

# UPPER MERION TRANSPORTATION AUTHORITY

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## Act 209 Land Use Assumptions Report

December 2024

# UPPER MERION TOWNSHIP

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# INTRODUCTION

## Act 209 Overview

First enacted in 1968, the Pennsylvania Municipal Planning Code (MPC) authorizes municipalities to enact impact fee ordinances and collect these fees to cover the cost of transportation improvements necessitated by land development. The MPC was subsequently amended via Act 209 in 1990 and again by Act 68 in 2000, in which the process of enacting transportation impact fees was further proscribed. These fees can be used for “costs incurred by a municipality for the construction of roadway improvements designated in a transportation Capital Improvements Plan that are attributable to new development, within a designated service area or areas.” These costs include—but are not limited to—construction, land acquisition, engineering, legal costs for right of way acquisition, traffic studies, and debt service.

Empowered by these legislative acts, the Board of Supervisors enacted an ordinance to collect transportation impact fees, and in 2014 the Township adopted its most recent Land Use Assumptions Report (LUAR), Roadway Sufficiency Analysis, and Capital Improvements Plan for Transportation Projects. From that time through the present, the Township has collected a transportation impact fee of \$3,623.38 for every peak-hour trip generated by new development in the Transportation Service Area (TSA).

In 2021, the Upper Merion Transportation Authority approved a resolution to conduct a new Act 209 study, and this Land Use Assumptions Report has been drafted in support of this effort. As required by Act 209, this updated Land Use Assumption Report is intended to determine the level and timing of growth and development within designated areas of the municipality and to provide land use data for traffic projections. The level of growth is based on projected population levels, current zoning regulations, approved subdivision and land development plans, and the Future Land Use Plan in the adopted Comprehensive Plan. This Land Use Assumptions Report update uses an eleven-year growth horizon beginning in 2019 and ending in 2030. What follows is a discussion on existing land uses and transportation networks, as well as projected changes in land uses, densities of residential development, intensities of nonresidential development, and population growth in Upper Merion Township.

## EXISTING CONDITIONS/HISTORIC TRENDS

Upper Merion Township is situated in the lower southeast corner of Montgomery County, bordered by Lower Merion to its southeast, West Conshohocken and Plymouth to its east, Bridgeport, Norristown, West Norriton and Lower Providence on its northern edge, and Chester and Delaware Counties on the western edge. It is approximately 20 miles from Center City, Philadelphia. The Township serves as the crossroads of multiple major highways including Route 422, I-76 (the Schuylkill Expressway), I-476 (the PA Turnpike), and Route 202. It is served by the Norristown High Speed Line (NHSL) on the eastern end of the Township and has high frequency suburban bus service operated by the Southeastern Pennsylvania Transportation Authority (SEPTA). The Schuylkill River runs along its northern and eastern edges and acts as a major barrier of the Township from the municipalities to its north: West Norriton, Conshohocken, and Plymouth. Railroad tracks also border the Schuylkill River and outline this division.

Since the 1950s, consistent private development has utilized almost all of the Township's developable properties. Today, less than three percent of vacant land exists and the future of development will rely almost entirely on infill development and redevelopment. Most readily recognized as the home of the King of Prussia Mall, the third-largest mall in the country, the confluence of multiple highways through the Township has also brought major economic activity through robust office parks and other large shopping center areas. The office park and corporate complexes host companies such as Lockheed Martin, Children's Hospital of Philadelphia, FedEx Ground Package System, and GlaxoSmithKline. The Township's housing is primarily split between single-family homes (attached and detached) and large multifamily properties (10+ units). However, historical neighborhoods of Swedeland and Swedesburg include rowhomes, twins, and small multifamily properties. Furthermore, the western portion of the Township is almost entirely comprised of Valley Forge National Historical Park, where General Washington famously placed the winter camp for the Continental Army in 1777 and 1778.

Due to the time period when Upper Merion Township experienced the most significant growth (1960s to 1980s), the community is heavily dependent on the automobile. This underscores the critical importance of the Act 209 fee so that redevelopment can provide the opportunity for subsequent roadway and transportation improvements.

# EXISTING CONDITIONS/HISTORIC TRENDS

## Description of Existing Land Use

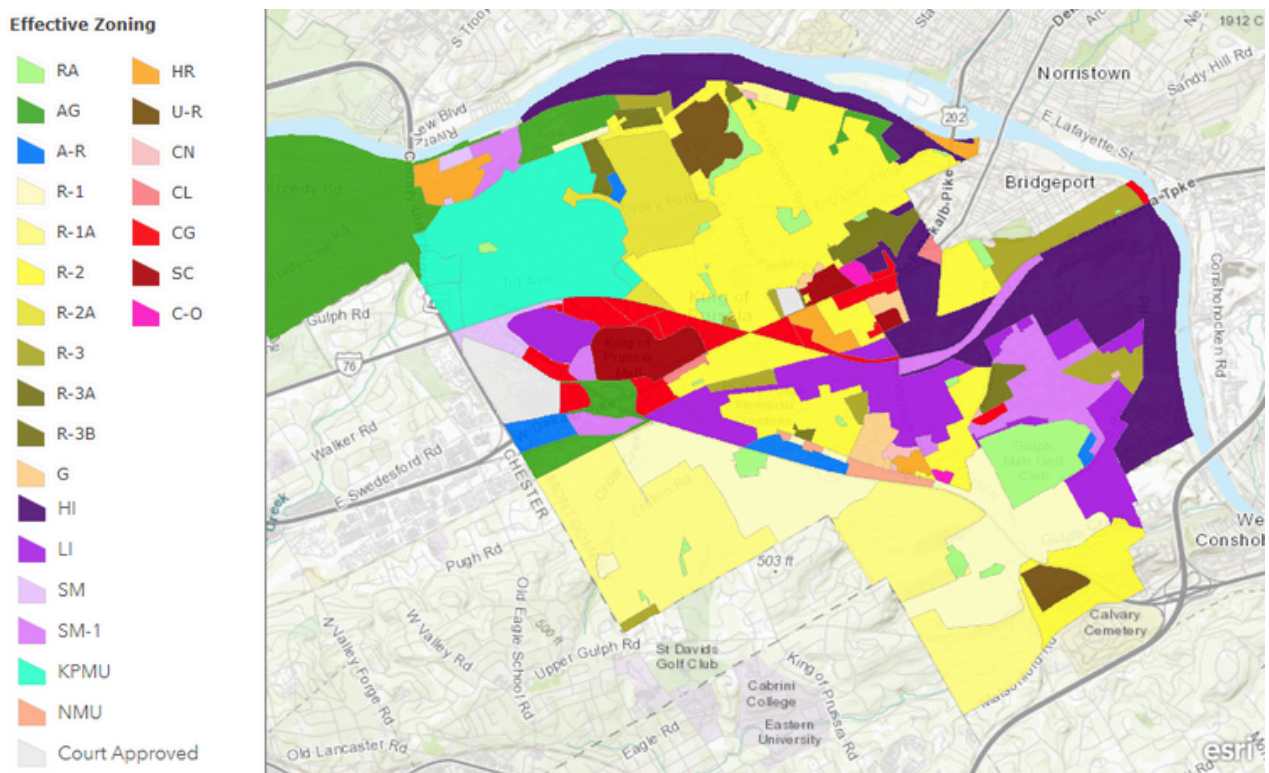


Figure 1: Upper Merion Township Zoning Map

The Township currently encompasses 24 distinct zoning districts as shown on the adopted zoning map (Figure 1) and includes several court-approved developments. The southern and northern sections of the Township are predominantly zoned for single-family homes. Much of the southern single-family zoned areas are separated from the centrally located commercial areas by the I-76, the Schuylkill Expressway.

In the eastern part of the Township includes the largest heavy industrial zoning district as well as the Renaissance Park, a large office park zoned SM-1. Renaissance Park is the second largest office park in the township and the sixth largest in the county.

The western portion is notable for housing the largest office park in both the Township and the county, zoned KPMU, along with the recently court-approved Village at Valley Forge development. This development has introduced a significant mixed-use area featuring big-box retail, a walkable shopping center, townhomes, apartments, condos, and a children's hospital. The far western edge of the Township is home to Valley Forge National Historical Park. At the center of the Township lies the King of Prussia Mall along with several other shopping centers and retail strips, zoning SC and CG.

Current focuses of zoning text amendments aim to steward more sustainable building practices, such as implementing zoning bonuses for LEED-designed projects, as well as encouraging mixed-use developments.

# EXISTING CONDITIONS/HISTORIC TRENDS

## Description of Existing Land Use



Figure 2: 2015 MCPC Existing Land Use

As shown in Figure 2 & Figure 3, less than 5% of Upper Merion is considered “undeveloped,” essentially making the township fully developed. However, the township remains a hub for economic development and a desirable place to live. As the metabolic rate of development subsides and areas are upzoned for continued growth, the Township will experience patterns of redevelopment in order to bring parcels to their highest and best use. Therefore, to assume future development in Upper Merion Township, one needs to recognize the existing real estate landscape, development tailwinds, and the conditions/occupancy of existing buildings.

From the development of the map above (2019) to today, the major development change has been the buildout of the Village at Valley Forge on a former, undeveloped golf course.

One golf course remains in the Township. The Gulph Mills Golf Club is one of the most exclusive golf courses on the Philadelphia Main Line. It creates a buffer between Renaissance Park and the tree-lined single-family neighborhoods south of its boundaries.

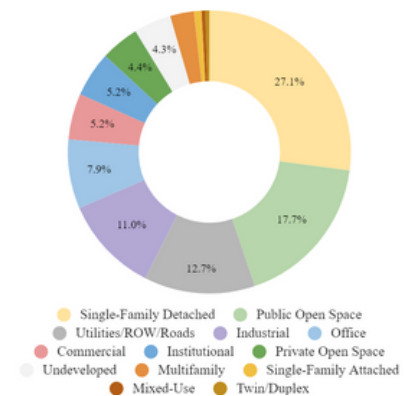


Figure 3: 2015 Existing Land Use Percentages

# EXISTING CONDITIONS/HISTORIC TRENDS

## Description of Future Land Use

Based on the current zoning of the Township, the deeply suburban areas, comprised of single-family homes, are likely to remain the same. Therefore, the major development and redevelopment tailwinds will be seen in the commercial, mixed-use, and industrial zoning districts.

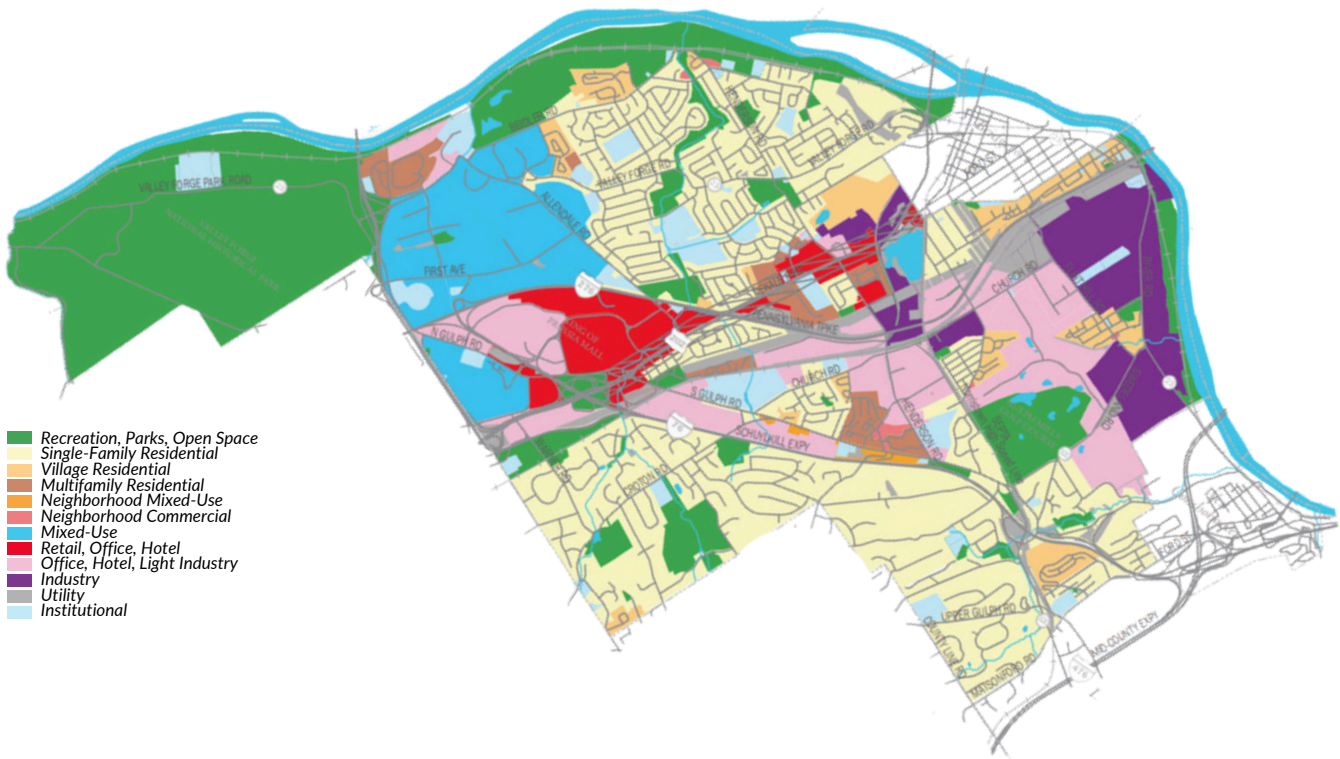


Figure 4: 2015 MCPC Future Land Use

As outlined in the Future Land Use map from the 2019 Comprehensive Plan draft (Figure 4), Moore Park (zoned KPMU, located in the western end of the Township) is poised to experience vibrant mixed-use development. The most recent proposed developments in the Moore Park area have been residential (Skye 750) and life science R&D (650 Park Ave).

Furthermore, new LEED standards for buildings provide bonuses for developments based on the sustainability trench for which it is design –with LEED Gold standard buildings receiving the highest bonuses. These bonuses can include height bonuses or impervious coverage bonuses.

Lastly, EPA Superfund and Act 2 sites are located within the eastern portion of the Township. As remediation is finalized and the sites are capped, the Township can expect proposed developments in areas that are mostly zoned for industrial development.



# EXISTING CONDITIONS/HISTORIC TRENDS

## Description of Existing Roadways

The Delaware Valley Regional Planning Commission (DVRPC) serves as the federally-designated Metropolitan Planning Organization for the Greater Philadelphia region, spanning nine counties in New Jersey and Pennsylvania. In this capacity, DVRPC is responsible for producing the Transportation Improvement Program (TIP) for the region, which is a list of multimodal transportation projects planned over a four-year period. Tables 1& 2 lists all TIP projects, completed and planned, for Upper Merion Township:

MPMS# 16396 Church Road Bridge Over Norristown High Speed Line   SR: 7200 - CONSTRUCTION COMPLETED		
Limits:	Over SEPTA Route 100	This project consists of the replacement of the Church Road Bridge and approaches over the SEPTA Route 100 rail line (Norristown High Speed Line) in Upper Merion Township. The project includes widening of the bridge to meet current design standards for a two-lane roadway with a pedestrian sidewalk on one side.
Improvement:	Bridge Repair/Replacement	
Est. Let Date:	03/15/2020	
Est. Funding:	\$6.5M	
MPMS# 16705 Chester Valley Trail Extension (C036) - CONSTRUCTION COMPLETED		
Limits:	S Gulph Rd Bridge to Schuylkill River Trail	This project includes the development of a 3.5-mile extension through Upper Merion, Bridgeport, and Norristown of the current paved Chester Valley Trail connecting from Exton to King of Prussia. It is part of a larger effort to provide a cross-county trail from Chester County through Montgomery County to Bucks County.
Improvement:	Bicycle/Pedestrian Improvement	
Est. Let Date:	09/26/2019	
Est. Funding:	\$18.8M	

Table 1: DVRPC MPO Transportation Improvement Plan Upper Merion Township Completed Projects

MPMS# 66952 PA 23/Valley Forge Road and North Gulph Road Relocation (2NG) SR:0422		
Limits:	US 422 to North Gulph Rd	This project will relocate PA 23 (Valley Forge Road) and SR 3039 (North Gulph Road) in the vicinity of the PA 23/US 422 interchange to improve operations and reduce traffic impacts within Valley Forge National Historical Park. In addition, relocation improvements will be made to North Gulph Road in order to provide the opportunity for a new “gateway” for the Valley Forge National Historical Park. The roadway will be moved approximately 300 feet to the east of the park entrance.
Improvement:	Intersection/Interchange	
Est. Let Date:	05/23/2024	
Est. Funding:	\$TBD	
MPMS# 48187 Henderson/Gulph Road Widen near 1-76 Ramps SR:3029		
Limits:	S Gulph to Queens Dr and Crooked Ln to PA320/1-76 Intersection	This project includes construction for widening to four lanes along South Henderson Road from South Gulph Road to Queens Drive as well as widening to four lanes along South Gulph Road from the approach of Crooked Lane to PA 320-1-76 East Ramp Intersection.
Improvement:	Roadway New Capacity	
Est. Let Date:	No Let Date	
Est. Funding:	\$19.3M	
MPMS# 48172 PA 23 Moore to Allendale and Trout Creek Rd Bridge SR:0023		
Limits:	Moore Rd to Geerdes Blvd	This project will replace a poor condition, functionally obsolete, weight restricted (26 tons) bridge on a new alignment to eliminate a 90 degree turn on the western end of the bridge and adjacent stop controlled intersection due to sight distance of Mancill Mill Road intersection. New bridge and roadway between Moore Road and Vandenberg Road will be two lanes westbound and one lane eastbound.
Improvement:	Intersection/Interchange	
Est. Let Date:	01/15/2026	
Est. Funding:	\$19.8M	

Table 2: DVRPC MPO 2024 Transportation Improvement Plan Upper Merion Township Proposed Projects

# EXISTING CONDITIONS/HISTORIC TRENDS

## Description of Existing Land Use

From the completion of the previous Act 209 study in 2010 to the present day, Upper Merion Township has enacted 46 ordinances affecting land use or zoning within the municipality, of which six have resulted in zoning map amendments :

- Ordinance No. 2013-815: Changing the zoning classification of three properties from the classification of CO and C-1 Commercial to SC Shopping Center.
- Ordinance No. 2014-827: Changing the zoning classification of 105 properties from their current zoning to KPMU King of Prussia Mixed-Use District.
- Ordinance No. 2015-837: Deleting the C-1 Commercial District, C-2 Commercial District, and C-3 Commercial District—comprising 179 parcels across these three districts—and replacing such districts in their entirety by the NC Neighborhood Commercial District, LC Limited Commercial District, and GC General Commercial District.
- Ordinance No. 2018-855: Changing the zoning classification of 31 properties from their current zoning to NMU Neighborhood Mixed-Use District.
- Ordinance No. 2020-867: Changing the classification of two parcels from their current zoning to SC Shopping Center District.
- Ordinance No. 2022-884: Changing the classification of four parcels from their current zoning to R-2 Residential District.

As a result of these ordinances, 320 parcels have been re-zoned to mixed-use or commercial use in the Township, signaling an increased focus on these land uses over the past decade. Four light industrial parcels were re-zoned to residential use during the same time span.

# POPULATION & EMPLOYMENT PROJECTIONS

## Description of Existing & Future Population Demographics

Upper Merion Township is currently experiencing its second major population boom, following the first between 1950 to 1960 (Figure 5). From 2010 to 2020, the Township’s population grew by 18.4%. With multiple large single-family and multifamily developments, the Township’s population will exceed 37,000 residents without any additional residential projects being approved.

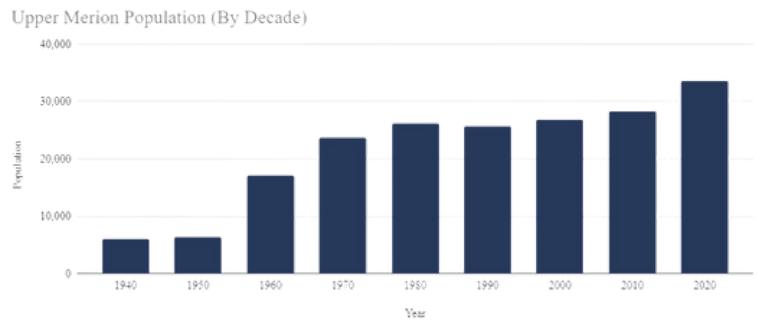


Figure 5: Upper Merion Township Population by Decade, U.S. Census

Once the current 206 Single Family Attached and 65 Single Family Detached project (Toll Brother’s Stonebrook) is fully constructed, there will be very few tracts of land remaining zoned for that residential use. However, the King of Prussia Mixed Use zoning district and General Commercial zoning district permit mixed-use developments, which can include multifamily units. Future population growth is expected to be primarily from the addition of new multifamily units.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Population	28,414	28,483	28,525	28,563	28,588	28,526	28,543	30,312	31,023	33,019	33,612	34,240	34,731
Growth Percentage	---	0.24%	0.15%	0.13%	0.09%	-0.22%	0.06%	6.20%	2.35%	6.43%	1.8%	1.87%	1.43%
Real Growth	---	69	42	38	25	(62)	17	1,769	711	1,996	593	628	491

Table 3: U.S. Census Upper Merion Township Population

Since the last Act 209 study, the Township’s population has continued to steadily climb after a period of residential development stagnation. Almost all the population growth over this period occurred in a three-year span—2017 to 2019—in which an influx of 4,476 residents moved to Upper Merion Township (Table 3). Ninety-five percent of the population growth in the Township from 2010 to 2019 took place within those three years. Since then, the population has steadily increased from 2020 to 2022.

	2015	2020	2025	2030	2035	2040	2045	2050
Population	28,522	34,161	36,359	36,801	37,258	37,565	37,803	38,017
Growth Percentage	---	19.8%	6.4%	1.2%	1.2%	0.8%	0.6%	0.6%
Real Growth	---	5,639	2,198	442	457	307	238	214

Table 4: DVRPC Upper Merion Township Population Projections

The Township’s current population growth is on target with 2015 DVRPC projections (Table 4). The projections show that it is expected for the Township to expand residential opportunities so that the population will climb to almost 37,000 residents by 2030, a figure that the Township’s actual development outcomes will likely exceed.

# POPULATION & EMPLOYMENT PROJECTIONS

## Description of Existing & Future Employment Demographics

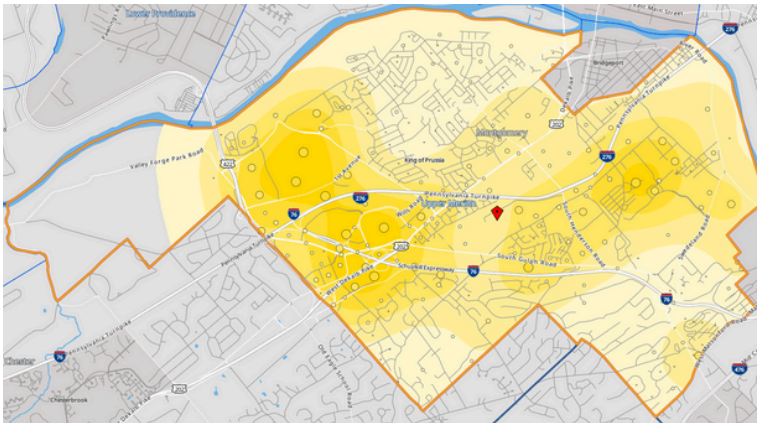


Figure 6: U.S. Census OnTheMap 2022

Upper Merion Township has emerged as a robust hub of economic activity, boasting over 60,000 jobs. As illustrated in Figure 6, OnTheMap data reveals that employment is concentrated in the Township’s two major business parks, the King of Prussia Mall, and the Village at Valley Forge. As the data is from 2022, it does not include the increased employment at the former GSK site off of Swedeland Road, Discovery Labs. The Discovery Labs is five million square feet of R&D, lab, cGMP Manufacturing, and tech-enabled space

Over the past two decades, development tailwinds have significantly contributed to sustained job growth in Upper Merion Township. This period has seen the proposal of 5,398,753 square feet of nonresidential development, encompassing a diverse mix of office, commercial, and industrial spaces. Specifically, the Township has witnessed proposals for 1,990,099 square feet of office space, 954,058 square feet of commercial properties, and 2,010,229 square feet of industrial properties, per MCPC Summaries of Subdivision, Land Development, and Zoning Activity.

These developments have played a crucial role in attracting new businesses and expanding existing ones, thereby creating a multitude of job opportunities. The King of Prussia Mall, one of the primary employment centers, continues to thrive as the largest regional mall, contributing significantly to the retail sector. Adjacent to the King of Prussia Mall is the Lockheed Martin King of Prussia campus which is home to over 2,500 employees.<sup>1</sup> Meanwhile, the Village at Valley Forge has introduced a high level of mixed-use development, further boosting job creation across various industries, including healthcare, retail, and residential services.

	2015	2020	2025	2030	2035	2040	2045	2050
Employment	52,328	52,379	56,230	57,650	58,146	58,915	59,821	60,724
Growth Percentage	---	0.09%	7.35%	2.52%	0.86%	1.32%	1.53%	1.50%
Real Growth	---	51	3,851	1,420	496	769	906	903

Table 5: DVRPC Upper Merion Township Employment Projections

Based on 2015 DVRPC employment forecasts for Upper Merion Township (Table 5), the Township is expected to have a steady increase in job creation over the next few decades. The Township is currently exceeding the 2015 projections and per Census OnTheMap data, has already crested the 2050 projection of over 60,000 individuals participating in the workforce. Most recently, it was reported by the *Philadelphia Business Journal* that the Township has lower office vacancy than University City and Center City Philadelphia.<sup>2</sup> If this trend holds true, then the community may experience continued employment growth.

# TRANSPORTATION SERVICE AREA

## Proposed Transportation Service Area

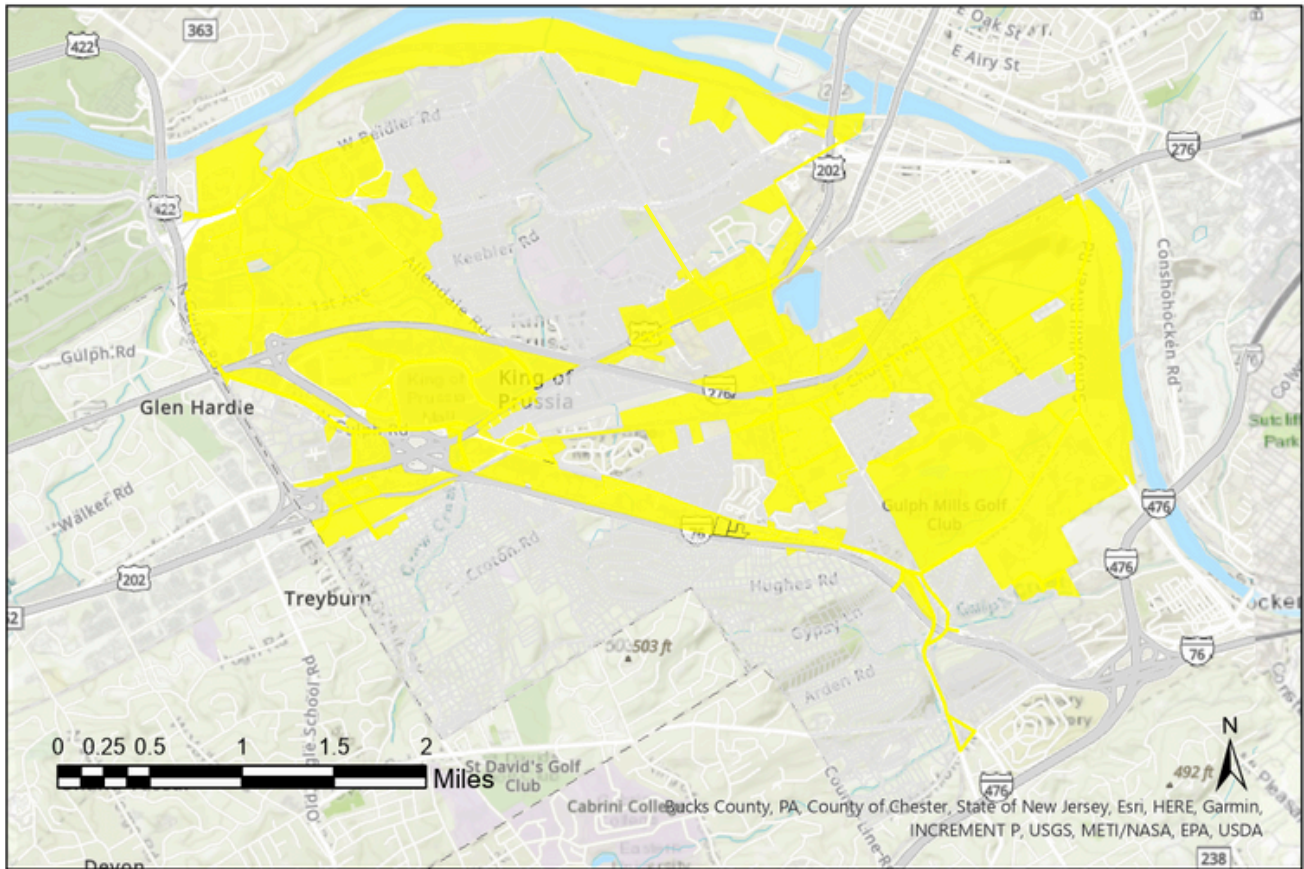


Figure 7: Proposed Transportation Service Area Map

Based on a detailed GIS analysis and the potential redevelopment areas identified in this study, Township staff have delineated a Transportation Service Area (TSA) covering 6.80 square miles across Upper Merion Township. This TSA includes six interconnected subareas: Moore, Mall, South Gulph, Henderson, Renaissance, & Schuylkill.

The TSA primarily encompasses mixed-use, commercial, and industrial zoning districts, strategically including the major hubs of economic activity and growth. This inclusion aims to support the ongoing development and infrastructure needs of these dynamic areas. Notably, the TSA does not extend into the predominantly single-family home zoning districts in the northern and southern parts of the Township. By focusing on the zones with the highest potential for redevelopment and economic impact, the TSA ensures that resources are allocated where they are most needed, fostering sustainable growth and development.

This approach not only maximizes the efficiency of collected impact fees but also ensures that the transportation infrastructure within the TSA can support the anticipated increase in traffic and development. By aligning the TSA boundaries with the areas of greatest redevelopment potential, the Township is positioned to enhance connectivity, improve transportation networks, and support the vibrant economic future of Upper Merion Township.

# TRANSPORTATION SERVICE AREA

## Proposed Transportation Service Area

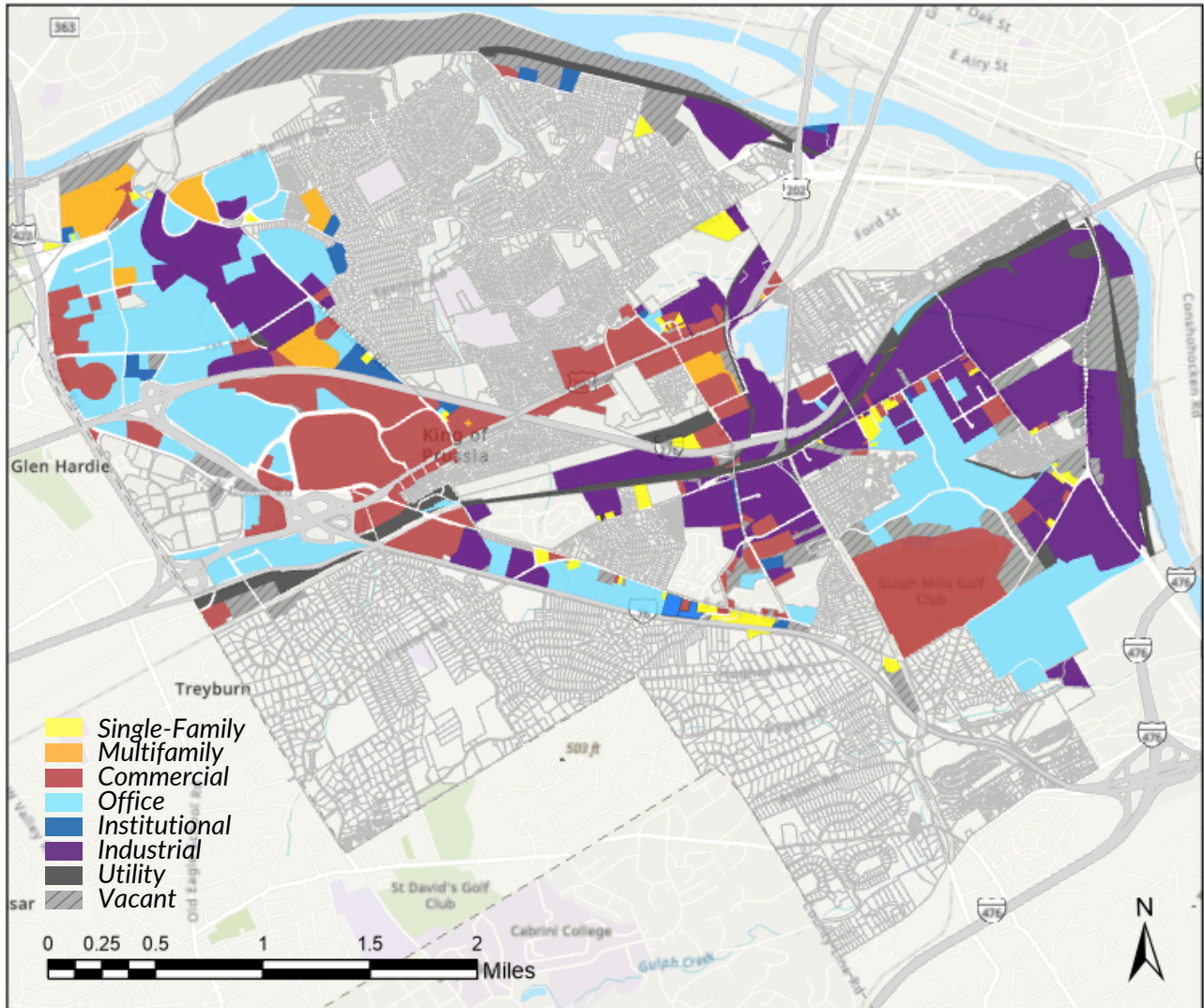


Figure 8: Transportation Service Area Land Use

The three most prevalent land uses in the TSA are commercial, industrial, and office space, which when combined account for 67.3% of its total area. These land uses dominate Upper Merion Township’s economy, and they also constitute the largest generators of vehicular trips within its borders. In the TSA, 10.75% of the area is vacant due to either limited access from rail lines or ongoing environmental remediation. Much of this undeveloped land is located adjacent to the Schuylkill River and the Norfolk Southern railroad, but redevelopment of this 654-acre land area would produce numerous new peak hour trips.

TOTAL	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	796.0	1168.7	63.2	126.5	926.8	63.0	368.7	466.0	372.3	4351.2
Sq. Miles	1.24	1.83	0.10	0.20	1.45	0.10	0.58	0.73	0.58	6.80
%	18.3%	26.9%	1.5%	2.9%	21.3%	1.4%	8.5%	10.7%	8.6%	100.0%

Table 6: Transportation Service Area Land Use

# TRANSPORTATION SERVICE AREA

## TSA Subarea - Moore

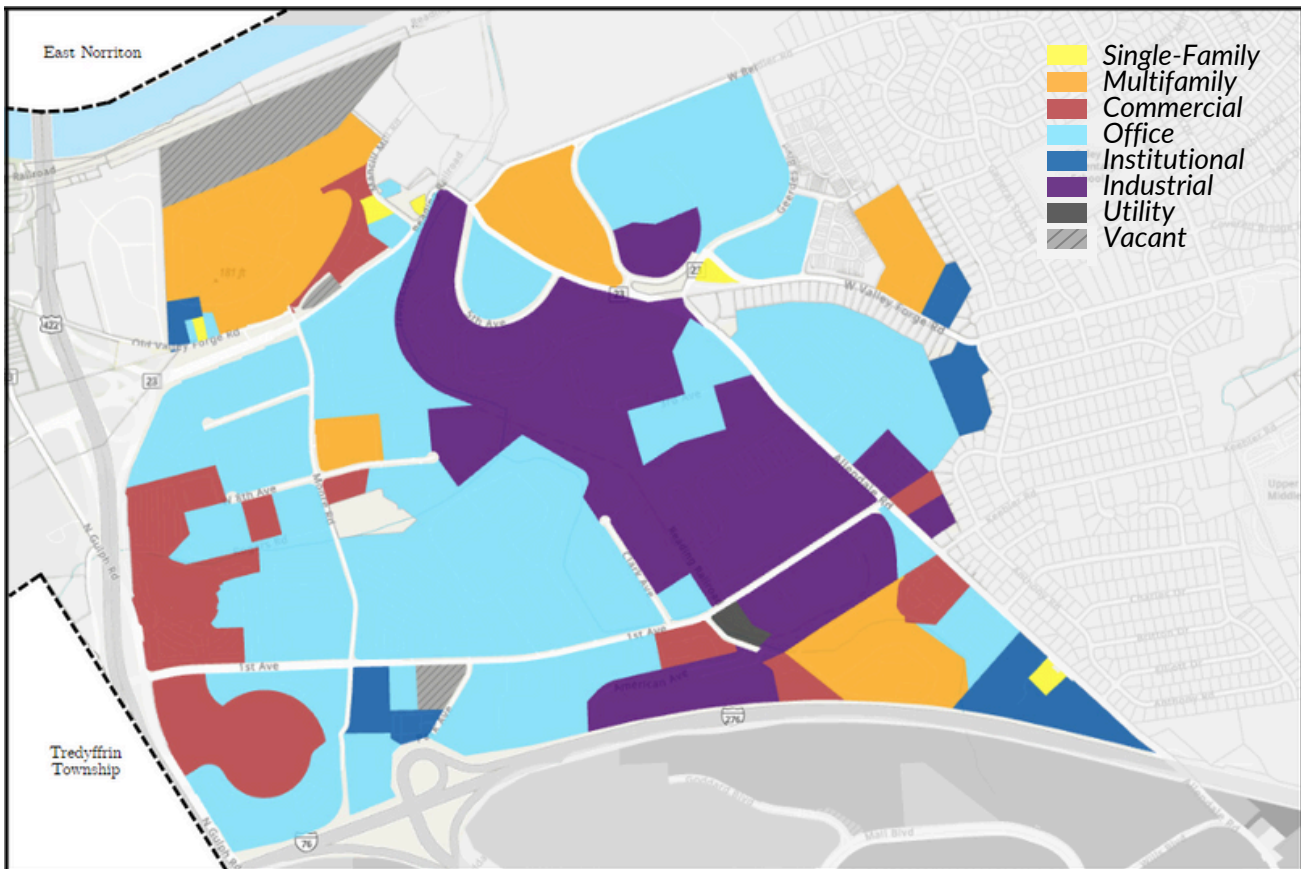
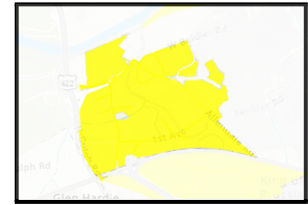


Figure 9: Moore Subarea Transportation Service Area Land Use

The Moore subarea comprises Moore Park, the largest business park in the county, as well as adjacent commercial and mixed-use properties. The subarea allocates 46% of its acreage to office uses, while 22.4% is designated for industrial purposes. Recently, the Township rezoned the area to a mixed-use zone, leading to a shift in land use. Currently, 10.2% of the land area is devoted to multifamily development.

Although the KPMU zone (with the exception of a few parcels on the north side of Valley Forge Road) now permits mixed-use development, none of the new multifamily projects incorporate a mix of residential and other uses. With only 3.7% of the area currently vacant, future development will likely be in the form of redevelopment, following trends towards multifamily housing, warehousing, or mixed-use projects.

Moore	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	74.3	180.0	40.1	82.1	369.9	4.0	1.8	30.1	54.8	837.0
Sq. Miles	0.12	0.28	0.06	0.13	0.58	0.01	0.00	0.05	0.09	1.31
%	8.9%	21.5%	4.8%	9.8%	44.2%	0.5%	0.2%	3.6%	6.5%	100%

Table 7: Moore Subarea Transportation Service Area Land Use

# TRANSPORTATION SERVICE AREA

## TSA Subarea - Mall

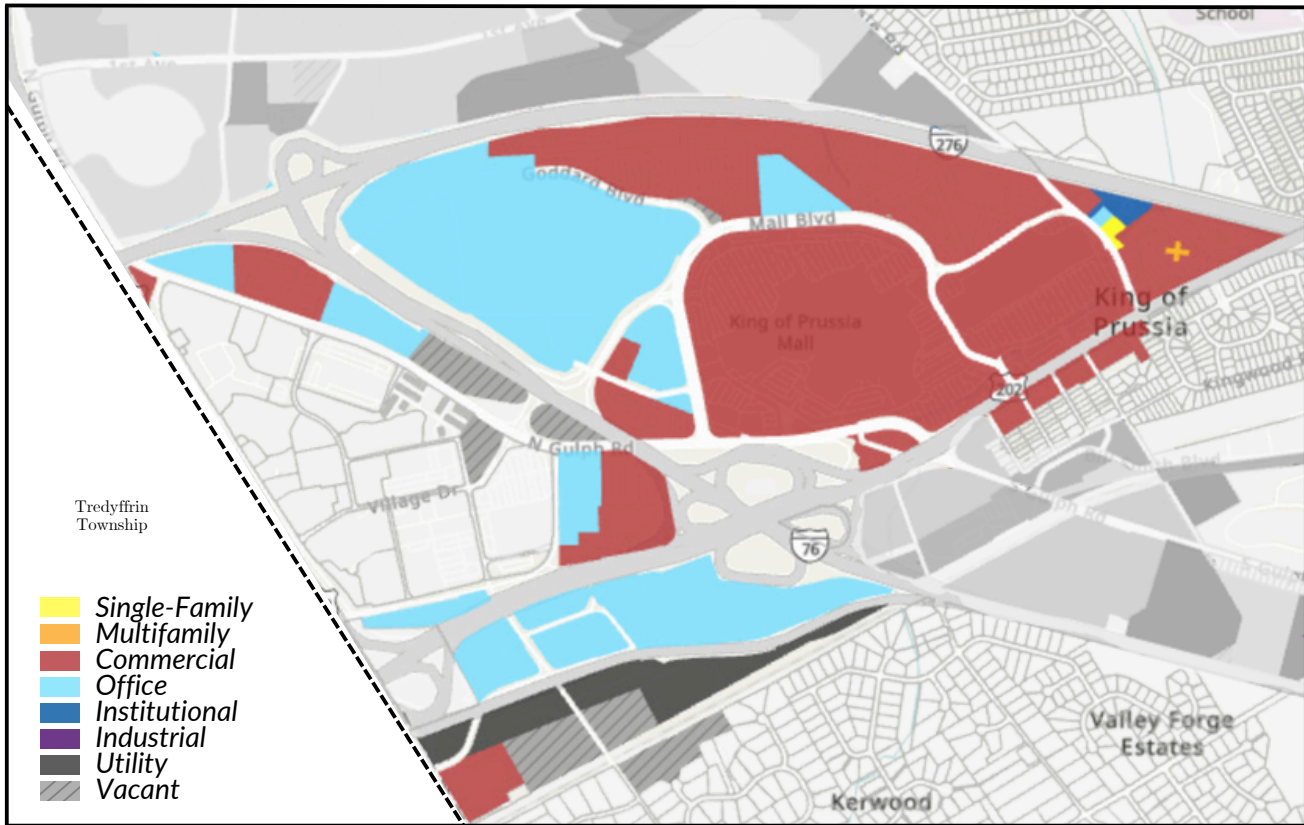
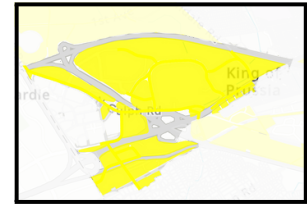


Figure 10: Mall Subarea Transportation Service Area Land Use

The Mall subarea is largely commercial (43.9% of land area), however, significant tracts are also devoted to office uses (28%). While it is unlikely to see a major redevelopment in the subarea in the next decade, redevelopment of smaller parcels will. The largest change in this area came recently with the development of a former golf course into the Village at Valley Forge, which brought over 2,900 residential units, including luxury apartments, condominiums, townhomes and senior living; 500,000 square feet of main street retail and restaurants and over 1,000,000 square feet of corporate office and medical space. Due to its recent development, the majority of that development was excluded from the TSA. Furthermore, development at the Village at Valley Forge is dictated by a court-approved settlement.

As fees are calculated based on the change in trip generation, it is not anticipated that substantial fees will be collected during redevelopment (commercial and office users are already trip traffic generators). That said, this area has major traffic concerns and would benefit from numerous circulation improvements.

Mall	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	278.9	0.0	1.8	0.4	178.0	1.7	65.2	25.0	84.5	635.5
Sq. Miles	0.44	0.00	0.00	0.00	0.28	0.00	0.10	0.04	0.13	0.99
%	43.9%	0.0%	0.3%	0.1%	28.0%	0.3%	10.3%	3.9%	13.2%	100%

Table 8: Mall Subarea Transportation Service Area Land Use



# TRANSPORTATION SERVICE AREA

## TSA Subarea - Renaissance

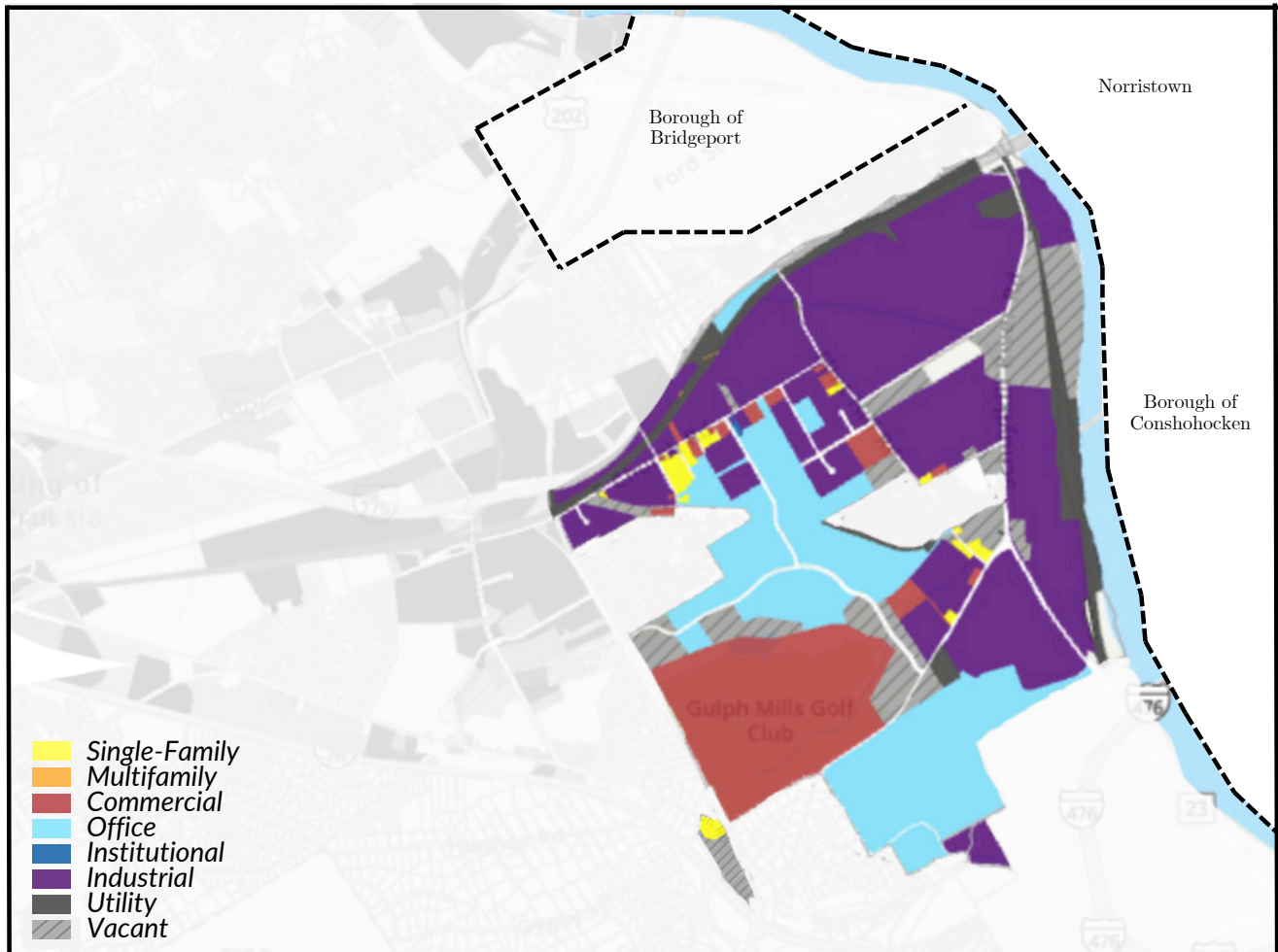


Figure 11: Renaissance Subarea Transportation Service Area Land Use

This subarea of the Township is experiencing significant development, particularly in life sciences, lab/research facilities, and warehouse uses. Despite this growth, the area faces severe congestion and natural terrain constraints, limiting improvements to the existing roadways. While minor modifications are feasible, traffic concerns have hindered efforts to establish a live/work environment. The Golf Mills Golf Course is the largest parcel of private open space in the Township.

Currently, 8.9% of the area is vacant, and 39.1% is industrial. The vacant land, due to its proximity to the Schuylkill River and limited access—partly because of the Norfolk Southern freight rail line—remains largely undeveloped. A notable asset in the Renaissance area is the Glasgow quarry; however, if the quarry is decommissioned, redevelopment would be challenging.

Renaissance	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	236.6	597.7	1	4.4	323.4	17.4	105	141.3	149.6	1,576.41
Sq. Miles	0.37	0.93	0.00	0.01	0.51	0.03	0.16	0.22	0.23	2.46
%	15.0%	37.9%	0.1%	0.3%	20.5%	1.1%	6.7%	9.0%	9.5%	100.0%

Table 9: Renaissance Subarea Transportation Service Area Land Use

# TRANSPORTATION SERVICE AREA

## TSA Subarea - South Gulph

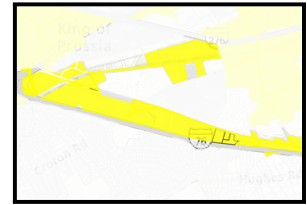


Figure 12: South Gulph Subarea Transportation Service Area Land Use

Recently rezoned to permit mixed-use (NMU), this subarea is currently developed with a mix of office (14.9%), commercial (15.7%), and industrial (41.6%) uses. Current development pressures include the redevelopment of smaller lots for mixed-use and warehouse facilities, as well as the expansion of existing office facilities.

Compared to other subareas, this one has the highest percentage of single-family homes. However, the mixed-use zoning will permit for small commercial and multi-family developments to be proposed, repositioning the corridor from a low-density area to a use that is more compatible with the development on the northside of S. Gulph Rd and the average daily traffic of the roadway.

South Gulph	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	46.1	121.8	5.4	0.0	43.7	20.5	21.3	13.7	20.3	292.7
Sq. Miles	0.07	0.19	0.01	0.00	0.07	0.03	0.03	0.02	0.03	0.46
%	15.7%	41.6%	1.8%	0.0%	14.9%	7.0%	7.4%	4.7%	6.9%	100%

Table 10: South Gulph Subarea Transportation Service Area Land Use

# TRANSPORTATION SERVICE AREA

## TSA Subarea - Henderson

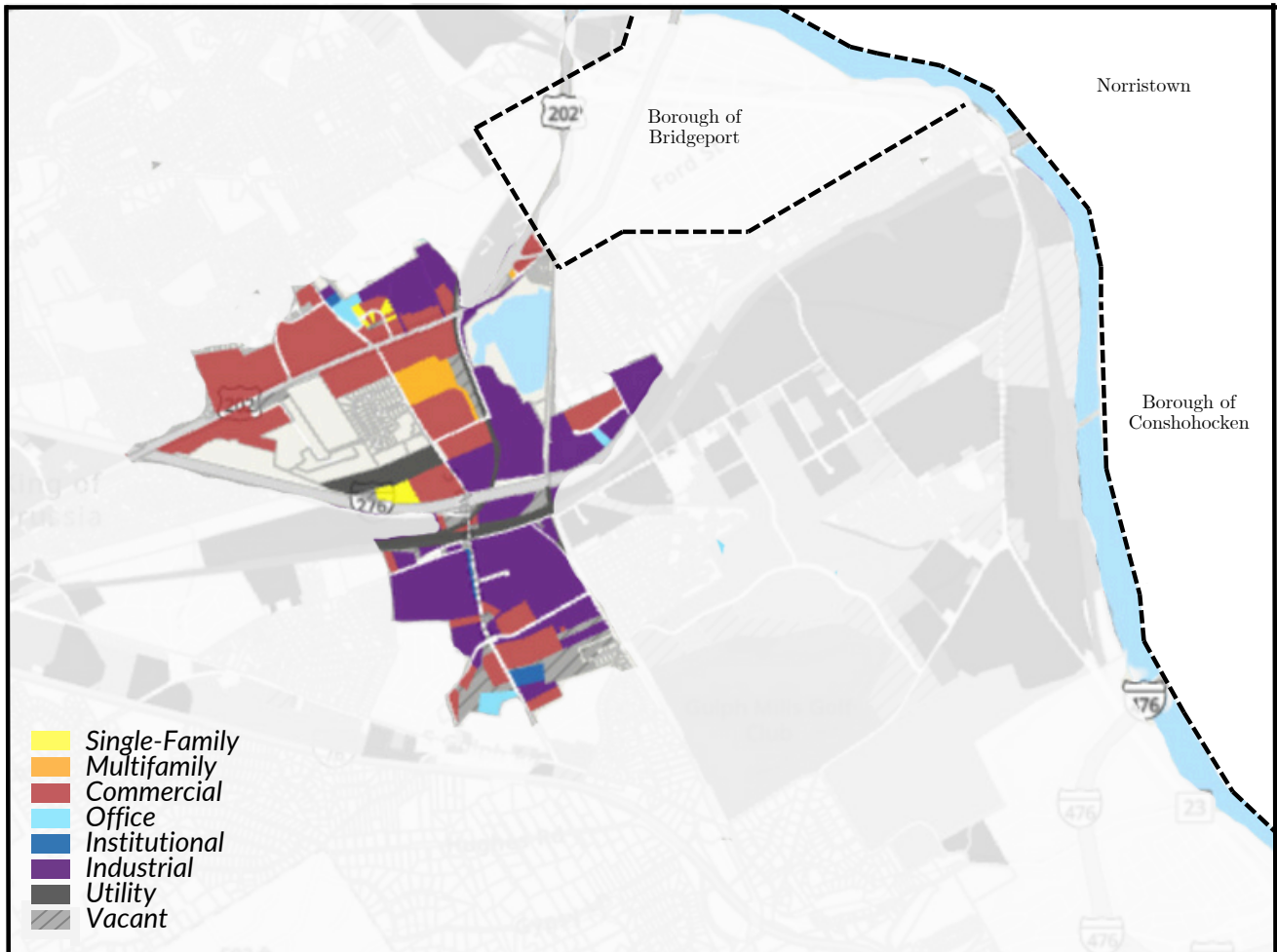


Figure 13: Henderson Subarea Transportation Service Area Land Use

The Henderson subarea is a major commercial and limited industrial corridor within Upper Merion, with commercial and industrial uses accounting for 62.2% of the land area. A significant underutilized industrial site in this subarea is the remaining salvage yard in the northeast. This site would require significant environmental remediation before it could be redeveloped. Additionally, the subarea contains one of the most congested intersections in the Township, at DeKalb Pike (Route 202) and Henderson Road.

As development pressures continue, addressing congestion and finding viable redevelopment options for underutilized industrial sites will be essential to enhance the area's functionality and appeal.

Henderson	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	158.5	195.9	4.3	39.6	11.8	6.3	65.2	33.3	57.3	572.2
Sq. Miles	0.25	0.31	0.01	0.06	0.02	0.01	0.10	0.05	0.09	0.89
%	27.7%	34.2%	0.8%	6.9%	2.1%	1.1%	11.4%	5.8%	10.0%	100%

Table 11: Henderson Subarea Transportation Service Area Land Use

# TRANSPORTATION SERVICE AREA

## TSA Subarea - Schuylkill

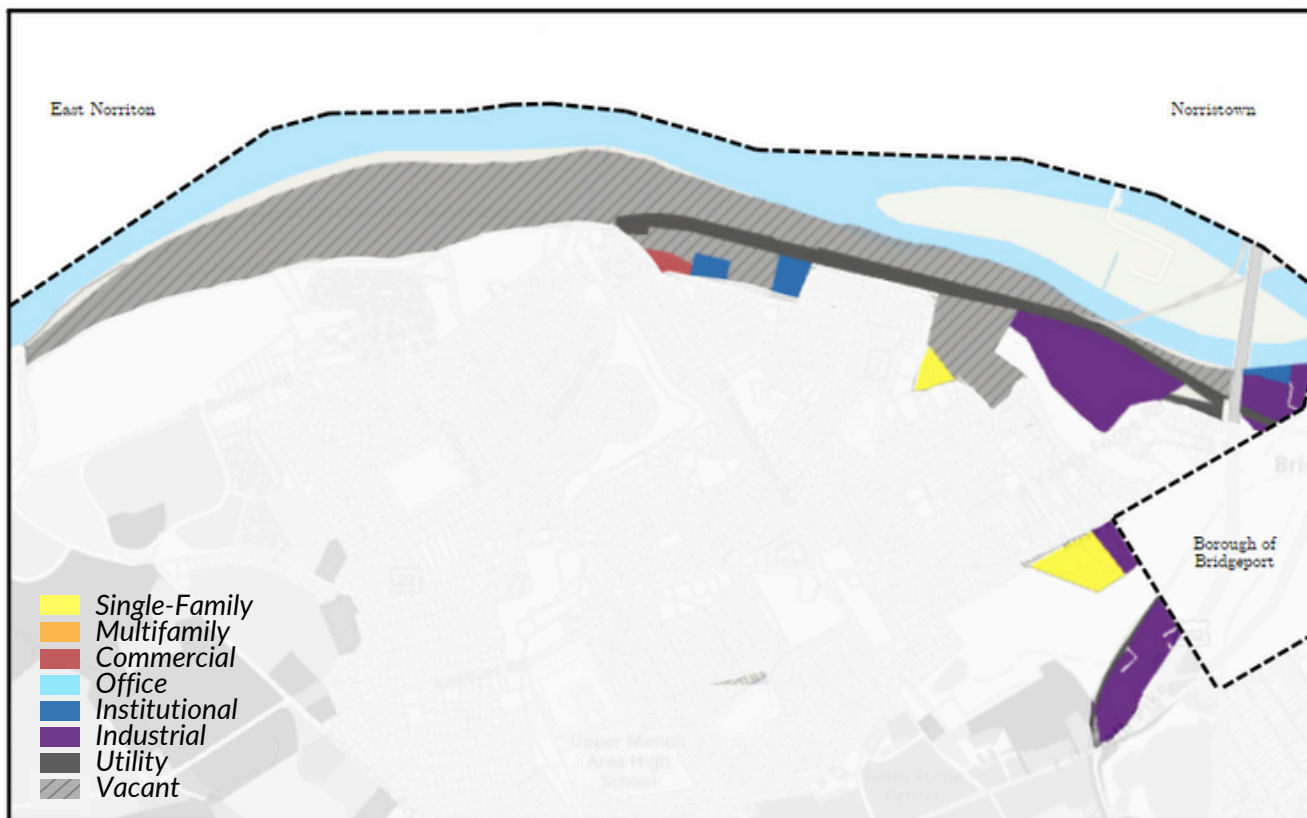
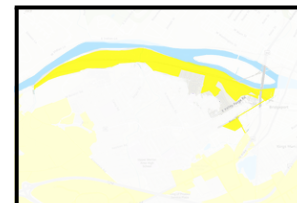


Figure 14: Schuylkill Subarea Transportation Service Area Land Use

The Schuylkill Subarea has the largest proportion of vacant land at 50.8%. This high vacancy rate is partly due to large heavy industrial parcels being inaccessible, situated north of a freight line, which has sequestered the area from development. Additionally, these parcels are located in a floodplain and would require environmental remediation.

However, with improved transportation access, substantial development could be proposed on these prime parcels. Moreover, the subarea contains industrial properties that are currently undeveloped or underdeveloped, such as portions owned by Glasgow Quarry and PECO. Both sites will require varied levels of remediation. The latter is being considered for a new substation, indicating potential for future growth and utilization.

Schuylkill	Commercial	Industrial	Institutional	Multifamily	Office	Single-Family	Utility	Vacant	ROW	Total
Acreage	1.7	73.4	10.7	0.0	0.0	13.2	110.3	222.6	5.8	437.6
Sq. Miles	0.00	0.11	0.02	0.00	0.00	0.02	0.17	0.35	0.01	0.68
%	0.4%	16.8%	2.5%	0.0%	0.0%	3.0%	25.2%	50.8%	1.3%	100%

Table 12: Schuylkill Subarea Transportation Service Area Land Use

# FUTURE LAND USE PROJECTIONS

The Act 209 Land Use Assumptions Report plays a pivotal role in forecasting where the next chapter of growth might unfold within a community. This area of potential redevelopment provides the data and insights from current, approved, and proposed projects to provide a comprehensive understanding of where redevelopment is likely to occur within the proposed TSA over the next decade and to what extent. By examining the highest possible use permitted by existing zoning classifications, this analysis identifies key areas poised for significant transformation. Anything with preliminary or final land development was excluded from the following lists.

## Potential TSA Residential Redevelopment

The following narratives offer a detailed look at the residential redevelopment potential for specific zoning districts, focusing on the King of Prussia Mixed-Use District and R-3 Residential. By inputting the acreage of a parcel, one can outline the maximum residential density, ensuring that the analysis aligns with zoning regulations and market trends.

Moving forward from the COVID-19 pandemic, the office and distribution development markets have experienced a slowdown due to the rise in remote work and the extensive build-out of distribution centers to meet the surge in e-commerce. Currently, the strongest development tailwind is in multifamily housing, driven by a high demand for residential units. The Toll Brother Stonebrook subdivision and the proposed O Reedel Rd subdivision (24 single-family homes) are likely two of the few remaining large subdivision opportunities in the township. The township expects to see small two to four lot subdivisions from larger existing single-family home parcels but they will likely be outside of the TSA.

Area	Address	Parcel #	Type	Status	Zoning	Acreage	Yield (du)	Existing
Moore	760 MOORE RD	58-00-13777-00-7	Industrial	Redevelopment	KPMU	25.44	763	230,132
Moore	1150 FIRST AVE	58-00-06847-05-2	Office	Redevelopment	KPMU	5.08	152	141,996
Moore	1001 -1019 W EIGHTH AVE	58-00-13777-03-4	Office	Redevelopment	KPMU	12.55	377	105,459
Moore	1100 FIRST AVE	58-00-06844-00-1	Office	Redevelopment	KPMU	18.14	544	144,172
Moore	830 FIRST AVE	58-00-00370-00-4	Industrial	Redevelopment	KPMU	45.00	1,350	560,266
Moore	500 AMERICAN AVE	58-00-00403-00-7	Industrial	Redevelopment	KPMU	8.30	249	121,660
Renaissance	FLINT HILL RD	58-00-07042-00-1	Vacant	Vacant	R-3	2.40	14	0
Renaissance	630 SWEDELAND RD	58-00-18559-00-4	Vacant	Vacant	R-3	1.16	7	0
Renaissance	640 SWEDELAND RD	58-00-18553-00-1	Vacant	Vacant	R-3	1.41	8	0
Renaissance	870 RIVER RD	58-00-16521-12-5	Vacant	Vacant	R-3	3.15	19	0

Table 13: Transportation Service Area Projected Residential Development

**Total Increase: 3,484 Units**  
**Total Redeveloped: 1,303,685 Sq. Ft.**

The methodology for each zoning district is as follows:

### King of Prussia Mixed-Use District

For the King of Prussia Mixed-Use District, the potential for multifamily housing is significant, especially given the current shift in market dynamics. As permitted by conditional use, the maximum residential density is set at 30 dwelling units per net developable acre. This calculation is focused solely on the residential component, excluding any additional mixed-use elements to provide a clear understanding of the residential capacity.

### R-3 Residential

In the R-3 Residential zoning district, the focus is on lower-density residential development, with a maximum permitted density of six dwelling units per developable acre. This district is characterized by its suitability for single-family homes and other low-density residential uses, making it ideal for creating suburban neighborhoods.

# TRANSPORTATION SERVICE AREA

## Potential TSA Non-Residential Redevelopment

This section provides a detailed narrative on how to determine the potential maximum square footage of redevelopments for different zoning districts, assuming all surface parking and no structured parking. The analysis does not take into consideration the existing square footage of non-residential buildings on the sites denoted as having a “redevelopment” status.

It is anticipated that office development will slow down over the next decade as businesses respond to remote and hybrid work opportunities. As a result, the non-residential development will rely on alternative uses. Upper Merion Township has seen an increase in the number of R&D and life science businesses, most notably at Discovery Labs. Furthermore, the Children’s Hospital of Philadelphia’s King of Prussia location has created a large boost in medical jobs in the township. These sectors are anticipated to continue to grow in the Philadelphia metropolitan region and Upper Merion Township will likely receive some of these industry tailwinds.

Furthermore, the township currently has two approved logistic warehouse plans that have yet to be built, potential as a result of a slight slump in the logistics development space. Future industrial development will likely range from R&D labs for advanced technologies to data centers to assist in the drastic uptick of data storage and artificial intelligence.

Area	Address	Parcel #	Type	Status	Zoning	Acerage	Yield	Existing	Delta
Moore	900 FIRST AVE	58-00-06826-00-1	Office	Vacant	KPMU	10.10	653,335	0	653,335
Moore	820 MANCILL MILL RD	58-00-13345-00-7	Office	Redevelopment	SM-1	0.52	16,875	8,023	8,852
Mall	300 GODDARD BLVD	58-00-08472-02-9	Commercial	Redevelopment	CG	16.24	902,009	87,791	814,218
Mall	310 GODDARD BLVD	58-00-08472-05-6	Commercial	Redevelopment	CG	9.03	501,239	91,739	409,500
Henderson	240 N GULPH RD	58-00-14086-13-9	Commercial	Redevelopment	SM-1	1.55	50,639	5,420	45,219
Henderson	125 N GULPH RD	58-00-17476-00-7	Commercial	Redevelopment	CG	0.68	37,489	3,882	33,607
Mall	826 W DEKALB PIKE	58-00-06226-00-7	Commercial	Redevelopment	CG	1.05	58,483	5,083	53,400
Henderson	113 N GULPH RD	58-00-17482-00-1	Commercial	Redevelopment	CG	0.62	34,425	1,248	33,177
Mall	812 W DEKALB PIKE	58-00-06223-00-1	Commercial	Redevelopment	CG	0.69	38,242	1,024	37,218
Mall	739 W DEKALB PIKE	58-00-17143-00-7	Commercial	Redevelopment	CG	1.21	67,424	5,700	61,724
Mall	568 W DEKALB PIKE	58-00-06193-00-4	Commercial	Redevelopment	CG	0.95	52,530	3,278	49,252
Mall	540 W DEKALB PIKE	58-00-06184-00-4	Commercial	Redevelopment	CG	0.45	25,118	1,056	24,062
Mall	516 W DEKALB PIKE	58-00-06169-00-1	Commercial	Redevelopment	CG	0.38	20,837	1,457	19,380
Mall	435 W DEKALB PIKE	58-00-06337-00-4	Commercial	Redevelopment	CG	1.03	57,094	3,168	53,926
Mall	425 W DEKALB PIKE	58-00-06340-00-1	Commercial	Redevelopment	CG	1.68	93,306	7,048	86,258
Mall	258 W DEKALB PIKE	58-00-06097-01-9	Commercial	Redevelopment	CG	0.46	25,500	2,036	23,464
South Gulph	201 S GULPH RD	58-00-17449-00-7	Industrial	Redevelopment	LI	11.58	680,973	56,687	624,286
Renaissance	RENAISSANCE BLVD	58-00-02694-01-1	Vacant	Vacant	SM-1	4.58	149,498	0	149,498
Renaissance	538 SWEDELAND RD	58-00-18576-00-5	Industrial	Vacant	LI	5.20	305,791	4,174	301,617
Renaissance	420 SWEDELAND RD	58-00-18592-00-7	Industrial	Vacant	LI	4.12	242,281	11,375	230,906
Renaissance	596 SWEDELAND RD	58-00-18571-00-1	Industrial	Vacant	LI	8.87	521,609	6,231	515,378
Renaissance	RENAISSANCE BLVD	58-00-02694-09-2	Vacant	Vacant	SM-1	12.56	410,270	0	410,270
Renaissance	RIVER RD	58-00-16519-50-5	Industrial	Vacant	HI	27.59	1,622,458	0	1,622,458
Renaissance	600 RIVER RD	58-00-16521-00-8	Industrial	Vacant	HI	7.53	442,809	0	442,809

Table 14: Transportation Service Area Projected Non-Residential Development

**Total Change: + 6,703,813 Sq. Ft.**

# TRANSPORTATION SERVICE AREA

## Potential TSA Non-Residential Redevelopment

The methodology for each zoning district is as follows:

### King of Prussia Mixed-Use District (KPMU)

The conceptual redevelopment yield for the King of Prussia Mixed-Use District begins with the basic input: the acreage of the parcel. For each acre of land, the calculation follows the parameters set for LEED Gold redevelopment. This requires 45% of the parcel to be dedicated to greenspace, leaving 55% available for total building coverage. Within this 55%, only 30% is allocated for the building itself, while the remaining 70% is designated for parking. To calculate the potential maximum square footage of the buildout, start by converting the available building coverage into square footage. For each acre (43,560 square feet), 55% (23,958 square feet) is the total building coverage. Of this, 30% is the actual building footprint, which equals 7,187.4 square feet per acre. Given the maximum building height of 120 feet (9 stories), multiply the building footprint by the number of stories to get the maximum buildable square footage:  $7,187.4 \text{ square feet/acre} \times 9 \text{ stories} = 64,686.6 \text{ square feet/acre}$ .

### General Commercial (CG)

For the General Commercial zoning district, the redevelopment yield calculation starts with the parcel's acreage, similar to the mixed-use district. However, the greenspace requirement is lower at 15%, leaving 85% for total building coverage. Within this coverage, 30% is allocated for the building, and 70% for parking. For each acre of land, the available building coverage converts to 36,026 square feet. Of this, 30% is the building footprint, equaling 10,807.8 square feet per acre. With the maximum building height of 80 feet (6 stories), multiply the footprint by the number of stories to obtain the maximum buildable square footage:  $10,807.8 \text{ square feet/acre} \times 6 \text{ stories} = 64,846.8 \text{ square feet/acre}$ .

### Suburban Metropolitan 1 (SM-1)

In the Suburban Metropolitan 1 district, the redevelopment yield calculation is based on an equal split between greenspace and building coverage, each occupying 50% of the parcel. Of the total building coverage, 30% is allocated for the building and 70% for parking. For each acre, 21,780 square feet is available for building coverage. With 30% designated for the building footprint, the calculation yields 6,534 square feet per acre. The maximum building height is 65 feet (5 stories), leading to a potential buildable square footage of  $6,534 \text{ square feet/acre} \times 5 \text{ stories} = 32,670 \text{ square feet/acre}$ .

### Limited Industrial (LI)

For the Limited Industrial zoning district, the calculation begins with 25% of the parcel dedicated to greenspace and 75% to total building coverage. Within this 75%, 30% is reserved for the building footprint, and 70% for parking. Each acre provides 32,670 square feet for building coverage. Allocating 30% for the building results in a footprint of 9,801 square feet per acre. With a maximum building height of 80 feet (6 stories), the maximum buildable square footage is  $9,801 \text{ square feet/acre} \times 6 \text{ stories} = 58,806 \text{ square feet/acre}$ .

### Heavy Industrial (HI)

The Heavy Industrial zoning district also requires 25% greenspace and allows 75% building coverage. Again, 30% of this is allocated for the building footprint and 70% for parking. Each acre provides 32,670 square feet for building coverage, and 30% of this is the building footprint, equating to 9,801 square feet per acre. With a maximum building height of 80 feet (6 stories), the potential buildable square footage is  $9,801 \text{ square feet/acre} \times 6 \text{ stories} = 58,806 \text{ square feet/acre}$ .

## CITATIONS

1. King of Prussia, Pennsylvania Location (n.d.). Lockheed Martin.  
<https://www.lockheedmartin.com/en-us/careers/locations/king-of-prussia-pennsylvania.html>
2. Schwedelson, P. (2024, April 22). King of Prussia office occupancy hits new high, even as Center City buildings struggle to attract tenants.  
[www.bizjournals.com/philadelphia/news/2024/04/22/king-of-prussia-office-occupancy-center-city.html](http://www.bizjournals.com/philadelphia/news/2024/04/22/king-of-prussia-office-occupancy-center-city.html)



# APPENDIX

## Proposed Transportation Service Area - Upper Merion Township

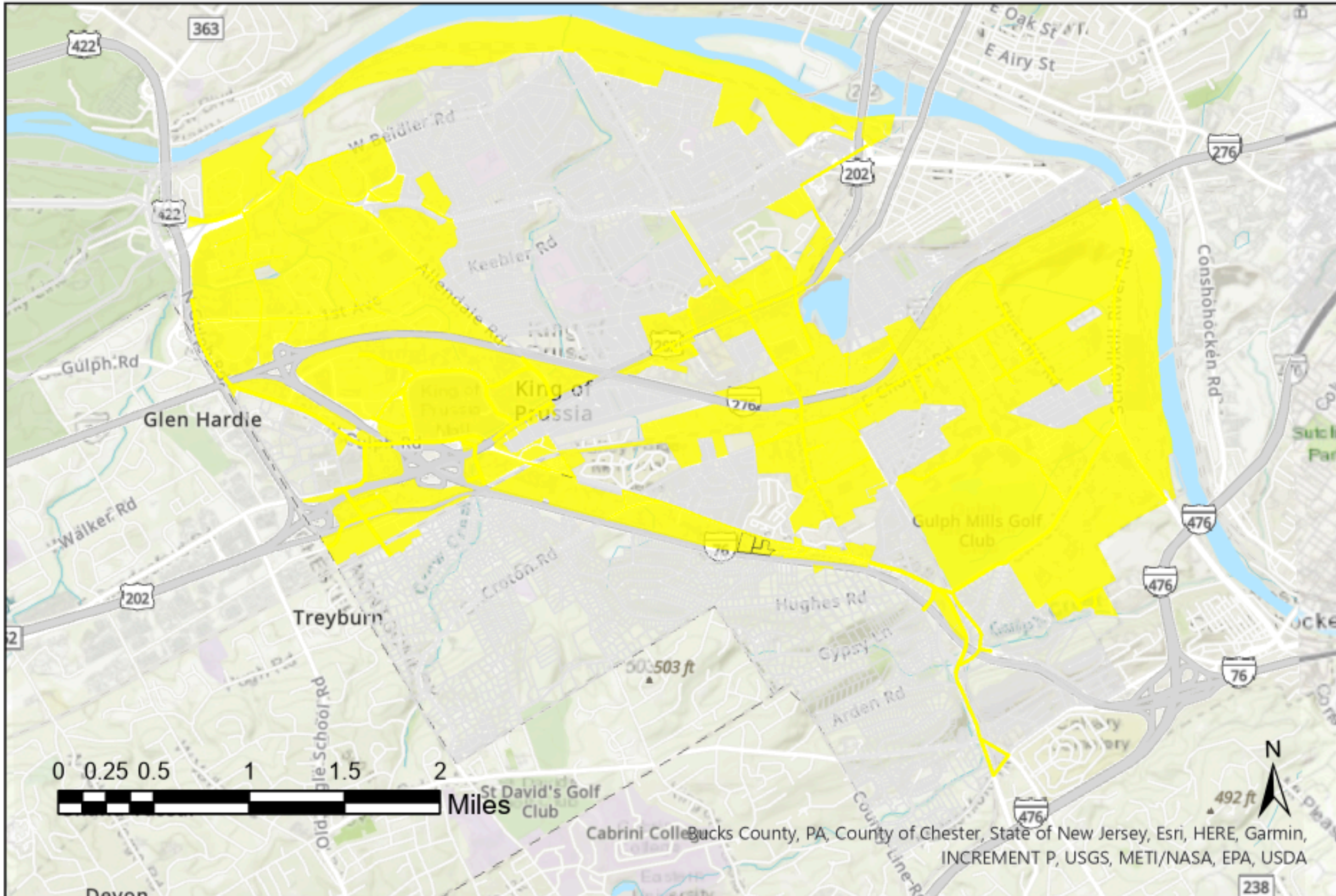


Exhibit 1. Transportation Service Area - Enlarged

# APPENDIX

## Level of Service Analysis Intersections

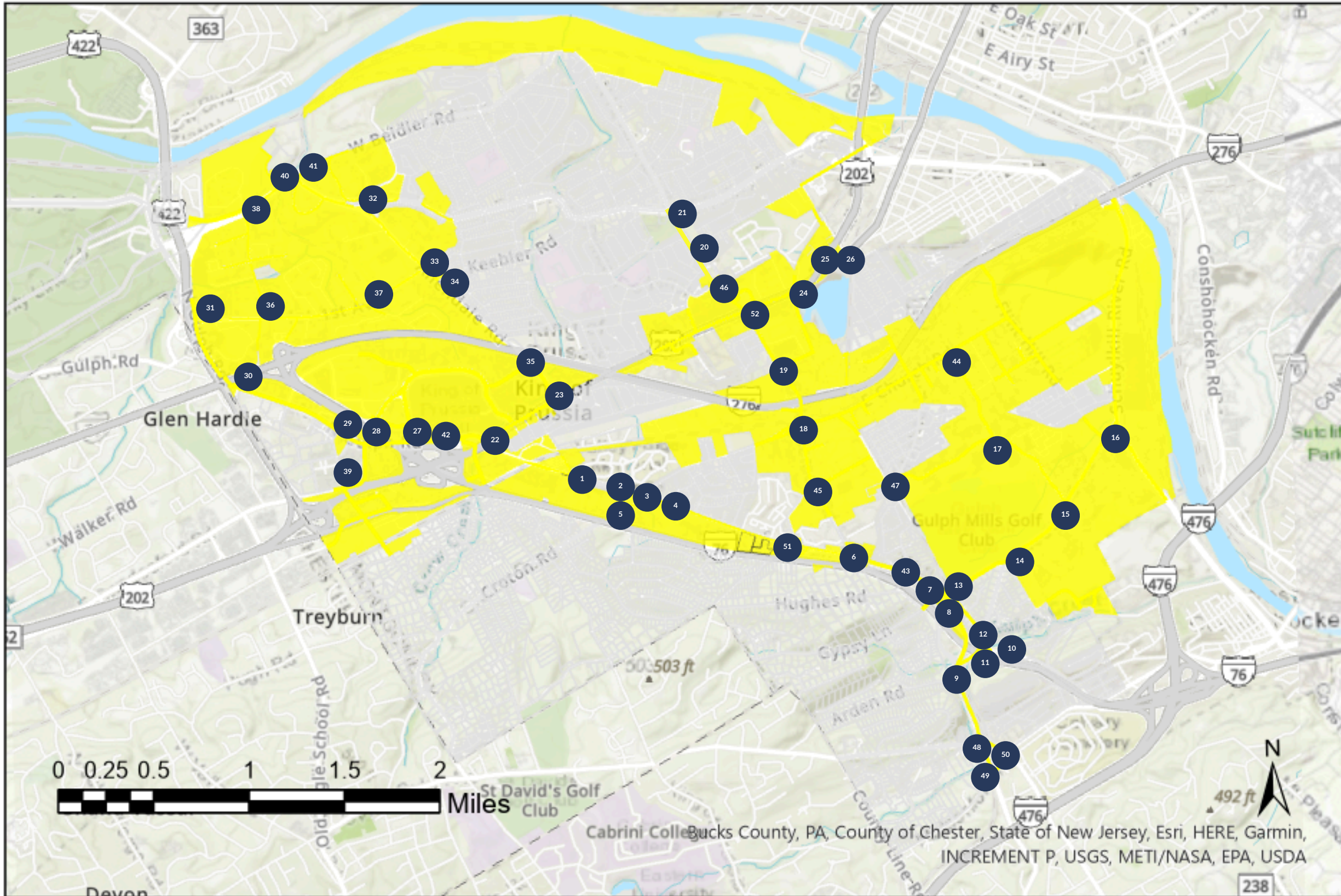


- 1 S. Gulph Road & Long Road
- 2 S. Gulph Road & Brooks Road
- 3 S. Gulph Road & Church Road
- 4 S. Gulph Road & Croton Road
- 5 Croton Road & Brooks Road
- 6 S. Gulph Road & Henderson Road/I-76 WB Ramps
- 7 S. Gulph Road & Gypsy Lane
- 8 S. Gulph Road & Swedeland Road
- 9 S. Gulph Road & Trinity Lane
- 10 Ballingomingo Road & I-76 WB Off-Ramp
- 11 Trinity Lane & Ballingomingo Road
- 12 Trinity lane & Holstein Road
- 13 Swedeland Road & Trinity Lane
- 14 Holstein Road & Swedeland Road
- 15 Swedeland Road & Renaissance Boulevard
- 16 Swedeland Road & River Road
- 17 Renaissance Boulevard & Horizon Drive
- 18 Henderson Road & Church Road
- 19 Henderson Road & Saulin Boulevard
- 20 Henderson Road & Ross Road
- 21 Henderson Road & Valley Forge Road
- 22 DeKalb Pike & Gulph Road
- 23 DeKalb Pike & Allendale Road
- 24 DeKalb Pike & Saulin Boulevard
- 25 DeKalb Pike & DeKalb Street
- 26 DeKalb Street & Ford Street & Crooked Lane
- 27 N Gulph Road & Mall Boulevard
- 28 N Gulph Road & N Warner Road
- 29 N Gulph Road & Village Drive
- 30 N Gulph Road & Guthrie Road
- 31 N Gulph Road & First Avenue & 422 EB Ramps
- 32 Allendale Road & Geerdes Boulevard
- 33 Allendale Road & 1st Avenue
- 34 Allendale Road & Keebler Road
- 35 Allendale Road & Wills Boulevard
- 36 First Avenue & Moore Road
- 37 First Avenue & American Avenue
- 38 Valley Forge Road & Moore Road
- 39 Swedesford Road & S. Warner Road
- 40 Valley Forge Road & Mancill Mill Road
- 41 Valley Forge Road& Beidler Road
- 42 N Gulph Road & Plaza Drive
- 43 S. Gulph Road & Crooked Lane
- 44 Church Road & Horizon Drive
- 45 Henderson Road & Shoemaker Road
- 46 Henderson Road & Prince Frederick St
- 47 Crooked Lane & Yerkes Road
- 48 S. Gulph Road & Upper Gulph Road
- 49 Montgomery Avenue & Matsonford Road
- 50 Matsonford Road & Upper Gulph Road
- 51 Weadley Rd & S. Gulph Rd
- 52 Henderson Rd & DeKalb Pike

Exhibit 2. Level of Service Analysis Intersections Map

# APPENDIX

## Proposed Transportation Service Area with Level of Service Analysis Intersections



- 1 S. Gulph Road & Long Road
- 2 S. Gulph Road & Brooks Road
- 3 S. Gulph Road & Church Road
- 4 S. Gulph Road & Croton Road
- 5 Croton Road & Brooks Road
- 6 S. Gulph Road & Henderson Road/I-76 WB Ramps
- 7 S. Gulph Road & Gypsy Lane
- 8 S. Gulph Road & Swedeland Road
- 9 S. Gulph Road & Trinity Lane
- 10 Ballingomingo Road & I-76 WB Off-Ramp
- 11 Trinity Lane & Ballingomingo Road
- 12 Trinity Lane & Holstein Road
- 13 Swedeland Road & Trinity Lane
- 14 Holstein Road & Swedeland Road
- 15 Swedeland Road & Renaissance Boulevard
- 16 Swedeland Road & River Road
- 17 Renaissance Boulevard & Horizon Drive
- 18 Henderson Road & Church Road
- 19 Henderson Road & Saulin Boulevard
- 20 Henderson Road & Ross Road
- 21 Henderson Road & Valley Forge Road
- 22 DeKalb Pike & Gulph Road
- 23 DeKalb Pike & Allendale Road
- 24 DeKalb Pike & Saulin Boulevard
- 25 DeKalb Pike & DeKalb Street
- 26 DeKalb Street & Ford Street & Crooked Lane
- 27 N Gulph Road & Mall Boulevard
- 28 N Gulph Road & N Warner Road
- 29 N Gulph Road & Village Drive
- 30 N Gulph Road & Guthrie Road
- 31 N Gulph Road & First Avenue & 422 EB Ramps
- 32 Allendale Road & Geerdes Boulevard
- 33 Allendale Road & 1st Avenue
- 34 Allendale Road & Keebler Road
- 35 Allendale Road & Wills Boulevard
- 36 First Avenue & Moore Road
- 37 First Avenue & American Avenue
- 38 Valley Forge Road & Moore Road
- 39 Swedesford Road & S. Warner Road
- 40 Valley Forge Road & Mancill Mill Road
- 41 Valley Forge Road & Beidler Road
- 42 N Gulph Road & Plaza Drive
- 43 S. Gulph Road & Crooked Lane
- 44 Church Road & Horizon Drive
- 45 Henderson Road & Shoemaker Road
- 46 Henderson Road & Prince Frederick St
- 47 Crooked Lane & Yerkes Road
- 48 S. Gulph Road & Upper Gulph Road
- 49 Montgomery Avenue & Matsonford Road
- 50 Matsonford Road & Upper Gulph Road
- 51 Weadley Rd & S. Gulph Rd
- 52 Henderson Rd & DeKalb Pike

Exhibit 1. Transportation Service Area - Enlarged