LAND USE ASSUMPTIONS REPORT TRANSPORTATION SERVICE AREAS I AND II

PREPARED FOR

FRANCONIA TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA





SEPTEMBER 2020

FRANCONIA TOWNSHIP

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Introduction

Act of 1968, P.L.805, No. 247, as reenacted and amended, Handbooks and Guides for Local Government Officials, Twenty-Third Edition dated October 2015 (Pennsylvania Municipalities Planning Code (MPC)) regulates the implementation of traffic impact fees under the Municipal Capital Improvement Article V-A as defined in Sections 501-A to 506-A. Traffic Impact Fees are applied to development projects based on the amount of traffic generated by the proposed development during the afternoon peak period. These fees generate revenue for municipalities to fund projects to address existing infrastructure deficiencies and accommodate future projected traffic volumes necessitated by and attributable to new development within the Transportation Service Areas. The Land Use Assumptions Report component of the Township's Act 209 Update describes the existing land uses within the designated traffic service area(s), projects future changes in land uses, identifies development applications and potential for residential and non-residential development, and analyzes population growth rates based on County records that may affect the level of traffic within the municipality and it's service areas. In addition, a Roadway Sufficiency Analysis and a Transportation Capital Improvements Plan must be prepared prior to enacting a traffic impact fee. Upon the completion of the Transportation Capital Improvements Plan and prior to its adoption by the governing body of the municipality and the enactment of a municipal impact fee ordinance, the advisory committee shall hold at least one public hearing for consideration of the plan by residents and other stakeholders.

Franconia Township began instituting a traffic impact fee in 1991. A Land Use Assumptions Report (1991 Plan) was developed by the Montgomery County Planning Commission in June of 1991 followed by a Roadway Sufficiency Analysis and Transportation Capital Improvement Plan. The Township Board of Supervisors adopted the Ordinance to impose a fee on all new construction in December of 1991. The original fee for each trip was \$975.00 for Transportation Service Area (TSA) I. Transportation Service Areas II and III were later adopted in 1994 and 1996, respectively, with a per trip fee of \$975.00. These fees were later recalculated and increased throughout the years to a present day fee of \$2,564.39 per trip for TSA's I, II and III.

Due to changes in land uses that have occurred since 1991 and transportation improvements needed to accommodate residential growth and new industry within the area, the Township requested to update the Act 209 Plan. This update will allow the Township to reevaluate the transportation needs of the Township and reprioritize capital improvement projects in each service area. 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.

Franconia Township is one of four townships and two boroughs that comprise the Indian Valley region. The May 2015 Indian Valley Regional Comprehensive Plan (IVRCP) was reviewed in support of the Act 209 Update and discusses PA 113 Heritage Corridor Transportation & Land Use Study and how it was supported by PennDOT, DVRPC, and MCPC, among other planning and economic development organizations of the Indian Valley, to provide context-sensitive improvements along a vital corridor through the region. The recommendations of this study included the following:

- Establish a Heritage Corridor Overlay District,
- Improve traffic flow with prioritized key-intersection improvements,
- Preserve heritage and open space viewsheds by adopting residential cluster zoning ordinances.
- Create mixed-use redevelopment at existing commercial and village centers,
- Concentrate development where it can be served by existing infrastructure while saving green fields from additional sprawl,
- Implement roadway improvements to accommodate increased traffic volumes, improve pedestrian and bicycle safety, and enhance the visual attributes of the corridor.

The Act 209 Update includes an analysis of the projected growth and roadways in order to implement the Township's goal of improving traffic flow and accommodate increased volumes consistent with the Regional Comprehensive Plan.

Description of Transportation Service Areas

Franconia Township consists of 8,869 acres (less than 14 square miles) in central Montgomery County. The surrounding boroughs include Souderton and Telford. There are currently three existing Transportation Service Areas (TSA) as described below:

TSA I currently consists of about 3.74 square miles making up 28% of the township's total 14 square miles. The area is generally bounded by the following in a clockwise manner as described by the 1991 Land Use Assumptions report: Starting from the intersection of Cowpath and Reliance Roads, extending along the Franconia Township/Souderton Borough boundary, along the railroad right-of-way (formerly Conrail), along the Franconia Township/Hatfield Township boundary, Wambold Road, Schoolhouse Road, Souder Road, including frontage parcels on Allentown Road and State Route (S.R.) 113 (Souderton-Harleysville Road), Telford Pike and Cowpath Road ending at the referenced starting point. The transporation network for this service area consists of the following arterial and collector streets or portions thereof:

S.R. 113 (Souderton- Harleysville Pike)

Allentown Road Beck Road Bergey Road Broad Street Cherry Lane Cowpath Road Creamery Road County Line Road

Delp Road
Elroy Road
Forrest Road
Godshall Road
Green Hill Road
Hollow Road
Indian Creek Road
Leidy Road
Lower Road
Mifflin Road

Minninger Road

Morwood Road Nice Road Reliance Road Rising Sun Road Schoolhouse Road Smokepipe Road Souder Road Souderton Pike Telford Pike

Township Line Road Wambold Road

TSA II currently consists of about 6.73 acres making up about 50% of the Township's land area. The area is generally west of Allentown Road as taken from the October 1993 Preliminary Land Use Assumption Report by the Montgomery County Planning Commission but excludes the limited industrially-zoned area near Elroy Road. The area is generally bounded by Allentown Road, Souder Road, Cassel Road, the Franconia Township/Lower Salford Township and Franconia Township/Upper Salford Township common municipal boundary and the East Branch of the Perkiomen Creek/Salford Township border. Roadways include the Northeast Extension of the Pennsylvania Turnpike, S.R. 113, Allentown Road, and several arterial and collector streets such as the following:

- 1. S.R. 113 (Souderton- Harleysville Pike)
- 2. Allentown Road
- 3. Camp Road
- 4. Cassell Road
- 5. Clemens Road
- 6. Creamery Road
- 7. Fell Road
- 8. Forman Road
- 9. Halteman Road
- 10. Hunsicker Road
- 11. Indian Creek Road
- 12. Keller Creamery Road
- 13. Kulp Road
- 14. Long Mill Road
- 15. Lower Road
- 16. Maple Avenue
- 17. Meetinghouse Road
- 18. Mill Road
- 19. Morwood Road
- 20. Mover Road
- 21. Ruth Road
- 22. Schoolhouse Road
- 23. Souder Road
- 24. Yoder Road

TSA III currently consists of about 3.00 square miles making up approximately 22% of the area in the northern quadrant of the Township. This area is bounded by the East Branch of the Perkiomen Creek/Salford Township border, County Line Road/West Rockhill Township/Telford Borough/Souderton Borough border, and Allentown Road. The southeastern boundary is generally parallel to Souderton-Harleysville Pike (S.R. 113) excluding properties fronting on S.R. 113 which are included in TSA I.

With the adoption of this report, the existing service areas will be redefined into two service areas for the purpose of assessing impact fees. In accordance with Act 209 requirements, each service area is to be less than or equal to 7.0 square miles. Existing TSAs I and III are hereby combined into TSA I with a total of 6.74 square miles. This area is generally defined as the area east of Allentown Road within Franconia Township and abuts both Telford and Souderton Boroughs.

R-R

Existing TSA II will remain as is with an area of 6.73 square miles, generally located west of Allentown Road. The current and proposed Transportation Service Areas described above are illustrated in *Figures 1 and 2*. *Figure 3* is a reference map from the Township's Comprehensive Plan showing areas of designated growth.

ACT 209 TRANSPORTATION AREAS FRANCONIA TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA TRANSPORTATION STUDY AREA (TSA) III LI 3.00 Sq Miles R 130 TRANSPORTATION STUDY AREA (TSA) I 3.74 Sq Miles R-130 · INST R-130 REC TRANSPORTATION STUDY AREA (TSA) II 6.73 Sq Miles

INST

Figure 1: Existing Transportation Service Areas (See Appendix A)

Figure 2: Proposed Transportation Service Areas (See Appendix B)

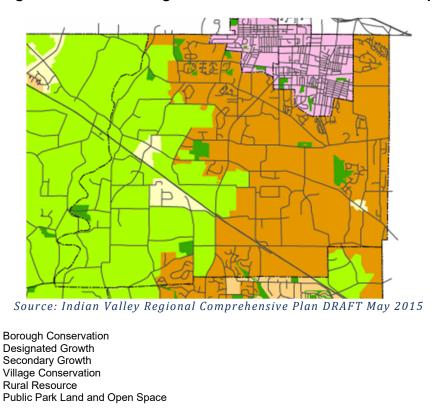


Figure 3: Areas of Designated Growth for Franconia Township

Population

Franconia Township is a rural community in Montgomery County focused on maintaining the agricultural character of the area and the Indian Valley and Perkiomen Creek Stream Valley by concentrating development in the villages and near Telford and Souderton Boroughs.

Population data was obtained from the US Census Bureau with population estimates taken from the Delaware Valley Regional Planning Commission (DVRPC)¹. DVRPC estimated the Township's 2016 population to be 13,263 persons, an increase from the US Census report of 13,064 persons in 2010. The US Census ACS 5-Year population estimate for 2013-2017 was comparable at 13,234 persons. Based on the census data, the most dramatic population change occurred between 1990 and 2010 with an increase of 5,840 persons or 82%. The Township experienced moderate growth between 2010 and 2016. *Table 1* below references the U.S. Census Bureau's population values for Franconia Township every decade from 1960 to 2010, including the estimates for 2016 and 2017, and the percent change between the current and prior "Census Year". Table 1 also references the population estimates for 2020 and 2030 by the DVRPC. The Bulletin estimates that the Township population will grow by an additional 1,114 persons between 2020 and 2030 or increase by approximately 8% for a total of 14,912 persons.

¹ DVRPC Regional Data Bulletin, September 2017

Table 1: Population by Year

Census Year	Population	% Change
1960	3,910	-
1970	5,245	34%
1980	6,545	25%
1990	7,189	10%
2000	11,525	60%
2010	13,064	13%
2016	13,263	1.5%
2017	13,311	0.4%
2020	13,798	4%
2030	14,912	8%

Population Data Source: U.S. Census Bureau

 $\underline{https://www.census.gov/quickfacts/franconiatownshipmontgomerycountypennsylvania}$

Population Forecast Source: DVRPC Population Forecasts, July 2016

Land Use

Franconia Township adopted ten primary zoning districts, as well as, three overlay districts to guide the use of land in the Township, as shown in Figure 4 and Appendix D Zoning Map. Based on area, the largest districts are the Rural Resource, R-130 Residential (Minimum 35,000 SF lots) and Limited Industrial districts. However, the Township's predominant land use is agriculture, followed by single-family residential housing at approximately 36% and 24%, respectively. The commercial districts are generally concentrated at the intersection of S.R. 113 and Allentown Road with village commercial districts in Elroy and Morwood. The industrial uses are at the southernmost area of the Township and straddling the railline between Souderton Borough and Hatfield Township. Institutional zoning districts and uses are scattered throughout the Township and include all levels of schooling, religious institutions, and senior living communities. The Township has 1,189 acres of open space permanently preserved per the Township's Comprehensive Open Space, Park and Recreation Plan (Open Space Plan) which is contained within public open space and permanently preserved farmland, as shown in Appendix E Protected Land Map. Table 2 and Figure 5 below show the 2015 percentages of each land use within the municipality from the DVRPC's Land Use in the Delaware Valley dated February 2017.

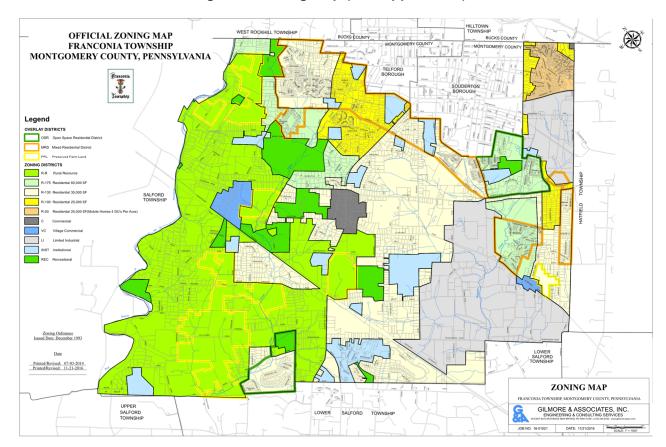
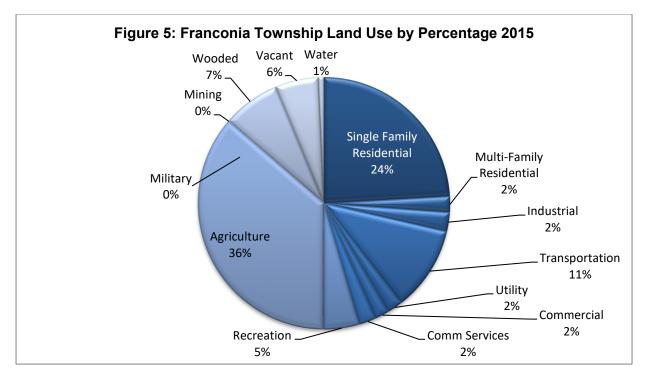


Figure 4: Zoning Map (See Appendix D)

Table 2: Land Use by Percentage 2015

Land Use	Acreage	% Total
Agriculture	3,217	36
Single-Family	2,136	24
Transportation	965	11
Wooded	658	7
Vacant	491	6
Recreation	408	5
Industrial	218	2
Comm. Services	195	2
Multi-Family	182	2
Utility	176	2
Commercial	159	2
Water Surface	64	1
Mining	0	0
Military	0	0
TOTAL	8,869	100%

Source: DVRPC "Land Use in the Delaware Valley, 2015", February 2017



Source: DVRPC "Land Use in the Delaware Valley, 2015", February 2017

Build-Out Analysis

The purpose of the Land Use Assumptions Report is to estimate levels of future development in order to develop traffic projections and update the Roadway Sufficiency Analysis and Capital Improvement Plan that will apply to the eleven-year planning horizon (to the year 2030).

Based on estimates by the US Census Bureau, approximately 13,311 people lived in Franconia Township in the summer of 2017 which was a 1.9% increase since 2010. The estimated increase from 2017 to 2020 is 4%. Further, based on the July 2016 Population Forecasts by DVRPC, the 2020 to 2030 population rate increase is proposed to be 8% which was considered in the 2030 build-out scenario. A correlation was assumed between the projected population growth rates and the number of new housing units.

Also, in determining the potential build-out for the Township, the subdivision and land development activity was listed for 2008 to 2019 based on Township records. Tables 3A and 3B identify the applications and respective status at the time this report was prepared. These projects are anticipated to be completed within the next eleven years.

In addition to projected growth rates and the current subdivision and land development applications, developable parcels and 2019 available imagery data were also reviewed to determine the remaining development potential for the Township. An analysis was performed of the remaining parcels within the Township greater than 5 acres which have a potential for future residential or non-residential subdivision or development, whether permitted to be developed or as permitted by current zoning regulations. The existing land uses were confirmed, and vacant, underdeveloped, agricultural lands and private properties with development potential were identified. Vacant and unrestricted agricultural land contain the greatest potential for

development. Temporarily protected open space includes golf courses, private open space, and private properties under the provisions of Act 319 and 515. The sum of these temporarily protected areas make up approximately 1,561 acres of the 8,869 total acres in the Township. It was assumed that each parcel will be developed under its current zoning designation, and it was also assumed that they will be developed conventionally as by-right or by conditional uses, and not as cluster options. Permanently preserved properties, schools, public open space, and churches have been excluded from the analysis for the purpose of this study assuming that they will be retained as their current use. Parcel build-out was analyzed on an individual lot basis and did not consider shared infrastructure that may be possible through consolidation of adjacent lots.

The site capacity analysis considered areas controlled by zoning such as required open space and natural resources that are required to be protected. By applying zoning regulations for minimum lot area and maximum building coverage to these developable lands, future development potential was estimated for the full build-out scenario. From these projections, specific road improvements can be planned in advance and development fees can be set aside for these improvements until they can be funded, designed and installed.

Residential Build-Out Analysis

There were approximately 4,969 housing units in the Township in 2017 per the US Census Bureau 5-year estimates (2013 to 2017). Tables 3A and 3B below document the available records of residential activity for about the past 10 years.

Table 3A: Residential Subdivision and Land Development Activity - TSA I (2008 to 2019)

No.	Block-Unit Number	Subdivision Name	No. of New Housing Units	Description	Status
1	9B0-41 to 043	Martin Subd.	3	Single-Family	2 of 3 Constructed
2	13-009	Bergey Tract	22	Single-Family	Sketch
3	03-002	Belton Manor	8	Single-Family	Final
4	4A-024	Bergeys Realty	1	Single-Family	Constructed
5	02-068	Hillstone	51	Mixed Residential	Under Construction
6	10-130	Hoff Properties	1	Single-Family	Constructed
7	12C-5	Schuler	1	Single-Family	Constructed
8	10-125 to 127	Silver Maple	3	Single-Family	Constructed
9	03-099	Souderton Menn. Homes	72	Adult Community	Sketch
10	10-001	Allebach Tract	11	Single-Family	Preliminary
11	13-24, 75	Belmont Estates	47	Single Family	Completed
12	4-13,37,55,78,81	Club View @ IV	18	Single-Family	Completed
13	13-149	Winslow Dr.	11	Single-Family	Completed
14	10-110,111	Coach Estates	2	Single-Family	Completed
15	31A-1+	Clearview	18	Single-Family	Completed
16	31A-83+	Barlow Dr.	32	Townhomes	Completed
17	12B-010	McCarthy Subd.	1	Single-Family	Final
18	28-21,66	Myers-Kraybill 30-80 Single-Family		Sketch	
	Total Potential Units in TSA				
Total Constructed TSA					137
Proposed to be built in TSA I in the next 10 years 245					245

Table 3B: Residential Subdivision and Land Development Activity – TSA II (2008 to 2019)

No.	Block-Unit Number	Subdivision Name	No. of New Housing Units	Description	Status
1	19-103	444 Creamery	1	Single-Family	Received Approval
2	27-135,140	Everview	1	Single-Family	Under Construction
3	26-068 to 072	Franconia Meadows	6	Single-Family	Constructed
4	19-178 to 180	Kapusta	2	Single-Family	1 Lot Completed
5	25A-084 to 086, etc.	Lincoln Woods	83	Single-Family	Phase I = 30 Units, Phase II Under Construction
6	24B-001	PBC Phase III	9	Single-Fam/Twin (Cottages)	Under Construction
7	20-002	Melanson	3	Single-Family	Sketch
8	24B-001	PBC-Phase IV	23	Senior Community	Sketch
9	22-067	R.Martin	1	Single-Family	Under Construction
10	18-114, etc.	Vistas	23	Single-Family	Completed
11	19-166	Dewar Dr.	1	Single-Family	Completed
Total Potential Units in TSA II					153
Total Constructed TSA II					59
	Proposed to be built in TSA II in the next 10 years				

Table 3C: Summary of Residential Development Activity for TSA I and II

Total Potential Units in Study Areas I and II	535
Total Constructed in Study Areas I and II	196
Total Proposed to be built in the next 10 years	339

From 2008 to 2019, approximately 196 housing units have been constructed of the 535 total approved, which yields approximately 530 new residents based on the US Census' rate of 2.7 persons per household. The total potential number of new residents assuming each project is fully constructed within the next eleven years is about 915 residents. Given the rate of development within Franconia over the past twenty years and the general health of the development economy, it is assumed for the purposes of this report that all of the projects approved or under construction will develop within the eleven year window considered herein. Therefore, 245 units are anticipated for TSA I while about 94 units are expected to be completed within TSA II in the same time period. The locations of the proposed developments are noted in *Figure 6 and Appendix I Development Map*.

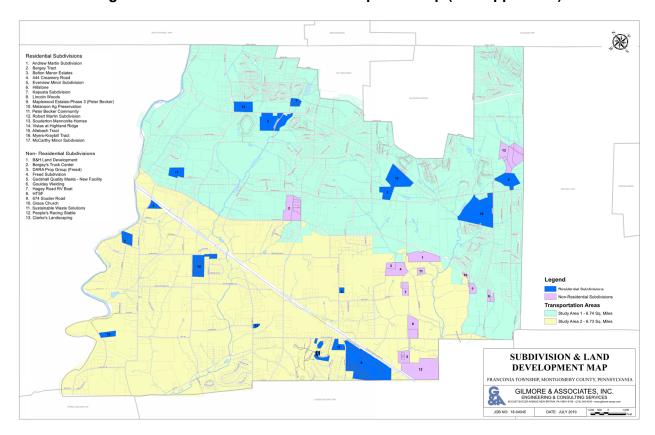


Figure 6: Subdivision and Land Development Map (See Appendix I)

In addition, as noted above, an inventory was taken of the developable parcels within the Township which consists of vacant land and temporarily protected open space greater than 5 acres. The following provides an overview of the procedures that were used to determine long-term residential build-out projections for Franconia Township:

- A. Identify parcels of land within the service area which are residentially zoned and 5 acres or greater in size to use as a basis for the estimated full build-out potential.
- B. Estimate the total number of housing units which could be built on each vacant parcel based on current Zoning District requirements noting the following assumptions:

- 1. Twenty percent (20%) of the gross area was subtracted to account for assumed impervious surface areas.
- 2. Examine parcel for the presence of natural resources such as watercourses, riparian buffers, woodlands, etc., and utility services. These restricted areas were approximated and deducted from the gross area of these parcels to arrive at a net area/developable area.
- 3. The resultant area was then divided by the minimum, required lot area for the respective zoning district to yield a build-out estimate (see Table 4).

Single-family dwelling lots were assumed as permitted by right within these zoning districts. Conditional uses were considered for the properties within the RR Zoning District which allows for single-family dwellings on smaller lots provided open space is proposed approximately equal to the area of the land being developed. Also, the MRD zoning district allows for multi-family uses, however, there are currently no vacant tracts in the Township that meet the minimum tract area requirement to develop these uses.

Based on Township records, 196 building permits were issued from 2008 to 2018 with another 339 total planned or approved based on current applications on file with the Township. If every developable parcel were to be developed based on the minimum lot area required under each zoning district and excluded an assumed percentage of infrastructure, natural resources and utilities, approximately 638 housing units could potentially be built with 299 units in TSA I and 339 units in TSA II. However, it is unlikely that all potential subdivisions and land developments would take place by 2030. Further, there are many property owners with agricultural uses that may permanently preserve their properties in addition to taking advantage of the Act 319 - Pennsylvania Farmland and Forest Land Assessment Act (Clean and Green) program, which is considered a temporary restriction for the sake of this study.

Table 4: Permitted Residential Uses by Zoning District

Tabi	e 4: Permitted Residential Uses by Z		i Ci	
		Max. Density (Units Per	Min. Lot Area	Min. Lot Area
Zoning District	Use Description	Acre)	(Ac)	(SF)
RR (By-Right Use)	Single Family Detached	N/A	4	17,400
RR (Conditional Use)	Single Family Detached	1 per 2 Acres	0.8-0.92	35,000- 40,000
R-175	Single Family Detached	N/A	1.38	60,000
R-130	Single Family Detached	0.96	0.80	35,000
R-100	Single Family Detached	N/A	0.57	25,000
R-50	Single Family Detached	N/A	0.57	25,000
Open Space Res	Single Family Detached	1.1		
Mixed Residential	Single Family Detached	4	0.18	7,800
	Semi-Detached (Twin)	4	0.13	5,850
	Semi-Detached (Non Twin- Unit A)	4	0.16	7,150
	Semi-Detached (Non Twin- Unit B)	4	0.10	4,550
	Quadriplex	4	0.07	3,120
	Townhouse	4	0.06	2,600
	Two-Family Duplex	4	0.21	9,100
	Multiple Family	4	20	871,200
	Older Adult Residential	4		
Mobile Home (R-50)	Mobile Home	4	0.22	9,500
Limited Industrial	Non-Residential	N/A	3.00	130,680
VC	Single Family Detached	N/A	0.40	17,500
	Two-Family Detached (Duplex or Semidetached)	N/A	0.40	17,500
	Apartments within an existing structure	N/A	0.40	17,500
	Residential Mixed Use (CU)	N/A	0.40	17,500

Table 5: Residential Build-Out Analysis

Transporation Service Area	Zoning District	Total Gross Acres	Total Developable Acres	Minimum Lot Area (Ac.)	Potential Dwelling Units based on Developable Areas
TSA I	RR/R-130	253	149	0.8	181
	R-175	286	170	1.38	118
				Subtotal	299
TSA II	RR/R-130	732	285	0.8	339
Totals		1,271	604		638

C. This estimate can be compared with an estimate of the increase in dwellings projected using the residential growth rate for the service area from the U.S. Census. It was decided to first choose a reasonable growth figure for the entire Township based on projected population increases and then assign this percentage to the number of dwelling units within the service area.

Based on the population growth predicted for each mid-year increment noted within the DVRPC's "County- and Municipal-Level Population Forecasts, 2015-2045" dated July 2016 (2016 DVRPC Population Forecasts), the population forecasts were determined and are listed below in Table 6. The age-cohort model predicted a slight curve rather than a straight line increase from 2020 to 2040, with slightly more growth in the early years and a slight slowing near the end. Franconia Township's population was estimated to grow at a rate of 4% from 2010 to 2020 and 8% from 2020 to 2030. Applying the population rate increase to the number of dwelling (housing) units yields an assumed increase of approximately 413 housing units between 2020 and year 2030 as noted below. The absolute population change is estimated to be 1,114 people from 2020 to 2030. While the Township has 258 proposed housing units planned that will likely be constructed over the next 10-years, a percentage of the potential estimated 638 units could also be constructed as well, so 413 new units seems reasonable over the next 10 years.

Table 6: Population and Housing Unit Estimates Based on Projected Growth Rates

Year	Total Population	10-Year Increase	Total Housing Units	10-Year Increase
2000	11,523*	-	4,236*	1,846 (77%)
2010	13,064*	1,541(13%)	4,801*	565 (13%)
2017	13,311**	247(2%)	4,969**	168(3%)
2020	13,798**	564 (4%)	5,157**	188 (4%)
2030	14,912**	1,114 (8%)	5,570**	413 (8%)

Sources: Total Population Source: DVRPC "Regional, County and Municipal Population Forecasts, 2015-2045", October 2016, Appendix A, Page 6; DVRPC "County and Municipal Population Forecasts, 2015-2045", July 2016; Total Housing Units Source:1990, 2000, 2010 Census General Housing Characterstics *Actual total

^{**}Estimated

Non-Residential Build-Out Analysis

Employment by occupation shows that Franconia Township is predominantly within the manufacturing industry. Current data shows more manufacturing jobs than health care and social assistance, educational services, and construction jobs combined. Agricultural work is at the bottom of the employment list. The following images summarize the available US Census employment data:

Public Administration Other Services (excluding Public Administration) Accommodation and Food Services Arts, Entertainment, and Recreation Health Care and Social Assistance **Educational Services** Administration & Support, Waste Management... Management of Companies and Enterprises Professional, Scientific, and Technical Services Real Estate and Rental and Leasing Finance and Insurance Information Transportation and Warehousing Retail Trade Wholesale Trade Manufacturing Construction Utilities Mining, Quarrying, and Oil and Gas Extraction Agriculture, Forestry, Fishing and Hunting 0 1,000 2,000 500 1,500 2,500

Figure 7: Franconia Township Employment by NAICS Industry Sector, 2015

Source: US Census Bureau, On the Map

Ridge Road Telfor Hilltown Aco Selford 309 Souderton Franconia nneytown Pike Hattfeld Woxall Hatfield Upper Salford Harleysville 2 km owamench Source: US Census Bureau, On the Map Map Legend

Figure 8: Franconia Township Work Area Profile

Job Density [Jobs/Sq. Mile]

- 5 134
- 135 524
- 525 1,173
- 1,174 2,083
- 2,084 3,252

Job Count [Jobs/Census Block]

- 4 33
- 34 165
- 166 519
- 520 1,268

Selection Areas

→ Analysis Selection

DVRPC forecasts project an overall increase of 7.8% in employment for Franconia Township between 2020 and 2030. It is anticipated that employment will increase by 601 jobs within the Township between 2020 and 2030 as noted below in Table 7:

Table 7: Projected Employment in the Township (Number of People)

		Υe	ar		
	2010	2015	2020	2025	2030
Projected					
Employment	6,293*	7,630	7,696	8,004	8,297

Source DVRPC Employment Forecasts 2015-2045, October 2016 *Actual Employment, 2010 Census

Approximately 31 non-residential development applications have been received within the past 10 years (2008 through 2019). As of December 2018, approximately 131,284 square feet of buildings have been constructed, with 792,316 square feet of potential building area possible upon full build-out beyond what has been constructed to date.

Table 8A: Non-Residential Subdivision and Land Development Activity TSA I (2008 to 2019)

No.	Residential Development	Square Footage of Footprint Proposed or 40% of Lot Area	Use	Status	
1	Alderfer Poultry Farm	N/A	Agriculture	Exempt	
2	B&H Land Development	52,253	Industrial	Constructed	
3	Bergey's Truck Center	76,792	Commercial	Under Review	
4	Gouldey Welding	8,200	Industrial	Constructed	
5	JBS Pump Building	1,108	Industrial	Constructed	
6	Leidy's Church Expansion	27,086	Institutional	Constructed	
7	Reformed Baptist Church	6,400	Institutional	Approved 2008	
8	Shoemaker Expansion	11,600	Industrial	Constructed	
9	674 Souder Road	34,500	Industrial	Approved 2016	
10	Grace Church	0	Institutional	Parking Lot Under Review	
11	Clarke's Landscaping	7,600	Agriculture	Under Review	
		225,539			
		39,794			
	Total proposed SF within the next 10 years TSA I 185,745				

Table 8B: Non-Residential Subdivision and Land Development Activity TSA II (2008 to 2019)

No.	Residential Development	Square Footage of Footprint Proposed or 40% of Lot Area	Use	Status	
1	DARA Prop Group (Freed)	2,112	Industrial	Under Review	
2	Freed Subdivision, Lots 2 and 3	223,898	Industrial	Approved Subd Only	
3	GQM New Facility	20,100	Office/Warehouse	Ph. 1: Constructed	
4	GQM New Facility	87,900	Warehouse	Ph. 2: Approved	
5	Godshall Quality Meats – Dry Storage Warehouse Hagey Road RV Boat	4,388	Warehouse	Constructed	
6	Storage Storage	53,550	Storage	Under Construction	
7	840 Harleysville Pike	11,360	Commercial	Constructed	
8	Hopewell Christian Fellowship	16,021	Institutional	Constructed	
9	HTSF	176,700	Warehouse	Under Construction	
10	Mascaro Transfer Station	20,736	Industrial	Constructed	
11	NCC Automated Systems Building Expansion	17,875	Industrial	Constructed	
12	The Pizza Box	1,010	Restaurant	Approved	
13	Sustainable Waste Solutions	17,609	Industrial	Under Review	
14	PBC Workshop Expansion	2,052	Planned Community	Under Construction	
15	PBC Skilled Facility Ph V	31,500	Planned Community	Future Phase	
16	DND Real Estate, Hagey Rd	N/A	Industrial Subd	4 of 5 Lots Developed	
17	Hagey Center Dr.	N/A	Industrial Subd	2 of 3 Lots Developed	
18	Froshour, Forman Rd	N/A	Industrial Subd	1 of 2 Lots Developed	
19	People's Racing Stable	11,250	Agriculture	Exempt	
		Total Poten	tial SF for TSA II	698,061	
	Total Constructed in TSA II 91,490				
Total proposed SF within the next 10 years TSA II 606,571					

Table 8C: Summary of Non-Residential Development Activity for TSA I and II

Total Potential SF in Franconia Township	923,600
Total SF Constructed	131,284
Total SF Proposed within the next 10 years	792,316

The Township has four (4) zoning districts that allow non-residential development as by-right uses which are the Commercial, Village Commercial, Limited Industrial and Institutional districts. Special exceptions were not considered in this analysis. All parcels that are categorized as "developable land" within the TSA's and are zoned in a district that permits non-residential development were identified. These properties included vacant lands, agricultural lands, single-family residential properties, etc. that are within the Limited Industrial district. The calculations do not generally account for redevelopment of any existing sites or infill development on currently developed parcels. Also excluded are parcels with a pending non-residential development proposal. The developable land was determined by assuming a percentage of natural resources based on 2019 aerial imagery.

Potential Square Footage

Parcels within the "developable land" category that are zoned to allow non-residential uses were considered when assessing potential full non-residential development, or maximum build-out. The total developeable land was determined by totaling the areas of the properties noted in Appendix H. The method to determine potential square footage of each parcel is as follows:

- 1. Total the amount of land in the "developable land" category.
- 2. Subtract the amount of utility rights-of-way, open space and/or natural resources located on each developable parcel from the total amount of undeveloped land to yield the total developable square footage.
- 3. Determine the effective "Floor Area Ratio" for each zoning district by multiplying the maximum allowable building coverage for a one story footprint. The maximum building coverage for the LI Limited Industrial District is 40%.
- 4. Multiply the total square footage of developable land by the effective Floor Area Ratio.

176.8 Acres X 0.40 = 70.7 acres (approx. 3,081,000 SF)

The result of the analysis yielded a projection of about 3,081,000 square feet of non-residential space that could be built within the Township if every parcel were to be developed to the anticipated maximum density under each zoning district with the above noted assumptions. About 1,632,808 square feet could be developed in TSA I and 1,448,527 square feet in TSA II.

Tables 9A and 9B below lists the parcels and potential building areas for one-story, non-residential buildings in each service area:

Table 9A: Non-Residential Build-Out Analysis - TSA I

ТМР	Gross Developable Acres	Net Developable Acres*	Effective Floor Area (Acres)	Building Floor Area (SF)
340004705904	16.7	10.7	4.3	186,116
340000244001	14.4	11.6	4.6	201,247
340004975004	18.3	11.7	4.7	204,070
340000226001	15.7	12.6	5.0	218,671
340003145007	33.7	27.0	10.8	469,751
340004960001	27.7	11.1	4.4	192,779
340000290009	14.4	9.2	3.7	160,173
TOTAL TSA I	140.8	93.7	37.5	1,632,808

^{*}Decreased developable land by approx. amount of utility ROW, open space and/or natural resources.

Table 9B: Non-Residential Build-Out Analysis - TSA II

ТМР	Gross Developable Acres	Net Developable Acres*	Effective Floor Area (Acres)	Building Floor Area (SF)
340004579004	18.0	10.8	4.3	188,179
340004582001	19.7	11.8	4.7	206,056
340004021004	61.5	24.6	9.8	428,561
340004468007	39.5	15.8	6.3	275,508
340004690001	10.0	8.0	3.2	139,392
340003259109	4.0	2.4	1.6	69,696
340004579109	6.2	3.7	2.4	104,544
340001615601	10.0	6.0	4.0	174,240
TOTAL TSA II	168.7	83.1	33.3	1,448,527
TOTAL TSA I and TSA II	309.6	176.8	70.7	3,081,335

^{*}Decreased developable land by approx. amount of utility ROW, open space and/or natural resources.

Sewer Capacity

In 2017, the Township approved a revision to the Act 537 Plan to extend sewer to 186 properties in the Morwood village area, 87 properties in the Gerhart Lane area, 31 properties on Allentown Road and 14 Rittenhouse Place properties, as shown in *Appendix F*. In 2019, the Franconia Township Sewer Authority (FSA) received a state loan for \$4.6 Million to address concerns with failing septic systems, sanitary sewer overflows and surcharging conditions experienced in recent years in the Township's East Branch of the Perkiomen and Indian Creek watershed. Funds will be used to install more than 22,000 feet of pressure sewer lines in Morwood Village, with another 4,350 feet of similar lines along Allentown Road. In addition, a 1,850-foot gravity sewer line along Rittenhouse Place and Indian Creek Road is also proposed.

Findings

Summary of 10-Year Growth Estimate by Population

Forecasts estimate a 7.8% increase in employment in the Township for a total of about 600 new jobs from 2020 to 2030. It is assumed that the number of jobs in each service area correlates to the amount of anticipated square footage, and therefore about 138 jobs may be created for TSA I and about 462 jobs in TSA II. The summaries are below for residential and non-resdiential growth in each TSA:

Transportation Service Area I

Residential

Based on current approved development applications and the number left to be constructed, approximately 245 residential units are proposed in TSA I which is 72% of the total proposed in the Township. Because population forecasts are crucial to transportation planning, projections from the DVRPC were also considered in order to estimate the Township's anticipated population growth from 2020 to 2030. Based on these estimated population growing rates, approximately 413 housing units could be built within the Township by the year 2030. A growth rate of 8% between 2020 and 2030 equates to 1,115 added persons based on 2.70 persons per household (U.S. Census 2013-2017 Estimates). Of 413 housing units, it was calculated that about 298 units may be built within this service area, which equates to 72% of the Township and 807 new residents.

Non-Residential

It is estimated that 185,745 square feet of non-residential, building floor area is proposed based on current applications on file with the Township in the Township's Service Area I and could be constructed in the next 10-year term, i.e. for the 2030 build-out scenario. These areas are assumed to be industrial uses such as contractors use, warehousing, and flex space.

Transportation Service Area II

Residential

As noted in Table 3B, about 94 residential units are proposed within TSA II based on active applications on file at the Township, which equals about 28% of the total proposed within the Township. Of the 413 housing units projected by applying the DVRPC estimated growth rates, and based on current approved development applications and the number left to be constructed in each service area, it is estimated that about 28% or 115 residential units could be constructed in this service area by the year 2030, yielding about 312 new residents.

Non-Residential

It is estimated that 606,571 square feet of non-residential, building floor area is proposed based on current applications on file with the Township in the Township's Service Area II and could be constructed in the next 10-year term, i.e. for the 2030 build-out scenario.

Summary of Long Term Development Potential

The following table, Table 10, summarizes the development potential of each of the two service areas within Franconia Township.

Table 10: Transportation Service Area Summary

	Service Area I		Service Area II	
	2030 Build- Out*	Full Build- Out**	2030 Build-Out*	Full Build- Out**
Potential Residential Units	245-298	299	94-115	339
Potential Non-Residential Building Area	185,745 SF	1,632,808 SF	606,571 SF	1,448,527 SF
Estimated Number of Jobs	138	N/A	462	N/A

^{*}Based on current applications and population growth rates

Transportation Service Area I

Residential

For the full build-out, it is estimated that approximately 299 residential units could be constructed in TSA I based on the developable acreages for each vulnerable property and the minimum required lot area per the respective zoning districts. In total, these residential housing units could be built adding approximately 807 new residents to the Township using the U.S Census rate of 2.7 persons per household.

Non-Residential

Based on an analysis of the vulnerable properties within non-residential districts, 1,632,808 square feet could potentially be constructed within TSA I in the long term. Current, permitted by-right uses within the applicable Limited Industrial Zoning District include administrative offices, manufacturing, contractor's office and storage, warehouse, self-storage, distribution center, flex space, and printing, publishing, lithography, etc.

Transportation Service Area II

Residential

For the full build-out, it is estimated that 339 residential units could be constructed in Service Area II based on the developable acreages for each vulnerable property and the minimum required lot area per the respective zoning district. In total, these residential housing units could be built adding approximately 915 new residents to the Township using the U.S Census rate of 2.7 persons per household.

Non-Residential

Based on an analysis of the vulnerable properties within non-residential districts, 1,448,527 square feet could potentially be constructed within TSA II in the long term. Current, permitted by-right uses within the applicable Limited Industrial Zoning District include administrative offices, manufacturing, contractor's office and storage, warehouse, self-storage, distribution center, flex space, and printing, publishing, lithography, etc.

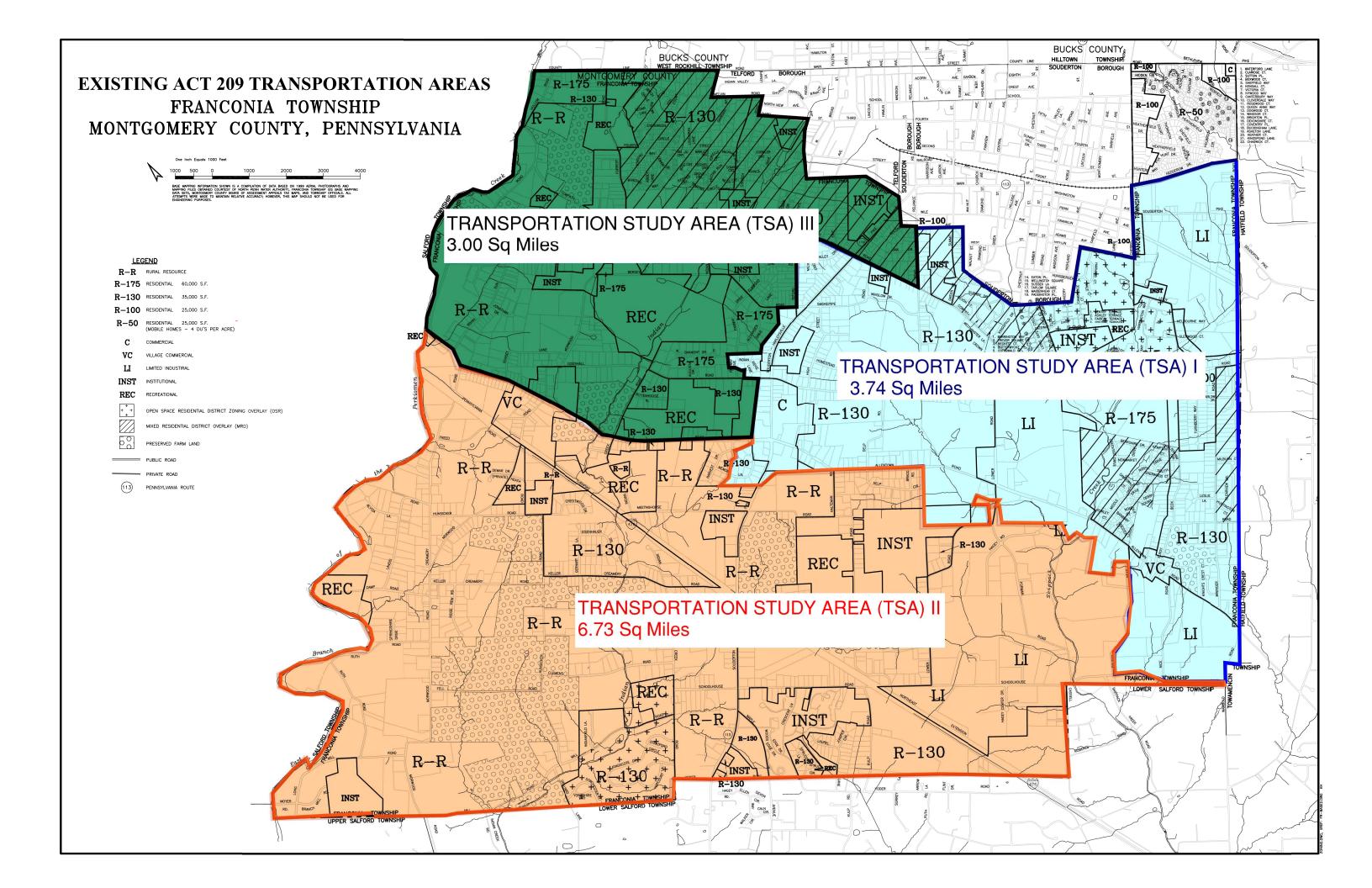
^{**} Based on potential for future land developments based on current zoning districts

References

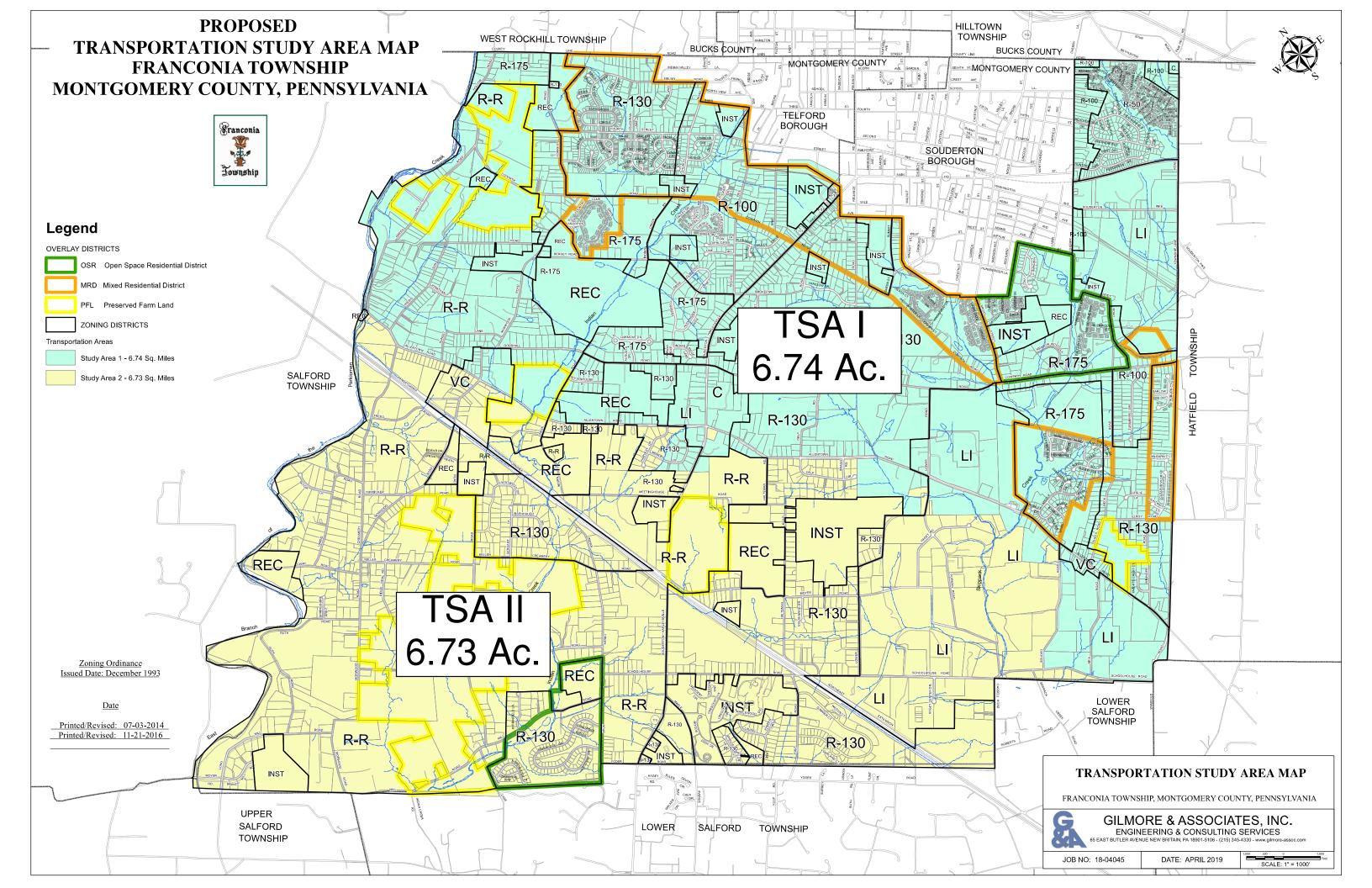
- DVRPC Analytical Data Report "Land Use in the Delaware Valley, 2015", February 2017; https://www.dvrpc.org/
- 2. DVRPC Analytical Data Report "County- and Municipal-Level Population Forecasts, 2015-2045", July 2016; https://www.dvrpc.org/
- 3. DVRPC Analytical Data Report "Regional, County, and Municipal Employment Forecasts, 2015-2045", October 2016; https://www.dvrpc.org/
- 4. DVRPC Regional Data Bulletin "Population Estimates 2010-2016", September 2017; https://www.dvrpc.org/
- Indian Valley Regional Planning Commission Comprehensive Plan, May 2015; https://www.montcopa.org/DocumentCenter/View/8438/Indian-Valley-Draft-Comp-Plan-May-2015
- 6. A Comprehensive Open Space, Park & Recreation Plan, May 2018, Franconia Township https://www.franconiatownship.org/media/47597/Reduced-Franconia-Open-Space-Park-Recreation-Plan-Updates -July-102018.pdf
- 7. Franconia Township Zoning Ordinance, adopted May 2, 1966, Franconia Township; https://ecode360.com/FR0973
- 8. United States Census Data, United States Census Bureau https://webapp02.montcopa.org/planning/dataportal/MultipleLookup.asphttps://www.census.gov/quickfacts/franconiatownshipmontgomerycountypennsylvania
- 9. Montgomery County Property Records Search, Assessment Office Property Records Database https://propertyrecords.montcopa.org/pt/forms/htmlframe.aspx?mode=content/home.htm
- 10. Act 537 Plan Revision: Special Study for Morwood Area April 2016, SC Engineers, Inc. https://www.franconiatownship.org/media/38388/537MorwoodDraft.pdf

Appendices

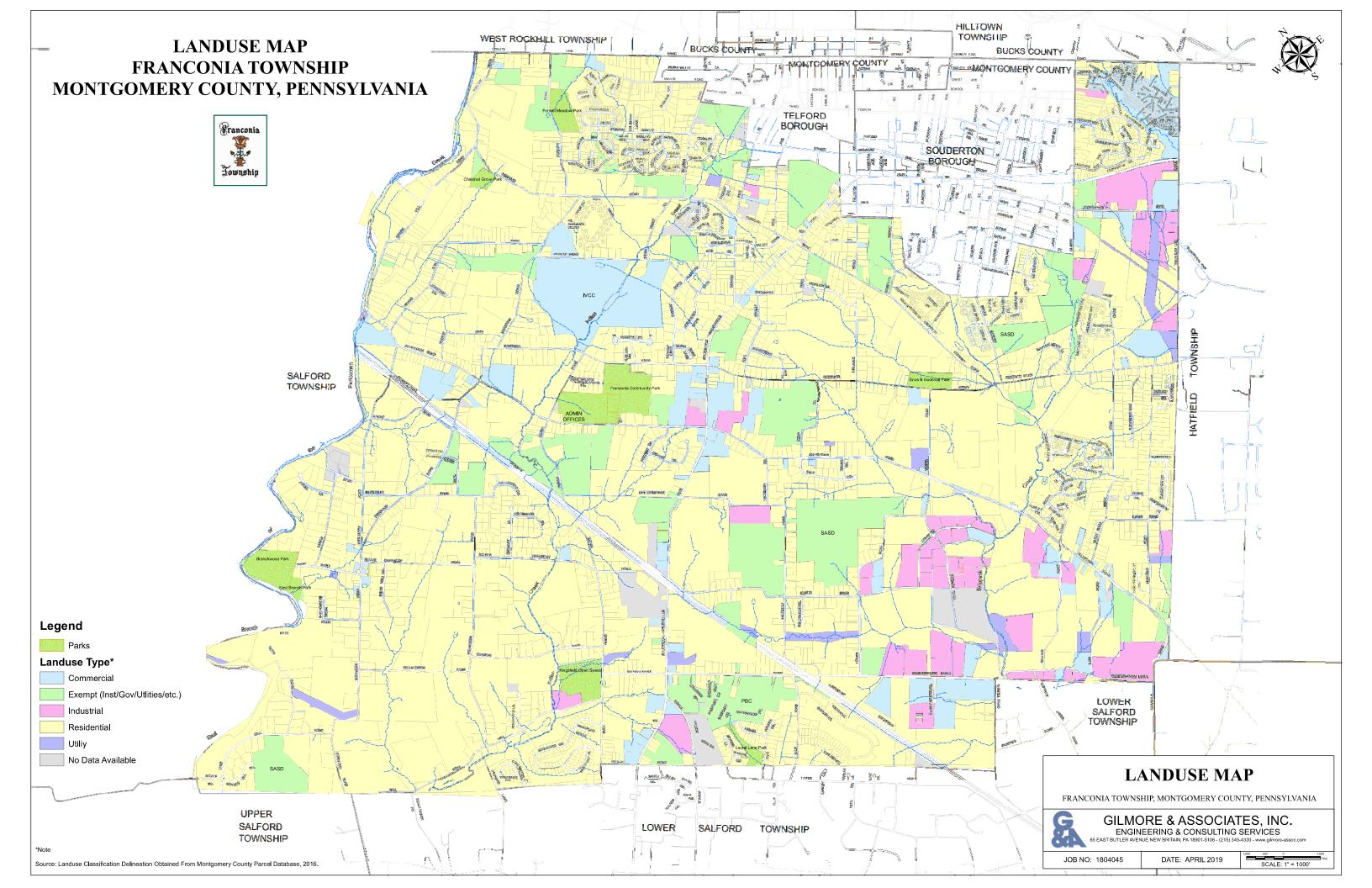
Appendix A: ExistingTransportation Service Areas



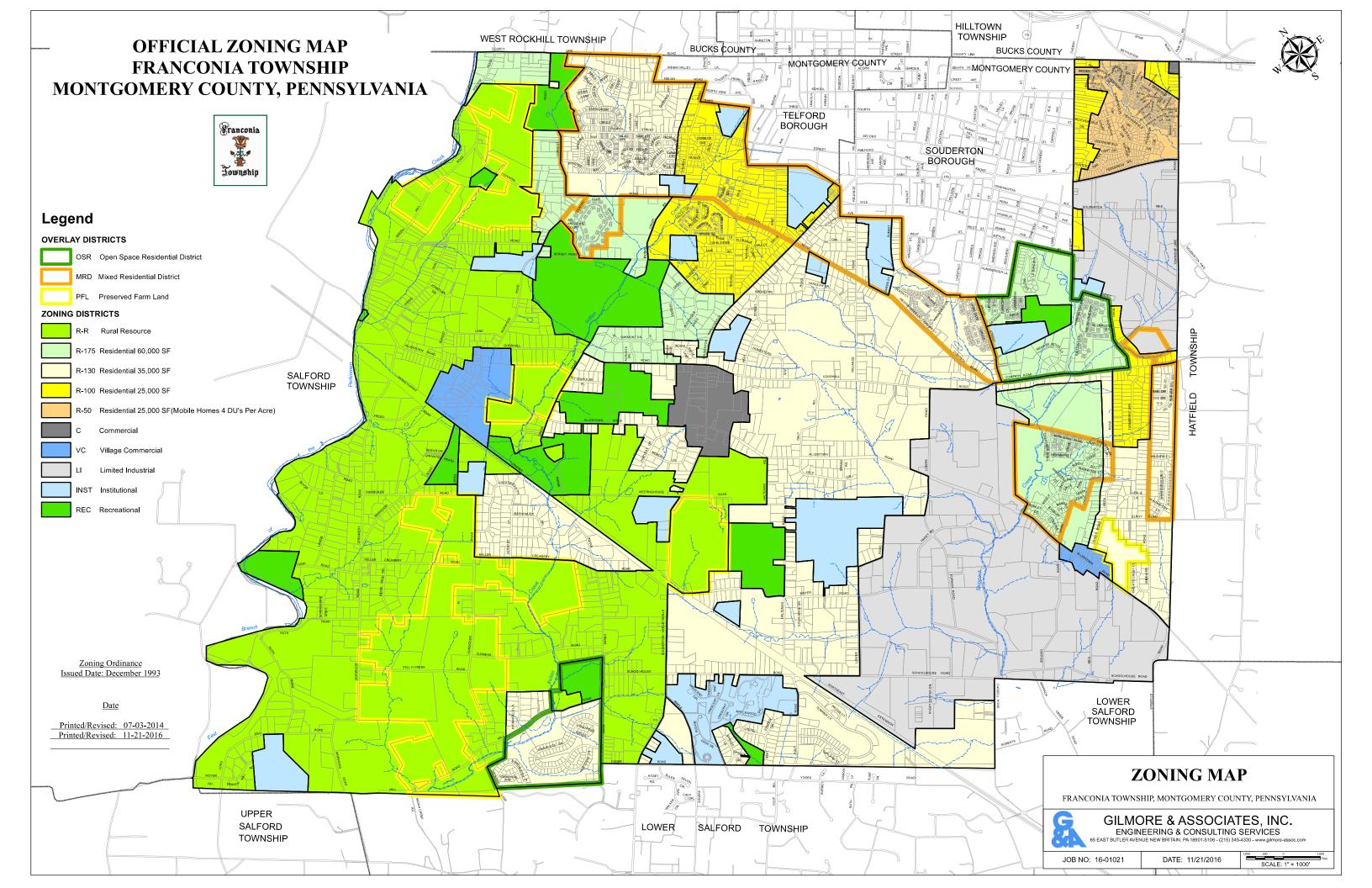
Appendix B: Proposed Transportation Service Areas



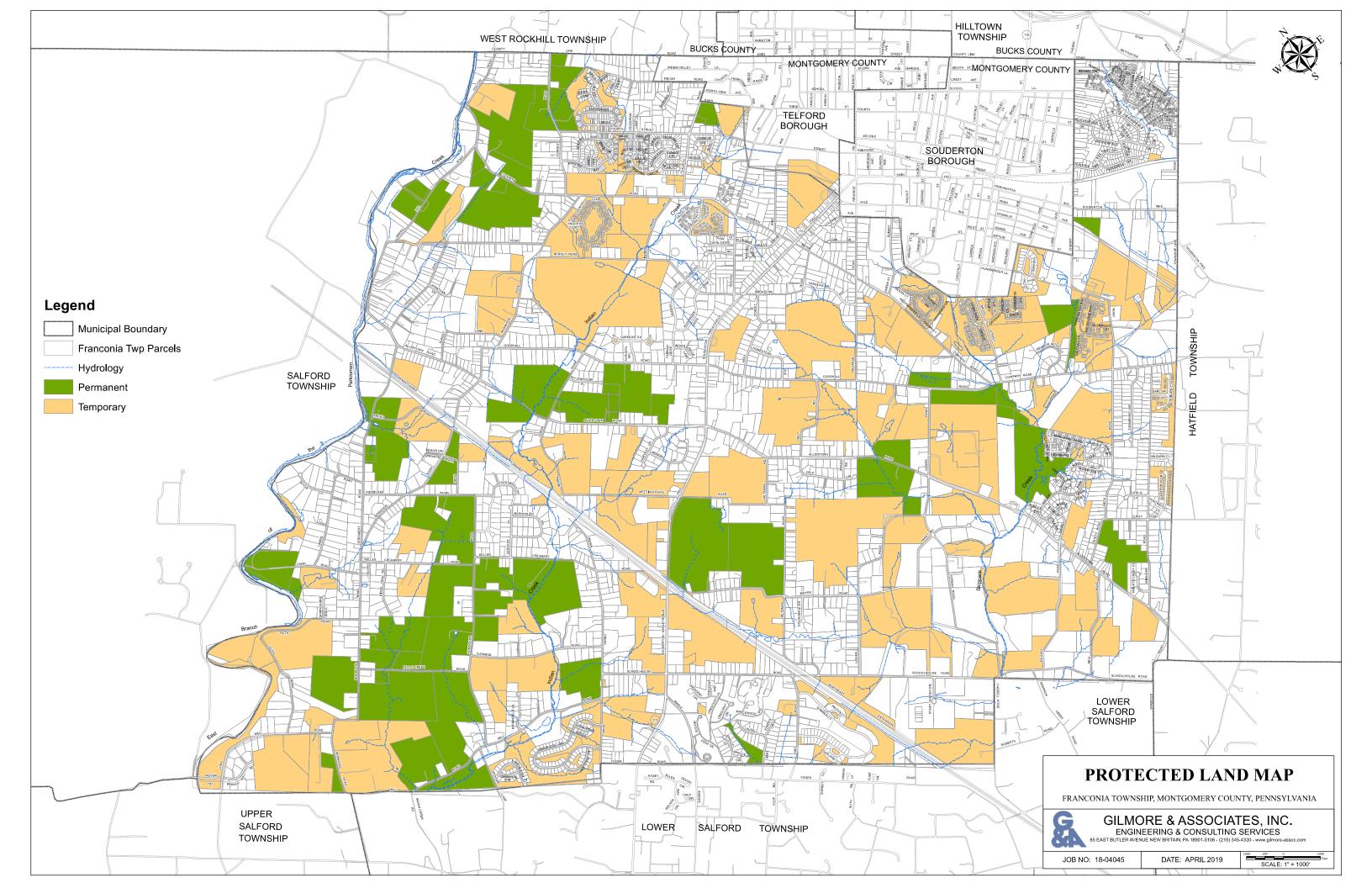
Appendix C: Land Use Map



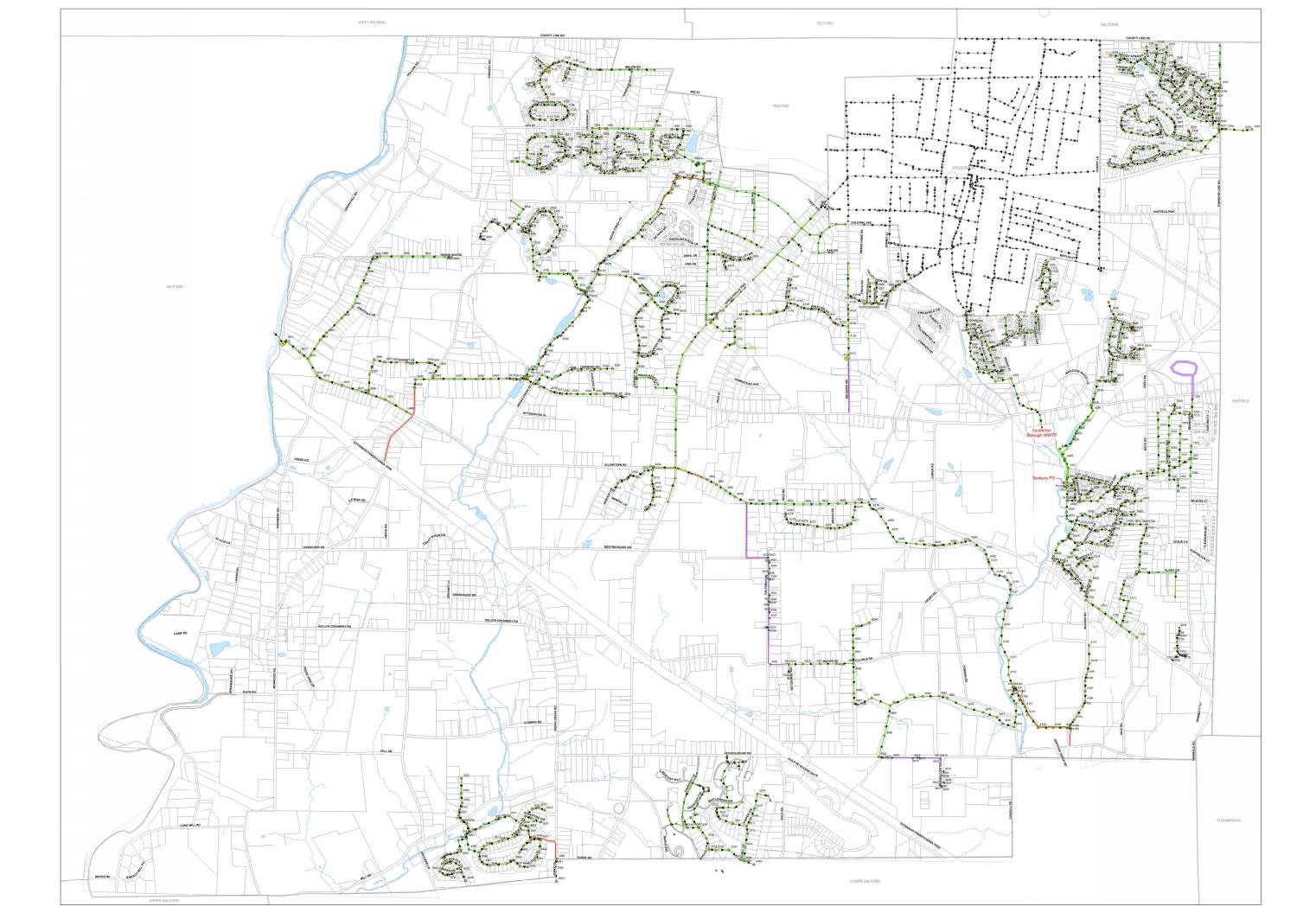
Appendix D: Zoning Map



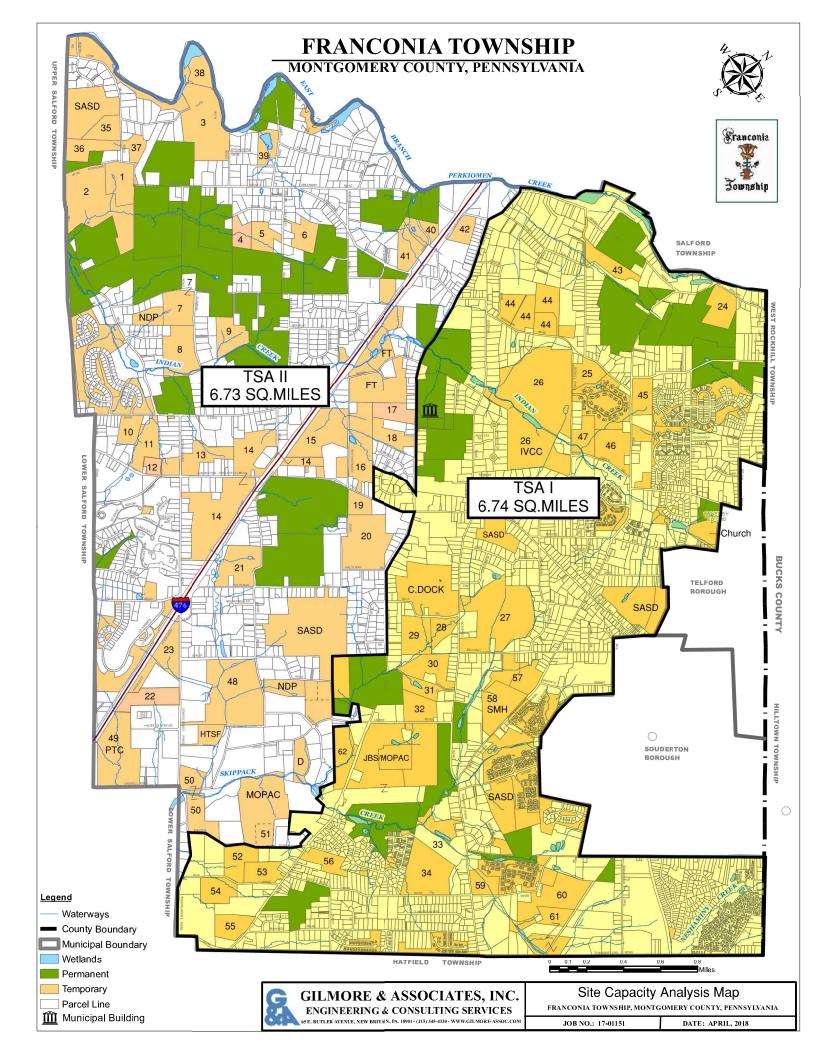
Appendix E: Protected Land Map



Appendix F: Sewer Authority Map



Appendix G: Site Capicity Analysis Map



Appendix H: Site Capacity Analysis Table

TSA I												
No.	ТМР	Land Use	Zoning	Min Lot Area (Ac) per Zoning	Tract Acreage	Total Developeable Acres	Max Num of Lots based on Zoning (Rounded Down)					
52	340004705904	Ag	LI	3.00	16.69	10.68	3					
53	340000244001	Ag	LI	3.00	14.44	11.55	3					
54	340004975004	Ag	LI	3.00	18.30	11.71	3					
55	340000226001	Ag	LI	3.00	15.69	12.55	4					
60	340003145007	Ag	LI	3.00	33.70	26.96	8					
61	340004960001	Ag	LI	3.00	27.66	11.06	3					
62	340000290009	Ag	LI	3.00	14.36	9.19	3					
27	340001759007	Ag	R-130	0.80	73.75	44.25	55					
28	340001456004	Ag	R-130	0.80	10.13	6.08	7					
29	340000094223	Ag	R-130	0.80	21.11	12.67	15					
30	340001821017	Ag	R-130	0.80	20.41	12.25	15					
31	340001822007	Ag	R-130	0.80	11.00	6.60	8					
32	340001821026	Ag	R-130	0.80	16.27	13.02	16					
45	340001099001	Ag	R-130	0.80	15.16	9.70	12					
57	340001231004	Ag	R-130	0.80	25.47	16.30	20					
58	340001225001	Ag	R-130	0.8	26.77	19.28	24					
33	340001174034	Res Vac Land	R-175	1.38	13.00	3.64	2					
34	340000445007	Ag	R-175	1.38	38.75	23.25	16					
46	340002848007	Ag	R-175	1.38	32.00	20.48	14					
47	340002803007	Ag	R-175	1.38	14.75	9.44	6					
56	340000055001	Ag	R-175	1.38	13.15	8.42	6					
59	340003164501	Ag	R-175	1.38	11.75	7.52	5					
25	340001099028	Com Vac Land	REC (R175) REC	1.38	13.66	8.20	5					
26	340000589007	IVGC	(R175)	1.38	149.18	89.51	64					
24	340002656001	Ag	RR	0.80	18.45	7.38	8					
43	340004276001	SFD	RR	0.80	14.41	1.44	1					

TSA II													
No.	ТМР	Land Use	Zoning	Min Lot Area (Ac) per Zoning	Tract Acreage	Total Developeable Acres	Max Num of Lots based on Zoning (Rounded Down)						
22	340004579004	SFD	LI	3.00	18.00	10.80	3						
23	340004582001	Ag	LI	3.00	19.71	11.83	3						
48	340004021004	Ag	LI	3.00	61.49	24.60	8						
50	340004468007	Ag	LI	3.00	39.53	15.81	5						
51	340004690001	IND	LI	3.00	10.00	8.00	2						
21	340004045007	Ag	R-130	0.80	26.60	21.28	26						
49	340004576007	Ag	R-130	0.80	64.20	19.26	24						
1	340003967004	Ag	RR	0.80	20.40	8.16	10						
2	340003412001	Ag	RR	0.80	63.32	25.33	31						
3	340004438001	Ag	RR	0.80	53.12	21.25	26						
4	340004221452	SFD	RR	0.80	9.64	3.86	4						
5	340003031004	Ag	RR	0.80	12.83	5.13	6						
6	340002989001	Ag	RR	0.80	14.46	5.78	7						
7	340002707004	Ag	RR	0.80	19.60	7.84	9						
8	340000850007	Ag	RR	0.80	29.33	11.73	14						
9	340002710001	Ag	RR	0.80	18.21	7.28	9						
10	340002896004	Ag	RR	0.80	10.02	4.01	5						
11	340002323001	Ag	RR	0.80	19.71	7.88	9						
12	340002317007	Com Vac	RR	0.80	5.45	2.18	2						
13	340002311004	Ag	RR	0.80	19.01	7.60	9						
14	340002515007	Ag	RR	0.80	90.25	24.82	31						
15	340003334007	Ag	RR	0.80	35.95	14.38	17						
16	340003316007	Ag/SFD	RR	0.80	34.20	13.68	17						
17	340000340004	Religious	RR	0.80	14.24	5.70	7						
18	340000334001	Ag	RR	0.80	13.81	5.52	6						
19	340002506007	Ag	RR	0.80	10.30	4.12	5						
20	340002035001	Ag	RR	0.80	44.47	17.79	22						
35	340003181007	Ag	RR	0.80	11.85	4.74	4						
36	340003178001	Ag	RR	0.80	16.31	6.52	7						
37	340003166004	Ag	RR	0.80	11.51	4.60	4						
38	340004444004	Ag	RR	0.80	14.60	5.84	7						
39	340000659108	SFD	RR	0.80	11.60	3.71	5						
40	340001717004	Ag	RR	0.80	10.51	4.20	4						
41	340001717013	Ag	RR	0.80	15.92	6.37	7						
42	340001391006	Ag	RR	0.80	10.88	4.35	5						

Appendix I: Subdivision and Land Development Map

