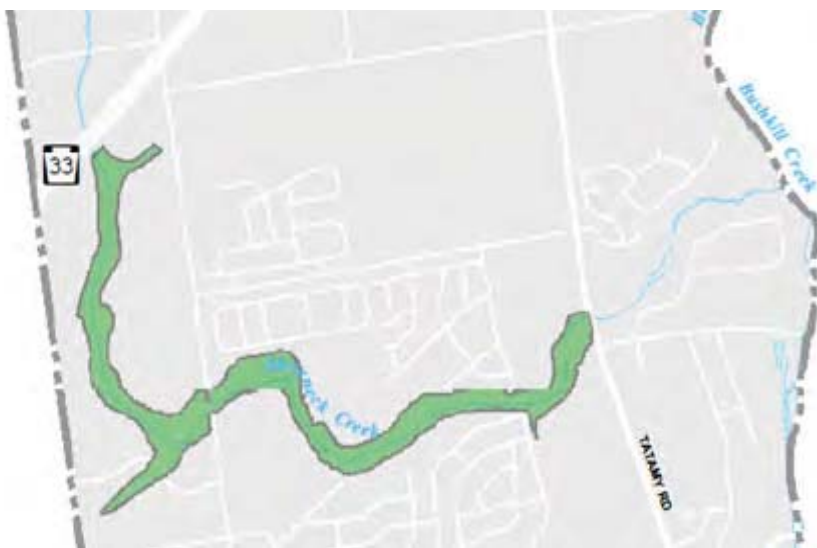
Recommendation: Amend the Nazareth Overlay

This Overlay update is intended to encourage consolidation of lots and enhancement of lot ingress/egress (curb cuts), signage, landscaping, bufferyards and sidewalks.



Recommendation: Create a Riparian Overlay

This Overlay can capture how naturalistic features are assets to the Township's overall system of amenities. The Township can designate the Overlay either through text amendments and/or updating the Township's zoning map to encourage connection between these open spaces and to formulate a critical mass of these resources that enhance their ecological value.





Recommendation: Complete a Zoning Audit

In the context of the above, the Township should complete a zoning audit of the Township's Zoning Ordinance text to evaluate technical provisions associated with development approaches that the community may have outgrown, have produced undesirable patterns of development and/or can reconcile Township Staff/Officials' observations of unintended outcomes. Opportunities for provisions to address redevelopment can be identified in context of what is currently permissible and for what is not. As part of the audit process, the Township should also analyze the Township Zoning Map including examining the edges of existing zoning districts, affirm any applicable refinements and provide a shield to deflect requests that could potentially create future inconsistencies or open doors for future land use conflicts.

Recommendation: Expand the Township's trail network

Pedestrian connectivity is the true measure of accessibility when evaluating a community's multi-modal network. Non-motorized access is essential to all systems of transportation, including biking and pedestrian-focused routes. Whether a pedestrian is walking from a parking lot to the office or from a transit stop to their home, the walking portion of every trip helps determine the satisfaction, safety and convenience of that trip. The Township has invested time and time again in its system of connectivity. The Township recognizes that local and regional connectivity of trails and sidewalks is an opportunity to advance the Township's quality of life; multimodal opportunities and recreational offerings. Pedestrian and bicycle connectivity can become an economic generator by providing amenities which attracts visitors, businesses and residents to invest in the community. Potential conformance to ADA accessibility requirements in combination with the extension of linkages will be important considerations for designating the specific new locations of connectivity ADA accessible paths will be confined to locations where grades do not exceed 5%. To the greatest extent feasible, the Township is encouraged to continue the evolution of its Connectivity Plan to offer a pedestrian-scale network throughout the Township as well as to ensure continued access to the broader regional trail system.

Example: Multi-use Utility Corridor - Potential Connector Trail Easement Option



Example: Greenway/Watershed Overlay Concept with Connector Trails





TRANSPORTATION

Several transportation elements were considered in the development of the comprehensive plan. The transportation goals and recommendations provided in the plan have been established based on priority and current/future need. The priority goals provide the Township with an overview of the issue or concern and the critical factors that create each specific issue.

Recommendations for initial steps have been provided for each of the transportation goals. The initial steps range from the development of task forces focused on beginning discussion associated with a given goal to detailed analyses and studies to better understand the issues and develop a design solution to address a specific goal.

The plan's goals and recommendations related to transportation provide the Township with a guide for addressing key transportation issues. The goals are not specifically prioritized; instead the Township should continue to review and evaluate the goals and implement the recommendations based upon a current/future development, increase in specific need and available funding opportunities.

1. Enhance Operation and Safety Conditions Throughout the Route 22, Route 248 & 25th Street Interchange. This area includes five (5) intersections with traffic signals near to each other. Above and beyond the existing operation and safety concerns, the interchange includes some unique characteristics. First, Northampton Street, a local east-west connection between Palmer Township and Easton, travels between the interchange intersections. This results in a signalized intersection with Northampton Street and Rt. 248, between ramp intersections with Rt. 248. Second, the westbound ramp from Rt. 22 includes a direct access point to a large commercial property. Finally, a high percentage of the accidents within Palmer Township occur at intersections within the Rt. 22, Rt. 248 and 25th Street interchange.

Recommendation: Create a task force with Township representatives, PennDOT representatives and key community members to begin discussing the intersection.

2. Improve Operations of the Northampton Street & Greenwood Avenue Intersection.

The primary concern is the Greenwood Avenue leg of this intersection. Traffic conditions during peak traffic hours result in increased delays. Improvements could include additional lanes or reconfiguration



of lanes along Greenwood Avenue. To perform a detailed evaluation of the operations of the intersection.

Recommendation: Detailed evaluation of the operations of this intersection. This would include conducting a full traffic analysis of the intersection, including analysis of the existing signal. Based on findings of the traffic and signal analyses, further recommendations could include coordinating preliminary and final design efforts to implement the proposed intersection improvements.

3. Enhance Safety at Tatamy Road & Newlins Mill Road and Tatamy Road & Corriere Road Intersections.

A recent crash analysis study was conducted for Tatamy Road, from just south of the Newlins Mill Road intersection, north to Main Street in the Borough of Tatamy. Over a five-year span (2010-2015), 33 of the 37 reported accidents along this stretch of Tatamy Road occur at or near the Tatamy Road and Newlins Mill Road intersection. Development patterns contribute to the concern at this intersection because of the increased truck traffic. The intersection of Tatamy Road and Corriere Road is very similar in that traffic along Tatamy Road is not controlled at the intersection.

Recommendation: The Township should conduct a local-lead study of these intersections to determine needs and potential safety enhancements.

4. Improve Operations at the Intersection of Rt. 248 & Old Nazareth Road / Park Avenue.

The existing intersection is not ideal, as well as not typical for intersection operations. Specifically, vehicles traveling along southbound Rt. 248 (Nazareth Road) and looking to turn onto eastbound Park Avenue are required to make two right turns instead of one left turn.

Recommendation: Prepare a detailed evaluation of the operations of the intersection. This would include conducting a full traffic analysis of the intersection, including analysis of the existing signal. Based on the findings of the traffic and signal analyses, further recommendations could include coordinating preliminary and final design efforts to implement the proposed intersection improvements.

5. Improve Pedestrian/Bicycle Access to Major Destination within the Township.

Palmer Township includes a decent pedestrian and bicycle network, including both existing and proposed trails. Based on a general evaluation of the network, the missing pieces are focused on north/south connections within the western half of the Township. In addition, missing sidewalk links should be completed, along key corridors, to promote a true multimodal transportation network.

Recommendation: The Township should complete detailed studies and establish a plan to promote pedestrian/bicycle links between major destination. Specific links include:

- **North/south connection (near western border of Palmer Township) between Lehigh River and proposed trail near Hartley Avenue.**
- **North South connection between Charles Chrinn Community Center and Palmer Township Community Pool.**
- **Pedestrian link(s) along Rt. 248 (Nazareth).**

6. Reduce Cut Through Traffic and/or High Speeds on Residential Streets.

Recommendation: Establish a Complete Streets Policy that could be implemented on specific residential arterial corridors to help promote alternative modes of transportation, as well as provide traffic calming.



CONNECTIVITY

From the general assessment of road corridors and intersections completed as part of the Comprehensive Plan process, a number of important considerations emerged related to pedestrian and bicycle activity. Through meeting discussions as well as the community-wide survey, residents expressed their desires to have increased non-vehicular connections and means of access destinations within the community. The successes of the Palmer-Wilson trail and the extensions of other regional connectors through the community demonstrate that when these linkages exist, people - and the community as a whole - use them with increasing frequency.

Based upon the historic interface of vehicular and non-vehicular networks, there are some challenges to connectivity. These considerations led to scrutinizing what opportunities exist for improving upon the functionality and the safety of the various segments within the collective system for both vehicles and pedestrians.

Logical, safe and desirable integration of vehicular and non-vehicular networks is often referenced in terms of 'Complete Streets.' Complete Streets policies are a framework for decision makers, passed by resolution, to incorporate considerations for all users of the transportation network when making land use, development or public infrastructure decisions. Further Complete Streets thinking is consistent with some of the foundational principles of Smart Growth that the Township promotes as part of this comprehensive planning effort.

On the following maps, a number of pedestrian-oriented routes translate into potential linkages that will necessitate specific trail and sidewalk linkages. The Township will need to determine, for example, the most applicable portions of a right-of-way (east vs. west/north vs. south) where connections should occur to promote opportunities for increased resident safety.





CONNECTION STATUS MAP

LEGEND

Palmer Township (6,614 Acres)

Rivers/Streams/Ponds

Schools

Parks/Dedicated Open Space

CONNECTION STATUS

Existing Trail/Bikeway (12.1 Miles)

Proposed Trail/Bikeway (16.7 Miles)

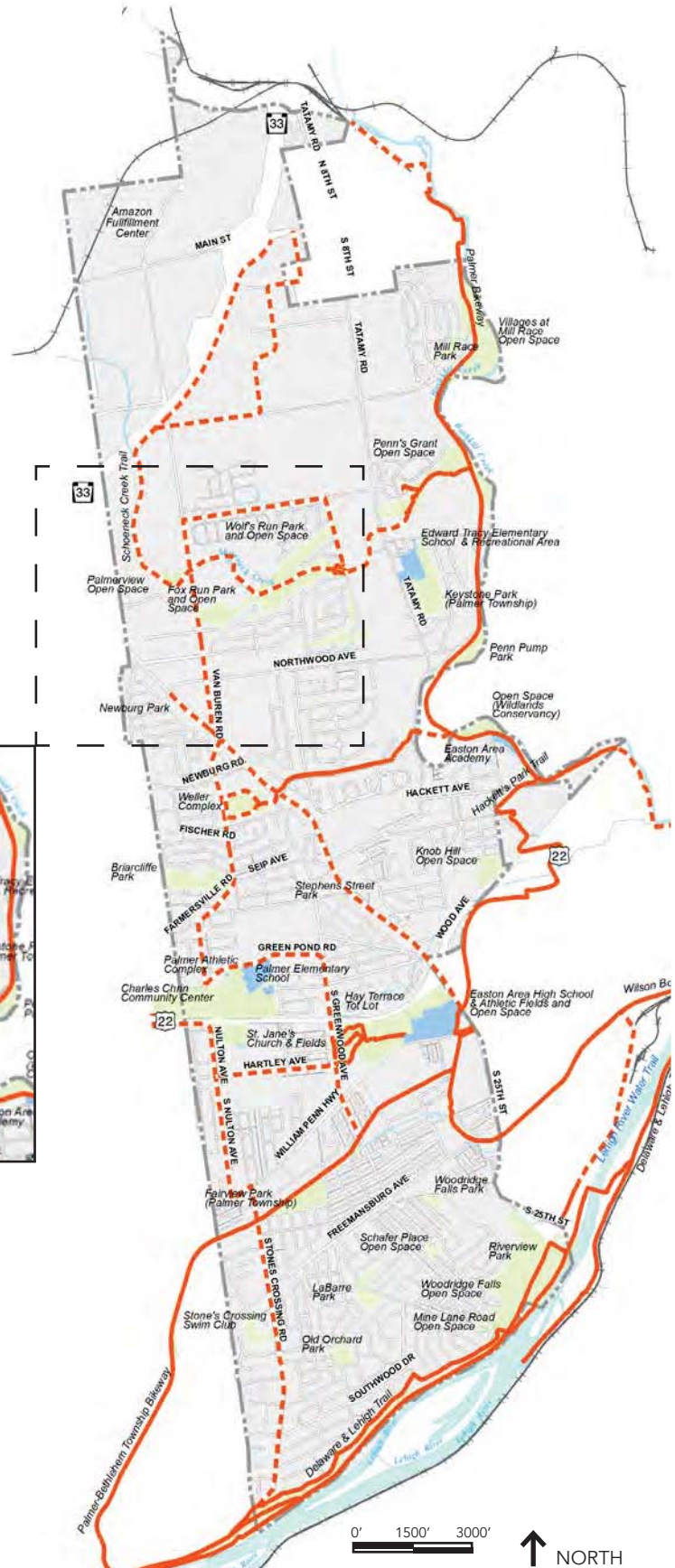
Note: Lengths are for trails/bikeways situated wholly within Palmer Township.



Proposed Trail/Bikeway Option
(15.5 Miles)

Prepared by:

EPD Environmental
Planning & Design, LLC



CONNECTION TYPE MAP

LEGEND

- Palmer Township (6,614 Acres)
- Rivers/Streams/Ponds
- Schools
- Parks/Dedicated Open Space

CONNECTION TYPE

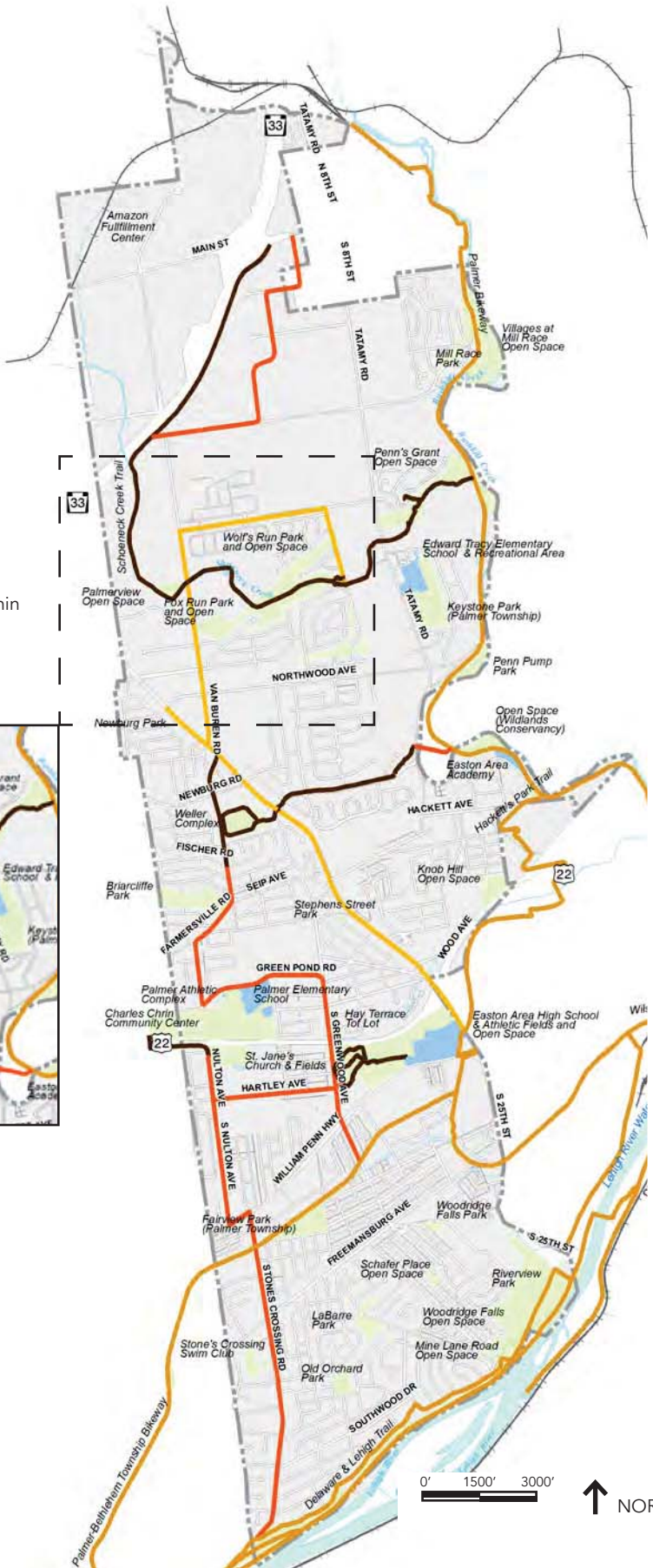
- Off-Road Trail (7.6 Miles)
- On-Road Bikeway (7.2 Miles)
- Rail-Trail/Canalway (10.4 Miles)
- Sidewalk (4.4 Miles)

Note: Lengths are for trails/bikeways situated wholly within Palmer Township.



Utility Easement Trail Option
(1.4 Miles)

Prepared by:
EPD Environmental
Planning & Design, LLC

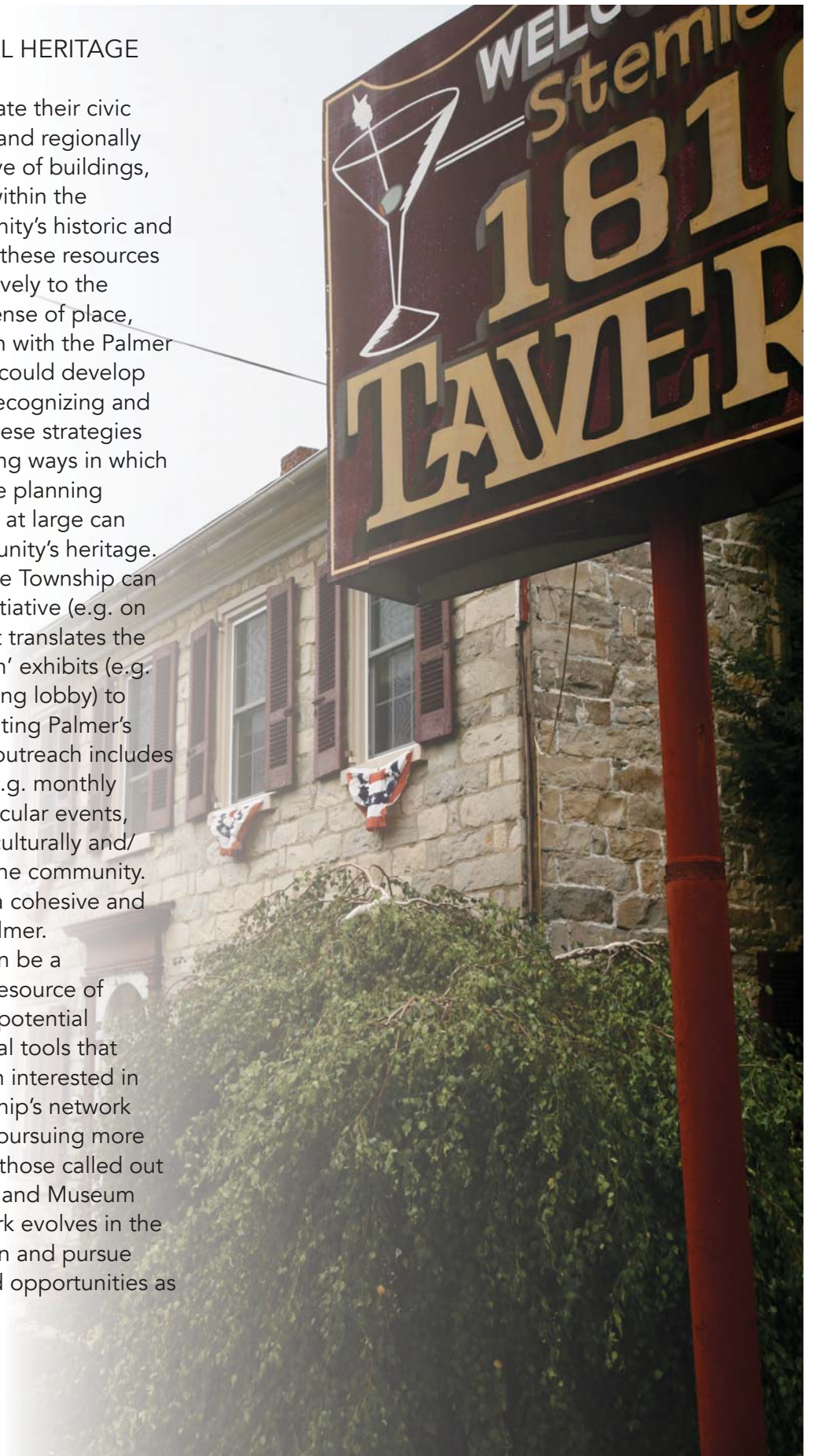


0' 1500' 3000' NORTH



HISTORIC AND CULTURAL HERITAGE

Residents of Palmer appreciate their civic assets. A number of locally and regionally significant resources, inclusive of buildings, structures and landscapes, within the Township enrich the community's historic and cultural heritage. To ensure these resources continue to contribute positively to the Township's landscape and sense of place, the Township, in cooperation with the Palmer Township Historical Society, could develop strategies oriented toward recognizing and celebrating these assets. These strategies should be aimed to enhancing ways in which lot owners can engage in the planning process as well as the public at large can learn more about the community's heritage. As part of these activities, the Township can develop a digitally-based initiative (e.g. on the Township's web site) that translates the community's many 'in-person' exhibits (e.g. those in the Municipal Building lobby) to an 'anytime' display highlighting Palmer's history. An example of this outreach includes having periodic highlights (e.g. monthly or quarterly) explaining particular events, structures, policies that are culturally and/or historically significant to the community. The highlights can serve as a cohesive and exciting way to celebrate Palmer. In addition, the Township can be a clearinghouse or reference resource of information associated with potential funding sources and technical tools that lot owners can access. when interested in becoming part of the Township's network of heritage assets and/or in pursuing more formal designations such as those called out by the Pennsylvania Historic and Museum Commission. As the network evolves in the future, the Township can plan and pursue other related heritage-based opportunities as appropriate.



PUBLIC SAFETY

In examining the most recent 18 months of data, the frequency of public safety responses is continuing to increase. Detailed data associated with fire and police responses are outlined in the Comprehensive Plan's Appendix. With patterns of increase, it is recommended that the Township, in conjunction with its Public Safety personnel, prepare a level of service assessment for both fire service and for emergency medical services (ambulance/paramedic response). The purpose of these two assessments is to identify if there is need to increase the number of locations from which fire and/or emergency medical responses are made. In evaluating response times as well as associated existing apparatus, the municipality can determine how best departments are able to continue to deliver quality services and to identify any opportunities for optimizing resources. The fire and the emergency medical service analyses will enable the Township to determine if there is a need for any additional sub-station(s). If such a need is identified, subsequent assessments could then focus on the potential locations of any applicable sub-station(s).





COMPREHENSIVE PLAN MAP

LEGEND

Palmer Township (6,614 Acres)

Parcels

Major Roads

Rivers/Streams/Ponds

LAND USE

Residential

Non-Residential

Park, Open Spaces & Schools

ZONING OVERLAYS

EXISTING ZONING OVERLAYS: TEXT AMENDMENTS

Nazareth/248

William Penn Highway

PROPOSED ZONING OVERLAYS: MAP AND TEXT ADDITIONS

Eastern Gateway

Freemansburg Subdistrict "A"

Freemansburg Subdistrict "B"

Freemansburg Subdistrict "C"

Riparian Buffer

CONNECTIVITY NETWORK

Existing Trail/Bikeway

Proposed Trail/Bikeway

Prepared by:

EPD Environmental
Planning & Design, LLC



Regional Relationships

It is dynamic – the people, the pace, and the dedication to continuous improvement; buildings from centuries ago alongside newly constructed homes and businesses are found throughout Palmer Township. The community functions as a terminus for the extended metropolitan corridors of New York City and Philadelphia. This relationship, affectionately by many called “70/70,” references the proximity (roughly 70 miles) to both New York and Philadelphia. With such access, Palmer Township is within reach to about 10 million people and an abundant amount of goods, services and amenities. Palmer Township could consider itself at the crossroads to the world. Residents of Palmer are within easy reach of ‘24/7’ urbanity as well as relaxing trails intertwining among wooded riverbanks.

The community, neighboring municipalities and the Easton Area School District benefit from both their locations and enthusiasm to be contributors to a region of vitality. In 2016, the GDP (Gross Domestic Product) of the New York metropolitan area was \$1,657,457,000 and for the Philadelphia metropolitan area it was \$431,038,000. With continued population growth, Palmer proves popular as a place to live with its established sense of community, convenience and varying landscapes.

Past and present connections with the Lehigh Canal, railroads and transit along with ever increasing users of Route 78 and Route 33 put seemingly unending opportunity at Palmer’s fingertips. There are many opportunities for transportation including expanding the use and connections of the LANTA (Lehigh and Northampton Transportation Authority) throughout Palmer making it even easier for residents and visitors to travel to, from and within the community. Residents working beyond the Township’s borders are afforded reasonable commutes, and residents can accomplish all their errands relevant to life’s everyday needs without leaving the community.

The Lehigh Valley Planning Commission (LVPC) is committed to ensuring quality growth and development among municipalities located within the Lehigh Valley region. LVPC is beginning its planning process to comprehensively update its regional planning initiatives. As it is important for orderly growth to continue so the Lehigh Valley remains attractive for residents and business in years to come, Palmer Township has considered the planning matters outlined in LVPC’s current 2030 Comprehensive Plan for Lehigh and Northampton Counties as relevant to the Township’s own Comprehensive Plan recommendations. Aligning with LVPC’s areas of focus, the Township has explored and outlined recommended policy initiatives/actions that will further conservation of natural features, encourage redevelopment of aged and/or former industrial sites, expansion of parks and recreational facilities, improved connectivity and upgrades to roads and intersections for increased safety and efficiency. Palmer Township’s Comprehensive Plan specifies a clear sense of direction for the community to take on in addressing the general goals the LVPC identifies in its Plan.

Palmer’s Comprehensive Plan includes both internal recommendations specific to within its boundaries as well as external recommendations that will involve the coordination between



Palmer and other municipalities in the Lehigh Valley region. Bethlehem Township, recently undergoing its own Comprehensive Plan update, reveals that land uses throughout Bethlehem appear to be compatible with the existing and future land use plans for Palmer; the same is true for the land use recommendations within Palmer's Plan as they are compatible with Bethlehem. Other surrounding municipalities with Comprehensive Plans underway or on the horizon can rest assured that the future land use patterns anticipated within Palmer Township are slated to be compatible with development along the community's perimeter.

Surrounded by many vibrant communities working on their own projects, Palmer knows a cohesive region is borne from on-going coordination with its surrounding municipalities. This collaboration is a key factor in the success in many of this Comprehensive Plan's recommendations.

Consideration for optimizing local and regional solutions associated with common transportation corridors, waterways, watershed and public facilities is of importance to the people of Palmer Township

Well-thought redevelopment strategies and the upgrading public services offered to residents and businesses are two central ideas for the municipalities throughout the Lehigh Valley region. Recognizably, a significant investment of time will be necessary in order to establish understanding, build consensus and implement the Comprehensive Plan's cross-municipal recommendations.

To ensure the positive impacts envisioned as part of each of the recommendations, Palmer Township along with its neighbors can achieve broader-scale regional efforts. As part of this, it is important to consider the following:

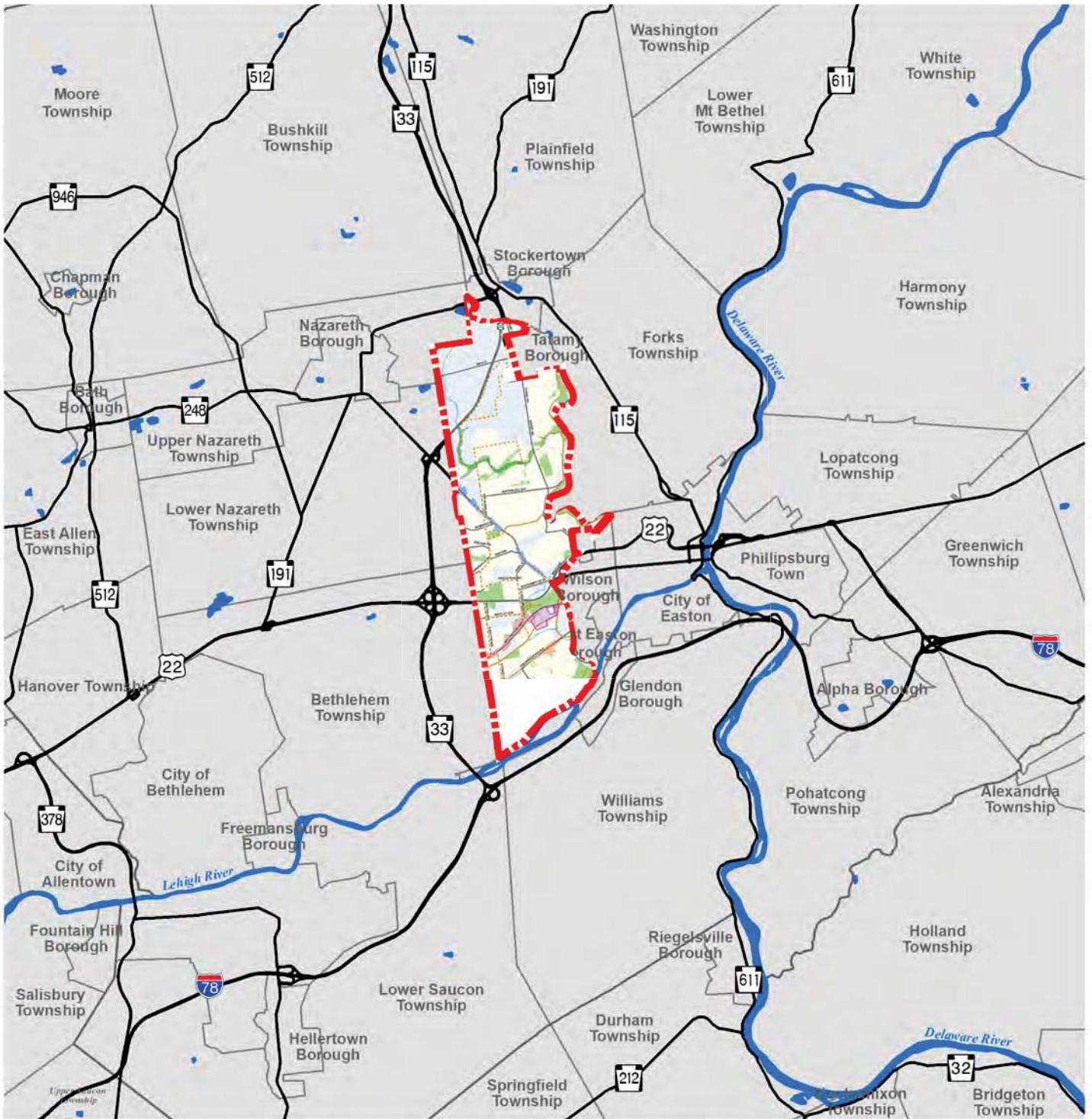
- ✓ The first recommendation that incorporates many of the surrounding communities is for Palmer to invite stakeholder communities to a Design Workshop series. Residents, design professionals and business representatives can formulate and sketch a series of infill alternatives within applicable commercial corridors. This Workshop series also will promote opportunities for continued coordination so that infrastructure demands are understood and that improvements are cohesive along the communities' borders.
- ✓ Coordinated pedestrian and vehicular access management provisions that emerge as part of Rt. 248 Overlay will be important to coordinated with Lower Nazareth. With adjacency to Lower Nazareth, it is important for pedestrian and vehicular improvements remain consistent throughout the entire Overlay ensuring safety for all residents and visitors along this Corridor.
- ✓ The recommendation to develop a Freemansburg Avenue Overlay is one that will be significant in coordinating with Wilson Borough and Bethlehem Township. The Overlay can consider such things as considering setbacks, bufferyards, lot consolidation goals, orientation, development scale and parking locations unique to the Corridor's three distinct sub-districts (A, B and C). With the potential redevelopment, consistency along the borders with neighbors' is important to Palmer.

- ✓ In creating the provisions for the Eastern Gateway, collaboration with Wilson Borough is important. Considerations for land uses, development types and development scale will be part of the Township-Borough discussions so that redevelopment within the Overlay can achieve a balance of desired character and impacts on surrounding rights-of-ways.
- ✓ The William Penn Overlay amendments will bring Palmer, Upper Nazareth and Bethlehem Townships together to understand desirable relationships of provisions such as those related to lot size, maximum building size, front yard landscape standards, bufferyards, ingress/egress, impervious standards, signage and parking design.
- ✓ Greenway/trail connections that are proposed as part of this Plan as well as the Township's Parks and Recreation Plan support for the opportunity to expand Palmer's natural resource and recreation planning ideas and bring positive change to the region. Efforts specifically to expand connections at the Charles Chrin Community Center of Palmer Township will require collaboration with neighboring Bethlehem Township. Pedestrian improvements in Palmer Township's northern reaches blending with potential connections in Tatamy will require coordination regarding rights-of-way and safety in the vicinity of Main Street and through the Borough to continue on through Palmer Township and to any eventual potential connection with the Plainfield Township Trail. Along other portions of Palmer Township's perimeter, discussions with neighboring municipalities will be important to focus on the importance of continued maintenance in each of the respective municipalities so that the overall pedestrian network remains attractive and safe. Public awareness is a sizable part of ensuring residents and visitors understand the ins and outs the pedestrian system and safety basics – for both pedestrians and those in motor vehicles.
- ✓ Lower Nazareth's involvement with Palmer Township is important in completing a detailed evaluation of the operations of the Route 248 and Old Nazareth Road/ Park Avenue intersection. This would include conducting a full traffic analysis of the intersection, including analysis of the existing signal. This intersection experiences traffic congestion and heavy traffic flow so this evaluation allows for the potential of having a safer intersection.
- ✓ Similarly, collaboration with Tatamy Borough is important in supporting the safety enhancements/improvements of the Tatamy Road and Newlins Mill Road and Tatamy Road and Corriere Road intersections. Staying abreast of coordinated efficiencies in the I-33 interchange area (Stockertown) is important to Palmer.
- ✓ Palmer Township and Wilson Township also have the opportunity to join forces in creating a task force with Township representatives, PennDOT representatives, LVPC and key community members to begin discussing possibilities with improving the safety of the Route 22, Route 248 and 25th Street Interchange. This collaboration is key in understanding the best route to take with enhancing the safety of this Interchange as well as the roadways and development access within the Interchange's immediate surroundings.



- ✓ Palmer has the opportunity to initiate collaboration with other regional organizations and government entities as it relates to furthering sustainability at local and regional decision-making levels. With a focus on enhancing municipal functions, resource efficiencies and positive long-term impacts, strategies, such as policies outlined as part the SunShot Initiative (in effect in communities across the Commonwealth) to equipment sharing, can be explored and assessed to determine how such decisions can become win-wins for Palmer and its neighbors.
- ✓ Palmer Township is looking forward to the opportunities to work with its neighbors to organize a municipal operations sharing team (MOST) event to identify how municipalities, including Palmer Township, can realize additional cost savings through cooperation. After this coordination, the communities should host the MOST event every other year and act on decisions/opportunities accordingly.
- ✓ Collaboration between Palmer, Forks, Tatamy, Upper Nazareth and Lower Nazareth to complete a level of service assessment can reveal the extent to which there is need for a sub-station associated with emergency medical services, and, if needed, to determine the most applicable location of said sub-station. Similarly, the communities could perform a level of service assessment to determine any need for a sub-station associated with fire service. The assessments' findings should explore the ways in which either or both sub-stations could affect response times and the well-being of residents throughout these communities. Along with the physical locations of such stations, the manner in which funding and maintenance can also be explored.

REGIONAL CONTEXT MAP



Action Table

Action

CHAMPIONS LEGENDESTIMATED IMPLEMENTATION COST LEGEND

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
PC	Palmer Township Planning Commission	\$\$	\$5,001 - \$20,000
RB	Palmer Township Recreation Board	\$\$\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$\$\$\$	\$50,001 - \$150,000
LVPC	Lehigh Valley Planning Commission	\$\$\$\$\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
A. Land Use, Housing and Economic Development			
Maintain Palmer Township's character while accommodating new growth, redevelopment and evolving housing needs.			
1 Evaluate existing zoning and land development ordinances to audit and understand the patterns of variances, status of definitions, application processes, the evolution of district purposes as well as the potential impacts of construction and infill/redevelopment in context of established neighborhood patterns.	Immediate	PC, Staff, BofS, ZHB support: engineers, design professionals, attorneys	\$\$
2 Conduct a Design Workshop series with resident design professionals and business representatives to formulate and sketch a series of infill alternatives within applicable commercial corridors.	Immediate	PC, Staff, BofS, ZHB, engineers, design professionals and attorneys	\$
3 Incorporate coordinated pedestrian and vehicular access management provisions into the Route 248 Overlay.	Immediate	PC, Staff, BofS, engineers, design professionals and attorneys	\$
4 Develop a Freemansburg Avenue Overlay considering setbacks, bufferyards, lot consolidation, orientation, development scale and parking locations unique to the Corridor's three distinct 'sub-districts' A, B and C and potential impacts of redevelopment.	Immediate	PC, Staff, BofS, engineers, design professionals and attorneys	\$
5 Create the Eastern Gateway Overlay considering uses, development types and development scale.	Immediate	PC, Staff, BofS, engineers, design professionals and attorneys	\$
6 Amend the William Penn Overlay examining relationships of lot size, maximum building size, front yard landscape standards, bufferyards, ingress/egress: impervious standards, signage and parking design.	Immediate	PC, Staff, BofS, engineers, design professionals and attorneys	\$
7 Create a Riparian Buffer Overlay via text and/or map designation to encourage connection between open spaces where possible and to enhance the natural resources' ecological value.	Immediate	PC, Staff, BofS, engineers, design professionals and attorneys	\$

Action Table

Action

CHAMPIONS LEGEND

ESTIMATED IMPLEMENTATION COST LEGEND

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
PC	Palmer Township Planning Commission	\$\$	\$5,001 - \$20,000
RB	Palmer Township Recreation Board	\$\$\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$\$\$\$	\$50,001 - \$150,000
LVPC	Lehigh Valley Planning Commission	\$\$\$\$\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
A. Land Use, Housing and Economic Development			
Maintain Palmer Township's character while accommodating new growth, redevelopment and evolving housing needs.			
8 Meet regularly with real estate professionals to provide municipal information and marketing materials. Compile and analyze data up-to-date trends in development/redevelopment to maintain a current understanding of how Municipal Codes and other government actions and regulations can impact development and redevelopment.	Medium-term	Staff support: PC	\$
9 Collect and compare data from performance benchmarks to understand current patterns between housing, socio-economic and municipal services.	Long-term	Staff support: PC	\$
10 Explore the feasibility and benefits of public-private investment opportunities within the community's business districts; pursue and follow-through with opportunities as they arise.	On-going	Staff support: BofS	\$\$-\$\$\$
11 Evaluate and implement practical standards for stormwater management areas and maintenance practices; continue educational programs to residents and businesses.	On-going	Staff, BofS, Twp. Engineer support: ESC, WH	\$\$-\$
12 Use technology such as software applications to map location of merchants/promotions, encourage facade improvements and continue/expand events to attract patrons to the Township.	On-going	Staff support: BofS	\$\$-\$
B. Transportation and Mobility			
Provide a safe, efficient and complete transportation system for the residents and businesses of Palmer Township.			
1 Complete detailed pedestrian studies and establish a plan to promote pedestrian/bicycle links between major destinations.	On-going	Staff, BofS, Twp. Engineer support: PC, RB	\$\$-\$\$\$
2 Complete a detailed evaluation of the operations of the Rt. 248 & Old Nazareth Road / Park Avenue intersection. This would include conducting a full traffic analysis of the intersection, including analysis of the existing signal.	Short-term	Staff, BofS, Twp. Engineer support: PC	\$\$

Action Table

Action

CHAMPIONS LEGEND**ESTIMATED IMPLEMENTATION COST LEGEND**

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
PC	Palmer Township Planning Commission	\$	\$5,001 - \$20,000
RB	Palmer Township Recreation Board	\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$	\$50,001 - \$150,000
LVPC	Lehigh Valley Planning Commission	\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
B. Transportation and Mobility			
Provide a safe, efficient and complete transportation system for the residents and businesses of Palmer Township.			
3 Continue to support the enhancement/improvement of the Tatamy Road & Newlins Mill Road and Tatamy Road & Corriere Road intersections in terms of safety enhancements.	On-going	PC, BofS, Staff, Twp. Engineer support: PennDOT	\$\$\$-\$\$\$\$
4 Detailed evaluation of the operations of the Northampton Street & Greenwood Avenue intersection. Conduct a full traffic analysis of the intersection, including analysis of the existing signal.	Short-term	Staff, BofS, Twp. Engineer	\$\$-\$\$\$
5 Create a task force with Township representatives, PennDOT representatives, LVPC, and key community members to begin discussing the possibilities with improving safety of the Route 22, Route 248 & 25th Street Interchange.	Short-term	PC, BofS, Staff, Twp. Engineer support: PennDOT	\$
6 Develop a ConnectPalmer digital and mobile application (app) to enable pedestrians to identify the safety, distance and topography, etc. of routes between destinations within the Township.	On-going	Staff, BofS	\$\$
7 Establish a Complete Streets Policy that could be implemented on specific residential arterial corridors to help promote alternatives modes of transportation, as well as provide traffic calming.	Long-term	Staff, BofS, Twp. Engineer support: PC	\$\$-\$\$
8 Host bi-annual dialogues with PennDOT and LANTA to review ridership information and identify adequacies/deficiencies of public transit services in the community.	Long-term	Staff, BofS	\$
9 Develop a private-public partnership to complete a Traffic Study/Audit of other key corridors in the Township as appropriate to determine the feasibility of implementing other improvements.	Long-term	Staff, BofS	\$\$-\$\$
10 Sponsor and host initiatives in the public realm to highlight the community's rights-of-way are pedestrian-focused.	Short-term	Staff, BofS	\$

Action Table

Action

CHAMPIONS LEGEND

ESTIMATED IMPLEMENTATION COST LEGEND

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
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RB	Palmer Township Recreation Board	\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$	\$50,001 - \$150,000
LVPC	Lehigh Valley Planning Commission	\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
C. Recreation, Natural System and Open Space			
Enhance the Township's provision of natural and civic amenities for those of all abilities and ages.			
1 Prioritize and implement renovations and new construction of recreation facilities.	On-going	Staff, BofS, RB	\$\$\$\$\$
2 Adopt maintenance policies/procedures and park typologies relevant to the Township Park and Recreation System; see also the Park and Recreation Plan.	Immediate	Staff, BofS, RB	\$-\$
3 Evaluate cost and expenditures associated with ongoing maintenance needs of the Park and Recreation System; determine priorities as applicable.	Immediate	Staff, BofS, RB	\$
4 Address stormwater management needs within Township parks to promote best management practices and long-term sustainability.	Immediate	Staff, BofS, RB, ESC	\$\$\$\$
5 Succeed in dialogue and working together with the school district to expand available active and passive recreation facilities available to residents and maximize space in the community.	On-going	Staff, BofS, RB	\$
6 Continue to advance Township efforts that have been initiated and financial commitments that have been made to address community recreation facility upgrades.	On-going	Staff, BofS, RB	\$
7 Promote open dialogue related to recreation planning and improvements to maximize recreation opportunities in a cost effective manner.	On-going	Staff, BofS, RB	\$
8 Continue to conduct the annual evaluation of user fees to determine appropriateness and/or adjustment; implement new or revised user fees, where applicable.	On-going	Staff, BofS, RB	\$
D. Civic Appreciation and Municipal Services			
Continue providing high-quality public services with efficiencies and prioritized upgrades.			
1 Engage with regional organizations, efforts and government programs by hosting a sustainability workshop to promote sustainability and sustainability energy methods within the Township, for example, the Sunshot Initiative.	On-going	BofS, ESC support: Staff	\$-\$

Action Table

Action

CHAMPIONS LEGEND

ESTIMATED IMPLEMENTATION COST LEGEND

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
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RB	Palmer Township Recreation Board	\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$	\$50,001 - \$150,000
LVP	Lehigh Valley Planning Commission	\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
D. Civic Appreciation and Municipal Services			
Continue providing high-quality public services with efficiencies and prioritized upgrades.			
2 Consider incorporating elements of green infrastructure such as pervious pavement, pervious planting beds and other stormwater collection strategies that could benefit from collection and detention facilities in the design/construction projects.	Medium-term	BofS, ESC support: Staff, Twp. Engineer	\$\$\$\$-\$\$\$\$
3 Update the Zoning Ordinance to include regulations for alternative energy sources such as CNG fueling and electric charging stations and solar energy.	Medium-term	BofS, ESC support: Staff, Twp. Engineer	\$-\$\$
4 Evaluate the economics and environmental benefits of the purchase of more energy efficient equipment and vehicles, including the conversion of existing vehicles to natural gas.	Medium-term	BofS, ESC support: Staff	\$
5 Promote meaningful, coordinated, time-efficient volunteer opportunities and investments in the community.			\$
a Improve the messaging on what volunteer opportunities are available and how volunteer skills can be matched with relevant goals, objectives, age focus and outcomes.	Short-term	BofS Support: Staff	\$
b Publicize progress of volunteer time commitments/outcomes on a project basis on all media fronts (print/television/online/social media outlets/spoken).	On-going	BofS Support: Staff	\$
c Conduct bi-annual workshops to collectively review, discuss and solidify a list of items for fiscal, physical and administrative savings.	Annually - March September	BofS Support: Staff	\$
6 Work with the community organizations to further expand discussions on opportunities for building the next generation of volunteers/community stewards.	On-going	BofS Support: Staff	\$

Action Table

Action

CHAMPIONS LEGEND

ESTIMATED IMPLEMENTATION COST LEGEND

BofS	Palmer Township Board of Supervisors	\$	\$0 - \$5,000
PC	Palmer Township Planning Commission	\$\$	\$5,001 - \$20,000
RB	Palmer Township Recreation Board	\$\$\$	\$20,001 - \$50,000
ESC	Palmer Township Environmental Steering Committee	\$\$\$\$	\$50,001 - \$150,000
LVPC	Lehigh Valley Planning Commission	\$\$\$\$\$	\$150,000+

PennDOT	PennDOT Engineering District Office 5
Twp. Engineer	Palmer Township Engineer
ZHB	Palmer Township Zoning Hearing Board
Staff	Palmer Township Administrative Staff

	Implementation Timeframe	Champions	Estimated Implementation Costs
D. Civic Appreciation and Municipal Services			
Continue providing high-quality public services with efficiencies and prioritized upgrades.			
7 Identify additional opportunities to cooperate with neighboring communities to grow the region's economy and/or reduce expenses through shared services.			
a Work with others to organize a municipal operations sharing team (MOST) event to identify how municipalities, including Palmer Township, can realize additional cost savings through cooperation.	On-going	BofS Support: Staff	\$
b Host the MOST event every other year and act on decisions/opportunities accordingly.	Odd years	BofS Support: Staff	\$-\$\$
8 Perform a level of service assessment to determine if there is a need for a sub-station associated with emergency medical services; if needed, determine the most applicable location of said sub-station.	Immediate	BofS, ESC support: Staff, Twp. Engineer	\$-\$\$
9 Perform a level of service assessment to determine if there is a need for a sub-station for fire service; if needed, determine the most applicable location of said sub-station.	Immediate	BofS, ESC support: Staff, Twp. Engineer	\$-\$\$
10 Develop and assessment associated with HVAC system performance for incorporation into the application approval process.	Short-term	BofS, ESC support: Staff, Twp. Engineer	\$-\$\$



Influences

Land Use

The Township's existing land uses patterns were evaluated to understand their existing relationships and opportunities for future development and/or redevelopment. Land use data was updated on a parcel-by-parcel site reconnaissance. Based on 2016 field review, the allocation of land uses are illustrated on the following page.

















Using existing zoning ordinance provisions for land use and dimensional criteria, the Township then evaluated the permissible range of development for the remaining undeveloped land within the community. This exercise, commonly known as build-out, projects the nature and scale of development. Based upon existing zoning designations, it is possible that approximately 244 additional dwelling units and 450 acres of non-residential development. If other land use or zoning district designations were considered, including low to medium density residential development rather than non-residential development, more than 1,200 dwelling units would be permissible. The effects of the type of development in the future will have direct impacts on the way in which the Township can balance its fiscal resources.

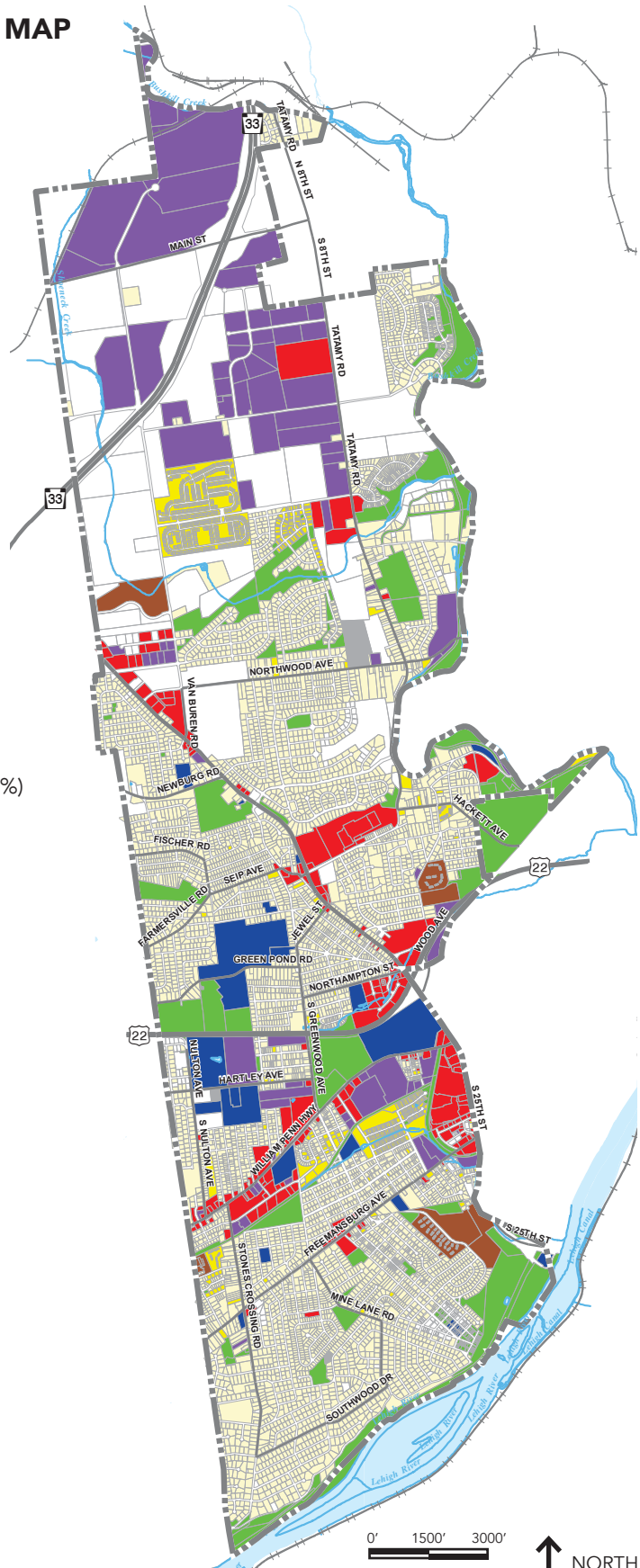
In early 2017, the Township developed and examined various build-out scenarios to identify the scale of potential growth on the 557 undeveloped acres in the northern third of the Township. Potential impacts on the delivery of public services/amenities, tax revenue, job generation, number of units (and residents) as well as infrastructure were evaluated in context of three zoning approaches: 2017 (existing) zoning designations, a roll back in time (where all undeveloped lots are zoned residential) and a mix of industrial and residential zoning. Based upon the Township's perspectives, the community aims toward a long-term balance of its revenues and expenses, retiring debt service as well as leveraging the investments made in the road, sewer and water infrastructure in the northern end of the Township. As long-term stability and long-term sustainability were consistent themes throughout the Comprehensive Plan's analyses and meeting discussions, the balance of the community's residential and non-residential uses are influential in maintaining the amenities and services that the community's residents desire and have come to appreciate the Township in offering over the years.



EXISTING GENERALIZED LAND USE MAP

LEGEND

-  Palmer Township (6,614 Acres)
-  Parcels
-  Major Highway
-  Arterial Roads
-  Active Rail Roads
-  Rivers/Streams/Ponds
-  Public/Semi-Public
213.4 ac (3.2%)
-  Public Recreation/Dedicated Open Space
699.6 ac (10.6%)
-  Single Family Residential-Detached
2,197.1 ac (33.2%)
-  Single Family Residential-Attached
(Duplex/Townhouse) 201.7 ac (3.0%)
-  Multi-Family Residential
(Apartments/Flats/Group Care) 98.0 ac (1.5%)
-  Commercial
339.6 ac (5.1%)
-  Industrial/Warehouse
811.9 ac (12.3%)
-  Utilities
19.7 ac (0.3%)
-  Undeveloped & Agriculture
1,135.8 ac (17.2%)
-  Right of Way
897.3 (13.6%)


























Prepared by:



EPD Environmental
Planning & Design, LLC

EXISTING ZONING MAP

LEGEND

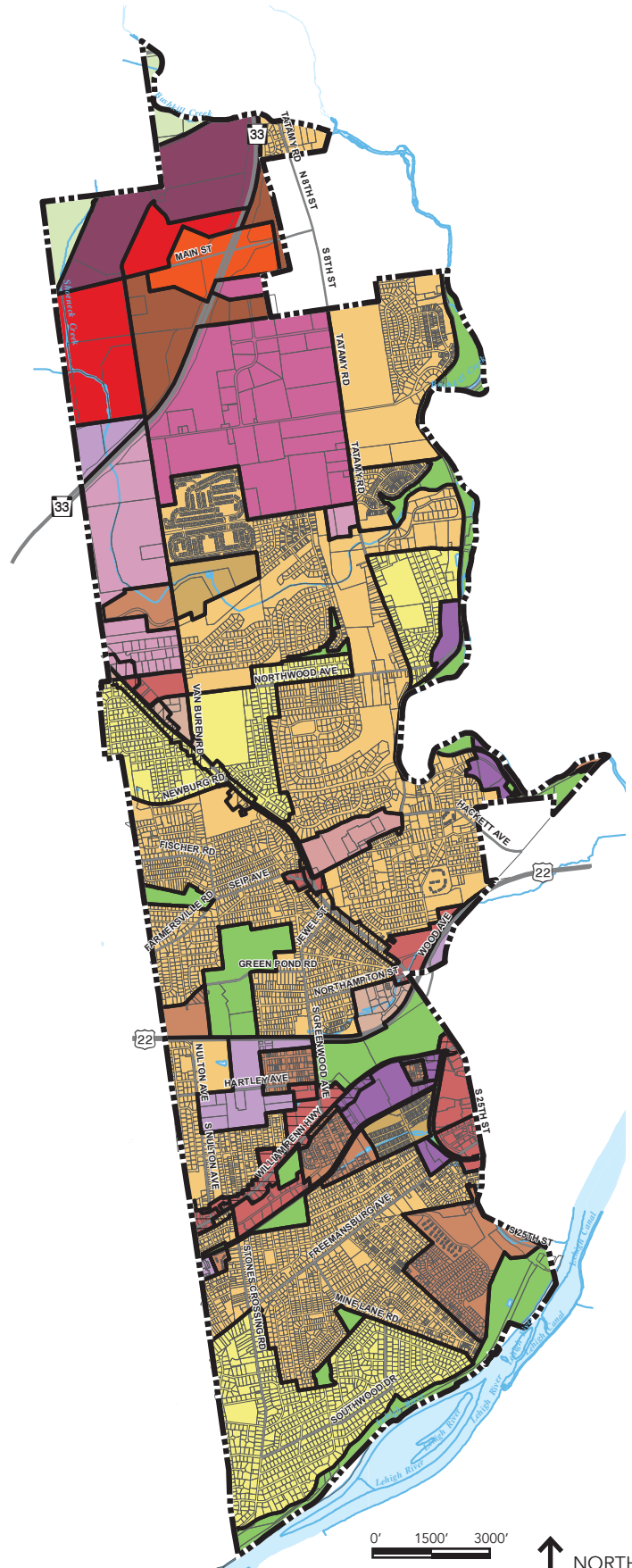
-  Palmer Township (6,614 Acres)
-  Parcels
-  Major Highway
-  Arterial Roads
-  Active Rail Roads
-  Rivers/Streams/Ponds
-  CR - Conservation and Recreation
-  RA - Rural Agricultural
-  LDR - Low Density Residential
-  MDR - Medium Density Residential
-  HDR-2 - High Density Residential (Limited)
-  HDR - High Density Residential
-  PO/B - Planned Office/Business
-  PC - Planned Commercial
-  GC - General Commercial
-  PI/C - Planned Industrial/Commercial
-  PO/IP - Planned Office/Industrial Park
-  LI - Light Industrial
-  HI - Heavy Industrial/Mixed Use
-  MSC - Main Street Commercial
-  NEB - North End Business
-  TI-1 - Transportation Industrial 1
-  TI-2 - Transportation Industrial 2

OVERLAY DISTRICTS

-  248 - Route 248 Overlay
-  WPH - William Penn Highway Overlay

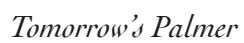
Prepared by:

EPD Environmental
Planning & Design, LLC



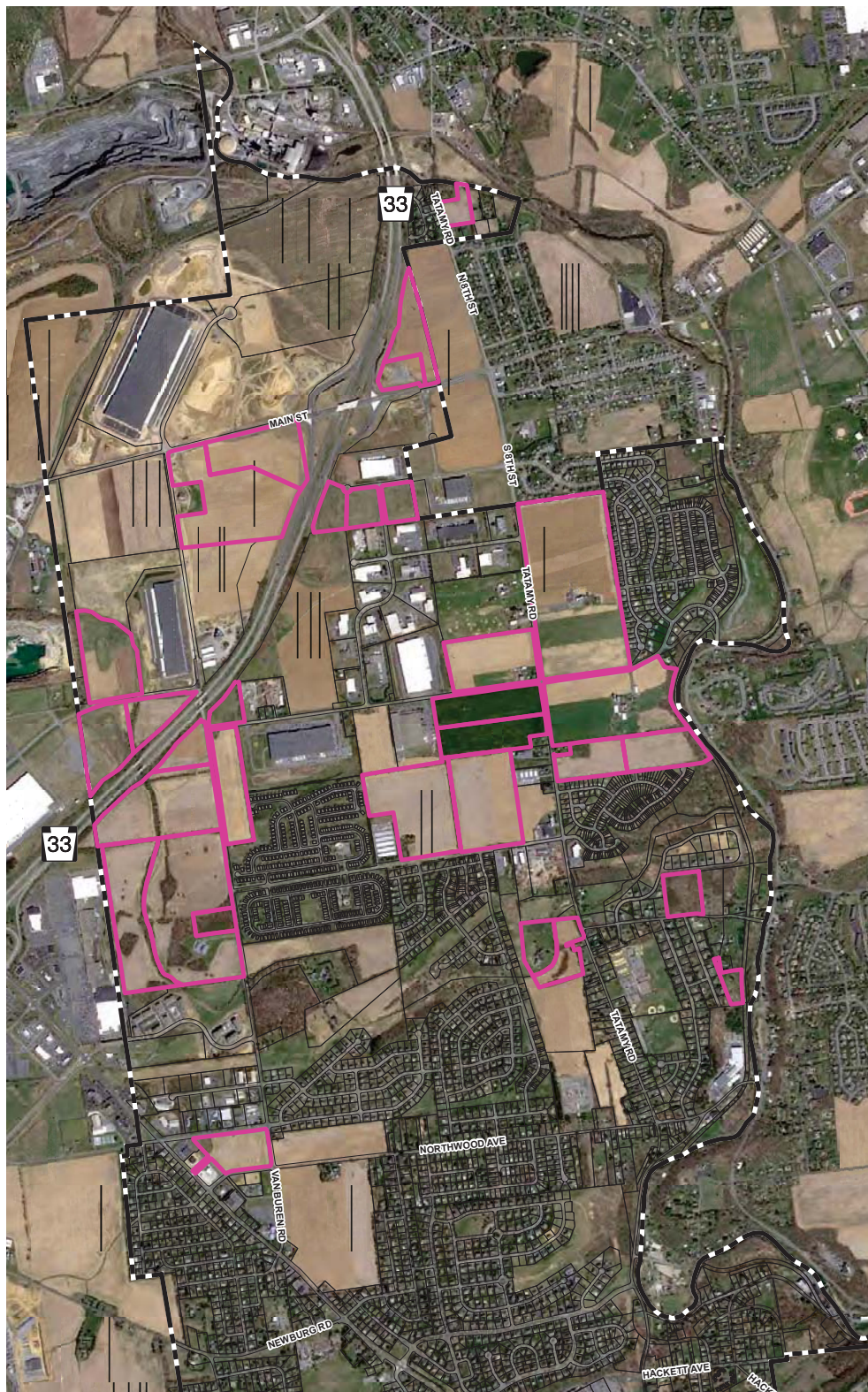
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↑ NORTH



LEGEND

- Palmer Township
(6,614 Acres)
- Parcels
- Undeveloped/
Agricultural Land



Prepared by:



Transportation

Palmer Township's transportation network has traditionally focused on motor vehicle travel and the safe and efficient transportation of vehicles within Palmer Township and throughout the surrounding communities. The transportation network consists of two limited access highways, Route 22 and Route 33; however, most of the roadway system is made up of arterials, collectors and local roadways. Congestion associated with Route 22 and the major arterials, which include Route 248, 25th Street and William Penn Highway, result in a larger burden on the collector and local roadways within the Township. The current plan realizes that continued development of the major roadways, as well as a specific focus on the collector and local roadways, will be required to improve safety and efficiency for the Township's overall transportation network. The recommendations of the plan include larger scale planning and coordination efforts to continue to seek solutions for major transportation concerns. The plan also includes recommendations for specific intersection improvements aimed to improve safety and/or operations of specific intersections.

Transportation planning efforts also focused on the continued development of a multi-modal transportation network within Palmer Township. Understanding the importance of development of pedestrian, bicycle and transit across Palmer Township will help alleviate some of the burden placed on the roadway network. Palmer Township currently has a strong foundation for continued development of a robust pedestrian and bicycle network. Key connections, however, are still lacking to provide a complete network that links the residential communities across the Township with the various destination and amenities.

Through a collaborative effort balancing the local knowledge of the project steering committee with the planning and design experience of the consultant team, specific transportation recommendations were defined to advance the development of transportation network across Palmer Township.

The transportation analysis consisted of evaluation of key intersections/linkages as identified through the preliminary stages of the comprehensive planning efforts. The assessment of each intersection included identifying specific characteristics of the subject intersection, such as, intersection controls (stop-controlled vs signal), layout of each leg of the intersection, lane widths, number of lanes, queue lengths, left-turn lanes, surrounding constraints, etc. Subsequently, the intersection characteristic identification, safety and operation concerns due to the existing conditions/characteristics of the intersections were defined and potential improvements were identified. Specific safety concerns identified included excessive vehicular speeds, sight distance concerns and high occurrence of accidents at each intersection. Operation concerns was focused on excessive queue lengths and future operation concerns based upon future development.

Multi-modal transportation improvements included understanding the existing pedestrian and bicycle network and defining critical connections needed to complete the network. Working



with the Steering Committee and local police, as well as through existing site analysis and observations, key transportation recommendations were established for the plan. The following intersections with segments were evaluated.

1. Route 22, Route 248 & 25th Street Interchange

This area includes five (5) intersections with traffic signals near to each other. Above and beyond the existing operation and safety concerns, the interchange includes some unique characteristics. First, Northampton Street, a local east-west connection between Palmer Township and Easton, travels between the interchange intersections. This results in a signalized intersection with Northampton Street and Rt. 248, between ramp intersections with Rt. 248. Second, the westbound ramp from Rt. 22 includes a direct access point to a large commercial property. Finally, a high percentage of the accidents within Palmer Township occur at intersections within the Rt. 22 and Rt. 248 interchange.

2. Northampton Street & Greenwood Avenue Intersection

The primary concern is the Greenwood Avenue leg of this intersection. Traffic conditions during peak traffic hours result in increased delays. Improvements such as include additional lanes or reconfiguration of lanes along Greenwood Avenue could mitigate these issues.



3. Tatamy Road & Newlins Mill Road and Tatamy Road & Corriere Road Intersections

A recent crash analysis study was conducted for Tatamy Road, from just south of the Newlins Mill Road intersection, north to Main Street in the Borough of Tatamy. Over a five-year span (2010 – 2015), 33 of the 37 reported accidents along this stretch of Tatamy Road occur at or near the Tatamy Road and Newlins Mill Road intersection. Development patterns contribute to the concern at this intersection because of the increased truck traffic. The intersection of Tatamy Road and Corriere Road is very similar in that traffic along Tatamy is not controlled at the intersection.

4. Rt. 248 & Old Nazareth Road / Park Avenue

The existing intersection is not ideal, as well as not typical for intersection operations. Specifically, vehicles traveling along southbound Rt. 248 (Nazareth Road) and looking to turn onto eastbound Park Avenue are required to make two right turns instead of one left turn.

5. Pedestrian/Bicycle Access to Major Destination within the Township

Palmer Township includes a decent pedestrian and bicycle network, including both existing and proposed trails. Based upon a general evaluation of the network, the missing pieces are focused on north/south connections within the western half of the Township. In addition, missing sidewalk links should be completed, along key corridors, to promote a true multi-modal transportation network.



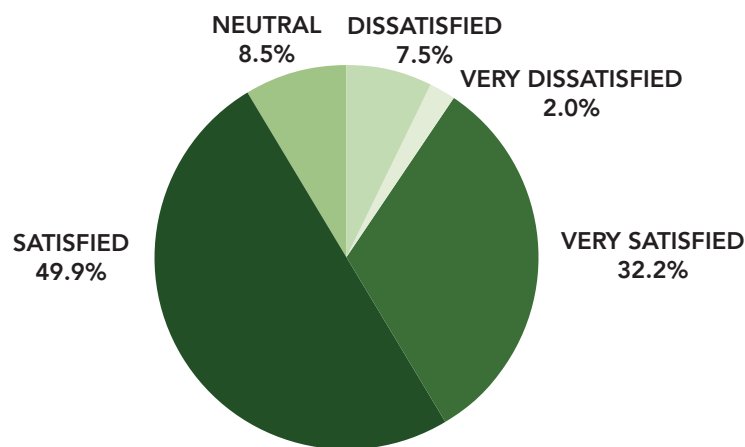


Community Input

RESIDENTS:

1. Like it here and stay here
2. Have great appreciation of parks and trails
3. Favor that development in the future slows down and is less intense
4. Are involved in community efforts

In General, how satisfied are you with Palmer Township as a place to live?



Overall, Palmer residents are satisfied with the Township as place to reside. There was no predominate reason for the 1 in 10 residents (approx.) expressing some level of dissatisfaction.

Rank the TOP 3 reasons why you selected Palmer Township as your place of residence?

REASONS	#1 REASON	#2 REASON	#3 REASON	OVERALL
Proximity To Family	37.0%	12.5%	12.1%	21.0%
Proximity To Work	17.2%	24.1%	14.2%	18.5%
Advice Of Friend/Employer	2.1%	4.2%	5.5%	3.9%
Quality Of Schools	6.2%	7.7%	7.1%	7.0%
Lot Size	2.9%	6.4%	10.8%	6.5%
Resale Value Of Property	3.3%	10.8%	12.6%	8.7%
Recreational Facilities	1.6%	3.0%	7.6%	4.0%
Trails	2.7%	6.9%	5.5%	5.0%
Quality Of Housing Available	21.1%	17.8%	15.6%	18.3%
Low Municipal Taxes	5.9%	6.6%	9.0%	7.1%

Based upon the possible variety of reasons why residents may live in the community, respondents indicated that their most common reason for living in the Township is to be near family. The second most common reason is the community's proximity to a place of employment; the third most common reason is related to the quality of housing available within the Township. Overall, proximity to family is the largest factor as to why respondents live in the Township, followed closely by proximity to work and quality of housing. Beyond these three choices, results show that other options do not appear to be major factors when considering Palmer Township as a place to live.

Across the board, respondents are positively or neutrally satisfied with majority of services with which the Township's revenues are used. Services which respondents are most satisfied with are those related to public safety; parks, recreational and leisure services; public works and the Township's general government administration. Respondents also expressed neutral satisfaction towards services such as general Township administration, planning & development, the Charles Chrin Community Center and the Township swimming pool. In context of dissatisfaction expressed for planning & development, residents commonly noted specific recent and/or current private-sector applications.

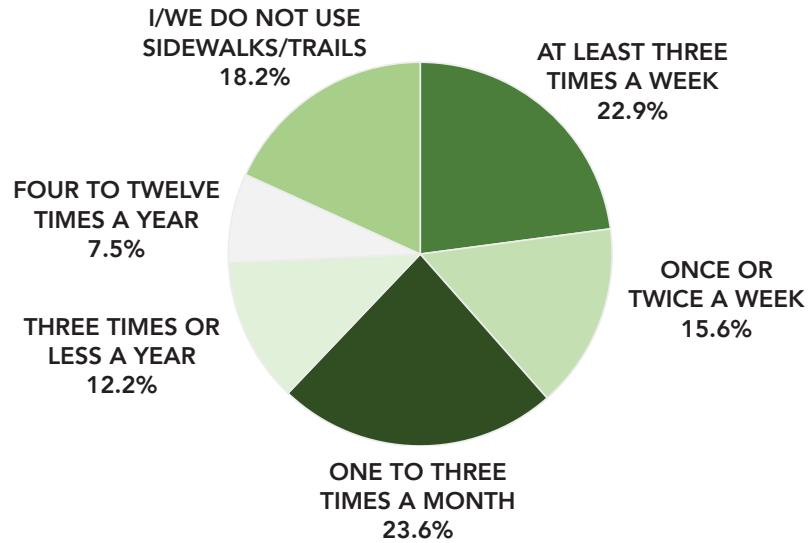
Township revenue (primarily from real estate, earned income and business privilege taxes) is used to support the services listed below. Please your current level of satisfaction with each.

SERVICES	SATISFIED	NEUTRAL	DISSATISFIED
Public Works	74.3%	18.8%	6.9%
Public Safety	79.8%	13.4%	6.8%
General Govt. Administration	56.5%	34.5%	8.1%
Charles Chrin Comm. Center	51.0%	39.0%	10.1%
Parks, Rec and Leisure Services	78.4%	17.7%	3.9%
Swimming Pool	42.4%	52.7%	4.9%
Planning & Development	38.0%	36.4%	25.6%





How often do you/others in your household utilize the sidewalks/trails found in the Township?



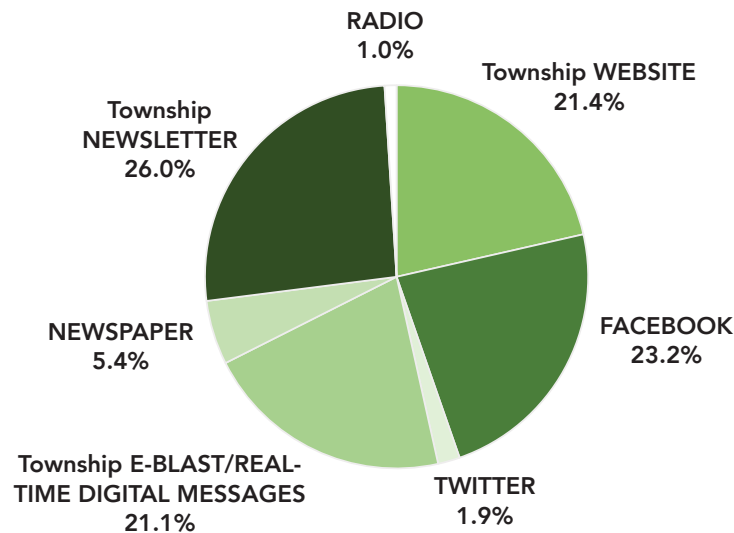
When asked how often the respondents and their households use the trails and/or sidewalks located within the Township, nearly half of all respondents indicated that they use sidewalks and/or trails one to three times a month or at least three times a week. This may be indicative of a contrast between residents and their interest in pedestrian infrastructure. These juxtaposed results may also suggest that some areas of the Township have sidewalks and trails, making it easier for residents to use them, while other parts of the Township do not. Pedestrian connectivity is fundamental asset to life in the Township.

Please rank the following Township destination in order of importance to your household for pedestrian access.

DESTINATIONS	# 1	# 2	# 3	OVERALL
Schools	22.4%	7.8%	8.9%	13.0%
Public Transportation	6.8%	6.3%	4.6%	5.9%
Parks & Recreation Facilities	16.3%	27.0%	20.0%	21.1%
Shopping Areas	23.6%	16.6%	18.1%	19.4%
Municipal Building/Library	4.5%	13.2%	14.9%	10.9%
Charles Chrin Comm. Center	2.6%	9.2%	11.2%	7.7%
Trails	19.5%	14.8%	14.7%	16.3%
Swimming Pool	4.3%	5.1%	7.6%	5.7%

When considering the importance for pedestrian access to various Township destinations, survey respondents answered that their highest priority destination for pedestrian access was the Township's shopping areas, followed closely by the Township's schools. The second and third highest priority for respondents were the Township's parks and recreation facilities. Overall, respondents felt that the most important destinations to have pedestrian access to were the parks and recreation facilities, shopping areas and trails, respectively.

How would you prefer to receive information about Township-related activities, alerts and/or events?



With generally comparable levels of preference, respondents have conveyed that their preferred modes of receiving information about Township-related activities, alerts and/or events would be through the Township Newsletter, through the Township's Facebook page, the Township's website and with Township E-Blast/ real-time digital messages. These results may suggest that community residents may prefer receiving both digital and non-digital forms of information to learn about Township-related activities, alerts and events.

What does your household perceive as major transportation issues within Palmer Township?





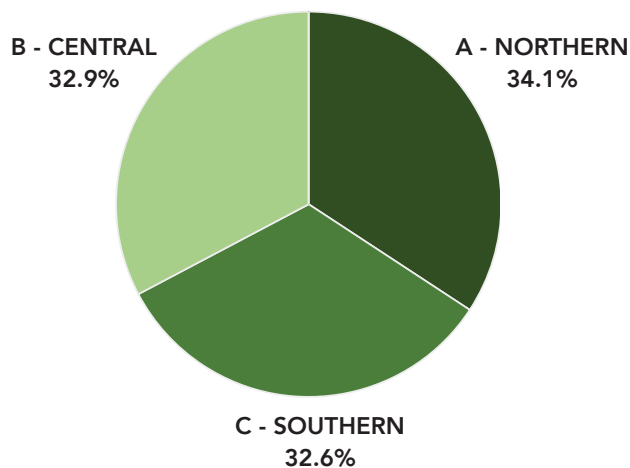
Palmer Township contains both major arterial roadways and low-volume residential roadways. When given a variety of possible transportation issues from which to choose, respondents most often identified their transportation challenges as excessive back-ups at traffic signals and cut-through traffic and/or high speeds on residential streets. Unsafe intersections that require traffic control intervention or intersections in need of geometric improvement were also identified as other matters needing attention.

How well do the housing options in Palmer Township meet your household needs?

NEEDS	MEETS NEEDS TODAY	DOES NOT MEET NEEDS TODAY	ANTICIPATED TO MEET NEEDS IN 5-10 YEARS	ANTICIPATED TO NOT MEET NEEDS IN 5-10 YEARS
The VARIETY of housing in Palmer meets my/our family's household needs	94.0%	6.0%	62.0%	38.0%
The AFFORDABILITY of housing in Palmer meets my/our household needs	84.8%	15.2%	56.0%	44.0%

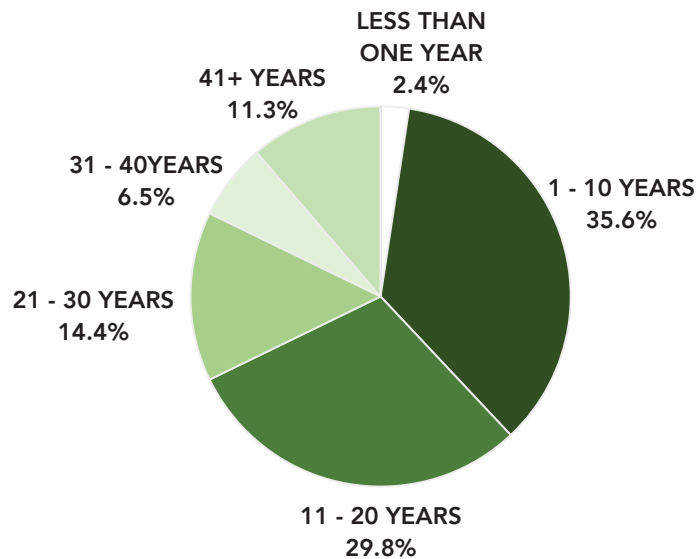
In terms of housing options within Palmer, the majority of respondents reported they feel that the variety of housing options meets their household needs today. When considering Township life in five to ten years, about two-thirds of respondents felt that the variety of housing would be able to meet household needs. In terms of affordability, almost 85% of respondents conveyed that housing affordability in the Township meets the current demand. In five to ten years, however, just over half of the respondents considered that housing in Palmer will still meet their needs. It is clear respondents feel that variety and affordability meet today's demands; while still a majority, fewer respondents perceive that these certainties may exist for them in the decade ahead.

Please indicate in which area you live.



When asked where they live within the Township, results indicated that there is a relatively even mix of respondents from Area A, Area B and Area C. Having an even mix of respondents in different areas in the Township is valuable because it helps indicate a reflection and representation of community-wide opinions.

How long have you lived in Palmer Township?



When asked how long respondents have lived in the Township, the majority relayed that they have lived in the Township between one and ten years. The second highest response was between 11 and 20 years. These responses are advantageous to the survey because we have both respondents who are new to the community providing a fresh set of eyes and potentially a more objective first impression of the Township as well as residents who have lived in the Township for multiple decades knowing and understanding the community's greatest attributes and its greatest challenges.

In general, how satisfied are you with Palmer Township as a place to live? VS: How long have you lived in Palmer Township?

LEVEL OF SATISFACTION	YEARS LIVED IN TOWNSHIP					
	< 1 YEAR	1 - 10 YEARS	11 - 20 YEARS	21 - 30 YEARS	31 - 40 YEARS	41+ YEARS
Very Satisfied	35.5%	27.6%	31.6%	33.3%	40.0%	42.5%
Satisfied	58.8%	49.6%	52.6%	53.9%	46.7%	37.5%
Neutral	5.9%	10.4%	9.1%	2.9%	11.1%	6.3%
Dissatisfied	0.0%	8.8%	4.8%	8.8%	2.2%	13.8%
Very Dissatisfied	0.0%	3.6%	1.9%	1.0%	0.0%	0.0%



Evaluating the relationship between resident tenure and their level of satisfaction with living in Palmer provides valuable insights in terms of potential short-term and long-term opportunities to enhance delivery of services.

Survey-wide, all categories reported positive levels of satisfaction with living in the Township and levels of dissatisfaction were low across the board. Almost all respondent cohorts identified "satisfied" as the most common answer and "very satisfied" as the second most common answer. These results show that the Township has been an enjoyable place to live for generations.

For those voicing dissatisfaction, the most predominate group comprises of residents living in Palmer for more than 40 years - a characteristic not uncommon across other similar types of surveys. While a very small percentage of residents identified as very dissatisfied with living in the Township, it is interesting that these are newer residents that may have had a different expectation prior to moving to the community. In some specific cases, this also is derived from opinions regarding school taxes.

Which Township destinations are the most important for you to have pedestrian access? VS
How long have you lived in Palmer Township?

HOW LONG YOU HAVE LIVED IN THE TOWNSHIP	SCHOOLS	PUBLIC TRANSPORTATION	PARKS & RECREATION FACILITIES	SHOPPING AREAS	MUNICIPAL BUILDING/ LIBRARY	CHARLES CHRIN COMMUNITY CENTER	TRAILS	SWIMMING POOL
Less Than One Year	+			+			+	
1 - 10 Years	+		+	+				
11 - 20 Years	+			+			+	
21 - 30 Years	+			+			+	
31 - 40 Years	+			+			+	
41 + Years	+			+			+	

Above is a chart showing the top three most important Township destinations to which pedestrian access is desired. The bolded "plus" symbols indicate the most popular answers for each age group.

For almost all age cohorts of the survey, destinations that are most desired to have pedestrian access are the Township schools, its shopping areas and its trails. These results are common to

many communities as residents tend to want to be able to walk to busy corridors easily, access recreational assets and allow children to walk safely to/from schools.

Parks and recreation facilities was also a top answer among residents who have lived in the community for 1-10 years. This may be indicative of these respondents having young children and wanting to safely access nearby assets quickly and easily.

How well do the housing options in Palmer Township meet your household needs? VS How long have you lived in Palmer Township?

NEEDS	YEARS LIVED IN THE TOWNSHIP					
	< 1 year	1 - 10 years	11 - 20 years	21 - 30 years	31 - 40 years	41+ years
The VARIETY of housing in Palmer meets my/our family's household needs						
Meets Needs Today	77.8%	79.2%	81.2%	79.0%	72.9%	87.2%
Does Not Meet Needs Today	0.0%	6.9%	3.3%	5.0%	8.3%	3.8%
Anticipated To Meet Needs In 5 - 10 Years	16.7%	8.1%	10.3%	7.0%	18.8%	3.8%
Not Anticipated To Meet Needs In 5 - 10 Years	5.6%	5.8%	5.2%	9.0%	0.0%	5.1%
The AFFORDABILITY of housing in Palmer meets my/our household needs						
Meets Needs Today	73.3%	69.4%	75.2%	71.1%	66.0%	73.8%
Does Not Meet Needs Today	0.0%	14.7%	11.4%	11.3%	8.5%	16.3%
Anticipated To Meet Needs In 5 - 10 Years	20.0%	8.7%	8.6%	5.2%	19.1%	5.0%
Not Anticipated To Meet Needs In 5 - 10 Years	6.7%	7.1%	4.8%	12.4%	6.4%	5.0%

Across the results of the survey, all respondents, regardless of how long they have lived in the Township, find that the variety and affordability of the Township's housing stock meet the needs of the community today.

Interestingly, when isolating which group of residents may not have that same level of certainty in 5-10 years, residents who have lived in Palmer for 21-30 years composed the group that was not so certain the housing stock may not be able to meet their anticipated future needs.



In which area of the Township do you live? VS: How long have you lived in Palmer Township?

AREA IN TOWNSHIP	YEARS LIVED IN TOWNSHIP					
	< 1 YEAR	1- 10 YEARS	11 - 20 YEARS	21 - 30 YEARS	31 - 40 YEARS	41+ YEARS
NORTHERN	47.1%	41.6%	34.3%	26.0%	23.9%	25.0%
CENTRAL	11.8%	30.8%	31.0%	38.0%	43.5%	37.5%
SOUTHERN	41.2%	27.6%	34.8%	36.0%	32.6%	37.5%

When looking at the areas of the Township in which respondents live, the residents which are newer to the community and have lived here ten years or fewer years live predominantly in the Northern section of the Township where there is generally newer housing stock.

Residents who have lived in the Township over twenty years but less than forty years tend to live in the central region of the Township. Residents who have lived in Palmer between eleven and twenty years or over forty years live in the southern section of the Township.

These tenure and geographic patterns are indicative of the notion that the life cycle of a neighborhood is typically a generation. When comparing this question's responses to other survey questions, it also appears that a transition in neighborhood residency is occurring. As this transition continues, it will be important to consider trends such as stresses of property maintenance where newer residents gain the inherent complexities of older housing.

What does your household perceive as major transportation issues with Palmer Township? VS:
In which area of the Township do you live?

TRANSPORTATION ISSUES	NORTH	CENTRAL	SOUTH
Excessive back-ups at signals	29.5%	36.1%	34.0%
Trouble entering/exiting residential streets from/onto major roadways	31.1%	37.8%	30.6%
Cut-through traffic and/or high speeds on residential streets	36.1%	31.8%	31.5%
Lack of access to public transportation	41.2%	29.4%	29.4%
Lack of pedestrian/bicycle access to major destinations within the Township	26.5%	34.0%	39.5%
Unsafe intersections that require traffic control and/or geometric improvements	42.9%	33.1%	23.3%
Traffic congestion around schools during arrival/dismissal times	23.8%	38.1%	35.8%
High speeds on major roadways	37.3%	33.3%	29.4%

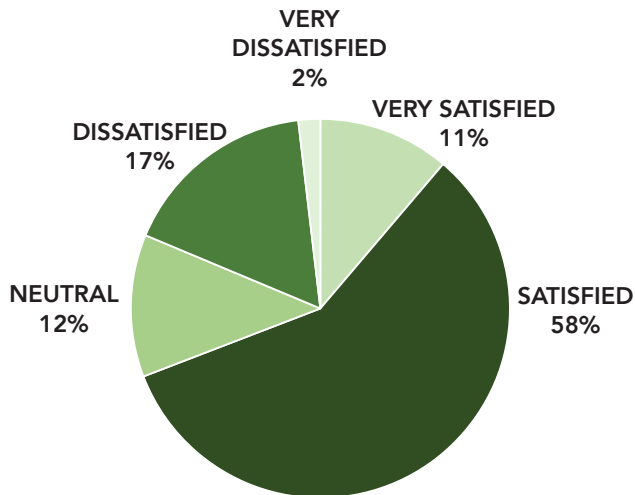
Evaluating the relationship of where survey respondents reside with the transportation-related concerns they have illuminates that there are certain portions of the Township where concerns are more extensive than others. Further, these responses validate Committee discussions to date. Specifically, based upon survey responses:

- Unsafe intersections, cut-through traffic, high speeds on major roadways and residential streets as well as a lack of access to public transportation are matters that are most concerning among residents living in the southern portion of the Township.
- Excessive back-ups at signals, troubles transitioning between residential streets and major roadways as well as traffic congestion around peak school times are most concerning among residents living in the central portion of the Township.
- Concerns regarding the lack of pedestrian and bicycle access is most prevalent among residents living in the southern portion of the Township.

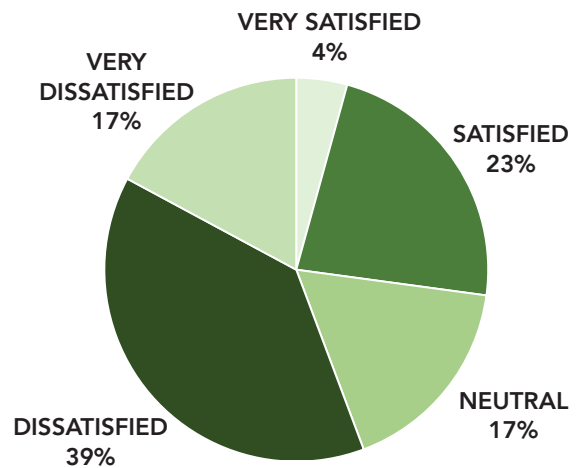


Township revenue (primarily from real estate, earned income and business privilege taxes) is used to support the services listed below. Please check your current level of satisfaction with planning and development. VS: In general, how satisfied are you with Palmer Township as a place to live?

ANSWERED "DISSATISFIED" WITH PLANNING & DEVELOPMENT



ANSWERED "VERY DISSATISFIED" WITH PLANNING & DEVELOPMENT



Township revenue (primarily from real estate, earned income and business privilege taxes) is used to support the services listed below. Please check your current level of satisfaction with planning and development. VS: What does your household perceive as major transportation issues with Palmer Township?

TRANSPORTATION ISSUES	DISSATISFIED	VERY DISSATISFIED
Excessive back-ups at signals	17%	19%
Trouble entering/exiting residential streets from/onto major roadways	11%	10%
Cut-through traffic and/or high speeds on residential streets	11%	14%
Lack of access to public transportation	20%	19%
Lack of pedestrian/bicycle access to major destinations within the Township	3%	2%
Unsafe intersections that require traffic control and/or geometric improvements	7%	7%
Traffic congestion around schools during arrival/dismissal times	21%	22%
High speeds on major roadways	10%	8%

For respondents who indicated levels of "dissatisfied" and "very dissatisfied" on Question 3 for Planning and Development:

- 34% of responses are related to traffic and trucking presence
- 35% of responses are related to the specific concern of manufacturing/warehousing in proximity to residential areas
- Remainder responses were random comments about regional-level concerns (not Township-specific or items in Township administrative control) e.g. "people drive like they are from New Jersey . . . "



Benchmarking

As Palmer approaches a state of build-out, new community planning issues emerge. To understand the potential impacts of build-out on community-wide services, programs and policies, the Township conducted a benchmark analysis. The following summary identifies: 1) the purpose and methodology of benchmarking; 2) indicators for evaluating the performance of services and the impact of assets; and 3) initial observations that could be relevant to the comprehensive planning efforts.

PURPOSE

The purpose of the Comprehensive Plan's benchmarking component is to:

- Establish quantitative comparisons between communities that share similar demographics, economic conditions and physical character.
- Compile data for a broad range of community-wide services, programs and policies that impact fiscal performance, cost of living, public safety/crime, resident amenities, senior attraction and educational opportunities.
- Create performance indices that measure and compare the effectiveness of services and programs as well as the impact on each community's "Quality of Life."
- Establish priorities to guide future decisions.

METHODOLOGY

The benchmark community selection process consists of three steps:

Step #1 – Identify notable communities in the region and throughout the Commonwealth.

Step #2 – Define initial benchmarking criteria including:

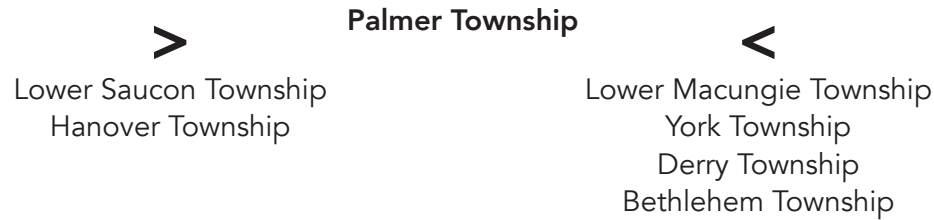
- Population
- Median income
- Median age
- Median household value
- Land use mix
- Government Structure
- Extent of Municipal Services Provided

Step #3– Compile, verify and evaluate data to determine similarities to and differences from Palmer.

COMMUNITY COMPARISONS

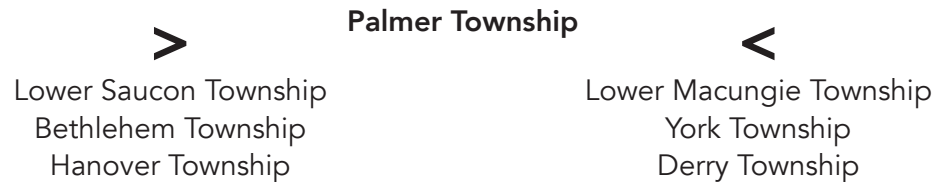
1. 1. 20,691 Palmer Residents

Almost all comparison communities continued growth through the past decade.



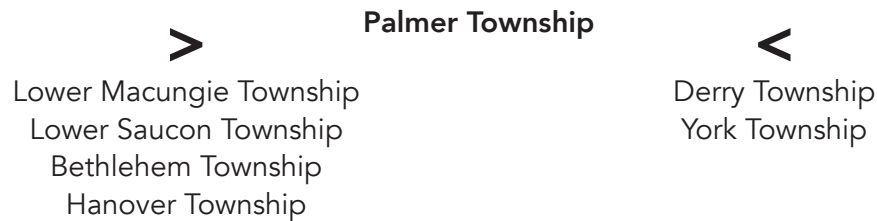
2. 45.2 Years of Age (Palmer Township Median)

The School District's attractiveness aids in Palmer's ability to maintain a younger and older population.



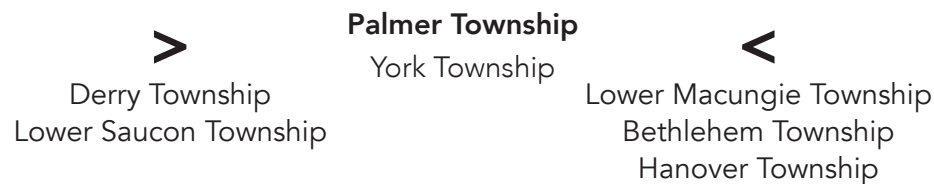
3. \$239,800 Palmer Township Median Housing Value (2010)

In the comparison, Palmer Township's household composition can be most correlated with Derry Township (Dauphin County).



4. \$216 Palmer Township Spending on Police per Capita

With the exception of Lower Macungie, each comparison municipality expends the greatest portion of its budget to public safety.





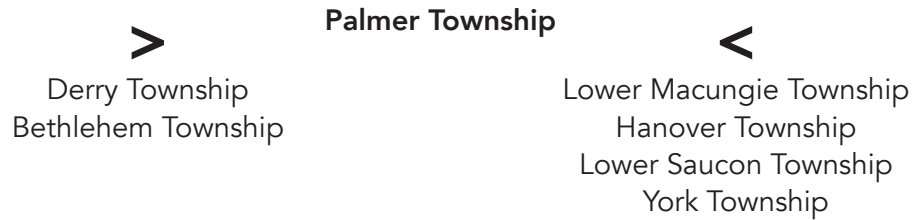
5. \$56 Palmer Township Spending per Capita

Palmer Township effectively allocates and spends resources for public works services.

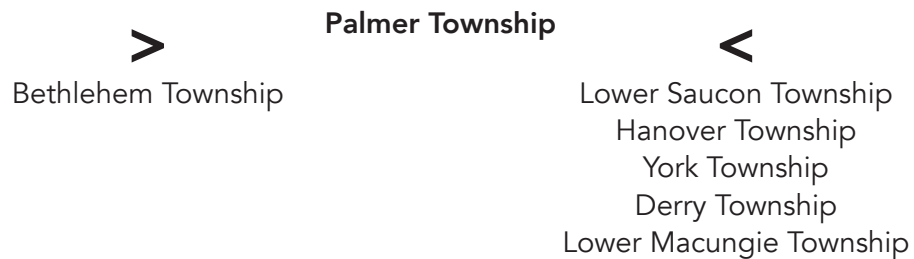


6. \$58 Palmer Township Spending per Capita

Investments in recreation are a source of pride and identity in Palmer Township.



7. \$0.09 Municipal Tax Revenue per \$1.00



CONNECTIVITY MAP

LEGEND

 Palmer Township (6,614 Acres)

 Parcels

 Rivers/Streams/Ponds

OPEN SPACE & CONNECTIVITY AMENITIES

 Parks and Open Space

 School

LAND TRAILS

 Existing Trails


 Proposed Trails

WATER TRAILS


 Existing Trail

 River Access Point

TRANSMISSION LINES*

 Pipeline/Powerline
(160' Wide Right of Way Shown)

ECONOMIC AMENITIES

 Major shopping Area

 Major Industrial Park

CIVIC AMENITIES

 Cemetery

 Place of Worship

* Note: Transmission lines were digitalized from 1:24,000 USGS Quad Maps.

Prepared by:

EPD Environmental
Planning & Design, LLC





LANDFORM AND WATERSHED MAP

LEGEND

Palmer Township (6,614 Acres)

Parcels

Major Highway

Arterial Roads

Other Roads

Active Rail Roads

Rivers/Streams/Ponds

Existing Trails

Proposed Trails

Watersheds

$\geq 500'$

$\geq 450' - 500'$

$\geq 400' - 450'$

$\geq 350' - 400'$

$\geq 300' - 350'$

$\geq 250' - 300'$

$\geq 200' - 250'$

$< 200'$

Palmer Township has three principal watersheds: The Bushkill Creek, Shoeneck Creek and Lehigh River. Hence, the extent to which development impacts the resources of these watersheds will be based upon the combination of Federal, State and Township's technical requirements for development. Potable drinking water is provided to the Township by Easton Suburban Water Authority and in the northern portion of the Township by Pennsylvania American Water. The Township will continue to have a professional relationship with these Authorities in the decades ahead to ensure that the Authorities' systems will provide a reliable, quality water supply.

Prepared by:

EPD Environmental
Planning & Design, LLC



APPENDIX

Fire Department North End Response Activity

January 1, 2016-September 22, 2017

Motor Vehicle Accidents = 41 (this includes Main Street and Route 33 at the ramps only)

Fire Alarm Activations = 15 (this includes only alarm system activations within the buildings)

Vehicle Fires = 6 (this includes vehicle fires on Main Street, Route 33 ramps, Van Buren Road to Hollo Road, and on the properties/parking lots)

Fires = 3 (this includes fires inside the structures and outside; excluding vehicle fires)

Rescues = 2 (these two rescue calls were persons trapped in vehicles from power line strikes – construction site)

Wire Down Calls = 2 (these include power lines that were downed from storms)

Hazardous Materials Calls = 6 (this includes spills on highway at the interchange/Main Street and on properties and natural gas leaks inside the buildings)

Total 2017 calls (to September 22, 2017) to the North end = 34

Total 2016 calls to North end = 41

In particular, the Fire Department has responded to:

Amazon = 12 calls

1611 Van Buren = 4 calls (still under construction)

1620 Van Buren = 1 call (still under construction)

XPO Logistics = 6 calls

Please note that this analysis only includes the Main Street zone, it's properties to Hollo Road/Van Buren Road intersection. There has been other incidents South of the Hollo Road/Van Buren Road as well as on Tatamy Road as a result of North end development. For example, there have been motor vehicle accidents involving employees of Amazon, XPO, and FedEx that occurred on Tatamy Road; Nazareth Road @ Van Buren Road; Van Buren Road @ Northwood Avenue; Nazareth Road @ Northwood Avenue; Main Street to Upper Nazareth border. Additionally, motor vehicle accidents involving tractor trailers traveling to North end have occurred on Route 33 and Route 22 that are not included in this analysis.

To put into perspective, in 2015, total call volume up to end of September was 461; in 2016, total call volume up to end of September was 495; and for 2017 currently at total call volume of 586 with one week remaining in September.

Total calls from 2015 = 641 (AVG. 53 month)

Total calls from 2016 = 708 (10% increase from 2015; AVG. 59 month)

**** Call volume has increased 16% for 2017 (Total 2016 vs. January 2017 to September 22, 2017). 2017 is an average of 65 calls a month so far.**

APPENDIX

Police Department North End Calls

August 28, 2015-Spetember 22, 2017

TYPE OF CALL	AMAZON	XPO
	11/24/15 -9/22/17 AMOUNT	8/28/15 -9/22/17 AMOUNT
Fire Alarm	9	2
Assistance	7	5
Information	6	5
Aggravated Assault	1	1
911 Hang Up	14	10
Check Welfare	2	0
Hazardous Materials	1	1
Non-reportable MVA	8	2
Unwanted Person	1	2
Parking	4	11
Disturbance	3	4
Found Property	1	0
VCN/Megan's Law	1	1
Stolen Vehicle	1	0
Property Damage	2	0
Theft	2	8
Animal Related	1	0
Fire Call	1	2
Lost Property	1	1
Entry Alarm	0	8
Calls for Service	0	1
Suspicious Activity	0	2
Civil Matters	0	1
Simple Assault	0	2
Terroristic Threats	0	1
Criminal Mischief/Vandalism	0	1
Abandoned Vehicle	0	1
Identity Theft	0	1
Suspicious Vehicle	0	1
TOTAL	66	74

MAIN STREET MVA'S

2008	5
2009	9
2010	6
2011	4
2012	11
2013	3
2014	2
2015	9
2016	18
2017 (9/26)	15

APPENDIX

Summary Table

BUILD-OUT SCENARIO	# OF UNITS	# OF NEW RESIDENTS	# OF NEW JOBS	TOWNSHIP TAX REVENUES (RESIDENTIAL)	TOWNSHIP TAX REVENUES (COMMERCIAL/ BUSINESS)	# ADTS (AVERAGE DAILY TRIPS)
ROLL BACK IN TIME (ALL UNDEVELOPED LOTS ARE RESIDENTIAL)	1,269	3,300	82	\$ 1,064,691	\$ 15,750	33,000
Today's Zoning CURRENT ZONING	244	635	2929	\$ 204,716	\$ 350,700	6,350
Modified Zoning - MIX OF INDUSTRIAL AND RESIDENTIAL	618	1,607	1893	\$ 518,502	\$ 234,500	16,070

APPENDIX

SCENARIO 1: BUILD OUT ANALYSIS - ROLL BACK IN TIME (ALL UNDEVELOPED LOTS ARE RESIDENTIAL)

PARCEL ID	ACRES	BUILDABLE AC. AVG (-15%)	CURRENT ZONING	MINIMUM LOT SIZE/GENERAL FAR*	AREA RESERVED FOR INFRASTRUCTURE	W/O OPEN SPACE DED.	SPACE AC. REQ.	OPEN SPACE REQ. PER UNIT	APPROXIMATE MAXIMUM POSSIBLE UNITS	APPROX. MAX. POSSIBLE DEV.***
J8271	65.1	55.4	Main Street Commercial/North End Business	0.34 ACRES		15%	160.93	7.402663811	154	153 UNITS
K8107F	17.7	15.1	Light Industrial	0.34 ACRES		15%	43.86	2.017332875	42	41 UNITS
K811A1	10.5	8.9	Light Industrial	0.34 ACRES		15%	25.97	1.194464546	25	24 UNITS
K834	22.5	19.2	Transportation Industrial 2	0.34 ACRES		15%	55.68	2.561277283	53	53 UNITS
J823A1	19.2	16.3	Main Street Commercial/North End Business	0.34 ACRES		15%	47.41	2.180751272	45	45 UNITS
J8245B	4.5	3.9	Medium Density Residential	0.34 ACRES		15%	11.22	0.516248002	11	10 UNITS
J827A1D	6.1	5.2	North End Business	0.34 ACRES		15%	15.07	0.693343023	14	14 UNITS
J827A1E	6.8	5.8	North End Business	0.34 ACRES		15%	16.72	0.769248198	16	15 UNITS
J827A1F	6.7	5.7	North End Business	0.34 ACRES		15%	16.47	0.757495022	16	15 UNITS
K853	5.0	4.3	Planned Office/Industrial Park	0.34 ACRES		15%	12.46	0.573245001	12	11 UNITS
K810A1	36.4	30.9	Planned Industrial/Commercial**	0.34 ACRES		15%	89.83	4.132232474	86	85 UNITS
K810A2A	31.5	26.8	Planned Industrial/Commercial**	0.34 ACRES		15%	77.92	3.584386165	74	74 UNITS
K8111	7.7	6.6	Planned Industrial/Commercial**	0.34 ACRES		15%	19.10	0.878814571	18	18 UNITS
K8112	4.9	4.2	Planned Industrial/Commercial**	0.34 ACRES		15%	12.13	0.558026441	12	11 UNITS
K8112A	58.1	49.4	Planned Industrial/Commercial**	0.34 ACRES		15%	143.64	6.607532851	137	137 UNITS
K8121	16.2	13.8	Planned Office/Industrial Park	0.34 ACRES		15%	40.07	1.84308081	38	38 UNITS
L842	12.7	10.8	General Commercial	0.30 FAR		15%	35.93	1.652824789	140864	140,863 SQ FT
K859	23.8	20.2	Planned Office/Industrial Park	0.34 ACRES		15%	58.77	2.703525399	56	56 UNITS
K8124	17.5	14.9	Planned Office/Industrial Park	0.34 ACRES		15%	43.21	1.987722722	41	41 UNITS
K8125	16.5	14.1	Planned Office/Industrial Park	0.34 ACRES		15%	40.85	1.879043476	39	38 UNITS
K81210A	31.6	26.9	Planned Office/Industrial Park	0.34 ACRES		15%	78.07	3.591149378	74	74 UNITS
K8129	35.1	29.9	Planned Office/Industrial Park	0.34 ACRES		15%	86.78	3.99210867	83	82 UNITS ¹
K8131	45.0	38.2	Medium Density Residential	0.34 ACRES		15%	111.07	5.109244837	106	105 UNITS
K8132A	12.3	10.5	Medium Density Residential	0.34 ACRES		15%	30.44	1.400459812	29	29 UNITS
K972	14.4	12.3	Medium Density Residential	0.34 ACRES		15%	35.70	1.642188423	34	34 UNITS
K8147	8.4	7.1	Medium Density Residential	0.34 ACRES		15%	20.72	0.953268114	20	19 UNITS
K8154	9.3	7.9	Medium Density Residential	0.34 ACRES		15%	23.04	1.059928562	22	21 UNITS
K974A	8.1	6.9	Medium Density Residential	0.34 ACRES		15%	19.96	0.918092727	19	19 UNITS
K9SW141G	3.3	2.8	Low Density Residential	0.34 ACRES		15%	8.04	0.36965427	8	7 UNITS
TOTAL										1,269 UNITS
TOTAL										140,863 SQ FT

* Calculated by using the lowest minimum lot size permitted in district to anticipate the highest potential density.

** For all uses besides greenhouses, single-family homes, private club, private picnic groves, bed and breakfast use.

*** Consolidating non-conforming lots which are currently too small can yield more possible development

¹ Medium Density Residential Minimum Lot Size was used to determine maximum development numbers

APPENDIX

SCENARIO 2: BUILD-OUT ANALYSIS - CURRENT ZONING

PARCEL ID	ACRES	BUILDABLE AC. AVG (-15%)	CURRENT ZONING	MINIMUM LOT SIZE/GENERAL FAR*	AREA RESERVED FOR INFRASTRUCTURE	W/O OPEN SPACE DED.	SPACE AC. REQ.	OPEN SPACE REQ. PER UNIT	APPROXIMATE MAXIMUM POSSIBLE UNITS	APPROX. MAX. POSSIBLE DEV.***
J8271	65.1	55.4	Main Street Commercial/North End Business	0.18 FAR	15%	307.55	0.046	14.14731306	434059	434,059 SQ FT
K8107F	17.7	15.1	Light Industrial	0.18 FAR	15%	83.81	0.046	3.855347272	118287	118,287 SQ FT
K811A1	10.5	8.9	Light Industrial	0.18 FAR	15%	49.63	0.046	2.282754466	70038	70,038 SQ FT
K834	22.5	19.2	Transportation Industrial 2	0.18 FAR	15%	106.41	0.046	4.894885474	150182	150,181 SQ FT
J823A1	19.2	16.3	Main Street Commercial/North End Business	0.18 FAR	15%	90.60	0.046	4.167657986	127870	127,869 SQ FT
J8245B	4.5	3.9	Medium Density Residential	0.34 ACRES	15%	11.22	0.046	0.516248002	11	10 UNITS
J827A1D	6.1	5.2	North End Business	0.18 FAR	15%	28.81	0.046	1.325055556	40655	40,654 SQ FT
J827A1E	6.8	5.8	North End Business	0.18 FAR	15%	31.96	0.046	1.470118778	45105	45,105 SQ FT
J827A1F	6.7	5.7	North End Business	0.18 FAR	15%	31.47	0.046	1.447657153	44416	44,416 SQ FT
K853	5.0	4.3	Planned Office/Industrial Park	0.18 FAR	15%	23.82	0.046	1.09553489	33613	33,612 SQ FT
K810A1	36.4	30.9	Planned Industrial/Commercial**	0.18 FAR	15%	171.68	0.046	7.897155395	242296	242,295 SQ FT
K810A2A	31.5	26.8	Planned Industrial/Commercial**	0.18 FAR	15%	148.92	0.046	6.850160226	210172	210,172 SQ FT
K8111	7.7	6.6	Planned Industrial/Commercial**	0.18 FAR	15%	36.51	0.046	1.679512292	51530	51,529 SQ FT
K8112	4.9	4.2	Planned Industrial/Commercial**	0.18 FAR	15%	23.18	0.046	1.066450532	32720	32,720 SQ FT
K8112A	58.1	49.4	Planned Industrial/Commercial**	0.18 FAR	15%	274.52	0.046	12.62772945	387436	387,436 SQ FT
K8121	16.2	13.8	Planned Office/Industrial Park	0.18 FAR	15%	76.57	0.046	3.522332214	108070	108,070 SQ FT
L842	12.7	10.8	General Commercial	0.30 FAR	15%	35.93	0.046	1.652824789	140864	140,863 SQ FT
K859	23.8	20.2	Planned Office/Industrial Park	0.18 FAR	15%	112.32	0.046	5.166737429	158523	158,522 SQ FT
K8124	17.5	14.9	Planned Office/Industrial Park	0.18 FAR	15%	82.58	0.046	3.798758979	116551	116,551 SQ FT
K8125	16.5	14.1	Planned Office/Industrial Park	0.18 FAR	15%	78.07	0.046	3.591060866	110179	110,178 SQ FT
K81210A	31.6	26.9	Planned Office/Industrial Park	0.18 FAR	15%	149.20	0.046	6.863085479	210569	210,569 SQ FT
K8129	35.1	29.9	Planned Office/Industrial Park	0.18 FAR	15%	165.86	0.046	7.629363237	234079	234,079 SQ FT
K8131	45.0	38.2	Medium Density Residential	0.34 ACRES	15%	111.07	0.046	5.109244837	106	105 UNITS
K8132A	12.3	10.5	Medium Density Residential	0.34 ACRES	15%	30.44	0.046	1.400459812	29	29 UNITS
K972	14.4	12.3	Medium Density Residential	0.34 ACRES	15%	35.70	0.046	1.642188423	34	34 UNITS
K8147	8.4	7.1	Medium Density Residential	0.34 ACRES	15%	20.72	0.046	0.953268114	20	19 UNITS
K8154	9.3	7.9	Medium Density Residential	0.34 ACRES	15%	23.04	0.046	1.059928562	22	21 UNITS
K974A	8.1	6.9	Medium Density Residential	0.34 ACRES	15%	19.96	0.046	0.918092727	19	19 UNITS
K9SW141G	3.3	2.8	Low Density Residential	0.34 ACRES	15%	8.04	0.046	0.36965427	8	7 UNITS
TOTAL									244	UNITS
TOTAL									3,067,205	SQ FT

* Calculated by using the lowest minimum lot size permitted in district to anticipate the highest potential density.

** For all uses besides greenhouses, single-family homes, private club, private picnic groves, bed and breakfast use.

*** Consolidating non-conforming lots which are currently too small can yield more possible development

¹ Medium Density Residential Minimum Lot Size was used to determine maximum development numbers

APPENDIX

SCENARIO 3: BUILD OUT ANALYSIS - MIX OF INDUSTRIAL AND RESIDENTIAL

PARCEL ID	ACRES	BUILDABLE AC. AVG (-15%)	CURRENT ZONING	MINIMUM LOT SIZE/GENERAL FAR*	AREA RESERVED FOR INFRASTRUCTURE	W/O OPEN SPACE DED.	SPACE AC. REQ.	OPEN SPACE REQ. PER UNIT	APPROXIMATE MAXIMUM POSSIBLE UNITS	APPROX. MAX. POSSIBLE DEV.***
J8271	65.1	55.4	Main Street Commercial/North End Business	0.18 FAR	15%	307.55	0.046	14.14731306	434059	434,059 SQ FT
K8107F	17.7	15.1	Light Industrial	0.18 FAR	15%	83.81	0.046	3.855347272	118287	118,287 SQ FT
K811A1	10.5	8.9	Light Industrial	0.18 FAR	15%	49.63	0.046	2.282754466	70038	70,038 SQ FT
K834	22.5	19.2	Transportation Industrial 2	0.18 FAR	15%	106.41	0.046	4.894885474	150182	150,181 SQ FT
J823A1	19.2	16.3	Main Street Commercial/North End Business	0.18 FAR	15%	90.60	0.046	4.167657986	127870	127,869 SQ FT
J8245B	4.5	3.9	Medium Density Residential	0.34 ACRES	15%	11.22	0.046	0.516248002	11	10 UNITS
J827A1D	6.1	5.2	North End Business	0.18 FAR	15%	28.81	0.046	1.325055556	40655	40,654 SQ FT
J827A1E	6.8	5.8	North End Business	0.18 FAR	15%	31.96	0.046	1.470118778	45105	45,105 SQ FT
J827A1F	6.7	5.7	North End Business	0.18 FAR	15%	31.47	0.046	1.447657153	44416	44,416 SQ FT
K853	5.0	4.3	Planned Office/Industrial Park	0.34 ACRES	15%	12.46	0.046	0.573245001	12	11 UNITS
K810A1	36.4	30.9	Planned Industrial/Commercial**	0.34 ACRES	15%	89.83	0.046	4.132232474	86	85 UNITS
K810A2A	31.5	26.8	Planned Industrial/Commercial**	0.34 ACRES	15%	77.92	0.046	3.584386165	74	74 UNITS
K8111	7.7	6.6	Planned Industrial/Commercial**	0.34 ACRES	15%	19.10	0.046	0.878814571	18	18 UNITS
K8112	4.9	4.2	Planned Industrial/Commercial**	0.34 ACRES	15%	12.13	0.046	0.558026441	12	11 UNITS
K8112A	58.1	49.4	Planned Industrial/Commercial**	0.34 ACRES	15%	143.64	0.046	6.607532851	137	137 UNITS
K8121	16.2	13.8	Planned Office/Industrial Park	0.34 ACRES	15%	40.07	0.046	1.84308081	38	38 UNITS
L842	12.7	10.8	General Commercial	0.30 FAR	15%	35.93	0.046	1.652824789	140864	140,863 SQ FT
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K8124	17.5	14.9	Planned Office/Industrial Park	0.18 FAR	15%	82.58	0.046	3.798758979	116551	116,551 SQ FT
K8125	16.5	14.1	Planned Office/Industrial Park	0.18 FAR	15%	78.07	0.046	3.591060866	110179	110,178 SQ FT
K81210A	31.6	26.9	Planned Office/Industrial Park	0.18 FAR	15%	149.20	0.046	6.863085479	210569	210,569 SQ FT
K8129	35.1	29.9	Planned Office/Industrial Park	0.18 FAR	15%	165.86	0.046	7.629363237	234079	234,079 SQ FT
K8131	45.0	38.2	Medium Density Residential	0.34 ACRES	15%	111.07	0.046	5.109244837	106	105 UNITS
K8132A	12.3	10.5	Medium Density Residential	0.34 ACRES	15%	30.44	0.046	1.400459812	29	29 UNITS
K972	14.4	12.3	Medium Density Residential	0.34 ACRES	15%	35.70	0.046	1.642188423	34	34 UNITS
K8147	8.4	7.1	Medium Density Residential	0.34 ACRES	15%	20.72	0.046	0.953268114	20	19 UNITS
K8154	9.3	7.9	Medium Density Residential	0.34 ACRES	15%	23.04	0.046	1.059928562	22	21 UNITS
K974A	8.1	6.9	Medium Density Residential	0.34 ACRES	15%	19.96	0.046	0.918092727	19	19 UNITS
K9SW141G	3.3	2.8	Low Density Residential	0.34 ACRES	15%	8.04	0.046	0.36965427	8	7 UNITS
TOTAL										618 UNITS
TOTAL										2,001,371 SQ FT

* Calculated by using the lowest minimum lot size permitted in district to anticipate the highest potential density.

** For all uses besides greenhouses, single-family homes, private club, private picnic groves, bed and breakfast use.

*** Consolidating non-conforming lots which are currently too small can yield more possible development

¹ Medium Density Residential Minimum Lot Size was used to determine maximum development numbers