BOROUGH OF SAYREVILLE LAND USE ELEMENT

DRAFT: JUNE 21, 2024



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Borough of Sayreville Middlesex County, New Jersey

DRAFT: June 21, 2024 Adopted: _____

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INTRODUCTION

The Borough of Sayreville adopted its last Comprehensive Master Plan in 2013 and adopted a subsequent Master Plan Reexamination Report in May 2023.

One of the recommendations of the Borough's 2023 Reexamination Report was to adopt a comprehensive Land Use Element to represent a synthesis of all other plan elements and serve as the basis for future ordinance revisions. The recommendation specifically identified the following objectives for the updated Land Use Element:

- Update the Land Use Element to reflect the existing land uses within the Borough, particularly existing residential areas and changes to the Borough's historically industrial areas.
- Reflect the 2017 amendment to the MLUL regarding smart growth.
- Include a Climate Hazard Vulnerability Assessment to (a) develop a climate resiliency strategy that identifies the natural hazards which pose a risk to Sayreville and (b) provide strategies and design standards for the Borough to implement.

The purpose of the Land Use Element is to provide a long-range policy guide for development. This Plan examines the current development trends within the Borough and establishes a vision for future growth. The Land Use Element takes into account the environmental characteristics and vulnerabilities, existing land use patterns and zoning densities, physical and visual form, as well as current and future land use demands. This section of the Master Plan also considers Sayreville's ongoing redevelopment efforts.

The Land Use Element is the cornerstone for supporting the Borough's zoning ordinance and sets a framework for the Borough's future development and redevelopment efforts.

Public Outreach

Garnering public input from Sayreville stakeholders was a fundamental aspect of the Master Plan Reexamination Report process. A digital survey was posted on the Borough's website for approximately three weeks in the spring of 2023, with a focus on stakeholder perceptions of Sayreville. Survey questions were derived to understand: how people view Sayreville in its current conditions and what they imagine for its future; what people feel is missing from Sayreville; and identifications of current issues, trends, and challenges throughout the Borough. The Borough received 391 responses to the survey, with more than 85% of respondents identifying themselves as Sayreville residents. Key take-aways from these responses are summarized below:

- **Borough Roots:** Approximately 50% of respondents are the first in their family to live in Sayreville, while 25% of respondents are part of a family that has lived in Sayreville for more than two generations. 66% of respondents have lived in Sayreville for at least 21 years.
- Associated Terms: The terms that respondents most commonly associate Sayreville with include "community", "small town", "blue collar", "friends", and "convenience" amongst others.
- Identified Challenges & Concerns: Over 90% of respondents identified traffic as a major challenge associated with new construction in the Borough. Respondents pinpointed "excessive" development, maintaining neighborhood character, and overcrowded schools as additional concerns.
- Needed Improvements: 90% of respondents agreed that additional public open space and improved sidewalks are required to improve Sayreville, while 50% of respondents indicated a need for more restaurants and community gathering spaces.
- **Development Preferences:** When asked to rank types of developments, respondents favored retail-only development over office-only or mixed-use developments.
- **Identified Issues:** The issues ranked as "very important" or "important" by at least 90% of respondents included: traffic, conditions of parks

and recreation facilities, and environmental quality and protection. Issues ranked as "very important" or "important" by 80%-90% of respondents included: bicycle and pedestrian safety, universal access, and availability of goods and services.

History

Sayreville is located on the ancestral homelands of the Nanticoke Lenni-Lenape and Munsee Lenape people. Although the Borough of Sayreville was not incorporated until 1920, it is estimated to have been settled around 1775 and historically served as an important river port along the Raritan River throughout the eighteenth and nineteenth centuries. Sayreville's early population was comprised primarily of working class immigrants from Ireland, Poland, and Italy.

The lands of Sayreville were historically rich with clay and quartz sand deposits, which largely supported the Borough's economy. Sand was mined to support the construction of infrastructure in the region, and the clay was fired to make pottery and brick. The brick manufacturing industry was so prosperous in Sayreville at this time that the Borough was named after the co-owner of the local Sayre and Fisher Brick company in the 1860s. The Brick industry also



Sayre and Fisher Brick Water Tower

spurred the construction of the Raritan River Railroad's Sayreville Branch line and Serviss Branch Line in 1890, which were specifically laid to create access to the Sayre and Fisher Brick Yards near the mouth of the Raritan River. The reach of the Sayre and Fisher Brick Company extended beyond Sayreville into the region, employing sometimes entire families. It's no surprise, then, that the Sayre and Fisher Brick Company came to be on the New Jersey's top ten largest employers by 1900. Other notable industries in Sayreville throughout this time period include the production of glass, clay tile, gunpowder, paint, photographic film, and cookies and crackers.

In more recent decades, as the sand pits have been developed over with housing and other uses, the Borough has become a popular bedroom community for New York City and New Jersey due to its proximity to regional transit options. Sayreville has continued to strengthen its economic base by attracting innovative commercial and industrial land uses into the Borough. Consider the Hercules Redevelopment Area, for example, which has allowed for the 2022 redevelopment of a former chemical plant into three modern logistics warehouses. This type of development is not uncommon in Sayreville nowadays; in fact, some of the largest companies in Sayreville (by revenue) currently include those within the metal and steel manufacturing, oil production and distribution, and industrial supply industries. Amidst an ever evolving economic landscape, the Borough continues to celebrate its history and community through the preservation of a number of historic landmarks and the hosting of community events throughout the year.

Demographics Population

As shown on Table 1, the Borough's population tripled between 1940 to 1970, followed by a slight decline between 1970 and 1980. Since the 1980 Census, the Borough has seen a continued increase in population. The Borough's population grew by 6.2% from 2010 to 2020 to a population of 45,345 people. The 2017-2021 American Community Survey (ACS) estimates the Borough's population to be 45,062 people.

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	Table 1: Population Trends Sayreville Borough, Middlesex County, and New Jersey State, 1930-2021										
	S	ayreville Boro	ough	Mic	Idlesex Coun	ty	New	Jersey Stat	e		
Year	Den	Cha	nge	Den	Char	nge	Den				
	Pop.	Number	Percent	Pop.	Number	Percent	Pop.	Number	Percent		
1930	8,658	-	-	212,208	-	-	4,041,334	-	-		
1940	8,186	-472	-5.5%	217,077	4,869	2.3%	4,160,165	118,831	2.9%		
1950	10,338	2,152	26.3%	264,872	47,795	22.0%	4,835,329	675,164	16.2%		
1960	22,553	12,215	118.2%	433,856	168,984	63.8%	6,066,782	1,231,453	25.5%		
1970	32,508	9,955	44.1%	583,813	149,957	34.6%	7,171,112	1,104,330	18.2%		
1980	29,969	-2,539	-7.8%	595,893	12,080	2.1%	7,365,011	193,899	2.7%		
1990	34,986	5,017	16.7%	671,780	75,887	12.7%	7,730,188	365,177	5.0%		
2000	40,377	5,391	15.4%	750,162	78,382	11.7%	8,414,350	684,162	8.9%		
2010	42,704	2,327	5.8%	809,858	59,696	8.0%	8,791,894	377,544	4.5%		
2020	45,345	2,641	6.2%	863,162	53,304	6.6%	9,288,994	497,100	5.7%		
2021	45,062	-283	-0.6%	858,770	-4,392	-0.5%	9,234,024	-54,970	-5.8%		

Source: U.S. Decennial Census; 2017-2021 American Community Survey 5-Year Estimates

	Table 2: Population By Age Sayreville Borough, 2011-2021									
Deputation	201	1	202	21	Change, 2	011-2021				
Population	Number	Percentage	Number	Percentage	Number	Percentage				
Total Population	42,511	100.0%	45,062	100.0%	2,551	6.0%				
Under 5 Years	3,021	7.1%	2,576	5.7%	-445	-14.7%				
5 to 14 Years	4,792	11.3%	5,129	11.4%	337	7.0%				
15 to 24 Years	5,095	12.0%	4,517	10.0%	-578	-11.3%				
25 to 34 Years	6,115	14.4%	7,309	16.2%	1,194	19.5%				
35 to 44 Years	6,055	14.2%	6,274	13.9%	219	3.6%				
45 to 54 Years	6,909	16.3%	6,480	14.4%	-429	-6.2%				
55 to 64 Years	4,930	11.6%	6,297	14.0%	1,367	27.7%				
65 Years + Over	5,594	13.2%	6,480	14.4%	886	15.8%				
Median Age	38.5 years	-	39.9 years	-	-	-				

Source: 2007-2011 ACS 5-Year Estimates and 2017-2021 ACS 5-Year Estimates

Age

According to the ACS 2017-2021 five-year estimates, the median age in Sayreville was 39.9 in 2021, only slightly higher than the 2011 median age of 38.5. Sayreville's population has shifted with decreases in two cohorts: the under-5-years cohort and the 15-to-24-year cohort. The under-5-years cohort had a 14.7% decrease, and the 15-to-24-year cohort decreased by 11.3%. The remaining cohorts all increased, with the most significant shifts in the 55-to-64-year cohort, 25-to-34-year cohort, and 65-and-over cohort of 27.7%, 19.5%, and 15.8%, respectively. This data is presented in Table 2.

Income

As outlined in Table 3 below, the estimated median income for Sayreville in 2021 was \$89,600, slightly lower than Middlesex County's median income of \$96,883. More than 40% of Sayreville residents were earning \$100,000 or more in 2021.

Employment

The ACS estimates that roughly 71% of Sayreville residents were in the labor force in 2021, compared to 65.7% of all Middlesex County residents. Sayreville had an unemployment rate of 3.8%, slightly lower than Middlesex County's unemployment rate of 4%.

Table 3: Household Income Sayreville Borough and Middlesex County, 2021								
	Sayreville	Borough	Middlesex	County				
	Number	Percentage	Number	Percentage				
Total Households	16,878	100.0%	299,455	100.0%				
Less than \$10,000	341	2.0%	10,735	3.6%				
\$10,000 to \$14,999	185	1.1%	7,612	2.5%				
\$15,000 to \$24,999	907	5.4%	14,872	5.0%				
\$25,000 to \$34,999	1,124	6.7%	15,880	5.3%				
\$35,000 to \$49,999	1,618	9.6%	24,936	8.3%				
\$50,000 to \$74,999	2,577	15.3%	41,749	13.9%				
\$75,000 to \$99,999	2,715	16.1%	38,542	12.8%				
\$100,000 to \$149,999	3,627	21.5%	60,026	20.0%				
\$150,000 to \$199,999	1,799	10.7%	37,309	12.5%				
\$200,000 or More	1,985	11.8%	47,884	16.0%				
Median Household Income	\$89,	600	\$96,8	83				

Source: 2021 American Community Survey 5-Year Estimates, Table DP03

Table 4: Employment Sayreville Borough and Middlesex County, 2021									
	Sayreville	Borough	Middlesex (County					
	Number	Percentage	Number	Percentage					
Population 16 Years and Over	36,922	100.00%	692,993	100.00%					
In Labor Force	26,212	70.99%	455,248	65.69%					
Civilian Labor Force	26,188	70.93%	455,063	65.67%					
Employed	24,796	67.16%	427,105	61.63%					
Unemployed	1,392	3.77%	27,958	4.03%					
Armed Forces	24	0.07%	185	0.03%					
Not in Labor Force	10,710	29.01%	237,745	34.31%					

Source: 2021 American Community Survey 5-Year Estimates, Table DP03

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Table 5: Employment by Indu Sayreville Borough, 2021	Table 5: Employment by Industry Sayreville Borough, 2021							
Industry	Number	Percentage						
Civilian Employed Population 16 Years and Over	24,796	100.0%						
Agriculture, Forestry, Fishing and Hunting, and Mining	61	0.2%						
Construction	1,383	5.6%						
Manufacturing	1,981	8.0%						
Wholesale Trade	1,162	4.7%						
Retail Trade	2,878	11.6%						
Transportation and Warehousing, and Utilities	2,321	9.4%						
Information	732	3.0%						
Finance and Insurance, and Real Estate and Rental and Leasing	2,120	8.5%						
Professional, Scientific, and Management and Administrative and Waste Management Services	2,863	11.5%						
Educational Services, and Health Care and Social Assistance	5,510	22.2%						
Arts, Entertainment, and Recreation, and Accommodation and Food Services	1,718	6.9%						
Other Services, Except Public Administration	938	3.8%						
Public Administration	1,129	4.6%						

Source: 2021 American Community Survey 5-Year Estimates, Table DP03

The largest industry in Sayreville is educational services, and health care and social assistance, which employs more than 22% of Sayreville's employed labor force. The next largest industries are retail trade; professional, scientific, and management, and administrative and waste management services; and transportation and warehousing, and utilities that employ 11.6%, 11.5%, and 9.4% of Sayreville's employed labor force, respectively. This data is reflected on Tables 4 and 5.

Housing

The 2017-2021 ACS estimates there were 17,411 housing units in Sayreville in 2021, of which 16,878 (96.9%) were occupied. Most residents owned their homes, as 63.1% of housing units were owner-occupied and the remaining 36.9% of housing units were occupied by renters. Nearly two-thirds of the Borough's housing stock was single-family homes, with roughly 51.5% of residences being single-family detached homes and 13.2% of residences being single-family attached homes. The next most common housing type was apartment buildings with ten or more apartments which accounted for roughly 19.2% of the Borough's housing stock.

As shown on Table 6 below, when comparing Sayreville's housing stock to that of the County and State, it is revealed that the Borough has a smaller percentage of detached single-family units as well as a higher percentage of attached single-family units and structures with five or more dwelling units. These numbers speak to the Borough's diverse housing stock, which is an important element in establishing housing options at a variety of affordability levels. A more diverse housing stock typically affords more accessibility to low- and moderate-income households.

The 2017-2022 ACS estimates that more than half of the owner-occupied housing units in Sayreville and in Middlesex County were valued at over \$300,000. At the state level, more than half of the owner-occupied units were valued at over \$200,000 during this same time period. While the median value for owner-occupied housing in Sayreville was greater than that of the State, the Borough had a smaller proportion of housing units valued at \$500,000 or more as compared to both the County and the State. This data is presented on Table 7 below.

Table 6: Occupied Housing by Housing Type Sayreville Borough, Middlesex County, and New Jersey State, 2021									
Units in Structure	Sayreville	e Borough	Middles	ex County	New Jersey State				
onits in Structure	Number	Percentage	Number	Percentage	Number	Percentage			
Total Occupied Housing Units	17,411	100.0%	313,219	100.0%	3,738,342	100.0%			
1 Unit, Detached	8,964	51.5%	165,546	52.9%	1,986,887	53.1%			
1 Unit, Attached	2,289	13.2%	34,778	11.1%	364,296	9.7%			
2 Units	869	5.0%	21,503	6.9%	333,937	8.9%			
3 or 4 Units	808	4.6%	16,832	5.4%	234,526	6.3%			
5 to 9 Units	1,121	6.4%	18,266	5.8%	174,797	4.7%			
10 or More Units	3,345	19.2%	53,979	17.2%	609,472	16.3%			
Mobile Home or Other	15	0.1%	2,315	0.7%	34,427	0.9%			

Source: 2021 American Community Survey 5-Year Estimates, Table DP04

Table 7: Value for Owner-Occupied UnitsSayreville Borough, Middlesex County, and New Jersey State, 2021									
Gayrevin		Sayreville Borough Middlesex County New Jersey State							
	Number	Percentage	Number	Percentage	Number	Percentage			
Total Owner-Occupied Units	10,655	100.0%	191,463	100.0%	80,152,161	100.0%			
Less than \$50,000	334	3.1%	3,813	2.0%	5,009,191	6.2%			
\$50,000 to \$99,999	163	1.5%	2,704	1.4%	7,945,627	9.9%			
\$100,000 to \$149,999	110	1.0%	3,602	1.9%	9,029,536	11.3%			
\$150,000 to \$199,999	359	3.4%	8,165	4.3%	10,384,287	13.0%			
\$200,000 to \$299,999	3,206	30.1%	42,354	22.1%	16,082,523	20.1%			
\$300,000 to \$499,999	5,170	48.5%	89,895	47.0%	17,514,271	21.9%			
\$500,000 to \$999,999	1,218	11.4%	38,450	20.1%	10,929,818	13.6%			
\$1,000,000 or More	95	0.9%	2,480	1.3%	3,256,908	4.1%			
Median (Dollars)	\$334,600	-	\$362,900	-	\$244,900	-			

Source: 2021 American Community Survey 5-Year Estimates, Table DP04

Table 8: Monthly Rent Sayreville Borough, Middlesex County, and New Jersey State, 2021									
	Sayrevi	lle Borough	Middle	sex County	New Jer	sey State			
	Number	Percentage	Number	Percentage	Number	Percentage			
Total Occupied Units Paying Rent	6,108	100.0%	104,446	100.0%	41,729,931	100.0%			
Less than \$500	136	2.2%	5,305	5.1%	3,363,941	8.1%			
\$500 to \$999	361	5.9%	5,707	5.5%	12,713,367	30.5%			
\$1,000 to \$1,499	3,041	49.8%	33,302	31.9%	12,853,602	30.8%			
\$1,500 to \$1,999	1,598	26.2%	35,358	33.9%	6,999,395	16.8%			
\$2,000 to \$2,499	741	12.1%	18,655	17.9%	3,063,749	7.3%			
\$2,500 to \$2,999	148	2.4%	4,146	4.0%	1,287,657	3.1%			
\$3,000 or More	83	1.4%	1,973	1.9%	1,448,220	3.5%			
Median (Dollars)	\$1,421	-	\$1,612	-	\$1,163	-			
Total Occupied Units Not Paying Rent	115	-	3,546	-	2,128,900	-			

Source: 2021 American Community Survey 5-Year Estimates, Table DP04

As shown on Table 8, the median rent in Sayreville for renter-occupied units was \$1,421 during this time frame, while the median rent was \$1,612 in Middlesex County and \$1,163 in the State. Nearly half (49.8%) of the renter-occupied units in Sayreville had a rent level between \$1,000 to \$1,499, while this rent level made up just 31.9% of rental units in the County and 30.8% of rental units in the State. Although the Borough tends to have a higher proportion of rent levels at \$1,500 and above as compared to the State, these percentages within Sayreville are significantly lower than those at the County level. This data suggests that Sayreville's housing stock offers rent levels that are more affordable than the County as a whole.

Development Trends Residential

Since the year 2000, the Borough has issued building permits authorizing the new construction of 2,177 residential units, which equates to an average of 94 units per year. During the same period, the Borough issued permits for the demolition of 90 units, which equates to an average of 4 units per year. All but six of the demolition permits issue after 2003 were for one- and two-family homes.

Sayreville has experienced a shift in housing typologies throughout this time period as well. While the vast majority— if not all—of residential units authorized by building permit annually between the years 2000 and 2009 were for one-and two-family homes, the Borough saw a significant increase in multi-family units beginning in 2010. This is especially evident in the years of 2012, 2015, 2016, 2021, and 2022, during each of which the number of annual multi-family units authorized was over 100 units. In fact, multi-family units authorized in Sayreville between the years 2010 through 2023 (through February) make up an estimated 99.6% of authorized multi-family units for the entire 23-year period.

Not surprisingly, this pattern can at least partially be linked to the Borough's affordable housing efforts, and this can be expected to continue. In 2018 the Borough established 3 affordable housing inclusionary zoning districts which can, in part, help explain this pattern. Even prior to this, since circa 1987 Sayreville has coordinated with developers to implement affordable housing controls, initiate and complete construction for affordable units, and approve development plans for proposed inclusionary, 100% affordable, agerestricted, and support/special needs affordable units. As of 2022, ongoing and proposed affordable developments in Sayreville—including Riverton and Camelot I and II, amongst others—accounted for 413 forthcoming affordable units in Sayreville. This data is represented on Table 9.

Non-Residential

As shown on Table 10, from 2000 to 2023, building permits were issued for 4,017,508 square feet of non-residential construction. The Department of Community Affairs provides data for non-residential development broken down into three categories: Office, Retail, and "Other." Of the 4,017,508 square feet, 355,106 square feet were for office development. No building permits were issued during this period for retail development. The remaining 3,662,402 square feet are attributed to the "Other" category that is further broken down into various classes and subcategories. Most "Other" development was for multifamily/dormitories and storage, as each accounts for more than 1.5 million square feet. This data is shown on Table 11.

In the 18-year span between 2004 and 2022, authorized building permits accounted for a total of 1,513,200 square feet of multifamily housing and dormitories in Sayreville. Sayreville witnessed its largest increase of multifamily housing and dormitory space in 2012 when it gained 759,900 square feet, which accounts for 17.6% of the total area gained during this time period. This nearly doubled the amount of multifamily housing and dormitory square footage authorized in 2011. Although the Borough saw a drop in authorized multifamily housing and dormitory space between the years 2014 and 2018, this trend has begun to rise in the years since.

In 2022, Sayreville gained 162,300 square footage of multifamily housing and dormitory space, accounting for 10.7% of the total area gained during this 18-year time frame. In the same year: Middlesex County gained 1,905,600 square feet, or 6.9% of the total area gained during this time period; and New Jersey State gained 28,929,400 square feet, or 7.9% of the total area gained during this time period. Sayreville's continuous uptick in authorized multifamily housing and dormitory between 2020 and 2022 aligned with trends at the State level, but contrasted trends at the County level. Sayreville's continued commitment to creating diverse and affordable housing for its residents is made evident by this data, shown on Table 12.

lables	9: Housing Uni		ed (A) and le Borough			ilding Per	mits	
Veen	1&21		Multi-		Mixed	l-Use	Total	
Year	Α	D	A	D	A	D	A	D
2000-2003*	-	-	-	-	-	-	575	22
2004	189	9	2	-	-	-	191	9
2005	62	6	-	-	-	-	62	6
2006	23	4	1	-	-	-	24	4
2007	25	8	-	-	-	-	25	8
2008	25	4	1	-	-	-	26	4
2009	5	2	-	-	-	-	5	2
2010	81	4	22	-	-	-	103	4
2011	27	3	33	-	-	-	60	3
2012	16	-	142	-	-	-	158	-
2013	28	3	75	-	-	-	103	3
2014	17	3	-	6	-	-	17	9
2015	1	2	124	-	-	-	125	2
2016	7	1	136	-	-	-	143	1
2017	10	2	5	-	-	-	15	2
2018	8	5	30	-	-	-	38	5
2019	47	2	90	-	-	-	130	2
2020	25	-	84	-	-	-	109	-
2021	10	1	128	-	-	-	138	1
2022	17	2	102	-	-	-	119	2
2023 (Jan & Feb)	-	1	11	-	-	-	11	1
Total 2000-2023*	623	62	986	6	0	0	2,177	90

Source: State of New Jersey Department of Community Affairs (DCA) Building Permits: Yearly Summary Data *The DCA Construction Reporter did not begin reporting housing permits by type until 2004.

Table 10: Permits Issued for Non-Residential Construction by Square Feet Sayreville Borough, 2000-2023					
Year	Office	Retail	Other	Total	
2000	30,000	-	268,676	298,676	
2001	62,153	-	345,642	407,795	
2002	3,297	-	183,150	186,447	
2003	3,328	-	227,606	230,934	
2004	22,786	-	78,359	101,145	
2005	3,200	-	84,610	87,810	
2006	8,842	-	59,966	68,808	
2007	59,106	-	111,166	170,272	
2008	19,160	-	81,279	100,439	
2009	27,081	-	301,844	328,925	
2010	5,796	-	139,578	145,374	
2011	13,084	-	150,095	163,179	
2012	-	-	274,109	274,109	
2013	17,914	-	253,959	271,873	
2014	14,685	-	16,416	31,101	
2015	11,424	-	272,608	284,032	
2016	34,635	-	19,901	54,536	
2017	3,028	-	12,881	15,909	
2018	2,646	-	61,630	64,276	
2019	5,586	-	129,846	135,432	
2020	-	-	93,953	93,953	
2021	4,735	-	141,648	146,383	
2022	2,620	-	343,355	345,975	
2023 (Jan & Feb)	-	-	10,125	10,125	
Total 2000-2023	355,106	0	3,662,402	4,017,508	

Source: State of New Jersey Department of Community Affairs (DCA) Building Permits: Yearly Summary Data

Table 11: Permits Issued for "Other" Non-Residential Construction by Square Feet Sayreville Borough, 2000-2023								
Year	A-2*	A-3**	Multi-Family / Dormitories	Education	Industrial	Institutional	Storage	Signs, Fences, Misc.
2000	-	-	68,100	-	-	-	200,000	576
2001	-	-	137,260	-	97,630	-	110,200	552
2002	-	3,910	-	6,000	-	-	173,240	-
2003	-	-	-	-	8,000	-	219,240	366
2004	-	-	29,920	-	1,150	7,500	33,880	5,909
2005	-	-	41,580	7,776	10,360	-	24,426	468
2006	-	-	41,364	5,136	1,860	-	11,606	-
2007	-	-	-	55,506	1,350	-	-	54,310
2008	-	-	8,000	-	-	-	66,050	7,229
2009	-	-	-	375	-	-	301,469	-
2010	-	-	41,429	-	-	-	91,216	6,933
2011	-	-	127,357	-	22,210	-	-	528
2012	-	-	266,098	-	7,061	-	-	950
2013	-	2,157	250,846	-	780	-	-	176
2014	-	4,844	-	-	-	10,000	996	576
2015	-	2,848	138,794	-	-	130,966	-	-
2016	701	-	19,200	-	-	-	-	-
2017	-	-	9,256	-	-	-	-	3,625
2018	-	-	56,404	-	-	-	-	5,226
2019	-	3,264	109,215	-	-	2	-	17,365
2020	-	-	79,411	13,390	-	-	-	1,152
2021	-	-	138,963	-	-	-	-	2,685
2022	-	-	-	-	-	-	341,835	1,520
2023 (Jan & Feb)	-	-	10,125	-	-	-	-	
Total 2000-2023	701	17,023	1,573,322	88,183	150,401	148,468	1,574,158	110,146

Source: State of New Jersey Department of Community Affairs (DCA) Building Permits: Yearly Summary Data *A-2 includes clubs, dance halls, casinos, restaurants, taverns and bars. **A-3 includes indoor swimming pools, art galleries, and museums.

Table 12: Permits Issued for Multifamily/Dormitories by Square Feet Sayreville Borough, Middlesex County, and New Jersey State, 2004-2022						
Year	Sayreville Borough		Middlesex County		New Jersey State	
	Square Feet	Percentage of Total	Square Feet	Percentage of Total	Square Feet	Percentage of Total
2004	29,900	2.0%	1,506,700	5.4%	20,404,300	5.6%
2005	41,600	2.7%	1,642,400	5.9%	24,198,000	6.6%
2006	41,400	2.7%	2,018,100	7.3%	18,592,300	5.1%
2007	-	-	2,157,500	7.8%	21,138,200	5.8%
2008	8,000	0.5%	111,900	0.4%	10,729,900	2.9%
2009	-	-	157,700	0.6%	7,648,300	2.1%
2010	41,400	2.7%	844,900	3.1%	8,900,200	2.4%
2011	127,400	8.4%	660,600	2.4%	8,713,200	2.4%
2012	266,100	17.6%	759,900	2.7%	14,269,100	3.9%
2013	250,800	16.6%	1,376,700	5.0%	19,175,400	5.2%
2014	-	-	1,242,600	4.5%	19,320,600	5.3%
2015	138,800	9.2%	902,400	3.3%	15,699,500	4.3%
2016	19,200	1.3%	1,239,900	4.5%	25,081,700	6.9%
2017	2,300	0.2%	2,005,000	7.2%	24,923,100	6.8%
2018	56,400	3.7%	2,631,400	9.5%	22,417,700	6.1%
2019	109,200	7.2%	2,086,000	7.5%	25,900,700	7.1%
2020	79,400	5.2%	2,193,600	7.9%	23,312,100	6.4%
2021	139,000	9.2%	2,212,800	8.0%	26,700,700	7.3%
2022	162,300	10.7%	1,905,600	6.9%	28,929,400	7.9%
Total 2004-2022	1,513,200	100.0%	27,655,700	100.0%	366,054,400	100.0%

Source: State of New Jersey Department of Community Affairs (DCA) Building Permits: Yearly Summary Data



Existing Land Use

Understanding the existing land uses in the Borough can inform recommendations for the Borough's future zoning and growth. Sayreville's current land use is largely characterized by wide swaths of public land dedicated to parks and recreational uses, the Borough's redevelopment areas, and one- to four-family residential. In addition to 28 municipality-owned public parks including John F. Kennedy Park, Sayreville Recreation Soccer Complex, and Waterfront Park—the Borough is home to large open areas including the Julian L. Capik Nature Preserve. The Borough also owns 40 basketball courts, 13 soccer fields, 19 baseball and softball fields, 4 volleyball courts, 20 horseshoe pits, 2 bocce ball courts, 9 tennis courts, 3 football fields, and 1 cricket pitch.

The Borough's Redevelopment Areas make up approximately 22% of the land in Sayreville, including most notably the Riverton Redevelopment Area and the Hercules Redevelopment Area, which collectively make up roughly 1,500 acres. A large portion of the Borough's land use is dedicated to 1-4 family residential, which is primarily concentrated in the northwest and east portions of Sayreville. Other notable land uses in Sayreville include the presence of 5 power facilities as well as 1 Middlesex County Utilities Authority wastewater treatment plant and 1 pump station, which collectively serve an estimated 800,000 residents across 30 towns.¹ Additionally, Middlesex County has a rather significant presence in the northeast corner of the Borough, where the buildings housing Middlesex County Utilities Authority, Middlesex County Fire Academy, and Middlesex Hazardous Materials are located. The Borough has 8 places of worship and 12 K-12 schools, which includes 3 private schools, 7 public elementary schools, 1 public middle school, and 1 public high school.

Public property, residential uses (excluding apartments), and waterways and roadways are the top land uses in Sayreville and collectively account for nearly 60% of the Borough's land area. Vacant and industrial properties make up another 23% of Sayreville's land area, and the remaining 10 property classes account for the final 17% of Sayreville's land use makeup.² This data is presented on Table 13.

Table 13: Land Use by Acres Sayreville Borough, 2022			
Property Class	Percentage		
15C	Public Property	2,315	21.0%
2	Residential	2,239	19.9%
	Waterways and Roadways	2,119	18.8%
1	Vacant	1,171	13.0%
4B	Industrial	1,092	10.2%
15F	Other Exempt	603	6.0%
4A	Commercial	461	4.1%
4C	Apartment	324	2.9%
5A/5B	Railroad	149	1.3%
15A	Public School	141	1.2%
15E	Cemetery	45	0.4%
15D	Church and Charitable	44	0.4%
15B	Other School	44	0.4%
3B	Qualified Farm 43 0.4%		
Total	11,252 100.0%		

Source: 2022 MOD-IV Data

¹ Valenti, Denise. "High Water Line' Project Draws the Boundary Where N.J.'s New Coastline Will Be If Climate Change Persists - High Meadows Environmental Institute." Princeton University, environment.princeton.edu/news/high-water-line-project-draws-the-boundary/. Accessed 10 Aug. 2023.

² This assessment was conducted utilizing best available data, including tax assessment records (MOD-IV) and municipal tax maps. It is common for areas with older development to have inconsistencies between these two sets of data; for analysis purposes, this necessitates the process of manually merging properties to align tax assessment data and tax map property lines.

Since the last Land Use Element was adopted in 2013, there have been significant changes to the land use throughout the Borough, which has largely been associated with residential areas, historically industrial areas, and several large developments. Some of these changes are summarized below:

- As mentioned earlier in this Plan, there has been an increase in the construction of multifamily units, which may at least partially be attributed to the Borough's 2018 action to establish 3 affordable housing inclusionary zoning districts.
- Since 2013, Sayreville has declared 5 areas throughout the Borough as areas in need of redevelopment, triggering opportunities and funding for the development of new, inventive uses throughout certain underutilized parts of the municipality.
 - Along those same lines, historically industrial areas—such as those along the Raritan Bay waterfront—are being remediated and redeveloped after decades of planning efforts. For example, Riverton is a mixed-use town center being developed in the Waterfront Redevelopment Area. While this development is not fully constructed at the time of this Plan, it offers a broader representation of Sayreville's changing landscape.

- As a response to Hurricane Sandy, **the NJDEP Blue Acres program bought out 149 residential properties in Sayreville between the years 2012 and 2022.** Many of the properties that were bought out have since been demolished and "returned to nature" or given the chance to return to a natural state. These buyouts occurred in the low-lying areas along MacArthur and Weber Avenues and within the Old Bridge section of the Borough.
- In recent decades there has been a rising trend for Class A logistics space throughout the Central Jersey region, due to the ease of access this location provides for distributors and commuters alike. In Sayreville this has triggered projects such as the Arsenal Trade Center in the Hercules Redevelopment Area, the construction of which was completed in 2023. This industrial campus comprises 3 buildings that contribute over 1,000,000 square feet of warehouse and logistical space to the Borough. This is just one example of the growing warehouse trend in the area.
- Recent residential developments throughout Sayreville represent a more diverse housing stock. The LaMer development, for example, has recently finished construction on its final phase after 35 years of development. This new addition to the Parlin neighborhood offers 102



A row of vacant and undeveloped Blue Acres properties along MacArthur Avenue

rental townhomes, which include amenities such as attached garages to help promote a sense of "home" for residents. This recent phase contributes to the existing 1,500 units of the LaMer development.

Furthermore, according to the Borough's 2022 Hazard Mitigation Plan, development in Sayreville over the last few years has resulted in: the construction of 88 affordable units within the Place at Sayreville development; over 500 new apartment units across 3 separate complexes, including the Morgan's Bluff development which has a total of 148 units; and 96 age-restricted townhouses and apartments within the Regents Walk development.

Existing Zoning

Sayreville's Land Development Ordinance consists of 28 zoning districts exclusive of the Borough's redevelopment areas.

Residential Districts

There are twelve residential districts in the Borough. The maximum building height is 35 feet and 2.5 stories in all residential zones except for the G-1 Apartment Zone; the G-1 Zone has a maximum height of 35 feet but no maximum permitted number of stories:

- R-5 Single-Family Residential
- R-7 Single-Family Residential
- R-10 Single-Family Residential
- R-20 Single-Family Residential
- R-7B Infill Overlay Residential
- R-7 (PRD) Planned Residential Development
- AH-1 Affordable Housing 1
- AH-2 Affordable Housing 2
- AH-3 Affordable Housing 3
- PD-7 Single-Family Planned Development
- PD-10 Single-Family Planned Development
- G-1 Garden Apartment

The **R-5**, **R-7**, **R-10**, and **R-20** Single-Family Residential Zones all permit the same principal and conditional uses. The zones permit detached single-family dwellings, institutional and public uses, essential services, community shelters, community residences, and existing agricultural uses. Houses of worship,

public utilities, family day care, and home occupations are conditional uses in all four zones. The minimum lot area in the R-5, R-7, R-10, and R-20 Zones are 5,000 square feet, 7,500 square feet, 10,000 square feet, and 20,000 square feet, respectively.

The **R-7B Infill Overlay Residential Zone** was established in 2014 as an overlay to the existing R-7 Zone. The intent of this overlay zone is to encourage the development of residential uses in areas of the Borough's R-7 Zone where there are a number of abandoned, non-conforming parcels of land that were previously used for commercial or accessory uses. The overlay establishes a "mean prevailing neighborhood frontage" to enable this goal. The zone only permits the use, construction, or structural alteration of detached single-family dwellings, institutional and public uses, essential services, community shelters, and community residences. The overlay is subject to the same bulk standards that apply to the R-7 Zone.

The **R-7 Planned Residential Development District** option permits detached and attached single-family dwellings and non-residential uses permitted in the B-2 General Business Zone described in the next section.

There are three Affordable Housing Zones: AH-1, AH-2, and AH-3. The **AH-1 Affordable Housing Zone (Camelot I Development)**—which applies to Block 136.16 Lots 30.05 and 30.06—permits multi-family dwellings as principal uses and private parks and playgrounds, private recreation buildings and facilities, garages and off-street parking facilities, and uses customary and incident to the principal use as accessory uses. The AH-1 Zone permits a maximum density of 168 dwellings units with a minimum requirement of 10 affordable units.

The AH-2 Affordable Housing Zone (Camelot II Development)—which applies to Block 347.01 Lot 3.01 and Block 366.01 Lot 1—permits the same principal and accessory uses as the AH-1 Zone, at a maximum density of 150 dwelling units with a minimum requirement of 8 affordable units.

The **AH-3 Affordable Housing Zone (Cross Ave / NL Development)**—which applies to Block 297 Lot 1, Block 333 Lot 1, and Block 332 Lots 1, 2, 3, and 4—permits: single-family attached structures/townhomes and affordable units developed as stacked flats within a multi-family building or as part of a townhouse building as principal uses; and the same accessory uses as the AH-1 and AH-2 Zones. The AH-3 Zone has a maximum density of 132 units, with a minimum requirement of 7 affordable units.

There are two Single-Family Planned Development Zones: PD-7 and PD-10. The **PD-7 Single-Family Planned Development Zone** permits the same principal and conditional uses as the R-5, R-7, R-10, and R-20 Zones with the addition of continuing care retirement communities as permitted uses. **The PD-10 Single-Family Planned Development Zone** permits the same principal and conditional uses as the PD-7 Zone with the addition of office uses. The minimum lot sizes for the PD-7 and PD-10 Zone are 7,500 and 10,00 square feet, respectively.

The **G-1 Garden Apartment Zone** permits single-family detached dwellings, single-family attached dwellings, and apartments. Other permitted uses include institutional and public uses, essential services, office, community shelters, community residences, and existing agricultural uses. Conditional uses in the zone include houses of worship, public utilities, family day care, and home occupations.

Commercial and Mixed-Use Districts

The Borough has 11 commercial and mixed-use districts:

- B-1 Neighborhood Business District
- B-2 General Business
- B-2 (PUD) General Business Planned Unit Development
- B-3 Highway Business
- B-4 General/Village Business District
- MW Marine Waterfront
- MW (PUD) Marine Waterfront Planned Unit Development
- PO Professional Office
- SED-2 Office/Business Use
- O-S Office/Service Overlay
- LI-BS Light Industrial/Business Service Overlay

The **B-1 Neighborhood Business District** encourages small-scale commercial development that serves the residents in the neighborhood in which it is found. With this goal in mind, permitted uses include offices, restaurants excluding drive-in, retail uses, financial institutions, and health club, gym, or recreational facilities.

The **B-2 General Business Zone** allows for pedestrianoriented development with a mix of commercial and residential uses. Mixed-use buildings are permitted. The B-2 General Business Planned Unit Development Zone encourages economic and residential growth of appropriate scale and distribution. The B-2 (PUD) Zone is subject to the same bulk standards as the B-2 and allows for detached/attached single-family dwellings, multi-family dwellings, and all non-commercial uses allowed in the B-2 Zone. The B-2 and B-2 (PUD) zones are the only commercial or mixed-use zones that permit residential uses.

The **B-3 Highway Business Zone** provides for large scale commercial development that relies heavily on automobile and truck access along Routes 9 and 35 on lots measuring 20,000 square feet or more. The B-3 Zone permitted uses include automobile sales, bars, indoor theaters, nightclubs, offices, restaurants without drive-in components, and retail uses.



A Main Street storefront, located in the B-4 General/Village Business Zone

The **B-4 General/Village Business Zone** encourages increased pedestrian-oriented commercial and retail activity in the Borough's Village or Main Street Hamlet along with providing flexibility for mixed use of commercial and residential uses. The B-4 Zone permits uses such as apartments, restaurants, banks, convenience stores, retail stores, and offices. Three different sets of bulk standards apply to development in the zone, depending on lot size.

The **PO Professional Office Zone** provides for office development alongside the Borough's business zones, permitting office space and research laboratories. The PO Zone remains in the Borough's Land Development Ordinance, but it no longer applies to any parcels in the Borough as it was subsumed by the B-4 General/Village Business Zone.

The **MW Marine Waterfront Zone** encourages water-related and water-dependent uses alongside commercial uses. The MW (PUD) Marine Waterfront Planned Unit Development Zone is subject to the same use and bulk standards as the MW Zone and additionally permits detached/attached single-family dwellings, multi-family dwellings, and non-commercial uses permitted within the B-2 Zone.

The **SED-2 Office/Business Use Zone** provides for a mix of professional office, sports and health facilities, business services, and restaurants. The SED-2 Zone remains in the Borough's Land Development Ordinance, but it no longer applies to any parcels in the Borough as it was replaced by the Fulton's Landing Redevelopment Area.

The **O-S Office/Service Overlay** encourages a balanced distribution of non-residential and residential uses along a portion of Washington Road, and generally permits a mix of professional offices, business services, service establishments, and retail sales.

The **LI-BS Light Industrial/Business Service Overlay** allows for a balanced distribution of non-residential and residential uses along a portion of Bordentown Avenue, and generally permits a mix of light industrial and business service uses including courier services, local trucking depots, landscaping contractors, dance studios, florists, computer repair, and more.

Industrial Districts

Sayreville has two industrial districts:

- I Industrial District
- SED Special Economic Development District

The I Industrial District permits industrial development, with permitted uses that include child care centers, essential services, information services and products/ communications industries, institutional and public uses, parking facilities, and a variety of light and heavy manufacturing uses including but not limited to food and beverage, textiles and apparel, paper, chemical and plastics, machinery and electrical equipment, and iron and steel manufacturing. Permitted accessory uses include: health clubs, gyms, or recreational facilities; offices, including medical offices and research labs; outdoor storage; parking for principal use; and restaurants. Houses of worship and public utilities are considered conditional uses. The minimum required lot size is 10 acres, and the maximum building height is 85 feet.

The **Special Economic Development District** permits a combination of commercial and industrial uses to provide for increased economic development in the area. The permitted uses include light and medium manufacturing, warehousing and indoor storage; automotive, commercial, industrial equipment and personal goods repair and maintenance; and offices (including medical office and research lab). The minimum required lot size for the zone is 60,000 square feet, and the maximum permitted building height is 50 feet.

Open and Public Space Districts

Sayreville has three open space and public space districts:

- OS-C Open Space Conservation
- OS-R Open Space Recreation
- PRIME Public, Recreational, Institutional, Municipal and Educational

The **OS-C Open Space – Conservation District** looks to maintain properties in their natural state and therefore only permits passive outdoor recreation uses, leaf composting facilities, existing public utilities, and other Borough-related activities.



oning District	
LI-BS: Light Indutrial / Business Service Overlay	P: PRIME
O-S: Office/Service Overlay	R-20: Single-Family Residential (20,000 SF)
GSP:Garden State Parkway	PD-10: Single-Family Planned Development (10,000 SF Lots)
B-1: Neighborhood Business	
B-2: General Business	R-10: Single-Family Residential (10,000 SF Lots)
B-2 (PUD): General Business Planned Unit Development	PD-7: Single-Family Planned Development (7,500 SF Lots)
B-3: Highway Business	R-7: Single-Family Planned Residential
B-4: General/Village Business District	Development
I: Industrial	R-7: Single-Family Residential (7,500 SF Lots) & R-7B Infill Overlay
MW: Marine Waterfront	R-5: Single-Family Residential (5,000 SF Lots)
MW (PUD): Marine Waterfront Planned Unit	G-1: Garden Apartment
Development	AH-1,2,&3: Affordable Housing
OS-C: Open Space - Conservation	
OS-R: Open Space - Recreation	Redevelopment Area
	Special Economic Development

The **OS** – **R Open Space** – **Recreation District** permits passive outdoor recreation uses, active outdoor recreation uses, and ancillary parking areas.

Key for Zoning Map on previous page

The **Public, Recreational, Institutional Municipal and Educational District** permits child care centers; essential services; health clubs, gyms or recreational facilities; institutional and public uses; and nursing home, assisted living facility, and continuing care retirement communities on lots measuring at least 10,000 square feet with a maximum permitted building height of 40 feet and 3 stories. Conditional uses in the zone include houses of worship and public utilities.

Redevelopment Areas

There are twelve redevelopment areas in Sayreville:

- Florida Power and Light Redevelopment Area
- Waterfront Redevelopment Area
- Jernee Mill Road Redevelopment Area
- Crossway Creek Redevelopment Area
- Dupont Redevelopment Area
- Route 35 Phase 1 Redevelopment Area
- Landfill and Melrose Redevelopment Area

- Hercules Redevelopment Area
- River Road Redevelopment Area
- Fulton's Landing Redevelopment Area
- National Amusements Redevelopment Area
- Club Pure Redevelopment Area

The **Florida Power and Light Redevelopment Area** (plan adopted in 1989) is a 57.52-acre area located in the southwest end of the Borough, which is split into 4 parcels (A, B, C, and D). Parcels A and B allow for the construction of a cogeneration facility and carbon dioxide plant by New Jersey Energy Associates (NJEA), Parcel C designates land ownership to Green Acres for preservation and use of the land as a buffer between heavy industry and recharge lagoons, and Parcel D allows for heavy industrial uses that conform with the M-2 Zone. The Sayreville Energy Center was constructed on Parcels A and B and opened in 1991. Parcel D remains undeveloped, and Parcel C remains as preserved open space.

The **Waterfront Redevelopment Area** (plan adopted in 1999 with amendments through 2015) is an approximately 954-acre area located along the Raritan River in the northeastern section of the Borough. The plan of the Waterfront Redevelopment Area, which was historically used primarily for industrial purposes, encourages (a) the revitalization of the Borough's economic base through job creation, while (b) providing public access to the River and (c) establishing businesses that can take advantage of the area's proximity to the regional transportation network.

The area is split into 13 distinct parcels, each of which has its own set of permitted uses. Generally speaking, however, the plan permits the following uses: waterrelated and water-dependent uses such as marinas, boat repair, bait and tackle shops and dry docking; golf courses; retail including restaurants (non-drive thru), entertainment, retail power centers, and outdoor/indoor commercial recreation; office; public use; park and ride facilities; childcare centers; full-service hotels or suite hotels; conference centers; health facilities including health clubs and spas; regional malls; museums; light industrial and manufacturing; and warehousing and distribution.

Recently, the 418-acre mixed-use Riverton development was proposed to be located within the Waterfront Redevelopment Area. This development, headed by North American Properties, will reportedly include 6.5 million square feet of retail and entertainment space, office and commercial space, and 2,000 residential units.³ The development is part of the Borough's Affordable Housing Settlement Agreement, and will include a required set-aside of 300 affordable residential units. As of February 2023, the team developing the site has completed the installation of remedial caps on portions of the land necessary for Phase I development. Other environmental remediation measures are in progress, in accordance with plans approved by the New Jersey Department of Environmental Protection.⁴

The first retail space scheduled to break ground is the Bass Pro Shops, which is anticipated to begin in the Spring of 2024. Phase I of development will account for the construction of Gateway Retail District and part of the "village", which will include components such as a hotel and conference center, residential units, entertainment, retail, and dining. The developers intend for Riverton to serve as a gateway into the "heart of New Jersey" and provide a downtown for Sayreville.⁵

The **Jernee Mill Road Redevelopment Area** (plan adopted in 1999) is a 156-acre area located on the west side of the Borough. The broad goals of the plan for this area are to (a) enhance Sayreville's economic



Riverton development is underway in the Waterfront Redevelopment Area

³Loyer, Susan. "New Town': What's up with the \$2.5B Waterfront Development off the Garden State Parkway?" Courier News, 15 May 2023, www.mycentraljersey. com/story/news/local/development/2023/05/15/riverton-nj-waterfront-development-sayreville-bass-pro-shops/70174357007/.

⁴Riverton FAQs MAY 2022, May 2022, riverton.com/wp-content/uploads/2022/05/Riverton_FAQs_May2022.pdf.

⁵"Riverton | A New Place." Performance by Nick Solazzo, Riverton.Com / Riverton | A New Place, Riverton, 12 Oct. 2020, https://riverton.com/development/. Accessed 16 Aug. 2023. base through job creation and tax revenues and (b) conserve the undeveloped, wooded nature of the area. With these goals in mind the plan permits commercial and industrial uses which include but are not limited to: electrical power generating facilities; fitness and recreation sports centers; communications industries; a variety of manufacturing; offices; parking facilities; restaurants; and warehousing and indoor storage.

The Red Oak Power facility proposed in the plan came to fruition and began commercial operations in September 2002.

The **Crossway Creek Redevelopment Area** (plan adopted in 2000 with amendments through 2009) is a 75-acre area off Ernston Road, located on the east side of the Borough. The overarching focus of the plan for this area is to provide senior citizen housing and supporting uses. To support this goal, the plan divides the area into two districts: Crossway Creek PD-10, which permits detached single-family dwellings, essential services, institutional and public uses, assisted living facilities, and community shelters and residences; and Crossway Creek SH/TH, which permits detached single-family housing for senior citizens, townhouses, essential services, institutional and public uses, community shelters and residences, and uses permitted in the MW zone.

Nearly the entirety of the Area has been built out with the Harbour Club Condominiums and Spinnaker Pointe developments. As of the writing of this Plan, construction of the Regents Wharf development has been completed.

The **Dupont Redevelopment Area** (plan adopted in 2002) is an 11.23-acre property located in the southwest section of the Borough. The Plan granted E.I. Dupont De Nemours and Company approval to construct a 125,000-square-foot warehouse building to be utilized in conjunction with its manufacturing facilities. The warehouse has been fully constructed for over a decade and is currently used as the Dupont Distribution Center.

The **Route 35 Phase I Redevelopment Area** (plan adopted in 2004 with revisions through 2005) is a 29acre area on the southeast side of the Borough, that sits off Route 35 but has no direct access to it. The overarching goal of the plan is to serve the needs of the Morgan neighborhood through the provision of a residential district that incorporates commercial activity on Route 35. The focused intention of this plan is to allow for mid-rise, age-restricted residential dwellings throughout the bulk of the property, with smaller portions of ground-floor retail with office above.

The construction of the Morgan's Bluff Apartments, an inclusionary age-restricted housing development, was completed within this area in 2016.

The Landfill and Melrose Redevelopment Area (plan adopted in 2011 with revisions through 2013) addresses two parcels, with a combined area of 53 acres: (1) a collection of 7 lots located along the South River in the southwest portion of the Borough, formerly used as municipal landfill #3 and so forth referred to as the RA-EI district; and (2) a single lot located along the Raritan River in the northeast portion of the Borough, formerly used as a sewage treatment plant and so forth referred to as the RA-PS district. The focus of the plan is to encourage the development of eco-industrial parks, with an overarching goal of encouraging economic performance and minimizing the environmental impacts of the companies involved.

With this goal in mind the RA-EI district permits industrial uses, which include but are not limited to: brewing or distilling; construction and building trade workshops; greenhouse or plant nurseries; industrial service establishments; manufacturing; offices; power plants; recycling depots; warehouses; solar panel power generation facilities; and boat and water related storage, launching, and maintenance facilities. The RA-PS district permits commercial uses to support nearby residential, office, and commercial uses, which includes a variety of service providers, maintenance providers, and wholesalers.

In May of 2022, the Sayreville Economic and Redevelopment Agency released a Request for Statement of Interest and Proposal for the prior Landfill #3 site, encouraging proposals to make innovative use of the 46-acre property.⁶ As of 2023, the Borough has entered into a redeveloper agreement to sell the landfill property to a redeveloper and allow for the construction and use of cold storage warehouses. The redevelopment plan will need to be amended to reflect this use.

⁶"Request for Proposal - Redevelopment Opportunity Sayreville Landfill #3." Borough of Sayreville, 2 May 2022, www.sayreville.com/cn/News/index. cfm?NID=54544&jump2=0.

The **Hercules Redevelopment Area** (plan adopted in 2017) is an approximately 590-acre area comprised of 20 lots, centrally located within the Borough. The overarching goal for this area is to attract new industries that will create jobs and increase the Borough's tax base. The plan for the site, which was previously used for industrial purposes, divides it into five sections which each have a unique set of permitted uses. Generally speaking the plan permits commercial and industrial land uses that include but are not limited to: warehousing, shipping, and distribution; technology centers for research, design, and testing; lumberyards; breweries and distilleries; indoor and outdoor recreational uses; alternative energy utilities; public parks and open space; water-oriented recreation; and wildlife habitat creation, enhancement or restoration.

On August 4, 2021, the Planning Board approved an application for the Arsenal Trade Center, which comprises three warehouses and ancillary office space in Section 1 of the area. A groundbreaking ceremony for the site was held in September 2022 and construction was completed before the end of 2023. As of February 2024, the site is fully operational.

The River Road Redevelopment Area (plan adopted in 2018 with amendments through 2019) is an 87-acre area located to the east of the River Road Waterfront Park. Some of the goals set forth in the redevelopment plan for this area are to provide affordable housing opportunities, create new recreational opportunities, and improve residential quality. With these goals in mind the area permits six land use districts, each of which permits its own set of residential and commercial uses. Permitted uses include, but are not limited to: multifamily residential (including affordable); senior citizen housing; passive/active outdoor recreational uses; public utilities; municipal uses; single- and two-family residential, including townhomes; wetlands mitigation; water oriented and water dependent uses such as marina activity, docks, and boat repair facilities; commercial uses such as retail, medical and professional offices, and child care services; and a high density direct current converter station.

Construction for The Place at Sayreville, an incomerestricted housing development with 88 apartmenthomes, was completed in this area in August of 2022.⁷ The **Fulton's Landing Redevelopment Area** (plan adopted in 2019) is a 158-acre area located in the central portion of Sayreville that fronts Main Street. The focus of the plan for this area is to redevelop the site into a warehousing complex, with overarching goals to (a) promote economic development and job growth and (b) strengthen Sayreville's tax base. Permitted uses in this area include warehouse/storage facilities, distribution/fulfillment centers, transload facilities, cold storage warehouses, light manufacturing, and office.

On August 17, 2022, the Planning Board approved an application encompassing the entirety of this area. The applicant of the development proposed three onestory warehouse buildings with ancillary office space to be built over three phases.

The **National Amusements Redevelopment Area** (plan adopted in 2021) is a 19.5-acre area located approximately a quarter mile south of the Raritan, in the northeastern section of the Borough. This area was previously a major destination in Sayreville, serving as the site of the Amboys Drive-In Theater beginning in 1957 and later operating as the Amboy Cinemas between the years of 1979 and 2005.



The Place at Sayreville offers amenities including tot lots, a community room, and landscaped grounds

⁷The Place at Sayreville - Everything You Want to Know About Our Community, https://www.ciscommunities.com/_files/ugd/aeb8fb_ f0974559fb3440dfbd75f6c76f8f27e1.pdf. Accessed 16 Aug. 2023.

The redevelopment plan for the area encourages a mix of commercial, recreational, and professional uses that are comparable to those within the nearby Waterfront Redevelopment Area. With this goal in mind, the area permits uses including: office; retail; grocery stores (limited to a maximum of 40,000 square feet); educational facilities; medical specialty; medical rehabilitation and physical therapy; hospitals; assisted living; hotel-conference centers; full-service hotels or suite hotels; health clubs, gyms, and spas; restaurants/bars; quick service restaurants; entertainment uses; public uses; park and ride facilities; and open space. As of the writing of this Plan, demolition of the prior Amboy Cinemas building has been completed.

The **Club Pure Redevelopment Area** (plan adopted in 2022), also referred to as the 1970 Route 35 Redevelopment Area, is a 138,000-square-foot parcel on the east side of State Highway 35 which was previously used as a nightclub and event venue. The goal of the redevelopment plan for this area is to encourage the redevelopment of the site into a storage facility.

Therefore, the area permits certain uses that are permitted in the neighboring B-3 Zone, which include: selfstorage facilities; child care centers; essential services; health clubs, gyms, or recreational facilities; institutional and public uses; offices; retail sales and services; and wholesale sales and services. At the Sayreville Planning Board meeting on June 7, 2023, plans for a self-storage facility on the site were approved.



A portion of land within the Fulton's Landing Redevelopment Area, taken in 2018.



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ENVIRONMENT

The presence of environmental constraints is a critical consideration when developing a land use plan for a community. The location and types of constraints help guide the type, intensity, and location of development in accordance with local, county, and state requirements.

Planning for Stormwater and Flooding

Due to the Borough's proximity to multiple waterways and the Raritan Bay, it's important to consider the impact of flooding and stormwater inundation throughout Sayreville, especially as sea levels rise in correlation with climate change. The Sea Level Rise map depicts how various levels of rising seas will impact the Borough's land. Furthermore, it's imperative to consider the mitigative measures that could help reduce these impacts through resilience efforts.

NJDEP Stormwater Management Rules

Over the last few years, the New Jersey Department of Environmental Protection (NJDEP) has released two amendments to the Stormwater Management Rules, N.J.A.C. 7:8, to promote statewide resiliency to such stormwater and flooding issues.

The Green Infrastructure Rule, effective March 2021, amended the rules to require the use of green infrastructure (GI) in any major development as a means of meeting groundwater recharge standards and stormwater runoff quantity standards. On or about February 22, 2021, the Borough amended §26-99.6 "Stormwater Control" through Ordinance #518-21 to comply.

The Inland Flood Protection Rule, effective July 2023, further amended the rules by:

 Increasing FEMA-established non-tidal flood elevations as follows: flood elevations mapped by NJDEP saw an increase of 2 feet; FEMA's 100year flood elevations saw an increase of 3 feet; and Flood Hazard Area (FHA) elevations determined by approximate methods saw an increase of 1 foot.

- Requiring that developers use projected precipitation volumes for flood elevation calculations, which are typically greater than current volumes. With these new flood elevations in place, there is potential for properties which were previously not within a floodplain to now be within a floodplain and, therefore, subject to the NJDEP permitting requirements.
- Refining the existing stormwater rules by requiring that (1) developers account for a higher intensity rainfall when designing stormwater management facilities for any new proposed land development project, and (2) infiltration areas must be calculated using the new higher intensity rainfall.

As of the writing of this Plan, §26-99.6 "Stormwater Control" of the Borough Code has not been updated to include these amended rules. The New Jersey Department of Environmental Protection has released a Model Municipal Stormwater Control Ordinance that provides a model for municipalities to reference when revising their municipal stormwater control ordinances.

NJDEP Flood Hazard Area Control Act (FHACA)

On March 25, 2013 the NJDEP adopted emergency amendments to the FHACA rules. This amendment was a response to the impact of Hurricane Sandy and was designed to reduce the impact of future flooding on development. The amended rules required the use of the highest available State or Federal flood elevation data to determine a site's flood elevation and required that any substantially flood-damaged buildings be elevated, amongst other regulations. The Borough adopted Ordinance #234-13 On October 28, 2013 to amend and supplement §23 "Flood Damage Prevention" in order to comply with these updates.

More recently on June 27, 2022, the Borough adopted Ordinance #17-22 to: repeal the former Flood Damage Prevention Ordinance; adopt a new §23 "Flood Damage Prevention and Protection" to adopt flood hazard maps; and designate a floodplain administrator. The regulations set forth in this Ordinance apply to all proposed development located within established flood hazard areas, with a purpose to protect human life and health, contribute to improved construction techniques in the floodplain, and minimize the need for rescue and relief efforts associated with flooding, amongst others.



Municipal Stormwater Management Master Plan Element

In May 2005, the Borough adopted its first Municipal Stormwater Management Plan (MSMP) Master Plan Element, which was subsequently revised in September 2005, May 2006, and November 2018. The MSMP is required by N.J.A.C. 7:14A-25 Municipal Stormwater Regulations, and is designed to address and minimize the negative impacts of stormwater runoff. The MSMP outlines a broad range of stormwater management regulations related to low impact development techniques, groundwater recharge, and stormwater quantity and quality.

Environmental Characteristics in Sayreville

Floodplains

Floodplains are flat, typically low-lying areas that are formed along the banks of rivers over time. They serve a vital role in promoting healthy local ecosystems by providing wildlife habitation and improving water guality. Important especially within urbanized areas, floodplains can significantly help prevent flood damage to man-made infrastructure and buildings by capturing and storing stormwater in flood events. The Federal Emergency Management Administration (FEMA) establishes the 100- and 500-year floodplains to help municipalities and homeowners plan for future storm events. These designated floodplain areas consist of land that is especially susceptible to being inundated by floodwaters. The 100-year floodplain refers to the area that has a 1% annual chance of flooding, while the 500-year floodplain refers to the area that has a 0.5% annual chance of flooding.

Three of Sayreville's municipal boundaries are defined by waterways: the western boundary is defined by the South River; its northern boundary is defined by the Raritan River; and its eastern boundary abuts the Raritan Bay. As a result, the land adjacent to these waterways fall within the FEMA Floodway, A Zone (100-year flood), and X Zone (500-year flood). The A Zone is defined by FEMA as a high-risk area and a Special Flood Hazard Area (SFHA), and properties within it are subject to the National Flood Insurance Program's (NFIP) floodplain management regulations. The X Zone, on the other hand, is considered a moderate risk zone. The FEMA Floodway is defined as the channel of a river and the adjacent land areas where development is prohibited to occur in order to preserve the natural functions of the waterway during flood events. The extent of Sayreville's floodplains are shown on the FEMA Flood Zones map.

Superstorm Sandy Surge

In October 2012, Sayreville was one of the municipalities to be hit the hardest by Superstorm Sandy and many residents were left without homes to return to. According to a National Oceanic and Atmospheric Administration (NOAA) summary on the Sandy storm surge, the deepest storm surge waters occurred along the Lower New York Bay, Raritan Bay, and Raritan River. In Sayreville, the highest high-water mark from the storm surges was recorded at 7.7 feet.⁸ Storm surge flooding significantly impacted areas of the Borough including Weber and McArthur Avenues and the Old Bridge section of Sayreville.

As a result, a majority of the inundated homes in these areas have since been bought out by the NJDEP Blue Acres program in an attempt to return the affected land to a natural state and mitigate future flood damage.9 As of October 2022, 149 Blue Acres buyout offers had been accepted in Sayreville and 32 applicants had received a collective \$2.6 million in grant funding from the New Jersey Department of Cultural Affairs (NJDCA), accounting for nearly half of the NJDCA funding received in all of Middlesex County.¹⁰ Additionally, Sayreville received nearly \$5.5 million in FEMA Public Assistance relief and residents suffered a total loss of \$5.4 million in wages due to the lasting impacts of the storm damage.¹¹ The extent of the Superstorm Sandy storm surge in Sayreville is represented on the Superstorm Sandy Surge map.

⁸ Bilinski, Joseph, et al. State of New Jersey Department of Environmental Protection, Trenton, New Jersey, 2015, Damage Assessment Report on the Effects of Hurricane Sandy on the State of New Jersey's Natural Resources.

⁹ Valenti, Denise. "High Water Line' Project Draws the Boundary Where N.J.'s New Coastline Will Be If Climate Change Persists - High Meadows Environmental Institute." Princeton University, environment.princeton.edu/news/high-water-line-project-draws-the-boundary/. Accessed 10 Aug. 2023.

¹⁰Loyer, Susan. "10 Years after Superstorm Sandy, Sayreville Recounts Survival and Heroism." Courier News, 21 Oct. 2022, www.mycentraljersey.com/story/news/ local/middlesex-county/2022/10/21/superstorm-sandy-anniversary-sayreville-nj-recounts-survival-heroism/69555988007/.

¹¹Hoopes Halpin, Stephanie. The Impact of Superstorm Sandy on New Jersey Towns and Households.


Wetlands

Wetlands are land areas that are either submerged or retain water at ground level for a portion of the year, including marshes, swamps, and bogs. Wetland areas provide a number of benefits that help to protect both natural and man-made environments. They serve as filtration systems, removing pollutants, chemicals, and sediments from the water table and store them in biomass. Wetlands act as groundwater recharge areas, releasing stored waters to streams during droughts. They are critical habitats for many of New Jersey's threatened and endangered species. Perhaps the most salient function of wetlands for many of New Jersey's shore and riverine communities is the natural flood control they provide by storing excess water and releasing it to surface waters over a period of time. In situations where the total area of wetlands shrinks and their natural functions decrease, the overall quality and quantity of the surface water flow within the watershed is altered. Expensive man-made infrastructure is often required to make up for the loss of wetlands.

Sayreville contains nearly 2,000 acres of wetlands, which are shown on the Environmental Constraints Map. The majority of the Borough's wetlands make up approximately 17% of the land in Sayreville and are primarily located along the northwest, west, and southeast borders of the Borough. Additionally, there are wetlands sandwiched between Main Street and Washington Road, and around the Jernee Mill Road area in the southwest corner of the Borough.

Riparian Buffers

Riparian zones are found along the edges of waterways and have soils and vegetations that are influenced by the presence of the water. These zones are either 50 feet, 150 feet, or 300 feet wide, depending on the classification of the waterway. Riparian zones do not apply to the Atlantic Ocean, man-made lagoons, stormwater basins, or oceanfront barrier islands. Riparian buffers are the naturally occurring vegetative areas that occur within this area, extending from the edge of the waterway to the edge of the Riparian zone. The riparian buffer is a crucial element within local ecosystems, as it supports wildlife habitation, reduces erosion along waterways, and temporarily stores and filters stormwater which reduces the impact of flooding on surrounding areas.

Sayreville contains approximately 55 acres of riparian buffer zones, which are shown on the Environmental Constraints Map. These buffer zones can be found scattered throughout the Borough, following the waterways that flow into Sayreville.

Known Contaminated Sites

The New Jersey Department of Environmental Protection maintains a list of Known Contaminated Sites in New Jersey. These sites are under the oversight of the NJDEP Site Remediation Program and have or had contamination present at levels greater than the applicable cleanup criteria for soil, ground water standards, and/or maximum contaminated levels (MCL's) of Safe Drinking Water Standards.

Sayreville has 52 known contaminated sites, which are shown on the Environmental Constraints Map. These contaminated sites can be found throughout the Borough, although there are a few clusters along US Highway 9 in the southeast area of Sayreville, around the Jernee Mill Road area in the southwest corner of Sayreville, and in the northeast corner of Sayreville located between the Garden State Parkway, Raritan Bay, and the Borough's municipal boundary with South Amboy.

Sayreville's wetlands, riparian buffers, and known contaminated sites are shown on the Environmental Constraints map.



The Borough has many assets that are located along the Raritan River, such as Buchanan Park



SUSTAINABILITY

Smart Growth

The term Smart Growth refers to the practice of preserving land, enhancing health and equity, and promoting balanced and sustainable land use that limits sprawl and accommodates a growing world population. Generally speaking, Smart Growth practices emphasize development around condensed, mixed use centers to bring people together, encourage alternative modes of transportation, and generate economic activity.

Smart Growth is acknowledged in the 2001 New Jersey State Development and Redevelopment Plan (SDRP) as a tool of planning for the future in such a way that preserves the state's resources and its residents' quality of life. The SDRP divides the state into 7 Planning Areas (PAs), which establish the foundation for the management of development and redevelopment throughout the state. Except for a few areas that are categorized as PA5 "Environmentally Sensitive Planning Area" and PA8 "County Park Planning Area", the vast majority of Sayreville falls within PA1 "Metropolitan Planning Area." Some of the primary goals for Metropolitan Planning Areas include protecting the character of existing stable communities, promoting growth in compact forms, and revitalizing cities and towns.

The SDRP outlines various strategies for meeting these goals, which are centered around improvements in infrastructure, employment opportunities, balanced housing, preserved open space, and traffic management. Although the SDRP is over 20-years-old, smart growth remains a foundational principle in modern planning practice. So much so, that the Municipal Land Use Law requires that Land Use Elements include a smart growth strategy which in part shall "consider potential locations for the installation of electric vehicle charging stations; storm resiliency with respect to energy supply, flood-prone areas, and environmental infrastructure; and environmental sustainability."

As will be discussed later in the Build Out Analysis section of this Element, Sayreville has limited development capacity and, thus, its growth will need to be planned strategically and with smart growth principles at the forefront. In total, the Borough has an estimated 524 acres of environmentallyunconstrained, vacant land remaining. Of this, the land that comprises the Waterfront Redevelopment Area accounts for an estimated 68% of the Borough's residential development potential and an estimated 55% to 74% of the Borough's non-residential development potential. Outside of the Waterfront Redevelopment Area, the Borough has the capacity to develop less than 1,000 additional residential dwelling units, and between 2.28 million to 5.35 million square feet of non-residential space, which includes office, commercial, and industrial development. As the Borough continues to grow, it will need to center smart growth principles such as walkability and public transit, compact development and density, and sustainable development practices.

The smart, sustainable future envisioned for the Borough by this Plan meets the standards of smart growth set forth in the SDRP and other best practices.

Electric Vehicle Charging Stations

On July 9, 2021, Governor Phil Murphy signed P.L. 2021, c. 171 into law. The law established new standards and parking requirements associated with the installation of Electric Vehicle Supply/Service Equipment (EVSE) and Make-Ready parking spaces. It additionally requires the designation of EVSE and Make-Ready spaces as permitted accessory uses in all zoning districts. Subsequently, on September 1, 2021, the New Jersey Department of Community Affairs (DCA) published a model statewide electric vehicle ordinance. The goal of this model ordinance was, in part, to ensure that New Jersey's municipalities are adhering to the requirements in a consistent manner. As of the writing of this Plan, Sayreville has not adopted the model ordinance nor have any public EVSE stations been constructed.



An example of Smart Growth principles being applied along Cookman Avenue in Asbury Park, New Jersey

Environmental Sustainability

A statement of strategy concerning environmental sustainability is a required component of the Land Use Element. The Borough of Sayreville is dedicated to promoting environmental sustainability and resiliency in support of its current and future residents, business owners, and other stakeholders. This is made evident by the Borough's:

- Commitment to the remediation and redevelopment of Sayreville's historically industrial sites;
- Active engagement of municipal boards committed to sustainability and resiliency, including Sustainable Sayreville, the Shade Tree Commission, the Open Space Committee, and the Environmental Commission;
- Encouragement of its residents to participate in sustainable land use programs such as Blue Acres, which has effectively been used along Weber Avenue, MacArthur Avenue, and in the Old Bridge section of the Borough to buyout flooded properties and return them to nature;
- Promotion of sustainability from within the Recycling Department, which emphasizes the motto "clean it up, green it up, and keep Sayreville beautiful" and has historically awarded mini-grants to Sayreville nonprofits supporting green initiatives in the local community; and
- Leveraging of state initiatives to preserve and enhance its open space through programs such as the New Jersey Department of Environmental Protection's Green Acres program and the New Jersey Clean Communities program, which is focused on litter abatement.

In addition to efforts made by the Borough, there have been resiliency projects conducted within Sayreville at the hand of the County as well. For example, the Middlesex County Utilities Authority made use of Federal Emergency Management Agency (FEMA) funding in 2021 to construct a floodwall for the Sayreville Pump Station. This intervention from the County acknowledges the critical role of resiliency in Sayreville.

This Land Use Element discusses principles of sustainability related to topics including EVSE implementation, stormwater management and flooding, and green building and resiliency standards, with the ultimate goal of integrating further sustainable measures into the Borough's Ordinance. Other Master Plan Elements overlap and include additional details on these topics, amongst others. The Borough may also consider pursuing opportunities to prepare the optional Green Building and Sustainability Element, which dives into further detail on the above topics as well as others including renewable energy, air quality conservation, natural resources, and public health.

Climate Change-Related Hazard Vulnerability Assessment

On February 4, 2021, Governor Murphy signed into law an amendment to the Municipal Land Use Law (N.J.S.A. 40:55D-28) requiring all Land Use Plan Elements to include a Climate Change-Related Hazard Vulnerability Assessment. The Assessment shall rely on the most recent natural hazard projections and best available science provided by the N.J.D.E.P.

The Assessment is required to include:

- Analysis of current and future threats and vulnerabilities of the municipality associated with climate change related natural hazards, including increased temperatures, drought, flooding, hurricanes, and sea level rise.
- A "Build-Out Analysis" of future development with an assessment of threats and vulnerabilities related to that development.
- Identification of facilities, utilities, roadways, and infrastructure necessary for evacuation and sustaining quality of life during a natural disaster.
- Potential impacts of natural hazards on components and elements of the Master Plan.
- Strategies and design standards available to reduce or avoid risks associated with natural hazards.
- A policy statement regarding consistency, coordination, and integration of the Vulnerability Assessment with various existing or proposed plans such as:
 - Natural Hazard Mitigation Plan
 - Floodplain Management Plan
 - ^o Emergency Management Plan
 - Emergency Response Plan
 - ^o Post-Disaster Recovery Plan

Vulnerable Populations

When planning for hazards and emergency events, it's especially important to consider portions of the population which may require special assistance or accommodations. According to the Borough's 2022 Hazard Mitigation Plan, the term "vulnerable populations" typically includes individuals who require mobility assistance, have financial insecurity, require translation or interpretive services, have cognitive impairments or special medical needs, are legal minors, or have social disadvantages. This term is often applied to describe individuals and families who may not have the physical or financial means to evacuate, who are not able to receive or understand emergency information dispersed by the Borough, or who are in need of refrigerated medication or electricity-dependent devices such as respirators.

For the purpose of this assessment, the following factors have been considered as potential contributors to vulnerability: household composition and disability; minority status and language; socioeconomic status; and housing and transportation. Sayreville's vulnerable population is summarized in Table 14.

Table 14: Vulnerable Populations Sayreville Borough, 2021 Household Composition and Disability				
Population Variable Population Within Variable Percent of Total Population				
Aged 65 or Over	6,480	14.4%		
Aged 17 or Younger	9,214	20.4%		
Household Variable	ivilian with a Disability 4,209 9.3% Household Variable Households Within Variable Percent of Total Households			
Single-Parent Households	7,515	Percent of Total Households 16.7%		
	· ·	10.7 %		
	ty Status and Language	Demonst of Total Demulation		
Population Variable	Population Within Variable	Percent of Total Population		
Minority	18,350	40.7%		
Black or African American	5,510	12.2%		
American Indian or Alaskan Native	89	0.2%		
Asian	7,971	17.7%		
Native Hawaiian or Other Pacific Islander	20	0.04%		
Other	1,523	3.4%		
Two or More Races	3,237	7.2%		
Hispanic or Latino	8,393	18.6%		
Speak English Less Than "Very Well"	5,977	13.3%		
So	cioeconomic Status	1		
Population Variable	Population Within Variable	Percent of Total Population		
Below Poverty Level	1,938	4.3%		
Unemployed (Ages 16+)	1,392	3.1%		
No High School Diploma (Ages 25+)	2,649	5.9%		
Housi	ng and Transportation	-		
Population Variable	Population Within Variable	Percent of Total Population		
Group Quarters	Data Unavailable	Data Unavailable		
Household Variable Households Within Variable		Percent of Total Households		
Total Occupied Housing Units	16,878	-		
Multi-Unit Structures	6,158	13.7%		
Mobile Homes	15	0.03%		
Crowing (Occupants Per Room)	-	-		
1.00 or Less Occupants Per Room				
1.01 to 1.5 Occupants Per Room	331	0.02%		
1.51 or More Occupants Per Room	207	0.01%		
No Vehicle	816	1.8%		

Source: 2021 ACS 5-Year Estimates Data Profiles

Analysis of Current and Future Threats

Increased Temperatures

According to the Office of the New Jersey State Climatologist at Rutgers University, the State of New Jersey experienced a statistically significant statewide average increase in temperature from 1895 to 2019.

The Borough of Sayreville, along with every community in New Jersey, is vulnerable to increased temperatures. The extent of the Borough's future vulnerability is impacted by the amount of future greenhouse gas emissions and the resultant temperature increases. According to temperature projections by the NJ Climate Change Resource Center at Rutgers University (presented on Table 15), the Borough of Sayreville can expect to see temperature increases under both a moderate emissions scenario and a high emissions scenario. The moderate emissions scenario is Representative Concentration Pathway (RCP) 4.5 where future greenhouse gas emissions peak around the year 2040. The high emissions scenario is RCP 8.5 where greenhouse gas emissions continue rising throughout the 21st century.

As part of the 2021 Middlesex County Hazard Mitigation Plan (2021 HMP) update, the Borough of Sayreville was asked to rank 17 hazards as high, medium, or low based on the hazard profiles and risk assessments of each hazard as they apply to the community. The Borough assigned a high ranking to floods, hazardous materials, hurricanes and tropical storms, Nor'easters, pandemics, and power outages. Hazardous materials are not influenced by climate change, and therefore will not be evaluated in this assessment.



"New Jersey 12-Month Average Air Temperature from 1895 to 2019. Points represent the average annual temperature, and the dashed line represents a five-year average of those points."¹²

¹² Source: Figure from "Climate Change in New Jersey: Temperature, Precipitation, Extreme Events, and Sea-level Rise, Environmental Trends Report" NJDEP, Division of Science and Research, updated 9/2020. Data in chart derived from the Office of the New Jersey State Climatologist 2020.

Table 15: Sayreville Projected Temperature Increase ¹³						
	Moderate Emissions (RCP 4.5) Change from 1981-2010 Baseline		High Emissions (RCP 8.5) Change from 1981- 2010 Baseline			
	2030	2060	2090	2030	2060	2090
Change in Days Above 95° F	+5 to +10	+11 to +20	+11 to +20	+5 to +10	+11 to +30	+41 to +50
Change in Cooling Degree Days	+200 to +400	+400 to +600	+600 to +800	+200 to +400	+600 to +1,000	+1,200 to +1,400
Change in Max. Temp. July	+2° F to +3° F	+4° F to + 5° F	+4° F to +6° F	+2° F to +3° F	+5° F to + 8° F	+8° F to +10° F

Floods

Sayreville is surrounded by water on three sides with the South River to the west, the Raritan River to the north, and the Raritan Bay to the east. The Borough's proximity to these waterways leaves the Borough vulnerable to flooding during major rain and storm events and from sea-level rise.

The 100-year floodplain is the area with a 1% annual chance of flooding, and the 500-year floodplain is the area with a 0.2% annual chance of flooding. The 100-year and 500-year floodplains can help illustrate the portion of the County's population estimated to be at risk. The 2021 HMP assessed that 225 Sayreville properties are in the 1% annual floodplain with a total replacement value of \$34,641,000, and 321 Sayreville properties are in the 0.2% annual floodplain with a total replacement value of \$111,983,000.

The 2021 HMP shows Sayreville has 230 National Flood Insurance Program policies that were in force as of 2020. There are 63 repetitive loss properties in the Borough, 40 of which have been mitigated through elevation or acquisition and demolition. The Federal Emergency Management Agency (FEMA) defines repetitive loss properties as properties where the National Flood Insurance Program (NFIP) has paid two or more claims of more than \$1,000 in any ten-year period since 1978.¹⁴

As sea levels rise, tidal flooding is expected to worsen these impacts. The 2021 HMP predicts that coastal flood events occurring at 12 feet above MHHW¹⁵ would either fully inundate or partly expose 862 properties to more than 700 square feet of tidal flooding, with apartments being the most at-risk property class. This scenario would result in a cumulative replacement value of \$234,547,000 of tidal flooding damage in addition to any inland flood exposures from non-tidal waters, which this assessment does not evaluate.

Hurricanes and Tropical Storms

New Jersey's cool coastal waters have historically served as a natural mitigation tool in the event of hurricanes and tropical storms. As these weather patterns travel north, away from the warmer waters and moisture-rich air that fuels them, their force is weakened as they pass through these cooler water. The threat of rising sea temperatures, however, reduces this effect and puts coastal municipalities like Sayreville at a higher risk of storm-related damages and deaths. Three of the top five deadliest hurricanes and tropical storms to hit New Jersey have occurred since 2010, resulting in a cumulative 78 deaths across the state.

While the high wind speeds of hurricanes and tropical storms contribute to damage, coastal storm surges and flash flooding pose a much more serious threat to New Jersey municipalities. According to the 2019 New Jersey State Hazard Mitigation Plan, approximately 90% of property damage and deaths that occur near the coast during hurricanes can be attributed to storm surge, which results from the combination of heightened sea levels and wind-enhanced waves

¹³ "Sayreville Borough: Public Health Exposure Snapshot;" NJ Climate Change Resource Center, NJ Adopt, Municipal Snapshots, https://njclimateresourcecenter. rutgers.edu/nj-adapt/

¹⁴ FEMA. 2020. "National Flood Insurance Terminology Index". https://www.fema.gov/flood-insurance/terminology-index

¹⁵ MHHW is shorthand for the Mean Highest High Water, which is the average height of the highest tide at a tide station over a recording period.

during a storm.¹⁶ Storm surges in Sayreville during Superstorm Sandy significantly impacted Weber and McArthur Avenues—an area located 5-miles inland from the Raritan Bay—as well as the Old Bridge section of the Borough and forced the evacuation and rescue of Sayreville residents.¹⁷ Flash flooding occurs when a large amount of rainfall inundates an area over a short period of time, leading to intense property damages and death. According to NJDEP flood models developed for a 2022 Resilient New Jersey Flood Impact Assessment report, by 2070 Sayreville can expect an approximate 7% increase in damages from flash flooding.¹⁸

The cumulative effects of high-speed winds, flash flooding, and storm surges have a multitude of secondary effects that disrupt municipal services and impact property owners and residents. In the short-term, these phenomena can lead to power outages, property damage, gas station closures, and the prevention of access to critical infrastructure. Senior citizens and other vulnerable populations are most impacted in the wake of these disruptions, as they are most likely to require evacuation assistance or medical attention. In the long-term, the impacts of hurricanes and tropical storms can lead to health issues that result from excessive mildewing, saltwater damage to structures, and the need for long-term or short-term housing shelters.

Nor'easters

Nor'easters function similarly to hurricanes and tropical storms, the main differences being that Nor'easters are formed further North, are fueled by cold rather than warm air, and slow-moving patterns. Nor'easters commonly occur and are strongest in the winter months and often result in flooding, storm surges, heavy rain or snow, and high winds. Their impacts can be more severe and wider-spread than hurricanes and tornadoes due to their much larger diameter and longer duration within a region. Coastal communities like Sayreville are impacted heavily by Nor'easters due to the resultant coastal storm surges and tidal flooding associated with high precipitation events and high wind speeds. The secondary impacts of Nor'easters include widespread utility failure, lack of access to critical infrastructure, building and property damage, the need for short-term or long-term shelter, and in some cases environmental contamination due to flooding. Because Nor'easters are strongest in the winter, in the event of extended service failure, they also pose medical risks associated with extreme cold. These impacts are most dangerous for the elderly and other vulnerable populations.

Between 1992 and 2016, four FEMA Nor'easterrelated disasters were declared in Middlesex County. Nor'easters, too, are predicted to become more severe and common with climate change; as temperatures warm and humidity from the Gulf of Mexico increase, snow events associated with Nor'easters are likely to intensify.¹⁹

Pandemics

As made evident by the COVID-19 pandemic, the trend of globalization has made the spread of outbreaks harder to contain and has forced a need for strengthened emergency planning across all levels of governance. The 2019 New Jersey State Hazard Mitigation Plan (2019 NJHMP) noted that New Jersey is particularly susceptible to the importation and spread of both global and local infectious diseases due to its geographic and demographic makeup.²⁰ The 2019 NJHMP reported that New Jersey is vulnerable to pandemic categories including foodborne diseases, mumps, norovirus, influenza, West Nile Virus, and ZIKA virus.

It is worth noting that the 2019 NJHMP was prepared prior to the onset of the COVID-19 pandemic and, therefore, does not address the impacts of COVID-19 on the State of New Jersey. The rapid and early spread

¹⁶ Michael Baker International. (January 25, 2019). "Section 5.8 Hurricane and Tropical Storm". 2019 New Jersey State Hazard Mitigation Plan. https://nj.gov/ njoem/mitigation/2019-mitigation-plan.shtml

¹⁷ Scott Harrigan. (July 10, 2018). Why Storm Surge is a Problem for New Jersey. RUE Insurance. https://www.rueinsurance.com/why-storm-surge-is-a-problemfor-new-jersey/

¹⁸ Resilient New Jersey. (July 2022). Raritan River and Bay Communities Flood Impact Assessment. https://resilientnewjersey.com/wp-content/ uploads/2022/07/220707_RRBC_Flood-Impact-Report.pdf

¹⁹ Michael Baker International. (January 25, 2019). "Section 5.9 Nor'easter". 2019 New Jersey State Hazard Mitigation Plan. https://nj.gov/njoem/mitigation/2019mitigation-plan.shtml

²⁰ Michael Baker International. (January 25, 2019). "Section 5.21 Pandemic". 2019 New Jersey State Hazard Mitigation Plan. https://nj.gov/njoem/ mitigation/2019-mitigation-plan.shtml

of COVID-19 throughout New Jersey, however, paints a clear picture of the State's susceptibility to pandemics. In the year 2020, the state of New Jersey had a death rate of 141.6 per 100,000 people, which was the highest across all 50 states.²¹

New Jersey was hit particularly hard by early cases of COVID-19; from the first reported New Jersey case on March 4, 2020 through April 4, 2020, the State of New Jersey reported a total of 34,124 cases, which topped the counts of entire countries including Turkey (20,921 cases), Switzerland (20,278 cases), Belgium (18,431 cases), the Netherlands (16,725), Canada (12,920 cases), and Austria (11,781 cases).²² Within the State of New Jersey, Middlesex County ranked third in the total number of COVID-19 cases (278,987 cases) and resulting deaths (2,684 cases) that occurred in any single New Jersey county between March 2020 and May 2023.²³

Although the number of active COVID-19 cases has seen a significant decrease since its widespread onset in March 2020, the pandemic has had a lingering health impact, referred to as "Long COVID", on some survivors. As of July 2023, 27.6% of New Jersey adults who previously had COVID-19 reported experiencing symptoms lasting three months or longer.²⁴ In recent years, the healthcare system in New Jersey has widely begun to address this phenomenon through the creation of post-COVID recovery programs, including those at Robert Woods Johnson Barnabas Health and Hackensack Meridian Health. Aside from Long COVID, the residual effects of the pandemic continue to have a tangential impact on areas of life including mental health, school enrollment and student learning, and the economy, amongst many others.

The 2019 NJHMP predicts that the risk of pandemics in New Jersey will further evolve and correspond to changes in: density (a higher density equals a higher likelihood of spreading disease); increased agricultural operations and demand of year-round produce (new emerging pathogens and increased chances for contamination will fuel foodborne illnesses); global temperatures (warming climates may make it possible for mosquitotransmitted diseases to intensify); and global travel patterns.

Density and proximity to bodies of water are some of the factors that may influence the spread of such pandemics. As of 2022, Sayreville's population density of 2,850 persons per square mile ranked relatively low across the state (228th of 564 state municipalities) and county (19th of 25 county municipalities); it falls below the New Jersey state average density of 3,584 persons per square mile.²⁵ This lower density, however, does not necessarily lessen Sayreville's susceptibility to pandemics. Sayreville falls within two watershed management areas (Monmouth WMA and Lower Raritan, South River, Lawrence MWA) and is surrounded by water on three sides, which heightens its risk to mosquito-borne illnesses such as West Nile Virus and ZIKA. Another factor to consider is Sayreville's growing 65+ population, which increased by 15.8% between 2011 and 2021; larger populations of the young and elderly elevate the severity of pandemic-related health risks.

As witnessed throughout the COVID-19 emergency shutdowns, pandemics diminish the workforce as workers stay home to care for themselves or family members who are ill, leading to potential disruptions in sectors such as healthcare or utilities. Additionally, pandemics have the potential to overburden healthcare systems, cause unemployment, negatively impact the economy, increase the cost of living, and limit or fully prohibit travel and gatherings. A 2021 brief on the impact of COVID-19 on New Jersey's economy reports that the state underwent a loss of 720,000 jobs between February and April 2020 and induced a recession worse than that of the Great Depression.²⁶

²¹ "Covid-19 Mortality by State." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 15 Feb. 2023, www.cdc.gov/nchs/pressroom/ sosmap/covid19_mortality_final/COVID19.htm.

^{22 &}quot;Loss, Lessons, Lives Saved: New Jersey's Pandemic Year." NJHA, www.njha.com/chart/special/pandemic/#timeline. Accessed 16 Oct. 2023.

^{23 &}quot;Track Covid-19 in New Jersey." The New York Times, The New York Times, 16 Oct. 2023, www.nytimes.com/interactive/2023/us/new-jersey-covid-cases.html.

²⁴ "Explore Long COVID in New Jersey: AHR." America's Health Rankings, www.americashealthrankings.org/explore/measures/long_covid/NJ. Accessed 16 Oct. 2023.

²⁵NewJersey.gov. (nd). "Population Density by County and Municipality: 2020-2022". https://www.nj.gov/labor/labormarketinformation/assets/PDFs/dmograph/ est/mcd/density.xlsx

²⁶New Jersey Department of Labor and Workforce Development. (September 2021). Economic Brief: Measuring the Impacts of COVID-19 on the New Jersey Economy One Year Later.

Power Outages

Power outages are often a result of severe weather occurrences, such as the aforementioned Nor'easters or hurricanes, although they can also occur due to manmade error. Power outages can last for several days up to several weeks and have a wide range of direct and indirect effects. One of the more worrisome impacts of power outages is the resultant harm on vulnerable populations, caused by factors such as a lack of heat and cooling, or the inability to use critical out-of-hospital medical systems such as ventilation machines. Other secondary effects of power outages can include: loss of perishable food due to appliance failure; house fires from shorted circuits; loss of power to mass rail transit, which can inhibit residents who travel outside of the Borough for work; loss of communication for first responders; sump pump and well pump failure; and, in extreme cases, chemical spills at handling plants or the looting of goods.

According to 2021 American Community Survey 5-Year Estimates data, approximately 10.6% of occupied housing units in Sayreville rely on electricity for heating and are therefore especially vulnerable to the harms associated with power outages. Even the 82.7% of housing units that rely on gas utility may experience disruptions with water heaters, stoves, or fireplaces that are not fully gaspowered. Sayreville's 2021 HMP notes that power outages are of particularly high concern when considering the number of senior apartment buildings in the borough that have no backup generators or funding for such.

Between 1965 to 2017, Middlesex County experienced 17 state-wide or regional major power failures. Experts predict that the frequency and probability of power failure occurrences in New Jersey are likely increase with climate change, putting Sayreville's community at an even higher risk in the future.²⁷

SLOSH Model

The Sea, Lake and Overland Surges from Hurricanes (SLOSH) Model is a diagnostic tool used to estimate storm surge heights resulting from hurricanes in a particular area. Developed by the National Weather Service in the 1990s, the model is still used today by the National Hurricane Center to forecast the impacts of storm surge inundation from hurricanes.

The maps below simulate the levels of flooding that would occur in Sayreville as a result of a category 1, 2, 3, and 4 hurricane. As is evident in these maps, a category 1 hurricane would primarily impact the Borough's northwest and west municipal borders along the Raritan and South Rivers, with inundation in the southeast corner of Sayreville as well. While a category 2 hurricane would not significantly increase the land area of the inundation, the severity of the inundation would rise dramatically with water depths of 9 feet or more making up most of the flooding. In addition to creating deeper flooding, the category 3 and 4 hurricanes would significantly increase the land area of the inundation and would extend into developed residential and commercial areas along Jernee Mill Road, Washington Road, and Ernston Road. For reference, Superstorm Sandy was not even a category 1 hurricane when it made landfall in New Jersey, having been reclassified as a "post-tropical cyclone" by the National Hurricane Center just hours earlier.28 The implications of the SLOSH model results in Sayreville are critical reminders of the immense danger posed by storm surges and the increasingly evident need for resilient initiatives in coastal areas.

²⁷ Michael Baker International. (January 25, 2019). "Section 5.22 Power Failure". 2019 New Jersey State Hazard Mitigation Plan. https://nj.gov/njoem/ mitigation/2019-mitigation-plan.shtml

²⁸ Storm Summary for Superstorm Sandy, National Weather Service, www.weather.gov/media/phi/StormReports/October292012.pdf. Accessed 16 Oct. 2023.









Build-Out Analysis

A build-out analysis is a tool used to project potential future development impacts by evaluating the amount and location of land that is developable under existing zoning and land use regulations. Build-out analyses also consider environmentally-constrained land that cannot be used for development, such as lands with wetlands, riparian flood zones, and steep slopes amongst other factors.

Methodology

In conducting a build-out analysis for Sayreville, vacant parcels throughout the municipality were identified and mapped using municipal tax assessment data. These parcels were then analyzed to determine the area of vacant land which is developable and the area of vacant land where development should be restricted due to existing environmental constraints. In total, Sayreville has a total of approximately 524 acres of environmentally unconstrained vacant land. The bulk and use standards outlined in the Sayreville Zoning Ordinance were then applied to each vacant parcel to determine the maximum development that each vacant parcel could support. All parcels which had lot sizes lower than the minimum lot size permitted in their zoning district were not considered as part of this calculation since development on those parcels would create non-conforming conditions.

For single-family residential districts, it was assumed that one dwelling would be constructed per vacant land area equal to the minimum lot size permitted within that zoning district. It was also assumed that 20% of the vacant land area would need to be utilized to construct necessary infrastructure improvements to support the new residential development, including infrastructure such as new streets with an average rightof-way of 50-feet, and new stormwater management facilities. In the R-7 Residential District, for example, it was assumed that one residential dwelling would be constructed per 7,500 square feet of vacant land area after setting aside the land necessary to construct new infrastructure improvements.

In districts such as the Planned Residential Development District, the number of dwellings was estimated by dividing the total area of vacant land with the number of dwelling units permitted per acre.

In zoning districts permitting multifamily dwellings and apartments, the vacant land within those districts was multiplied by the maximum building coverage and the maximum number of stories permitted to determine the square footage of the largest possible building that could be constructed. This value was divided by 1,200 square feet to estimate the number of units which would be located within each building. It is assumed that on average a dwelling unit in a multifamily building will occupy 1,200 gross square feet. This includes 1,000 square feet of rentable space plus a grossing factor of 20% to account for common spaces such as stairwells, elevators, corridors, and building lobbies.

For non-residential districts, the vacant land area was multiplied by the maximum building coverage and the maximum number of stories permitted in each zoning district to determine the largest possible buildings that could be constructed per the existing zoning ordinance. In mixed-use districts where residential is permitted above ground floor commercial it was assumed that the lower level of each building would be entirely dedicated to commercial, and the upper levels would be entirely dedicated to residential purposes. Alternatively, the non-residential square footage was also calculated by multiplying all of the vacant land area within nonresidential districts by a Floor-Area-Ratio (FAR) of 0.2. This generally assumes a much lower build-out density than what is actually permitted within each zoning district, but better accounts for the fact that not all new development will be constructed to the maximum density, and it is consistent with the methodology used to estimate additional non-residential space in the buildout analysis conducted as part of the 2013 Sayreville Borough Master Plan.

In addition, planned developments in active redevelopment areas were included as part of this analysis, such as the Fulton's Landing Redevelopment Area, the River Road Redevelopment Area, and the Waterfront Redevelopment Area. It is also important to note that changes to Sayreville's zoning ordinance since 2013—including the addition of the AH Affordable Housing District and the establishment of several new redevelopment areas–currently allow for greater building densities in many areas of the Borough as compared to 2013.

Residential Analysis Results

According to the 2021 5-Year American Community Survey Estimate, Sayreville has 17,411 existing residential units. As displayed in the table below, Sayreville's current zoning ordinance and redevelopment plans would permit the construction of approximately 2,835 dwelling units, resulting in a build-out of 20,246 dwelling units. Of this number, 2,000 units will be constructed as part of the Riverton development within the Borough's Waterfront Redevelopment Area. The results of the residential build-out analysis are shown on Table 16 below.

Non-Residential Analysis Results

If all unconstrained vacant land in non-residential zoning districts were to be developed to their maximum extent permitted by the current zoning ordinance, the Borough could add approximately 11,850,000 gross square feet of non-residential building area. Of this number, 6,500,000 square feet of non-residential space will be constructed as part of the Riverton development within the Borough's Waterfront Redevelopment Area. If all of the vacant land within non-residential districts—excluding the vacant land within the Waterfront Redevelopment Area—were to be built-out at a FAR of 0.2, the Borough could add approximately 8,775,000 gross square feet of non-residential building area. The results of the non-residential build out analysis are shown on Table 17 below.

Table 16: Residential Build-Out Analysis Sayreville Borough, 2023		
	Number of Units	
Existing Dwelling Units	17,411	
Additional Residential Units (excluding Waterfront Redevelopment Area)	835	
Additional Residential Units (from Waterfront Redevelopment Area)	2,000	
Total Residential Build-Out (Dwelling Units)	20,246	

Table 17: Non-Residential Build-Out Analysis Sayreville Borough, 2023		
	Square Feet	
Additional Non-Residential Area (excluding Waterfront Redevelopment Area)	2,275,000 to 5,350,000	
Additional Non-Residential Area (from Waterfront Redevelopment Area)	6,500,000	
Total Additional Non-Residential Area	8,775,000 to 11,850,000	



A rendering illustrating the vision behind the mixed-use Riverton development in the Waterfront Redevelopment Area Source: Riverton, Riverton.com



Identification of Critical Facilities, Utilities, Roadways, and Other Infrastructure

Middlesex County has 2 Coastal Evacuation routes than run directly through Sayreville, including the Garden State Parkway (GSP) and U.S. Highway 9 (U.S. 9). The GSP provides both northbound and southbound evacuation and connects to other evacuation routes, including the Turnpike and New Jersey Route 440. Although the Garden State Parkway runs through areas of Sayreville that are within FEMA flood zones, it is not known to be inundated by flooding. U.S. 9 only provides southbound evacuation from Sayreville, but it does not run through any FEMA flood zones within or directly around Sayreville. U.S. 9 runs north-south through the state of New Jersey and into Delaware; along the way it provides direct access to other Middlesex County evacuation routes, including New Jersey Route 34 and New Jersey Route 18.

Sayreville's Emergency Resources and Facilities include 1 police station, 1 national shelter, 3 EMS stations, 6 fire stations, and 19 gas stations. These are shown in the Emergency Facilities and FEMA Flood Zones map below. In terms of critical facilities and utilities, Sayreville also has 1 emergency operation center (EOC), 1 wastewater facility, 1 cellular tower, 1 AM-FM transmission tower, and 2 food assistance programs.

The Homeland Infrastructure Foundation – Level Data (HIFLD) is a subcommittee within the Department of Homeland Security (DHS) that is responsible for collecting geospatial data from all levels of government, processing it for uniformity and quality, and sharing with the end user. National shelters are facilities identified by either FEMA or the American Red Cross as places that can potentially house people in case of a disaster or emergency. According to the emergency shelter data, there are 5 national shelters located directly outside of Sayreville in the neighboring municipalities of South Amboy and Old Bridge.



Sayreville Public Safety Complex



Sayreville Engine Company No. 1



Madison Park Volunteer First Aid Squad



Strategies and Design Standards to Reduce Risks

The recommendations section of this Plan Element as well as the Borough's 2005 Municipal Stormwater Management Plan Element (revised through November 2018) go into further detail regarding strategies and best management practices designed to reduce risk associated with climate change and climate-change related issues. Furthermore, the Borough's 2013 Economic Plan (2013 EP) Element outlines initiatives the Borough can take to preserve Sayreville's natural environment through the protection of wetlands, floodplains, and stream corridors. The 2013 EP specifically recommends stabilizing bank erosion, relieving flooding adjacent to streams, preserving and supplementing the existing vegetation throughout the Borough, and providing access to environmentally constrained areas in a way that promotes passive recreation and citizen stewardship.

The following is a summary of additional mitigation strategies the Borough identified as "ongoing" during the County's 2022 Hazard Mitigation Plan process:

- Backup power supplies for critical facilities and shelters.
- Acquire or elevate repetitive loss properties.
- Raise all pump stations.
- Upgrade back-up Emergency Operations Center (EOC) to store emergency management equipment and vehicles, as well as serve as a training facility for emergency response.
- Pursue Community Rating System (CRS) application.
- Investigate options to protect houses on Eisenhower and Patton from storm surge now that most of the houses on MacArthur and Weber have been bought out and removed.
- Buy out houses prone to repeat flooding on Winding Wood Drive that are blocked off from emergency services in a flood event.²⁹

In the spring of 2021, Resilient New Jersey kicked off its process of developing a regional action plan for the Raritan River and Bay Communities. This regional planning process involved a number of municipal partners, including Savreville. The overarching goal of the plan was to develop effective solutions to reduce flood risk and build resilience throughout the region. The plan was implemented through the creation of 4 plans, which included: an introductory "About Our Region" report; a "Vision and Priorities" report; an "Impact Assessment"; and a final document addressing "Scenarios and Action Plan." In addition, a Resilience Strategies Toolkit exploring solutions to flooding was also developed.

Throughout this process, the interdisciplinary team utilized community outreach and flood modeling software amongst other tools to identify the Borough's most flood-prone critical assets and devise solutions to mitigate future flood-related damage. A total of 13 assets across 4 categories (Emergency Response, Infrastructure, Public Health, and Quality of Life) were identified as flood-prone in the Impact Assessment report, including: 1 hurricane evacuation route; 1 power generation facility; 2 substations; 1 cemetery; 1 childcare center; 3 places of worship; and 4 community assets, including the ShopRite of Ernston Road and the DuPont-Parlin Site, which is one of the Borough's large employers.

Aside from these assets, the Impact Assessment Report predicts that the majority of future flood-related damages will be incurred by residential properties. The Report emphasizes the importance of protecting the 5 power plants located within Sayreville, which collectively provide power to a majority of the region; damage or disruption to these plants have a widespread detrimental impact.

²⁹ This was noted as a "new project that remains in the exploratory stage" in the 2021 HMP. It is relevant to note that the Winding Wood Drive development comprises 1,900 units; the large scale of this development may pose financial and logistical challenges to the realization of this strategy. As an alternative to buying out these properties, the Borough could investigate the establishment of a modernized emergency alert system. While this wouldn't solve the issue of repeated flooding, it could potentially encourage early evacuation and mitigate the need for emergency services during flood events.

Upon identifying these vulnerabilities, the team ultimately devised an Action Plan which outlined the following opportunities as potential flood mitigation strategies that Sayreville may consider:

- Adapt the Siemens Energy Power Plant site located on Main Street to reinforce it from flooding;
- · Encourage the redevelopment of Sayreville's decommissioned power plant as a green energy campus;
- Restore wetlands and riparian zones along the Raritan River and South River and work with developers to integrate living shorelines into waterfront development projects such as Riverton;
- Secure additional property buyouts in low-lying areas of the Borough, and pursue grants to transform boughtout properties into communities amenities such as passive recreational space or community gardens;
- Utilize municipally-owned facilities, parks, and open space to expand stormwater storage and create floodable areas located away from critical infrastructure (potential sites include the Sayreville Sports Complex and Veterans Park); and
- Implement zoning updates that (a) will limit future growth on flood-prone sites along the South River that were not previously bought out but have a similar risk profile to those that were and (b) create opportunities for increased density outside of the floodplain.

Policy Statement on Consistency, Coordination, and Integration with Other Plans

The Borough of Sayreville recently participated in the County's 2022 Hazard Mitigation Plan. It is the Borough's intention to continue to prepare for future hazards in a manner consistent with the 2021 HMP. Additionally, the 2021 HMP indicates that the Borough prepared a Comprehensive Emergency Management Plan, Emergency Operation Plan, and Post-Disaster Recovery Plan in 2015 and 2021. This Land Use Element, along with the other elements of the Master Plan, are intended to be consistent with the County 2021 HMP as well as Sayreville's regulatory plans relating to emergency management and disaster mitigation.



An excerpt from the Resilient NJ Raritan River and Bay Communities Resilience Strategies Toolkit, illustrating the key components and benefits of implementing a living shoreline. Source: Resilient NJ 2022, Raritan River and Bay Communities Resilience Strategies Toolkit

LAND USE PLAN RECOMMENDATIONS

This Land Use Element recommends a number of policy considerations, land use recommendations, and zoning changes. Specific recommendations are outlined in the sections below.

General Recommendations

The last comprehensive Zoning Ordinance was adopted in 1999. It is recommended the Borough complete a comprehensive revision, including reviewing ordinance definitions, design standards, permitted and conditional uses, and other topics.

As part of a comprehensive revision process, a general clean-up of the Ordinance should occur to re-number the sections and organize it in a way that is user friendly. The overarching format of the Ordinance should flow from basic organizing principles to the application process, zoning standards, design standards, technical engineering requirements, and legal obligations. Furthermore, the Borough should consider adopting an online, interactive zoning map.

Recommendations applicable to specific ordinance sections include:

- §26-59, "Technical Review Committee" revisions should be made to clarify and expand on the role of the Technical Review Committee.
- §26-81, "Zone Districts" each Zone district should be broken out into its own section to provide a purpose that it consistent with the Master Plan, a list of permitted uses (updated to reflect the Reexamination Report and current best practices), bulk standards, and any other supplemental standards.
- §26-99.6 "Stormwater Control" revisions should be made to reflect the July 2023 amendments to the Municipal Stormwater rules. This Plan notes that the NJDEP has released a Model Stormwater Control Ordinance for Municipalities that provides a guide for municipalities.
- §26-104, "Off-Tract Improvements" updates should be made to reflect current engineering best practices.
- §26-110, "Fees and Deposits" fees and escrows should be reevaluated and increased. This section should be revised to include a "Request for Zone Change" fee.
- Article V, "Performance and Maintenance Guarantees" updates should be made to reflect changes in the Municipal Land Use Law pertaining to the topic.
- A "Request for Rezoning" section should be added to the Ordinance to establish a process for which an entity can request that the Borough rezone a property. This Plan notes that the Municipal Land Use Law does not provide such a process.
- A "Capital Review" section should be added to the Ordinance to clarify the capital review process, timeline, and Planning Board role. This Plan notes that MLUL §40:55D-29 and §40:55D-31 address these topics and should be referenced.

General Sustainable Land Use Recommendations

It is predicted that the associated risks of climate change will only become more pressing in the future. Therefore, it is recommended that the Borough continue to take actions that reflect land use practices founded in sustainability and resiliency, including those below:

- The Borough should continue to participate in hazard mitigation planning and incorporate the recommendations from the 2021 HMP as well as future plans into the Ordinance.
 - ^o Specifically, the Borough should take action to pursue mitigative action #17 from the 2021 HMP, which suggests that Sayreville investigate options to protect existing houses on Eisenhower Drive and Patton Drive from storm surge, which are now at a higher risk due to the numerous buyouts and demolitions

that have occurred on Weber Avenue and MacArthur Avenue. This Plan's recommendation to create a conservation resiliency zone (see "OS-C Open Space-Conservation" subsection below) directly supports this action.

- Furthermore, the Borough should continue to pursue ongoing mitigative actions #8 ("acquire or elevate repetitive loss properties") and #9 ("raise all pump stations") from the 2015 HMP. In support of this, the Borough should continue to pursue external funding for such projects.
- It is recommended that the Borough utilize Middlesex County's 2022 Open Space and Recreation Plan to consider additional future open space opportunities for the Borough.
- It is recommended that the Borough create a Flood Hazard Overlay that is contiguous with the mapped flood hazard area to permit a lower percentage of impervious cover and encourage green infrastructure and resilient site design.
- The Borough should work with developers to incorporate flood-resilient measures along the waterfront, including living shores, flood berms, resiliency parks, etc. and to expand and preserve wetlands and riparian zones along the Raritan and South Rivers.
- The Borough should incorporate zoning policies that (a) minimize future development potential within flood-prone areas along the Raritan and South River and (b) preserve these properties as nature-based resilience areas.
- It is recommended that the Borough consider adopting a Green Building and Sustainability Master Plan Element to further strengthen Sayreville's sustainability and resiliency.
- It is recommended that the Borough continue seeking opportunities to build resilience against the risks
 associated with climate change, specifically addressing tools to mitigate temperature rise and flood
 hazards as they relate to human health.



Green infrastructure best management practices (BMPs)--like this rain garden in Philadelphia, PA--utilize nature-based design to mitigate stormwater inundation and provide co-benefits such as improved water and air quality, wildlife habitation, and neighborhood beautification. BMPs contribute to sustainability and resiliency.

Definitions

It is recommended that the Borough amend the ordinance definitions to (a) incorporate new common land uses and practices and, in some instances, (b) be updated to reflect modernized meanings of certain words or phrases.

New definitions to be added include, but are not limited to:

- Adult Educational Facilities means any building or part thereof which is designed, constructed or used for education of adult students (i.e. students over eighteen (18) years of age) that is not part of a licensed State of New Jersey facility, or under the jurisdiction of the Sayreville Board of Education. Such establishment is intended to provide groups of five or more individuals with instruction or learning in matters pertaining to art, business, computer training, vocational or technical training, language, sports, self-defense, recreation, or other skills or subjects, but not offering the full curriculum of academic instruction provided by a high school, college or university.
- Animal Daycare and Grooming Facility means any structure or premises in which animals are boarded for a period not to exceed 24 hours, groomed, or trained for commercial gain.
- Artwork/Mural means a two-dimensional representation of a creative idea that is expressed in a form and manner as to provide aesthetic enjoyment for the viewer rather than to specifically convey the name of a business or a commercial message about the products or services offered on the property upon which the artwork is displayed.
- **Brewpub** shall mean an establishment, with license from the State under N.J.S.A. 33:1-10, where alcoholic beverages are brewed and manufactured, served and consumed on the premises, and which is operated in conjunction with a restaurant use. In accordance with the relevant state license, the provision of meals to customers shall be an integral part of the use. Retail sales, regulated by state licensing requirements, shall be permitted as an accessory use.
- **Brewery** shall mean an establishment licensed per the requirements of N.J.A.C. 33-10 as a limited brewery primarily engaged in the production and distribution of beer, ale, or other malt beverage,

which may include such accessory uses as tours, retail sales, and on-site consumption, i.e. "tasting room."

- Commercial Vehicle means any motor vehicle that has painted or installed thereon a sign or logo, or any motor vehicle that contains any visual evidence of the vehicle being used for commercial purposes.
- Community Center means a building used for recreational, social, educational and cultural activities, open to the public or a designated part of the public, and owned and operated by a public or nonprofit group or agency. The facilities shall not include any living-quarters.
- Community Garden means an area less than one (1) acre managed and maintained by a group of individuals to grow and harvest food crops or non-food ornamental crops for personal or group consumption or donation. A community garden area may be divided into separate garden plots or orchard areas for cultivation by more than one individual or may be farmed collectively by members. A community garden may include common areas and a storage shed or similar structure not to exceed three hundred (300) square feet in area or fifteen (15') feet in height. Community gardens may be principal or accessory uses and may be located outdoors, on a roof, or within a building.



James Anderson mural in Philadelphia, PA

RECOMMENDATIONS

- Dog Park/Run means a parcel or tract of public or privately-owned land set aside or designated for use by dog owners as "off-leash" areas for exercising their canine pets.
- Electric Vehicle Charging Station / "EV Charging Station" means a public or private parking space that is served by battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in a plug-in electric vehicle ("PEV"). Also known as "Electric Vehicle Supply Equipment."
- Film Studio / Movie Studio means a facility that is used to make films, television shows, and other video productions. Customary accessory uses may include back-lot activities, including but not limited to set production/design, make-up rooms, and commissary and warehouse and/or accessory building for activities such as but not limited to set production/design, custom storage, etc. and solely used for those purposes.
- Gasoline Service Station with Convenience Store means a convenience retail establishment that also offers gasoline or other motor fuel (including electric vehicle charging stations) for sale to the public as a single principal use.
- **Green Building** means practices that consider the impacts of buildings on: the local, regional, and global environment; energy and water efficiency; reduction of operation and maintenance costs; minimization of construction waste; and eliminating the use of harmful building materials.
- Indoor Recreation Facility means a permanent structure housing facilities for recreational activities such as tennis, soccer, swimming, exercise rooms, handball, and similar activities.
- LEED (Leadership in Energy and Environmental Design) means a rating system intended to encourage the design, construction, operation, and maintenance of buildings and neighborhoods so as to minimize their consumption of energy and to lessen their impact on the environment.
- Medical Marijuana Alternative Treatment Center means an organization authorized through licensure issued by the NJ State Department of Health and the Board of Medical Examiners to perform activities necessary to provide registered qualifying patients with usable marijuana and related paraphernalia in accordance with the



A dog park in Philadelphia, PA

provisions of the P.L. 2009, c. 307. For the purposes of zoning, an Alternative Treatment Center is the interface between provider and patient and is synonymous with a Medical Marijuana Dispensary.

- Medical Offices shall mean a building or portion thereof providing diagnostic, therapeutic, or preventive medical, osteopathic, chiropractic, dental, psychological and similar or related treatment by a practitioner or group of practitioners licensed to perform such services to ambulatory patients on an outpatient basis only, and without facilities typically associated with hospitals for inpatient care, major surgical procedures, or emergency care. A medical office may also contain associated in-house ancillary services such as in-house diagnostic testing facilities, physical therapy, medical counseling services, and similar services.
- **Micro Distillery** means a facility for the manufacture, on-site storage, retail sale, and sampling of distilled alcoholic beverages, licensed per the requirements at N.J.S.A. 33:1-10.3d, and operating per the terms set forth in that act, which prohibit the sale of food on premise.
- Office means a room or group of rooms used for conducting the affairs of a business, profession, service industry, or government.
- Solar Energy System (also known as Photovoltaic Solar Panels) means any solar collector(s), film(s), shingle(s), or other solar energy device(s) or solar structure component(s) mounted on a building or on the ground and including other appurtenant structures and facilities, whose primary purpose is to provide for the collection,

storage, and distribution of solar energy received from the sun to supply power to the principal use of the property whereon said system is located and/or into the electrical grid with authorization from the grid operator.

- Warehousing means the housing, storing, keeping, holding, or sheltering of goods, wares, merchandise, materials, articles, commodities, stock-in-trade, and the like on a temporary or permanent basis for sales or distribution or distribution off-site.
- Wind Energy Facility means a facility or structure for the purpose of supplying electrical energy produced from wind, whether such a facility or structure is a principal use, part of a principal use, or an accessory use or structure.

Existing definitions to be revised or replaced include, but are not limited to, those below. Suggested revisions to existing definitions are underlined, whereas replacements to existing definitions are included in full without underlining:

 Billboard means a sign structure and/or sign utilized for: Advertising an establishment, an activity, a product or service or entertainment that is sold, produced, manufactured, available, or furnished; or promoting any activity, including noncommercial activity and solicitation, such as but not limited to charitable solicitation and noncommercial speech, at a place other than on the property in which said sign structure and/or sign is located.

- **Board** means the Borough of Sayreville Planning Board <u>or Zoning board of Adjustment</u> when acting within its scope of jurisdiction under this Chapter and/or the MLUL.
- Dwelling, Multi-family means a building containing three (3) or more dwelling units that share common horizontal <u>or vertical</u> separations, including <u>apartment buildings</u>, garden apartments, <u>and other</u> <u>similar arrangements.</u>
- Gasoline Service Station means a place where gasoline or other motor fuel (including electric vehicle charging stations) is offered for sale to the public and deliveries are made directly into motor vehicles and which may provide for minor repairs but shall not include auto body work, welding or painting, nor any repair work outside of the enclosed building.
- Health Club means an establishment that provides facilities for aerobic exercise and exercise equipment, including showers, lockers, and other accessory uses. <u>Health clubs include full-service</u> gyms and specialized fitness centers including but not limited to yoga studios, Pilates studios, spin class studios, CrossFit studios, and other personal training facilities.



Townhouses are a common form of multifamily dwelling; this configuration in Philadelphia, PA incorporates a garden courtyard.

 Hotel means a facility offering transient lodging accommodations to the general public and that may include additional facilities and services, such as restaurants, meeting rooms, entertainment, personal services, and recreational facilities. Unless specifically stated, hotels shall be assumed to include limitedservice hotels that do not include accessory services, full-service hotels that provide a suite of accessory services, and extended-stay, suite, or executive hotels that typically provide larger rooms with additional en suite facilities.

Smart Growth and Sustainability

Updates to the Ordinance should be made to reflect the 2017 amendment to the MLUL regarding Smart Growth and best practices in sustainability and resiliency, including those below:

- The Municipal Land Use Law was updated in 2021 regarding electric vehicle charging stations and the DCA Model Statewide Municipal EV Ordinance was created. It is recommended that the Borough adopt this ordinance, which will codify the state law within the Borough's Land Development Ordinance.
- It is recommended the Borough encourage the installation of public electric vehicle infrastructure on commercial and municipal properties within Sayreville and multifamily housing developments.
- Further, in accordance with State Law (P.L. 2021, c. 171), electric vehicle charging stations and Make-Ready parking spaces should be permitted accessory uses within all zoning districts in the Borough.
- It is recommended that the Borough adopt a Sustainability and Green Building Practices subsection into Article V, entitled "Development Requirements and Standards", of Ordinance chapter 26. This section should include a set of standards based on promoting green building practices, sustainability, and resiliency, which will be discussed further in the "Design Standards" section of this document.

Sidewalk Connectivity

Sayreville's sidewalk network is incomplete in the sense that it has gaps in various areas throughout the Borough. This Plan acknowledges that filling in these gaps on a large scale presents challenges, especially in residential neighborhoods where a lack of adequate space or a property's location along a county road may make the construction of new sidewalks infeasible. It is recommended, instead, that the reviewing board consider where and how sidewalk gaps can be closed as land development applications undergo site plan review. Where there is adequate space, this approach can strengthen pedestrian connectivity on a site-by-site basis.

Economic Revitalization

For roughly two decades the Borough has considered possibilities to encourage commercial vitality along the stretch of Main Street located between Washington Road and River Road, with the idea of fostering an attractive and vibrant downtown for Sayreville. Presently, this stretch is predominantly zoned as the B-4 General/Village Business District, which permits a mix of low-density residential, mixed-use, retail, professional and medical services, and restaurants, amongst other uses. It is recommended that the Borough consider implementing a variety of tools to determine the best approach to establish this area as a commercial corridor. Specifically, the Borough may consider:

- Preparing an economic development plan for the Borough as a whole, with an emphasis on this strip of Main Street as well as any other important existing or potential commercial corridors.
- Developing cohesive branding strategies that can easily translate into programmatic and design opportunities for the Borough (i.e. community street festivals, pole banners, etc.)
- Establishing an overlay that encourages active storefronts and mixed-use development while also establishing comprehensive bulk and design standards to create a pedestrian-centric environment.

Pursuing non-condemnation redevelopment and/or rehabilitation opportunities as applicable, and incentivizing developers to pursue projects that are not only advantageous to the Borough and the community at large, but also help the Borough achieve a desired downtown feel.

- Investigating the feasibility of a Business Improvement District as commercial activity strengthens along this stretch of Main Street. This Plan notes that, due to the existing predominantly residential character of Main Street, the creation of a Business Improvement District is not presently recommended but could potentially be advantageous in the future.
- Preparing a Circulation and Parking Plan for this stretch of Main Street, specifically addressing pedestrian and bicyclist connectivity with residential developments, high-visibility crosswalks, sidewalk widening in tandem with future development, and streetscape design to create a walkable and comfortable downtown.



The annual Crafts and Fine Art Festival in Haddonfield has drawn in a wide range of attendees from the South Jersey/ Phildelphia region since 1994 Source: Visit NJ, visitnj.org

Design Standards

It is recommended that the Borough review and amend the existing design standards. The Borough should consider amending the lighting standards for residential, commercial, and industrial zones and should review and amend street design and sign standards to reflect current best practices. Furthermore, a Sustainability and Green Building Practices section should be added to include design standards that promote environmental sustainability and resiliency. Specifically, the following design standards should be incorporated into the Ordinance:

Signs

Within Ordinance §26-89, "Signs", the standards should be updated to add new types of signs, address issues such as those associated with electronic message center/digital display signs and make the standards easier to apply in tandem with additional standards specific to particular zones. Recommendations are included, but not limited to:

- Include a "purpose" subsection defining the limits and intents of the section, specifically indicating that the standards in the ordinance are "contentneutral" and "not intended to censor speech."
- The following signs should be added to the "Sign Permit Exemptions" subsection: name plates and/ or house numbers on residences; and temporary signs including banners, window signs, real estate signs, contractor signs, institutional special event signs, and political signs.
- Under "General Regulations," existing Illuminated Signs standards should be modified to limit: visibility from right-of-way and glare on pedestrians, drivers, and adjacent properties; times of day when illuminated signs are permitted to be on display; externally illuminated sign standards; and internally illuminated sign standards.
- An "Electronic Message Center / Digital Display Signs" subsection should be added to address: the inclusion of electronic message centers/digital display signs are permitted accessory uses in certain zones; application requirements; general requirements regarding matters such as permitted placement, height, area, and design; luminance standards; and message duration.
- A "Prohibited Signs" subsection should be added to address prohibited sign types and placement.

- The "Non-Conforming Signs" subsection should be expanded by including the following language:
 - Existing non-conforming permanent signs may continue to exist; however, when the sign is modified either in shape, size, illumination, or structure, the sign shall be altered to conform to the provisions of this section.
- Include sign regulations specific to the following zones: residential districts; business districts (excluding the B-3 Zone); B-3 Zone; industrial districts; and the PRIME district; and
- Include sign regulations specific to gasoline stations with convenience stores or public garages.

Lighting

Within §26-96.8, "Lighting Design", the standards should be updated to specify standards specific to each type of zone (one- and two-family residential, multifamily residential, commercial, and industrial). Recommendations are included, but not limited to, those below:

- It is recommended that the Borough delete standards f through i, which address spill over, freestanding light locations, illumination standards, and wiring. In lieu of addressing these as a general discussion, they should be broken out into standards specific to one- and two-family residential, multifamily residential, commercial, and industrial zones. These standards should address:

 (a) illumination intensity requirements at parking lots and driveways, sidewalks and pedestrian walkways, building entrances, side or rear property lines, front property lines, on-site open space; and
 (b) light fixture height for wall mounted and pole mounted fixtures.
- It is recommended that the Borough revise subsections j, "Lighting Fixtures", and k "Lighting Standards (Poles)", to reflect current best practices.
 - Specifically, the Borough should remove standards j.6 through j.8, and should add a standard requiring that all light fixtures utilize LEDs or similar energy efficient lighting elements.
 - Furthermore, the Borough should remove standard k.2 and shall add standards requiring that (a) all wiring be laid underground, and (b) all poles be oriented and designed to be protected from vehicle traffic.



An example of an externally illuminated wall-mounted sign in a commercial corridor in New Brunswick, NJ



The Princeton Public Library (Princeton, NJ) provides an example of contemporary lighting design practices



A streetscape in Harrison, NJ models street tree spacing that accommodates both vehicles and pedestrians

Streets

Within §26-97, "Streets", the standards should be updated. Recommendations are included, but not limited to, those below:

- Remove standard 26-97.1.m regarding four-way intersections in residential developments.
- Revise standard 26-97.2b regarding traffic signs and control devices to:
 - Require that the installation of Traffic Control Devices shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) or applicable County, State, or Federal regulation, with an exception for residential developments in which the Residential Site Improvement Standards (RSIS) shall apply as applicable; and
 - Indicate that, in addition to the Police Department and/or other competent agencies, the Borough Engineer has the jurisdiction to review recommendations regarding to the installation of all traffic control and directional signage within the public right-of-way.
- Revise 26-97.2.c regarding Street Trees to (a) require that trees be placed and maintained so as not to interfere with sight lines for motorists and pedestrians, (b) prioritize native plants species, and (c) recommend species which provide shading and aesthetic benefit, conform to prevailing street tree patterns in the Borough, and take branching pattern and hardiness into consideration.
- Add a new, separate sidewalk subsection to expand upon the sidewalk standards. This may cover matters such as sidewalk width, sidewalk area landscaping and material durability, sidewalk thickness, illumination, and frontage regulations, amongst others.

Sustainability and Green Building Practices

It is recommended that the Borough add a "Green Building, Sustainability, and Resiliency" subsection to the Ordinance, with a purpose of ingraining these best practices into local decision-making and development projects. These standards should be meant to guide the preparation and review of applications for developments throughout the Borough and, in part, should be pulled from the LEED v.4 standards for New Construction and Major Renovation. These standards may address:

- Site Layout and Design, with a focus on integrating vegetated open space into site plans, managing rainwater through green infrastructure practices, reducing the heat island effect through the provision of cool roofs/vegetative roofs on buildings or parking canopies, reducing light pollution, and reducing parking footprint.
- Water Efficiency, specifically addressing indoor and outdoor water use reduction through WaterSense fixtures and fittings, EnergyStar appliances, and native/drought-tolerant landscaping.
- Energy Use, looking particularly at renewable energy options and efficient building performance.
- Materials and Waste Management, focused on the storage and collection of recyclables and the management of construction and demolition waste.
- Indoor Environmental Quality, with a focus on low-emitting materials, thermal comfort, and indoor air quality.
- Location and Transportation, emphasizing connections to transit and the installation of bicycle facilities and electric vehicle charging stations.
- Hazard Reduction and Resiliency, addressing best practices in resiliency such as flood proofing and retrofitting, considering sea level rise when siting buildings and infrastructure, constructing new residential structures within flood hazard areas with extra freeboard, selecting flood tolerant species and plants with durable root structures for landscaping, and locating mechanical systems on roofs or raised platforms for areas within flood zones or those that are potentially impacted by sea level rise.

Zoning Recommendations

All uses in the Ordinance should be reviewed and amended/updated as needed. The existing zoning should be evaluated and amended to reflect current and anticipated development in the Borough.

Residential Zoning

R-5 Single-Family Residential

There are no recommendations specific to the R-5 District.

R-7 Single-Family Residential

This Plan recommends:

- Rezoning the properties along MacArthur Avenue, Weber Avenue, and within the Old Bridge section of the Borough (Blocks 1-8 and Block 9, Lot 1.02) from the R-7 Single Family Residential District to the OS-C Open Space Conservation District . Historically, these areas have seen the most recurring damage from stormrelated flooding due to their proximity to the Raritan River. As climate change intensifies the impact of storm surge and flooding throughout the Borough, it is important to take actions that mitigate the risk of future property damage, especially in these areas. Rezoning these areas will minimize the future development of structures where the risk of damage is high and will support the creation of a natural buffer area that can help serve the Borough in its flood mitigation measures. Further information regarding this recommendation is provided in the "OS-C Open Space – Conservation" subsection below.
- Rezoning the westerly portion of Block 9, Lot 1 from the R-7 Single Family Residential District to the SED Special Economic Development District. Currently, this property is split-zoned with the westerly portion being R-7 and the easterly portion being SED. As a result of this rezoning, the entire property would be zoned as SED.

R-10 Single-Family Residential

Along Bordentown Avenue, there is a handful of R-10 residential properties located amidst a cluster of land that is otherwise zoned with the LI-BS Light Industrial/Business Services Overlay. It is recommended that the Borough expand the LI-BS Light Industrial/Business Service Overlay to include these properties (Block 29, Lot 4.04 and Block 17.01, Lots 2, 3, 4, and 5). Applying the LI-BS Overlay to these properties will allow for potential future development that (a) is more consistent with the industrial and commercial character of Bordentown Avenue and (b) can take advantage of the properties' proximity to US-9 and US-18.

R-20 Single-Family Residential

There are no recommendations specific to the R-20 District.

R-7B Infill Overlay Residential

The Borough should evaluate whether the R-7B District continues to have any practical function and consider modifying or removing it from the Ordinance.

R-7(PRD) Planned Residential Development District

As described in the "B-2 General Business" subsection below, the R-7(PRD) permitted uses language should be revised to (a) remove references the B-2 Zone and (b) provide a list of specific non-residential uses permitted within the PUD/PRD Zones.

AH-1 Affordable Housing 1

There are no recommendations specific to the AH-1 District.

AH-2 Affordable Housing 2

There are no recommendations specific to the AH-2 District.

AH-3 Affordable Housing 3

There are no recommendations specific to the AH-3 District.

PD-7 Single-Family Planned Development

There are no recommendations specific to the PD-7 District.

PD-10 Single-Family Planned Development

There are no recommendations specific to the PD-10 District.

G-1 Garden Apartment

There are no recommendations specific to the G-1 District.



Construction at the Camelot I development, located within the Borough's AH-1 Affordable Housing District (as of October 2023)



Units within the Winding Woods development, located in the G-1 Garden Apartment District

Commercial/Mixed Use Zoning

B-1 Neighborhood Business District

This Plan recommends that the following text and permitted uses be adopted for the B-1 Zone:

- The purpose of the B-1 Neighborhood Business Zone is to encourage small-scale commercial development that serves the residents in the neighborhood in which it is found.
- · Identified permitted uses should be expanded to include:
 - Adult education facilities, which are facilities not part of a licensed State of New Jersey facility and used for the education of students over eighteen years of age.
 - Animal daycare and grooming facilities are newer uses that have increased in popularity. The Borough does not currently permit such uses to serve the needs of the Borough's residents.
 - ^o Dog park / run to supply neighborhood dog owners with spaces to take their dogs off-leash. Pet ownership has been on the rise and with it the demand for dog parks and runs.
 - Community centers to provide neighborhood space for residents to gather and participate in various activities.
 - Community gardens provide space for residents to grow their own food and promote local health and community in the neighborhood.
 - Personal service establishments involving the care of a person or personal goods or apparel such as hair dressers and barbers, nail salons, and dry-cleaners. These uses are currently only permitted in the Office/ Services Overlay Zone.

B-2 General Business

The B-2 Zone currently comprises just a few lots, clustered in three areas along Bordentown Avenue and Main Street/ Buchanan Street/Karcher Street. These areas should be rezoned as follows:

- Block 29.04 Lots 1.01, 2, and 3.01, Block 30 Lots 1.02, 1.03, 2, 3, and 3.01, Block 31 Lots 1, 2, 3 and 4, and Block 33 Lots 1, 1.01, 2, 4.07, 4.08, and 5 along Bordentown Avenue should be rezoned to the B-3 Zone.
- Block 1 Lots 1, 1.01, 2, 3, 3.01, 4, 5, and 5.01 along Bordentown Avenue should be rezoned to the OS-C Zone.
- Block 168.12 Lots 39, 40, 41, 42, 43, 44, 44.01, 45.01, and 46.01 along Main Street/Buchanan Street/Karcher Street should be rezoned to the B-4 Zone.

Further, this Plan recommends removing the B-2 Zone from the Ordinance. This will also necessitate a revision to Ordinance §28-84.3 "Regulations for Planned Unit and Planned Residential Development District Option", which permits non-residential uses "permitted in the B-2 Zone" within all PUD and PDR Districts. This language should be revised to remove mention of the B-2 Zone and specifically list the permitted non-residential uses.

B-2(PUD) General Business Planned Unit Development

As described in the "B-2 General Business" subsection above, the B-2(PUD) permitted uses language should be revised to (a) remove references the B-2 Zone and (b) provide a list of specific non-residential uses permitted within the PUD/PRD Zones.

B-3 Highway Business

This Plan recommends that the B-3 Zone absorb a portion of the few remaining B-2 properties along Bordentown Avenue, as described in the "B-2 General Business" subsection above. Additionally, it is recommended that the following text, permitted uses, and accessory uses be adopted for the B-3 Zone:

- Purpose: The B-3 Highway Business Zone provides for large scale commercial development that relies heavily on automobile and truck access along Routes 9 and 35 on lots measuring 20,000 square feet or more.
- Additional identified permitted uses should include:
 - Adult education facilities which are facilities not part of a licensed State of New Jersey facility and used for the education of students over eighteen years of age.
 - Animal day care and grooming facilities with overnight boarding permitted. The Borough does not currently permit such uses to serve the needs of the Borough's residents.
 - Automobile sales are currently permitted in the B-3 Zone and should be expanded to include automobile rentals. Automobile rentals like automobile sales will benefit from access along Routes 9 and 35.
 - ^o Brew pubs are licensed establishments operated in conjunction with a restaurant where alcoholic beverages are brewed, manufactured, served, and consumed.
 - ^o Breweries are not currently permitted in the Borough though their popularity has been on the rise in recent years. Permitting breweries will help meet the desires of the Borough's residents.
 - Financial Institutions are currently permitted in the B-2 District. With the recommendation of dissolving the B-2 District into the B-3 District, the B-3 District should allow for Financial Institutions as a permitted use, limited to the following Blocks and Lots: Block 1, Lots 1, 1.01, 2, 3, 3.01, 4, 5, and 5.01; Block 29.04, Lots 1.01, 2, and 3.01; Block 30, Lots 1.02, 1.03, 2, 3, and 3.01; Block 31, Lots 1, 2, 3 and 4; and Block, 33 Lots 1, 1.01, 2, 4.07, 4.08, and 5.
 - Funeral Homes are currently permitted in the B-2 District. With the recommendation of dissolving the B-2 District into the B-3 District, the B-3 District should allow for Funeral Homes as a permitted use, limited to the following Blocks and Lots: Block 1, Lots 1, 1.01, 2, 3, 3.01, 4, 5, and 5.01; Block 29.04, Lots 1.01, 2, and 3.01; Block 30, Lots 1.02, 1.03, 2, 3, and 3.01; Block 31, Lots 1, 2, 3 and 4; and Block, 33 Lots 1, 1.01, 2, 4.07, 4.08, and 5.
 - Garden centers or nurseries cater to the gardening needs of the Borough's residents. No such uses are permitted in the Borough.
 - Offices are currently permitted in the B-3 Zone but are not defined in the Borough's ordinance. The Borough should define office use as spaces for conducting business, professional, service industry, or government affairs. The Borough should further define medical offices uses and permit them in the B-3 Zone.
 - Micro-distillery facilities include on-site storage, manufacturing, retail sale, and sampling of distilled alcoholic beverages without the sale of food on site.
 - Indoor recreation facilities provide for indoor activities such as tennis, soccer, swimming. This type of large commercial development requires ample space, which is allotted in the B-3 Zone.
 - Personal service establishments involving the care of a person or personal goods or apparel such as hair dressers and barbers, nail salons, and dry-cleaners.
- Additional identified accessory uses should include:
 - Apartments are currently permitted in the B-2 District as an accessory use. With the recommendation of dissolving the B-2 District into the B-3 District, the B-3 District should allow for apartments as an accessory use, limited to the following Blocks and Lots: Block 1, Lots 1, 1.01, 2, 3, 3.01, 4, 5, and 5.01; Block 29.04, Lots 1.01, 2, and 3.01; Block 30, Lots 1.02, 1.03, 2, 3, and 3.01; Block 31, Lots 1, 2, 3 and 4; and Block, 33 Lots 1, 1.01, 2, 4.07, 4.08, and 5.

B-4 General/Village Business

This Plan recommends that the B-4 Zone absorb the few remaining B-2 properties along Main Street/Buchanan Street/Karcher Street, as described in the "B-2 General Business" subsection above. Additionally, it is recommended that the following text and changes to permitted uses be adopted for the B-4 Zone:

- The purpose of the B-4 General/Village Business Zone is to encourage increased pedestrian-oriented commercial and retail activity in the Borough's Village or Main Street Hamlet along with providing flexibility for mixed use of commercial and residential uses.
- Additional Identified changes to the permitted uses in the B-4 Zone include:
 - Alter the permitted business, professional or medical offices to reflect two distinct uses: office and medical offices. Offices will encompass all spaces for conducting business, professional, service industry, or government affairs.
 - Permit financial institutions to support the existing commercial and retail activity.
 - Limit permitted restaurants to those without a drive-in/drive to support the pedestrian-oriented intent of the B-4 Zone.

MW Marine Waterfront

There are no recommendations specific to the MW District.

MW(PUD) Marine Waterfront Planned Unit Development

As described in the "B-2 General Business" subsection above, the MW(PUD) permitted uses language should be revised to (a) remove references the B-2 Zone and (b) provide a list of specific non-residential uses permitted within the PUD/PRD Zones.

PO Professional Office

The PO Professional Office district should be removed from the Ordinance, as it was previously subsumed by the B-4 Zone and no longer exists.

SED-2 Office/Business Use

The SED-2 Zone should be removed from the ordinance. This Zone was replaced by the Fulton's Landing Redevelopment Area and no longer exists.

O-S Office/Service Overlay

There are no recommendations specific to the O-S District.

LI-BS Light Industrial/Business Service Overlay

The LI-BS Light Industrial/Business Service Overlay should be expanded to include the properties located at Block 29, Lot 4.04 and Block 17.01, Lots 2, 3, 4, and 5, as described in the "R-10 Single-Family Residential" subsection above.



A storefront along Main Street in the Borough's B-4 District



The entrance to Buchanan Park, located in the Borough's PRIME District



One of Sayreville's industrial sites along the Raritan River, located in the Borough's I District

Industrial Zoning

l Industrial

It is recommended that the Borough rezone Block 28, Lot 1 and Block 28.01, Lot 1.03 from the I Zone to the PRIME Zone. Doing so will (a) permit for a wider and more diverse range of uses on these properties than what is currently allowed, and (b) provide for future uses of the properties which are more compatible with the existing adjacent residential uses than industrial uses.

SED Special Economic Development

It is recommended that the western portion of Block 9, Lot 1 be rezoned from the R-7 Single Family Residential District to the SED Special Economic Development District, as described in the "R-7 Single-Family Residential" subsection above. As a result, the entire property will be zoned as SED.



A trail entrance at the Julian L. Capik Nature Preserve, which falls within the Borough's OS-C Zone

Public and Open Space Zoning PRIME Public, Recreational, Institutional, Municipal and Educational

It is recommended that Block 28, Lot 1 and Block 28.01, Lot 1.03 be absorbed into the PRIME Zone, as described in the "I Industrial District" subsection above.

Further, it is recommended that all existing PRIME properties within Blocks 1-8 (Old Bridge section of Sayreville) be rezoned to the OS-C Zone, as described in the "OS-C Open Space-Conservation" subsection below. Doing so will ensure that the entirety of the Old Bridge section of the Borough is considered in the proposed conservation and resiliency zone described below.

OS-C Open Space-Conservation

The OS-C District should be expanded to include the R-7 properties along Weber and MacArthur Avenues and within the Old Bridge section of the Borough (Blocks 1-8 and Block 9, Lot 1.02), as described in the "R-7 Single-Family Residential" subsection above. Similarly, the existing PRIME and B-2 properties within Blocks 1-8 of the Borough (the Old Bridge section of Sayreville) should be rezoned to the OS-C Zone, as described in the "B-2 General Business" and "PRIME Public, Recreational, Institutional, Municipal and Educational district" subsections above.

Furthermore, the Borough should consider modifying the OS-C District to reflect best practices in nature-based resiliency. Specifically, this modification should allow for existing structures to remain, undergo improvements up to a certain monetary value (proportionate to the overall value of structure), and sell while also preventing new development within these flood-prone areas of the Borough. The Resilient New Jersey process identified The Township of Woodbridge's Ordinance §150-41.1 "OSC/R Open Space Conservation/Resiliency Zone" as a model and best practice in resilient land use.

The key regulations and provisions of Woodbridge's OSC/R Zone are summarized below:

 Permitted uses include unimproved open space and existing structures (subject to the current zoning standards). This Plan notes that applying such a Zone to Sayreville would require language permitting existing utilities and existing improved open space/parks, since these uses currently exist in the Old Bridge section of the Borough.

- Reconstruction/renovation work on existing structures is limited to "ordinary maintenance" (defined in the Ordinance to include improvements such as roof replacement with like materials, replacement of interior or exterior trim, replacement of glass in any window or door, etc.) which does not exceed 50% of the value of the structure.
- Existing structures must meet certain flood mitigation building design standards and no occupancy of the property will be permitted until the structure complies.
- All properties within the OSC/R Zone are required to register annually, which requires an initial inspection as well as re-inspections "from time to time."
- §150-41.1 also addresses standards relating to streets, landscaping, and buffers.

OS-R Open Space-Recreation

There are no recommendations specific to the OS-R District.

Additional Recommendations

It is recommended the Borough adopt an updated Zoning Map to reflect the Borough's current zoning. A draft zoning map has been prepared and should be reviewed and amended to incorporate the recommendations put forth in this Plan.

Redevelopment Planning Recommendations

It is recommended the Borough examine the National Amusement Redevelopment Area Plan and assess if any changes are necessary. Additionally, the Landfill and Melrose Redevelopment Area Plan should be amended to include cold storage warehousing as a permitted use, in order to reflect the 2023 redeveloper agreement regarding this Area. There are no recommendations for additional redevelopment plans.



The Sayreville Sports Complex, located in the OS-R District, offers a variety of fields for active recreation

Table 18 below provides a summary of the zoning map changes proposed in this Plan. These proposed changes are illustrated on the maps provided on the following pages. The first map presents highlighted areas that correspond with the identification numbers and descriptions provided in Table 18. Each of the remaining proposed zoning maps in the Plan depict a specific section of the Borough, in order to show a more detailed view of the proposed zoning.

Table 18: Proposed Zoning Map Changes Sayreville Borough				
ID Number on Map	Area Affected	Proposed Zoning Change	Reasoning	
1	Existing R-7 properties along MacArthur & Weber Avenues	R-7 to OS-C	Mitigate future flood damage	
	Existing R-7 & PRIME properties within Old Bridge neighborhood (Blocks 1-8)	R-7 & PRIME to OS-C	Mitigate future flood damage	
2	Block 1, Lots 1, 1.01, 2, 3, 3.01, 4, 5, & 5.01	B-2 to OS-C	Mitigate future flood damage and eradicate B-2 Zone	
	Block 9, Lot 1	R-7 to SED	Property currently split- zoned; rezone so that zoning for entire lot is consistent	
3	Block 29, Lot 4.04 Block 17.01, Lots 2, 3, 4, & 5	Expand LI-BS to include (existing R-10 properties)	Expand scope of future development potential to (a) be consistent with surrounding uses and (b) utilize access to highways	
4	Block 29.04, Lots 1.01, 2, & 3.01 Block 30, Lots 1.02, 1.03, 2, 3, & 3.01 Block 31, Lots 1, 2, 3, & 4 Block 33, Lots 1, 1.01, 2, 4.07, 4.08, & 5	B-2 to B-3	Eradicate B-2 Zone	
5	Block 168.12, Lots 39, 40, 41, 42, 43, 44, 44.01, 45.01, & 46.01	B-2 to B-4	Eradicate B-2 Zone	
6	Block 28, Lot 1 Block 28.01, Lot 1.03	I to PRIME	Permit for a wider and more diverse range of uses that are more compatible with existing adjacent residential uses	



Proposed Zoning Map Legend

The legend below provides a key for the various zoning districts throughout the Borough and should be referenced for the Proposed Zoning maps found on pages 72 through 77 of this Plan.

Proposed Zoning	
LI-BS: Light Industrial / Business Service	R-20: Single-Family Residential (20,000 SF)
Overlay O-S: Office/Service Overlay	PD-10: Single-Family Planned Development (10,000 SF Lots)
GSP:Garden State Parkway	R-10: Single-Family Residential (10,000 SF
B-1: Neighborhood Business	Lots)
B-2 (PUD): General Business Planned Unit	PD-7: Single-Family Planned Development (7,500 SF)
Development B-3: Highway Business	R-7: Single-Family Planned Residential Development
B-4: General/Village Business District	R-7: Single-Family Residential (7,500 SF Lots) &
I: Industrial	R7-B Infill Overlay
MW: Marine Waterfront	R-5: Single-Family Residential (5,000 SF Lots)
MW (PUD): Marine Waterfront Planned Unit	G-1: Garden Apartment
Development	AH-1,2,&3: Affordable
OS-C: Open Space - Conservation	Redevelopment
OS-R: Open Space - Recreation	Special Economic Development
P: PRIME	











