MASTER PLAN

LOGAN TOWNSHIP

Gloucester County, New Jersey



January 26, 2021
Adopted by the Township Planning Board: ______, 2021
(Resolution #_____)

The original of this Master Plan was signed and sealed in accordance with N.J.S.A.45:14A-12.

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MASTER PLAN BACKGROUND

A thorough review of the Township's 2010 Master Plan reveals that an update is necessary. While the Township implemented many of the planning initiatives set forth in the 2010 document, conditions within the Township have continued to evolve. With the increase in commercial and industrial development comes additional traffic and congestion on the local roadway network, and the degradation of the level of service at intersections. Vast expanses of paved parking areas around some of the larger industrial buildings and are largely empty and underutilized. New trends in ride-hailing, ecommerce delivery, and renewable energy have created both challenges and opportunities that have yet to be addressed by the Township's Unified Development Ordinance (UDO).

In the past 10 years, there has been significant changes in Logan, including the continued expansion of both the Pureland and Commodore 295 industrial complexes, the full buildout of the Logisticenter industrial park, and the expansion of the Route 322 Corridor Commercial (RCC) zone. Although numerous ordinances have been adopted since 2010 in response to site and area specific changes, there is currently a need to update the Master Plan in order to guide and direct future growth.

The Township has continuously amended their policy documents and development regulations to reflect the Township's changing needs. These changes include the expansion of the RCC zone referenced above, the creation of the Village Interchange Commercial (VIC) and General Business Park (GBP) zones; creation of the Riverfront Industrial (RFI), Recreational Waterfront Development (RWD) and Affordable Housing Overlay zones (AH-O AND ARH-O); a soil and fill importation and placement ordinance, and an ordinance regulating performance and maintenance guarantees. Although each of these amendments addressed a specific need, pursuant to the statutory requirements set forth in N.J.S.A. 40:55D-89 of the New Jersey Municipal Land Use Law, "the governing body shall, at least every 10 years, provide for a general reexamination of its master plan and development regulations..." With this document, the Township's Planning Board is creating a concise "plan" to guide land use and policy decisions for the next ten years.

This 2020 Master Plan will consist of an analysis existing of conditions, a restatement of goals and objectives carried forward from past master plans, a land use element, a circulation element, and recommendations regarding community facilities, conservation, economic development, recycling, and regional planning. It is important to note that while a Housing Element has been prepared and updated, it is a separate standalone Element.

EXISTING CONDITIONS

1.0 Introduction

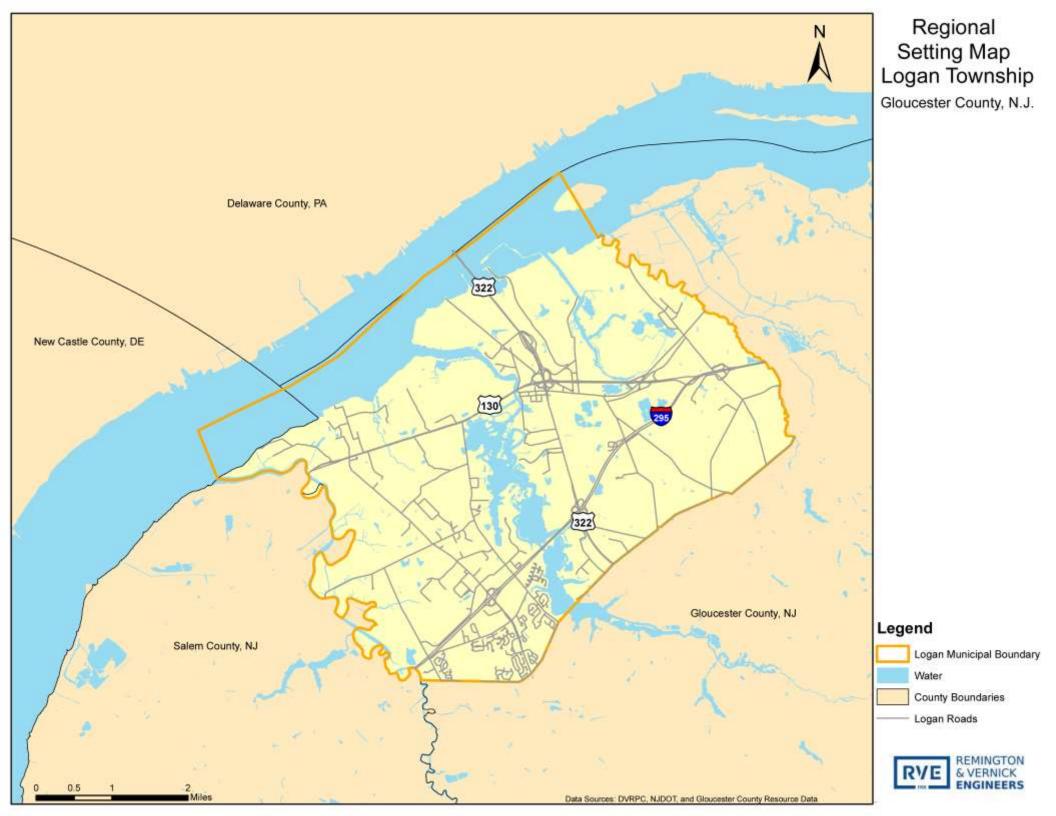
Although Logan Township experienced a 2.5% decrease in population since 2000, it is projected to increase by 20% from 2015 to 2045. Since significant growth in the Township is anticipated, consistent with the surrounding region, Logan must ensure that it meets the needs of its residents while preparing and planning for the future. Fundamental to this Master Plan is to develop a strategy for the Township to achieve a balance of continued industrial/commercial expansion, agricultural preservation, and residential and commercial development while maintaining the existing quality of life.

This chapter provides a comprehensive inventory of the Township and includes a description of its existing regional setting, demographics, natural characteristics, community facilities, utilities, and economic conditions. This background information provides a framework for constructing the recommendations, which, in effect, constitute the essence of the master plan.

2.0 Regional Setting

Logan Township is located in the northwestern section of Gloucester County (see **Regional Setting Map**) and is adjacent to Greenwich Township (northeast), Woolwich Township (southeast), Salem County to the southwest (Oldmans Township), and the Delaware River (northwest). The Township contains approximately about 27 square miles or 17,275 acres and and is traversed by several major traffic arterials, including Interstate 295, U.S. Highway 322 and U.S. Highway 130. Both Interstate 295 and U.S. Highway 130 provide ready access up and down the Eastern seaboard, while U.S. Highway 322, connects Logan Township with shore areas and the New Jersey Turnpike to the south, Pennsylvania, via the Commodore Barry Bridge to the north.

There is little doubt that the Township's development surge since 1970 is due, in large part, to its excellent location with respect to highway access. The Township has become an attractive location for warehouse distribution and other light industrial uses and the likelihood of this continued industrial and commercial expansion, especially along the Rt. 322 corridor, is highly probable.



3.0 <u>Demographic Analysis</u>

The following demographic data provides the historical context, along with information which may be used to extrapolate trends in the Township and surrounding region.

Population

Per the most recent census estimate, Logan Township has a population of 5,900 and a density of 219.1 persons per square mile. As Table 1 below shows, Logan's population declined by 2.5% from 2010 to 2018 after increasing significantly between 1970 and 2000. While the Township's growth far surpassed both the County and the State's toward the end of the 20th century, the last twenty years indicate an ever so slight role reversal.

Table 1

Population Trends, 1970 to 2018					
	Logan Township	Gloucester County	New Jersey		
1970	1,840	172,681	7,168,164		
1980	3,078	199,917	7,364,823		
1990	5,147	230,082	7,730,188		
2000	6,032	254,673	8,414,350		
2010	6,042	288,288	8,791,894		
2018	5,900	290,852	8,881,845		
Increase, 1970 to 2000	69.5%	32.2%	14.8%		
Change, 2000 to 2018	-2.4%	0.9%	1.0%		

Source: United States Census, www.census.gov

As indicated in Table 2 below, the Township's population decline since 2010 was shared by two of the three adjoining municipalities (Greenwich Township's population decreased by 2% while Oldmans Township's in Salem County decreased by 2.7%). On the other hand, Woolwich, the third municipality bordering Logan, experienced a 19.4% rate of population growth during this time period.

Table 2

Population Change, 1930 to 2018							
	1950- 1960	1960- 1970	1970- 1980	1980- 1990	1990- 2000	2000- 2010	2010- 2018
Logan Township	-13.4%	-4.4%	67.3%	67.2%	17.2%	0.2%	-2.5%
E. Greenwich Twp	16.5%	20.5%	26.3%	26.9%	3.3%	43.2%	9.0%
Greenwich Twp	29.0%	39.6%	-4.8%	-5.6%	-4.4%	0.4%	-2.0%
Woolwich Twp	-8.0%	-7.1%	-1.6%	29.2%	107.8%	70.3%	19.4%
Oldmans Twp	75.8%	-28.3%	-11.5%	-8.9%	6.8%	-1.4%	-2.7%
Gloucester County	47.0%	28.1%	15.8%	15.1%	10.7%	11.7%	0.8%
Salem County	18.6%	2.8%	7.2%	1.0%	-1.5%	2.7%	-4.3%

Source: United States Census, www.census.gov

Housing

As shown in Table 3 below, Logan Township's housing stock increased by 2.5% between 2000 and 2018. During the same 18-year period, Gloucester and Salem Counties experienced modest increases in housing units. In comparison to neighboring municipalities, Logan's slight increase in housing units since 2000 is in contrast with larger gains in Woolwich and Oldmans Townships.

Table 3

Housing Units 2000-2018						
Municipality	Sq. Mi.	2000 Units	2010 Units	2000-2010 Change	2018 Units	2010-2018 Change
Logan Twp.	26.93	2,077	2,172	4.4%	2,129	-2.0%
E. Greenwich Twp.	14.44	1,971	3,405	42.1%	3,462	1.7%
Greenwich Twp.	9.31	1,944	2,048	5.1%	2,095	2.3%
Woolwich Twp.	20.91	1,026	3,275	68.7%	4,293	31.1%
Oldmans Twp.	19.5	694	699	0.7%	729	4.3%
Gloucester County	322.01	95,054	109,796	13.4%	113,907	3.7%
Salem County	331.90	26,158	27,417	4.6%	27,608	0.7%

Source: 2014-2018 American Community Survey

Table 4 below indicates the number of dwelling units for which building permits were issued in Logan and surrounding communities since 2000. Thus, while Logan has experienced a modest increase of 160 units over the last 19 years, neighboring Woolwich Township increased its units by over 21 times Logan's rate. A large portion of the growth in Woolwich is the result of a planned unit development for approximately 4,500 new units (the Weatherby complex). This growth is occurring close to Logan Township's border and will impact the future of the Township.

Between 2010 and 2018, only 8 building permits were issued for housing units in Logan, which is a decrease of over 93% when compared with the number of building permits issued between 2000 and 2009. While the rate of housing development has slowed considerably in Logan Township, both regionally and nationally building permits have been increasing steadily since the end of the Great Recession. While Logan may not be a location sought by home builders, due to its location near both the New Jersey Turnpike and Interstate 295, Logan has continued to be the star in the distribution/logistics sector. Between now and 2034, logan expects a minimum of 6.2 million sq. ft. of additional commercial and industrial development. These divergent trends between housing and nonresidential development, help to highlight the uniqueness that is Logan Township and highlight its status as a regional distribution center.

Table 4

Building Permits Issued for Housing Units				
Municipality	Building Permits Issued 2000-2009	Building Permits Issued 2010-2018		
Logan Twp.	152	8		
E. Greenwich Twp.	1,514	582		
Greenwich Twp.	113	20		
Woolwich Twp.	2,383	1,024		
Oldmans Twp.	31	52		
Gloucester County	15,325	5,173		
Salem County	2,471	449		

Source: New Jersey Construction Reporter 2000-2018, NJ Division of Codes and Standards and United States Census, www.census.gov

As Table 5 below shows, the average household size for Logan Township (2.96 persons) in 2018 was larger than the corresponding County and State figures of 2.74 persons and 2.68 persons, respectively. With current demographic trends shifting towards decreased household sizes, it can be expected that these numbers will drop in the 2020 census. The relatively larger size of Logan Township's households suggests that its resident population is more family structured than the resident populations of the County and state.

Table 5 also indicates that, at \$207,600, the median value of owner-occupied units in Logan was much lower than that of the State (\$327,900), but only slightly lower than the County's (\$216,700). Although the Township lags both the County and the State in this respect, the median rent in Logan exceeded that of the County and the State. Thus, the Township's median rent in 2018 was \$1,387, compared to \$1,186 for the County and \$1,295 for the State. Logan had a lower rate of rental units (6.3%) than both the County (19.8%) and State (36.1%). Similarly, the Township's vacancy rate in 2018 (6.3%) was lower than that of the County (7.5%) and the State (10.9%). The lower vacancy rate in Logan is indicative of a comparatively stable housing market.

Table 5

Housing Data 2018					
	Logan Township	Gloucester County	New Jersey		
Household Size	2.96	2.74	2.68		
Median Housing Value	\$207,600	\$216,700	\$327,900		
Median Gross Rent	\$1,387	\$1,186	\$1,295		
Owner-occupied Units	93.7%	80.2%	63.9%		
Renter-occupied Units	6.3%	19.8%	36.1%		
Vacancy Rate	6.1%	7.5%	10.9%		

Source: American Community Survey, 2014-2018

As Table 6 below shows, only 21.3% of Logan's population was at least 55 years of age compared to the County's 28.8% rate and the state's 29.9% rate for this cohort. Reflective of this distribution is Logan's median age of 37.8 years which is below both the County's 40.8 median age and the State's 40.8 median age. Although the median age in the Township has increased from 36.8 years in 2010, it is still indicative of a community with a relatively young resident base.

Table 6

Age Distribution	Age Distribution, 2018					
	Logan Town	ship	Gloucester Cou	Gloucester County		
		Percent		Percent		Percent
Under 5	280	4.7%	15,508	5.3%	521,684	5.9%
5 to 9	448	7.5%	18,276	6.3%	540,335	6.1%
10 to 14	568	9.5%	19,054	6.6%	562,668	6.3%
15 to 19	409	6.9%	19,439	6.7%	565,170	6.4%
20 to 54	2,979	50.1%	134,558	46.3%	4,127,580	46.5%
55 to 64	745	12.5%	40,594	13.9%	1,187,545	13.4%
65 +	520	8.8%	43,423	14.9%	1,376,863	15.5%
Total	5,949	100%	290,852	100%	8,908,520	100%
Median Age	37	7.8	40	.8	36.7	

Source: American Community Survey, 2014-2018

As Table 7 below shows, the percentage of Logan's population that was African American in 2018 (12.4%) was somewhat higher than the County (10.3%) and only slightly lower than the State (13.4%). The percentage of the Township's white population (81.6%) is similar to the County's (81.7%) but higher than the State's (67.9%).

Table 7

Racial Composition - 2018							
	Logan T	Logan Township		Gloucester County		New Jersey	
	Persons	Percent	Persons	Percent	Persons	Percent	
White/Caucasian	4,854	81.6%	238,703	81.9%	5,956,539	66.9%	
Black/African- American	737	12.4%	29,877	10.3%	1,207,995	13.6%	
Asian	44	0.7%	9,763	3.4%	868,213	9.7%	
Other	314	5.3%	13,065	4.5%	875,773	9.8%	
Total	5,949	100%	291,408	100%	8,908,520	100%	
Persons of Hispanic or Latino Origin	235	4.0%	18,639	6.4%	1,839,359	20.6%	

Source: United States Census, www.census.gov

Educational attainment looks at what level of education was achieved for the segment of the population over the age of 25. In 2018, only 3% of Logan residents over this age lacked a high school diploma. This rate was less than half the 7.2% rate for the County and less than a third of the 10.4% rate for the State. This comparison strongly suggests that the adult population of the Township has achieved a higher level of education than both the County or State populations.

Table 8

Educational Attainment - 2018			
Percent of Population over 25 years of a			
No High School Degree			
Logan Township	3.0%		
Gloucester County	7.2%		
New Jersey	10.4%		

Source: American Community Survey, 2014-2018

4.0 Natural Characteristics

In 2019, an Environmental Resource Inventory (ERI) for the Logan Township was prepared by the Land Conservancy of New Jersey in conjunction with the Environmental Commission of Logan Township. The ERI provides detailed information on existing water resources, biological resources, and environmental issues within the Township.

The information contained in this report is intended to provide an overview of the existing soils and wetlands conditions within the Township and, where appropriate, refers to information contained in the ERI.

Soils

In 2015, the official Gloucester County Soil Survey was updated by the Natural Resources Conservation Services (NRCS).

The Soil Survey identifies the following three major soil series that are prevalent in the Township:

- Udorthents: Occupies approximately 25% of the Township land area. Consists of dredged materials transplanted by human activity. Found in Uplands and Coastal Plains.
- Mannington-Nanticoke: Occupies approximately 8% of the Township land area. Consists
 of soil in tidal flats and experiences frequent flooding.
- Sassafras: Accounts for 7.7% of the Township land area. Consists of a well-drained soil that is fairly deep.

The ERI includes a detailed description of each soil series as well as a discussion of the capability units.

The specific soil types identified in Logan Township are included in Table 9 and illustrated on the **Soils Map**. This table lists limitations of the soil types that are important in evaluating the soils for development suitability. These limitations are:

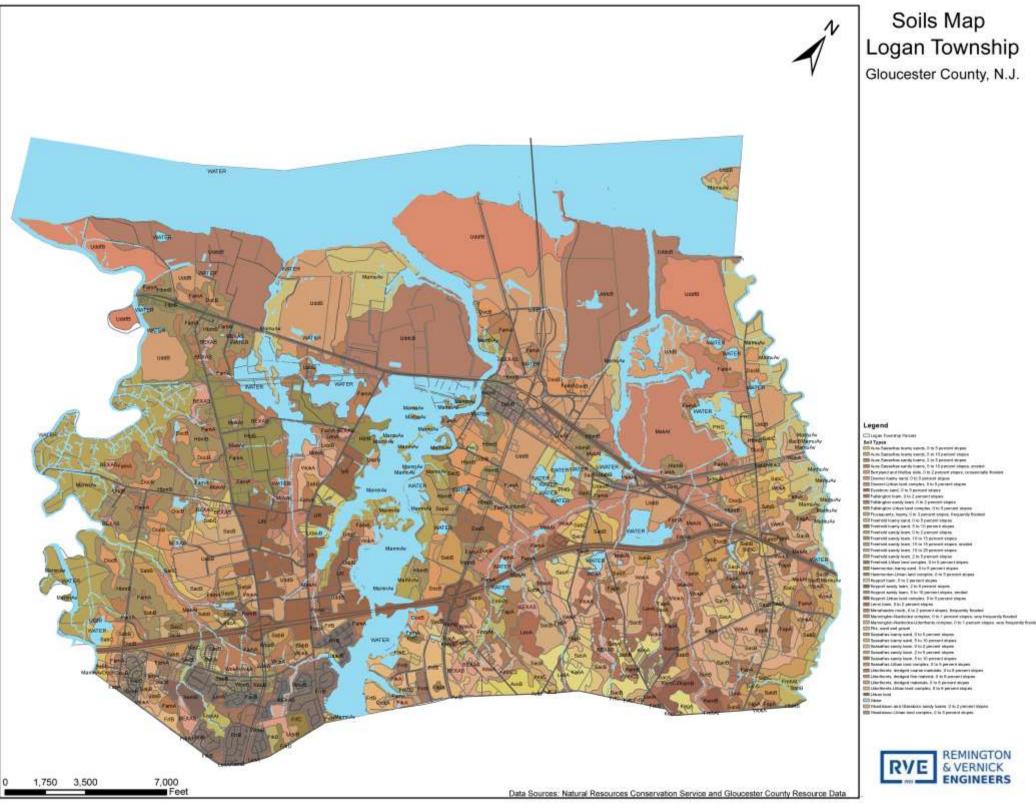
- Depth to Seasonal High Water Table
- Septic Suitability
- Building Site Suitability
- Road Subgrade Suitability

Table 9

		Depth to Seasonal High Water Table	Septic Suitability	Building Site Suitability	Road Subgrade Suitability
Ad	Alluvial sand	1 ft			Fair
Ва	Bayboro loam		Poor	Poor	Poor
DoB	Downer loamy sand, 0-4% slopes	5-10ft	Good	Good	Good
Ek	Elkton loam	1ft	Poor	Poor	Poor
Fa	Fallsington loam	1ft	Poor	Poor	Fair
Fd	Fallsington sandy loam	1ft	Poor	Poor	Fair
FhB	Freehold loamy sand, 0-5% slopes	10ft	Good	Good	Good
Fhc	Freehold loamy sand, 5-10% slopes	10ft	Good	Good	Good
FoA	Freehold sandy loam, 0-2% slopes	10ft	Good	Good	Good
FoC	Freehold sandy loam, 5-10% slopes	10ft	Good	Good	Good
FsD	Freehold soils, 10-15% slopes	10ft	Good	Fair	Good
FtE	Freehold, Colts Neck & Collington soils, 15-25% slopes	10ft	Fair	Poor	
КрВ	Keyport sandy loam, 0-5% slopes	10ft ¹	Poor	Good	Poor
KpC3	Keyport sandy loam, 5-10% slopes severely eroded	10ft ¹	Poor	Good	Poor
LdB	Lakeland sand, 0-10% slopes	5-10ft	Good	Good	Good
LkA	Lenoir & Keyport loams, 5-10% slopes		Poor	Poor	Poor
Мс	Made land, course materials	2			
Mf	Made land, fine materials	2			
Mu	Muck	0			Not Suitable
Pg	Pits	2			
Po	Pocomoke loam	0	Fair	Poor	Fair
Ps	Pocomoke sandy loam	0	Fair	Poor	Fair
SfB	Sassafrass loamy sand, 0-5% slopes	10ft	Good	Good	Good-Fair
SfC	Sassafrass loamy sand, 5-105 slopes	10ft	Good	Good	Good-Fair
SrA	Sassafrass sandy loam, 0-2% slopes	10ft	Good	Good	Good-Fair
SrB	Sassafrass sandy loam, 2-5% slopes	10ft	Good	Good	Good-Fair
SrC	Sassafrass sandy loam, 5-10% slopes	10ft	Good	Fair	Good-Fair
SsD	Sassafrass soils, 10-15% slopes	10ft	Fair	Poor	Good-Fair
SsE	Sassafrass soils, 15-40% slopes	10ft	Fair	Poor	Good-Fair
Tm	Tidal marsh	0			Not Suitable
WnA	Woodstown & Dragston Loams, 0-2% slopes	2-3ft	Fair	Fair	Good
WnB	Woodstown & Dragston Loamy sands, 0-5% slopes	2-3ft	Fair	Fair	Good
WsB	Woodstown & Dragston Sandy Loams, 0-5% slopes	2-3ft	Fair	Fair	Good
WtB	Woodstown & Klej loamy sands, 0-5% slopes	2ft	Fair	Fair	Good

Source: Soil Survey of Gloucester County; Compiled by: Peter P. Karabashian Associates, Inc.

¹ SHWT depth is reported to be 10ft or greater on slopes but surface ponding occurs in level areas. ² Depth to SHWT not reported



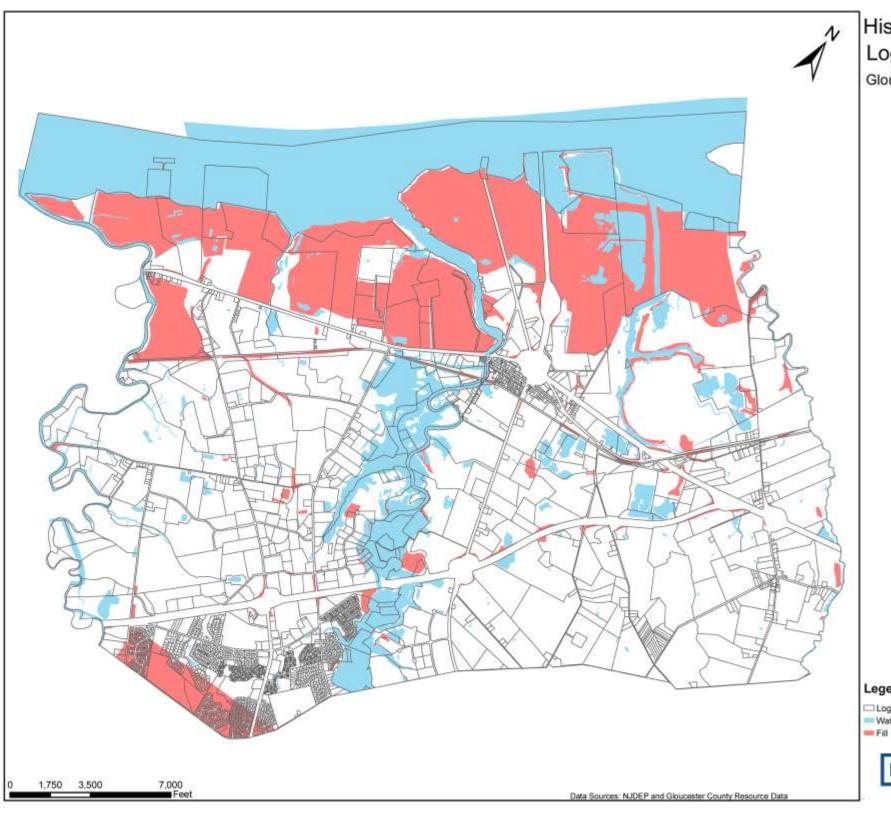
Soils Map Logan Township

Gloucester County, N.J.

Legend

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Historic Fill Map Logan Township

Gloucester County, N.J.

Legend

Logan Township Parcels
Water



Soil characteristics provide general guidelines useful in evaluating the suitability of any site for development but cannot be expected to be precise for every location. Variations in the characteristics of a soil type may occur on a site by site basis.

Overall, future development should be directed toward those areas which consistently have good characteristic ratings as identified in Appendix E of the ERI. It is still recommended that residential development not be placed on contaminated dredge spoil deposit areas. Refer to the **Historic Fill Map** for additional details.

Wetlands

New Jersey protects freshwater wetlands under the New Jersey Freshwater Wetlands Protection Act Rules: N.J.A.C. 7:7A. The Logan Township Wetlands Map (Wetlands Map) identifies the wetlands classified by the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey Department of Fish and Wildlife.

Logan Township is dominated by tidal freshwater marshes and there are also freshwater wetlands along its stream corridors. According to the ERI, wetlands of all types total 5,590 acres within the Township, of which 1,724 acres are deciduous wooded wetlands, 955 acres are deciduous scrub/shrub wetlands, and 821 acres are freshwater tidal marshes³.

As illustrated on the **Wetlands Map**, a preponderance of the wetland areas are associated with the Delaware River and the five tributary stream corridors in the Township (Oldmans Creek, Birch Creek, Raccoon Creek, Cedar Swamp and Repaupo Creek). The greatest extent of emergent wetlands is found as freshwater tidal marshes along the main channels of the Raccoon, Birch, and Oldmans Creeks.

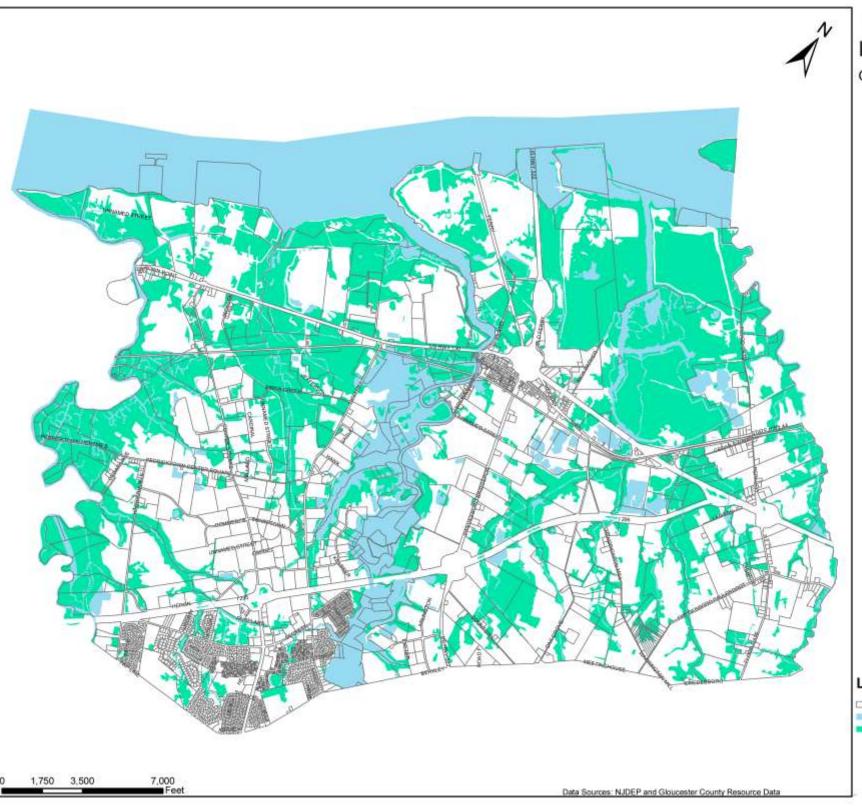
The wetland areas of the Township are sensitive environmental areas, which provide habitats for wildlife species and natural stormwater detention and filtration. The configuration of the wetlands creates natural open space corridors throughout the Township. Because of the overall environmental importance of the wetlands, appropriate buffers shall be provided by adjacent development.

5.0 Land Use

The State Development and Redevelopment Plan (SDRP), which is constantly updated, divides the state into Planning Areas based upon the environmental capabilities, infrastructure availability, existing patterns of development and other principles. The three Planning Area⁴ designations (refer to **Planning Area Map**) in Logan Township are: Suburban (PA-2); Fringe (PA-3); and Environmentally Sensitive Planning Area (PA-5).

³ Environmental Resource Inventory, The Land Conservancy of New Jersey, November 26, 2019.

⁴ While inconclusive, and depending on the reference map, there is a tiny portion of Rural (PA-4) in the western portion of the Township. This PA-4 area is largely land which is undevelopable due to wetland and other environmental constraints



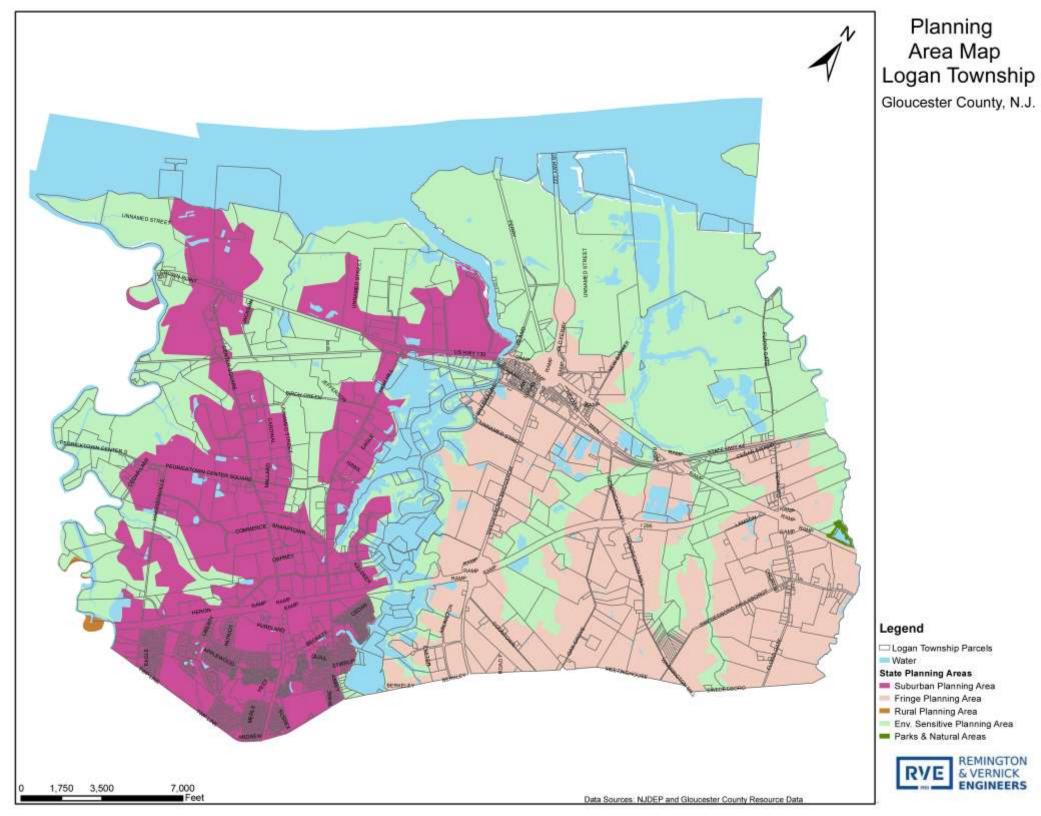
Wetlands Map Logan Township

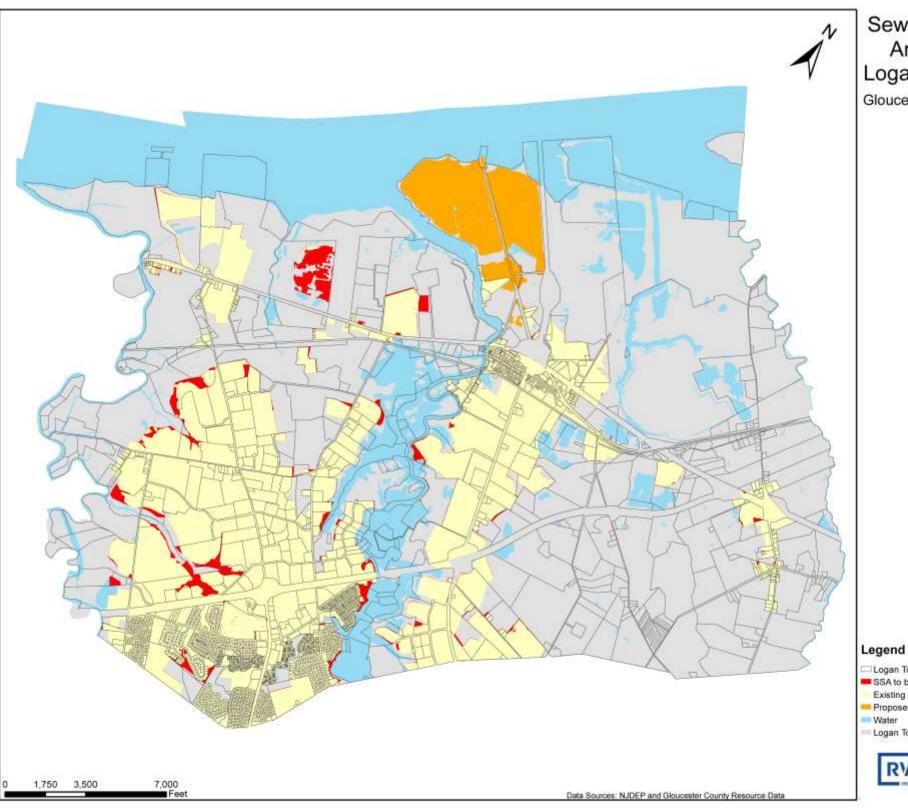
Gloucester County, N.J.

Legend

- Logan Township Parcels
 Water
- Wetlands







Sewer Service Area Map Logan Township

Gloucester County, N.J.

- Logan Township Parcels
- SSA to be removed
- Existing SSA
- Proposed SSA
- Logan Township Municipal Boundary



Throughout the entirety of the Township Public sewer is not available (**Sewer Service Area Map**). While the Township is currently in the process of amending the Sewer Service Area (SSA), it is anticipated that large areas of the Township, largely due to environmental conditions, will remain outside the sewer service area. In addition to the Township's desire to add the Raccoon Island to the sewer service area, there are some smaller areas proposed to be eliminated for the sewer service area.

The 2015 Land Use/Land Cover dataset (GIS Shapefile) developed by NJDEP, which is the most recent data set available, classifies land uses into organized classifications. These classifications are set forth in Table 10 below.

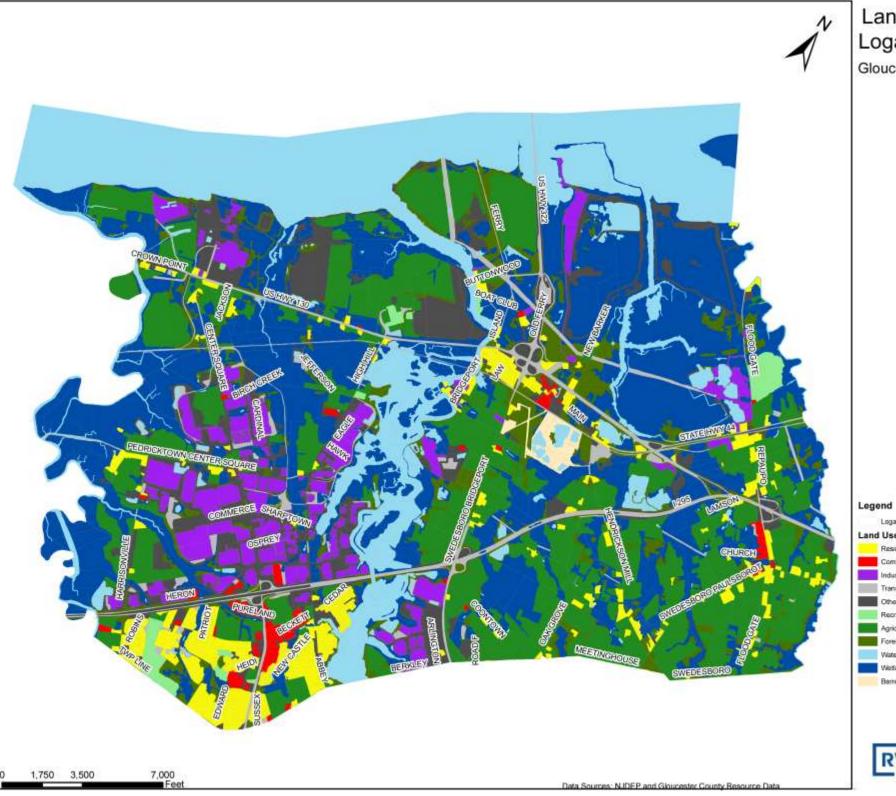
As shown in the Table 10 and on the **Land Use Map**, 27.3% of Logan Township is comprised of water or forests, which for the most part is neither developable nor within PA-2 or PA-3. 20.2% of lands in Logan are currently used for agricultural purposes, and 27.9% of the land in Logan Township is wetlands.

Table 10

Land Use Classification, 2015				
	Acres	Percent		
Residential	814.91	4.72%		
Commercial	141.20	0.82%		
Industrial	955.63	5.53%		
Transportation	629.40	3.64%		
Other Urban	1497.42	8.67%		
Recreation	143.02	0.83%		
Agriculture	3496.32	20.24%		
Forest	1043.37	6.04%		
Water	3667.91	21.23%		
Wetlands	4813.79	27.87%		
Barren Land	71.65	0.41%		
Total Acres	17,274.62	100.00%		

Source: 2015 Land Use/Land Cover dataset, NJDEP

Over the course of the past two decades, Logan Township has experienced numerous development changes. These changes have been largely due to planned developments and their consistency with the Township's vision. While Logan has continued to develop as a logistics center, the Township continues to offer a mix of industrial, commercial, and residential uses while maintaining an active farming community. To this end, Logan's landscape continues to be dominated by its predominate feature, water and wetlands. The Delaware River, its three major stream corridors, and the acres of wetland and marshes surrounding them make up 49.1% of the total acres within the Township.



Land Use Map Logan Township

Gloucester County, N.J.





6.0 Community Facilities

Community facilities and services are an important part of the Township's desirability as a place to live and work. By performing an inventory of existing community facilities and services in Logan Township, information about the general nature of such facilities can be derived. Data can then be assessed to determine appropriateness for meeting present and future needs of the community. The information presented in the following pages is primarily a description of various community facilities and services in the Township, as they exist today.

Many of Logan Township's facilities are located in Bridgeport, the oldest residential community in the Township, which exists along Main Street/N.J. State Route 44.

Municipal Building

Since 2010, the one-story Municipal Building, fronting along Main Street in the Bridgeport section of Logan Township has undergone many improvements including resurfacing of the gymnasium floor, removal of basketball court, and the installation of a municipal storage garage. Perhaps most prominent was the installation of solar panels on the roof of the building, which provide around 30% of the building's required electricity. The building, which formerly served as a school, is occupied by the following municipal offices:

- Clerk's Office
- Assistant Treasurer
- Planning Board
- Environmental Commission
- Board of Health
- Tax Collector
- Tax Assessor
- Court, meeting room and Welfare Director
- Police Department
- Construction Office
- Fire Prevention Bureau
- Offices of the Logan Township Youth League
- Public Works

Police Department

The Logan Township Police Department consists of a 21-officers with an additional hire pending. The main headquarters in the municipal building with an additional small room, located within the Public Works Building on Township Line Road, which allows officers to utilize the facilities. The Police Department maintains a motor pool consisting of 21 vehicles, including a K-9 vehicle.

The Police Department is comprised of 3 divisions: administration; patrol; and detective, and an additional special services unit. In 2016, Capt. Joseph Lombardo was promoted to Chief, Lieutenant Joseph Flatley was promoted to Captain, and Sgt. Ray Kennedy was promoted to Lieutenant.

Fire Department

The Logan Township Fire Company, which was formed as a volunteer force in 2008, operates out of three stations, Bridgeport, Beckett, and Repaupo. The company is a result of the consolidation of the Bridgeport Volunteer Fire Company and the Repaupo Volunteer Fire and Rescue Company. The company provides fire protection to Logan's 5,900 residents, over 20 million square feet of commercial real estate property, 26.9 square miles, and has a mutual aid arrangement with Swedesboro and Woolwich. Additionally, the company provides vehicle rescue services to the Township roads, including two U.S. highways, an Interstate, and the Commodore John Barry Bridge. The Department is currently experiencing understaffing issues and is seeking to mediate the issue by implementing an overnight duty crew stipend from 11 PM to 7 AM, when volunteers are frequently unable to report. In 2019, two daytime employees were hired to conduct inspection tasks, answer emergency calls from 7 AM to 4 PM, and to maintain equipment and stations. The Department is seeking to add one additional firefighter in 2020 and another in 2022⁵. In terms of equipment, the company operates with the following:

Table 11

Apparatus	Apparatus Type	Year	Age
1811	Engine	1994	25 yrs
1812	Engine	1997	22 yrs
1813	Engine (REPLACEMENT ON ORDER)	1987	32 yrs
1814	Quint	2013	6 yrs
1815	Support	1999	20 yrs
1816	Ladder	1990	29 yrs
1825	Brush Truck (OOS)	1968	OOS
1828	Rescue (now emerg mgmt.)	1997	OEM
1800	Command Car (Oatman)	2011	8 yrs
1801	Command Car (Rhoad)	2009	10 yrs
1810	Support (Old Dodge 145,000)	2006	13 yrs

Source: Logan Township Fire Company Fifteen-Year Plan, 2019-2034

In addition to the Township Fire Company, Logan Township also has a Fire Official who along with the Municipal Fire Chief, Scott Oatman, participates in the site plan and subdivision review process and provides input as to street widths, interior circulation, sprinkler connections and locations, fire lanes/zones, water main size, hydrant locations, and more.

Recreation

Numerous public and private recreational facilities serve a wide range of needs within the Township. Township Line Park and Beckett Park are two of the largest parks which host Township affiliated recreational sporting leagues. In addition to these parks, there are recreation facilities located at both the Municipal Building and the Senior Center, and a dog park on High Hill Road. Raccoon Creek Conservation Area and Oak Grove Park are the two most prominent undeveloped parks that will likely be part of future recreational improvements.

The Bridgeport playground is located directly behind the old municipal building on Main Street. The playground is approximately .25 acres and contains swings, slides, and other typical playground

⁵ Logan Township Fire Company Fifteen-Year Plan, 2019-2034, Scott D. Oatman, Chief

equipment. The facility is frequently utilized by the surrounding Bridgeport neighborhood and was developed in 1987 and recently updated. In 2015, Township Line Park underwent numerous improvements including a new storage building and renovations to the hockey rink. In 2018, new sports field lighting systems were constructed to support recreation leagues. Table 12, illustrates the recreational facilities that are located at each park:

Table 12

Municipal Recreation Resources					
Park Name	Resources				
Township Line Park	1 Football Field				
	4 Soccer Fields				
	1 Playground				
	2 Basketball Courts				
	1 Hockey Rink				
	3 Tennis Courts				
	1 Pavilion				
Beckett Park	3 "Large" Baseball Fields				
	2 "Medium" Baseball Fields				
	2 "Very Small" Baseball Fields				
	1 Playground				
Municipal Building	1 Hockey Rink				
Tot Lot	1 Playground				

Source: Logan Township Open Space and Recreation Plan

Table 13 indicates the estimated annual number of participants in recreation programs supported by the Township. The Township's rapidly expanding recreation capabilities have supported many new opportunities for residents.

Table 13

7 977 7 9						
Estimated Annual Number of Participants in Recreation Programs						
Sport	Total					
Baseball	83					
Softball	69					
Basketball	300					
Soccer- Spring	293					
Soccer- Fall	300					
Flag Football	150 (First Year)					

Source: Logan Township Open Space and Recreation Plan

Library

The Township Branch of the Gloucester County Library System is located at 498 Beckett Road. The current building, which is 9,660 sq. ft, opened in October of 1995, and holds a collection of 25,000 items.

The Logan Township Branch began in the winter of 1979 in a gas station off Center Square Road and moved shortly thereafter to a vacant second floor office in the Beckett Village Shopping Center. In 1980, the Logan Branch moved to a refurbished office trailer and remained there for fifteen years. In recent years, the Library has undergone improvements to resurface the parking lot and construct exterior play areas.

Post Office

Logan Township's Post Office is located along Main Street in Bridgeport. The facility was built in January 1986. Although the post office is not centrally located in the Township, it is conveniently accessed via local and regional roadway connections and provides ample space to meet the operational needs of a postal facility. Alternatively, many Logan residents utilize the Swedesboro Post Office as it is close to the residential areas in Beckett.

Schools

The Logan Township School District operates three schools. The Center Square School, located on Peachwood Drive, educates children in pre-kindergarten, kindergarten and first grade. Logan Elementary, located on School Lane, is for students in grades 2 through 5. Logan Middle School, also located on School Lane, educates students from 6th grade through 8th grade.

For grades 9 through 12, Logan is a sending district, and most students attend Kingsway High School in Woolwich. Kingsway High School is part of the Kingsway Regional School District. Additionally, some students attend Gloucester County Institute of Technology (GCIT) for high school. For grades pre-kindergarten through 12th grade, the Township approximates 1,160 students enrolled, which includes approximately 265 high school students who attend Kingsway School District and 60 high school students enrolled at GCIT. At both facilities, tuition is paid for by the Logan Township School District.⁶

In 2018-2019, there were approximately 1,724 students enrolled at Kingsway High School and the student to teacher ratio was 13:1, slightly above the State ratio of 12:1. From 2009 to 2019, the number of students enrolled at Kingsway High School increased by approximately 17%.⁷ Due to the growing population in Woolwich, it is anticipated that enrollment at Kingsway High School will continue to increase and the Township is aware that high school enrollment may exceed capacity. Discussions with the Logan Township School Board regarding viable options for grades 9-12 are ongoing. The table below depicts a decline in Logan Township school enrollment for Pre-K to Grade 8 over the past decade.

⁶ District Narrative, Logan Township School District,

https://www.logan.k12.nj.us/apps/pages/index.jsp?uREC_ID=272971&type=d&termREC_ID=&pREC_ID=514183

⁷ Kingsway High School 2018-2019 Report Card, State of New Jersey Department of Education, https://rc.doe.state.nj.us/report.aspx?type=summaryschool&lang=english&county=15&district=2440&school=050&schoolyear=2018-2019

Table 14

Logan School Enrollment 2008-2018					
Year	Logan Schools (Pre-K to Grade 8)				
2017-2018	835				
2016-2017	843				
2015-2016	850				
2014-2015	843				
2013-2014	839				
2012-2013	838				
2011-2012	879				
2010-2011	874				
2009-2010	903				
2008-2009	900				

Source: Logan Township School District Narrative

Public Works and Trash Collection

The Logan Township Public Works Department is presently a twenty-four (24) employee department including: public works manager, secretary, supervisor, mechanic, drivers, flex drivers, and laborers. In the summertime the public works department hires anywhere from 2-4 part-time workers (high school or college students) for increased needs. Public works has historically been responsible for a variety of duties including but not limited to: grass cutting, field & park maintenance, facility maintenance, stormwater management, slow plowing, salting, minor road maintenance, and mechanical maintenance of public works and fire department vehicles.

In 2009, the Township brought the trash collection services into the public works responsibility including trash, recycling, yard waste and metal/bulk pick up. Given the cost savings and success of this program, Logan Township has entered into shared services agreements with the Boroughs of Swedesboro and Wenonah, and Townships of East Greenwich, Harrison, Woolwich, and Woodstown for collection services for trash, recycling, and bulk waste.

In 2015, a municipal storage building was constructed at the Logan Municipal headquarters located at 125 Main Street, Bridgeport, NJ, for the Department of Public Works to store vehicles and equipment. In terms of vehicular equipment, the department operates with the following:

- Seventeen (17) Trash vehicles
- Three (3) Dump trucks
- Two (2) Utility Trucks
- Ten (10) Pick Up trucks
- One (1) Stake Body Truck

As Logan Township continues to develop, it is anticipated that the Public Works Department will grow as the needs develop for both staff and equipment.

7.0 Utilities

Within Logan Township, the community is served by the following general utility providers:

Electricity – Atlantic City Electric
Natural Gas – South Jersey Gas
Cable Television – Comcast Cable
Water – New Jersey American Water*
Sanitary Sewer – Logan Township Municipal Utilities Authority (MUA)

*New Jersey American Water is the water service provider throughout the Township through two (2) Public Water Systems known as the Bridgeport System and the Logan System. However, at this time some of the actual system assets are owned by Logan Township.

Sanitary Sewer conveyance and treatment provided by the Logan Township MUA in conveyed through gravity piping, force main piping and pump station systems throughout the Township and is treated at the Treatment Plant facility located off Route 130 and the Jefferson Lane Easement.

Storm Sewer conveyance/storage and water quality facilities on publicly owned property and public roadway right of ways are maintained by the Logan Township Public Works Department. Throughout residential subdivisions and commercial/industrial businesses there are pockets of privately owned and maintained stormwater conveyance/storage systems and water quality basins.

8.0 Profile of Economic Conditions

From the standpoint of total employment, Gloucester County and Logan Township are showing signs of a stable economy. The Delaware Valley Regional Planning Commission (DVRPC) projects employment and population forecasts to 2045. Logan Township's employment and population are expected to have a 20.56% and 20.39% change from 2015 to 2045. This follows suit with the County numbers which indicate an employment change of 29.39% and a population change of 29.10% from 2015-2045.

Gloucester County

Gloucester County is an attractive location in Southern New Jersey for the development of business interests. Its proximity to major market, places the County in an excellent position to continue to attract industrial and commercial growth. The County's economic strength lies in the continuing expansion of the wholesale trade, transportation and warehousing sectors.

The civilian labor force in Gloucester County has steadily increased over the last thirty years and is projected to continue its growth, albeit at a slower pace. The DVRPC is projecting approximately a 29% increase in the County's civilian labor force between 2015 and 2045, which translates to a growth rate of about 1% annually.

Table 15

Civilian Labor Force						
Estimates Projections						
	2015	2020	2025	2035	2045	
Gloucester County	121,382	128,161	134,902	147,682	156,686	
Logan Township	9,726	10,183	10,529	11,277	11,726	

Source: Delaware Valley Regional Planning Commission, DVRPC

Logan Township

a. General Development Plans

Since 1979, four industrial complexes have been granted general development plan (GDP) approval in the Township, and there approval and construction has significantly impacted the Township's and the County's economy.

The GDPs include:

- 1. Pureland Industrial Park was previously granted GDP approval for an over 1,500-acre industrial complex. The approval includes lands classified as a planned commercial development and as a planned industrial development. Pureland is situated off interchange 10 of Interstate 295. The resolution does not include an expiration date for the GDP and legal interpretations have concluded that Pureland is subject to the ordinance regulations in place at the time of the GDP approval. Currently, Pureland consists of 13,000,000 square feet of building space which constitutes about 83% of the available land for development. Before the recent downturn in the economy, Pureland had generated about 8,500 jobs.⁸ Another 3,269 jobs are projected when Pureland reaches full build-out.
- 2. Previously, a GDP for a Planned Industrial Development on approximately 302.52 acres located at the intersection of Route 322 and Interstate 295 was approved by the Township. The application was filed by Prentiss/Copley Investment Group and the project is currently referred to as the Commodore 295 Industrial Park. The GDP approval expired in 2012 and the underlying zoning will guide development at this time. Consideration should be given to updating the expired GDP to promote future development.
- 3. The Township previously approved general development plan for a Planned Industrial Development on approximately 1,100 acres located on parcels east of Interstate 295 and bounded by Center Square Road, Oldmans Creek, and the Conrail right-of-way. The approval was for conceptual plan only due to the magnitude of the project. The approval was granted for twenty years from the date the applicant receives final approval for the first section, site plan and/or subdivision of the planned development. The application was filed by CNE-NEBC Land Limited Partnership and the development is currently referred to as LogistiCenter of Logan. Roughly 540 jobs have been generated, and it is projected that when the remaining 3,000,000 sq. ft is constructed, an additional 2,250 jobs will be created. Pursuant to one of the recommendations of the 2010 Master Plan concerning Logisticenter, Ordinance #04-2016 was

⁸ Jobs estimates do not include temporary jobs associated with the development and construction of buildings within Pureland.

adopted on June 21, 2016 to create a new zoning district for the Logisticenter which has assured the completion and occupancy of the development.

4. A general development plan was recently approved for a Planned Industrial Development and retail stores located on the western side of Route 322, bound by a Conrail right of way to the north, and I-295 to the south. The development contains nine buildings, representing more than 3 million square feet of warehousing and commercial space. In addition to Logan North, another GDP is currently in design for the opposite side of Route 322, known as Logan South.

b. Employment

The development of the warehousing, including strategic distribution centers, and industrial areas in Logan Township have helped the Township maintain a stable economy. Emblematic of this fact is the construction of a 1 million square-foot Amazon fulfillment center in Logisticenter and the fact that the Township projects 6.2 million sq. ft. of commercial and industrial development from 2019 to 20349. A consequence of this warehousing development is that the unemployment rate in Logan has consistently remained lower than that of the County and the state (see Table 17 below). Similar to trends in both the County and the State, the unemployment rate in Logan, since 2015, has continuously declined.

Table 17

		-					
Unemployment Rates							
2010 2015 2016 2017 2018							
Logan Township	7.4%	8.0%	6.3%	5.2%	4.4%		
Gloucester County	8.2%	9.2%	8.1%	7.4%	6.3%		
New Jersey	7.8%	8.8%	7.9%	7.0%	6.1%		

Source: New Jersey Department of Labor and Workforce Development

According to the 2018 ACS, the majority of jobs in Logan were in three industries: Educational services, and Professional, scientific, and management, and administrative and waste management services; Wholesale and Retail Trade; and Manufacturing. As shown on Table 18, this is generally consistent with the industry distribution of surrounding municipalities.

⁹ Estimate provided in the Logan Township Fire Company Fifteen-Year plan

Table 18

Percent Distribution of Employment by Industry, 2018						
	Logan		Greenwich	Woolwich	Oldmans	Gloucester County
Industry Code	Jobs	%	%	%	%	%
1	92	2.8%	1.7%	2.0%	5.7%	0.7%
2	245	7.4%	4.4%	3.5%	10.3%	6.6%
3	356	10.7%	13.3%	10.7%	15.2%	7.6%
4	126	3.8%	5.1%	4.6%	3.8%	4.0%
5	312	9.4%	8.6%	10.3%	7.3%	11.4%
6	121	3.6%	5.5%	2.9%	8.2%	5.6%
7	60	1.8%	1.4%	1.6%	0.0%	2.1%
8	238	7.2%	8.0%	9.3%	12.7%	6.9%
9	406	12.2%	8.1%	12.6%	7.5%	11.2%
10	857	25.8%	23.5%	28.0%	14.6%	27.9%
11	162	4.9%	8.3%	7.5%	6.9%	7.4%
12	191	5.7%	6.0%	3.4%	2.9%	4.0%
13	159	4.8%	6.0%	3.5%	5.0%	4.7%

Source: 2018 United States Census, ACS

Industry Codes: 1 – Agriculture, Forestry, Fisheries & Mining, 2 – Construction, 3 – Manufacturing, 4 – Wholesale Trade, 5 –Retail Trade, 6 - Transportation and warehousing, and utilities, 7– Information, 8 – Finance and insurance, and real estate and rental and leasing, 9 – Professional, scientific, and management, and administrative and waste management services, 10 – Educational services, and health care and social assistance, 11 – Arts, entertainment, and recreation, and accommodation and food services, 12 – Other Services, except Public Administration, 13 - Public Administration

Table 19 provides a list of the significant employers in Logan Township according to the 2019 Logan Township Employer Transportation Survey.

Table 19

Largest Non-Governmental Employers in Logan					
Name	Nature of Business	No. Employees			
Missa Bay LLC Plant 4 aka Ready	Foodservice	650			
Pac/Bonduelle					
Chelten House Products, Inc.	Foodservice	350			
Rastelli Fine Food aka Rastelli Bros Inc.	Foodservice	210			
Custom Building Products	Manufacturing	163			
Heritage Bag	Manufacturing	160			
Alberts Organics	Distribution	155			
Cardinal Distribution (aka Cardinal Health)	Distribution	147			
Vistar aka Performance Food Group	Distribution	115			
Jack & Jill Ice Cream Co.	Distribution	100			
Powell Electronics	Manufacturing	94			

Source: 2019 Logan Township Employer Transportation Survey

The Delaware Valley Regional Planning Commission (DVRPC) projected an increase of approximately 700 jobs in Logan between 2020 and 2030. While it would appear, there is no shortage of employment opportunities in Logan Township, employers have indicated an inability to fill some 600 open positions. The Township is actively working with employers to mitigate this ongoing issue.

c. Redevelopment

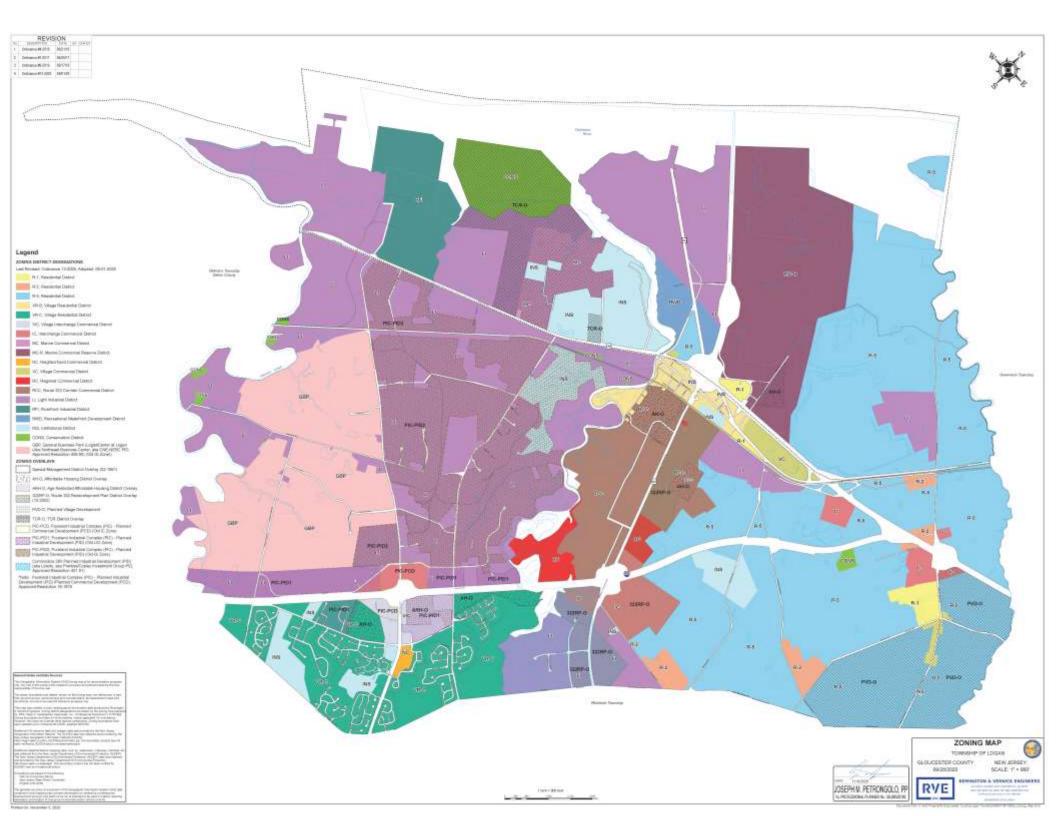
As illustrated on the **Existing Zoning Map**, there is one redevelopment area in the Township. The entirety of the eastern side of the Route 322 corridor was designated an Area in Need of Redevelopment as well as parcels with frontage on the western side of Route 322, south of the I-295 interchange. A Redevelopment Plan was adopted in 2002 and subsequently amended in 2010.

Including additional parcels in the Route 322 Corridor Redevelopment Plan could benefit the warehouse and industrial development that is proposed in the Logan South and North industrial parks. Currently, a redevelopment plan exists for some of the parcels included in the Logan South GDP proposal, but this could be resolved through a new preliminary investigation and redevelopment plan that encompasses the entire area of Logan North.

In 1991, the Township created the Special Management Overlay District encompassing the land between Route 130 and the Delaware River. Due to special characteristics, the properties were deemed suitable for treatment under the Blighted Area Act, Redevelopment Act and the Urban Renewal Corporation Association (Fox-Lance) Law. This district, akin to what in present day would be referred to as "An Area in Need of Redevelopment", has special characteristics that have yet to be fully redeveloped and will play a large role in the future planning and development of Logan Township.

Raccoon Island, located on the banks of the Delaware River, adjacent to Route 322 and the Commodore Barry Bridge has been identified as an area of the Township that should be a focus of redevelopment. The Township is in the process of assessing the redevelopment criteria for determining if the area would qualify as "An Area in Need of Redevelopment".

While it will be important to maintain consistency with adjacent land uses, prevent land use conflicts, and control truck traffic related to the continued expansion of warehouse development, consideration should be given to establishing additional redevelopment areas adjacent to major intersections.



GOALS & OBJECTIVES

The Municipal Land Use Law (MLUL) requires that all Master Plans contain a specific statement of principles, assumptions, policies and standards upon which the physical, economic, and social development of the municipality are based. The following goals and objectives, which have been carried forward from the previous Master Plan, satisfy this requirement and provide the foundation of this Master Plan.

Goal 1: Continue to have a balance of uses throughout the community to preserve the tax basis.

Objectives:

- Capitalize on the success of logistical distribution facilities within the Township and support similar uses and activities along the Route 322 corridor.
- Ensure the existing industrial and commercial base and balance is preserved and competitive.
- Support pragmatic and thoughtful development of residential uses, including affordable housing, that is consistent with Logan's character; that provides labor resources for the commercial and industrial base; that allows for a range of housing options to the residents throughout the age and income spectrum; and that promote and further the concept of responsible fiscal management and affordability for all of the residents.
- Amend the Logan Township Zoning Map to reflect the future vision for the Township.

Goal 2: Preserve Logan Township's Character

Objectives:

- Conserve woodlands and wetlands, minimizing disruption of environmentally sensitive areas.
- Protect and enhance the historic character of the Village of Bridgeport
- Protect the existing "village" and "environs" development pattern in the Township.
- Encourage the continuance of agricultural uses and preservation of open space in the Township.

Goal 3: Enhance the environmental quality of the Township and the environmental health of the existing and future residential populations.

Objectives:

- Preserve and protect environmentally sensitive wetland areas.
- Develop methods to ensure contaminated materials will not be deposited in the Township
- Continue to encourage the acceleration of identifying and cleaning up toxic waste disposal and contaminated sites and ensure that residential development takes place only in areas with no elevated exposure hazards.
- Be cognitive of Environmental Justice issues and develop controls and practices that are protective of those socioeconomic groups most at risk.

Goal 4: Accommodate growth

Objectives:

- Support the development of both affordable and market rate housing for residents of the Township and other New Jersey regions in appropriate locations in the Township.
- Continue to provide a balanced development of compatible land uses in the Township.
- Capitalize on waterfront access and encourage suitable waterfront development activity that creates large-scale, safe, unrestricted recreational access to the Delaware River for future generations.
- Provide balanced vehicle circulation in residential and commercial areas to avoid congestion, promote vehicle safety, and provide easy access for emergency vehicles.
- Promote the health, safety and welfare of existing and future Township residents by preventing residential development of contaminated sites and/or areas associated with disproportionate exposure or health risks relative to the existing population base and large residential population centers.

Goal 5: Provide Sound Fiscal Management

Objectives:

- Encourage development that produces tax surpluses, economic stability and job opportunities.
- Stage capital expenditures to coordinate services with identified needs.
- Encourage efficiencies of design in new developments to minimize public service costs.
- Where mutually beneficial, encourage interlocal agreements to reduce local costs for services.

LAND USE ELEMENT

As discussed in the Existing Conditions analysis of this Master Plan, there has been considerable development in Logan Township since the adoption of the 2010 Master Plan. The 2010 Master Plan set forth specific objectives for land use which addressed not only the changes in the Township but also the policies set for the by State through the New Jersey State Development and Redevelopment Plan. Over the last 10 years, many of the recommendations have been accomplished by the Township and are no longer applicable. This Master plan builds on the Townships previous accomplishments and establishes recommendations for the next ten years and beyond.

Although the UDO has been revised throughout the years, one of the primary purposes of this Master Plan, and specifically the Land Use Element, is to provide the necessary clarifications to guide amendments to the UDO and other ordinances and policies to reflect the future vision for Logan Township.

While some of the recommendations in this Land Use Chapter are substantive in nature others are corrections of errors that are contained in the UDO and other ordinances.

A. Zoning Map Recommendations

Route 322 Corridor

Ordinance 9-2019, rezoned most, of the Route 322 Corridor to RCC. This helped provide consistent standards throughout the Logan North GDP and the anticipated Logan South GDP. Consideration should be given to designating additional parcels as an area in need of redevelopment or rezoning additional parcels as RCC.

Repaupo

In 2005, due to a settlement agreement, the Township passed an ordinance establishing the Planned Village Development (PVD) Overlay Zone District. The overlay zone is bound by I-295 to the north, the municipal boundary with East Greenwich Township to east, the municipal boundary with Woolwich Township to the south, and Hendrickson Mill Road (County Route 670) north to the intersection with Paulsboro Road (County Route 653), north along Paulsboro-Swedesboro Road until its intersection with Repaupo Station Road (County Route 684), and then north until its intersection with I-295. As the settlement agreement had since been invalidated in court, this zone is no longer legal and should be removed from the Zoning Map. With the removal of the overlay zone, parcels will revert to their underlying zone, the vast majority of which are zoned R-5.

TCR Overlay

In 2010, wishing to restore the zoning of the majority of the Raccoon Creek Site back to industrial and marine commercial but being mindful of the settlement agreement that came out of 2005 Builders Remedy Lawsuit, the Township established the Town Center River Overlay Zone District in an area along Raccoon Creek. This overly zone copied the standards of the previous Town Center River District (TCR) and created an overlay so the underlying property could be rezoned. The area is generally bound by the Delaware River to the west and north, Raccoon Creek to the north, and US Route 130 to the south, as depicted on the Township

Zoning Map. As the settlement agreement has since been invalidated in court, this zone is no longer legal and should be removed from the Zoning Map. With the removal of the overlay zone, parcels will revert to their underlying zone, which includes MC - Marine Commercial, CONS - Conservation, INS - Institutional, and LI - Light Industrial.

Affordable Housing

Affordable housing details are contained in the Township's Housing Element and Fair Share Plan.

Split-lot Zoning

In reviewing the zoning map for Logan Township, there are some lots that are located in two or more zoning districts. These types of lots are called split lots. Split lots present problems for the Township and the property owner. For example, it is hard to determine where the actual "split" is which can encumber the development approval process. A recommendation of this Land Use Element is to resolve inappropriate split lots within the Township.

B. Policy Recommendations

Sustainability

The Township should consider adapting policies to support the development of green infrastructure and other types of sustainable infrastructure. Preparation of a Green Buildings and Environmental Sustainability Plan Element can provide a framework for the Township to implement sustainable development regulations.

Focus Development Away from Interstate Exit 10

The Township desires to maintain the existing open land around Interstate I-295 Exit 10, for future ramp improvements. The current conditions of the exit ramp from 295 to Center Square Road are insufficient as there is frequent backups and congestion. Maintaining the land around these exits will allow the Township to restructure the movements of vehicles to reduce traffic congestion and provide a safer route of accessing Center Square Road and the Township as a whole.

Raccoon Island

Raccoon Island is a largely vacant stretch of land located north of Route 130, west of Route 322, east of Raccoon Creek, and south of the Commodore Barry Bridge. Specifically, Raccoon Island is comprised of portions of Block 302, 303, 304, 305, and 307. It is recommended that the Township investigate strategies for the area's potential redevelopment.

Park and Ride

The Township intends to partner with a private vendor to create a municipal park and ride facility, since there is a lack of parking spaces available for employees at most commercial sites. The Township should

consider various township-owned locations to construct parking lots to allow for a transportation system to be implemented at these locations.

Municipal Truck Route System

It is recommended that a Municipal Truck Route system be established pursuant to N.J.S.A. 40:67-16.1. The Municipal Truck Route system will designate streets or parts of streets as Routes for Vehicles Over 4 Tons. All trucks having a total combined gross vehicle weight (GVW) of vehicle plus load in excess of 4 tons shall be excluded from all municipal streets, except from those municipal streets listed, State Highways, and County Roadways, which form part of the truck route system. Vehicles will be permitted on all streets for the purpose of the pickup and delivery of materials.

Redevelopment

While it will be important to maintain consistency with adjacent land uses, prevent land use conflicts, and control truck traffic as warehouse development expands throughout the Township, consideration should be given to establishing additional redevelopment areas adjacent to major highway intersections.

C. Ordinance Recommendations

Organization of the UDO

The current UDO exists in two separate parts: Book 1 of 2 includes Articles I-X & Zoning Map, and Book 2 of 2 includes Appendices A & B, providing a historical context and previous zoning standards. It is recommended that, where practical, these separate books be combined.

Non-Residential Districts

Individual single-family dwellings or small pockets of such dwellings whose construction pre-dates the adoption of current zoning regulations, exist within these non-residential districts. These residences are considered non-conforming uses and are subject to strict limitations on expansion and reconstruction. The Township should consider the need for relief to allow for the expansion, reconstruction or minor subdivision of these parcels. Any subdivision or construction project should be consistent with any neighboring residential development. Under no circumstances should consideration be given to an exception of residential uses within the Conservation or Institutional Zones.

Signs

a. Multi-Tenant

Signage regulations for multiple occupant/tenant (MOT) should be refined to clearly indicate when multiple signs are permitted, be if multitenant are located in one structure or separate structures. Additionally, multiple occupant/tenant (MOT) should be clearly defined to help address this issue regarding permitted signage.

b. Addressing

On larger buildings it is difficult for the fire department to find addresses. Addresses should be clearly visible upon approach and consideration should be given to permitting/requiring address numbering to be located at the top of building. Consider requiring building addresses to be located at the most easily visible top corner of all buildings.

c. Digital Display

Digital Display signs are becoming more popular in certain industries and have a different impact on neighboring properties and roadways than standard non illuminated signs. The Township should implement standards in the UDO regulating the use of digital display signs and their impact on roadways and adjacent properties.

d. Billboards

The Township should consider the benefits of permitting commercial billboards along major corridors throughout Logan.

Impervious Coverage Regulation

While many zoning districts in the UDO contain a maximum impervious coverage calculation, some residential districts do not have impervious coverage regulations. It is recommended that all zoning districts contain impervious coverage standards. In order to ensure that stormwater run-off does not flow onto adjacent properties, consideration should be given to requiring a residential grading plan when proposed sheds or other accessory uses exceed 250 sf.

Outdoor Storage of Materials

The Township has been facing problems with unsightly laydown yards and outdoor storage of materials. This should be closely examined throughout the UDO. Consideration should be given to requiring screening of materials to reduce unpleasant views around the Township. The storage of outdoor materials should also only be permitted when associated with a principal use.

Solar Panel Regulation

The Township should consider establishing regulations in the UDO which guide construction of solar panels. Solar panels are becoming more popular on the roofs of single-family dwelling units and carport type garages in parking lots. The Township has an opportunity to regulate solar facilities in the manner that will be most aesthetically pleasing to residents and the surrounding community.

Conservation Zone

Consideration should be given to a review of permitted uses within this zone.

Stormwater Regulations

New storm water regulations were promulgated by the State and will be enforced by the New Jersey Department of Environmental Protection. These regulations will impact how a community plans to address water quality issues and further support the implementation of "Green Infrastructure" as a means of meeting groundwater recharge standards and stormwater runoff quality standards. The Logan Township Planning Board Engineer, or a designee, shall attend the NJDEP stormwater design course to effectively regulate developments per the newly released regulations. Additionally, it is recommended that members of the Township Planning and Zoning Boards and Public Works attend stormwater management training, and consideration be given to maintenance of Township facilities as it relates to stormwater runoff. The Township should draft new regulations which will be in compliance with new regulatory requirements.

Residential Setback Requirements

It is recommended that the residential setbacks of the VR-C zone be reviewed and potentially amended for consistency with actual conditions and historically recommended use variances.

Prohibited Use

The Township should investigate and determine at what point, above a certain threshold level, the storage of combustible materials (more specifically fuel tanks for trucks and generators) should be prohibited.

Design Standards

We recommend the Design Standards of Article V of the UDO be reviewed with the Township engineer and public works department to ensure that current standards and practices are properly reflected for proposed publicly owned property and rights of ways.

Electric Vehicle Parking Ordinance

As electric vehicles become more common today, many businesses are providing parking spaces for charging electric vehicles. These spaces are typically reserved for electric vehicles only and it is recommended that the Township establish regulations within the UDO to encourage smart growth, ensure adequate parking availability, and balance parking needs with other community goals.

Minimum Parking Requirements for Industrial and Commercial Uses

It would appear that certain industrial/commercial uses do not require sufficient parking. The Township should reevaluate the number of required parking spaces for all industrial and commercial uses in order to provide an adequate number of spaces for employees, visitors, and expected freight vehicles.

Miscellaneous

During the UDO revision process inconsistences, errors, or omissions may be discovered. In order to prevent any confusion or incomplete sections of the amended UDO, it is recommended that the Township

address any errors or omissions during this revision process. Additionally, deletion of unnecessary zoning districts and modified incorporation of the GDP bulk and area criteria is recommended to be addressed.



CIRCULATION ELEMENT

A. Roadways

Many of the 2010 Circulation Plan recommendations that have not been completed to date remain within this current Circulation Element.

1.0 Major Regional Highways

Logan Township is served by three major regional highways which crisscross the Township and divide the Township into 6 areas, each with their unique characteristics.

Interstate 295

Interstate 295 is a limited access highway which divides the east and central sections of the Township and provides the Township with three interchanges. Center Square Road (Interchange 10), Rt. 322 (Interchange 11), and Repaupo (Interchange 14). This highway provides access to and from the Township to major east coast cities such as Wilmington/Baltimore to the south and New York to the north.

- The Center Square Road interchange serves the Pureland Industrial Park, one of the largest of such facilities in the State of New Jersey and the Logan and Woolwich Township's major residential developments at Beckett and Weatherby.
- Rt. 322 interchange serves the Commodore 295 Industrial Park with access to the New Jersey Shore Communities to the southeast and to Pennsylvania communities and Interstate 95 to the northwest.
- The Repaupo Interchange provides access to Floodgate Road which serves one of the original residential/industrial districts of the Township as well as Swedesboro, the original residential/commercial districts in adjacent and rapidly developing Woolwich Township and Greenwich Township.

Route 130

Route 130 is a state highway which shares the Rt. 295 right of way in the northern part of the Township and is classified as a principal arterial highway. In the northern half of the Township, Rt. 130 leaves the Rt. 295 south right of way to become an independent multilane highway. South of Rt. 322 the highway is classified as a minor arterial. It basically divides the Township's central area from the riverfront sections. Prior to the development of the Interstate Highway system (Route 295) in the 1950's, this highway was traditionally the major north - south roadway serving the Bridgeport section of the Township and linked Bridgeport to cities to the north and south in New Jersey. Today this highway basically serves industrial/commercial and residential properties located along the road and as a connector between the Pureland Industrial Park and the Commodore Barry Bridge.

The replacement of the draw bridge and the realignment of Main Street and Island Road has been completed by NJDOT, and a Fishing Pier was constructed at the end of the roadway.

Route 322

State Route 322 is a major east-west highway classified as a principal arterial highway which divides the Township in half and serves as the major connection linking New Jersey to Pennsylvania.

Route 322 traditionally served as the east-west highway through the Township linking Bridgeport and other New Jersey destinations in the East to Pennsylvania.

The evolution of the road network in Logan Township has been influenced primarily by regional factors. The existing transportation system is composed primarily of major-minor collectors which serve through traffic to and from Pennsylvania and Woolwich Township, and the large volumes of traffic generated at Logan Township's industrial parks (Pureland Industrial Park, LogistiCenter and Commodore 295 Business Parks). The minor roads located in the Township generally service local traffic.

A corridor study was conducted by NJDOT for this major connector road between Pennsylvania and the New Jersey shore. The four-lane section of highway between the railroad tracks and Rt. 295 is actively under construction.

2.0 Minor State Highways

Logan Township has multiple minor state highways which currently feed into the major roadway system.

NJ Rt. 44

A two lane roadway connecting Gibbstown/Greenwich Township to Bridgeport and Repaupo (via Repaupo Station Road). Access to Rt. 322 (north) is via Springers Lane/Hansons Row/Barker Ave/Rt 130. Access to Rt. 322 (south) is via Main Street/S. Bridgeport Rd. Access to Rt. 130 (north) is via Barker Ave (north) while access to Rt. 130 (south) is via Hansons Row/Barker Ave. For a section of the highway between Repaupo Station Road and the Route 130 Interchange, Rt. 44 is paralleled by Cedar Swamp Road. Cedar Swamp Road also provides access to Rt. 130.

NJ Rt. 324 - Ferry Road

This section of highway originally served as the main access road to the Delaware River Ferry and serves the waterfront, minor industrial and residential development. The roadway is currently closed to traffic and has been predominantly turned over to the Township of Logan for maintenance and control.

3.0 County Roads

Repaupo Station Road (Rt. 684)

This is a north-south road that connects with Swedesboro Paulsboro Road (Woolwich Township) and Rt. 295/130. This section of the Township has the potential for residential growth considering its access to Rt. 295/130. Roadway widening and potential traffic signals may be warranted at Rt. 44 and Paulsboro Road should substantial development occur.

Paulsboro Road (Rt. 653)

This county arterial highway section leading from Swedesboro and intersection to Hendrickson Mill Road (Rt. 670), and Repaupo Station Road leading to Rt. 295/130 and continues east into to connect to Greenwich Township.

Hendrickson Mill Road (Rt. 670)

This county road connects County Road 669 (Stone Meeting House Road) with Rt. 44 through a minor frontage road and Oak Grove Road Rt. 671.

Oak Grove Road (Rt. 671)

This county road extends from Rt. 44 to County Road 669 (Swedesboro Paulsboro Road/Stone Meeting House Road) and from County Road 669 to U.S. Route 322.

Stone Meeting House Road (Rt. 669)

This county road serves as the southern border of the Township (with Woolwich Township) and connects to Paulsboro Road which leads down to Rt. 322. This roadway ultimately ends at the Commodore Business Park (Arlington Boulevard, Commodore Drive, and Exeter Court).

High Hill Road (Rt. 662)

This county road connects Swedesboro and Woolwich Township with Rt. 130 and serves as an industrial and residential collector road. The road nearly parallels Center Square Road (Rt. 620). The northern section of the road, between Rt. 295 and Rt. 130 serves the Pureland Industrial Park while the southern section of the road serves a growing residential population.

Center Square Road (Rt. 620)

This county arterial road serves as Logan Township's main street as it passes through the center of the Township's major residential/commercial sections and as an approach to Interchange 10 of Rt. 295. This road also handles traffic from the growing neighboring residential sections of Woolwich Township and Logan Township's industrial parks. The northern section of the road, between Rt. 295 and Rt. 130 serves the Pureland and Northeast Industrial Parks while the southern section of the road serves a growing residential/commercial population.

Pedricktown (Rt. 601)

This lightly traveled County Road travels east and west and connects Harrisonville Road with Center Square Road.

Harrisonville Road (Rt. 602)

This lightly traveled County Road runs parallel with Center Square Road through the Township from Pedricktown Road to Township Line Road. LogistiCenter has just recently extended Commerce Drive through to this road and there is a potential that the section between Commerce Drive and Beckett Road will become an alternative route to Rt. 295 north.

4.0 Township Roads

In 2005, the Township roadways were reviewed for short-term and long-term needs for the creation of a 15-year pavement management program referred to as the 15-Year Pavement Management System 2006-2020 (hereinafter referred to as the PMS Report).

The report provided a comprehensive planning tool to guide the management of road asphalt maintenance. Proper and regular road maintenance extends the lifetime of most pavement types and reduces costs, by reducing the frequency of reconstruction and emergency maintenance. The most effective tool to maximize roadway maintenance budgets is a Pavement Management System (PMS). The principal goal of a PMS is to extend the useful life of the local roadway system.

A roadway full of cracks, potholes and puddles costs a considerable amount of taxpayer dollars to restore to an acceptable condition. With the establishment of a regular pavement maintenance program, streets are periodically maintained using sealing and resurfacing methods. Eventually, very few roads would ever exhibit significant deterioration. The costs of pavement maintenance techniques, such as seal coating and resurfacing, are small in comparison to the full depth reconstruction of a roadway. By periodically investing in lower cost improvements, such as seal coating and resurfacing, municipalities may significantly decrease the need for costly reconstruction measures. For this reason, regularly scheduled, cost-effective maintenance improvements can improve the quality of a roadway system, while reducing the total cost to the municipality.

The PMS Report provides a tentative schedule of improvements, recommends the road maintenance and repairs to be made over a period of time determined by the Township. After initial maintenance techniques are assigned, the repairs are spread out over the life of the PMS based on planned municipal expenditures and road conditions. The Township determined that a 15-year program would best fit the needs and yearly budget.

The PMS report is not a stand-alone guide as roadway conditions will continue to change. The report is used as a guidance document for annual budgeting as well as roadways viewed to improvement in a given year and given condition. For the past several years the township has used this guide and is well underway to township-wide pavement management. The PMS report has received preliminary updates with roadway amendments.

Annually the Township applies for New Jersey Department of Transportation Municipal Aid funding for those locally owned roadways used for more than simple residential traffic. The Township has been very successful the past several years and we recommend the Township continue to apply for these grants in the future.

Beckett Road

This two-lane road connects Harrisonville Road, Center Square Road, and High Hill Road. This road serves a large and growing residential and commercial population. Currently the intersection of Beckett Road and Center Square Road serves as the Township's main intersection with the Township's major shopping center on the southeast corner, the Township library on the southwest corner, a medical center on the northwest corner and an additional shopping center on the northeast corner.

Beckett Road is currently undergoing traffic calming improvements that include restriping and redesign of the roadway to create a safer environment for the residential areas nearby. Additionally, lighting improvements have begun along this two-lane corridor.

Beckett Road East of Center Square Road

South Side - This section of Beckett Road serves the Township's major shopping center, a large townhouse development, minor commercial developments and vacant/underutilized lands.

North Side - This section of Beckett Road serves a small shopping center, a growing cul-de-sac pad based commercial development, growing office developments, and vacant/underutilized land which can be used as industrial or interchange commercial development.

This section of Beckett Road serves as a connector between Center Square Road and High Hill Road where there are major residential developments to the south and the industrial parks to the north.

Beckett Road West of Center Square Road

South Side - This section of roadway currently serves two existing residential developments, an athletic complex and vacant land which can be developed residential.

North Side - Along the south side of the road, there is a new residential development, church facilities, a fire house and large tracts of underutilized/vacant lands.

This section of Beckett Road serves as a connector between Center Square Road and Harrisonville Road where there are major residential developments to the south and the industrial parks to the north.

Floodgate Road

Floodgate Road is a north/south street connecting the north Waterfront section of Logan Township to Rt. 295/130 and eventually via County Route 684 Repaupo Station Road to Swedesboro Paulsboro Road. This roadway serves an industrial/waterfront and auto racetrack as well as scattered residential development.

Cedar Swamp Road

Cedar Swamp Road generally parallels Rt. 44 between Floodgate/Repaupo Station Road - Rt. 684 and Oak Grove Rd. - Rt. 671. This two-lane road serves some scattered residential and commercial development and provides access to and from Rt. 130 south and north. The road is in fair condition.

Lamson Ave.

Minor local access two-lane dead-end road.

Barker Ave

Barker Avenue is a two-lane road recently resurfaced, which serves as connection to the following areas:

- Rt. 130 North exit (close to the Rt. 322 exit onto Rt. 130) to Main Street and Rt. 44 in downtown Bridgeport.
- Main Street and Rt. 44 in downtown Bridgeport. to the Rt. 130 North entrance
- Rt. 130 South exit to Springer's Lane/Hansons Road which is connected to Main Street and Rt. 44 in downtown Bridgeport.
- Springers Lane/Hansons Row (which connected to Main Street and Rt. 44 in downtown Bridgeport) to Rt. 130 South entrance.
- A minor local access dead end road.

Hansons Row Road/Springers Road - Rt. 44

This two-lane road connects Crown Point Road - Rt. 44 with Rt. 130 South and Rt. 322 as well as Old Ferry Road Rt. 324. Hansons Row has been recently resurfaced.

Island Road

This two-lane road connects Ferry Road - Rt. 324 with Rt. 130 South. This roadway is in poor to fair condition however adequately serves the current traffic.

Main Street

This street connects from Island Road – Rt. 324 to Rt. 44 and serves as the Main Street through downtown Bridgeport, the historical center of Logan Township. This roadway intersects with Barker Avenue to allow access to Rt. 130 North. The street has been recently resurfaced and provides adequate capacity.

Bridgeport Local Streets

These roadways are in decent condition

Heilman/Steelman Avenue

Minor local access two-lane dead-end road with cul de sacs located at either dead end.

South Bridgeport Road

This relatively minor road connects Rt. 322 to the downtown residential Bridgeport section of the Township.

Township Line Road

This road forms the southern boundary of the Township on the west side of the Township. This two-lane road runs east-west and connects High Hill Road and Harrisonville Road. The road serves residential developments in Logan Township and Woolwich Township as well as Recreational Facilities in Logan Township.

Stone Meeting House Road/Swedesboro Avenue

This road serves as the southern border of the Township with Woolwich Township and connects Paulsboro Road/Swedesboro Paulsboro Road with Rt. 322 and terminates at the Commodore Business Park (Arlington Boulevard, Commodore Drive, and Exeter Court).

Heron Drive

Heron Drive is lined with industrial development and the roadway links Harrisonville Road - County Route 602 on the west and High Hill Road-County Route 662 on the east.

Sharptown Road

This Township road is lined with industrial development and connects to Commerce Boulevard to link to Harrisonville Road - County Route 602 on the west and High Hill Road - County Route 662 on the east.

Commerce Boulevard

This road has been completed by Logisticenter and links Center Square Road - County Road 620, to Harrisonville Road - County Road 602. The roadway is in decent condition, and mainly serves the businesses in Logisticenter but has become a more widely used road due to the connection of both county roadways.

Coontown Road

Minor shortcut road between Stone Meeting House Road and Rt. 322 at Rt. 295 Interchange.

Village Center Drive

This street serves the Township's larger commercial developments from Beckett Road and Center Square Road.

Village Center Drive North - this dog leg section of road connects Beckett and Center Square Roads and has a cul-de-sac section (Village Center Court) of roadway which is planned to serve additional industrial/commercial development. Currently this road serves several pad site high usage commercial developments. The terminus of the road at Center Square Road allows for traffic movements from Center Square Road northbound and to Center Square northbound.

Village Center Drive South - this roadway serves the Village Center Shopping Center which consists of a major supermarket, bank and numerous restaurants, shops and offices as well as providing access to a major residential townhouse development.

Jackson Street

Minor local access two-lane dead-end road.

Mallard Court

Minor local access two-lane dead-end road.

Veterans Drive

Minor local access two-lane dead-end road.

Eagle Court

Minor local access two-lane dead-end road.

Hawk Drive

Minor local access two-lane dead-end road.

Osprey Court

Minor local access two-lane dead-end road.

Birch Creek Road

Currently this is a minor local access two-lane dead-end road with a cul-de-sac terminus. There is a paper street section of the road which exists from High Hill Road west to the wetlands.

Progress Court

Minor local access two-lane dead-end road.

Kildeer Court

Minor local access two-lane dead-end road.

Technology Drive

Minor local access two-lane dead-end road.

Jefferson Lane

Minor local access two-lane dead-end road.

Arlington Boulevard

Minor local access two-lane dead-end road.

Commodore Drive

Minor local access two-lane dead-end road.

Exeter Court

Minor local access two-lane dead-end road.

VR-B Zone Residential Streets

Off Center Square and High Hill Roads in the VR-B zone is the majority of the residential homes in the Township. There are many local streets in this area in fair to good condition and incorporated in the Township road maintenance program.

Eagle Farms	Cambridge Knoll	Hampton Ridge
Blue Jay Drive Cardinal Court Chickadee Court Eagle Run Goldfinch Court Mockingbird Lane	Salisbury Way Shallcross Pass Stone Henge Sussex Court Sussex Road	Abbey Lane New Castle Lane Quail Court Shire Lane Surrey Place
Mockingbird Court	Logan Woods	Foxtown Village
Oriole Drive Robins Run East Robins Run West Greenfields Andrew Court Bennett Court	Adams Street Hamilton Street Hancock Drive Madison Street Monroe Street	Canter Road Derby Road Fox Lane Hunters Road Saddle Lane Stirrup Road
Bordeaux Drive Bordeaux Place Burgundy Drive Catawba Drive Champagne Court Champagne Drive Concord Place Edward Drive Heidi Lane	Old Orchard Oakwood Place Peachwood Peachwood Drive Applewood Drive Birchwood Place Cedarwood Place Cherry Wood Lane	High Hill Farms Arrowood Place Cedar Place Chinaberry Lane Goldenrod Lane Harvest Road Hedgerow Drive (East)
Tioral Earlo	Shorry Trood Earlo	riougeron Billo (Edot)

Lvnn Place School Road Maplewood Place Hickory Lane Merle Lane Dogwood Place Honeysuckle Lane Elmwood Place Reisling Place Mulberry Lane Robert Court Hamilton Street Persimmon Place School Road Hancock Drive Sassafras Lane Sherry Place Madison Street Sweet Bay Lane Willow Place Monroe Street

B. Rail Service

Rail service to Logan Township consists of freight service along the Conrail right of way, which roughly parallels Routes 44 and 130. Rail spurs from this line provide direct connections into the developed light industrial areas within the Township.

C. Public Transit

Logan Township is served by New Jersey Transit buses which travel through the Walter Rand Transportation Center in Pennsville from Philadelphia and the Avondale Park and Ride. The following are the current bus routes:

- 402 Pennsville Route(s) that service stop Beckett Road and Center Square Road
- 402 Philadelphia Route(s) that service stop Beckett Road and Village Center Drive

D. Transportation Issues

For over two decades, Logan Township has seen tremendous growth in its industrial parks and a steady increase in job opportunities. The Township currently has 283 employers and approximately 15,000 jobs with only a population of approximately 5,900 residents.

Over the years, the Township has established a strong relationship with the corporate community and have worked with them to address their issues. The one primary issue that has been an open item is the lack of public transportation options in Logan Township and the surrounding counties. Therefore, we conducted a survey sent to every business entity within the Township.

The 2018 Transportation Survey revealed that the most compelling concern of each employer was that they were unable to maintain existing and/or fill new job positions with skilled and unskilled workers as a result of the employees' inability to have access to adequate public transportation, which would serve the industrial parks throughout the Township. Over 600 job openings exist in Logan Township due to inadequate public transportation, and this issue is not only limited to Logan Township. There are numerous municipalities in the tri-county area adjoining US Route 130, US Route 322 and Interstate 295 that are all experiencing the same dilemma.

Public Transportation is key to helping bridge the economic divide and bringing our available workforce together with our employers. With the existing job vacancies and the several hundred additional jobs to come from the significant construction efforts underway for additional facilities and for South Jersey, the Township should begin coordinating with South Jersey Transportation officials to provide funding and planning for a transportation initiative in Logan Township and the surrounding municipalities.

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E. Recommendations

1.0 Recommended Local Action

Pavement Management Report

Update the Pavement Management Report. The current 15-Year Pavement Management System was established for 2006-2020 and will need to be reviewed again for the next 15-Year period.

Private Road Use

Review the UDO and subdivision standards and amend as appropriate to ensure roads that are essentially for private use are maintained as private. The following regulations should be included:

- Industry cul-de-sac roadways essentially serve as driveways and should remain privately owned by the business or businesses maintaining use.
- Residential subdivision minor roadways not acting as collector roadways shall be privately owned by the associated Homeowners Association.
- New subdivision road(s) intended for public dedication shall not be dedicated or top-paved until all lots have been constructed on said road to avoid damage by major construction equipment. However, if the project is dormant or not completed within 1-2 years, top paving will need to be completed.

Transportation Initiative

As mentioned above in the Transportation Issues section, there are existing job vacancies at several business entities and several hundred additional jobs are anticipated from construction efforts underway.

The 2018 Transportation Survey, indicated a need for an Intra-County Public-Private Bus System, electric or natural gas powered, to serve Gloucester, Salem and Cumberland County. In just the review of Logan Township, it was recommended to complete the following transportation improvements:

- Added Monday-Friday run times on the 402 bus line
- Added weekend run times on the 402 bus line
- Bus Line service increase or a new line to cover the 322 Corridor
- New Bus Line or 401 Bus Line Modification for Salem to Logan Service
- Expansion of Shuttle service for Sunday
- Gaps in service filled-in for Monday-Friday service
- Replacement of lost foundation funding (2021) that is helping to support the current Monday-Saturday shuttle service

It is recommended that the Township engage in further conversations with public/private partnerships to solicit funding for additional transportation opportunities and improvements throughout Logan Township and the surrounding counties.

2.0 Transportation Policies

The following transportation policies are recommended for consideration by the Township:

- Street tree planting, street lighting, landscaping, sidewalks, curbs and bike paths shall be required where deemed necessary by the Planning Board.
- Public transportation should be encouraged in order to make the best use of existing resources and to provide improved access capabilities to residents.
- Sound attenuation provisions should be required for all residential developments adjacent to commercial developments or highways.
- Coordinate recommendations herein with the Gloucester County Planning Board and the NJDOT.

3.0 Ordinance Recommendations

The following recommendations are recommended for consideration by the Township, and may require a policy/ordinance amendment:

- Uninterrupted traffic flow should be maintained by prohibiting on-street parking and limiting access points from individual properties on collector and arterial streets.
- Off-street parking requirements should be sufficient to obviate the need for on-street parking.
- Regional and internal circulation systems should be designed to separate industrial, commercial and through traffic from internal residential traffic.
- Right-of-way and pavement width requirements as well as improvements specifications should be sufficient to assure that Township streets will be adequate to serve optimal traffic volumes which are generated both locally and regionally.
- New development in any form should have sidewalk along the frontage, unless otherwise waived. The Township should consider a township-wide sidewalk and lighting evaluation for pedestrian links.
- Increasing building setbacks to accommodate wider right-of-ways where right-of-way reservations are necessary.
- Requiring a turnaround area on all lots to prohibit backing out on a street.
- Development of criteria and guidelines for submission of traffic impact studies.
- Proposed developments should be required to pay the cost of their fair share of roadway improvements identified in the Township's Circulation Element.
- Blue hydrant reflectors should be required along all streets.

4.0 Recommended Roadway Projects

Center Square Road - County Rt. 620 and Interchange 10

This county arterial road serves as Logan Township's main street which passes through the center of the Township's major residential/commercial sections and as an approach to Interchange 10 of Rt. 295. This road also handles traffic from the growing neighboring residential sections of Woolwich Township and Logan Township's Industrial parks. The northern section of the road, between Rt. 295 (Heron Drive) and Rt. 130 serves the Pureland and Northeast Industrial Parks while the southern section of the road serves a growing residential/commercial population.

The major traffic congestion point in the Township is Interchange 10 of Rt. 295. This interchange provides primary egress and access for both residential and industrial uses in the Township. The interchange is not a full cloverleaf interchange and requires left turns onto Center Square Road from both the Northbound and Southbound exists. Traffic studies indicated that these left turn movements currently operate in a failed condition. This condition results in traffic by-passing these left turn movements and using Heron Drive/High Hill Road or Beckett Road/Harrisonville Road as alternate routes.

As documented in the 2010 Circulation Plan, past traffic studies completed by various commercial developments indicate that some traffic movements already experience failure and that in the future, delays at the ramps to Rt. 295 will increase and other movements will begin to fail. In order to avoid the use of Township streets as alternative roads for exiting interstate traffic, and to improve access to Township residents and businesses, the reconstruction of this interchange should be planned and development should be focused away from Interchange 10.

Commercial development around Interchange 10 has resulted in developer funded improvements between Interchange 10 and Beckett Road. In this section of roadway, the road has been realigned and widened, left turn lanes have been installed and extended, traffic signal timing modifications have been made at Beckett Road and a traffic signal was installed at Pureland Drive.

The County has also widened Center Square Road between Township Line Road and Shady Brooke Lane.

It is recommended that Township coordinate with NJDOT and the County to complete the total reconstruction of interchange 10. This reconstruction should include the widening of Center Square Road over Rt. 295 and developing the interchange into a full cloverleaf intersection. Should a full cloverleaf be an impractical addition, I-295 access points should be coordinated with the NJDOT to alleviate the congestion. Additionally, given the congestion, curb cuts at Center Square Road in the adjacent area should be minimized.

Center Square Road and Beckett Road

In order to serve the growing commercial and residential sections along Beckett Road, the intersection of Center Square Road and Beckett Road will also have to be widened to provide for independent left and right turning lanes as well as through lanes from the east approach on Beckett Road. This widening has already been completed for the west approach. It is recommended to complete the widening on the east approach, which will require property additions along the existing right of ways on Beckett Road as well as

a new traffic signal installation. Sidewalks on both the north and south sides of Beckett Road as well as crosswalks and pedestrian signals have been completed at the intersection.

It is recommended that Beckett Road from Pedricktown-Harrisonville Road Rt. 602 to Center Square Road Rt. 620 to not be a part of the Municipal Truck System. Therefore, trucks with the weight over 4 tons will not be able to turn down this section of Beckett Road. This will require coordination with the County to install signs at this intersection to prevent and enforce the trucks to not turn onto this section of Beckett Road.

As per the 2003 Circulation Plan, traffic studies by various developers also recommend that a traffic signal will eventually be warranted at Village Center Drive and Beckett Road. It is recommended that the Township conduct a traffic signal analysis to determine if one is warranted at this intersection.

Beckett Road

This two-lane road connects Harrisonville Road, Center Square Road and High Hill Road. This road serves a large and growing residential and commercial population.

In addition to the major intersection improvements at Center Square Road per the 2003 Circulation Plan, traffic studies indicated that a traffic signal should be planned for Beckett Road and Village Center Road. Currently, the light boxes have been installed, but it is recommended that the light placements be coordinated with PSE&G as that has not been completed yet.

It is also recommended to install a multi-way bike path along the southside of Beckett Road to allow access to the ballfields and the Library.

Repaupo Station Road - Rt. 684

It is recommended that this roadway be reviewed for possible intersection Improvements, roadway widening, and potential traffic signals at Rt. 44 and Paulsboro Road should substantial development occur.

Floodgate Road

Floodgate Road north of Rt. 44 should be repaved/reconstructed/improved to correct deteriorated sections. The majority of the roadway is in fair condition from a 1997 PSO project.

High Hill Road - Rt. 662

This county road connects Swedesboro Woolwich Township with Rt. 130 and serves as a major industrial and residential collector road. The road basically parallels Center Square Road - Rt. 620, through the Township. The use of this County Road as an alternative for traffic from the Industrial Parks on the north side of Route 295 to the Commercial/Residential areas and the northbound entrance to Rt. 295 is increasing. Traffic on this road will continue to increase as the residential/commercial and industrial communities continue to grow and traffic on Center Square Road increases. This alternative route will unfortunately increase traffic on Township owned Beckett Road.

It is recommended that the Township coordinate with Gloucester County about the negative impacts this alternative route for truck traffic would cause on Beckett Road and to propose the widening and improvement of Beckett Road. While this alternative route for truck traffic would have an extreme negative impact on Beckett Road, it would alleviate traffic along Center Square Road and provide better access to commercial and residential sections of the Township.

The northern section of the High Hill Road, between Rt. 295 (Heron Drive) and Rt. 130 serves the Pureland Industrial Park while the southern section of the road between Beckett Road and Township Line Road serves a growing residential population within Logan Township as well as Woolwich Township. The portion of High Hill Road between Heron Drive and Beckett Road links the Industrial area of the Township with the residential and commercial sections of the Township. Traffic on this section of roadway is anticipated to increase as the traffic on Center Square Road increases and the commercial development of Beckett Road/Village Center Road continues.

Various sections of this roadway have been improved and widened as residential developments were built along the road. However, it is recommended that the roadway in its entirety be reviewed and determine which other sections of the roadway will require widening and repaving in order to develop a uniform roadway section.

High Hill Road and Beckett Road

Traffic at this intersection has increased over the years as commercial development has increased along Beckett Road/Village Center Road and residential development increased along High Hill Road. This intersection is becoming a major junction point within the Township. Currently, this intersection is controlled by a stop sign on Beckett Road. The geometry of this intersection is skewed which causes difficulty with sight distance for turning movements. The realignment, widening and signalization of this intersection should be planned and coordinated with Gloucester County. Additional right of way may be required.

High Hill Road and Township Line Road

Traffic at this intersection will increase over the years as traffic increases on Center Square Road and alternate routes to the industrial parks and commercial developments on Beckett Road. Currently, this intersection is controlled by a stop sign on Township Line Road. The widening and signalization of this intersection should be planned and coordinated with Gloucester County.

High Hill Road and Sharptown Road

Sharptown Road aligns with the entrance to the LogistiCenter at Center Square Road. Sharptown Road/Commerce Boulevard is lined with industrial development and the combined roadways will eventually link Harrisonville Road - County Route 602, on the west and High Hill Road - County Route 662, on the east providing alternative route for traffic to Beckett Road/Village Center Road and northbound Rt. 295 and residential developments along High Hill Road. This intersection will experience increased traffic. The widening and signalization of this intersection should be planned.

Barker Ave. / New Barker Ave. / Hansons Row / Springer Lane

These Township owned streets form a major access route from Rt. 322 and Rt. 130 to the Township's Municipal Building and the traditional downtown area of the Township Bridgeport. The sections of these roadways which serve as the entrance to the Township's government/community building are deteriorated and are recommended to be reconstructed and lighted to provide safe access to this area of the Township.

South Bridgeport Road

This relatively minor road which connects Rt. 322 to the downtown residential Bridgeport section of the Township could become an alternate route from Rt. 322. It is recommended that this road be rerouted to provide a better connection to Route 322. Due to the poor conditions of the existing stormwater pipe leading under South Bridgeport road, it is recommended that new stormwater pipe be installed and the roadway to be reconstructed.

It is recommended that this connection between residential and commercial zones should be kept as a local access street with minor improvements to discourage traffic. The purpose and use of this roadway however may change with the development of the Route 322 corridor.

Pureland Drive Through Street

It is recommended that the Township coordinate with Gloucester County, McDonald's and Pureland Group in order to extend Pureland Drive to become a through street. Currently, there is no designated left-turning lane on Center Square Road Rt. 620 to enter the McDonald's and Dunkin Donuts parking lots, which is causing hazardous conditions for the drivers in that area. Extending Pureland Drive across Center Square Road and new signalization could help alleviate the traffic build-up of the drivers entering those businesses.

The existing section of Pureland Drive will remain a private roadway. The proposed section of Pureland Drive on the East side will have multiple users and would tentatively be public.

Beckett Road/Village Center Drive Turn Around

It is recommended that the Township coordinate with Gloucester County, Dunking Donuts, McDonald's, and Pureland Group for the installation of a truck turnaround at this location. The truck turnaround would extend from the existing cul de sac at Village Center Drive behind the McDonald's property and extend between the Dunkin Donuts/McDonald's to lead out to Center Square Road.

Beckett Road from Pedricktown-Harrisonville Road Rt. 602 to Center Square Road Rt. 620 is not recommended to be a part of the Municipal Truck System. Therefore, trucks with the weight over 4 tons will not be able to turn down this section of Beckett Road. Creating the truck turnaround will allow the trucks to safely turn around and get back to I-295.

Township Line Road

This road serves residential developments in Logan Township and Woolwich Township as well as Recreational Facilities in Logan Township and planned commercial developments in Woolwich Township. It

is also recommended to be established as a Municipal Truck Route, which may increase the amount of truck traffic to this area.

It is recommended that the Township continue with implementing the current plans to widen this road as part of the residential and commercial development in Woolwich Township. The intersection of Center Square Road and Township Line road is also recommended to be widened and improved as part of the County's current projects to improve Center Square Road.



COMMUNITY FACILITIES ELEMENT

1.0 Intent

The Existing Conditions analysis of this Master Plan included an inventory of community facilities in Logan Township. Using that inventory as a foundation, specific proposals for the development of the community facilities needed, including recreation and utilities, will be set forth below. The recommendations were developed to ensure that the long-term needs of Township residents are addressed.

2.0 Objectives

- a. Continue to maintain and optimize the existing usable recreation space.
- b. Continue to work with the Board of Education to evaluate the need for a new high school in Logan Township.

3.0 Recommendations

Indoor Facilities

Additional indoor recreational space is needed. The Township should investigate the development potential of utilizing the fire company properties, former Bridgeport Rental and Oil Services (BROs) site, Township Line Park or other Township owned parcels. Additionally, there is the possibility of acquiring additional land for the future development of an indoor recreational facility. Indoor recreation facilities, specifically basketball and volleyball courts, should be provided to a level which will adequately serve the Township.

Oak Grove Park

Develop Oak Grove Park to support additional recreation activities and sporting leagues for Township residents. The Township should investigate any potential private partnership to help fund improvements.

Tot Lot

Recreation improvements are also recommended in the Bridgeport section of the Township. The existing tot lot on Mechanic Street is old and underutilized, so this playground should be improved with new equipment and a new park design.

Trails

The Township should provide additional walking trails where appropriate with consideration be given to existing parks with open areas to help improve pedestrian circulation throughout the Township.

CONSERVATION ELEMENT

1.0 Intent

The following objectives and recommendations were developed using the information gathered in the Existing Conditions analysis as well as in the Township's Environmental Resources Inventory (ERI) and Open Space and Recreation Plan (OSRP). The recommendations were designed to provide for the preservation, conservation and utilization of natural resources, while considering the impact of other elements of the Master Plan on the present and future conservation.

As of November 2019, there were 1,896 acres of preserved Municipal and County land within Logan Township, including part of two state Wildlife Management Areas – Raccoon Creek and Logan Pond, the county operated DREAM Park, 1,203 acres of preserved farmland, and municipal parks located throughout the Township.

Logan Township operates an Open Space Trust Fund to collect and allocate funds to improve existing open space lands throughout the Township. Since 2000, the Township has collected \$1,218,961 in this Open Space Trust Fund, and in the same time period expended \$952,204 on open space related projects, including various parks around the Township.¹⁰

2.0 Objectives

- a. Identify priority parcels for preservation.
- b. To preserve and protect sensitive wetland areas
- c. To conserve energy resources

3.0 Recommendations

Land Lease

Consider mechanisms for the utilization of open space tax monies in order to lease open space or farmland development rights or enter into a long-term lease of development rights with options to purchase or to deed restrict.

Farmland Preservation Plan

Adopt a Farmland Preservation Plan.

Agricultural Preservation

Continue to preserve agricultural lands.

¹⁰ Open Space and Recreation Plan for the Township of Logan, The Land Conservancy of New Jersey, November 2019, pp 1. 2020 MASTER PLAN

ECONOMIC DEVELOPMENT ELEMENT

1.0 Intent

As reported in the Profile of Economic Conditions in the Existing Conditions analysis (Section B. 7.0), it is likely that employment will continue to grow in Logan Township throughout the 1990's. This growth will be generated by continued development within planned industrial developments. In addition to continued industrial growth, the Township should seek to expand the economic base by attracting other forms of commercial development. Critical to this economic expansion is excellent access to regional highways throughout the Township. This access is important for the development of the Route 322 corridor as well as properties within the Interchange Commercial District.

A goal of the economic plan is to encourage appropriate expansion of Logan's industries, which includes agriculture, warehousing, and logistics, while preserving the existing character of the Township.

2.0 Objectives

- a. Encourage economic expansion in areas currently designated for industrial and commercial developments.
- b. Locate business areas advantageously, in relation to regional circulation systems.
- c. Continue to promote industrial and commercial development in park-like settings.
- d. Ensure that economic developments in the Township do not impinge on the quality of life in residential areas.
- e. Ensure that economic development occurs with minimal negative impact on environmentally sensitive lands.

3.0 Recommendations

Waterfront Development

Capitalize on the Township's waterfront and permit waterfront recreational uses in specific zones.

Warehouse

Continue to develop opportunities for the expansion of large-scale warehouse distribution centers along Route 322 and in other locations.

Market Available pad sites

In commercial areas, support the development of and market available pad sites for additional restaurant.

RECYCLING ELEMENT

1.0 Intent

To establish objectives and recommend programs to encourage the recycling of waste materials in Logan Township and support the expansion of shared service agreements with surrounding municipalities.

2.0 Objectives

- a. To continue to identify programs and/or methods to be implemented by the township to increase the quantities and types of materials recycled by residences and business.
- b. To propose to surrounding municipalities the utilization of the Township's in-house recycling collection services in lieu of a private hauler.
- c. To achieve the goals and objectives of the recycling plan of the State of New Jersey.

3.0 Recommendations

Continue shared service agreements

The Township should continue to explore additional shared service agreements with surrounding municipalities.

Facilitate facility improvements

The Township should continue to make necessary improvements to the Public Works facility.

REGIONAL PLANNING CONSIDERATIONS

The Master Plan for Logan Township was developed while taking into account existing state, county, and regional planning documents. In addition, proposed and existing land uses within adjacent municipalities were considered. The Municipal Land Use Law ("MLUL") requires that:

"The Master Plan shall include a specific policy statement indicating the relationship of the proposed development of the municipality, as developed in the master plan to (1) the master plans of contiguous municipalities, (2) the master plan of the county in which the municipality is located, (3) the State Development and Redevelopment Plan adopted pursuant to the State Planning Act,...and (4) the district solid management plan pursuant to the provisions of the "Solid Waste Management Act"...of the county in which the municipality is located."

In accordance with the requirements of the MLUL, the following information has been identified as the basis for the regional planning considerations of this Master Plan:

1.0 Adjacent Municipalities

Logan Township is adjacent to Woolwich Township to the south, Oldmans Township to the west, and Greenwich Township to the east. A small portion of East Greenwich Township also borders the southeast corner of Logan. The Master Plans for each of these municipalities were reviewed.

Woolwich Township

The Woolwich Master Plan was originally created in 2003, then subsequently updated in 2008 and 2016. In July 2008, Woolwich Township adopted a Transfer of Development Rights (TDR) Plan that included amended land use, circulation, stormwater, utility service plans. The Township again amended the plan in 2016. The 2016 Master Plan Update included various new elements, such as the land use plan, circulation plan, further revisions to the TDR program plan, stormwater plan, public spaces plan, and open space and recreation plan. These documents combine to regulate the future of Woolwich Township, which will have some impact on the neighboring Logan Township.

Greenwich Township

Greenwich Township Planning Board adopted a Master Plan Update in September of 1999. A Land Use Plan was included within the Update and set forth recommendations for the future development of Greenwich. A review of the Proposed Land Use Map revealed that the areas directly adjacent to Logan Township were recommended for inclusion within a Conservation Zone, indicating that the properties would not be developed and would remain preserved in their current state or would be used for farming, recreation, wildlife sanctuaries, or arboretums. The lands in Logan are currently zoned as R-5, which is for low intensity development, and is therefore complementary with the proposed Conservation Zone.

Oldmans Township

Oldmans Township, Salem County, adopted a Statement of Objectives and Land Use Plan Element in June 2009. The Land Use Plan Element included a discussion of the proposed land uses in Oldmans consistency with the existing uses in Logan Township. The areas in Oldmans that are adjacent to Logan are zoned for either Industrial (I) or Agricultural Residential (AR). In Logan, with the exception of four lots recommended for inclusion in the proposed Conservation (CONS) Zone, the existing zoning for the adjacent properties, which is Light Industrial (LI), will remain. This area is also a part of the Logisticenter, or Northeast Business Center, a warehousing district that previously existed as the GI zone. In addition, Logan and Oldmans Townships are separated by the Oldmans Creek geographic border, which is the reason for the highly irregular border along this part of Logan.

East Greenwich Township

East Greenwich Township adopted a Master Plan Reexamination Report in 2018. Revisions to the existing land use plan and zoning map were proposed, however, no changes were proposed at the border with Logan Township. The adjacent area in East Greenwich is currently zoned for interstate businesses but is surrounded by land zoned for rural residential uses. Since no changes were proposed in East Greenwich's Reexamination and no zoning changes are proposed in this Master Plan, it is assumed that there will be no conflicts between the uses at this municipal border.

2.0 Gloucester County

The Logan Township Master Plan is compatible with the plans of Gloucester County. The preparation of the Logan Plan considered the planning documents, specifically, the County's Wastewater Management Plan, as well as the County's plans for various facilities, such as the Dream Park, and services within Logan.

3.0 New Jersey State Development and Redevelopment Plan

The State Development and Redevelopment Plan (SDRP) has designated Logan Township within tFOUR planning areas; Suburban (PA-2), Fringe (PA-3), Rural (PA4), and Environmentally Sensitive (PA-5). The major focus of the State Plan is to encourage growth within the existing growth corridors and to discourage growth in the rural agricultural portions of the state. The recommendations set forth in this Master Plan, specifically the proposed zoning map, support the SDRP. The Plan promotes controlled growth in the existing villages or nodes, Beckett, Bridgeport, and Repaupo. The SDRP classified the Route 322 corridor within the Fringe Planning Area (PA-3) therefore; the proposed commercial development and of the RCC zone would not conflict with the SDRP goals of preserving environmentally sensitive areas. Additionally, the Conservation District (CONS) will ensure that the existing environmental qualities of certain properties are preserved.

IMPLEMENTATION SUMMARY

As discussed in the previous chapters of this Master Plan document, various recommendations have been laid out which will guide the physical, social, and economic development of the Township. Each chapter has a specific focus relating to a particular aspect of the Township's future plans. This Implementation section of the document outlines the specific recommendations set forth in the previous chapters to clearly identify and summarize the intent of each section.

LAND USE

Zoning Map Recommendations (See pages 31-32)

- Consider additional rezoning or an area in need of redevelopment designation for parcels in the vicinity of Logan North and South developments
- Remove the Planned Village Development (PVD) zoning overlay.
- Remove the Town Center River Overlay (TCRO) zoning overlay.
- Continue to support the development of affordable housing and enforcement of established affordable housing overlay zones.
- Develop a strategy for the redevelopment of Raccoon Island.
- Resolve inappropriate split-zoned lots in the Township.
- Consider locations for a municipal park and ride facility.
- Consider a review of permitted uses within the Conservation Zone..

Policy Recommendations (See pages 32-33)

- Adopt policies to support the development of green infrastructure as well as other types of sustainable infrastructure.
- The Township Zoning Board should create a checklist of local concerns to be addressed in the negative criteria testimony regarding 'D' variances.
- Focus development away from Interstate-295 exit 10.
- Establish a Municipal Truck Route System
- Consider additional redevelopment areas adjacent to major highway intersections

Ordinance Recommendations (See pages 33-36)

- Combine the two UDO books into one complete document.
- Consider amending standards as related to residential uses in non-residential zoning districts.
- Signs
 - Revise sign standards for multi-tenant occupancy.
 - Create a requirement for addressing of buildings to be clearly visible.
 - Develop regulations regarding digital display signs.
 - Consider permitting commercial billboards along major corridors.
- Develop consistent impervious cover regulations for zoning districts including a requirement for residential accessory uses over 250 sf.

- Develop standards to regulate the outdoor storage of materials.
- Develop standards to regulate the construction and use of solar panels.
- Amend the Conservation zoning district to permit a liquified natural gas facility.
- Update ordinances to conform with new NJDEP regulations regarding stormwater runoff.
- Review and revise residential setbacks of the VR-C zoning district.
- Update design standards to ensure that current standards and practices are properly reflected for proposed publicly owned property and rights of ways.
- Develop standards to regulate electric vehicle parking.
- Revise minimum parking requirements for certain industrial and commercial uses.
- Revise clerical errors or mistakes found within the UDO, including deletion of unnecessary zoning districts and incorporation of GDP bulk and area criteria.

CIRCULATION

Recommended Local Action (See pages 47-48)

- Update the Pavement Management Report.
- Review the Township UDO and subdivision standards and amend as appropriate.
 - Industry cul-de-sac roadways essentially serve as driveways and should remain privately owned by the business or businesses maintaining use.
 - Residential subdivision minor roadways not acting as collector roadways shall be privately owned by the associated Homeowners Association.
 - New subdivision road(s) intended for public dedication shall not be dedicated or top-paved until all lots have been constructed on said road to avoid damage by major construction equipment. However, if the project is dormant or not completed within 1-2 years, top paving will need to be completed.
- Engage in further conversations with public/private partnerships to solicit funding for additional transportation opportunities and improvements throughout Logan Township and the surrounding counties.

Transportation Policies (See page 48)

The following transportation policies are recommended for consideration by the Township:

- Street tree planting, street lighting, landscaping, sidewalks, curbs and bike paths shall be required where deemed necessary by the Planning Board.
- Public transportation should be encouraged in order to make the best use of existing resources and to provide improved access capabilities to residents.
- Sound attenuation provisions should be required for all residential developments adjacent to commercial developments or highways.
- Coordinate recommendations herein with the Gloucester County Planning Board and the NJDOT.

Ordinance Recommendations (See page 48)

The following transportation policies are recommended for consideration by the Township, and may require a policy/ordinance amendment or addition:

- An uninterrupted traffic flow should be maintained by prohibiting on-street parking and limiting access points from individual properties on collector and arterial streets.
- Off-street parking requirements should be sufficient to obviate the need for on-street parking.
- Regional and internal circulation systems should be designed to separate industrial, commercial and through traffic from internal residential traffic.
- Right-of-way and pavement width requirements as well as improvements specifications should be sufficient to assure that Township streets will be adequate to serve optimal traffic volumes which are generated both locally and regionally.
- New development in any form should have sidewalk along the frontage, unless otherwise waived. The Township should consider a township-wide sidewalk and lighting evaluation for pedestrian links.
- Increasing building setbacks to accommodate wider right-of-ways where right-of-way reservations are necessary.
- Requiring a turnaround area on all lots to prohibit backing out on a street.
- Development of criteria and guidelines for submission of traffic impact studies.
- Proposed developments should be required to pay the cost of their fair share of roadway improvements identified in the Township's Circulation Element.
- Blue hydrant reflectors should be required along all streets.

Recommended Roadway Projects (See pages 49-53)

- The total reconstruction of interchange 10 at Center Square Road should be planned. This
 reconstruction should include the widening of Center Square Road over Rt. 295 and
 developing the interchange into a full cloverleaf intersection. Should a full cloverleaf be an
 impractical addition, I-295 access points should be coordinated with the NJDOT to
 alleviate the congestion. Additionally, given the congestion, development should be
 focused away from Interchange 10 and additional Center Square Road curb cuts in the
 adjacent area should be minimized.
- The intersection of Center Square Road and Beckett Road will have to be widened to provide for independent left and right turning lanes as well as through lanes from the east approach on Beckett Road. Beckett Road from Pedricktown-Harrisonville Road Rt. 602 t Center Square Road Rt. 620 should not be a part of the Municipal Truck Route System and will require coordination with the County to install proper signage at the intersection to prevent and enforce the trucks to not turn onto this section.
- Conduct traffic signal analysis to determine if one is warranted at Village Center Drive and Beckett Road.
- It is recommended to install a multi-way bike path along the southside of Beckett Road to allow access to the ballfields and the Library.

- Intersection Improvements, roadway widening, and potential traffic signals may be warranted on Repaupo Station Road R.t 684 at Rt. 44 and Paulsboro Road should substantial development occur.
- Floodgate Road north of Rt. 44 should be repaved/reconstructed/improved to correct deteriorated sections.
- Sections of High Hill Road (Route 662) require widening and repaving in order to develop a uniform roadway section.
- The realignment, widening and signalization at the intersection of High Hill Road and Beckett Road should be planned and coordinated with Gloucester County. Additional right of way may be required.
- The widening and signalization at the intersection of High Hill Road and Township Line Road should be planned and coordinated with Gloucester County.
- The widening and signalization at the intersection of High Hill Road and Sharptown Road should be planned.
- Sections of Barker Ave, New Barker Ave, Hansons Row, and Springer Lane where the
 entrances are deteriorated should be reconstructed and lighted to provide safe access to
 this area of the Township.
- South Bridgeport Road should remain a local access street with minor improvements to discourage traffic. New stormwater pipe should be installed and the roadway reconstructed for this installment.
- The Township should consider coordinating with Gloucester County, McDonald's and Pureland Group in order to extend Pureland Drive to become a through street.
- The Township should consider coordinating with Gloucester County, Dunking Donuts, McDonald's, and Pureland Group for the installation of a truck turnaround at this location. The truck turnaround would extend from the existing cul de sac at Village Center Drive behind the McDonald's property and extend between the Dunkin Donuts/McDonald's to lead out to Center Square Road.

COMMUNITY FACILITIES (See page 54)

- The Township should seek to create additional indoor recreational space. Potential site
 considerations include new construction, repurposed/reused buildings or sites such as
 Bridgeport Rental and Oil Services (BROS).
- Develop Oak Grove Park to support additional recreation activities and sporting leagues for Township residents.
- Improve the existing Mechanic Street tot lot including new design and equipment.
- Provide additional walking trails where appropriate to improve pedestrian connections throughout the Township.

CONSERVATION (See page 55)

- Consider mechanisms for the utilization of open space tax monies in order to lease open space or farmland development rights or enter into a long-term lease of development rights with options to purchase or to deed restrict.
- Continue to preserve agricultural lands in connection with Gloucester County.

ECONOMIC DEVELOPMENT (See page 56)

- Capitalize on the Township's waterfront and permit waterfront recreational uses in specific zones.
- Continue to develop opportunities for the expansion of large-scale warehouse distribution centers along Route 322 and other major corridors.
- Support/market available pad sites for additional restaurant uses.

RECYCLING (See page 57)

- Continue to explore additional shared service agreements with interested surrounding municipalities.
- Continue to make necessary improvements to the Township Public Works facility.

