

Borough of Somerdale

Master Plan Reexamination Report

Borough of SOMERDALE

The Crossroads of South Jersey



June 2017

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The original of this document was signed and sealed in accordance with N.J.A.C. 13:41-1.2 and 13:41-1.3 of the State Board of Professional Planners

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A handwritten signature in blue ink, likely belonging to Andrew Levecchia, the Director of Planning.



Borough of Somerdale

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Preface

I. Preface

Since the Master Plan was first adopted in 1978, the Borough of Somerdale and the region have undergone significant changes. In the last 10 years alone, there have been significant demographic, social, economic and environmental across the Nation, State of New Jersey, and our own Delaware Valley Region. Started in 2007 and officially over in 2009, the Great Recession is now generally acknowledged to be the most devastating global

economic crisis since the Great Depression. Although young adults in their 20s and 30s bore the brunt of the economic downturn, many Americans ages 50 and older—including baby boomers nearing retirement—were also affected, either directly or indirectly, by rising unemployment, plummeting home values, residential foreclosures and the decline in the stock market. Businesses throughout the region and nation also saw a significant amount of loss of commercial tenancies and saw a decline in consumer spending, to mention a few.

Though the regional and national economy have recovered on the whole, with Camden County's unemployment falling from approximately 11.3% in February of 2010 to 4.1% by April 2017, challenges remain with stagnant wages. Over the past decade, median household income in the United States has actually fallen from its high in 1999 over the past decade and has remained fairly stagnant in relation to rising inflation. Over the next decade, some experts project a natural increase of median household income due to a declining unemployment rate. In 2017, the State's minimum wage climbed from \$8.38 to \$8.44 an hour, and discussions about raising it higher have been tabled until at least the beginning of 2018.

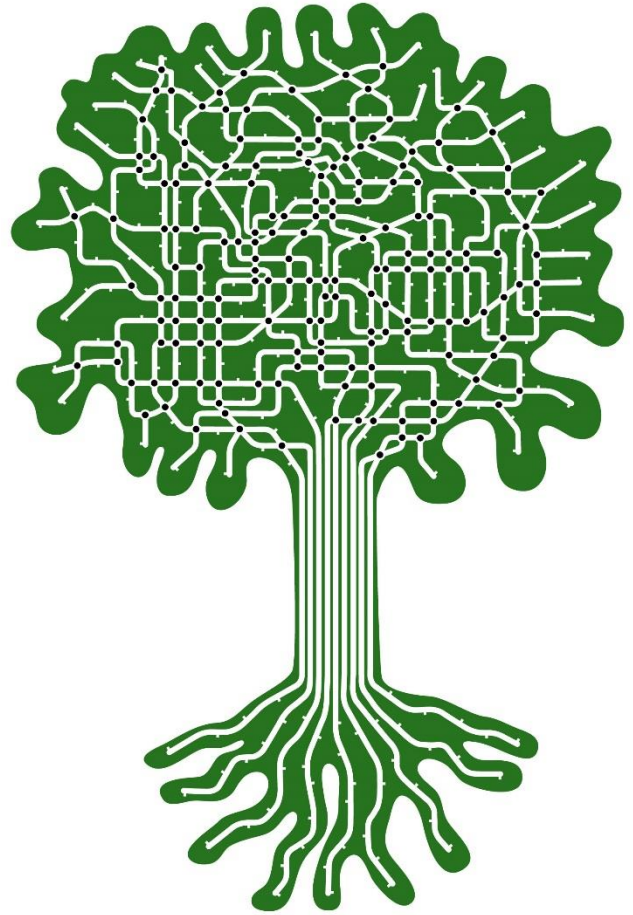
Since the Great Recession, the housing market in Somerdale and Camden County has seen slower recovery. According to Delaware Valley Regional Planning Commission's (DVRPC) projections, Camden County's population will only increase by 2.77% between 2015 and 2040 while Somerdale's population is projected to see a small decline of approximately -1.37%. Moving forward, this projection may prove inaccurate if Somerdale continues to redevelop existing lots to include more housing choices and higher density development.

In addition to the Great Recession, shifting market and demographic forces have also affected the housing, commercial and retail sectors. Going forward, market demand for walkable communities and amenity filled urban centers looks to remain high, especially among the Millennial and young professional workers. Housing ownership for this demographic group remains difficult for a variety of reasons and renting is playing an increasing role throughout the region and nation. Currently, retailers are also facing the combination of stagnating retail sales and rapidly rising online sales causing reduced traditional "Brick & Mortar" sales. During the 4th Quarter of 2016, the percent of e-commerce sales as a percent of retail sales stood at 8.30%. Experts expect retail ecommerce sales to increase to \$4.058 trillion in 2020, making up 14.6% of total retail spending that year. This impact may continue to affect many local businesses and big box retailers alike in the coming years.



In the past decade, our region has seen an increase in severe weather events. Hurricane Sandy was the most destructive hurricane ever recorded in New Jersey and caused massive damage throughout the State with economic losses to businesses estimated at up to \$30 billion. Other storm events like Hurricane Irene and others show the necessity of climate and hazard mitigation planning Statewide as well as in the Borough. Since the 2009 Reexamination, there has been a paradigm shift towards environmental stewardship, responsibility, sustainability as well as increased resiliency throughout the State and Region.

With over half a million residents and more than 13,000 businesses located within Camden County, it is crucial to work with surrounding municipalities to promote a more viable and livable region. As our economic, land use and transportation patterns have evolved over the last century, metropolitan areas have become increasingly important. In most parts of New Jersey, and especially in Camden County, the political boundaries established by municipalities long ago are no longer relevant to businesses' or residents' activities, especially with regards to air and water resources. For these and many more reasons, it is imperative that Somerdale and the community closely analyze the ultimate vision, goals and objectives of the Borough. A thorough analysis should be performed to see how the Borough has evolved over the past 10 years towards their goals and where their new vision should take them. The Borough of Somerdale should be aware of local and regional trends and factors in moving forward with new development regulations, redevelopment studies and areas, as well as overall planning studies.



Somerdale is part of an interconnected Camden County network of 500,000 people and 13,000 businesses. It is essential to work on a multi-jurisdictional level to provide for our residents needs. The political boundaries established by municipalities long ago are no longer relevant to businesses' or residents' activities, especially with regards to air and water resources.

Introduction

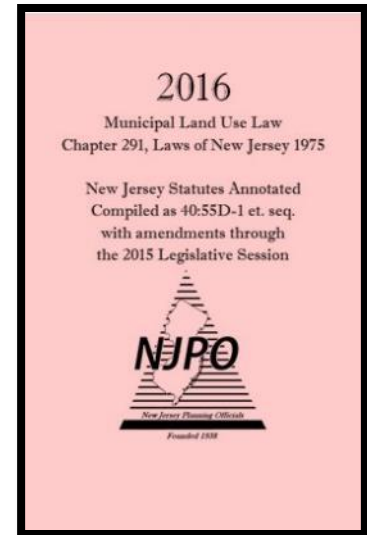
II. Introduction

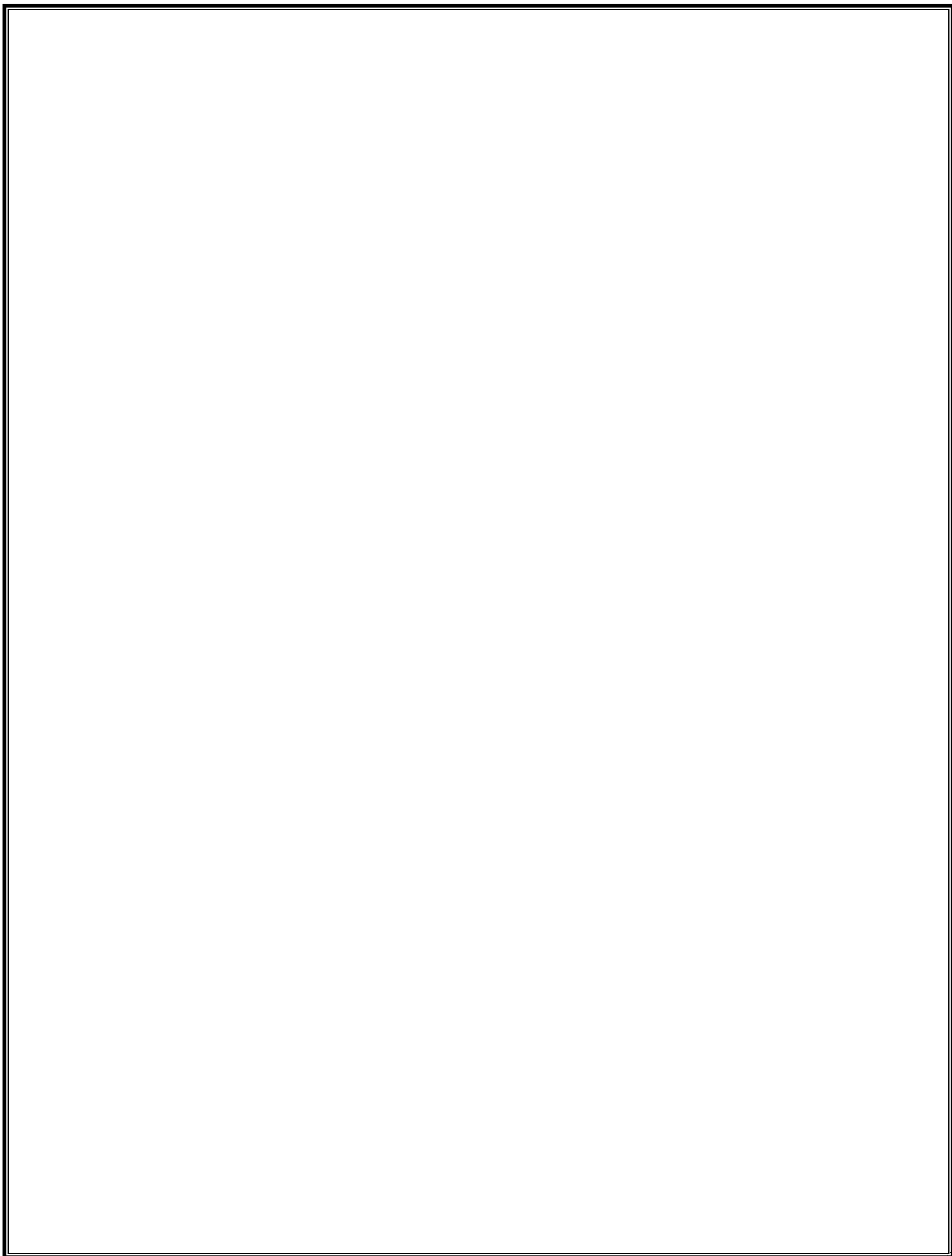
New Jersey's Municipal Land Use Law requires that each municipality in the State undertake a periodic review and reexamination of its local Master Plan. The purpose of the Reexamination Report is to review and evaluate the Master Plan and municipal development regulations on a regular basis in order to determine the need for updates and revisions. The Reexamination Report is not a Master Plan. The primary purpose of a Reexamination Report is to evaluate changes throughout the municipality and surrounding region as well as to determine whether the Master Plan and related development regulations are still relevant and appropriate. A Reexamination Report also serves to identify traditional planning needs, provide guidance and identify the next steps to the municipal planning process.

The Borough of Somerdale's current Master Plan was adopted in 1978. In 2009 the Planning Board reexamined the Master Plan to reflect changes in priorities, land use and circulation policies, demographics, and overall changes. This is the fourth known time that the Master Plan for The Borough of Somerdale will be reexamined since the 1978 Master Plan was adopted by the municipality. Previous reexaminations were performed in 1995, 2003 and 2009. This reexamination report provides commentary for the 1978 Somerdale Master Plan and the most recent 2009 Master Plan Reexamination Report.

Other Borough documents referenced during the preparation of this report include The 2009 Property Investigation of various Blocks and Lots in the Borough, the 2012 Final Recommendations Land Use and Development Ordinance Amendments and the Proposed Expansion of the PC-RD Zoning District Standards, the 2007 Property Investigation and Redevelopment Plan for Block 127: Lot 1, Report and Recommendations Amended Redevelopment Plan for the Lion's Head Plaza Redevelopment Area, Lion's Head Plaza Revitalization Plan, 2006 Cooper Creek Neighborhood Vision Report, 2002 DVRPC US 30 Corridor Study and the 2003 DVRPC Inter-Municipal Cooperation: WHP Economic Development and Land Use Assessment. Several municipal officials, including members of the Governing Body, Administration, members of the Planning Board, Traffic Sergeant, Zoning Officer, Engineer and Mayor have been interviewed. These interviews were conducted to provide comments about the effectiveness of the goals and objectives within the current Master Plan as well as to get a sense of where the town currently stands and where it is going in a broad sense.

New Jersey State Law (N.J.S.A. 40:55D-89) requires a municipality to periodically reexamine its Master Plan every ten years. The periodic review ensures that a municipality's land use regulations and development ordinances are up to date, consistent with current land use practices and reasonable before a court of law. The absence of the Planning Board adopting a Master Plan Reexamination Report shall constitute rebuttable presumption that the municipal development regulations are no longer reasonable (N.J.S.A 40:55D89.1). The town thereupon loses the benefit of a presumption of validity. As a result, any developer or landowner seeking to challenge all or a portion of the municipal development regulations or the zoning ordinance in Superior Court and is placed in a far stronger legal position and has greater probability of prevailing against the municipality in court. In addition, a zoning ordinance or development regulations can be held invalid by the court. It is therefore imperative that the reexamination report process begin on time & that the Master Plan Reexamination Report be adopted in a timely manner. This report constitutes the Master Plan Reexamination Report for the Borough of Somerdale as required by the Municipal Land Use Law (N.J.S.A. 40:55D-89).





III. Statutory Requirements

40:55D-89 Periodic examination.

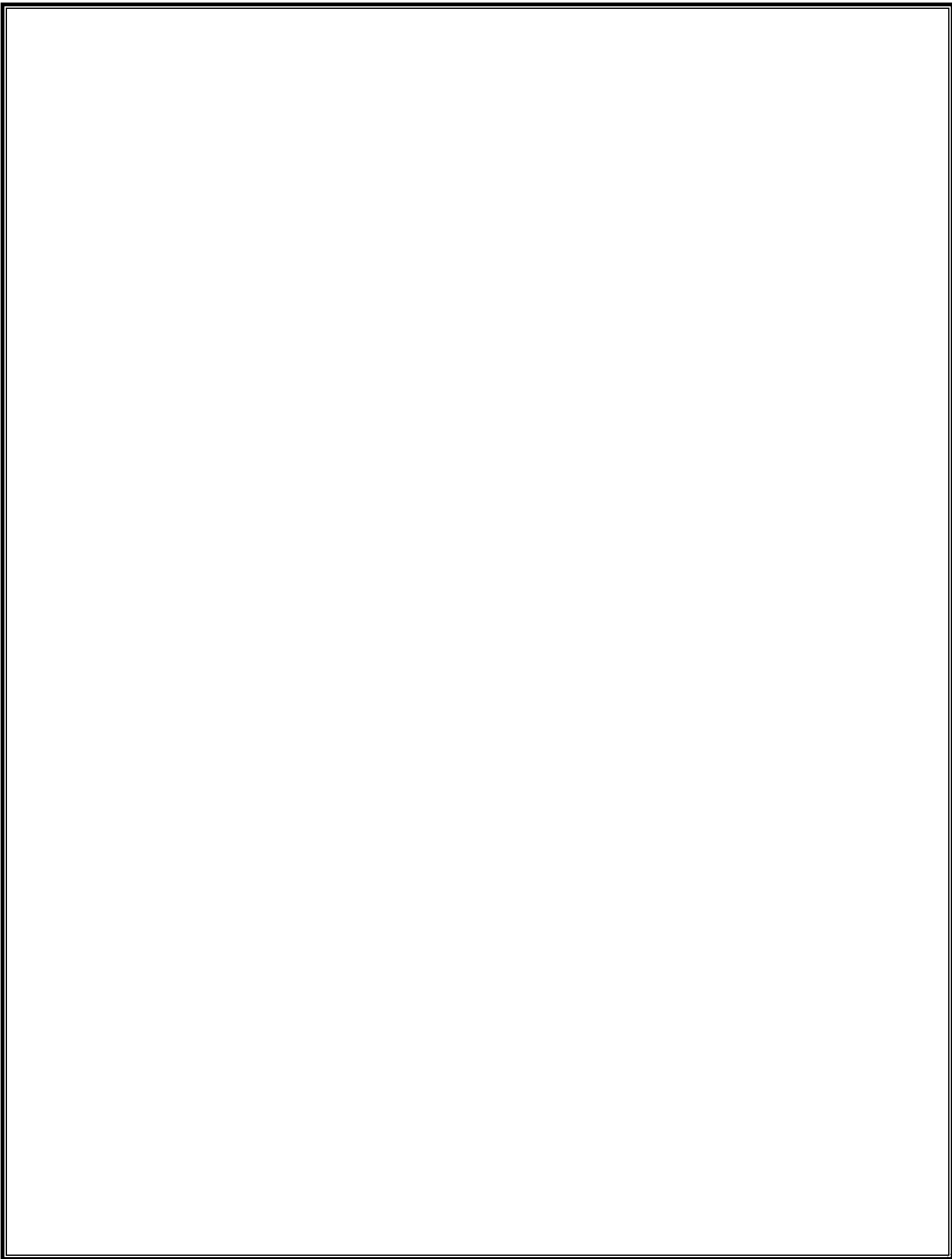
The governing body shall, at least every ten years, provide for a general reexamination of its Master Plan and development regulations by the Planning Board, which shall prepare and adopt by resolution a report on the findings of such reexamination, a copy of which report and resolution shall be sent to the County Planning Board. A notice that the report and resolution have been prepared shall be sent to the municipal clerk of each adjoining municipality, who may, on behalf of the governing body of the municipality, request a copy of the report and resolution.

The Reexamination Report shall state:

- a. The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.
- b. The extent to which such problems and objectives have been reduced or have increased subsequent to such date.
- c. The extent to which there have been significant changes in the assumptions, policies, and objectives forming the basis for the Master Plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition, and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives.
- d. The specific changes recommended for the Master Plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.
- e. The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the "Local Redevelopment and Housing Law, "P.L.1992, c.79 (C.40A:12A-1 et al.) into the land use plan element of the municipal Master Plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

40:55D-89.1. Reexamination report; absence of adoption.

The absence of the adoption by the planning board of a reexamination report pursuant to section 76 of P.L. 1975, c. 291 (C. 40:55D-89) shall constitute a rebuttable presumption that the municipal development regulations are no longer reasonable.



IV. Past Problems and Objectives

The structure of this report follows the requirements that are outlined in NJSA 40:55D-89a and therefore in Section A, the report lists the major problems and objectives of the current master plan and then in Section B, relists the problems and objectives providing commentary for each objective and problem listed below.

NJSA 40:55D-89a the reexamination report shall state:

- A. The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.**

General comments on the 1978 Master Plan 2009 Master Plan Reexamination

The current Master Plan adequately meets all legal requirements noted in the Municipal Land Use Law. It is however outdated to meet the Borough's current needs and best planning practices of today. A new and thorough Master Plan should be written for Somerdale. The current plan is missing crucial elements addressing the various issues facing Somerdale. The plan lacks to address the current best planning practices regarding land use, housing, circulation and the environment as well as incorporating green stormwater infrastructure, sustainable building codes, climate and natural disaster resiliency, smart growth, changing consumer preferences, changing population demographics, an aging population, shifting employment base, shifting retail model and more.

Furthermore, the current Master Plan has no current or relative vision or goals for the municipality and thus lacks concrete objectives that the Planning Board, Administration and Governing Body can strive to achieve. The most recent Master Plan Reexamination from 2009 helps address some current issues while raising some clear obstacles facing the municipality. It is our professional opinion that the current Master Plan Document does not meet the best planning practices of today and should undergo a complete rewrite prior to the 2027 expiration of this Reexamination Report. Funding could be allocated over the next decade into a fund for this effort.

The Borough continues to strive to address a number of the goals and objectives, as well as the planning issues, highlighted in the prior planning reports, although others require continued efforts. The remaining issues, as noted in the prior reexaminations, are a function of the type of long-range planning concerns which they represent, the general nature of most of the problems and objectives, and the extent and type of development and redevelopment which the Borough has experienced. The general planning concerns regarding the impact of development upon the community, the protection of environmentally sensitive features, and the preservation of existing established residential neighborhoods all represent long term issues which focus on the inherent character of the community, and consequently necessitate continual assessment and reassessment on the part of the Borough.

While some general problems and concerns have existed since 1978, despite a 39-year gap in time, others have not developed until recently. The following analysis reviews the issues which have been partially addressed, while identifying others that continue to remain a critical concern. All information is based on prior reexamination reports, planning studies, new data as well as interviews with stakeholders throughout the Borough:

The following objectives were set forth in the 1995 reexamination and condensed in the most recent 2008 Master Plan Reexamination.

Though they are over 22 years old, they are worthy of inclusion due to the fact that they remain relevant driving forces in the Borough's long range planning and development:

Commercial and Industrial Goals:

1. Provide a broad range of commercial uses in areas that have sufficient infrastructure and area to support them.
2. Provide design controls to attempt to establish a visual uniformity to commercial units, especially within the industrial zone.
3. Promote attractive commercial development through implementation of landscaping, buffering, and signage standards throughout the non-residential zones in the Borough.

Circulation:

1. Provide a road network separating and directing through traffic to regional roads.
2. Limiting driveways and roads accessing State and County Highways.
3. Establish requirements for street trees and open space buffers.
4. Provide walkway and bikeway systems to provide connections between neighborhoods and along roadways and stream corridors.
5. Encourage reduction of traffic when possible and encourage improvement of traffic conditions.

Environmental:

1. Preservation and enhancement of existing environmentally sensitive areas.
2. Provide access to open space and environmentally sensitive areas by pedestrian paths and greenways.
3. Promote stormwater management to protect water quality.

Recreation and Community:

1. Maintain and develop neighborhood park sites.
2. Develop plans and explore funding sources to take advantage of undeveloped open space.

Extent Past Problems and Objectives Have Increased or Been Reduced

The following is a summary of the overall goals of the 2003 Reexamination (Condensed and Paraphrased in the 2008 Reexam):

1. The Borough shall continue to utilize the NJ Local Redevelopment and Housing Law tool to achieve revitalization of the Lion's Head Plaza Facility.
2. Amending the Land Use & Development Ordinance and Site Plan Ordinance to include updated standards for buffering landscaping and signage is complete and the Borough continues to explore amendments that will address senior's housing and temporary structures. The Planning and Zoning Board, in conjunction with the Governing Body will make formal recommendations regarding amendment of the Ordinance on a continual basis.
3. The Housing Element and Fair Share Plan should be developed and incorporated into and made part of the Master Plan. Submission of a Petition to COAH for Substantiate Certification should be made after preparation of the Housing Element.
4. Strive to accomplish revitalization of the existing business districts by encouraging business to form a merchants or business association.
5. Pursue investigations of properties other than Lion's Head Plaza that would meet the statutory definition of properties in need of redevelopment and development plans that will bring those properties up to a more productive status.
6. Continue acquisition and enhancement of recreational resources throughout the municipality including the protection of environmentally sensitive areas and the limited, compatible development of those areas.
7. Continue to monitor, plan, repair, and replace the existing infrastructure as required to allow for the development and redevelopment of property without fear of a failing part of those systems inhibiting such progress. Pursue NJDEP Infrastructure Trust funds to assist with upgrades.
8. Encourage the development of senior's housing in the Grant Avenue and Osage Avenue area by establishing lines of communication between the Governing Body and developers and firms that specialize in the design construction and management of those types of facilities.
9. Continue the long standing (over 25 years) working relationship with the Camden County Community Development Block Grant Program (CDBG) to provide the necessary funds for the rehabilitation of individual homes and the roadway improvements.
10. Perform regular reviews of the Land Use Ordinance to insure conformance with current regulations. Actively solicit comments from the various Borough entities on a regular basis to determine areas of concern that could be addressed through Ordinance changes or enforcement of existing codes.
11. The Borough should encourage additional cooperative efforts with the Camden County Highway Department. The Borough should continue to strive for improved traffic circulation along the numerous County Highways within the Borough and address intersection congestion and safety issues as they have with the Somerdale Road/ East Atlantic Avenue Intersection and the Somerdale Road/ Warwick Road intersection.

12. Selection of future land use patterns is narrowly defined by the amount of established development and the lack of vacant developable land within the Borough.
13. Establish a strong presence within the White Horse Pike Economic Development Coalition to guide the future vitality of the White Horse Pike Corridor.

The following is a summary of the Planning Recommendations of the 2008 Mater Plan Reexamination:

1. Continue to utilize the tools provided by the NJ Local Redevelopment and Housing Law to encourage and effectuate additional redevelopment and revitalization in additional areas of the Borough. Current redevelopment and revitalization studies, under way as of the date of this document, should be carefully considered for their benefits to the community as well as their potential impacts to municipal services.
2. Complete the codification and publication of a complete land use ordinance. This will improve the ability of the would-be developer to navigate the ordinance and make informed decisions on the developability of land, in which he or she may be interested. The current condition of the ordinance is cumbersome and confusing at best, with numerous appended ordinances that override or modify original portions of Chapter 162. This is an important task, given the emergent redevelopment and development opportunities in the Borough at this time.
3. The Planning Board should continue to formulate the vision for the revitalization of the Industrial zone. The Planning Board should discuss, refine and choose one or a modification of the following options as outlines by Ms. Leah Furey in her work, and as suggested by the Reexamination Committee:
 - a. Consider preserving a core industrial zone, within the current industrial area, to continue to permit current industrial use types.
 - b. Consider a form based zone to standardize the appearance and size of structures, with or without further definition of permitted uses in the zone.
 - c. Consider an overlay type zone that would simply permit a variety of uses that would be similar to that which is currently permitted in the Borough's B-1 and B-2 Districts, while still allowing the underlying industrial zone to persist.
 - d. Extend, in their entirety, or modify the architectural standards of the PC-RD zone to include the Kennedy Boulevard Corridor and/ or additional areas within the current industrial zone.
 - e. Extend or modify the streetscape and landscape design elements of the CooperTowne project for the enhancement of the Kennedy Boulevard Corridor,
4. Continue to pursue the establishment of a Community Center Complex at the site of the current Kennedy Park by working cooperatively with both the National Park Service and Green Acres Program. This project will be key to the revitalization of the Kennedy Boulevard Corridor. The project will provide a cultural center, for both residents and non-residents, that does not currently exist in the immediate area. The Governing Body should also consider the formation of a community Facility Maintenance Committee to plan and implement regular maintenance of its recreational resources.

Extent Past Problems and Objectives Have Increased or Been Reduced

5. Continue to work proactively with the White Horse Pike Economic Development Coalition and the Delaware Valley Regional Planning Commission to create, design, and use standards that could be extended along the Borough's White Horse Pike Corridor. The fact that over 31,000 vehicles travel the White Horse Pike per day, automatically established a large customer base for all types of service and retail oriented businesses. The challenge will be to make these services attractive to motorists and to create functional site designs to safely accommodate these customers once they make the decision to leave the highway.
6. Establish frequent dialogue with the Somerdale Board of Education and the Sterling High School District to maintain awareness of the functional capacity of each district on a yearly basis. As has been discussed, previously in this report, current discussion with potential developers, recent municipal approvals and potential amendments to prior municipal approvals for housing developments have the potential to immediately impact the school system. Current housing proposals for the approved Gateway Village project, the former Terra Del Sole project site, and possible changes from age-restricted to market-rate housing at the Shires project are of the most concern, at this time.
7. Continue to regularly monitor, repair and replace the Borough's existing infrastructure systems as required so that the Borough can continue to work to attract developers and redevelopers and convince them to invest in the community.
8. Continue the long-standing relationship with the Camden County Development Block Grant Program, to take full advantage of the resources offered.
9. The Planning Board may consider maintaining the Reexamination Committee or forming a new committee to perform regular review of the Land Use Ordinance. The Committee or full Board must continue the refinement and confirmation of standards for the revitalization of the industrial area and Kennedy Boulevard.

V. Extent Past Problems and Objectives Have Increased or Been Reduced

NJSA 40:55D-89a the reexamination report shall state:

- A. The extent to which such problems and objectives have been reduced or have increased subsequent to such date.**

General Commentary

The Borough of Somerdale is an older suburban community within Camden County and as such is characterized by a mix of old and new residential, commercial and light-industrial development. The Borough occupies approximately +/-780 acres or 1.2 square miles. Somerdale was founded on April 23, 1929, from portions of [REDACTED]. **SHORT HISTORY HERE.. FEW SENTENCES... ASK STAFF FROM TOWN TO HELP.** Somerdale is located in the north-central section of Camden County with the Borough of Stratford, Lindenwold and Hi-Nella to its south, Voorhees Township to its east, Magnolia and Lawnside to its north and Gloucester Township to its west. The Borough is located mid-way between New York City and Washington D.C., adjacent to Philadelphia in what is known as the "Great East Coast Megalopolis".

The 2015 American Community Survey projected the Borough's population to be 5,298 persons. There are approximately 2,143 total households and 1,360 families. Approximately 45% of those families have children under the age of 18. The median household income is approximately \$51,633, which is lower than the Camden County average of \$62,185. Following World War 2, The Borough of Somerdale underwent massive growth. Between 1940 and 1969, some 73.5% of all housing or 1,400 units were constructed.

More recent development throughout the town includes the transformation of the old Lion's Head Shopping Plaza into Cooper Towne Center which now serves as the primary public gathering space for the Borough and includes a mix of uses including new retail and residential areas. The retail spaces range in size from 2,000 SF shops to a new 220,000 SF Walmart and have facades designed as smaller main street shops. Two new residential neighborhoods named Gateway Village have been added, with 122 affordable and 30 market-rate units, to serve as connectors between the Center and the adjacent neighborhoods and streets.

Some scarce vacant lots for development still remain, but moving forward, most development will occur in the form of redevelopment. Substantial redevelopment opportunities do exist in the form of under-utilized sites; moving forward, the Borough should remain cognizant of these opportunities and constraints. The following sections note problems that were identified at the time of writing the 1978 Master Plan and the 2009 Reexamination.

Land Use

General Comments

Over the past few decades, the majority of available land throughout the Borough has been developed. The few remaining undeveloped parcels are generally in the northern section of the Borough along the Cooper River Tributary and as a result are for the most part undevelopable and should remain protected. The largest undeveloped parcel, Block 129.02: Lots 1 and 2.04, is owned by the Borough of Somerdale and contains approximately 9 acres. Other smaller undeveloped parcels are scattered throughout the Borough. Outside of those areas, all new development will have to come in the form of redevelopment of previously developed lots.

Though it has been known for a long time that there is an intrinsic correlation between transportation infrastructure and land use, there is growing research and acknowledgement of the impact of land use on human health. The Borough should be aware that the percent of the population aged 55 or older has grown appreciably since 1990. More than 2.3 million New Jersey residents (some 26.6 percent of the state's population) were at least 55 years old in 2012, with more than half of that total over the age of 65 and nearly 200,000 aged 85 or older. In the Borough, approximately 30.2% of residents are over the age of 55. Given this trend, towns must start thinking about how to adapt and accommodate the needs and preferences of this large cohort of adults. Communities that can meet their needs will be in a better position to support and retain this demographic than communities that fail to act.

Population demographics will have the biggest impact to land use over the next 30 years. As the Baby Boomer generation matures they will start to look for communities that have age friendly resources and active neighborhoods. It is true that the American population continues to live longer and is healthier than previous generations. This means that there will be the largest concentration of people over 55 in America than ever before. Given these trends, Somerdale should start to consider how it can adapt to and accommodate the needs and preferences of this large cohort of adults. Communities that can meet these needs will be in a better position to support and retain this demographic and continue to thrive as population age increase.

In terms of land use, municipalities such as Somerdale should direct the necessary resources to accommodate the growing senior population which consequently is not only positive for this age group but positive for all demographic groups alike. This includes providing for more housing choices, promoting the development of aging-friendly communities, providing for more mixed-use land uses, interconnecting streets and creating a well meshed network, institute a complete streets policy, and align recreational space with residential uses.

A Land Use Map has been provided in Appendix C depicting land use throughout Somerdale.

Extent Past Problems and Objectives Have Increased or Been Reduced

Brownfields and Contaminated Sites:

According to the NJ Department of Environmental Protection Site Remediation Program, there are currently four sites within Somerdale that are “Active Sites with Confirmed Contamination”. Active Sites are those sites having one or more active cases or remedial action permits where contamination has been confirmed. These sites may have any number of pending and/or closed cases. Though some sites are in the process of undergoing studies or working towards cleanup, others are sitting idle. While most municipalities including Somerdale may not be able to provide direct financial assistance, there are ways that they can reduce project costs and schedule. Municipalities retain land use authority and can offer incentives that can be used to facilitate private investment in brownfield sites. Redevelopment plans, redevelopment agencies, community and local political support have all been effective in promoting brownfields development.

The NJDEP works in partnership with the New Jersey Economic Development Authority to administer the Hazardous Discharge Site Remediation Fund (HDSRF). The HDSRF provides funding to municipalities, counties, and redevelopment entities for the remediation of brownfield sites. There are a number of grants and loans for assessment, investigation and cleanup of brownfield properties. Additional information can be found at: <http://www.nj.gov/dep/srp/finance/hdsrf/>

There are additional sources of funding that can be found through the U.S. Environmental Protection Agency's Brownfields program including grants and loans for assessments, cleanup, and planning. Additional information can be found at: http://www.epa.gov/brownfields/grant_info/

Active Sites With Confirmed Contamination			
Site ID	PI Number	PI Name	Address
56294	030841	ALL SEASONS SERVICES INC	333 KENNEDY BOULEVARD
25558	018729	COOPER'S AUTO SERVICE INC	101 WHITEHORSE PIKE
224715	463443	NATIONAL RETAIL ASSOC	EVESHAM AVE
9806	007619	WAWA FOOD MARKET #8346	2 N WHITE HORSE PIKE

From 2014-2016, Site #9806 (2 N White Horse Pike) was redeveloped with a Wawa Convenience Food Market Store and gas pumps. A future phase includes a bank with a drive-thru as well as additional parking. The entire site, also known as Block 70.01, Lots 13,13.01,13.02,14-16, was remediated and redeveloped during the construction process. As a result, it is likely that this will be removed from the State register of Active Sites with Confirmed Contamination.

Housing

Existing Housing and New Development

The Borough of Somerdale has approximately +/- 2,188 housing units according to the 2015 American Community Survey. Many of these units are single-family dwellings that were constructed between 1950 and 1969 (approximately 64% of the total housing stock). Quality of housing ranges between various parts of the Borough.

As mentioned in the land use assessment, proper housing policies are key to a stable and successful land use pattern. The Borough has an abundance of single-family homes which works well, but may preclude accommodation of the entire demographic base. Providing housing options beyond the detached single-family residence helps to accommodate the different preferences, budgets and access needs of all residents, including older adults. Locating future residential development within proximity to existing neighborhoods preferably mixed use development goes one step further by offering the additional benefit of pedestrian access to a variety of destinations. Land use policy that welcomes housing alternatives benefits older adults and younger professionals in terms of manageability, affordability, accessibility and safety.

As residents age, they no longer have the same requirements that they may have had at an earlier point in their lives. Most no longer have the need for a multi-bedroom home on a large parcel of land that they must then often manage themselves. These large single family homes also have generally higher maintenance costs and property taxes than smaller houses. Smaller properties such as townhomes or condos create affordable and accessible alternatives to multiple-acre housing lots, while reducing infrastructure and service costs for the municipality. These smaller and more tight knit communities also often offer better accessibility and allow residents to stay within their communities following retirement. This is especially important for residents who can no longer drive and are dependent on adequate pedestrian facilities to move around. At the same time, other demographic groups also have better access to housing.

Young adults and young professionals who have more housing choices would also benefit. Homeownership rates among Americans under age 35 are barely more than half the national number of 62.9%, at just 34.1%. This, too, is a record low and about a fifth below its peak from in the mid-2000s. This is due to a variety of factors ranging from delayed retirement of existing professionals, high college debt, low starting pay, and a preference to the flexibility of renting to the constraints of ownership. Somerdale should take these factors into account when developing their housing policy and consequently their land use policy.

The Borough of Somerdale should follow the principles discussed in the NJ Future's 2014 report titled *"Creating Places to Age: A Municipal Guide to Best Land-Use Practices."* Those recommendations are copied directly from the NJ Future Report and include the following items:

Creating Alternatives to Detached Single-Family Housing

Local zoning regulates the housing types that are allowed in the community. Multi-family housing, including townhomes, condominiums, duplexes and apartments, can be produced and maintained more inexpensively on a per-unit basis, making them less costly to buy or rent than a larger home. Communities whose zoning ordinances are inclusionary and provide reasonable alternatives to detached single-family housing will be better able to meet the physical and financial needs of an aging population.

Extent Past Problems and Objectives Have Increased or Been Reduced

Reduced Building Setbacks

Municipal zoning ordinances often dictate the minimum distance from property lines at which construction can take place. Larger minimum setbacks may mean expansive green lawns and privacy to some, but present challenges for others. Daily activities can become difficult or even hazardous for older adults when larger setbacks mean a longer walk to collect mail, additional snow to shovel along the driveway and more area to landscape and maintain. Development that is permitted closer to the street also strengthens opportunities for neighborhood interaction between residents rather than isolating them far from streets and walkways. Zoning ordinances that permit reduced setback requirements will help developers meet these needs of an aging population.

Smaller Residential Lot Sizes

Zoning codes generally prescribe minimum residential property sizes. Larger lots, an acre or more in size, discourage pedestrian activity and require more time, money and energy for landscaping and upkeep. A zoning code that permits a variety of housing densities, up to at least 10 units per acre, will accommodate more effectively a variety of different needs, abilities and lifestyles. As an added benefit, higher residential density can help create the critical mass of customers required to support viable commercial centers and other services for older residents.

Affordable Housing

In some communities, the cost of smaller housing units can still be prohibitive to older adults, especially those on fixed incomes. Municipalities that encourage affordable housing as a fixed percentage of new development, or through development fees, can help provide opportunities for low- and moderate-income adults. During interviews with stakeholders from the Borough, it was identified that affordable senior housing is needed and the Borough would benefit from working with developers on constructing Senior Housing, a significant part of which would be oriented towards affordable senior units. The Borough should encourage this institution in their development interests and work with them in providing a much-needed asset within the community.

Universal Design

A house constructed for a young and mobile family will not always meet the changing needs of its occupants as they age. Narrow hallways (or very wide hallways), staircases, and other design features may render the house virtually inaccessible to residents or guests with limited mobility. Housing that incorporates elements of Universal Design offers expanded access to residents of all abilities. Universal Design addresses all aspects of construction and interior design, and includes elements such as “no-step” entrances, levered door handles, restroom grab bars, accessible power outlets and telephone jacks, as well as color contrasting floors. Municipalities, working within the construction parameters set by the state, can work with residents, builders and other permit applicants on how to build or retrofit housing for an aging population.

Accessory Apartments

While state law permits a “senior citizen” (defined by the Municipal Land Use Law as someone 62 or older, or a surviving spouse aged 55 or older) to rent part of his or her single-family house to one person, municipal ordinances regulate the installation, use and occupation of so-called “granny flats” or “in-law suites” (attached or detached one-bedroom accessory apartments). These units can be located inside the house or be detached, such as inside a retrofitted garage or barn. Permitting accessory apartments creates an opportunity for an interested property owner

to create a rental unit that can generate revenue to help him or her maintain the primary dwelling and remain in the community. Some individuals may opt to move into the apartment and rent out the primary residence instead, or may move into an accessory apartment hosted by another family member or unrelated individual. Ideally, zoning ordinances that permit to the installation and rental of an attached or detached one-bedroom accessory apartment, or permit the homeowner to move into the apartment and rent out the house, will help to provide affordable and accessible options for older residents.

Proximity to Existing Development

Zoning ordinances dictate the location and type of development in the community, often separating residential neighborhoods from commercial districts. The extent of this separation may necessitate the use of a car to accomplish trips to the doctor, pharmacy, post office, dry cleaner, hair salon, grocery store and places of worship. Increased automobile use results in greater traffic congestion and isolates older adults unable to drive or who cannot afford to maintain a vehicle. Revising zoning to encourage new residential development near existing commercial development reduces the need for multiple trips, and encourages walking and pedestrian activity.

Traditional “Main Street” Development

Municipal zoning codes often separate businesses, residences and amenities by type. For example, a zoning regulation might prohibit the placement of a café (retail or food/beverage) near a library (civic), despite the potential connection between the two uses. In other cases, restrictive zoning might limit the ability for apartments to be developed above retail or commercial development. A zoning code that specifies an excessive number of different districts for different land uses may inadvertently force residents to make more trips, while a flexible zoning code that encourages mixed development in a compact town center (including supermarkets, doctors’ offices, gyms, places of worship, important civic buildings like libraries and community centers and apartments above offices and retail) will appeal to older adults who want or need to minimize the amount of time spent driving.

Accessible Public Facilities and Recreation

Municipal park developments range from “passive” (such as walking paths, fishing areas or picnic facilities) to “active” (such as skating rinks and playing fields). Older adults will have different preferences in recreational activities than younger residents. Recreation and wellness programs can accommodate an aging population by ensuring that the developed park infrastructure is geared to all age groups and abilities. While rigorous hiking in a wilderness setting might appeal to some, others will seek out a safe, lighted walking area with access to public restrooms and benches.

Since the last Master Plan Reexamination, there has been an increase in the amount of housing as a result of the recently constructed Gateway Village. The new development contains 122 townhomes, 30 of which are affordable family rental units, located adjacent to Coopertowne Center, a retrofit of the old Lion's Head Shopping Center in Somerdale. Through a cooperative effort with Borough officials and private stakeholders, the vision plan, which included the redevelopment of the Lion’s Head Plaza and surrounding underutilized properties, was implemented as Cooper Towne Center and has been completed to award-winning standards. The Borough should continue to these types of units and housing that is various age groups.

Extent Past Problems and Objectives Have Increased or Been Reduced

Circulation

Roads and Highway System

As of July 2015, the Borough of Somerdale had a total of 23.98 miles (38.59 km) of roadways, of which 19.23 miles (30.95 km) were maintained by the municipality, 3.52 miles (5.66 km) by Camden County and 1.23 miles (1.98 km) by the New Jersey Department of Transportation.

White Horse Pike Circulation Problems

Overall, the White Horse Pike (US Route 30) is the busiest roadway in the Borough and will continue to be so as it is the primary vehicular route for most employees and residents to move about. US 30 is an east/west urban principal arterial connecting southern NJ and Atlantic City to Philadelphia. Intersections of the White Horse Pike with County Highways present some of the most congested intersections in Somerdale and as more development and redevelopment occurs along the White Horse Pike, incremental access improvements should be made to promote safety and reduce congestion.

White Horse Pike and Evesham Avenue

Though not directly in Somerdale, NJDOT is in the process of upgrading the intersection of the White Horse Pike and Evesham Ave. The purpose of this project is to improve safety and reduce congestion. Within the project limits, US Route 30 is a four lane highway (two lanes in each direction) that experiences traffic volumes exceeding the capacity of the traffic signal, and the accident rate at the traffic signal exceeds the statewide average. Currently, US Route 30 between Evesham Avenue and Warwick Road has no left turn lanes for left turning vehicles onto the numerous side streets and businesses. The project proposes the following improvements at the US Route 30 and Evesham Avenue intersection intended to improve both capacity and safety:

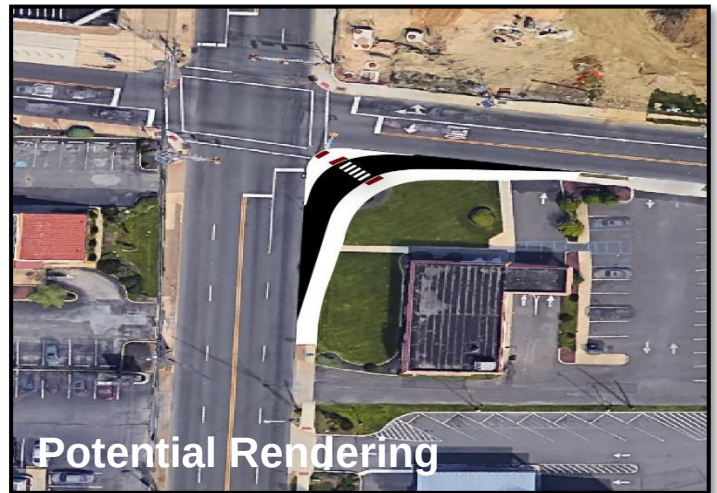
- Exclusive left turn lanes on the US Route 30 approaches
- Lengthened left turn lanes on the Evesham Avenue approaches
- Additional through lane on the eastbound Evesham Avenue approach
- Separate signal phase for left turns
- In addition, a continuous center left turn lane will be added on US Route 30 between Nelson Avenue and Ashland Avenue. This lane is intended to improve capacity and safety along US Route 30.

In addition to these proposed improvements, the convenience and gas chain, Royal Farms, has proposed to develop the southwestern-most lot and make additional circulation improvements. At the time of this writing, the Royal Farms has been approved by the Borough of Magnolia and Camden County and are working with NJDOT and utility companies on final details of the design. This project will affect the proposed lane striping of the intersection and as a result any through travelers, such as residents of Somerdale.

Somerdale Road and White Horse Pike

The White Horse Pike and Somerdale Road intersection has an imperfect alignment in which the two roadways meet at a skewed angle. As a result, a vehicle driving westbound on US Route 30, that attempts to take a right turn movement onto Somerdale Road, has to make a sharp turn at the approximately 80° angled turn. As a result of reduced sight lines and high speeds, this hard turn poses a safety issue.

In the 2002 DVRPC US 30 Study, it was indicated that, “According to local officials, the traffic signal pole in this quadrant has been knocked down several times in the past few years.” This was confirmed with officials during recent staff interviews. Over the long term, it may be prudent to create a dedicated right turn lane and pedestrian refuge island at this intersection. Allowing these movements could lead to reduced congestion and increased pedestrian/ cyclist safety. Additionally, the intersection radius should be increased in the other three quadrants to better facilitate right hand turns. Current site layouts allow for this design and the Borough should work with NJDOT on a potential long term solution. (See potential draft sketch below)



Colby Ave, Grant Ave and White Horse Pike

The current off-set intersection alignment of Colby and Grant Avenues forces the inclusion of two sets of traffic signals at this intersection with the White Horse Pike. As a result, drivers driving from Colby to Grant Avenue must make an awkward movement to drive across. In addition to this, the intersection is very wide, with crosswalks across US 30 spaced approximately 100 feet from each other. Off-set intersections along US 30 are common, especially along sections of US 30 that serve as municipal boundaries, such as between Oaklyn Borough/Haddon Township and Somerdale/Stratford boroughs. Because through traffic on the intersecting streets must travel on US 30 for a short stretch, they usually require multiple cycles at signalized intersections.

DVRPC studied this issue in their 2002 US 30 Corridor Study and suggested that:

One way to increase the capacity of off-set legs at intersections is to restripe those legs to provide a two-lane approach where feasible. This would create a left turn lane and a right turn lane on the off-set street. This will in turn reduce the green time needed. Another option is to put loop detectors in the pavement of off-set legs. This will allow the traffic signals to respond to current conditions. If no cars are present on a leg, then no green time needs to be allotted for that leg. If only one or a few streets are offset, consider making the off-set legs one-way towards US 30.

This approach is ideal for smaller volume roads that do not carry much through traffic and will not be suitable in an area like Oaklyn where virtually all streets are off-set at US 30. Typically, each segment of the off-set street will have its own green phase. This contributes to congestion along the corridor by increasing the red phase length for each intersection approach. At some intersections, such as Vassar Avenue in Somerdale and Stratford boroughs, where the distance between off-sets is longer, through vehicles frequently get caught on US 30 in between the off-sets when the signal changes. They must then cross oncoming US 30 traffic to continue on the north-south street.

Extent Past Problems and Objectives Have Increased or Been Reduced

This is a joint Stratford and Somerdale long-term issue that both towns should work to solve. This intersection may prove to cause increased congestion and safety issues. Over the long term, it may prove prudent to work with Stratford, NJDOT and the owner of the “Aldi Lot” to create an aligned and simple 4-pronged intersection.

General Issue for County and State Roadways

Many small businesses line US 30 in Somerdale, and several are located along County Highways. In many of these locations, each business has its own curb cut and driveway. In some spots the driveway continuously fronts US 30 with no curb. This proliferation of curb cuts has a negative effect on pedestrian amenities by creating discontinuous sidewalks and this wide driveway area creates a conflict between pedestrians and vehicles turning into a business.

The numerous entry points onto US 30 and County Highways also create many more potential conflict points between vehicles entering and exiting these roadways. On road networks with an abundant amount of access points, crash incidents increase significantly.

The Borough still has a large amount of small businesses each with their own driveways. As lots are developed and redeveloped, shared access should be emphasized. Managing access along highways can result in better traffic flow, fewer crashes, and provide for an enhanced business environment. Access management improves safety by separating access points so that turning and crossing movements occur at fewer locations. This allows drivers passing through an area to predict where other drivers will turn and cross and provides space to add turning lanes. From an economic standpoint, clear and safe access is necessary to the vitality of a commercial corridor and from an environmental standpoint, the reduction in access points and clearer flow allows for less impervious surfaces and increased vegetated areas.

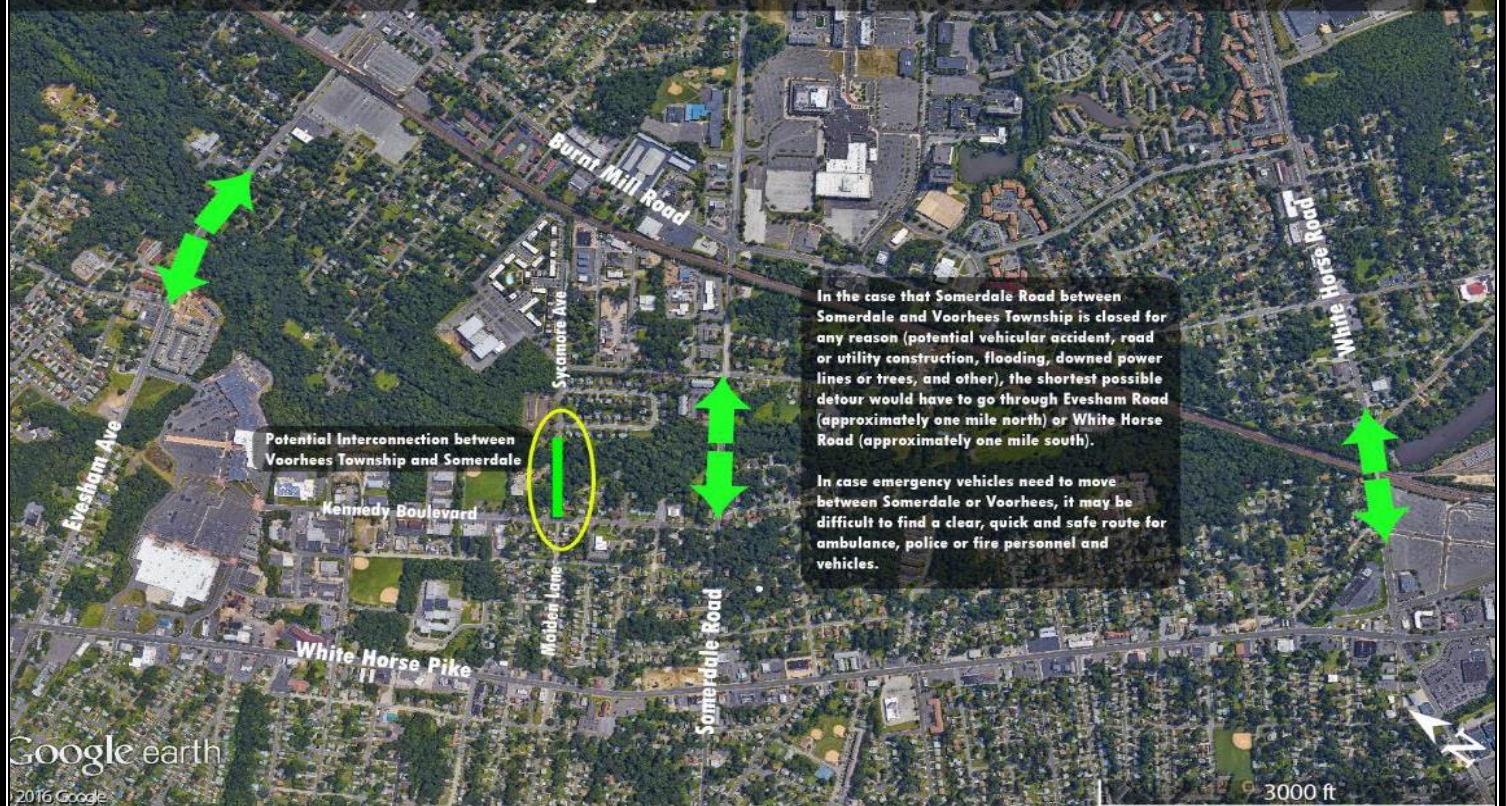
Local Road & Highway Intersection Issues

Several local roadways and intersections throughout the Borough have seen an increase in circulation issues since the 2007 Reexamination. Discussions during these interviews mentioned a coordinated effort between neighboring towns and the County on retiming the towns traffic signals. Since municipalities own each signal in their respective jurisdiction, they will need to work with each other on a coordinated effort for longer stretches of roadways.

Somerdale Road and Ogg Avenue Intersection

The intersection of Somerdale Road and Ogg Avenue is a County Road intersection within the Borough that was recently improved to provide better circulation flow and enhanced safety measures for both drivers and pedestrian. Due to the current alignment, however, sight lines continue make it hard for drivers to be completely aware of their surroundings and pedestrians have a hard time crossing this intersection. Over the long term, it may prove prudent to replace this intersection with a small neighborhood roundabout. This would provide for multiple crosswalks for pedestrians, slow down traffic approaching the intersection and allow the intersection to operate at peak efficiency. This decrease in congestion and increase in safety would create multiple benefits for both Somerdale residents. The center island in the middle of the roundabout could also become a gateway incorporating small aesthetic features such as “Welcome to Somerdale” signage or artistic feature or green infrastructure. Impervious coverage of the intersection would also decrease and allow for increased natural stormwater infiltration which though minimal, would have a positive impact on stormwater quality and quantity.

Lack of Interconnectivity between Somerdale and Voorhees



Potential Road Interconnection Project

Additionally, there may be a need to investigate the potential of interconnecting Maiden Lane or Crestwood Ave in Somerdale to Sycamore Ave in Voorhees Township. There is currently no road interconnection between the neighborhoods in Somerdale and Voorhees from Somerdale Road (CR 678) and Evesham Avenue (CR 544). For nearly a mile, the Cooper River Tributary separates the two towns along this stretch. It would be beneficial to both towns to make this interconnection and allow residents easier access instead of forcing them to go around via Somerdale Road or Evesham Avenue. Somerdale could benefit from this for multiple reasons:

1. Residents could utilize local roadways to get to the Ashland Train Station by taking Sycamore Ave to Preston Ave and on instead of using the busy Evesham Ave or Somerdale Ave roadways during morning and afternoon peak hours. As these roads have slower speed limits and less vehicular traffic, they would be safer to use for Somerdale residents riding bikes to the train station.
2. As Somerdale continues to develop their Kennedy Boulevard, promote business on the corridor and upgrade recreational facilities, this stretch will become busier and more utilized. A connection from Voorhees to the Kennedy Boulevard may prove useful in bringing more residents of the adjoining Voorhees neighborhood to this strip.
3. This interconnection will also allow Voorhees residents easier access to the updated Lion's Head Shopping Center and new Walmart. Residents of those neighborhoods would be able to walk or ride their bikes to these businesses.
4. In the case that Somerdale Road between Somerdale and Voorhees Township is closed for any reason (potential vehicular accident, road or utility construction, flooding,

Extent Past Problems and Objectives Have Increased or Been Reduced

downed power lines or trees, and other), the shortest possible detour would have to go through Evesham Avenue (approximately one mile north) or White Horse Road (approximately one mile south).

In case emergency vehicles need to move between Somerdale or Voorhees, it may be difficult to find a clear, quick and safe route for ambulance, police or fire personnel and vehicles.

Pedestrian Circulation

During stakeholder interviews it was identified that there is an ongoing need for better pedestrian facilities throughout the Borough including sidewalks, crosswalks and pedestrian countdown timers. There are many roadways and neighborhoods throughout the Borough that currently do not have sidewalks.

Sidewalks should be provided to all shopping centers and districts, public buildings and facilities to provide ease of access and reduce the need for vehicular traffic to these sites. We also recommend that street crossings, in well-traveled areas, be improved with crosswalks, pedestrian signals and signage. Along with sidewalks, adequate street lighting and benches should also be provided. Sporadic sidewalk forces pedestrians to walk in the roadway when sidewalk “runs out”. This can be observed clearly in proximity to the municipal building for example, where a person walking down Juniper Street would have to get off the sidewalk and walk in the street in order to get to the municipal building even though a majority of the street has sidewalk. See image below:



Public Transportation

Though Somerdale does not have a vast public transportation system, public transit modes do exist and are used by residents as well as employees throughout the Borough. New Jersey Transit bus service is available on the 403 route, which operates between the City of Camden and Turnersville in Gloucester County. Effective Tuesday, September 13, at the direction of Somerdale Borough Officials, the following bus stops have been eliminated along this route:

Eliminated Bus Stops:

- US-30, eastbound at Cedar Avenue, near side: on White Horse Pike at Our Lady of Grace Church (MyBus ID# 16276)

- US-30, westbound at Cedar Avenue, near side: on White Horse Pike (MyBus ID# 16286)

Weekday peak headways are between 20 and 30 minutes and off-peak is 60 minutes. Saturday headways are 30 to 50 minutes all day and Sunday headways are 55 to 65 minutes all day. The majority of the route is within the study corridor and serves Philadelphia, Camden, Collingswood, Audubon, Barrington, the Echelon Mall, Lindenwold PATCO/NJ Transit station, Clementon, Pine Hill, Winslow Plaza, Camden County College, Erial and Turnersville. The bus route operates primarily along US 30. **[DOES THIS STOP IN SOMERDALE AT ALL? PULL TO STOP TYPE SERVICE?]**

Additionally, though not in the Borough, the Ashland Train Station as well as the Lindenwold Transit Center are nearby train stations which are served by DRPA's PATCO service. This service can take passengers from the Lindenwold Train Station to the City of Philadelphia. NJ Transit also utilizes this line and runs trains from the City of Philadelphia through Cherry Hill to Lindenwold and on to Atlantic City.

The municipality should work with NJ Transit to potentially increase bus service to parts of town without service and provide for better marked bus stops and bus stations. Expanded connections to the Ashland and Lindenwold Transit Center may be beneficial. If needed, bus stations should be relocated to locations with high demand

Traffic Calming & Pedestrian Safety

During interviews with stakeholders throughout the Borough, it was identified that speeding is not a significant issue on municipal roads and traffic calming is only needed on certain roadways.

One roadway in particular with a high rate of speeding is Helena Ave on the border of Somerdale and Gloucester Township. This roadway has a significant amount of cut through traffic from the adjacent neighborhood in Gloucester Township and would benefit from some type of physical traffic calming measure. For more information and examples of various measures, please refer to the Traffic Circulation Issues section on page 52.

Extent Past Problems and Objectives Have Increased or Been Reduced

Environmental

Conservation/ Recreation:

"At the present time, there is one tract that is used for passive recreation only. The site, which is located between Warwick Road and the railroad, is used as a natural trail area. The park is in excellent condition, with most of the undergrowth removed from the site. The Borough is making an effort to acquire two properties adjacent to enlarge this area through a grant from the Green Acres Program. The site, which has a stream traversing it, covers +/- 7.09 acres."

"Somerdale has a total of 27.82 acres dedicated to recreational use at the present time. This is approximately 4.27 acres per 1,000 population. The recommended amount of recreational space is 7.5 acres per 1,000 population. This would require the Borough to dedicate an additional 21.0 acres to recreation."

Response:

At this time, it appears that there is sufficient recreational space in the Borough, though it is centered in a few locations in the Borough. During the stakeholder meetings with Borough officials, it was revealed that there may be an opportunity to convert the former school building lot off Somerdale Road into a passive and active recreational area. This lot is already part of a Redevelopment Area but due to community concerns and private investment issues over the years, neither commercial or residential redevelopment has been feasible. At this time, there is a good opportunity to preserve part of this building and make the lot into a recreational area. For more information, please refer to Redevelopment Plan Section on page 114.

The Borough should also consider adding a Conservation and Recreation Element and an Environmental Resource Inventory to its Master Plan. These documents will help identify the environmentally sensitive areas and provide a guideline for how to preserve and/or protect them from over development. Somerdale should continue to work with the Camden County Division of Environment and Open Space and Farmland Preservation to ensure that natural resources like the head waters of the Cooper River are protected.

At this time, existing parks should be maintained and enhanced. In particular, Nature Trail Park seems to have been observed to be actively used and those trails should be maintained. In the future, if new park and recreational space is needed, it should be incorporated into residential neighborhoods. If a major subdivision or site plan is prepared anywhere in the Borough, park and recreational space should be incorporated into the design of the new neighborhood. Additionally, the Borough should investigate the creation of new trail and bicycling facilities for residents as there is a noticeable demand for these facilities.

The Borough should continue to pursue open space preservation where possible. One such method for protecting open space could include the option of using Transfer of Development Rights (TDR). TDR is a voluntary, incentive- based program that allows landowners to sell development rights from their land to a developer or other interested party who then can use these rights to increase the density of development at another designated location. A TDR program seeks to preserve landowners' asset value by moving the right to build a house from a location where development is prohibited (e.g., for environmental reasons) to a location where development is encouraged.

Legally, the existing right to build a single house (for example) on one acre in the environmentally-sensitive area is "separated" from the land, meaning that the right to build no longer exists in that location, but can be purchased for use in another location. This involves placing a "deed restriction"* on the property, but also keeping track of the development right, its appraised value, and its original owner so that it can be sold for use elsewhere. The state has already established a State Transfer of Development Rights Bank to keep track of the development rights and accumulated interest, to manage transactions, and possibly to buy rights for sale later.; a Pinelands Development Credit Bank exists for the Pinelands region as well. In New Jersey, municipalities that have established development transfer ordinances may use the State TDR Bank, establish their own transfer of development rights bank or use a county managed bank, if available, to facilitate transfers within their jurisdiction. For more information, list of benefits and case studies, please see the State Agriculture Development Committee website at <http://www.state.nj.us/agriculture/sadc/tdr/tdrbank/>

In order to better plan and manage existing environmental resources, the Borough would also benefit from preparing an Environmental Resource Inventory (ERI). Preparing such a document would allow Somerdale to make better informed land use, transportation and environmental decisions. An ERI is an unbiased report of integrated data. It provides baseline documentation for measuring and evaluating resource protection issues. The ERI is an objective index and description of features and their functions, rather than an interpretation or recommendation. Identifying significant environmental resources is the first step in their protection and preservation.

The ERI is an important tool for environmental commissions, open space committees, planning boards and zoning boards of adjustment. The planning board should adopt the ERI as part of the municipal master plan, either as an appendix or as part of a master plan conservation element. As part of the master plan, the ERI can provide the foundation and documentation for the development of resource protection ordinances and resource-based land use planning. The Environmental Commission Enabling Legislation (N.J.S.A. 40:56A) and The Municipal Land Use Law (MLUL) (N.J.S.A.40:55D-1 et seq.) both give authority and responsibility to Environmental Commissions to prepare such inventories and reports. For more information and guidance on preparing such a document, please see the Association of New Jersey Environmental Commissions resource paper titled, "The Environmental Resource Inventory: ERI."

Community Facilities

Municipal Building:

The current municipal building, located at 105 Kennedy Boulevard, is in good shape and has undergone an addition since the last reexamination report. The new addition provided the municipal building with a new courtroom which also serves as the Council meeting chambers and PB meeting chambers.

Library: Somerdale does not have a public library outside of the school libraries provided for students. At this time there is sufficient library services within the County Library System and other local libraries to not warrant a new Somerdale Library. If one is considered however, a new library should incorporate modern meeting and community meeting space, technology center as

Extent Past Problems and Objectives Have Increased or Been Reduced

well as other modern amenities to serve students and residents. Today's modern libraries are much more than simple book depositories and they fill a vital service for underserved populations. For households without internet services, printers, fax machines or computers, they fill a much needed void.

Community & Senior Center: 101 South Hilltop Ave, Somerdale NJ

The Senior Center was recently renovated via funds from the Community Development Block Grant (CDBG). This grant allowed the senior center to undergo renovations which
_____[fill-in]_____
_____.

Fire Station:

In 1997, the Borough of Somerdale and Borough of Magnolia formed a Fire Department Consolidation Committee made up of two members from each Fire Company and two members of Council and the Mayor to work out the details. By the end of 1997, the last of work on the new Fire Department Constitution and By-Laws were being finalized. On March 13, 1998 the State of New Jersey recognized the Magnolia Heights Volunteer Fire Company and the Somerdale Volunteer Fire Company as being consolidated into a single corporate organization. The fire station is currently located at 101 Park Ave in Somerdale. Today the merger of the two fire stations is a good example of how to merge municipal facilities for a shared benefit to residents of Camden County.

EMS Services:

Magnolia Ambulance Corps, Inc. has been providing emergency medical services to the residents of Magnolia and Somerdale since 1953 and recently began providing services to the Borough of Lawnside. Emergency medical services are provide using a mix of paid staff and volunteer members. Paid staff are employed by Sterling EMS Alliance, LLC. An organization formed by a partnership between Magnolia Ambulance Corps, Inc. and Stratford Ambulance Association, Inc. in 2007. Paid staff rotate between both organizations to ensure that all towns have coverage when volunteers are not available. The Alliance is governed by members from both Magnolia and Somerdale and work closely with the governing bodies of each town. This is another example of a great example of municipal services merger.

Borough Parks and Recreational Space:

The Borough currently has 4 parks under its ownership:

James Perry Memorial Park
Memorial Park
Somerdale Nature Trail
Kennedy Boulevard Field and Walking Track

These parks are all in a good state of repair or on track for new updates or on the maintenance schedule. A new 40' X 60' practice baseball facility is currently under construction thanks to a Camden County grant. Moving forward, there has been discussion regarding incorporating new recreational facilities into the redevelopment of the former School Building off Somerdale Road. This is a redevelopment area and will likely be redeveloped in the coming years. It would be prudent for the Borough to work with redevelopers of the site to incorporate recreational facilities on this property.

The Somerdale Nature Trail

The Somerdale Nature Trail is especially a great asset for the Borough and is very well maintained. During a site visit to the park, there were many residents utilizing the trail, despite recent rain earlier in the day. During a quick discussion, residents mentioned that a good amount of school children and people in the nearby neighborhoods use the trail. There is also a significant amount of people walking their dogs along the trail. The Borough should continue to maintain this park and trail as it is a great Borough asset to the residents.



Public Works: During interviews, it was found that Somerdale's Department of Public Works is currently working on a master plan for the entire Public Works facility. During discussions, staff mentioned that there is a need for an overall study and master plan for the facility and site. There is a need for new and modernized offices, a need for a new salt dome and a need to expand and renovate their maintenance facility. A new warehouse for storage and for vehicles is also required. The Borough should work towards working with a consultant on providing a study and master plan of facilities for the Public Works Department and creating a timeline of facility improvements. During the reexamination effort for Somerdale, County staff also began working with the Borough of Magnolia on their reexamination report. During initial meetings with the Magnolia Planning Board, members of that board identified the need for a possible new public works facility or significant upgrades. Members of the Magnolia Planning Board also proposed the idea of a possible merger with the Somerdale Public Works Department for a shared Public Works Facility that would service both municipalities.

Extent Past Problems and Objectives Have Increased or Been Reduced

As a result of both municipalities need to update and upgrade their facilities, it would be prudent to explore the financial benefits of a joint public works department that could service both municipalities. A committee between both towns, similar to the one set up in 1997 for the fire station merger, could be set up. Additional towns such as Hi-Nella, Stratford, Lawnside and Barrington may also be interested in such a proposal and should be invited to the table if interested. Benefits of such a merger would include better economies of scale during purchasing or construction as well as economies of scale for maintenance matters and the ability to retain more full time staff.

School Buildings

During discussions between Borough staff, it was revealed that there are numerous challenges facing the existing school buildings. In particular, the Somerdale Park School has numerous problems that need to be addressed at some point in the near future. Currently that school has insufficient parking and an obsolete traffic circulation pattern. This creates a hazardous situation to both children and staff as well as parents who drop off their children in the morning. A new circulation pattern and additional parking would be highly beneficial to increasing safety in the Borough.

In addition to traffic circulation and parking, there are drainage issues around the school site. During major flooding events, water ponds and floods certain sections of the property and cannot drain quickly enough. During discussions, it was mentioned that additional space may be needed and that a new science lab to expand STEM education would be beneficial. In the near future, the roof may also need to be replaced. This could be replace in kind with the existing asphalt roof or via a conversion to a sloped roof. If structurally feasible, the school could also look at incorporating a Green Roof on top of the existing structure.

Green Roof on School Facility:

Green roofs, also known as vegetated roof covers, eco-roofs or nature roofs, are multi-beneficial structural components that help mitigate the effects of urbanization on water quality by filtering, absorbing or detaining rainfall. They also help reduce ambient temperatures and help improve air quality of the surrounding area. Alternatively, traditional black roofs are a source of numerous environmental and public health concerns in our urban environment.

Dark impervious surfaces like black roofs, absorb and radiate heat back into the surrounding atmosphere in a way that can significantly raising the ambient air temperature. This heat island effect can raise the temperature on a conventional dark roof up to 90 degrees F (50 degrees C) hotter than the surrounding air on a hot and sunny day, with much of the heat transferred down into the building below. As a result, more energy is required to cool building interiors, which increases emissions of greenhouse gases which degrade air and water quality. When rain falls on a conventional paved rooftop, instead of soaking into the ground or being taken up by plants, the water has nowhere to go except downhill where it flows through downspouts and into gutters and storm drains, picking up and carrying pollution in huge volumes to our rivers, lakes, and beaches.

Unlike traditional roofs, green roofs prevent excessive runoff during storm events by retaining large amounts of rainfall. Green roofs capture stormwater and allow the evaporation and evapotranspiration processes to naturally reduce volume and discharge rate of runoff entering conveyance system. Green roofs are built using a lightweight soil media, underlain by a drainage



Extensive Green Roofs

Extensive green roofs are limited to herbs, grasses, mosses, and drought tolerant succulents such as sedum, can be sustained in a shallow substrate layer (<4 inches), require minimal maintenance once established, and are generally not designed for access by the public. These green roofs are typically intended to achieve a specific environmental benefit, such as rainfall runoff mitigation. Extensive roofs are well suited to rooftops with little load bearing capacity and sites which are not meant to be used as roof gardens. These have a generally low cost and require minimal maintenance.



Semi-intensive Green Roofs

Semi-intensive green roofs fall between intensive and extensive green roof systems and have a level of design with regard to planting layout. Depth of growing medium is typically 5 to 8 inches and can be planted with a large variety of plants. These roofs are considered semi-intensive due to the landscape design coupled with increased construction cost and levels of maintenance: dedicated irrigation system (variable), annual fertilization, and advanced horticultural care. Semi-intensive roofs are often used as building amenities accessible to the occupants as an area to enjoy nature.



Intensive Green Roofs

Intensive green roofs utilize a wide variety of plant species that may include trees and shrubs, require deeper substrate layers (typically 8 to 30 inches plus), are generally limited to flat roofs, are labor intensive to construct and maintain, require a dedicated irrigation system, continual fertilization and overall advanced horticultural care is required. These types of roofs are often park-like areas accessible to the buildings occupants and general public. These types of roof systems are the costliest vegetated roof systems to construct.

layer and high quality impermeable membrane that protects the structure. Soil is planted with a specialized mix of plants that thrive in the harsh, dry, high temperature conditions of the roof and tolerate short periods of inundation from storm events. The layer of plants aid stabilization of indoor temperature and humidity by lowering the absorption of solar radiation and thermal conductance, while providing insulation for the building. This allows green roofs to be on average 60°F cooler than black roofs in the summertime. Through the appropriate selection of materials, even thin vegetated covers can provide significant rainfall retention and detention functions as well as assist in reducing solar heat absorption

Not only do green roofs help save money on energy, but it also help sequester carbon dioxide emissions. According to Kristin Getter and colleagues in a study from Michigan State University, "Replacing traditional roofing materials in an urban area of about one million people, for example, would capture more than 55,000 tons of carbon -- the same effect as removing more than 10,000 mid-sized SUVs or trucks off the road in a year". Additionally, green roofing provides roof longevity with its waterproofing membrane that provides a growing medium and vegetation. This ultimately shields the membrane from ultra-violet radiation and physical damage. Compared to traditional black roofs, maintenance costs of green roofs tend to be higher by \$0.21 to \$0.31 per square foot; however, their life expectancy is typically more than twice that of traditional roofs. When considering the overall monetary benefits of green roofs, such as stormwater runoff reductions, energy savings, improved real estate values, sequestration of carbon dioxide and general community improvements, "the money invested into installing a green roof of 3-6" in depth can be recouped within about 6.4 years for a 5,000 sq. ft. installation, and 6.2 years for a 10,000 sq. ft. installation," according to a report by the General Services Administration.

Extent Past Problems and Objectives Have Increased or Been Reduced

School Resiliency:

If the school is undergoing major improvements, it should also look at the option of increasing sustainability and resiliency into the school facility. An Energy Audit would be especially helpful. The audit will help guide the school toward the strategies that are most relevant to its particular situation. Most importantly, based on an in-depth exploration of the building and its particular characteristics, analysis of historical energy usage, and up-to-date consideration of current incentives, the audit will identify and prioritize the energy improvements that are possible. The audit will specifically identify potential savings, both in energy and dollars, and allow the school to prioritize those efforts that have the greatest impact. Completing a comprehensive audit is one of the most important planning steps in developing a sustainable energy program, since it creates an inventory of all potential improvement from which specific projects can be selected for implementation. Without knowing the full scope of options possible, optimal energy improvement planning is not feasible.

According to the EPA, schools nationwide have the opportunity to save \$2 billion in energy costs through the implementation of energy efficiency strategies and technologies that exist today. Making buildings more energy efficient is one of the most effective strategies for not only reducing costs, but also reducing greenhouse gas emissions, reducing dependence on fossil fuels, and numerous other strategic benefits associated with a more sustainable energy supply. When deployed in a school setting, these solutions also have significant educational and community outreach potential. Building efficiency is a key part of an overall sustainable energy program, and the work covered by this audit action is a crucial step in that program.

Following the audit, the school could look at potentially installing onsite renewable energy generation. A photovoltaic panel system will typically offset a fraction of the electricity the school currently buys from the utility or third party supplier, and, as a result, reduces the use of traditional fuels and their associated impacts. With the installation of large battery systems, this can help the school become more resilient during major storm events and power outages. During these times, cafeteria refrigerators and major systems would remain operational without relying on gasoline to run backup generators.

The New Jersey Clean Energy Program (NJCEP) Renewable Energy Storage Program offers financial incentives through an open enrollment for applicants investing in renewable electric storage projects that are integrated with behind-the-meter, net metered, Class 1 renewable energy systems interconnected with New Jersey's electric distribution system. The open enrollment program offers an incentive of \$300 per kWh of energy capacity. The maximum incentive per project is \$300,000 or 30% of the project's total cost, whichever is less. Applications will continue to be accepted until the program's \$3 million budget is fully committed or the Board replaces the program with a competitive solicitation. For further details, visit the NJCEP website: www.njcleanenergy.com/renewable-energy/programs/energy-storage

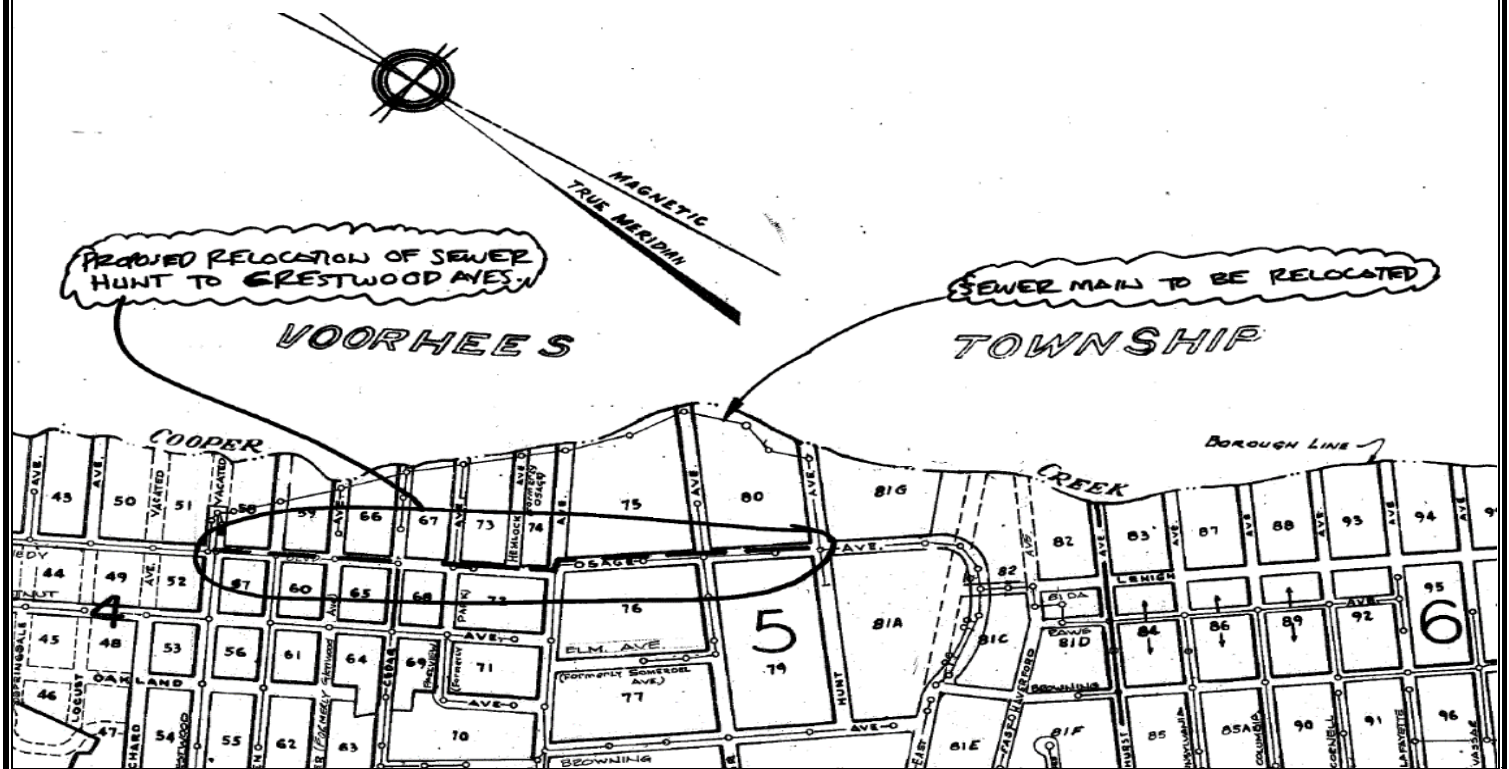
Sanitary System

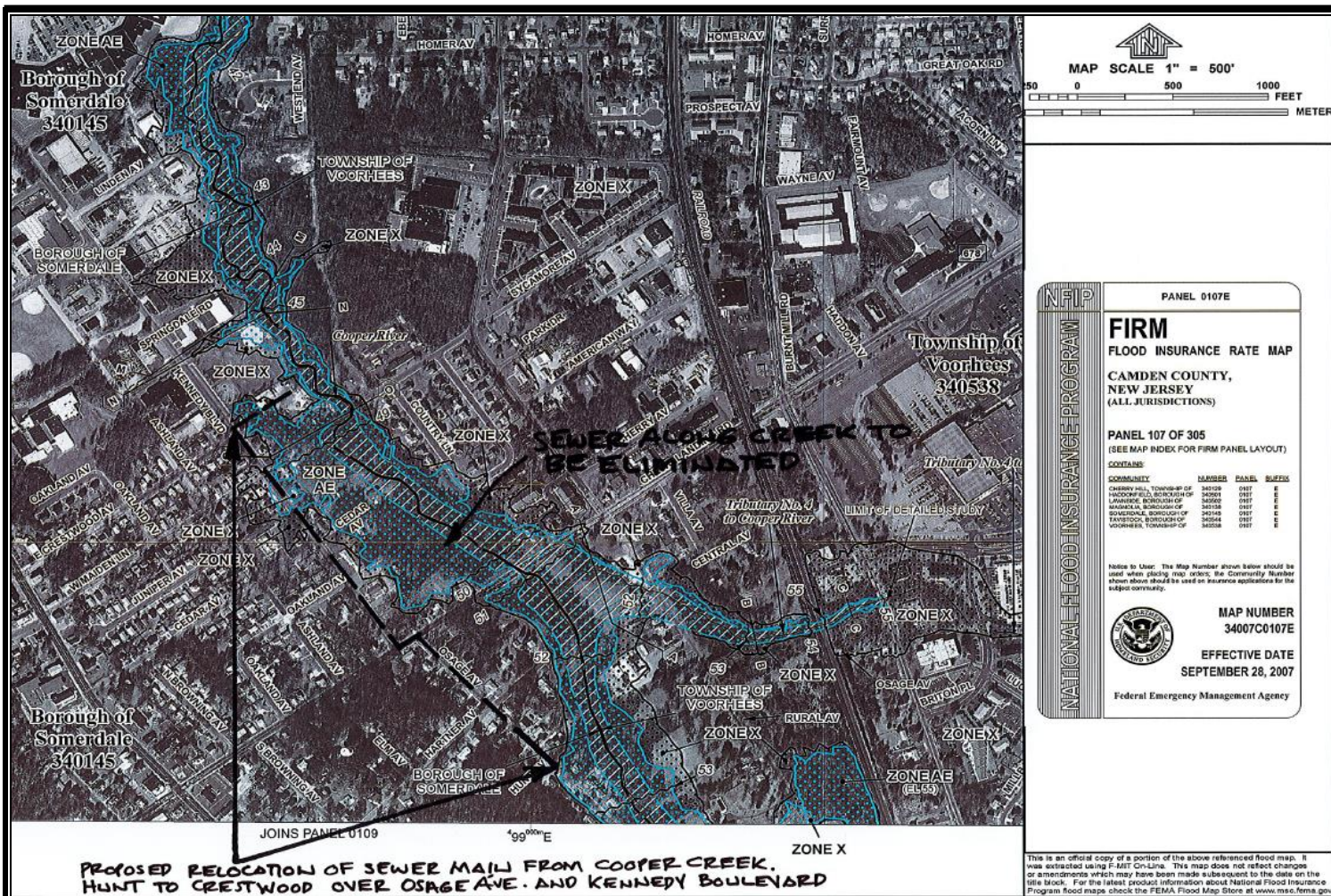
The Somerdale Borough Sanitary Sewer Collection System is now over 70 years old. It was originally designed to provide conveyance, treatment and disposal of the Borough's sanitary sewage and mostly constructed and expanded during the post-World War II suburban housing boom. As time went on, many areas of the conveyance system were plagued by infiltration/inflow problems, open and/or offset pipe joints, sags, deteriorated manholes and antiquated and overtaxed pumping stations. In the 1980's, most of Camden County's individual municipal sewage

treatment plants were connected to a regionalized collection and treatment system managed by the Camden County Municipal Utilities Authority (CCMUA). The Borough's treatment plant was taken off-line and all sewage was diverted into the regional system. At that point, direct discharge of Somerdale's marginally treated sewage to the Cooper Creek ceased.

The interception and treatment of the Borough's sewage by the CCMUA did nothing, however, to address the Borough's aging collection system and problematic pump stations throughout the Township. In 2007, the Borough entered into an agreement with the CCMUA to remove the excess infiltration/inflow (I&I) from the sanitary sewer system to allow for a temporary increase in the Borough's sewer allocation for the successful redevelopment of the former Lion's Head Plaza, now known as CooperTowneCenter. To comply with the agreement, the Borough purchased televising system and commenced with televising the system in sections to develop an Improvement Program to replace and or slipline sanitary sewer mains, reconstruct or line sanitary manholes in targeted areas of the Borough to correct I&I, eliminate frequent blockages, open and correct offset pipe joints as well as pipe sags and protruding laterals. The Borough has recently completed pump station upgrades and substantial sewer main replacement projects throughout the prioritized areas and continues to pursue funding sources to continue with the work.

The Borough of Somerdale is proposing to continue the rehabilitation of the sanitary sewer system by performing improvements to the system, which is adjacent to Cooper Creek. This system has been problematic for the Sewer Department staff due to the difficulty in accessing the system, as well as the continued deterioration of the system. The main was originally constructed along Cooper Creek because it followed some of the lowest topography in the Borough and it intersected the former treatment plant facilities located at the end of Crestwood Avenue along the Creek. This portion of the system is known to have a high volume of inflow and infiltration due to its location adjacent to the Cooper Creek. The sewer's location in a mapped floodplain and within* freshwater wetlands make it an area of environmental concern as well, Frequent inundation of the system contributes to inflow problems and blockages and the resultant untreated sewage overflows pose a direct risk to the Creek.





The Borough is proposing to abandon the sanitary sewer collection system from Hunt Avenue to Crestwood Avenue and construct a new sanitary sewer collection system along Kennedy Boulevard, between the right-of-way and concrete curbing. In order to construct the new system, a pump station will be constructed at Hunt Avenue, as well as 16 individual EONE Ejection Pumps to redirect the flow to the new (gravity) system. This new branch of the sanitary sewer collection system will improve the overall function of the system, mitigate potential health and environmental hazards, significantly reduce or eliminate the inflow and infiltration and restore the natural environment along the Creek.

It is important to focus on the environmental benefits of the relocation of the sewer collection system in this area because the Borough intends to continue to provide enhanced passive recreation opportunities along the Cooper Creek Corridor in the future. In 2017, the Borough began a major sanitary sewer effort to lay out a plan for future construction and reconstruction of lines. They outlined 4 major concerns of the existing system and how it affects residents as can be seen below:

- Sanitary effluent can back up into homes and basements.
- Continual ground water infiltration and illegal sump pump connections cause pump stations to run constantly. This results in higher energy costs to operate the system.
- During times of inclement weather, rain water and ground water enter the system causing long sections of the system to be overburdened and effluent spills into the street.
- The system is well beyond its expected useful service life. Sewer main blockages that must be repaired in an emergency cost 2 to 3 times as much as scheduled or planned repairs

At this point, rainwater and ground water intrusion is so high that the system can no longer handle the flow. This additional clear water flow is effecting the operations at the Camden County Municipal Utilities Authority plant in Camden. The Borough has a commitment to the NJDEP & CCMUA to address our sewer infrastructure system in return for their increasing their capacity contribution which is needed for Somerdale's continued economic redevelopment. Meanwhile the cost of labor and materials continues to skyrocket. Moving forward the Borough has undertaken a multi-phase approach. Phase I and Phase II have been completed and approximately 1/2 of the system has been televised. A priority list has been developed for the next phases and Phase III and IV will occur from 2017-2021.

These multi-year effort by the Borough will be very beneficial for residents of Somerdale as it will repair or replace critical infrastructure vital to the economic vitality and environmental sustainability of the Borough.

Historical Preservation

Through interviews with Borough stakeholders and investigation with the Camden County Historical Society and New Jersey & National Registers of Historic Places, it was revealed that there are no properties on the State Registrar. Currently, Somerdale does not have any assets that could warrant a need to be put on the State or National Registrar. Moving forward, the Borough should document its history and protect various elements from around the Borough to showcase for future generations.

Municipal Stormwater Management Plan

1978 Master Plan Stormwater:

"Drainage is usually a problem with industrial areas due to the large percentages of land devoted to impervious ground cover. The proximity of Cooper Creek provides the developer a place of discharge for the runoff."

As part of New Jersey's compliance with federally mandated requirements, the New Jersey Department of Environmental Protection (NJDEP) adopted municipal stormwater regulations (NJAC 7:8) in 2004 that required preparation and adoption of a stormwater management plan and ordinance by the Borough to address the need for promoting groundwater recharge and controlling the impacts of stormwater runoff from development. The Borough of Somerdale adopted a *Municipal Stormwater Management Plan* on March 8th, 2005 and was last revised On April 27th, 2005. In addition, the *Stormwater Control Ordinance* was also adopted on May 11th, 2006 and *The Stormwater Pollution Prevention Plan* was adopted on March 8th, 2005 and last revised on May 29th, 2009.

This Municipal Stormwater Management Plan (Plan) describes Somerdale's requirements for addressing stormwater related impacts of land development and re-development projects, and has been developed to meet obligations detailed in the Borough's Tier A Municipal Stormwater

Extent Past Problems and Objectives Have Increased or Been Reduced

General Permit. This permit is required by the New Jersey Department of Environmental Protection (NJDEP) and is described in NJAC 7:14A – Municipal Stormwater Regulations.

The 2005 Somerdale Municipal Stormwater Management Plan has been prepared for incorporation into the Borough's Master Plan. It is intended to expand the research, background information, policies, objectives, goals and recommendations included in the previous Master Plan Reexamination Reports. The Municipal Stormwater Management Plan should be consistent with the Residential Site Improvement Standards (RSIS) at NJAC 5:21 and may need to be updated to reflect ongoing RSIS revisions. The Borough should utilize the most current update of the RSIS in the stormwater review of residential areas. This Municipal Stormwater Management Plan should be updated to be consistent with all previous and future updates of the RSIS.

The following are required State goals of the MSWMP and ones adopted in the Somerdale Municipal Stormwater Management Plan:

- Reduce flood damage, including damage to life and property;
- Minimize, to the extent practical, any increase in stormwater runoff from any new development;
- Reduce soil erosion from any development or construction project;
- Assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
- Maintain groundwater recharge
- Prevent, to the greatest extent feasible, an increase in nonpoint pollution;
- Maintain the integrity of stream channels for their biological functions, as well as for drainage;
- Minimize pollutants in stormwater from new and existing development to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state, to protect public health, to safeguard fish and aquatic life and scenic and ecological values and to enhance the domestic, municipal, recreational, industrial, and other uses of water; and
- Protect public safety through the proper design and operation of stormwater basins.

To achieve these goals, the plan outlines specific stormwater design and performance standards for new development. Additionally, the plan proposes stormwater management controls to address impacts from existing development. Preventative and corrective maintenance strategies are included in the plan to ensure long-term effectiveness of stormwater management facilities. The plan also outlines safety standards for stormwater infrastructure to be implemented to protect public safety.

The Borough does not have additional goals beyond the State mandated requirements described above. The Borough could however incorporate the following additional goals when performing the next revision to the Stormwater Management Plan and Stormwater Control Ordinance:

- Limit disturbances of environmentally sensitive lands such as steep slopes, floodplains and wetlands.
- Protect groundwater and surface water quality to safeguard its use for drinking water, recreation and natural habitat for animals.
- Protect important wildlife habitats, streams, waterways and other unique or irreplaceable land types.
- Preserve important visual amenities, placing special emphasis on preservation of river views, wetland marshes, woodland, vistas and other scenic resources.

- Incorporate Green Infrastructure, Low Impact Development and NJ Best Management Practices for Stormwater control into municipal projects and request developers to investigate these options.
- Review site plans to minimize environmental disruption and to encourage development of landscapes and streetscapes consistent with these goals.

General Information

It was noted in the Municipal Stormwater Management Plan that the Borough has had a slight decline in population from 1980 to 2000 and that there have been no substantial changes in the stormwater runoff volumes and pollutant loads to the waterways of the municipality. The NJDEP has established an Ambient Biomonitoring Network (AMNET) to document the health of the State's waterways. There are over 800 AMNET sites throughout the State and these are samples on five-year cycles. The data is used to generate a New Jersey Impairment Score which is based on a number of biometrics related to benthic macroinvertebrate community dynamics. There are two waterbodies in the Borough. One waterway is Cooper Creek which runs along the northeastern boundary of the Borough and the other is Graverly Run which is located in the western section of Somerdale. No testing has been performed on Graverly Run and the nearest test site for Cooper Creek appears to be at Kaighn Ave in Camden (Site ID #01467191) where impairment is phosphorous. There is no priority ranking for these streams. Therefore, it is believed that NJDEP has not developed a Total Maximum Daily Load (TMDL) for pollution in these waterways.

A TMDL is the amount of a pollutant that can be accepted by a waterbody without causing an exceedance of water quality standards or interfering with the ability to use a waterbody for one or more of its designated uses. The allowable load is allocated to the various sources of the pollutants, such as stormwater and wastewater discharges, which require an NJPDES permit to discharge, and nonpoint source, which includes stormwater runoff from agricultural areas and residential areas, along with a margin of safety. Provisions may also be made for future sources in the form of reserve capacity. An implementation plan is developed to identify how the various sources will be reduced to the designated allocations. Implementation strategies may include improved stormwater treatment plants, adoption of ordinances, reforestation of stream corridors, retrofitting stormwater systems, incorporating green stormwater facilities and other best management practices strategies.

The 2005 Municipal Stormwater Management Plan indicated that in addition to water quality problems, the Borough has exhibited severe water quantity problems including flooding and streambank erosion, and diminished base flow in its waterways. The stormwater flows to the waterways were less (i.e., less impervious area), prior to development, than presently exist in the Borough. As impervious coverage increased in the Borough, the peak and volumes of stream flows was also increased. The increased amount of water resulted in stream bank erosion, which resulted in unstable areas, and degraded stream habitats. The soils within Somerdale are mostly impermeable, and they are clayey (marl). The imperviousness of the Borough has somewhat decreased groundwater recharge, decreasing base flows in streams during dry weather period.

Extent Past Problems and Objectives Have Increased or Been Reduced

At the time in 2005, the municipality listed several recommended revisions to Chapter 162 of the Borough Code, entitled “*Land Use and Development*”. These recommendations included various ordinances, regulations, and standards to be amended so they incorporate better nonstructural stormwater management strategies. [Have these been performed?] According to the Borough’s Municipal Stormwater Pollution Prevention Plan and recent interviews, the Borough has been actively enforcing N.J.A.C 5:31-7 and RSIS standards and promoting local public education through [redacted]. Existing and new storm drains are labeled with plaques reading “No Dumping – Drains to River” and all MS4 Outfall Pipes had been mapped in 2005. No illicit connections to outfall pipes have been made according to that report. [Since then?]

Overall the Borough has been proactive in promoting the goals and objectives of the 2005 Municipal Stormwater Management Plan. Moving forward, some issues still remain [Ask Chuck R. about these issues] such as.....

1. Significant flooding still occurs along the Cooper Creek during major storms
2. Some stormwater pipes running under East Atlantic Avenue may be of inadequate size and may be impeding the flow of stormwater.
3. Nature Trail Park is located at one of the lowest points in the Borough and is as a result a major natural stormwater collection area for the Borough and drains out via Graverly Run. Proper maintenance of the park and its vegetation as well as drainage structures should be maintained.
4. Graverly Run drains stormwater that collects at Nature Trail park. The current condition of slopes along the Creek are in a deteriorating condition and erosion is high. A long term plan that incorporates steep slope protections and revegetates the slopes is recommended.
5. A significant amount of geese, ducks and other bird wildlife have been observed at the Kennedy Blvd Recreation Area. The combined amount of bird waste may be impeding the water quality of Cooper Creek and a natural green infrastructure filtration system is recommended to clear up the water quality.
6. The Borough is currently working on major Sanitary Sewer Collection System improvements and should continue to do so.
7. The Borough should incorporate Green Infrastructure projects in conjunction to gray stormwater infrastructure projects to maximize a multitude of benefits from such systems.
8. The Borough should investigate stormwater collection and filtration infrastructure at School Facilities, especially at the Somerdale Park School.

The last revision to the Municipal Stormwater Management Plan was performed in 2007 and should be updated once again to reflect the changes made in the most recent 2011 Residential Site Improvement Standards (RSIS), potential for new monitoring stations or location changes, updated rules, planning/ engineering practices, green infrastructure projects, or otherwise important factors requiring an update.

VI. Changes in Assumption, Policies and Objectives

NJSA 40:55D-89c. The reexamination report shall state:

- c. The extent to which there have been significant changes in the assumptions, policies, and objectives forming the basis for the Master Plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition, and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives.

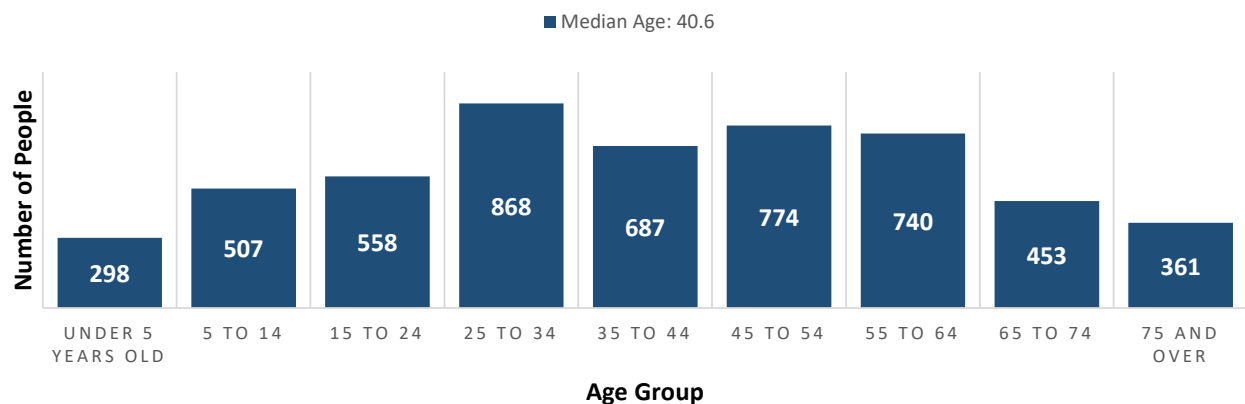
Density, Distribution and Description of Population

DVRPC DATA	2000 Census	2010 Census	2015 Population	Percent Change 2000-2015	2020 Forecast	2025 Forecast	2030 Forecast	2035 Forecast	2040 Forecast	Percent Change 2015-2040
Camden County	508,929	513,657	510,923	+0.39%	514,006	517,073	520,189	522,886	525,101	+2.77%
Somerdale	5,192	5,151	5,460	+5.16%	5,444	5,427	5,411	5,397	5,385	-1.37%

Source: DVRPC Population Forecast by County and Municipality 2015-2045; 2000 and 2010 Census.

The 2010 Census listed the Borough's population at 5,151. According to the most recent DVRPC population projections, the 2015 population is now estimated at 5,460 persons which is evenly divided between males and females. The 2011-2015 American Community Survey puts the total at 5,246 persons. In total, there are approximately 2,026 households in the Borough and 1,345 families of which 602 families are living with their own children under the age of 18. The average household size is 2.54 persons and average family size is 3.11 persons. Population trend data produced by the Delaware Valley Regional Planning Commission (DVRPC) for the Borough predicts a slight decrease in population of approximately -1.37% between 2015 and 2040. As is often the case with trend data, current activities are hard to account for, as the DVRPC's trend data looks to average the loss in population from the past three Censuses over the entire Delaware Valley region.

BOROUGH OF SOMERDALE POPULATION



Source: 2010-2014 American Community Survey 5-year Estimates: Table DP-05

Changes in Assumption, Policies and Objectives

Approximately 66.2% of people identify themselves as White alone, 20.5% as Black or African American alone, 4% as Asian alone and 6% identify themselves as Hispanic or Latino (of any race). Approximately 3% of people in the Borough identify themselves as two or more races. Some 6% of Somerdale's residents are of foreign birth while 37% were born in a different state. Of the foreign born population, a large majority, 47.6%, originated from Asia and 24% originated from Latin America and 21.3% originated from Europe.

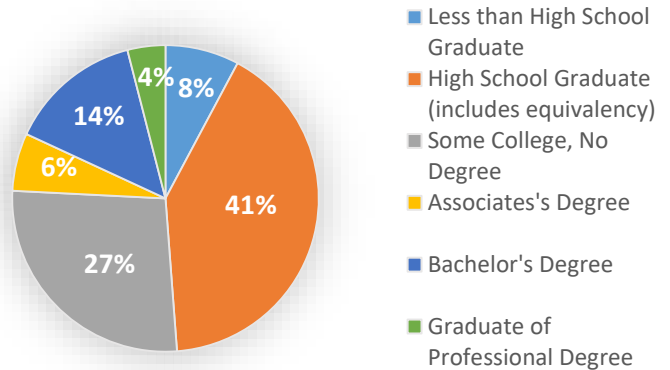
Education

According to 2011-2015 ACS Data, there are approximately 1,149 children 3 years and over enrolled grades K-12. Approximately 165 are enrolled in nursery school or preschool, 57 in Kindergarten, 358 in Elementary School (grades 1-8), and 219 in High School (grades 9-12). Additionally, some 350 persons are currently enrolled in college or graduate school. Approximately 27% of the residents (25 years and over) have attended some college and have no degree, some 6.1% received an associated degree, 14.1% received a bachelor's degree and 4% of residents have a graduate or professional degree.

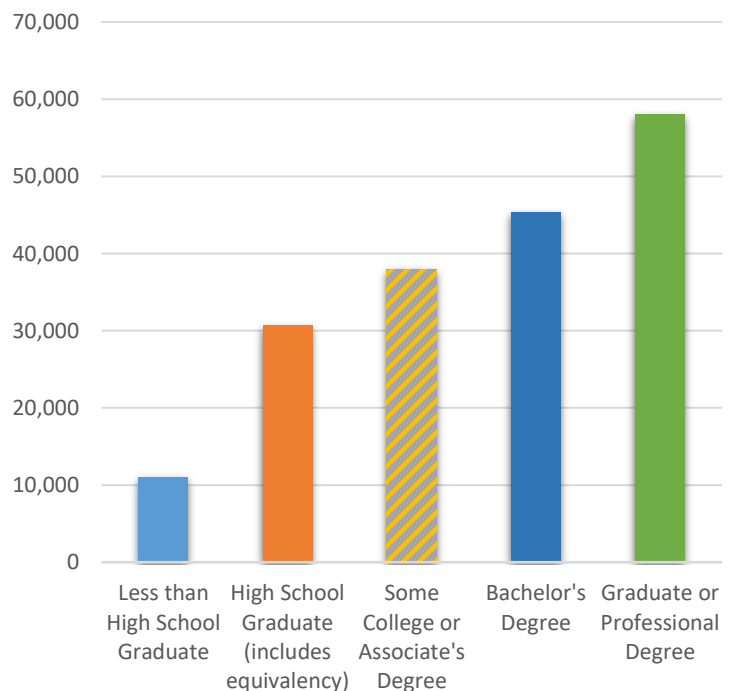
Housing

According to the 2011-2015 ACS, there are a total of 2,188 housing units in Somerdale with approximately 2,135 occupied and 53 vacant. Of the 2,135 occupied units, some 1,487 are owner-occupied while some 648 units are renter-occupied. A majority of householders, some 33.9%, moved into their current housing units between 2000 and 2009. Approximately 49.2% of householders moved into their current units prior to 1999 while 17% moved into their units in 2010 or later. The average household size of owner-occupied unit is 2.71 persons while the average household size of renter-occupied unit is 1.87 persons. Approximately 44.7% of homes in Somerdale have 3 bedrooms while 14.7% have 4 bedrooms and 14.1% have 2 bedrooms. Some 22.1% of housing units have only 1 bedroom and only 3.2% have 5 or more bedrooms.

**Somerdale Resident's Educational Attainment
(25 years and over)**



**Median Earnings in Past 12 Months
by Educational Attainment (25 Years
and Over)** (IN 2014 INFLATION-ADJUSTED DOLLARS)



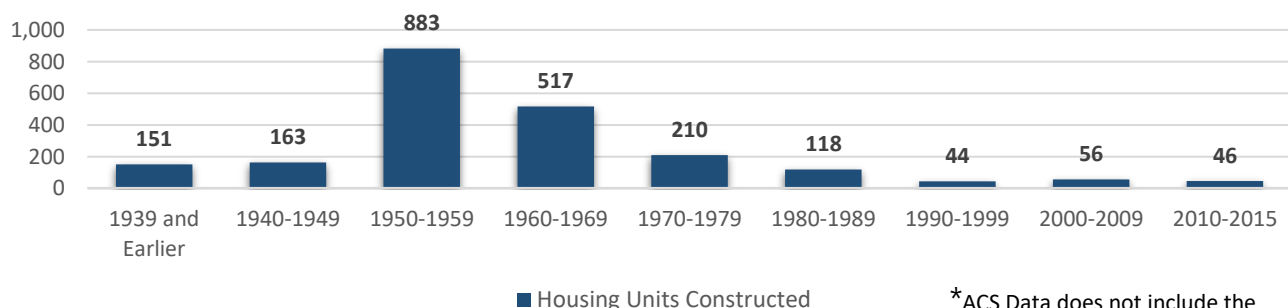
UNITS IN STRUCTURE		
Unit Type	Number of Units	Percent of Total
1-unit, detached	1,543	70.5%
1-unit, attached	50	2.3%
2 units	94	4.3%
3 or 4 units	76	3.5%
5 to 9 units	68	3.1%
10 to 19 units	198	9%
20 or more units	155	7.1%
Mobile home	4	.2%
Boat, RV, van, etc.	0	0.0%
Total Housing Units:	2,188	100%

A majority of homes, 1,543 out of 2,188, are single unit detached (some 70.5% of the total). The bulk of housing (73.6%) was built following WWII with the mass suburbanization across the US between 1950 and 1979. According to the 2011-2015 ACS, approximately 10.9% of homes are valued between \$0 and \$99,999. Some 63.4% are valued between \$100,000 and \$199,999. Approximately 22.7% are valued between \$200,000 and \$299,999. About 2.6% are worth between \$300,000 and \$499,999. Only 0.4% of homes are valued at over \$500,000 in Somerdale.

Recently constructed, Gateway Village, has provided new housing opportunities for residents moving within or to Somerdale. The development contains 122 townhomes, 30 of which are affordable family rental units, located adjacent to Cooper Towne Center, a retrofit of the old Lion's Head Shopping Center in Somerdale. Through a cooperative effort with Borough officials and private stakeholders, the vision plan, which included the redevelopment of the Lion's Head Plaza and surrounding underutilized properties, was implemented as Cooper Towne Center and has been completed to award-winning standards. The new development was also one of the most successful and fastest selling developments for Ryan Homes in South Jersey.

Cooper Towne Center now serves as the primary public gathering space for the Borough and includes a mix of uses including new retail and residential areas. The retail spaces range in size from 2,000 sf shops to a new 220,000 sf Walmart and have facades designed as smaller main street shops. Two new residential neighborhoods have been added, with both affordable and market-rate units, to serve as connectors between the Center and the adjacent neighborhoods and streets.

Age of Berlin Township Housing Stock



*ACS Data does not include the 122 units created in the Gateway Village Development

Changes in Assumption, Policies and Objectives



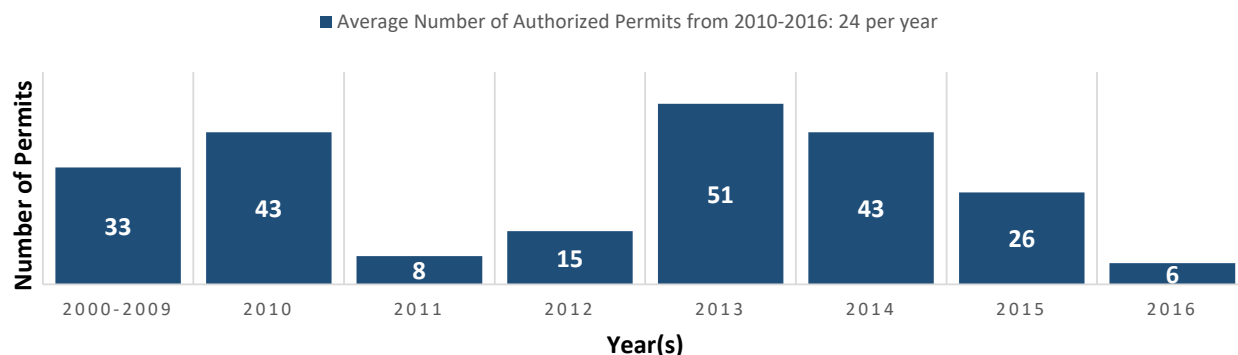
Streetscape improvements, new ingress and egress access points, wider sidewalks, and on-street parking were added to increase walkability and automobile connectivity. To date, over \$40 million of construction has begun or been completed on the plan, all financed by the private sector. In 2012, this project was selected by NJ Future to receive their Smart Growth Award for Outstanding Plan.

No additional major sites within the Borough are expected to be developed as the Borough is mostly built out. Some larger vacant parcels exist but need to be cleared of existing improvements. Moving forward, all new major future housing development in Somerdale will consist of redevelopment projects that are of somewhat higher density in nature. Townhomes and twin homes may become even more common. Some large undeveloped lots still remain but may be unsuitable for residential development due to environmental constraints such as steep slopes, wetlands or flood plains. A part of new housing should provide affordable housing geared towards the senior population as well as financially disadvantaged populations. The rest of housing development will consist of rehabilitating existing housing stock. Additional housing may come in the form of remodeling, renovating and constructing additions to existing homes. Some homes that are too costly to renovate, that have severe code violations or are too small for their occupants may require a tear down and rebuild. Particular need is for “starter homes” which first time home buyers are able to afford and maintain.



Some 30 New Affordable Units in Somerdale as part of Gateway Village Project

NEW PRIVATELY OWNED RESIDENTIAL HOUSING UNITS AUTHORIZED TO BE BUILT



Source: U.S. Bureau of Census for New Jersey & The New Jersey Department of Labor and Workforce Development

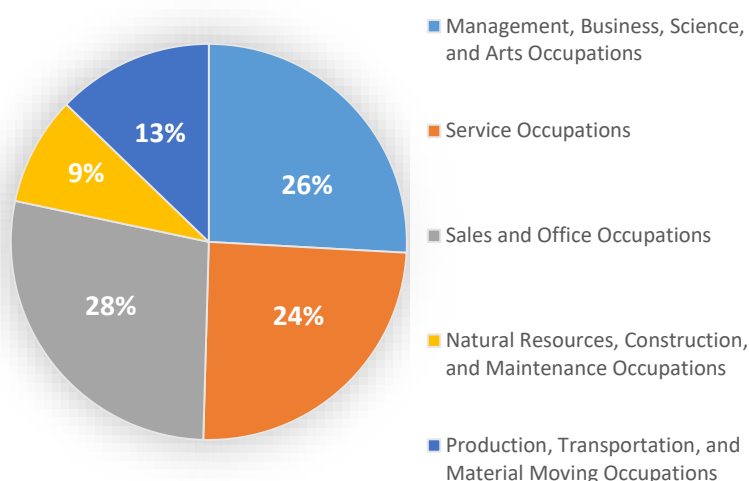
Employment and Income

According to the 2015 American Community Survey, the median household income in the Borough of Somerdale stands at approximately \$51,633, which is lower than the Camden County average of \$62,185. There are approximately 2,298 persons in the Borough that are 16 years and older, of which 1,472 persons are in the civilian labor force. Of those 2,298 persons, some 2,825 are employed while 342 remain unemployed (These statistics may be out of date by the time of this writing. Some 1,327 persons are not in the labor force.

These include students, elderly near or at retirement age, persons staying home to raise children as well as persons who stopped actively looking for employment. Increasingly, the aging of the population has put upward pressure on the percentage of the overall population that is not in the labor force. According to the Bureau of Labor Statistics, in 2014, 87.4 million Americans 16 years and older neither worked nor looked for work at any time during the year. Of this group, 38.5 million people reported retirement as the main reason for not working. About 16.3 million people were ill or had a disability, and 16.0 million were attending school. Another 13.5 million people cited home responsibilities as the main reason for not working in 2014, and 3.1 million individuals gave “other reasons.”

The largest employment sectors in Somerdale include educational services, health care and social assistance (employing approximately 24.8% of the population); retail trade (employing approximately 11.7% of persons); arts, entertainment, and recreation, and accommodation and food services (employing some 11.4% of the population); and transportation and warehousing, and utilities (employing some 10.7% of the population).

Somerdale Occupation Breakup (Civilian Employed Population 16 Years Old and Over)



Household Income and Benefits (In 2015 Inflation-Adjusted Dollars)

Income	Borough of Somerdale (Percentage of Population)	Camden County (Percentage of Population)
Less than \$10,000	8.1%	7.4%
\$10,000 to \$14,999	6.7%	4.6%
\$15,000 to \$24,999	8.3%	9.5%
\$25,000 to \$34,999	9.1%	8.1%
\$35,000 to \$49,999	14.4%	11.7%
\$50,000 to \$74,999	19.2%	16.4%
\$75,000 to \$99,999	14.0%	13.0%
\$100,000 to \$149,999	14.3%	16.8%
\$150,000 to \$199,999	4.2%	6.9%
\$200,000 or more	1.6%	5.4%
Median household income (dollars)	\$51,633	\$62,185
Mean household income (dollars)	\$64,827	\$81,281

Approximately 2,288 persons are private wage and salary workers, 491 are government workers and 46 are self-employed in own and not incorporated business. Most persons (77.8%) drive alone to work while a small minority carpools to work (9.3%). Approximately 8.3% of persons use public transportation and 2.3% work at home. Some 1.3 % of residents walk to work.

Borough of Somerdale's Status with Council on Affordable Housing (COAH)

The New Jersey Supreme Court, in Mount Laurel I (1975) and Mount Laurel II (1983), declared that municipal land use regulations that prevent affordable housing opportunities for the poor are unconstitutional and ordered all New Jersey municipalities to plan, zone for, and take affirmative actions to provide realistic opportunities for their "fair share" of the region's need for affordable housing for low and moderate-income people. In 1985, the New Jersey Legislature, in direct response to the Mount Laurel decisions, enacted the Fair Housing Act, which created the Council on Affordable Housing (COAH) to assess the statewide need for affordable housing, allocate that need on a municipal fair share basis, and review and approve municipal housing plans aimed at implementing the local fair share obligation.

COAH was originally supposed to release the Third Round rules in 1999 but due to political pressure from municipalities failed to do so for several years, leading to litigation to force COAH to issue the rules. In March of 2015, the New Jersey Supreme Court issued a decision, formally known as *In re Adoption of N.J.A.C. 5:96 & 5:97 ex rel. New Jersey Council on Affordable Housing*, 221 N.J. 1 (2015), now commonly referred to as Mount Laurel IV. This ruling states that the New Jersey Council on Affordable Housing (COAH) has failed to act and meet its legislative obligation to promulgate rules establishing municipal affordable housing obligations and compliance mechanisms for meeting those obligations. As a result, the Courts have assumed jurisdiction over the Fair Housing Act. The ruling allowed the municipalities to file a declaratory judgment action and gave the municipality the ability to file a new third round plan by July 8th, 2015 or be subjected to a builder's remedy lawsuit. This lawsuit could be used to force to allow more housing units at greater density under the "builder's remedy".

Recently, in a July 2016 ruling by the New Jersey's Appellate Division, the court determined that the state's municipalities do not have to abide by affordable housing rules that were left unenforced by the Council on Affordable Housing (COAH) for 16 years. The court ruled that,

despite housing advocate arguments in favor of the addition of hundreds of thousands of units to the state's stock of affordable housing, city and town officials will only be held to current and future mandates. Though this decision protects municipalities, the issue remains of how to provide for much needed affordable housing for vulnerable groups such as senior citizens and the disabled, who struggle to meet rents and are on fixed incomes.

The Borough of Somerdale continues to fulfill their COAH requirements and is actively working to incorporate affordable housing in the Borough fabric. The recent Gateway Village project added 30 affordable units to the Borough. Moving forward, the Borough should continue to upgrade and renovate existing units with HOME and other funding sources. The HOME Investment Partnerships Program (HOME) provides formula grants to States and localities that communities use - often in partnership with local nonprofit groups - to fund a wide range of activities including building, buying, and/or rehabilitating affordable housing for rent or homeownership or providing direct rental assistance to low-income people. The Borough of Somerdale was also the first municipality in the State to be granted substantive certification by COAH's third round obligations and was entitled immunity from suit concerning same for a ten year period.

Changes in Development, Assumptions, Objectives, Policy & Best Planning Practices

The following section is a list of significant changes in assumption, development, objectives, policy and best planning practices. This section attempts to provide commentary on a wide variety of topics and assumptions that have changed since the last reexamination report. These topics include the following:

- 1. County Plan**
 - a. New Camden County Comprehensive Plan
 - b. Bicycle Facilities
- 2. Borough of Somerdale Bikeways**
- 3. State Plan**
- 4. Circulation Issues Throughout the Borough**
- 5. Sustainability, Green Infrastructure and Energy Conservation**
 - a. Green Infrastructure & Low Impact Development
 - b. Energy Efficiency
 - i. Solar/ Photovoltaic Panels
 - ii. Vehicle Efficiency & Green Fleet Program
 - iii. Idling Restrictions
- 6. Green Building and Environmental Sustainability Master Plan Element**
- 7. Hazard and Resiliency Planning**
- 8. Smart Growth & Transit Oriented/ Transit Adjacent Development**
- 9. Zoning**
- 10. Economic Development of White Horse Pike**
- 11. Market Conditions**

1. County Planning

Camden County Comprehensive Plan

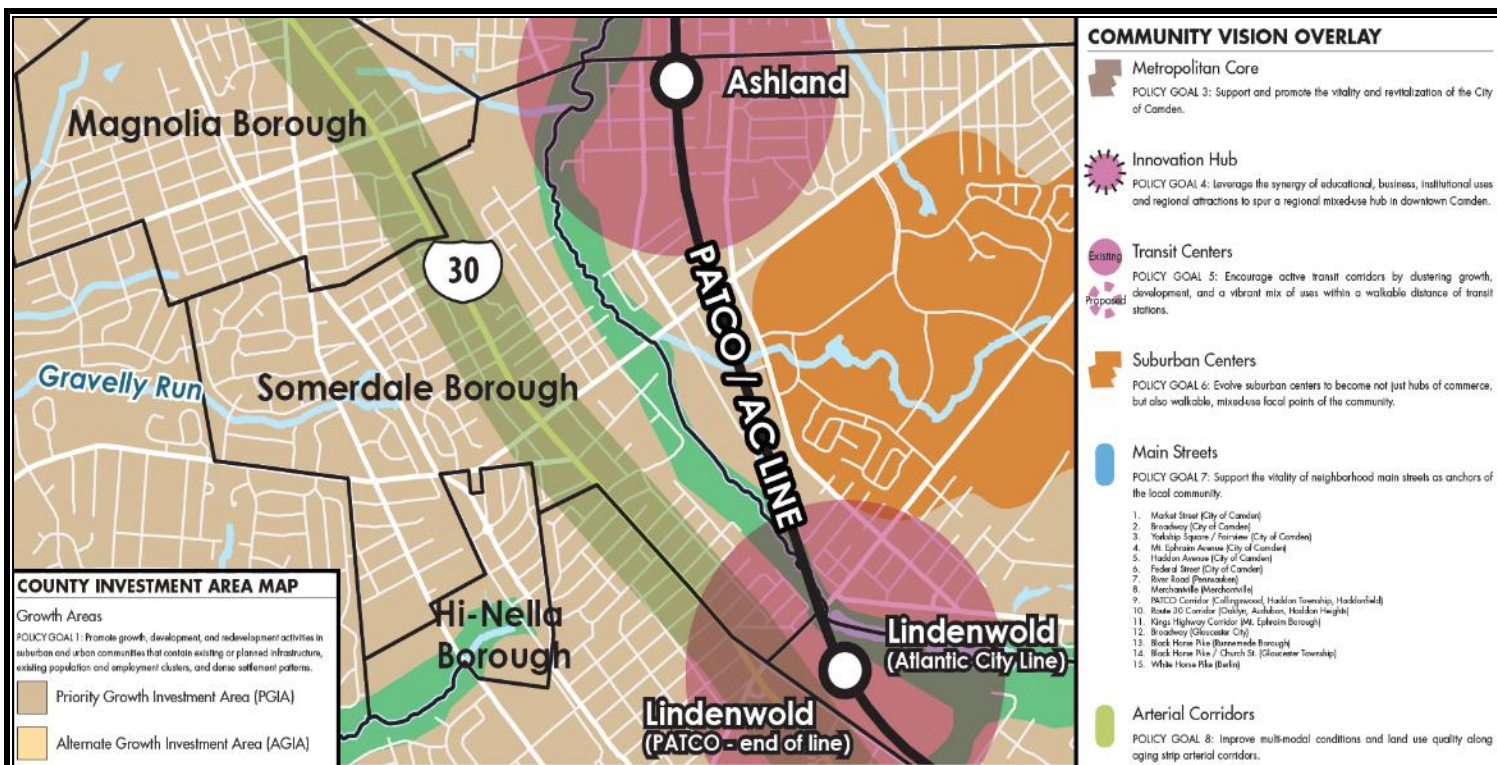
Camden County adopted a new Comprehensive Plan in October of 2014. The plan is intended to provide each of the municipalities with a vision for the future up to 2040. The plan is to be used as a guide in developing land use regulations and for meeting consistency with municipal Master Plans, zoning ordinances and redevelopment plans. The three guiding principles of the plan are:

- ❖ **Vibrancy:** promotes economic and social interaction through the strengthening of downtowns, mixed-use centers, and strong well-connected neighborhoods.
- ❖ **Proximity:** promotes sustainable, compact land use patterns in areas with existing infrastructure, in addition to enhanced multi-modal connections throughout the County, allowing undeveloped and natural areas to remain untouched.
- ❖ **Durability:** promotes long-term sustainable policies and land use patterns that ensure that Camden County meets the social, economic and environmental needs of its current and future residents.



To help municipalities realize their community's vision and principles for land use, the plan details investment areas, in which the Borough of Somerdale lies entirely in the Priority Growth Investment Area (PGIA). The plan outlines 10 geographically-based policy goals to help guide long-term growth and development in the County. The plan's goals that apply to Somerdale and its location in the Priority Growth Investment Area are listed on the following page.

- Promote growth, development, and redevelopment activities in suburban and urban communities that contain existing or planned infrastructure, existing population and employment clusters and dense settlement patterns.
- Encourage limited growth, conservation or preservation activities in areas that do not contain existing or planned infrastructure supportive of large-scale growth and development, and contain a majority of resources that are important to the environmental, scenic and agricultural qualities of the County.
- Encourage active transit corridors by clustering growth, development and a vibrant mix of uses within a walkable distance of transit stations.
- Improve multimodal conditions and land use quality along aging strip arterial corridors.
- Harness the economic and cultural potential of the County's signature destination parks, riverfronts, and open space.
- Ensure that the County's green and grey infrastructure systems work to reduce the impacts of natural disasters, create viable alternatives for non-motorized transportation and promote sustainable forms of land use development.



For a complete listing of the Camden County Comprehensive Plan Investment Areas map, description and policy goals please see Appendix D.

The Borough should take steps to plan in accordance with principles and goals outlined in the 2014 County Comprehensive Plan. With over half a million residents and more than 13,000 businesses located within the County, it is crucial to work together to promote a more viable and livable area. Planning at the regional scale is critical. As our economic, land use and transportation patterns have evolved over the last century, metropolitan areas have become increasingly important. In most parts of New Jersey, and especially in Camden County, the political boundaries established by municipalities long ago are no longer relevant to businesses' or residents' activities, especially with regards to air and water resources.

As a result, to meaningfully influence environmental impacts associated with development, land use, and transportation, officials must act at a level where central cities and suburbs can be considered together. Camden County's new Comprehensive Plan is the guiding document to the County's development over the next 25 years. In 2040, Camden County will be a place where all of life's opportunities are within reach. The Camden County community will be able to take advantage of a rich variety of neighborhoods, work and educational opportunities, open spaces, and transportation options. Regardless of age, income, ability, or personal preference, Camden County will offer something for everyone.

To achieve this vision, the County needs to ensure that people, amenities, opportunities, and transportation options are linked together to promote vibrant centers, proximity to desired destinations, and a land use pattern durable enough to stand the test of time for the needs of today and the future. Doing so will enable all citizens of the Camden County community to access and benefit from the many amenities Camden County has to offer, putting opportunity at your doorstep.

The Camden County Comprehensive Plan is comprised of five elements titled: Land Use Master Plan, Highway Plan, Bicycling & Multi-Use Trails Plan, Sustainability Plan and the Open Space and Farmland Preservation Plan. Together with the Comprehensive Plan, these five elements all serve as guiding documents for the County in moving forward in the next quarter century of its development. Municipalities are highly encouraged to go through these elements when working on their own revisions, updates, amendments or new plans. This will ensure that there is broad consensus and overlaying vision for our neighborhoods, communities and municipalities.

The Borough of Somerdale is located in an identified Priority Growth Area (PGIA) delineated by the County Comprehensive Plan. Camden County's growth areas contain existing or planned infrastructure, existing population and employment clusters, and dense settlement patterns that are best suited to accommodate the majority of growth anticipated in Camden County by the year 2040. These areas are ideal for new development, redevelopment, and the enhancement of multi-modal connections. These areas also contain protected historic and natural resources that are key components of the character and livability of these areas. Priority Growth Investment Areas (PGIA's) are areas best suited for future investment in growth, development, and redevelopment. Policy Goal 1 is to promote growth, development, and redevelopment activities in suburban and urban communities that contain existing or planned infrastructure, existing population and employment clusters, and dense settlement patterns.

Other policy goals from the Comprehensive Plan apply to Somerdale. Policy Goal 5 focuses on transit centers. This goal is to encourage active transit corridors by clustering growth, development, and a vibrant mix of uses within a walkable distance of transit stations. Policy goal 8 applies to the White Horse Pike which aims to improve multi-modal conditions and land use quality along aging strip arterial corridors. Policy goal 10 works to ensure that the County's green and grey infrastructure systems work to reduce the impacts of natural disasters, create viable alternatives for non-motorized forms of transportation, and promote sustainable forms of land use development. This incorporates various items ranging from hazard mitigation planning to the incorporation of green infrastructure and various sustainability measures.

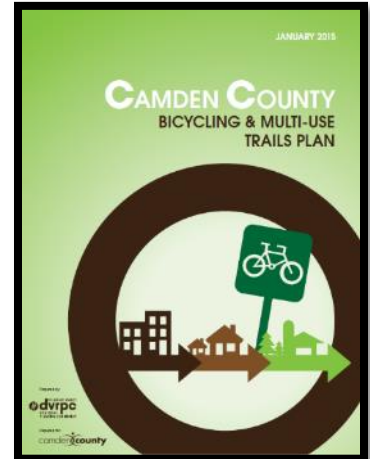
All of these policy goals aim to improve vital assets scattered throughout the County and put emphasis on certain improvements and policy actions. The Borough should work with these County identified assets and policy goals to achieve a synergy moving forward. The Full Camden County Comprehensive Plan can be found on the Planning Division's website at: <http://www.camdencounty.com/masterplan>

Changes in Assumption, Policies and Objectives

Bicycle Facilities

The Camden County Bicycling and Multi-Use Trails Plan effort began in 2008 as a way to connect bicyclists and other non-motorized users to attractions in Camden County, such as open space, schools, universities, train stations, shopping destinations, and employment.

In 2014, Camden County formally adopted the Bicycling & Multi-Use Trails Master Plan. The overarching purpose of the plan is to serve as a guidance document to the municipalities that are seeking to enhance local mobility and accessibility. This equals increasing opportunities for people to walk and bicycle for short trips to school, parks, shopping destinations, and train stations. In this plan there are three types of proposed on-road bicycle facilities, which are referred to as recommended routes, mixed treatments, and bicycle facilities. All segments in the plan play an important role in creating a meaningful network of bicycle facilities in the county. However, road characteristics vary considerably in terms of cross-sections, speeds, widths, and therefore require different approaches that respond to these characteristics.



Under the County Bike and Multi-Use Trails Plan, County roadways including Somerdale Road (CR 678), Warwick Road (CR 669), and East Atlantic Ave (CR 727) are all listed to be considered for on-road facilities. This essentially requires the County to look at those roadways and evaluate if new Bike and Ped facilities are feasible to construct. If deemed financially and physically feasible, the County may determine to construct new facilities. A number of other municipal on-road facilities to be considered include Evergreen Ave, Linden Ave, Springdale Ave, Kennedy Boulevard, Crestwood Ave, Gloucester Ave, Grant Ave, Vassar Ave, Lehigh Ave, and Holyoke Ave. In addition to on-road facilities, off-road trails to be considered include the Big Timber Creek Greenway Trail (North Branch), the Woodcrest Station to Somerdale Borough Trail as well as the East Atlantic Bikeway Trail. For a full map of the existing and proposed trails, please see Appendix D. Moving forward, the Borough of Somerdale should work with Camden County on possibly incorporating bicycle lanes on County Routes and developing their trail network.

A map of the bike and multi-use trail network can be found in Appendix C. Somerdale should build its own local network using the County Plan as a guide and work with the County in integrating any new proposed trails and bikeways. The Full Camden County Bicycling and Multi-Use Trails Plan can be found on the Planning Division's website at: <http://www.camdencounty.com/masterplan>

2. Borough of Somerdale Bikeways

Cross County Greenway Multi-Use Trail

One of the most widely discussed topics with various stakeholders was the creation of a trail running through the entirety of the Borough adjacent to the Conrail right-of-way. The Camden County Bicycling and Multi-Use Trails Plan identified a potential trail segment here that could eventually stretch from the City of Philadelphia to the Atlantic County border. Somerdale's portion would run from the border of Magnolia to the border of Hi-Nella/ Stratford. This potential trail could utilize existing Conrail and Camden County right-of-way to construct the trail. The area is already somewhat clear and flat and is required to stay flat and clear for maintenance.

The overall Camden County vision is to create a roughly 32-mile "spine" trail which would other local municipal trails to branch out from. Once this spine is created, each municipality along the way could link up new trails to this trail to create entire networks for residents. This "Spine" Trail would also allow Somerdale residents to have better access to more recreational assets including more trails as well as local and County Parks. Over the next few decades, riders will be able to ride all the way from Somerdale to the Ben Franklin Bridge and then follow Philadelphia's sprawling trail system, all the way toward Valley Forge and beyond. Eventually this "Spine" will connect to the East Coast Greenway, which is a proposed multi-use trail running continuously from Maine to Florida.

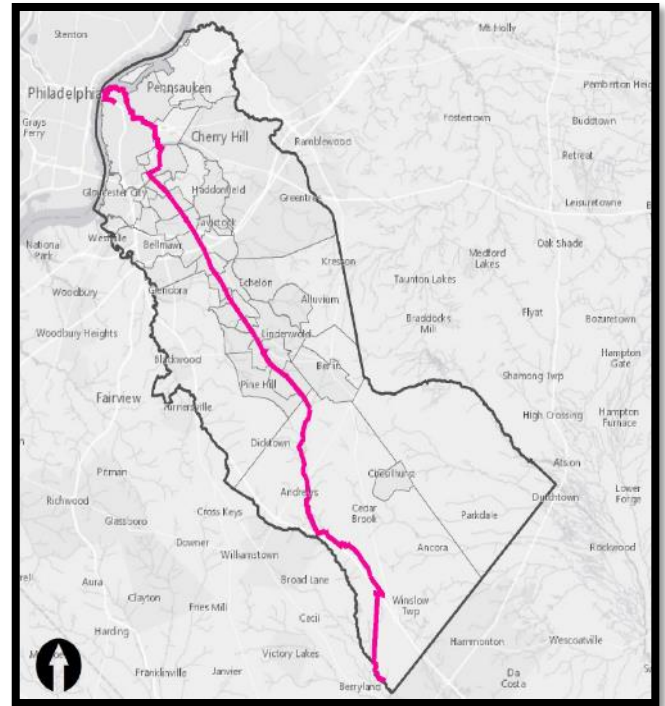
If developed, this trail could serve as a great year-round asset for the Borough that would allow residents to walk, bike run, roller-skate and more. As the Conrail rail line already runs through the Borough and the right-of-way could accommodate a trail, this would be a clear alignment through Somerdale. With an official designation and redevelopment of the area as a trail, law enforcement would be better able to observe the trail and provide better security to persons who want to walk, run or bike in the Borough.

The trail could also provide nearby resident with multiple benefits. Multi-use paths create economic vitality in the towns and neighborhoods through which they pass. Local businesses in proximity to this potential trail will likely see increased economic activity and sales. Communities that have multi-use trails have been observed to be more desirable and properties near trails have been observed to sell faster and at higher prices. This increase in property values would be beneficial to both homeowners and the Borough. Multi-use trails also provide residents a place to recreate in a safe area. According to the Thunderhead Alliance 2007 Benchmarking Report, between 1960 and 2000, levels of bicycling and walking to work fell 67% while adult obesity levels rose 241%. At the same time, the number of children who bike or walk to school fell 68% as levels of overweight children rose 367%.



Changes in Assumption, Policies and Objectives

According to 2016 County Health Rankings data, rates of physical inactivity and obesity (BMI of 30 percent or more) among adult persons in Camden County (27 and 29 percent, respectively) are both higher than those found within the State, overall (24 and 25 percent, respectively). In addition to the elevated health risk associated with physical inactivity and obesity, the associated medical costs in Camden County are significant. In Camden County, obesity related absenteeism, alone, (102,110 obese adults) costs between \$9.0 and \$15.3 million per year, while physical inactivity (108,470 adults) cost nearly \$87.0 million in medical costs per year. The Surgeon General recommends moderate physical activity, including walking, is one of the best antidotes to the obesity epidemic. Just ½ hour of walking, 5 times a week, can greatly change an individual's health status (CRCOG Regional Pedestrian Plan, "Walking Matters").



While one of the major goals of this initial route is to create a recreational trail that will connect to parks and open space, it is also a goal to create a practical route that will encourage daily bicycle commuting and for utilitarian trips, such as getting groceries or going out to eat. The potential tourism and economic benefit component is something that also cannot be ignored. According to the NV5 Camden County Trail Report and 4ward Planning, as a result of projected increases in direct tourism spending from out-of-town trail users, the proposed Camden County trail is estimated to inject over \$20.0 million per year into Camden County's local economy. This increase in tourism spending is estimated to support a total of \$10.1 million in economic output, 117 jobs, \$4.3 million in labor income, and \$992,000 in local and state taxes per year.

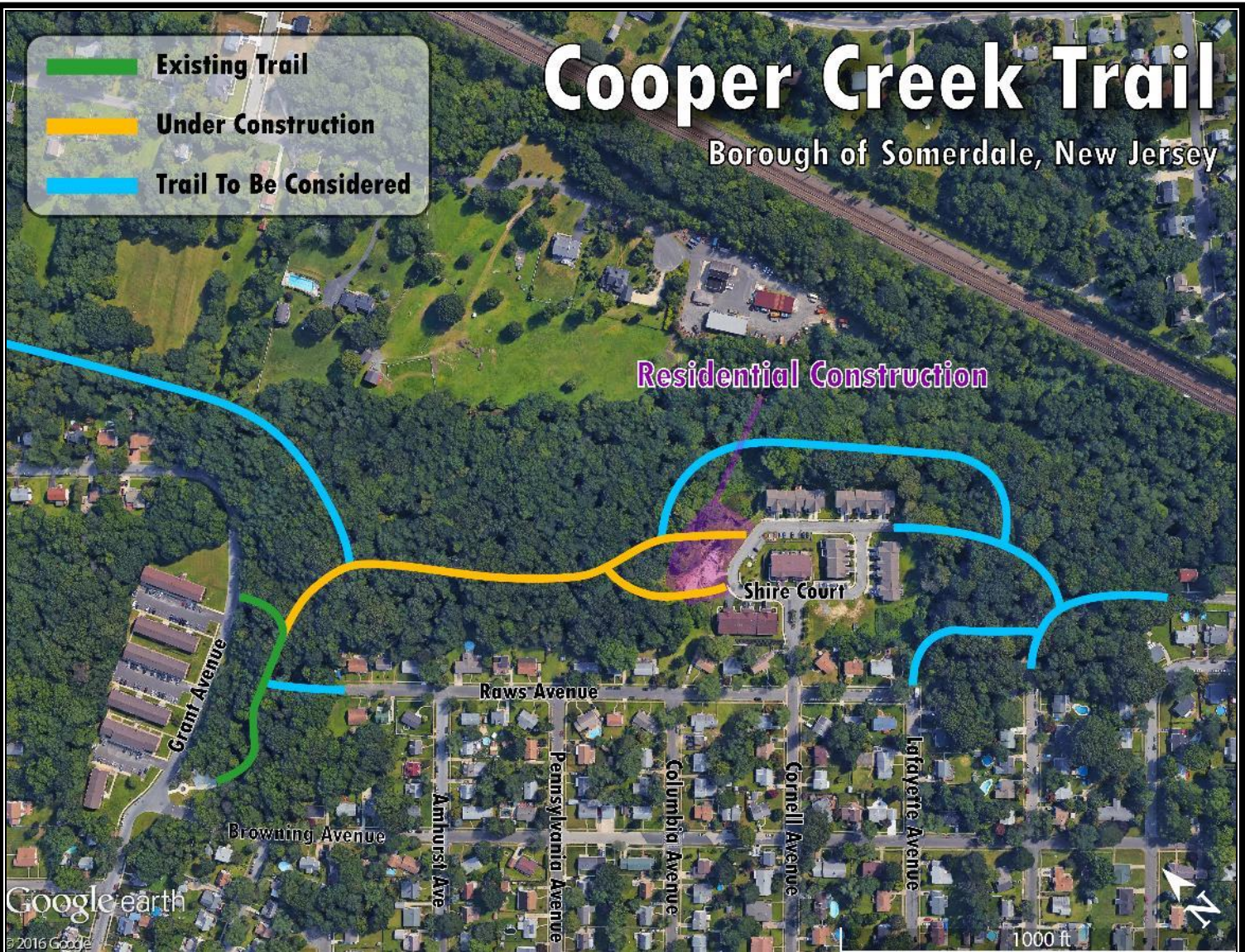
These estimates could very well end up being far too conservative, as the \$20.0 million in additional spending by out-of-town trail visitors represents just 2.4 percent of current tourism spending within Camden County (\$844 million) and 3.8 percent of existing tourism employment (9,015 jobs). As portions of the trail are developed and trail surveys are implemented, more detailed estimates of trail usage and spending will enable a more refined analysis of the economic impact from tourism spending in Camden County as a result of the proposed trail. Additionally, over the years, many studies have indicated an enhancement in residential property value due to proximity (a "proximity effect") to trails and greenways, and this premium (typically ranging from five to 10 percent) is found with direct adjacency as well as with distances extending up to a mile. Based on our proximity effect analysis, on average, property values for the 51,100 single-family homes located within a mile of the proposed trail are likely to increase by approximately \$7,300 per home, with this increase in value as high as \$11,500 for homes located immediately adjacent to the trail. With a total real estate premium of approximately \$373.4 million, the total real estate value captured by these single family homes, alone, provides Camden County with an additional \$14.0 million in general tax revenue per year. Somerdale should capitalize on the many various fiscal, health, recreational and transportation benefits associated with this trail development in the coming years. Borough officials should work with the County and residents towards promoting this trail through Somerdale.



POTENTIAL COUNTY TRAIL TO BE CONSIDERED RUNNING ALONG ATLANTIC AVENUE. FINAL ALIGNMENT THROUGH SOMERDALE TO BE DETERMINED IN FUTURE PLANS

Cooper Creek Trail

Borough of Somerdale, New Jersey



Newly Constructed Cooper Creek Trail

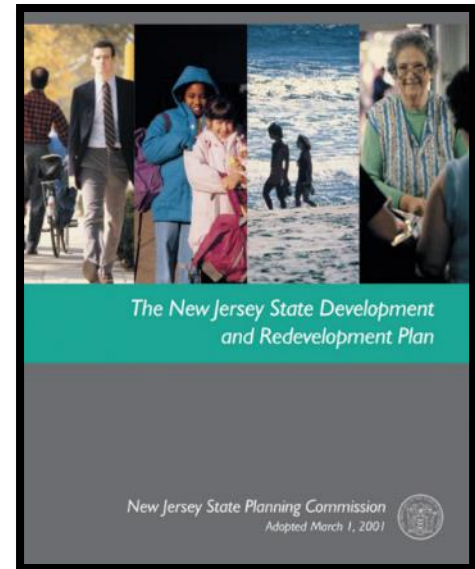
During 2015-2017, the Borough has worked to create a small trail segment that is located in the wooded area between Grant Avenue, Raws Avenue and the Cooper Creek. Funded with a \$100,000 grant from Camden County, the current orange section (as seen in the graphic above) is mostly complete and will open in 2017. This section will connect the existing trail off Grant Avenue to the “Shires Development” on Shire Court where 12 additional units are under construction. A long-term plan for this section could also include the potential blue alignment above for complete connectivity to the existing neighborhood and nearby destinations. The photo to the right shows where sidewalk along Lafayette Avenue ends but could ultimately link up to a larger trail segment. This section is also included in the 2014 Camden County Bicycling and Multi-Use Trails Plan and is known as the Woodcrest Station to Somerdale Borough Trail in that plan. The Borough should keep working towards expanding their trail facilities to include better connectivity to different neighborhoods and provide access by trail or bicycle facilities to the Woodcrest and Lindenwold PATCO Train Stations.



3. State Plan

Several changes in assumptions, policies and objectives are apparent when considering the changes in the New Jersey State Development and Redevelopment Plan. The first version of the new state plan was adopted in 1992 and the second in 2001. Although the State Plan is over 15 years old, and much change has occurred since its adoption, the plan still have many relevant goals, objectives and policies. The plan also delineates various land use types throughout the State.

These plans sought to identify five generalized planning areas throughout the state. They were titled Planning Area 1 – 5 or PA1, PA2, PA3, PA4 and PA5. Both plans grouped Somerdale and several of the surrounding communities in the Metropolitan Planning Area (PA1). The state plan and the planning areas have been recognized by several state agencies as a basis for decision-making, grant funding and project implementation.



Having the distinction of a PA 1 and being recognized by the state as participating in a regional planning framework changes many ideas about the outlook of the municipality. A PA1 is described as an area where redevelopment can occur to foster compact forms of growth, stabilize older suburbs and protect the character of the community while redesigning areas of sprawl. The communities in this Planning Area form a part of the metropolitan mass where municipal boundaries tend to blur. The nature of this settlement pattern can undermine efforts to address a host of functional problems on a municipal basis. It is increasingly impractical, for instance, to manage traffic congestion, solid waste disposal and air and water pollution locally. These and other concerns spill over from one municipality to the next, requiring a regional perspective on potential solutions.

These communities have many things in common: mature settlement patterns resulting in a diminished supply of vacant land; infrastructure systems that generally are beyond or approaching their reasonable life expectancy; the need to rehabilitate housing to meet ever changing market standards; the recognition that redevelopment is, or will be in the not-too-distant future, the predominant form of growth; and a growing realization of the need to regionalize an increasing number of services and systems in light of growing fiscal constraints. In addition, the wide and often affordable choice of housing in proximity to New York and Philadelphia has attracted significant immigration, resulting in noticeable changes in demographic characteristics over time.

In recent history, the effect of local planning efforts has been to isolate land uses from each other. Zoning requirements, such as large setbacks or extensive buffers, the location of stormwater detention facilities and unnecessarily wide roads, create physical barriers between land uses and activities. Current trends in our region continue to extend sprawl, focusing primarily on the same single-use or limited use development products, in response to developer and market demand and local zoning requirements. If these regional trends continue, municipalities like Somerdale will remain fragmented. Because this pattern of development is inefficient in terms of the cost of

Changes in Assumption, Policies and Objectives

facilities and services, it pressures property taxes up to pay for services that are more expensive than they should be. This pattern also results in traffic congestion, since virtually every destination requires a vehicular trip, and in the unavailability of affordable housing, limited open space and absence of community character and sense of place.

Somerdale has taken constructive steps in promoting some mixed-use development and pushing for the resurrection of the struggling Lion's Head Shopping Plaza into a more pedestrian friendly and mixed use Cooper Towne Plaza. It should continue to promote the redevelopment of the Borough to include more mixed use and higher density development. It should also promote smart growth & transit oriented/ transit adjacent development discussed in the following section.

We concur with the 2008 Reexamination Report in stating that the Borough of Somerdale's 1978 Master Plan and 1995 and 2003 Reexamination reports are in conformance with the principles of the State Development and Redevelopment Plan. The 2008 Reexamination Report is also in conformance with the State's goals and objectives.

4. Traffic Circulation Issues

Complete Streets Policy

The Borough of Somerdale would benefit from enacting a Complete Streets Policy. Complete Streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets are promoted as offering improved safety, health, economic, and environmental outcomes. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists.

In late 2009, the New Jersey Department of Transportation (NJDOT) instituted a Complete Streets Policy and in 2013, Camden County adopted its own Complete Streets Policy. Seven NJ Counties and 130 municipalities (as of July 2016) have adopted complete streets policies. Cherry Hill Township, Voorhees Township, Gloucester Township and the City of Camden have all adopted local Complete Streets Policies. As part of a Complete Streets Policy, all potential projects will be reviewed against several factors to determine whether Complete Streets design is appropriate, including the road's function, traffic volume, adjacent land use, and environmental and cost considerations.

Please see Appendix G for the Camden County Resolution and NJDOT Complete Streets Checklist.

Shared Access and Access Management

In addition to shared parking, the Borough of Somerdale should encourage cross access easements and shared access between contiguous properties to reduce the number of driveways, decrease the amount of impervious areas and provide a more pedestrian and environmentally friendly site layout. Managing access along highways can result in better traffic flow, fewer crashes, and provide for an enhanced business environment. Access management improves safety by separating access points so that turning and crossing movements occur at fewer locations. This allows drivers passing through an area to predict where other drivers will turn and cross and provides space to add turning lanes.

According to the FHWA, a national study in the late 1990s looked at nearly 40,000 crashes and data from previous studies to determine the crash rate associated with adding access points to major roads. It found that an increase from 10 to 20 access points per mile on major arterial roads increases the crash rate by about 30%. The crash rate continues to rise as more access is permitted. More recent studies consistently show that well-managed arterials are often 40 to 50 percent safer than poorly managed routes. From an economic standpoint, clear and safe access is necessary to the vitality of a commercial corridor and from an environmental standpoint, the reduction in access points and clearer flow allows for less impervious surfaces and increased vegetated areas. Somerdale should work to create a plan that addresses access management in vital commercial corridors such as along the White Horse Pike and County Roads. The municipality should also work with developers and their adjoining properties to allow for cross/ shared access easements between adjoining properties to maximize efficient traffic flows onto roadways.

Changes in Assumption, Policies and Objectives

Traffic Calming & Pedestrian Safety

Several roadways throughout Berlin Township have been noted to be driven with excess speed. These roadways are dangerous to residents and especially younger children who may be prone to accidentally getting hit by passing vehicles at dangerous speeds. Many roadways in the Township are also known as cut-through streets which vehicles use to avoid traffic on heavier traveled roads. Many of these roadways are neighborhood streets without the capacity to handle such traffic. As such, many roadways throughout the Township would benefit from a variety of traffic calming measures and pedestrian safety improvements.

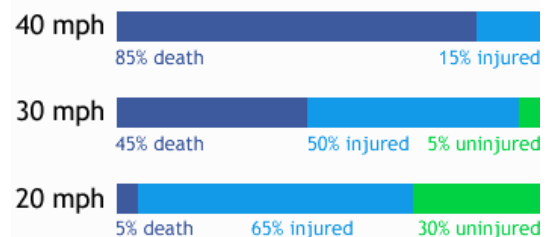


Some residents in Berlin Township have resorted to calming traffic on their own without assistance from Township.

Traffic calming is the process of minimizing the negative impacts associated with neighborhood traffic on residents, pedestrians, bicyclists and school children. When implemented, traffic calming measures can reduce neighborhood speeding, cut-through traffic, and reckless driver behavior on local streets. While roadways ensure both vehicle and pedestrian connectivity, excessive traffic or speeding can cause adverse neighborhood impacts resulting from their original design and placement. To avoid these negative impacts, local streets can be retrofitted to encourage safer driver behavior. The underlying principle of traffic calming is the notion that local streets should be safe, particularly where children play, residents walk and people socialize in the outdoor environment. Traffic calming measures are installed for the purpose of increasing safety and thereby enhancing the livability of our communities. In addition to increasing safety, these traffic calming measures also increase the aesthetic qualities of a neighborhood. Oftentimes, these measures can include landscaping and the addition of vegetation. This can have the added benefit of increasing air quality and with the right design water quality as well.

Select roads such as Franklin Ave, Walker Ave, Minck Ave, Commerce Lane, Taunton Ave, Grove Ave, Catherine Ave, and others would benefit from traffic calming and pedestrian safety measures to ensure lower traffic speeds and safer driving behavior. These roadways could utilize traffic calming measures to mitigate the negative effects of cut-through traffic on neighborhood streets. The tools of traffic calming take a different approach from treating the street only as a conduit for vehicles passing through at the greatest possible speed. They include techniques designed to lessen the impact of motor vehicle traffic by slowing it down, or literally “calming” it. This helps build human-scale places and an environment friendly to people on foot. Such traffic calming measures would benefit the township twofold. One would be the increased pedestrian safety of a slower corridor with less potential pedestrian, bicycle and automobile conflicts and the other would be the increased vitality of the commercial corridor through increased visibility of businesses. Speeding on roads like Haddon Avenue may also prevent potential shoppers from walking the Avenue for fear of their own or their children’s safety and create an uncomfortable atmosphere.

Pedestrian Injuries at Impact Speeds

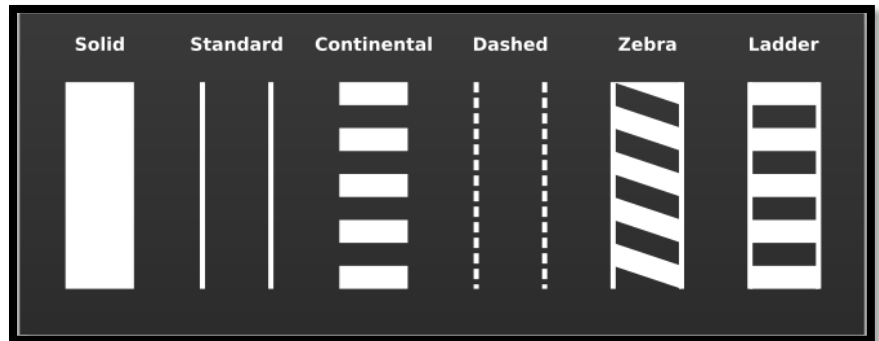


The relationship between pedestrian injury severity and motor vehicle impact speeds [UK DOT, 1987].

The following are traffic calming and bicycle/ ped safety measures Somerdale could utilize:

High Visibility Crosswalks

A marked crosswalk can benefit pedestrians by directing them to cross at locations where appropriate traffic control, including traffic signals or adult school crossing guards, either currently exist or can be provided. However, marked pedestrian crosswalks,



in and of themselves, do not slow traffic or reduce pedestrian crashes. It may be helpful to install marked crosswalks at signalized intersections or locations where crosswalks are typically marked, at key crossings in neighborhoods with designated school walking routes, and at certain types of uncontrolled crossings. While basic crosswalk markings consist of two transverse lines, an FHWA study found that continental markings were detected at about twice the distance upstream as the transverse markings during daytime conditions. In the study, this increased distance meant that drivers traveling at 30 mph had eight additional seconds of awareness of crossing pedestrians.

Additionally, marked crosswalks at uncontrolled locations (such as midblock crossings) must be carefully selected and designed to ensure that they enhance, rather than reduce, pedestrian safety. In some circumstances marked crosswalks should not be installed unless supplemental measures are taken to reduce traffic speeds, shorten crossing distances, enhance driver awareness, and/or provide an active warning of pedestrian presence. Marked crosswalks alone (without other substantial treatments) should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph. They should also not be installed where a roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or where the roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

Textured & Color Pavement

Textured or color paving treatments can break the visual monotony of asphalt streets, highlight crossings as an extension of the pedestrian realm, and announce key civic or commercial locations. Special paving treatments include integrated colors, textures, and scoring patterns. They may be instituted within crosswalk markings or across an entire intersection and are sometimes used along entire street blocks. Textured pavements are good for “main street” areas where there is substantial pedestrian activity and noise is not a major concern. Textured pavements are often combined with Speed Tables, Raised Crosswalk, and Raised Intersections.

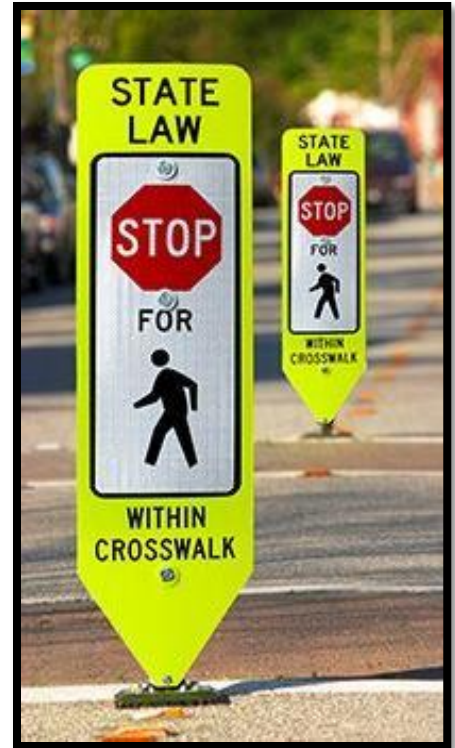


Changes in Assumption, Policies and Objectives

In-Street Signs

In-street crosswalk signs should be installed at uncontrolled pedestrian crossings to make the crosswalk more visible and increase driver yielding. They are more likely to be effective on two-lane, low-speed streets than on multi-lane, high-speed streets, and are prohibited by the 2009 MUTCD at signalized intersections. They can be easily damaged and need to be reset or replaced when damaged.

In-street pedestrian crossing signs should be placed at the crosswalk in the street or on a median, but should not obstruct the pedestrian path of travel. In-street signs can be permanently installed in the roadway or mounted on a portable base to allow them to be taken in and out of the street as needed. When portable in-street signs are used for school crossings, they should be monitored by a school official or adult school crossing guard. Motorists in New Jersey **MUST** stop for pedestrians in a marked crosswalk. Failure to observe the law may subject you to one or more of the following: 2 Points, \$200 Fine (plus court costs), 15 Days Community Service, Insurance Surcharges. Pedestrians on the other hand must obey pedestrian signals and use crosswalks at signalized intersections. Both carry a \$54.00 fine for failure to observe the law.



Overhead Signs and Rectangular Rapid Flashing Beacons

School crosswalks with overhead signs (and sometimes flashing beacons) may be helpful in alerting drivers of a busy crossing at a wide or higher speed street. These are usually placed at mid-block crossings but can be used at intersections with uncontrolled crossings. Overhead signs are easier for drivers to see in cases where on-street parking, street trees, or other visual obstructions exist. Flashing beacons at a marked crosswalk may draw additional attention to the crosswalk. The beacons can be set with a timer to flash only during crossing times, or can be pedestrian-activated by an automatic detector or push button such that they only flash when pedestrians are present. In other locations the beacons are set with a timer to flash only during crossing times, or are pedestrian-activated by an automatic detector or push button and only flash when pedestrians are present.



Various school warning signs are also available for use in school areas. These signs include school advance signs to alert motorists that they are entering a school zone where children are present. A school crossing sign at the crosswalk should have a down arrow. School speed limit signs (e.g., "School: Speed Limit 20") may also be used to give advance warning to motorists to slow down as they enter the school zone.



Rectangular rapid flashing beacons (RRFBs) are active warning devices used to alert motorists of crossing pedestrians at uncontrolled crossings. They remain dark until activated by pedestrians, at which point they emit a bright, rapidly flashing yellow light. Studies suggest that RRFBs can significantly increase yielding rates compared to standard pedestrian warning signs alone. Results have shown that motorist yielding can be increased from baselines averaging 5% to 20% with the standard pedestrian warning sign treatment only to sustainable yielding rates of 80% or higher with this device. Flashing beacons can be used to control traffic at intersections where traffic or physical conditions do not justify a full signal but crash rates indicate the possibility of a special need, or to provide supplementary warning of a midblock or uncontrolled school crosswalk. They should be considered for use at high-conflict uncontrolled crossing locations with significant pedestrian volumes where visibility is compromised by grades, curves, or other conditions.

RRFBs shall be installed on both the right and left sides of the roadway. They are not currently included in the MUTCD, but jurisdictions can use them if they obtain approval from FHWA, under the terms and conditions of Interim Approval II (see section IA.10 of the MUTCD). Chapter 4K of the MUTCD provides guidance for the use of flashing beacons.

In-pavement Flashers

An in-roadway warning light system (IRWL) "consists of a series of amber or white lighting units encased in durable housings and embedded in the pavement parallel to a marked crosswalk" (ITE Traffic Engineering Committee TENC-98-03, 2001). The IRWL is a type of device that is used at existing or new pedestrian crosswalks to warn drivers of oncoming pedestrian traffic. The device usually consists of LED lights that are embedded into the roadway alongside the crosswalk and are oriented to face oncoming traffic. When a pedestrian approaches the crosswalk, the system is activated and the LED lights begin to flash simultaneously. These lights are programmed to flash for a period of time that is sufficient for an average pedestrian to cross.



Changes in Assumption, Policies and Objectives

There are two different types of embedded pavement flashing light systems, passive and active. These types differ on how the system is activated. With a passive system, the pedestrian activates the device merely by walking up to the crosswalk. This is accomplished by using one of several motion detection devices. These include microwave, motion sensors, video detection, or a light trip beam. With an active system, the device is usually activated by a button that a pedestrian push in order to cross. These active systems are generally similar to lighted pedestrian signs at traffic intersections.

Crosswalks with in-pavement flashers can be expensive to install and maintain, and should only be selected after first considering other solutions. The 2009 MUTCD allows them at uncontrolled crossings to alert drivers to crosswalks, but does not allow them at crosswalks controlled by traffic signals, STOP signs or YIELD signs. Crosswalks with in-pavement flashers are expensive to install and maintain, and should not be selected without first considering other solutions. Section 4L.02 of the MUTCD provides a list of factors to consider (including vehicle and pedestrian volume thresholds) when evaluating the need for in-pavement warning lights at crosswalks, as well as standards for their installation and operation.

Advance Stop/Yield Line

Advance stop or yield lines encourage drivers to stop further back from the crosswalk, promoting better visibility between pedestrians and motorists, and helping to prevent multiple-threat collisions at mid-block or uncontrolled crossings. A multiple-threat collision is a pedestrian crash that occurs when pedestrians have to cross more than one lane in each direction. A motor vehicle in one lane stops and provides a visual screen to the motorist in the adjacent lane. The motorist in the adjacent lane continues to move and hits the pedestrian.



The 2009 MUTCD recommends that yield or stop lines used at uncontrolled multi-lane crossings be placed 20 to 50 feet in advance of the crosswalk; however, according to PEDSAFE 2013, a setback of 30 feet for the advance stop or yield lines (in advance of the crosswalk) has been found to be appropriate for most situations. At signalized midblock locations, the 2009 MUTCD recommends separation of at least 40 feet between the stop line and the nearest signal indication. The advance stop or yield line should be supplemented with "Stop Here For Pedestrians" signs (R1-5 or R1-5a) to alert drivers where to stop to let a pedestrian cross. One study, according to The American Association of State Highway and Transportation Officials, found that use of a "sign alone reduced conflicts between drivers and pedestrians by 67 percent, and with the addition of an advanced stop or yield line, this type of conflict was reduced by 90 percent compared to baseline levels.

Speed Humps

Speed humps, oftentimes called road humps, are rounded and raised areas placed across the roadway. They are generally 10 to 14 feet long (in the direction of travel), making them distinct from the shorter “speed bumps” found in many parking lots, are 3 to 4 inches high and often placed in a series (typically spaced 300 to 600 feet apart). The profile of a speed hump can be circular, parabolic, or sinusoidal and typically includes pavement marking (zigzag, shark's tooth, chevron, zebra). They are often tapered as they reach the curb on each end to allow unimpeded drainage. Speed Humps are good for locations where very low speeds are desired and reasonable, and noise and fumes are not a major concern. They are mainly used on residential streets and seldom used on major roads, bus routes, or primary emergency response routes as they may interfere with response times. According to the Institute of Transportation Engineers (ITE), there is an approximate delay of between 3 and 5 seconds per hump for fire trucks and up to 10 seconds for ambulance with patient. ITE also notes that studies indicate that traffic volumes have been reduced on average by 18 percent depending on alternative routes available and that collisions have been reduced on average by 13 percent on treated streets (not adjusted for traffic diversion).



Both speed humps and speed tables cost on average approximately \$2,500 each, with low estimates of about \$1,000 and high estimates of \$6,900 (Bushell, Poole, Zegeer, Rodriguez, 2013).

Speed Tables

Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields give speed tables higher design speeds than Speed Humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles. According to the ITE, studies show that traffic volumes have been reduced on average by 12 percent depending on alternative routes available and collisions have been reduced on average by 45 percent on treated streets (not adjusted for traffic diversion). As for emergency response, ITE states that there is generally less than 3 seconds of delay per speed table for fire trucks.



Both speed humps and speed tables cost on average approximately \$2,500 each, with low estimates of about \$1,000 and high estimates of \$6,900 (Bushell, Poole, Zegeer, Rodriguez, 2013).

Changes in Assumption, Policies and Objectives

Raised Crosswalks

Raised crosswalks are Speed Tables outfitted with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. Raised pedestrian crosswalks serve as traffic calming measures by extending the sidewalk across the road and bringing motor vehicles to the pedestrian level. Raised crosswalks improve accessibility by allowing a pedestrian to cross at nearly a constant grade without the need for a curb ramp and makes the pedestrian more visible to approaching motorists. They have a trapezoid-shaped cross-section to slow motorists at the pedestrian crossing where the slowing will be most effective.



Speed tables outfitted with crosswalk markings are used on local streets, but they may not be applicable for some collector streets due to an increase in emergency vehicle response time. Raised crosswalks are good for locations where pedestrian crossings occur at haphazard locations and vehicle speeds are excessive. Roadways are not the only places traffic calming devices can be useful. Raised crosswalks can be used in school parking lots to slow traffic and more safely allow pedestrians to cross the parking lots. When used, care must be taken to accommodate drainage in the parking lot and to prevent water from pooling.

Costs range from \$1,500 to \$30,000 with an average cost of approximately \$8,200 (Bushell, Poole, Zegeer, Rodriguez, 2013).

Chokers

Chokers are curb extensions at midblock locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks, they are also known as safe crosses. Two-lane chokers leave the street cross section with two lanes that are narrower than the normal cross section. One-lane chokers narrow the width to allow travel in only one direction at a time, operating similarly to one-lane bridges. They are good for areas with substantial speed problems and no on-street parking shortage.



Costs for chokers range from \$5,000 to \$20,000, depending on site conditions and landscaping [PEDSAFE, 2004].

Raised Intersections

A raised intersection is essentially a speed table for an entire intersection. Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with brick or other textured materials on the flat section. They usually raise to the level of the sidewalk, or slightly below to provide a “lip” that is detectable by the visually impaired. By modifying the level of the intersection, the crosswalks are more readily perceived by motorists to be “pedestrian territory”. Raised intersections are good for intersections with substantial pedestrian activity, and areas where other traffic calming measures would be unacceptable because they take away scarce parking spaces. This is good for mobility impaired pedestrians but may cause problems for the sight impaired if they cannot detect the curb edge.



Costs range from \$12,000 to \$114,000 with an average cost of approximately \$50,540 (Bushell, Poole, Zegeer, Rodriguez, 2013).

Chicanes

Chicanes are curb extensions that alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on-street parking, either diagonal or parallel, between one side of the street and the other. Each parking bay can be created either by restriping the roadway or by installing raised, landscaped islands at the ends of each parking bay. Good for locations where speeds are a problem but noise associated with Speed Humps and related measures would be unacceptable. Unless well-designed, chicanes may still permit speeding by drivers cutting straight paths across the center line.



Costs for landscaped chicanes range from \$10,000 (for a set of three chicanes) on an asphalt street to up to \$30,000 on a concrete street [PEDSAFE, 2004].

Changes in Assumption, Policies and Objectives

Curb Extensions or Neckdowns

Neckdowns are curb extensions at intersections that reduce the roadway width from curb to curb. They “pedestrianize” intersections by shortening crossing distances for pedestrians and drawing attention to pedestrians via raised peninsulas. They also tighten the curb radii at the corners, reducing the speeds of turning vehicles. They are good for intersections with substantial pedestrian activity and areas where vertical traffic calming measures would be unacceptable because of noise considerations. Curb extensions or neckdowns are often used in combination with other traffic calming measures such as chicanes, speed bumps, or rumble strips, and are frequently sited to “guard” pedestrian crossings. In these cases the “squeeze” effect of the narrowed roadway shortens the exposed distance pedestrians must walk.



The cost of a curb extension can range from \$2,000 to \$20,000 depending on the design and site condition. An average cost is approximately \$12,000. Drainage is usually the most significant determinant of cost. The cost to install a green/vegetated curb extension can vary from \$10,000 to \$40,000, though retrofitting an existing curb extension by adding vegetation can be relatively inexpensive. Costs can go up significantly if something major, such as a utility pole, fire hydrant or controller box, is moved. [PEDSAFE, 2004].

Neighborhood Traffic Circles

Traffic circles are raised islands, placed in intersections, around which traffic circulates. They are good for calming intersections, especially within neighborhoods, where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems. These small scale circles requires drivers to slow to a speed that allows them to comfortably maneuver around them while also requiring them to yield to motorists already in the intersection. Key design features for neighborhood traffic circles are: the offset distance (distance between projection of street curb and center island), lane width for circling the circle, the circle diameter, and height of mountable outer ring for large vehicles such as school buses and trash trucks. According to the ITE, studies show that intersection collisions have been reduced on average by 70 percent and overall collisions by 28 percent. As neighborhood traffic circles are oftentimes landscaped, this landscaping needs to be designed to allow adequate sight distance. According to the ITE, emergency vehicles typically slow to approximately 13 mph and there is an approximate delay of 5 to 8 seconds per circle for fire trucks.



The cost for a landscaped traffic circle on an asphalt street is about \$6,000 and ranges from \$8,000 to \$12,000 for a landscaped mini-circle on a concrete street [PEDSAFE, 2004].

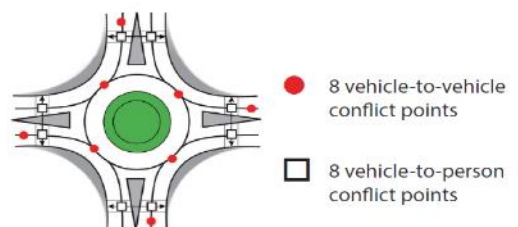
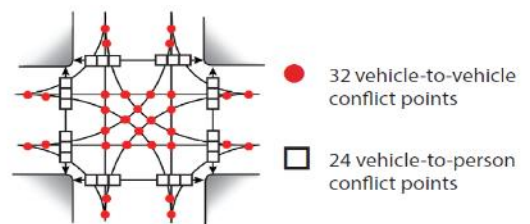
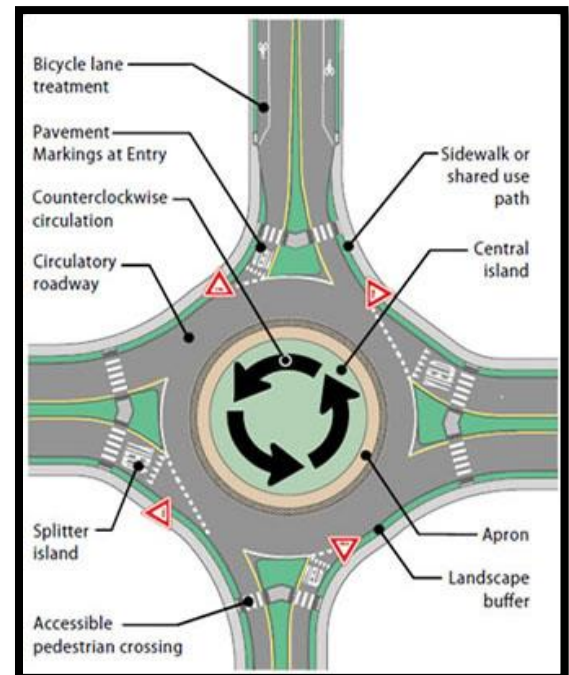
Roundabouts

A roundabout is a type of circular intersection, but is different than a neighborhood traffic circle or large rotary. Roundabouts require traffic to circulate counterclockwise around a center island and unlike Traffic Circles, roundabouts are used on higher volume streets to allocate right-of-way between competing movements. The prevailing rotary designs in the first half of the 20th century enabled high-speed merging and weaving of vehicles. Priority was given to entering vehicles, facilitating high-speed entries which resulted in high crash rates and congestion which led to rotaries falling out of favor in America after the mid-1950s.

The modern roundabout was developed in the United Kingdom to rectify problems associated with these traffic circles. In 1966, the United Kingdom adopted a rule at all circular intersections that required entering traffic to give way, or yield, to circulating traffic. This rule prevented circular intersections from locking up by not allowing vehicles to enter the intersection until there were sufficient gaps in circulating traffic. These changes improved the safety characteristics of the circular intersections by reducing the number and the severity of crashes.

Roundabouts have been proven safer and more efficient than other types of circular intersections. Roughly the size of a baseball diamond or infield, modern roundabouts differ from rotaries or traffic circles, which can be as big as the entire outfield. Roundabouts feature lower, safer vehicle speeds. They can be 80 feet across with single lanes carrying 25,000 vehicles a day or larger at 200 feet, with double lanes and 45,000 vehicles a day. According to the FHWA, roundabouts reduce the types of crashes where people are seriously hurt or killed by 78-82% when compared to conventional stop-controlled and signalized intersections, per the AASHTO Highway Safety Manual.

By using space to pause on the “splitter island,” pedestrians need to watch only one direction of traffic at a time, which simplifies the task of crossing the street. The low vehicle speeds through a roundabout — which can be



Changes in Assumption, Policies and Objectives

as low as 15 mph — also allow more time for drivers and pedestrians to react to one another, which reduces the chance and consequences of error. A bicyclist can be given the option of riding in the lane of slow-moving cars or crossing as a pedestrian. Roundabouts also cause drivers to slow down, ideally to less than 20 mph, which reduces the risks to both pedestrians and drivers. At the same time, roundabout can handle some 30 to 50 percent more traffic than conventional intersections which can help reduce travel delays.

According to the FHWA, the average construction cost of roundabouts is estimated at approximately \$250,000. (Roundabouts: An Information Guide)

Reduced Corner Radii

There is a direct relationship between the size of the curb radius and the speed of turning motor vehicles. A large radius may easily accommodate large fire trucks and other large trucks and school busses, but it also allows other drivers to make high speed turns and it increases the crossing distance for pedestrians. Motorists who drive faster are less likely to stop for pedestrians. A larger radius will also result in a longer crossing distance for the pedestrian. The solution is to reduce the curb radius.



When designing curb radii, consider what motor vehicles actually need when turning. Instead of assuming that every corner needs to be cut back, look at other factors such as on-street parking and bicycle lanes to determine how much space a turning motor vehicle will need. The effective radius that exists should include the width of parking lanes and bicycle lanes on both streets. Large trucks do not need to stay on their half of the street when turning on local streets. There is not a need to design for the largest vehicle that may use a street, especially for streets inside neighborhoods.

Costs range from \$2,000 to \$20,000 depending on drainage, utilities and other site features [PEDSAFE, 2004].

Center-Island Narrowing

A center island narrowing, or often simply called a center island, is a raised island located along the centerline of a street that narrow the travel lanes at that location. Center island narrowings are often landscaped to provide a visual amenity. Placed at the entrance to a neighborhood, and often combined with textured pavement, they are often called “gateway islands.” Fitted with a gap to allow pedestrians to walk through at a crosswalk, they are often called “pedestrian refuges.” Center Island Narrowings are



good for entrances to residential areas, and wide streets where pedestrians need to cross. The magnitude of reduction in speed is dependent of the spacing of center island narrowings between points that require drivers to slow. On average center island narrowings achieve a 7% reduction in speeds. These traffic calming measures are preferred by fire department/emergency response agencies to most other traffic calming measures.

According to the ITE, reported costs range between \$5,000 and \$15,000 (1997 dollars)

Radar Speed Signs

Radar speed signs give drivers notice that they are speeding and lets them know what speed they are traveling versus what the speed limit is on the road being traveled. Radar speed signs can be used with flashing beacons to create the most effective message to speeders around schools. The signs can manage multiple speed limits during the day, and often have an option to add a relay switch that will trigger beacons to go on when speeders are detected.

Cost per sign can range from \$1,000 to \$6,000 per sign.



Road Diet

A road diet, also called a lane reduction or road rechannelization, is a technique in transportation planning whereby the number of travel lanes and/or effective width of the road is reduced in order to achieve systemic improvements. A classic Road Diet typically involves converting an existing four-lane, undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane.

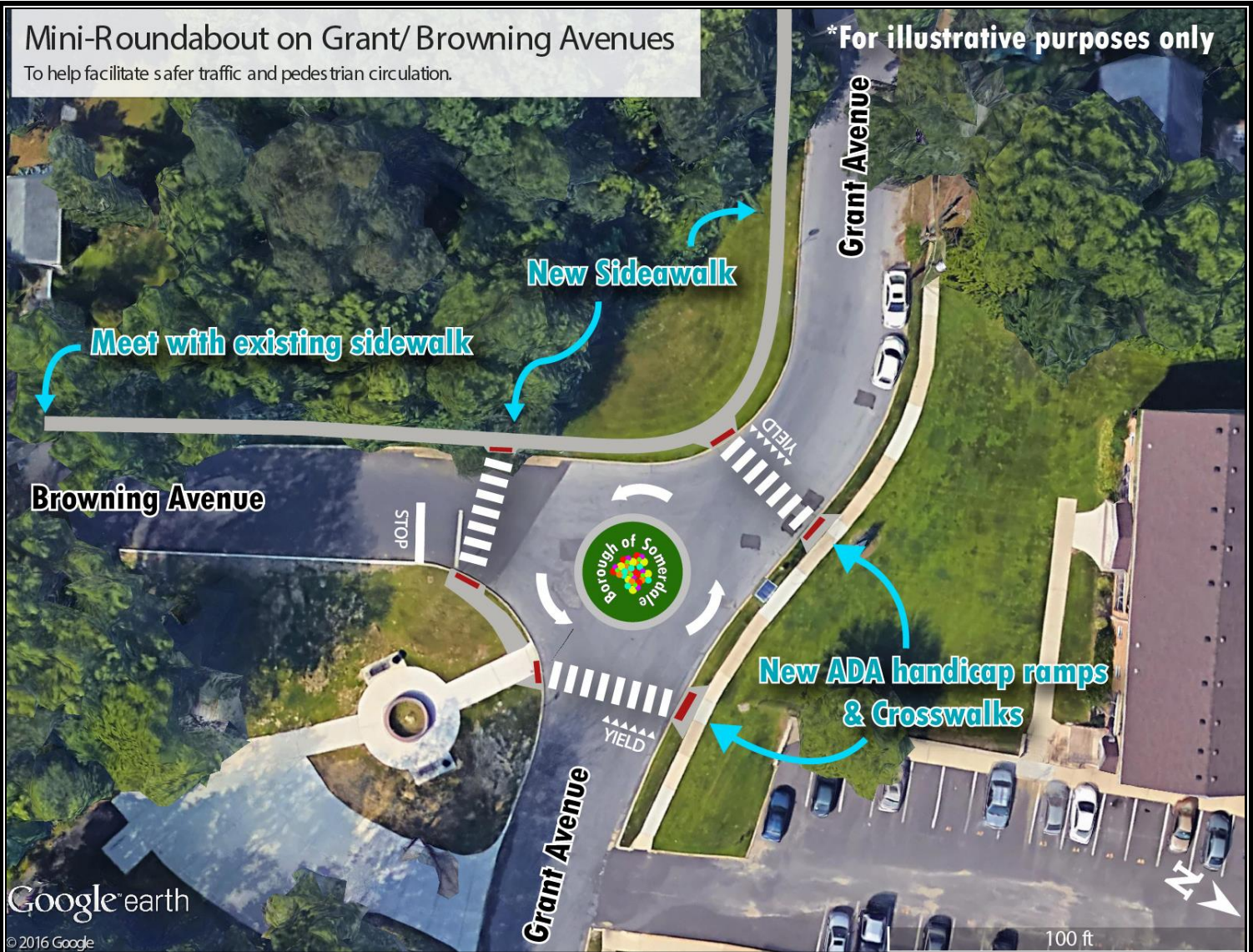
The resulting benefits can include a crash reduction of 19 to 47 percent, reduced vehicle speed differential, improved mobility and access by all road users, and integration of the roadway into surrounding uses that results in an enhanced quality of life. A key feature of a Road Diet is that it allows reclaimed space to be allocated for other uses, such as turn lanes, bus lanes, pedestrian refuge islands, bike lanes, sidewalks, bus shelters, parking or landscaping. As more communities desire "complete streets" and more livable spaces, they look to agencies to find opportunities to better integrate pedestrian and bicycle facilities and transit options along their corridors. When a Road Diet is planned in conjunction with reconstruction or simple overlay projects, the safety and operational benefits are achieved essentially for the cost of restriping. A Road Diet is a low-cost solution that addresses safety concerns and benefits all road users — a win-win for quality of life.



Mini-Roundabout on Grant/ Browning Avenues

To help facilitate safer traffic and pedestrian circulation.

***For illustrative purposes only**



Grant Avenue/ Browning Road Vehicular & Pedestrian Circulation

The current design of the intersection of Grant Avenue and Browning Avenue may not provide adequate safety measures for persons attempting to walk over to the newly constructed trail section. There is currently missing sidewalk on the southern span of the intersection and missing ADA handicap ramps and crosswalks at this location. In order to facilitate for better circulation and increase pedestrian safety, a traffic calming measure in the form of a small mini “neighborhood” sized roundabout could be constructed.

Roundabouts have been proven safer and more efficient than other types of circular intersections and in this location would likely be the safest option to allow for slower traffic that could allow pedestrians to walk. With this newly constructed trail, more pedestrian traffic, especially families and young children, can be expected. In addition to these measures, other safety measures could also be incorporated such as in-street pedestrian crossing signs.

5. Sustainability, Green Infrastructure and Energy Conservation

A large change in assumptions, policies and objectives as it relates to the Borough of Somerdale encompasses the concept of sustainability and resiliency which are now on both the National and State agenda and under significant discussion in the South Jersey/ Delaware Valley Region. While the term Sustainability is a common term, its definition is commonly misunderstood. In terms of this reexamination, Sustainability shall be described by its four tenets: *Economics* (the New/Next/Green Economy), *Environment* (climate change and climate resiliency, in particular), *Equity* (reducing the divide between those with the least and those with the most) and *Institutionalization* (how the status quo needs to adapt to this new paradigm).



The Borough of Somerdale passed Resolution in March of 2012 which Supports the Participation in the Sustainable Jersey Municipal Certification Program. Only New Jersey municipalities can apply for certification and **participation is strictly voluntary**. No fees are charged to local governments and the only required action is to have a Green Team appointed by the municipal governing body. The program then provides local governments with a clear mission and a menu of sustainable actions to achieve. The technical content of the program's actions are developed with the help of task forces composed of local officials, experts, non-profit groups, and members of the business community. Recommended best practices/actions are vetted with local government officials. Training, monthly workshops and technical support is provided to communities in order to build general capacity and effectiveness of local governments and Green Teams for implementing the program.

Sustainable Jersey towns and cities implement practices that lead to cost savings in energy, water and waste bills. The program helps communities improve efficiency, cut waste and stimulate their local economies. Registered towns get special priority access and notification of incentives and grants, and are eligible for the Sustainable Jersey Small Grants Program which has funded \$1,900,000 worth of sustainable projects since 2009 across New Jersey. Currently the Borough is registered as participating in Sustainable Jersey but does not have a standing certification. The Borough needs to implement 2 out of 12 priority actions, complete actions in 6 of 19 categories and receive a total of at least 150 points to obtain the bronze sustainability certification which will open it up to various opportunities.

The Somerdale Green Team has a strong interest in the environment and works towards making the Borough more sustainable. Currently Somerdale has no Environmental Commission. One could be established in order to "aid with the protection, development or use of natural resources." When created, the Commission would have the power to conduct research into the use of open land and shall keep an index of all open areas, publicly and privately owned, including open marshlands, swamps, and other wetlands, in order to obtain information on the most desirable use of such areas. Both groups would be very important in any future sustainability and environmental efforts.

Changes in Assumption, Policies and Objectives

Air and Water Quality on Public Health

Over the past half century, there has been a significant increase in the quality of our Air and Water resources. Since its initial enactment and subsequent amendments, the Clean Air and Clean Water acts have had a proven track record of success, cost-effectively cutting dangerous pollution, and positively impacting our environment and our health. On the national level, Corporate Average Fuel Economy Standards (CAFE) which set an average gas mileage requirement for a manufacturer's fleet as well as California Air Resources Board standards (CARB) which New Jersey has also adopted and other similar regulations have all helped significantly improve the United States Air Quality. Despite these achievements, air and water pollution in the United States continues to harm people's health, the environment and ultimately our economic vitality. In September 2016, the WHO said that more than 90 percent of the world's population lives in areas where air pollution exceeds levels considered safe for humans. The United States, Camden County and Somerdale are not immune from the negative effects of water and air pollution.

The Borough should be aware of the great strides and remaining objectives in regards to pollution. According to a March 2011 report by the Environmental Protection Agency's Office of Air and Radiation, under the 1990 Clean Air Act Amendment Programs, the economic value of the substantial air quality improvements that would be realized by the year 2020 is estimated at almost \$2 trillion. Air and water pollution are generally considered to be external costs. Because air is a public good (it is free of charge, and one's consumption of it does not decrease the benefit of another), individuals tend to perform activities that harm the air without considering the impact of their activities, and thus impose external costs on unrelated third parties.

An example of this could include the operation of a factory that creates pollution. This air pollution in turn neither harms the factory owner nor buyers of the goods being produced. It does, however, harm nearby residents unrelated to the business transaction. These residents, for example, might suffer from asthma, pregnancy complications, lung disease or even premature death as a result of their proximity to the pollution. The financial cost of the asthma, lung disease, etc. for these residents (medical bills, sick days off work, etc.) is an external cost that demonstrates a market failure, as it is not the optimal result of a perfectly functioning market.

The EPA has identified six pollutants as "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. These six pollutants are carbon monoxide, lead, nitrogen oxides, ground-level ozone, particle pollution (often referred to as particulate matter), and sulfur oxides.

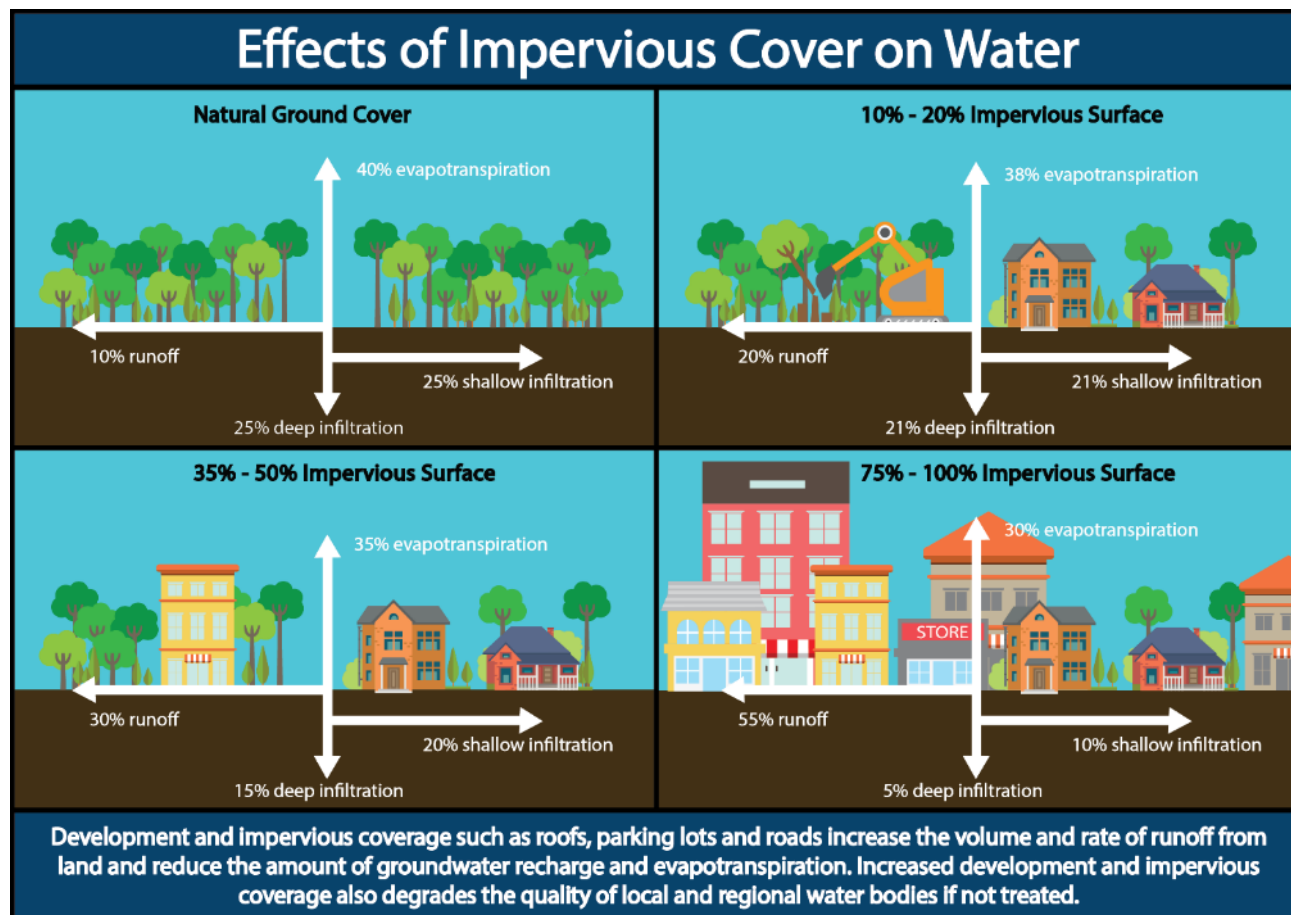
In order to continue the battle against air and water pollution, the Borough should make the following items a priority:

- Make it an official Borough policy to maintain the State's "No Idling Regulation" and educate employees and residents of this via educational materials and street/ building signs.
- Make it an official Borough policy to purchase fuel efficient and alternative fuel vehicles.
- Install solar panels, wind turbines, battery storage systems and other alternative energy forms to reduce the Borough's carbon footprint and create more resiliency against potential petroleum supply chain disruptions due to natural disasters or price fluctuations.
- Work towards various Sustainable Jersey Action Items (checklist can be found in Appendix)

Green Infrastructure & Low Impact Development

Over the past century, and especially the years following WW2, Camden County and the Borough of Somerdale have become an increasingly urban. This development in turn had a mass impact on our local watersheds. Prior to development of land, a majority of rainwater is filtered through the soil, which ultimately recharges groundwater and provides base flow to nearby streams, ponds, wetlands, rivers, and lakes. When land is developed, impervious surfaces such as cement, asphalt, and roofing all prevent rainwater from infiltrating as would otherwise naturally occur. The natural cycle is disturbed, and the amount of precipitation that is infiltrated decreases, while runoff increases and is carried away through pipes, culverts and other methods known as “grey infrastructure”.

For decades, stormwater, or runoff, was considered largely a problem of excess rainwater or snowmelt impacting communities. Prevailing engineering practices were to move stormwater away from cities as rapidly as possible to avoid potential damages from flooding. The increased volume of stormwater runoff and the pollutants carried within it continue to degrade the quality of local and regional water bodies. Large quantities of stormwater that wash across urban surfaces and discharge from the stormwater sewer systems contain a mix of pollutants such as bacteria, metals, nutrients, oils and greases, pesticides, sediments, toxic chemicals, trash and debris as well as many oxygen-depleting substances and can also increase flood risk, waterway scour and sedimentation. More recently, however, these traditional practices have evolved and come to recognize stormwater as a resource that, when managed properly within communities, has multiple benefits.



Causes of Water Quality Degradation From Nonpoint Sources



Bacteria and Parasites

Most bacteria and parasites enter streams or rivers through direct deposition of waste in the water and runoff from areas with high concentrations of animals. Domesticated animals such as livestock, fowl or even dogs can contribute heavily to bacterial pollution. Runoff from wetlands, septic tanks, and sewage plants may cause an increase in coliform and other bacterial pollution.



Oils and Hydrocarbons

Petroleum hydrocarbons in water are considered very harmful to natural biota. These hydrocarbons can damage the liver, kidneys, blood, as well as other vital organs and some have been found to be carcinogenic and toxic to humans. Low levels of oil pollution can inhibit reproduction and survival of aquatic organisms, and prolonged concentrations can harm estuarine species.



Trash and Debris

Urban trash and debris (plastic bags, bottles, fast-food wrappers, cigarette butts and so forth) may be ingested by aquatic organisms, causing internal organ failure or a slow strangulation. Trash and debris can also create odors, aesthetic problems, and lead to water contamination with various pathogens. Yard waste such as grass cuttings dumped along a stream bank becomes excess nutrients that create algae blooms.



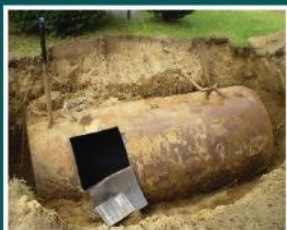
Household Chemicals

Household chemicals ranging from household cleaners, paints, solvents, lawn care, automotive products, pool chemicals, and health and beauty aids can all be made up of a large amounts of toxic chemicals. When not properly used or disposed of, these chemicals will end up in nearby water bodies, contributing to water pollution.



Toxic Chemicals

As it travels, runoff collects chemicals that are on the ground. Fish and organisms are then harmed by these chemicals. Chemicals can originate from a variety of various sources and thousands of everyday products. Roofing materials for example are a major source of copper, cadmium, zinc, and phthalates. Wood smoke and creosote-treated wood release polycyclic aromatic hydrocarbons (PAHs) into waterways.



Underground Storage Tanks

USTs are used by gas stations, and industries to store toxic material such as gasoline and oil that contain hazardous substances which can cause cancer and harm developing children. Frequently, the walls of USTs corrode, leaking toxins into drinking water supplies. Chemicals in USTs quickly move through soil and pollute groundwater. One pin-prick sized hole in an UST can leak 400 gallons of fuel a year.



Thermal Pollution

Thermal pollution is defined as sudden increase or decrease in temperature of a natural body of water. A common cause of thermal pollution is the use of water as a coolant by power plants and manufacturers. It is also often caused when urban stormwater runs off hot pavement such as asphalt which can heat up to 140°F in extreme circumstances. Certain fish need cold waters to thrive and hot water can exacerbate algae blooms.



Sediments and Yard Waste

Sediment such as loose sand, clay, silt and other soil particles often comes from soil erosion, construction sites or from the decomposition of plants and animals. Sediments in runoff can degrade the quality of water by preventing the growth of vegetation, disrupting aquatic habitat, clogging fish gills, reducing oxygen content, among many other things.



Pesticides

When storms hit, the runoff from yards and roadsides carry pesticides into local water bodies, where they may harm aquatic life and enter drinking-water supply intakes. Pesticides are substances used to kill or control pests. Pesticides are not entirely specific in their action, and can harm or kill fish crustaceans, amphibians, insects, animals and other organisms.



Fertilizers and Nutrients

Fertilizers are often used in farming and lawn care. When fertilizers run-off into nearby water, they can cause an increase in nutrient levels which can result in algal blooms. Algae may block sunlight from marine plants and also use up all the oxygen in the water, leaving none for other marine life. This can result in the death of many aquatic organisms, which need oxygen rich water to live.



Combined Sewer Overflows

Every year, combined sewer overflows (CSOs) release about 850 billion gallons of untreated sewage and stormwater into lakes, streams, and rivers across the United States. Sewage contains all kinds of chemicals, from the pharmaceutical drugs people take to the paper, plastic, and other wastes they flush down their toilets. Sewage can also carry viruses such as hepatitis, typhoid, and cholera.



Salts and De-icing Solutions

Salt applied to roads and other surfaces can eventually make its way to nearby rivers, streams, lakes and even groundwater. When this occurs, it can increase the levels of sodium and chloride in the source waters for drinking water supplies. Studies have also found that chloride from road salt can negatively impact the survival rates of fish, insects, crustaceans, amphibians, plants and other organisms.



Heavy Metals

Concentrations of metals found in water can have adverse effects upon public health as well as upon aquatic biota. Lead, arsenic, copper cadmium, mercury and some forms of chromium are of particular concern. These metallic elements are considered systemic toxicants that are known to induce multiple organ damage, even at lower levels of exposure and are classified as human carcinogens.



Atmospheric Deposition

Pollutants such as carbon dioxide, sulphur dioxide, and nitrogen oxides released into the air by cars, trucks, construction machinery, lawn tools, power plants and other source will fall back to the earth's surface in the form of acid rain, where it could wind up in our waterways. Many types of plants and animals are unable to tolerate acidic waters and will ultimately die or be unable to reproduce.

These practices, known as green infrastructure, best management practices and low impact development are all very important methods of improving water quality and reducing peak flows which can lead to costly flooding, scouring and sedimentation issues.

Green infrastructure is a concept that entered the sustainability discourse in the last decade among a wide range of agencies, organizations, companies, community groups, and planners. Essentially, it elevates natural systems as infrastructure to a level of importance similar to “grey” systems and provides a common language for discussing these systems. Through a network of decentralized stormwater management practices, it captures and infiltrates rain where it falls, thus controlling water quality as well as the volume and velocity of stormwater runoff at its source, all of which improve the health of surrounding waterways. There are different scales of green infrastructure which can range from small Municipal ROW projects and private rain gardens to neighborhood scale Stormwater Wetlands and Vegetated Infiltration Basins.

Green infrastructure protects existing floodplains and mimics natural features by retaining and filtering runoff, reducing the need for traditional or gray infrastructure solutions such as costly new wastewater treatment plants, flood control structures, and the extensive network of pipes to redirect stormwater. Green infrastructure practices are generally less expensive and more effective over the long term than traditional infrastructure solutions. In addition, they facilitate nature’s natural resilience that communities need in order to adapt to the impacts of a changing climate, especially in regards to an increasing frequency of storms such as Hurricane Sandy and Hurricane Irene. The following benefits section is separated into three sections and goes in depth with each specific benefit.

LID is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. Low Impact Development (LID) is a relatively new practice that attempts to control stormwater runoff by uniting urban and suburban site planning, land development, and stormwater management with ecosystem protection. It was first developed in the 1990s in response to the costly economic and environmental impacts of conventional (end-of-pipe) stormwater management techniques. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

According to the NJDEP Stormwater Management Rules at NJAC 7:8, the groundwater recharge, stormwater quality, and stormwater quantity standards established by the Rules for major land development projects must be met by incorporating nine specific nonstructural stormwater management strategies into the project’s design to the maximum extent practicable. To accomplish this, the rules require an applicant seeking land development approval from Somerdale to identify those nonstructural strategies that have been incorporated into the project’s design. In addition, if an applicant contends that it is not feasible to incorporate any of the specific strategies into the project’s design, particularly for engineering, environmental, or safety reasons, the Rules further require that the applicant provide a basis for that contention. **The Joint Planning and Zoning Board and Planning Board Engineer should continue to review applications for conformance with NJDEP Stormwater Management Rules and promote incorporation of the nine specific nonstructural stormwater management strategies as well as other Green Infrastructure methods to improve the quality of stormwater, reduce the quantity of runoff and promote groundwater recharge.**

Changes in Assumption, Policies and Objectives

There are many benefits regarding incorporating Green Stormwater Infrastructure including:

- Avoided and Reduced Capital Costs
- Reduce the Economic Impacts Associated with Flood Events
- Decrease the Need to Use Potable Water
- Increased Property Values
- Increased Energy Efficiency & Reduced Energy Costs
- Controls Stormwater Volume
- Improves Water Quality
- Improves Groundwater Recharge
- Improves Health of Stream Banks and Aquatic Life
- Supports Biodiversity and Improves Habitat
- Improves Air Quality
- Helps Mitigate Climate Change Impacts
- Improved Streetscape and Neighborhood Aesthetics
- Protects Public Health and Reduces Illness-Related Costs
- Assists in Making Communities More Resilient to Potential Climate & Storm Impacts
- Improves Pedestrian Safety + Experience
- Provides Recreational Opportunities

The following are some Green Stormwater Items that could be incorporated throughout the Borough of Somerdale:

- Green Roofs
- Blue Roofs
- Permeable Pavers
- Porous Asphalt
- Pervious Concrete
- Reinforced Turf & Grass Paving
- Downspout Disconnection & Planters
- Stormwater Tree Trenches
- Rainwater Harvesting (Cisterns & Barrels)
- Bioretention Systems & Raingardens
- Vegetated Stormwater Curb Extension
- Stormwater Planter Boxes
- Green Alleyways & Walkways
- Constructed Wetlands (Stormwater & Wastewater)
- Green & Sustainable Surface Parking Lots
- Infiltration Basins & Subsurface Infiltration
- Wet Ponds
- Sand Filters & Grass Swales
- Riparian Buffers
- Urban Forests
- Green Walls
- Pocket Parks

Energy Efficiency

Energy efficiency is one of the best ways that the Borough could save limited financial resources and tax dollars. Though energy savings greatly outweigh the costs over the lifetime of an energy efficient upgrade, upfront costs often present a significant challenge to moving forward. To continue Somerdale's energy efficiency initiatives, the Borough should look into the option of utilizing the Energy Savings Improvement Program for financing improvements. In 2009, the legislature approved Energy Savings Improvement Programs (ESIPs) as an alternate method for New Jersey local government units to finance the implementation of energy conservation measures (P.L. 2009, c.4). On September 21, 2012, Governor Christie signed (P.L. 2012, Chapter 55) which further defined the ESIP process. ESIPs are a type of "performance contract."

In essence, by using the ESIP financing alternative, the future value of energy savings is leveraged to pay for the upfront project costs. The law specifically allows boards of education, counties, municipalities, housing authorities and public authorities to enter into contracts for up to 15 years to finance building energy upgrades in a manner that ensures that annual payments are lower than the savings projected from the energy conservation measures; ensuring that ESIPs are cash flow positive in year one, and every year thereafter. The ESIP law allows local units to use "Energy Savings Obligations" as the financing method to pay for the costs (capital as well as soft costs) of these energy conservation measures. This can be an effective way to lower the Borough's energy consumption, improve your buildings and equipment, and save the taxpayers' money, without increasing local indebtedness. For more information and resources, please see Sustainable Jersey 2013 How-To Guide: *How to Implement an Energy Savings Improvement Plan*.

Solar/ Photovoltaic Panels

Since the last reexamination report, there has been new legislation updating the Municipal Land Use Law (MLUL) chapter that deals with Wind, Solar and Photovoltaic Energy Facilities. As of 2009, New Jersey's MLUL now defines solar electric generating facilities as "inherently beneficial uses;" however, the law has not removed the necessity to prove that the solar facility will not frustrate the overall planning efforts of the town or become a detriment to the well-being and safety of the community. In other words, inherently beneficial does not mean "permitted." The law also exempts solar panels from zoning limitations on impervious cover (i.e., driveways, buildings, and other surfaces that prevent water from absorbing into the ground).

Idling Restrictions

Idling cars, trucks, school buses, public and private transportation buses, and off-road construction vehicles/equipment all contribute to the degradation of local air quality. Children are highly susceptible to the ill effects of idling pollutants. Children breathe up to 50% more air per pound of body weight than adults, making them more susceptible to both acute and chronic respiratory problems like asthma. Current regulations in the State of New Jersey limit engine idling for both diesel and gasoline vehicles to three minutes with limited exceptions. Violations can be issued by NJDEP, County Environmental Health Officers, or local police departments.

Avoiding idling time has a multitude of benefits including: savings in fuel and maintenance costs, extending vehicle life, and reducing damaging emissions. The New Jersey Department of Environmental Protection has designed a program titled "Idling is Everybody's Business" which can be implemented by any town, business, or school. Further information and a model ordinance can be found on the Bureau of Mobile Sources Website at: <http://www.stopthesoot.org/sts-whatyourtowncando.htm>

6. Hazard and Resiliency Planning

Resilience and disaster risk reduction must be part of urban design and strategies to achieve sustainable development. Somerdale's officials should be aware of the interdependencies between the Borough's and region's infrastructure systems, as well as the dependencies that communities have on them. Utilities and infrastructure providers as well as insurance underwriters are well aware that action is needed to make infrastructure systems (on which so many other stakeholders depend) more resilient to natural hazard and climate risks. With the increase in frequency and strength of storm events, our region needs to be better prepared for disaster prevention and response. Redundancy should be incorporated into existing infrastructure systems and existing infrastructure should be made to be more resilient.

New Jersey state law requires every municipality to have a state approved Emergency Operations Plan (EOP) and to appoint a Coordinator. They, along with the Emergency Management Committee, made of members of Somerdale's Governing body, Police, Fire, Ambulance and school are responsible to coordinate activities to mitigate, prepare for, respond to, and recover from disasters. The Community Emergency Response Team (CERT) Program educates residents about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Somerdale should continue to work towards making sure that their EOP is up to date to reflect any potential hazards and disasters. These include:

Incident	Description	Regional Probability	Debris Impact
Winter Wind Storms/ Nor'easters	Historically, nor'easters occur one to two times a year in New Jersey. These events can create a low to medium amount of debris made up predominantly of vegetative waste, but may also include overhead wire service components, construction and demolition debris and white goods depending on the size of the event and secondary impacts such as power outage.	High	Low/ Moderate
Hurricane/ Tropical Storms	Historically, hurricanes with a significant magnitude to create disaster debris occur every ten to twenty years with tropical storms occurring every 5 years in New Jersey. Past events have created a low to high volume of disaster debris but have the potential to create much higher levels of debris. It is estimated that a category 3 Hurricane could create approximately 3,759,945 tons of disaster debris within the jurisdiction. With climate change, our region can expect the frequency of hurricane events to increase.	High	Moderate/ High
Tornados & Straight-Line Winds	Camden County has seen approximately 8 tornados in the years between 1956 and 2012 according to the Tornado History Project. More often occurring are, damaging winds called "straight-line" winds. Strong thunderstorm winds can come from a number of different processes. Most thunderstorm winds that cause damage at the ground are a result of outflow generated by a thunderstorm downdraft. Damaging winds are classified as those exceeding 50-60 mph.	Low	Moderate/ High
Flooding	Flooding is a frequent issue for nearly every single New Jersey municipality regardless if it is caused by Flash Flooding, River Flooding, Tropical Systems and Coastal Flooding, Ice/Debris Jams, Significant Snowmelt or Dam Breaks/Levee Failure	High	High

Over the past few years, Somerdale has been proactive in promoting resiliency planning in the Borough. Recently, Somerdale received a grant to put in two emergency bypass systems for its two pumping stations. Somerdale has also put in emergency generators at its firehouse, municipal building and several other town buildings.

The United Nations put out a report in 2012 titled, *“How to Make Cities More Resilient: A Handbook for Local Government Leaders.”* This report provides officials, mayors, governors, and others with a generic framework for risk reduction and points to good practices and tools that are already being applied in different cities for that purpose. It responds to the following key questions: WHY building disaster resilience is beneficial; WHAT kind of strategies and actions are required; and HOW to go about the task. Because cities, towns and municipalities differ in size, social, economic and cultural profiles and exposure to risk, each one will approach the tasks differently. They did however create a generic checklist of items that all towns and cities around the world could utilize, however big or small.

The Ten Essentials for Making Towns & Cities Resilient Checklist

1. Put in place organization and coordination to understand and reduce disaster risk, based on participation of citizen groups and civil society. Build local alliances. Ensure that all departments understand their role in disaster risk reduction and preparedness.
2. Assign a budget for disaster risk reduction and provide incentives for homeowners, low income families, communities, businesses, and the public sector to invest in reducing the risks they face.
3. Maintain up to date data on hazards and vulnerabilities. Prepare risk assessments and use these as the basis for urban development plans and decisions, ensure that this information and the plans for your city’s resilience are readily available to the public and fully discussed with them.
4. Invest in and maintain critical infrastructure that reduces risk, such as flood drainage, adjusted where needed to cope with climate change.
5. Assess the safety of all schools and health facilities and upgrade these as necessary.
6. Apply and enforce realistic, risk compliant building regulations and land use planning principles. Identify safe land for low income citizens and upgrade informal settlements, wherever feasible.
7. Ensure that education programs and training on disaster risk reduction are in place in schools and local communities.
8. Protect ecosystems and natural buffers to mitigate floods, storm surges and other hazards to which your city may be vulnerable. Adapt to climate change by building on good risk reduction practices.
9. Install early warning systems and emergency management capacities in your town & city and hold regular public preparedness drills.
10. After any disaster, ensure that the needs of the affected population are placed at the center of reconstruction, with support for them and their community organizations to design and help implement responses, including rebuilding homes and livelihoods.

7. Green Building and Environmental Sustainability Master Plan Element

In August 2008, the Municipal Land Use Law (MLUL) was amended to include the Green Building and Environmental Sustainability Element (GBESE) in the list of permitted Master Plan Elements. This Element, like all Master Plan Elements, is intended to guide land-use decisions and provide the basis for ordinances addressing sustainability and land use issues. The need for sustainable development and resource conservation has been well documented by numerous authoritative sources and levels of government, including the United Nations, United States Government, State of New Jersey, Delaware Valley Regional Planning Commission, New Jersey Department of Environmental Protection and Camden County. By taking the initiative to create a GBESE, the Borough of Somerdale could align its policies and goals to create a more livable, efficient and vibrant community for its residents and businesses. This element would be a good first step at introducing sustainability concepts into local planning documents and later weave those concepts into various policies and ordinances. The MLUL N.J.S.A. 40:55D-28b(16) describes the Element as the following:

"A green buildings and environmental sustainability plan element, shall provide for, encourage, and promote the efficient use of natural resources and the installation and usage of renewable energy systems; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat storm water on-site; and optimize climatic conditions through site orientation and design."

Purpose of Element

When viewed along with the MLUL provisions for this Plan Element, a theme emerges centered on an underlying principle of conservation at a broad-based level. The majority of the purposes of the MLUL (11 out of 15) direct the Planning Board to protect the environment, prevent urban sprawl, and protect the State's natural resources. These eleven purposes of the law are listed below, which are consistent with local goals and objectives of the Somerdale Master Plan and Master Plan Reexamination Reports.

- a) To encourage municipal action to guide the appropriate use of or development of all lands in the state, in a manner which will promote the public health, safety, morals and general welfare;
- b) To secure safety from fire, flood, panic, and other natural and man-made disasters;
- c) To provide adequate light, air and open space;



- d) To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the State as a whole;
- e) To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions, and the preservation of the environment;
- f) To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial, industrial uses, and open space both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;
- g) To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight;
- h) To promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land;
- i) To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land;
- j) To promote utilization of renewable energy sources; and
- k) To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs.

The Planning Board should prepare a Green Building and Environmental Sustainability Master Plan Element in furtherance of the above MLUL purposes to conserve natural resources and promote the maintenance of a clean and healthy natural and built environment. Municipalities have the authority to adopt laws and regulations to protect public health and welfare and to promote the general welfare in their communities outside of the planning and zoning powers. These types of environmental and health based regulations and ordinances pertain to all property in a municipality.

It should be noted that this Element, like all Master Plan Elements, is intended to guide land use decisions and provide the basis for ordinances addressing sustainability and land use issues. The Master Plan Element **cannot** include requirements or mandatory actions; instead it provides recommendations and support for ordinances that fulfill that role in municipal planning. Additionally, a Master Plan Element cannot dictate the operations of a business or institution. Ultimately, for this element to be effective, it will require that the Planning Board and Town administration take the additional steps of infusing these concepts throughout each of the other Master Plan Elements and various ordinances.

The time needed to adopt a Green Building and Environmental Sustainability Element is largely a function of local processes, but as an estimate, could take anywhere between 10 and 18 months. A factor in the timing is the amount of available staff, consultant and/or volunteer time, and meaningful public participation necessary for the process. In addition, because the content of the Element includes topics outside the scope of the typical Master Plan Element, some additional research and time may be needed to compile and evaluate the new information.

Changes in Assumption, Policies and Objectives

Sections to Include within the Green Building and Environmental Sustainability Master Plan Element

Though every town tailors their Green Building and Environmental Sustainability Master Plan Element to accommodate the needs of their residents and businesses, most Elements all include the following sections as well as some or all of these subchapters within their sections:

1. Sustainable Land Use Patterns as well as Challenges, Goals, Objectives & Strategies
 - a. Smart growth and compact development
 - b. Land use and multi-modal transportation connection
 - c. Open space and farmland preservation
 - d. Infill development and brownfield redevelopment
 - e. Increase density in proximity to mass transit and mixed-use cores
 - f. Diverse housing types and mixed-use development
 - g. Historical preservation
 - h. Integration of Community Forestry Management Plan
 - i. Wildlife habitat fragmentation
 - j. Integrate parks, recreational amenities and community facilities in proximity to residents
 - k. Encourage local food production through community gardens
 - l. Permitting urban agriculture, beekeeping and limited amounts of chicken/ small fowl
 - m. Adopt the Environmental Resource Inventory as part of the Master Plan.
2. Sustainable Circulation Systems as well as Challenges, Goals, Objectives & Strategies
 - a. Allow for the integration of neighborhood streets
 - b. Prohibit the development of cul-de-sac streets and require full neighborhood connections
 - c. Create a local Bicycle and Pedestrian Plan for bike facilities and sidewalk improvements
 - d. Require sidewalk in front of all new development and redevelopment
 - e. Encourage and provide for inter-connectivity paths between neighborhoods.
 - f. Explore the potential for future bus rapid transit (BRT) through the municipality.
 - g. Consider necessary traffic calming measures
3. Energy Conservation as well as Challenges, Goals, Objectives & Strategies
 - a. Benchmarking and comparing energy performance to similar buildings/ facilities
 - b. Energy audits
 - c. Implementing energy efficiency initiatives in public buildings.
 - i. Upgrading or replacing HVAC systems
 - ii. Sealing leaks in forced air heating and cooling ducts
 - iii. Increasing indoor lighting and installing sensors
 - iv. Energy efficient fixtures, appliances and tools
 - v. Insulating Building
 - vi. Sealing and caulking windows and doors
 - vii. Replace old windows and doors with energy-efficient ones
 - viii. Utilize a programmable thermostat
 - ix. Install high-efficiency water heaters

4. Renewable Energy Production as well as Challenges, Goals, Objectives & Strategies
 - a. Installation of solar panels and small scale wind turbines in public buildings
 - b. Remove barriers to solar and small scale wind power facilities and make them accessory uses in all zoning districts.
 - c. Update building code to encourage passive solar strategies.
5. Green Building Design as well as Challenges, Goals, Objectives & Strategies
 - a. Encourage green building certification programs such as USGBC LEED, EPA Energy Star for Buildings Program, Passivhaus Standard, National Green Building Standard, Living Building Challenge, Net-Zero Energy Building, Green Globes system, and many more.
 - b. Choose eco-friendly paints, sheens, and finishes
 - c. Use low-VOC construction products
 - d. Choose hard, low-formaldehyde floors
 - e. Use reclaimed or renewable materials
 - f. Install a green roof or blue roof as well as Green Stormwater Infrastructure
 - g. Install water-saving fixtures
 - h. Provide rainwater collection system
 - i. Require energy-efficient equipment
 - j. Minimize site disturbance
 - k. Use ceiling fans for natural ventilation
6. Sustainable Water Resource Practices as well as Challenges, Goals, Objectives & Strategies
 - a. Promote the use of high-efficiency appliances, such as water heaters, toilets, dishwashers, low-flow shower heads, and washing machines in the Borough.
 - b. Encourage recycling of rainwater and reuse of “grey” water for landscape watering and irrigation.
 - c. Utilize Green Stormwater Infrastructure throughout municipal facilities and encourage residents to utilize GSI as well. Require new developments to incorporate these items.
 - d. Retrofit existing stormwater management infrastructure that is failing or not providing groundwater recharge and/or water quality treatment.
 - e. Promote the disconnection of impervious surfaces throughout the Borough.
 - f. Encourage homeowners and business owners to use rain barrels, rain gardens, and porous pavement on their property.
 - g. Promote native plant and native ecosystem landscaping in development applications.
 - h. Encourage compact development that preserves riparian buffers, wetlands, steep slopes, wooded areas and other environmentally sensitive areas.
 - i. Direct the Borough’s remaining development potential away from riparian buffers, flood hazard areas, wetlands, and wetland buffers.
 - j. Evaluate the Land Use Ordinance for opportunities to reduce required impervious cover. Areas for consideration should include parking ratios, shared parking and/or pervious pavement.

Changes in Assumption, Policies and Objectives

7. Waste Reduction and Recycling as well as Challenges, Goals, Objectives & Strategies
 - a. Reduce construction and demolition waste in Somerdale through education and encouragement and/or requirements in the Land Use Ordinance.
 - b. Evaluate the Land Use Ordinance to ensure all new nonresidential and multi-family developments have adequate recycling space in order to facilitate recycling to the fullest extent possible.
 - c. Explore partnerships that can lead to increased Borough recycling rates of currently recycled materials and expand the list of recyclable materials.
 - d. Encourage composting of food and vegetative waste, wherever appropriate, to reduce waste from households, commercial uses and institutions. Encourage residents to use Borough composting for larger vegetative debris.

Municipalities have the authority to adopt laws and regulations to protect public health and welfare and to promote the general welfare in their communities outside of the planning and zoning powers. These types of environmental and health based regulations and ordinances pertain to all property in a municipality.

Green building, or sustainable design, is the practice of increasing the efficiency with which buildings and their sites use energy, water, and materials, and reducing building impacts on human health and the environment over the entire life cycle of the building. Green building concepts extend beyond the walls of buildings and can include site planning, community and land use planning issues as well. Buildings in the US account for nearly 39% of total energy use, 68% of total electricity consumption, 30% of landfill waste and 14% of total potable water consumption.

The built environment has a vast impact on the natural environment, human health, and the economy. By adopting green building strategies, we can maximize both economic and environmental performance. Green construction methods can be integrated into buildings at any stage, from design and construction, to renovation and deconstruction. However, the most significant benefits can be obtained if the design and construction team takes an integrated approach from the earliest stages of a building project.

To promote more sustainable building design, municipalities have implemented various incentives. Incentives such as height bonuses, floor/ area ratio (FAR) bonuses, reductions in landscaping requirements and the counting of green roof space as landscaping/open space in return for achieving levels of green building ratings. Other incentives include reductions in permit/ application fees, expedited permitting and approval, tax incentives and technical/ design assistance.

Additionally, the GBESE is one of the action items (10 points) that counts towards the Sustainable Jersey Certification Program. To achieve points toward Sustainable Jersey certification, the GBESE must, at a minimum, address the following mandatory core topics. Communities are encouraged to address additional areas as appropriate to their circumstances. A few optional topic areas are included below as examples. With each topic area, municipalities should include recommendations or action steps which show how they intend to address the issue.



- Climate Change/ Green House Gas Emissions– New Jersey has identified climate change as a public health risk and a threat to the public safety and welfare, and has set targets for greenhouse gas emission reductions as codified in the Global Warming Response Act of 2007. Similarly, the adopted Green Building and Environmental Sustainability Element (GBESE) shall consider local approaches to addressing climate change and reducing greenhouse gas emissions through a coordinated set of policy actions and activities.
- Renewable Energy– Use of renewable energy in homes, businesses, and in public facilities reduces the use of fossil fuels that contribute to global warming and impair air quality. The GBESE should identify ways to promote the use of renewable energy by retrofitting existing structures, as well as by incorporating renewables in new developments, redevelopment projects and public facilities.
- Green Building & Design– Green building and design strategies not only improve the environmental and energy performance of buildings, but also lessen the impact of those buildings on the surrounding environment. The GBESE should encourage property owners and developers to utilize green building and design practices in existing buildings and new construction, including energy efficiency, water conservation, use of recycled renewable materials, etc.
- Land Use & Mobility– Land use plays a critically important role in climate change because it directly affects emissions from the transportation sector. The GBESE should identify smart growth strategies that reduce vehicle miles traveled (VMT), or the amount each person drives, to address sustainability in the long term.
- Water– Water conservation and protection of water quality not only protect the environment, they save money in avoided supply and remediation costs. Efficiency in water supply and treatment can also provide efficiency in energy use. The GBESE should identify ways for the community to protect water quality and quantity and support innovative measures to achieve these goals.

Examples of other optional topics:

- Food Systems– Food system planning is the process of taking a comprehensive approach to the food supply chain, reducing energy and water consumption at each stage and supplying whole, healthy foods to consumers within a food-shed. The GBESE can consider sustainable food systems planning and policies.
- Waste Management– The generation, transport, and disposal of solid waste in New Jersey produces greenhouse gas emissions, including methane from the decomposition of waste in landfills and carbon dioxide from incineration. The GBESE can consider various strategies to encourage waste prevention, reduction and recycling.

8. Smart Growth & Transit Oriented/ Transit Adjacent Development

Smart growth is an urban planning and transportation practice which promotes growth in compact walkable urban centers to avoid sprawl. It also advocates for compact, mixed-use, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices. The community benefits of smart growth include lower infrastructure and utility costs, preservation of open space and environmentally-friendly areas, increased densities that support transit, and enhancement of the pedestrian environment. Through smart growth strategies, the Borough of Somerdale could reduce sprawl and encourage redevelopment of existing neighborhoods and established centers that promote an identifiable center-oriented corridor.

Traffic problems are directly linked to the way we use the land. According to NJ Future, for every 1 percent increase in developed land, traffic increases by 1.5 percent. We cannot build our way out of congestion until we link land use and transportation decisions. Smart growth provides a means of doing just that. A great deal of today's traffic results from our inability to accomplish even the simplest tasks without driving. In New Jersey's older towns and suburbs, traffic is much less of a problem than in newly built suburbs because these older communities offer walking, biking and transit choices for moving around. Such choices are a hallmark of smart growth.

The sprawling land use patterns we have pursued in recent decades drive up property taxes in both newer suburbs and in the cities and inner suburbs left behind in the race for ratables. While the first wave of development may seem to pay for itself, and even lower taxes in some cases, as people make their homes in the new sprawling developments the demand for services rise-and the new schools, libraries, roads and parks and their maintenance all must be funded from local property taxes. These new places drain people and jobs from the older towns and cities, where costs to maintain old infrastructure remains high and the service needs of the people who cannot afford the new suburbs rises. Smart growth can break this cycle by making better use of our existing infrastructure thereby reducing the amount of new roads, sewers and schools we need to build.

According to the 2000 Impact Assessment of the State Plan by Rutgers University, growth that followed the State Plan would save New Jersey at least \$2.3 billion that would otherwise be spent on new roadway construction and sewer and water upgrades. Growth according to the State Plan would help New Jersey's economy by reducing local government costs by some \$160 million every year.

There are a variety of different practices that the Borough should utilize in promoting Smart Growth Development. The following are a set of Smart Growth Principles from <http://smartgrowth.org/> :

I. Mix Land Uses

Smart growth supports mixed land uses as a critical component of achieving better places to live. By putting residential, commercial and recreational uses in close proximity to one another, alternatives to driving, such as walking or biking, become viable. Mixed land uses also provide a more diverse and sizable population and commercial base for supporting viable public transit. Mixed use can enhance the vitality and perceived security of an area

by increasing the number and activity of people on the street. It attracts pedestrians and helps revitalize community life by making streets, public spaces and pedestrian-oriented retail become places where people meet.

Mixed land uses can contribute economic benefits. For example, siting commercial areas close to residential areas can raise property values, helping increase local tax receipts. Meanwhile, businesses recognize the benefits associated with locations that attract more people, increasing economic activity.

In today's service economy, communities find that by mixing land uses, they make neighborhoods attractive to workers who are considering quality-of-life-criteria as well as salary to determine where they will settle. Smart growth provides a means and a basis for communities to alter existing planning structures that don't allow mixed land uses.

II. Take Advantage of Compact Building Design

Smart growth provides a means for communities to incorporate more-compact building design as an alternative to conventional, land-consumptive development. Compact building design suggests that communities be laid out in a way that preserves more open space, and that individual buildings make more efficient use of land and resources. For example, by encouraging buildings to grow vertically rather than horizontally, and by incorporating structured rather than surface parking, communities can reduce the footprint of new construction, and preserve more greenspace. This not only uses land efficiently, but it also protects more open land to absorb and filter rain water, reduce flooding and stormwater drainage needs, and lower the amount of pollution washing into our streams, rivers and lakes.

Compact building design is necessary to support wider transportation choices, and provides cost savings for localities. Communities seeking to encourage transit use to reduce air pollution and congestion recognize that minimum levels of density are required to make public transit networks viable. In addition, local governments find that, on a per-unit basis, it is cheaper to provide and maintain services like water, sewer, electricity, phone service and other utilities in more-compact neighborhoods than in dispersed communities.

Research has shown that well-designed, compact New Urbanist communities that include a variety of house sizes and types command a higher market value on a per-square-foot basis than do those in adjacent conventional suburban developments. Increasing numbers of developments are successfully integrating compact design into community building efforts. This is happening despite current zoning practices that discourage compact design – such as those that require minimum lot sizes, or prohibit multi-family or attached housing – and other barriers, such as negative perceptions of “higher density” development.

III. Create a Range of Housing Opportunities and Choices

Providing quality housing for people of all income levels is an integral component in any smart growth strategy. Housing is a critical part of the way communities grow, because it constitutes a significant share of new construction and development. More importantly, however, housing availability is also a key factor in determining households' access to

Changes in Assumption, Policies and Objectives

transportation, commuting patterns, access to services and education, and consumption of energy and other natural resources. By using smart growth approaches to create a wider range of housing choices, communities can mitigate the environmental costs of auto-dependent development, use their infrastructure resources more efficiently, ensure a better jobs-housing balance, and generate a strong foundation of support for neighborhood transit stops, commercial centers, and other services.

No single type of housing can serve the varied needs of today's diverse households. Smart growth represents an opportunity for local communities to increase housing choice not only by modifying land-use patterns on newly developed land, but also by increasing housing supply in existing neighborhoods and on land served by existing infrastructure. Integrating single- and multi-family structures in new housing developments can support a more diverse population and allow more equitable distribution of households of all income levels. The addition of units – through attached housing, accessory units, or conversion to multi-family dwellings – to existing neighborhoods creates opportunities for communities to slowly increase density without radically changing the landscape.

Adding housing can be an economic stimulus for commercial centers that are vibrant during the work day, but suffer from a lack of foot traffic and consumers during evenings or weekends. Most importantly, providing a range of housing choices allows all households to find their niche in a smart growth community – whether it is a garden apartment, a rowhouse, or a traditional single-family home.

IV. Create Walkable Neighborhoods

Walkable communities that are desirable places to live, work, learn, worship and play are a key component of smart growth. Their desirability comes from two factors. First, goods (such as housing, offices, and retail) and services (such as transportation, schools, libraries) are located within an easy and safe walk. Second, walkable communities make pedestrian activity possible, thus expanding transportation options, and creating a streetscape for a range of users – pedestrians, bicyclists, transit riders, and drivers. To foster walkability, communities must mix land uses and build compactly, as well as ensure safe and inviting pedestrian corridors.

Walkable communities are nothing new. Communities worldwide have created neighborhoods, communities, towns and cities based on pedestrian access. However, within the last fifty years public and private actions have often created obstacles to walkable communities. For example, regulation that prohibits mixed land uses results in longer trips and makes walking a less-viable option. This regulatory bias against mixed-use development is reinforced by private financing policies that consider mixed-use development riskier than single-use development. In addition, communities that are dispersed and largely auto-dependent employ street and development design practices that reduce pedestrian activity.

As the personal and societal benefits of pedestrian-friendly communities are realized – benefits that include lower transportation costs, greater social interaction, improved personal and environmental health, and expanded consumer choice – many are calling upon the public and private sectors to facilitate development of walkable places. Land use and community design play a pivotal role in encouraging pedestrian environments.

By building places with multiple destinations within close proximity, where the streets and sidewalks balance multiple forms of transportation, communities have the basic framework for walkability.

V. Foster Distinctive, Attractive Communities with a Strong Sense of Place

Smart growth encourages communities to craft a vision and set standards for development that respect community values of architectural beauty and distinctiveness, as well as expand choices in housing and transportation. Smart growth seeks to create interesting, unique communities that reflect the values and cultures of the people who reside there, and foster physical environments that support a more cohesive community fabric. Smart growth promotes development that uses natural and man-made boundaries and landmarks to define neighborhoods, towns, and regions. It encourages the construction and preservation of buildings that are assets to a community over time, not only because of the services provided within, but because of the unique contribution they make to the look and feel of a city.

Guided by a vision of how and where to grow, communities are able to identify and utilize opportunities to make new development conform to their standards of distinctiveness and beauty. Smart growth ensures that the value of infill and greenfield development is determined as much by its accessibility (by car or other means) as its physical orientation to, and relationship with, other buildings and open space. By creating high-quality communities with architectural and natural elements that reflect the interests of all residents, there is a greater likelihood that buildings (and therefore entire neighborhoods) will retain their economic vitality and value over time. This means that the infrastructure and natural resources used to create these areas will provide residents with a distinctive and beautiful place that they can call “home” for generations to come.

VI. Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas

“Open space” refers to natural areas that provide important community space, habitat for plants and animals, and recreational opportunities, as well as farm and ranch land (working lands), places of natural beauty, and critical environmental areas (e.g. wetlands). Open space preservation supports smart growth goals by bolstering local economies, preserving critical environmental areas, improving community quality of life, and guiding new growth into existing communities.

There is growing political will to save the “open spaces” that Americans treasure. In recent elections, voters have overwhelmingly approved ballot measures to fund open space protection efforts. Protection of open space provides many fiscal benefits, including increasing local property value (thereby increasing property tax bases), providing tourism dollars, and preventing local tax increases (due to the savings from avoided construction of new infrastructure). Supplies of high quality open space also ensure that prime farm and ranch lands are available, prevent flood damage, and contribute to clean drinking water.

Open space also provides significant environmental quality and health benefits. Open space protects animal and plant habitat, places of natural beauty, and working lands by removing development pressure and redirecting new growth to existing communities. Additionally, preservation of open space benefits the environment by combating air

Changes in Assumption, Policies and Objectives

pollution, attenuating noise, controlling wind, providing erosion control, and moderating temperatures. Open space also protects surface- and ground-water resources by filtering trash, debris, and chemical pollutants before they enter a water system.

VII. Strengthen and Direct Development Towards Existing Communities

Smart growth directs development towards existing communities already served by infrastructure, seeking to utilize the resources that existing neighborhoods offer, and conserve open space and irreplaceable natural resources on the urban fringe. Development in existing neighborhoods also represents an approach to growth that can be more cost-effective, and improves quality of life. By encouraging development in existing communities, communities benefit from a stronger tax base, closer proximity of a range of jobs and services, increased efficiency of already-developed land and infrastructure, reduced development pressure in edge areas (preserving more open space), and, in some cases, strengthening rural communities.

The ease of greenfield development remains an obstacle to encouraging more development in existing neighborhoods. Development on the fringe remains attractive to developers for its ease of access and construction, lower land costs, and potential for developers to assemble larger parcels. Zoning requirements in fringe areas are often less burdensome, as there are few existing building types that new construction must complement, and a relative absence of residents who may object to the inconvenience or disruption caused by new construction.

Nevertheless, developers and communities are recognizing the opportunities presented by infill development, as suggested not only by demographic shifts, but also a growing awareness of the fiscal, environmental, and social costs of urban fringe development. Journals that track real estate trends routinely cite the investment appeal of the “24-hour city” for empty nesters, young professionals, and others, and developers are beginning to respond.

VIII. Provide a Variety of Transportation Choices

Providing people with more choices in housing, shopping, communities, and transportation is a key aim of smart growth. Communities are seeking a wider range of transportation options in an effort to improve beleaguered current systems. Traffic congestion is worsening across the country. According to the Texas Transportation Institute, the amount of delay endured by the average commuter in 2010 was 34 hours, up from 14 hours in 1982.

In response, communities are beginning to implement new approaches to transportation planning, such as better coordinating land use and transportation; increasing the availability of high-quality transit service; creating redundancy, resiliency and connectivity within their road networks; and ensuring connectivity between pedestrian, bike, transit, and road facilities. In short, they are coupling a multi-modal approach to transportation with supportive development patterns, to create a variety of transportation options.

IX. Make Development Decisions Predictable, Fair and Cost Effective

For a community to be successful in implementing smart growth, the concept must be embraced by the private sector. Only private capital markets can supply the large amounts of money needed to meet the growing demand for smart growth developments. If investors, bankers, developers, builders and others do not earn a profit, few smart growth projects will be built. Fortunately, government can help make smart growth more profitable for private investors and developers. Since the development industry is highly regulated, the value of property and the desirability of a place are affected by government investment in infrastructure and government regulation. Governments that make the right infrastructure and regulatory decisions will support fair, predictable and cost-effective smart growth.

Despite regulatory and financial barriers, developers have created successful examples of smart growth. In many cases, doing so has required them to spend time and money getting variances to the codes. Expediting the approval process is especially helpful to developers, for whom “time is money.” The longer it takes to get approvals, the longer the developer’s capital remains tied up in land and not earning income. For smart growth to flourish, state and local governments need to make development decisions about smart growth more timely, cost-effective, and predictable for developers. By creating a supportive environment for development of innovative, pedestrian-oriented, mixed-use projects, government can provide smart growth leadership for the private sector.

X. Encourage Community and Stakeholder Collaboration in Development Decisions

Growth can create great places to live, work and play—if it responds to a community’s own sense of how and where it wants to grow. Communities have different needs and will emphasize some smart growth principles over others: those with robust economic growth may need to improve housing choices; others that have suffered from disinvestment may emphasize infill development; newer communities with separated uses may be looking for the sense of place provided by mixed-use town centers; and still others with poor air quality may seek relief by offering transportation choices. The common thread, however, is that the needs of every community and the programs to address them are best defined by the people who live and work there.

Citizen participation can be time-consuming, frustrating and expensive. On the other hand, encouraging community and stakeholder collaboration can lead to creative, speedy resolution of development issues and greater community understanding of the importance of good planning and investment. Smart Growth plans and policies developed without strong citizen involvement will lack staying power. Involving the community early and often in the planning process vastly improves public support for smart growth and often leads to innovative strategies that fit the unique needs of a particular community.

Key actions in encouraging collaboration include developing an inclusionary process and a common understanding among diverse stakeholders, using effective and appropriate communication techniques, and working with local authorities.

Transit Oriented Development and Transit Adjacent Development

The Borough of Somerdale has taken positive actions towards developing with Smart Growth principles in mind by working towards redeveloping the Cooper Towne Plaza and Gateway Village Project as well as marketing and redeveloping various other select properties in town. The Borough, moving forward at this point, is in the next stage of its growth. It has real potential to capitalize on two very beneficial PATCO Train Stations at Ashland and Lindenwold. Somerdale's unique location along the White Horse Pike and in between two major train stations has remained underutilized by restricting property owners and lots east of the White Horse Pike to mostly R-1 Single Family Residential zoning.

During this reexamination process, It has been brought up at various meetings that the area east of the White Horse Pike, due to its proximity to these train station assets, would be a good candidate for Transit Oriented Development (TOD) or Transit-Adjacent Development (TAD). TOD is generally defined as moderate- to high-density, mixed-use development within an easy walk of a transit station, usually five minutes or roughly one-quarter of a mile. TODs are designed with the pedestrian in mind and seek to facilitate transit use, while reducing dependence on automobiles. TAD's on the other hand are still in close proximity to train stations but slightly further out than TOD areas. They also have more on-site parking facilities and may have a lower density.

This low density residential development, as prescribed by the existing zoning, may not be the highest and best future use of these properties and restricts full use of the neighborhood and resident's private property. Zoning serves as an important tool for a municipality to implement the vision that they have for their community and Somerdale should revise their zoning in this section of the Borough to promote for better Smart Growth principles. The location of this neighborhood between the two PATCO stations presents officials with an opportunity to reassess the Borough's vision to include TOD/ TAD regulations that encourage transit-supportive uses within the area. Such transit-supportive uses tend to promote walkability and greater transit ridership, while providing opportunities for multi-purpose trips.

Transit Oriented Development and Transit Adjacent Development Opportunities in Borough of Somerdale

Potential for TOD & TAD Development through future rezoning

Legend



PATCO Station



1/2 Mile Buffer



1 Mile Buffer



2 Mile Buffer



Streams



CC Municipalities



Municipal Roads



County Roads



State & Federal Highways

0 0.075 0.15 0.3 0.45 0.6 0.75 Miles



9. Zoning

Planned Commercial- Residential Zoning District

The Borough has been proactively working to amend and update zoning changes as necessary over the past few decades. As development patterns, demographic forces and market forces alter the housing and business markets, Somerdale has been proactive in amending their zoning to meet current demands. The PC-RD (Planned Commercial- Residential Zoning District) is a good example of meeting market demands. The PC-RD zone was developed to provide the foundations for the creation of a planned commercial center including commercial, restaurant, service, and professional office uses as well as planned multi-family housing. The zone is intended to encourage innovative development and redevelopment to revitalize the area and create a variety of building types under a comprehensive plan with coordinated site design, shared parking, signage, lighting, landscaping and utilities, consistent with smart growth and sustainable development concepts. The standards for the PC-RD zone are found in Article XXVI of the Borough's Land Development Ordinances.

During the reexamination process, Borough staff indicated the potential for expanding the PC-RD zone to the entirety of the White Horse Pike. The 2012 "Final Recommendations for Land Use and Development Ordinance Amendments and the Proposed Expansion of the PC-RD Zoning District Standards" by Robert Scott Smith also makes this recommendation. Several benefits could be observed via such a rezoning including the inclusion of better site design, shared parking, signage, lighting, landscaping and utilities, consistent with smart growth and sustainable development concepts for the entirety of the White Horse Pike. This cohesion would simplify the zoning code for developers and also make Somerdale a more business-friendly environment. In the 2012 report, Mr. Smith indicated that although the lack of vacant developable land along the White Horse Pike limits the potential for having an immediate visual impact, it would foster a long term vision in which the cumulative effects of standards would become more evident over time.

The report also went on to state that, "The pedestrian element, although desirable in a lot of cases, is not a realistic element to encourage along the White Horse Pike, in my opinion. The current geometric limitations of shallow lot depth of most properties fronting the White Horse Pike in the Borough is a restricting factor that cannot be altered without major redevelopment and parcel acquisitions. "Though Mr. Smith is correct in his assessment of the pedestrian environment, it would be prudent to maintain and pursue a walkable environment along the White Horse Pike as to promote an aesthetically pleasing corridor and to market the corridor and its businesses as higher value products than other highway strip corridors. Maintaining a walkable and pedestrian friendly environment will also keep Somerdale from splitting along the White Horse Pike line and maintain a type of municipal cohesion.

As for the expansion of the PC-RD Zoning, the Borough could create a better development environment by extending the PC-RD Zone to the White Horse Pike Area. Though a zoning investigation needs to be performed first, the Borough should look into incorporating the PC-RD zone from Hilltop Avenue to the White Horse Pike on the western section of the pike and to all lots within 200 feet to 250 feet of the White Horse Pike on the east. This would allow developers to purchase adjoining lots next to the White Horse Pike and develop a standard product on these lots. Strict design standards should still be utilized along an expanded business/ PC-RD zone.

Upzoning and Transit Oriented Development

The Borough should investigate the possibility of upzoning the section of Somerdale east of the White Horse Pike. As mentioned in the previous section, this section of Somerdale lies within a mile radii of a PATCO Train Station. As a result, the Borough has the potential to capitalize on its location and free property owners and developers to redevelop land according to market demand. The Borough should especially look into upzoning the southeastern most section of the Borough which lies adjacent to the Lindenwold PATCO Train Station. This station presents Somerdale with a significant asset that it should utilize to its advantage. Upzoning this section of town could open up land to more dense development including but not limited to townhomes, duplex homes, garden style apartment buildings and low- to mid-rise structures.

A common concern with upzoning and TOD Development is the addition of school age children into the school district. A common myth of higher density development is that development overburdens public schools and other public services and requires more infrastructure support systems. The reality is that the nature of who lives in higher-density housing—fewer families with children—puts less demand on schools and other public services than low-density housing. Moreover, the compact nature of higher-density development requires less extensive infrastructure to support it. According to an Urban Land Institute report on Higher Density Development, it has been found that low-density suburbs and exurban areas generally attract families with more school-age children.

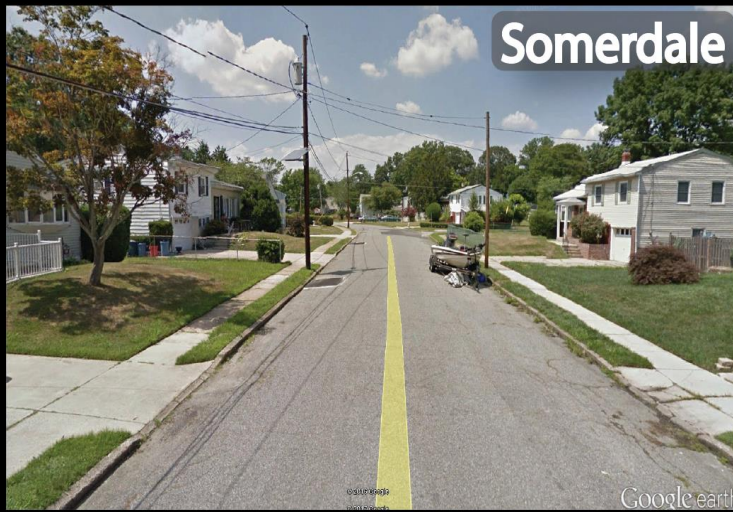
In fact, single-family developments average 64 children for every 100 units, compared with only 21 children for every 100 units of garden apartments and 19 children for every 100 units of mid- to high-rise apartments. The reason is that multifamily housing attracts predominantly childless couples, singles, and empty nesters. Putting this in perspective for Somerdale, according to municipal officials, the new 120-unit Gateway Village at the Cooper Towne Center only added 6-8 children into the school district.

Reevaluation of Residential Zoning Restrictions and Standards

The Borough of Somerdale should reevaluate the current **residential setback standards** for front yard setbacks and side yard setbacks. The current setback standards prevent the implementation of smart growth principles and impose an additional burden on property owners and developers. From the point of view of creating a good town aesthetic, massive setbacks are counter-productive. Not only do they often reduce density by imposing deeper and more spaced out lots, but they go against the feeling of enclosure that makes walking and even just being in a place comfortable. Front yard setbacks are seldom used for uses other than parking and aesthetics. Back yard setbacks are more useful and often allow for private gatherings. Front yard setbacks on the other hand are for the most part empty space, just a bit of lawn and vegetation, maybe one or two trees, and a driveway.

This imposes a necessity on property owners to maintain larger front lawns and more vegetation. Doing so goes against both environmental sustainability principles and smart growth principles. This affects the elderly population and less affluent residents harder due to the physical or monetary requirements of proper maintenance. Side yard setbacks also go against smart growth principles due to the fact that they reduce the amount of developable land and waste valuable open space that could be otherwise used for a more productive purpose. These large setbacks also prevent developers from building denser developments.

Differences in Zoning and Density



Minimum lot sizes should also be reevaluated as large minimums go against smart growth principles and sustainability principles. In a free society, the types of home sites available should be driven by consumer demand, not choices that are the function of an artificially-imposed limit by the government. Due to the nature of the home building industry, economies of scale play a critical factor in land development. Minimum lot sizes play a critical factor in determining home prices for an area. Though Somerdale has done a great job in meeting their COAH obligations, there is a great deal of room for creating a wider range of home types as well as home prices. Essentially smaller lot sizes mean lower costs for things like land clearance, streets and utility improvements and the ability to redevelop at a higher density which allows developers to use economies of scale to their benefit. That means lower costs for home buyers or a higher quality home product.

By its nature, smaller lot sizes also preserve more open space as less lot size space is needed on a per household basis. That means (on a Borough and regional basis) less impervious cover, more filtration for runoff before it enters streams, less encroachment on wetlands and other important environmental features and more preservation of forests in our region. Height restrictions also restrict property owners and developers to creating “cookie-cutter” homes of exact dimensions. The Borough should look into increasing the height restrictions for all Residential Zones but especially the R-2 and R-3 Zones. At this point in the Borough’s development, the Borough is fully built out and building at a higher density and building up could promote higher quality products in future redevelopment projects. Moving forward, Somerdale has the opportunity to undertake a zoning study to determine the adequate distance for front and rear yard setback as well as the minimum lot size for lots in the Borough. Below is a graphic depicting typical density in Ocean City, NJ and the Borough of Somerdale. With smaller setbacks, smaller required lot sizes and less height restrictions, property owners and developers have the ability to cater to demographic and market forces.

Sign Ordinance

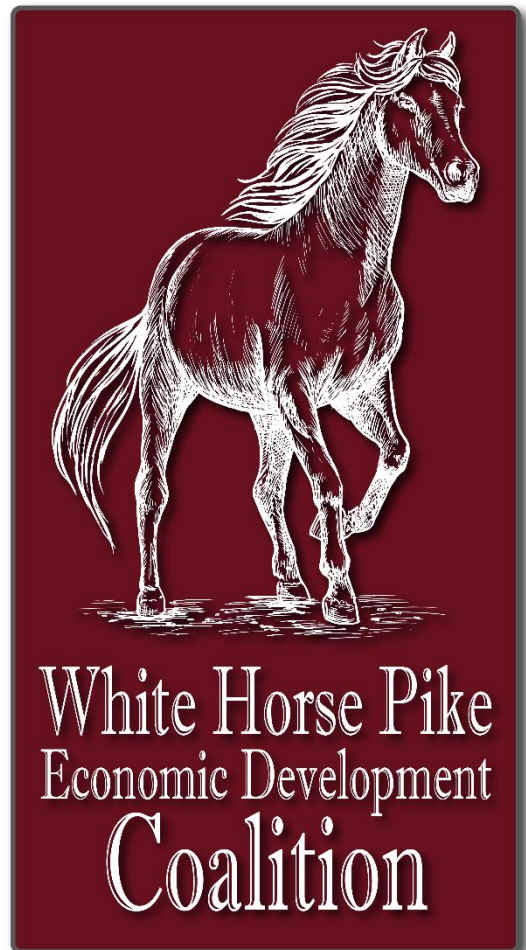
The Borough is currently working on updating their sign ordinance. Currently, the sign ordinance is a large document of some 30 pages and has contradictory standards. The mayor along with the Borough engineer, code enforcement officer and zoning officer are working to condense and simplify the current ordinance into a more business-friendly standard.

10. Economic Development of White Horse Pike

Economic Development along the White Horse Pike is a critical issue for every adjoining municipality along the White Horse Pike as well as for Camden County. The White Horse Pike corridor region includes 10 municipalities stretching from the western edge at the intersection of the White Horse Pike (US Route 30) and Clements Bridge Road (NJ Route 41) to the eastern most boundary of Lindenwold. Due to the fact that the WHP is a critical north-south highway for all neighborhoods in the vicinity of it, it would be appropriate to include Hi-Nella and Tavistock since those residents also rely on the WHP for a significant amount of travel. This 13.72-square mile region of 51,630 people represented 6.03% of the County's land mass and approximately 10% of its total population. The 19,878 jobs in the White Horse Pike region represent about 7.5% of those in Camden County. Overall the Delaware Valley Regional Planning Commission projects that these towns will see approximately 10.5% of these jobs disappear for a total loss of approximately 2,087 jobs if projections are correct.

The White Horse Pike was originally built in the early 1800s and remained very rural for most of its early history. The White Horse Turnpike Company was incorporated in January 27, 1854 with the authority to convert White Horse Road into a turnpike, running from Camden to Stratford and eventually to Atlantic City. By 1897, the White Horse Pike formed the longest line of improved roads in the state of New Jersey (60 miles). It formed the only through route in southern New Jersey during this era and linked Philadelphia and Camden to Atlantic City. The route opened the area to recreational pursuits for bicyclists and provided a viable mode, outside of water and rail transportation, to deliver farm produce to major markets. This route as a result has historical significance due to its relationship to the Good Roads Era is 1896 to 1917. After automobiles came into use, the White Horse Pike became the first paved concrete road in New Jersey in 1922, and was the "longest stretch of hard-surface roadway in the world. Today the WHP is categorized by its inherent suburban nature of big box stores, neighborhood shopping strips, antiquated or obsolete site layouts, numerous curb cuts and inconsistent design standards.

The White Horse Pike region is almost completely developed, with a large amount of commercial development on the corridor and a far greater amount of residential development in the enveloping neighborhoods. Undeveloped wetland areas and greenway park systems may be found along the region's headwaters of the South Branch of the Cooper River and the North Branch of Timber Creek. The corridor is served by I-295, which grants speedy access to Philadelphia and Trenton and points further north and south. The corridor is one of the oldest routes used to take people to Atlantic City and the Jersey Shore. The predominant land use in the region is single-family detached housing on 1/6 to 1/8 acre lots. Non-residential areas occur along the Pike and throughout several neighborhoods.



There is potential to recreate and reenergize the WHP Economic Development Coalition. Working together, all towns could move forward with a larger overall master plan for the corridor.

Changes in Assumption, Policies and Objectives

For the past several years eight of the ten municipalities in this region have been participating in the White Horse Pike Economic Development Coalition. The White Horse Pike Economic Development Coalition is a mutual association of communities along the US Route 30 corridor and old Beasley Point railroad network in the central section of Camden County. The Coalition consists of stakeholders, including mayors, business owners and professionals from the 8 cooperating municipalities and aims to encourage revitalization and redevelopment of vacant and underutilized properties along the White Horse Pike Corridor. The Coalition was created in 1997 with the purpose of creating a collaborative focused approach to corridor wide redevelopment. The problems that are evident along the White Horse Pike Corridor are similar to other aging commercial corridors and are reflected in all 8 of the municipalities participating in the Coalition.

In 2005, the Coalition commissioned a Market Feasibility Study with the assistance of funding provided by the Delaware Valley Regional Planning Commission. The study considered the conditions in the corridor and recommended strategies for marketing and revitalization. In 2006, the Camden County Improvement Authority prepared a White Horse Pike Plan, which is a regional smart growth strategy that focused in issue-based goals for the region: Economic Development, Housing, Circulation, Public Services and Facilities, Natural Resources, Cultural resources, Utilities, and Regional Cooperation.

The plan was the culmination of a seven-year intergovernmental regional planning effort and the end-product of a NJ Department Community Affairs grant agreement. Contributions to the body of the document consist of dozens of public meetings and scores of stakeholder interviews and thousands of hours of review and analysis of over 60 public and private sector planning documents, as well detailed land use development, population, employment and housing data analyses. The document was intended to be a reference for the County and municipal development, redevelopment and conservation strategies to enhance the quality of life within their communities.

Between these two reports, there are several key takeaways that are still very relevant today. The plan implementation agenda from the Camden County report is included in Appendix N. Even though some actions are no longer relevant and some have been completed, this list can still be used to take concrete steps in moving forward with coordinating efforts between municipalities. It can also serve as a template of goals and objectives in crafting a new multi-jurisdictional master plan for the White Horse Pike Corridor. Most of these municipalities currently have a Master Plan that is dozens of years old and also have reexamination reports that only meet the bare state requirement for reexamination. By crafting a long-range master plan for these towns, a coordinated effort could take place in which government services can be evaluated for redundancy or for benefits of economies of scale, a clear and consistent zoning code could be created to usher in a better business environment and various opportunities and constraints could be tackled with a coordinated effort.



Moving forward, all of the White Horse Pike towns should work to reestablish the coalition which should then work together to create a business district identity and coordinate future zoning, marketing, and redevelopment efforts.

11. Market Conditions

It is appropriate for the Borough to not only consider the major problems which were affecting the municipality at the time of the last Reexamination report, but to also reflect on the current up to date planning, demographic and market issues facing the community today. The following represents a list of the significant land use, development and planning concerns recognized during the time of the reexamination.

Residential Sector

Job gains and improving household confidence are expected to guide existing-home sales to a decade high in 2017, but supply and affordability headwinds and modest economic growth are holding back sales and threatening to keep the nation's low home-ownership rate subdued. The first quarter of 2017 saw the strongest quarterly home sales pace in a decade, according to the latest quarterly report from the National Association of Realtors.

The median home value in Camden County is \$168,000. Camden County home values have gone up 3.6% over the past year and Zillow predicts they will rise 2.0% within the next year. The median list price per square foot in Camden County is \$97, which is lower than the Philadelphia Metro average of \$129. The median price of homes currently listed in Camden County is \$149,900. The median rent price in Camden County is \$1,400, which is lower than the Philadelphia Metro median of \$1,500.

The median home value in Somerdale is \$148,500. Somerdale home values have gone up 2.2% over the past year and Zillow predicts they will rise 1.9% within the next year. The median list price per square foot in Somerdale is \$88, which is lower than the Philadelphia Metro average of \$129. The median price of homes currently listed in Somerdale is \$119,900.

JP Morgan estimates that Americans aged 25 to 35 will invest a trillion dollars over the next five years. In the coming three decades, baby boomers will also turn over some \$30 trillion in assets over to their millennial children and grandchildren according to an Accenture-CNBC study. As a result, this demographic group has a large amount of economic power. The Borough should take this into consideration when planning for its long-term visions and housing policy. According to a 2015 poll conducted by the National Association of Realtors and the Transportation Research and Education Center at Portland State University, millennials prefer walking over driving by a substantially wider margin than any other generation. The 2015 National Community and Transportation Preference Survey found that Millennials (ages 18-34) prefer walking as a mode of transportation by 12 percentage points over driving. Millennials are also shown to prefer living in attached housing, living within walking distance of shops and restaurants, and having a short commute, and they are the most likely age group to make use of public transportation.

As a whole, the survey found that Americans prefer walkable communities more so than they have in the past. Forty-eight percent of respondents reported that they would prefer to live in communities containing houses with small yards, but within easy walking distance of the community's amenities, as opposed to living in communities with houses that have large yards, but they have to drive to all amenities. And while 60 percent of adults surveyed live in detached, single-family homes, 25 percent of those respondents said they would rather live in an attached home and have greater walkability.

Changes in Assumption, Policies and Objectives

Retail

The retail market in the United States and around the world has seen unprecedented change over the past decade. Over the past decade, the shift has primarily been towards online shopping and services. Nearly every commercial industry has an online presence and offers either services or retail sales via an online outlet. As smartphones and tablets have become more affordable, powerful and user friendly, these devices have pushed online sales even further.

The retail industry is already undergoing cataclysmic changes, with about 3,300 store closings announced so far this year, according to Fung Global Retail & Technology, a retail think tank. It is expected that close to 8,500 stores will close nationwide by the end of 2017. Between 6 million to 7.5 million existing jobs are at risk of being replaced over the course of the next 10 years by some form of automation, according to a new May 2017 study by the financial services firm Cornerstone Capital Group. We have already begun to see these impacts throughout Camden County and especially in the nearby Voorhees Town Center Mall which has been significantly affected.

Still, it is unlikely that most consumers will soon do all of their shopping exclusively online via tablets in the comfort of their own home. Local retail stores will likely remain the first port of call for consumers in the foreseeable future. That being said, retailers would be well advised not to ignore the growing online shift and those who don't have an online presence or establish one will lose out on valuable customers and sales. Social media and online advertising have become essential to the vitality of local businesses.

Local stores will remain important for same day shopping and browsing. Physical retail locations also offer a much more personalized shopping experience. Now, because consumers can research products and read customer evaluations online, consumers often know as much if not more about a product than the sales staff in-store. Instead, local stores can benefit from the ability to combine the products with certain services and experiences. Local supermarkets that have locally sources ingredients, cooking classes, integrated show kitchens and counters where pasta is freshly prepared on site have created a niche where the customer can get an expanded service. Other examples could include shoe stores that offer on-site repairs, pharmacy stores with an urgent care built into the store, and coffee shops with book rentals, free Wi-Fi and small conference rooms. In addition to local stores and businesses, many large online retailers are now creating brick and mortar stores to serve as showrooms for their offsite fulfillment.

Throughout the State and Camden County, there are hundreds of distressed retail centers that are struggling to stay afloat. According to PlanSmart NJ, a non-profit planning and research organization, about one in five large retail buildings (25,000+ SF) is considered stranded (vacancy rate greater than 20%) in the State of New Jersey. This change in retail viability can be attributed to a variety of reasons. Moving forward, property owners and municipalities must find new ways to retrofit and redevelop these old retail centers who oftentimes have defunct, discredited and outdated land use models.

The Borough of Somerdale has many retail centers within its borders and several in the immediate area near the Borough. As vacancy rates, retail rents, retail conditions, demographic changes and infrastructure conditions all transcend municipal boundaries, the Borough should be working with surrounding municipalities to create a better business atmosphere and experience. Many of these traditional suburban centers are not currently equipped to meet new

market demands which can leave them underutilized and oversupplied-but if redeveloped or repurposed, they can become attractive places for new residents and businesses.

According to PlanSmart NJ, there are several key takeaways about the state of the office and retail markets of New Jersey and Camden County:

- New commercial and retail properties are still entering the market at a time of struggling physical sales which results in retail market oversaturation where new buildings cannibalize older buildings, oftentimes in the same town or commercial corridor.
- Stranded retail and office assets have profound economic, environmental, and social impacts on their local communities and their effects can be felt throughout New Jersey
- Stranded assets are failing across the State due to an outdated and inefficient land use model.
- Most stranded assets are found in suburban, auto-dependent locations.
- Suburban office and retail properties struggle as workers' demands shift to more walkable locations and employers follow the labor pools.
- The loss of retail and jobs hurts local and regional economics, negatively impacts surrounding business, and increases the fiscal burden on other properties.

The Borough of Somerdale is located within the Southern Camden County submarket, which has approximately 870 retail buildings with a total GLA of 5,494,584 SF. The End Year 2016 vacancy rate stands at about 8.8% for the South Camden County subregion which is higher than the overall Philadelphia market which has a vacancy rate of approximately 5.1% and the North Camden County vacancy rate of 5.4%.

Office

At this point, New Jersey's office market has been in crisis for many years. According to PlanSmart NJ, the State of New Jersey is in the "bottoming out" phase of the real estate cycle, meaning the market has essentially collapsed. The situation is compounded by new office space still entering the market and oversaturating the market even further. According to PlanSmart NJ, supply is well ahead of stagnant demand and vacancies have risen well above equilibrium while rents are falling behind replacement costs. Poor job growth in New Jersey does not justify the existing supply of office space, let alone new office construction. By some estimates, it will take 20 years to occupy all the vacant office space in the State.

Many of existing office centers face compounded burdens as they are oftentimes located in faraway auto-dominated suburban locations in which the buildings are oftentimes antiquated and have functionally obsolete layouts, floor plans, mechanical systems or amenities. Costs to remedy these conditions are often not financially feasible and may prevent a space from being occupied.

The outlook does however remain positive for Northern and Central New Jersey's urban and suburban transit hubs. This contrasts with the state's suburban vacancy rate, which has stubbornly remained around 30.0 percent.

Changes in Assumption, Policies and Objectives

Industrial Space

Industrial vacancy rates have reached all-time lows, and developers continue to break ground on new sites to meet swelling demand. At year-end 2016, 6.9 million square feet of industrial product was under construction and is slated for delivery in 2017. With supply remaining historically constrained, more developers are expected to break ground, which should establish 2017 as the best year for new construction this cycle. New Jersey's previous cyclical high water mark was reached in 2014 with 8.0 million square feet of new construction. It should be prudent for the Borough of Somerdale to continue to keep land zoned and open for light industrial uses.

VII. Master Plan and Development Regulation Recommendations

NJSA 40:55D-89d. The reexamination report shall state:

d. The specific changes recommended for the Master Plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.

General Commentary on the Master Plan and Reexamination Report

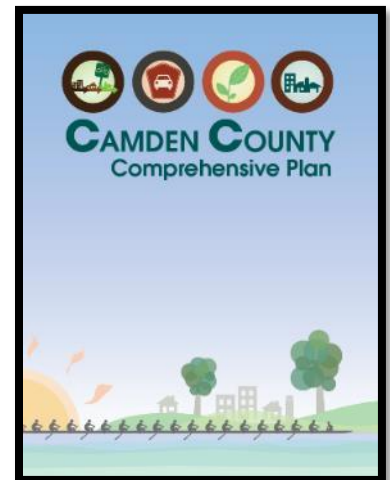
The current master plan is long outdated to meet the current needs and best planning practices of today. A new and thorough Master Plan is recommended for the Borough of Somerdale. The current plan is missing crucial elements addressing the various issues facing Somerdale. The plan lacks to address the current planning practices incorporating green stormwater infrastructure, sustainable building codes, climate and natural disaster resiliency, smart growth, changing consumer preferences, changing population demographics, and aging population, shifting employment base, shifting retail model and more.

To provide for a clear path for future development of the Borough, a comprehensive and thorough plan should be created that can guide the future growth of the municipality. Such a plan can also provide for a better organized business and development environment that shows developers and the business community the intended direction of the Borough.

Camden County Master Plan

When writing a new municipal master plan, the Borough's plan should seek consistency with the Camden County Comprehensive Plan dated from October 2014. The Camden County Comprehensive Plan was updated in 2014 and is intended to provide the County and its 37 municipalities with an actionable vision for the future and in order to keep pace with changes anticipated up to the year 2040.

The plan is intended to be used by municipalities as a tool for guidance in developing land use regulations and for evaluating consistency with municipal actions such as master plans, zoning ordinances and redevelopment plans. The three principles that guide and inform the goals and policy actions of the Land Use Element should be incorporated into any new Borough of Somerdale plans and initiatives.



Master Plan and Development Regulation Recommendations

Specific Master Plan & Development Recommendations

Given the extent to which there have been significant changes in assumptions, policies and objectives at the local, county, state and federal levels, the 2017 Master Plan Reexamination Report recommends a number of changes to the Borough's municipal master plan and development regulations. These are discussed in the following subsections. The following list of recommendations is discussed in the following subsections and has been derived from the careful scrutiny of the current Master Plan, land development ordinances and several meetings with Borough officials and the planning board. Interviews with various stakeholders throughout the town also helped create the following list of concerns and recommendations. Further discussion and refinement of these items is needed, before actions are presented to the governing body to be amended by ordinance.

General Commentary on the Master Plan and Reexamination Report

This reexamination report indicates that it is appropriate for the Borough to prepare an update to the current Master Plan including all necessary and optional elements addressing the various issues facing Somerdale. New Master Plan Elements should incorporate topics such as economic development and redevelopment, green stormwater infrastructure, sustainable building codes, climate and natural disaster resiliency, smart growth, changing consumer preferences, changing population demographics, and aging population, shifting employment base, shifting retail model and more.

To provide for a clear path for future development of Somerdale, a comprehensive and thorough Master Plan should be written that can guide the future growth of the municipality. Such a plan can also provide a long-term vision for a better organized business and development environment that shows developers and the business community the intended direction of the Borough.

1. Create a New & Comprehensive Master Plan and/ or Create New Elements

The municipality should consider contracting a NJ Licensed Professional Planner to write a new Master Plan. The Master Plan should include a resident inspired vision for the Borough, a land use element that includes a Land Use Plan and map, a Circulation and Transportation Element, a Fair Share Housing Plan Element, Parks and Recreation Plan Element, Economic Development Element, Utilities Element, Recycling Plan Element, Urban Design Element and a Green Building and Environmental Sustainability Element among others are also strongly recommended to accompany the Master Plan. If Somerdale does not at this time want to create a new Master Plan, they should at the very least create the following three elements:

A. Green Building and Environmental Sustainability Master Plan Element (GBESE)

Promoting further sustainability in the municipality can be undertaken through the creation of a Sustainability Plan or a Sustainability Element of the Master Plan or incrementally through various sustainability ordinances, programs, and projects. Somerdale should investigate sustainability ordinances and programs that would green the municipality and make it more climate resilient. In August 2008, the Municipal Land Use Law (MLUL) was amended to include the Green Building and Environmental Sustainability Element (GBESE) in the list of permitted Master Plan Elements. This Master Plan Element has the ability to establish goals,

guide Borough policy and integrate sustainability into the local discourse. **The Planning Board should prepare a Green Building and Environmental Sustainability Master Plan Element in furtherance of the above MLUL purposes to conserve natural resources and promote the maintenance of a clean and healthy natural and built environment.**

The Borough should also investigate adopting sustainability ordinances and programs that would “green” the municipality and make it more climate resilient. The Borough should take initiative to build only green certified buildings whenever undertaking new construction and promote such buildings to residents, businesses and developers. Green building certification programs include ones such as USGBC LEED, EPA Energy Star for Buildings Program, Passivhaus Standard, National Green Building Standard, Living Building Challenge, Net-Zero Energy Building, Green Globes system, and many more.

To promote more sustainable building design, Somerdale could implement various incentives. Incentives such as height bonuses, floor/ area ratio (FAR) bonuses, reductions in landscaping requirements and the counting of green roof space as landscaping/open space in return for achieving levels of green building ratings. Other incentives could include reductions in permit/ application fees, expedited permitting and approval and technical/ design assistance. **The Borough should amend its building and zoning codes to incentivize sustainable building standards and practices.**

B. Comprehensive Circulation Plan

The Borough currently does not have a Comprehensive Circulation Plan for vehicles, bicycles and pedestrians. Creating one would be beneficial to assess current conditions and could prove useful to future planning efforts. **A Comprehensive Circulation Plan should be prepared for Somerdale that addresses all circulation, construction and maintenance issues. Going further, a complete streets policy could be incorporated into the circulation plan with recommended potential projects.**

C. Conservation and Recreation Element

The Borough should consider adding a Conservation and Recreation Element to plan out the future needs of the Borough’s Recreational assets and to document potential areas for conservation. Though the Borough is nearly fully built out, there still remain parcels that could be ultimately preserved for open space and conservation.

2. Update Zoning Map & Zoning Throughout the Borough of Somerdale

The Planning Board should consider updating the zoning map to accurately reflect current zoning, overlay zones and new zoning changes based on this report. An existing zoning map was recreated as part of this Reexamination effort, examined by various officials in the Borough for accuracy and is attached in APPENDIX B. Somerdale may find that rezoning some sections of the Borough may be necessary as part of promoting a more conducive environment for residents and local businesses.

Master Plan and Development Regulation Recommendations

1. It is recommended that a vision plan be developed for the White Horse Pike corridor. Discussing zoning issues with officials from the Borough, it was revealed that it may be prudent to extend the PC-RD Overlay Zone across the entirety of the White Horse Pike frontage.

Following discussion and further analysis, Somerdale should adopt a new official zoning map by ordinance depicting any changes.

3. Cooper Creek Trail Extension

The Borough of Somerdale should continue the recent trail development actions and work to expand this trail into a larger network. It should especially connect to nearby “dead-end” street networks. On a larger scale, the Borough should explore the option of working towards a potential trail from the Lindenwold Transit Center to the Ashland Train Station. This would require cooperation between Somerdale, Voorhees and Camden County as the trail would need to cross Somerdale and White Horse Roads.

4. Complete Streets Policy

The Borough would benefit from enacting a Complete Streets Policy. Complete Streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets are promoted as offering improved safety, health, economic, and environmental outcomes. A complete streets policy also provides 10 points towards Sustainable Jersey certification with a further 10-15 points when the town actually implements a complete street policy on its street network.

In late 2009, the New Jersey Department of Transportation (NJDOT) instituted a Complete Streets Policy and in 2013, Camden County adopted its own Complete Streets Policy. In 2017 NJDOT released a Complete Streets Design Guide which is helpful when incorporating design choices into Complete Streets projects. Seven NJ Counties and 130 municipalities (as of July 2016) have adopted complete streets policies. Cherry Hill Township, Gloucester Township and the City of Camden have all adopted local Complete Streets Policies. As part of a Complete Streets Policy, all potential projects will be reviewed against several factors to determine whether Complete Streets design is appropriate, including the road’s function, traffic volume, adjacent land use, and environmental and cost considerations.

In Cherry Hill for example, projects in which Complete Streets improvements would exceed 15 percent of the total cost are exempt from the program. Different municipalities and counties throughout the State institute various fiscal and constraint thresholds. **It is recommended that the Borough, by ordinance, adopts a Complete Streets Policy. For assistance with implementing a complete streets policy, Somerdale should reach out to Cross County Connection which is a Transportation Management Association for Southern New Jersey. Please see Appendix G for the Camden County Resolution and NJDOT Complete Streets Checklist.**

5. Municipal Stormwater Management Plan

According to 40:55D-93, The [Stormwater Management] Plan shall be reexamined at each subsequent scheduled reexamination of the Master Plan pursuant thereto. **If not done so already, the Borough should update the plan to reflect any new changes in State Law or any new municipal ordinances. It should also update and keep current their Mitigation Plans which is provided for a proposed development that is granted a variance or exemption from the stormwater management design and performance standards.** Somerdale should take into account new updates to the Program and to the NJ Stormwater Best Management Practices Manual and make necessary adjustments to their Municipal Stormwater Management Plan. The Borough of Somerdale should then integrate the Storm Water Management Plan and Storm Water Control Ordinance into the new Master Plan and Reexamine the storm water plan and ordinance at each subsequent reexamination of the Master Plan.

NJAC 7:8 also required preparation and adoption of a stormwater management plan and ordinance by the Borough to address the need for promoting groundwater recharge and controlling the impacts of stormwater runoff from development. These rules have pushed Green Infrastructure forward in the State of New Jersey. Somerdale should go beyond the minimum requirements set by NJAC 7:8 and promote or even require certain green infrastructure practices to be utilized in new development. **Municipal owned property and roads should be analyzed for the potential to incrementally include green infrastructure projects and programs. Whenever milling and overlaying or reconstructing roadways, Green Infrastructure practices should be incorporated.**

6. Building Green Infrastructure throughout the Borough

The Borough should work towards incorporating Green Infrastructure, especially green stormwater Infrastructure into projects throughout the municipality. Whenever a road needs to be resurfaced or rebuilt, Somerdale has an opportunity to incorporate items such as right-of-way vegetated curb bioswales. A pilot project may prove wise to showcase the benefits, construction techniques and associated maintenance requirements.

7. Public Works

Somerdale's Department of Public Works is currently working on a master plan for the entire Public Works facility. There is a need for new and modernized offices, a need for a new salt dome and a need to expand and renovate their maintenance facility. A new warehouse for storage and for vehicles is also required. The Borough should work towards working with a consultant on providing a study and master plan of facilities for the Public Works Department and creating a timeline of facility improvements.

During this time Magnolia has also identified the need for a possible new public works facility or significant upgrades. Members of the Magnolia Planning Board brought up the idea of a potential merger with the Somerdale Public Works Department for a shared Public Works Facility that would service both municipalities. **As a result of both**

Master Plan and Development Regulation Recommendations

municipalities need to update and upgrade their facilities, it would be prudent to explore the financial benefits of a joint public works department that could service both municipalities. A committee between both towns, similar to the one set up in 1997 for the fire station merger, could be set up. Additional towns such as Hi-Nella, Stratford, Lawnside and Barrington may also be interested in such a proposal and should be invited to the table if interested. Benefits of such a merger would include better economies of scale during purchasing or construction as well as economies of scale for maintenance matters and the ability to retain more full time staff.

8. Hazard & Resiliency Planning

Somerdale should investigate the potential of increasing their resilience to disaster events. **The Borough should investigate the potential of creating a Resilience Zone, which is a special improvement district, precinct, neighborhood, or corridor designated in official planning documents for comprehensive risk management and upgrading so that it is more resilient in the face of a variety of predictable and unpredictable extremes.** Areas of frequent flooding, high susceptibility to catching fire, holding large quantities of chemicals, or areas with high densities of people and businesses should be priorities for resiliency actions and plans.

The Borough of Somerdale should make sure that their state approved Emergency Operations Plan (EOP) is continually up to date and should appoint the coordinator or other person to act as convener and driver of multi-stakeholder collaboration on climate resilience. It might be prudent to work with nearby municipalities to pool and leverage resources on a larger regional basis to support a convening officer which can then work with the Camden County Office of Emergency Management. The insurance industry could be an active supporter of such initiatives.

9. Upzoning and Transit Oriented Development

The Borough should investigate the possibility of upzoning the section of Somerdale east of the White Horse Pike. As mentioned previously, this section of Somerdale lies within a mile radii of two PATCO train stations. As a result, the Borough has the potential to capitalize on its location and free property owners and developers to redevelop land according to market demand. The Borough should especially look into upzoning the southeastern most section of the Borough which lies adjacent to the Lindenwold PATCO Train Station. This station presents Somerdale with a significant asset that it should utilize to its advantage. Upzoning this section of town could open up land to more dense development including but not limited to townhomes, duplex homes, garden style apartment buildings and low- to mid-rise structures.

10. Redevelop Former School Building

The Borough of Somerdale should investigate the possibility of preserving part of the former school house building and tearing down the rear portion for a smaller footprint while at the same time preserving the usability of the building. Providing active and passive recreational opportunities and incorporating a community use would be practical for this site considering that private market office, commercial and office development has been opposed by the community in the past. These recreational opportunities would foster community cohesion and interaction, provide a missing recreational element,

promote economic development and make sure municipal resources aren't wasted on a maintaining and policing a vacant parcel. Instead, resources should be put to work for the benefit of the community.

11. Bicycle and Multi-Use Trails Facilities

Somerdale should utilize the Map of Bicycling & Multi Use Trails (Recreated from the Camden County Bicycling & Multi-Use Trails Plan) as a guide to develop the Borough's own recommended bicycle and trails routes plan. Expanding this transportation option could enhance local mobility and accessibility throughout the Borough. This means increasing opportunities for people to walk and bicycle for short trips to school, parks, shopping destinations and train stations. Somerdale could take the following steps:

- i. Inventory and analyze existing data and existing conditions of Borough and community bicycle and pedestrian infrastructure, maps, programs and policies
- ii. Engage with stakeholder groups, individuals and the public to gather their input on where and what type of facilities are needed
- iii. Develop a list of recommendations for bicycle circulation, parking, infrastructure, as well as policies and programs.
- iv. Create a Bicycle, Multi-Use Trail and Pedestrian Infrastructure Plan that complements bike & pedestrian circulation.
- v. The Borough should use their recommended routes plan along with a complete streets policy to develop an infrastructure projects list and a recommended plan for potential phasing and implementation. Major projects could be incorporated into road resurfacing and reconstruction projects.
- vi. Bicycle friendly features should then be incorporated into the Zoning/ Development Code and the planning board as well as staff should work with developers to incorporate items such as bicycle parking into their lots.

12. Camden County Trail

The overall Camden County vision is to create a roughly 32-mile "spine" trail which would other local municipal trails to branch out from. Eventually, once completed, the trail will run from the Ben Franklin Bridge to the Atlantic County border which will allow a user to ride their bike to an extended Greater Philadelphia Bicycle network as well as potentially ride further down into South Jersey. Once this spine is created, each municipality along the way could link up new trails to this trail to create entire networks for residents. This "Spine" Trail would also allow Somerdale residents to have better access to more recreational assets including more trails as well as local and County Parks. The Borough should continue to work with the County on this initiative.

13. Somerdale Park School

This school has numerous problems that need to be addressed at some time in the near future. Currently the school has insufficient parking and an obsolete traffic circulation pattern. This creates a hazardous situation to both children and staff as well as parents who drop off their children in the morning. A new circulation pattern and additional parking would be highly beneficial to increasing safety in the Borough.

Master Plan and Development Regulation Recommendations

In addition to traffic circulation and parking, there are drainage issues around the school site. During major flooding events, water ponds and floods certain sections of the property and cannot drain quickly enough. During discussions, it was mentioned that additional space may be needed and that a new science lab to expand STEM education would be beneficial. In the near future, the roof may also need to be replaced. This could be replaced in kind with the existing asphalt roof or via a conversion to a sloped roof. If structurally feasible, the school could also look at incorporating a Green Roof on top of the existing structure. A green roof would have many compounded benefits.

14. Perform an Environmental Resource Inventory

An ERI is an unbiased report of integrated data. It provides baseline documentation for measuring and evaluating resource protection issues as well as providing a municipality with a tool to make more well informed land use, transportation and environmental decisions. The ERI is an objective index and description of features and their functions, rather than an interpretation or recommendation. Identifying significant environmental resources is the first step in their protection and preservation. **The Borough should perform an Environmental Resource Inventory in order to provide critical support to any future new or updated Open Space, Conservation, Sustainability or Recreational Elements of the Borough of Somerdale Master Plan.**

15. Undertake a Community Asset Mapping Project

The Borough of Somerdale should undertake a Community Asset Mapping project to provide for a collective inventory of the positive and valued aspects of the community, including places, institutions, programs and people. In doing so, the Borough can provide the foundation for assessing gaps and making improvements. Asset mapping is a proactive and interactive approach to learning about a community. Following the initial Community Asset Mapping, Somerdale should work to increase access to community, cultural and natural assets determined in the Community Asset Mapping Project and Environmental Resource Inventory.

16. Community Forestry Management Plan

Acknowledging the contributions shade trees and community forests make to a community and the necessity to nurture, protect and manage a vigorous community forest resource, the New Jersey Shade Tree and Community Forestry Assistance Act was passed on December 5, 1996. The act enables New Jersey's communities to reduce or eliminate their exposure to litigation due to the drastic decline and poor condition of the community tree resource. The basis for this protection is a properly planned local community forestry program implemented through a state approved management plan, as well as municipal or county participation in the state's Training Skills and Accreditation Program.

The Borough should prepare a Community Forestry Management Plan in order to minimize or eliminate their exposure to litigation as well as provide for the management and proper maintenance of its forests and shade trees. By developing and implementing a management plan for Somerdale's shade trees, the tree program can

become more proactive and efficient. A management plan can also lead to decreased tree maintenance and removal costs, shorter response time to citizen requests for work and a decrease in hazardous tree situations. Grants also exists to finance the preparation of the plan.

Following the completion and acceptance of the plan by the State as well as completing the required training skills and accreditation program, the Borough will then achieve “Approved Status” under the New Jersey Shade Tree and Community Forestry Assistance Act. Approved Status would allow Somerdale to be eligible for various grants such as the Community Stewardship Incentive Program (CSIP) Grant which would provide the Borough with funds to assist in the implementation of forestry goals and objectives as stated in the five-year community forestry management plan.

Approved Status provides maximum liability protection under the Act for Somerdale. It will ensure that if the courts seek information from the New Jersey Forestry Service concerning the status of your municipality or county under the Act that a case can be made that your municipality or county is participating in the program and in full compliance with the New Jersey Shade Tree and Community Forestry Assistance Act. **It is recommended that the Borough of Somerdale apply for approved status under the Community Forestry Assistance Act to help with obtaining grants relating to the Borough’s tree and forestry assets.**

17. Promoting Energy Efficiency throughout Borough of Somerdale

The Borough should promote energy efficiency whenever fiscally viable and into all new municipal owned buildings and assets. Officials should work to promote development of wind and solar facilities throughout Somerdale. The Borough should also utilize energy efficient vehicles when managing their vehicle fleet. As local vehicles do not travel a long distance and have the ability to be returned at the end of a workday, all electric or hybrid vehicles would be beneficial to the Borough and serve as an example to residents.

18. Future Demographic Changes

The Borough should remain cognizant of the changing demographic of our region as well as the nation overall. Differences in demographics will alter housing and retail preferences. The increasing senior and Millennial population have preferences towards walkable neighborhoods with a variety of assets nearby. Many of these principles are part of the “Smart Growth” umbrella. As such, the Borough of Somerdale should follow the principles discussed in the NJ Future’s 2014 report titled “Creating Places to Age: A Municipal Guide to Best Land-Use Practices.”

19. Historical Preservation

The Borough should work with local historical societies including the Camden County Historical Society to identify historically significant buildings and assets. The Borough should then proactively work to preserve, maintain and promote these historical assets to its residents and visitors.

Master Plan and Development Regulation Recommendations

20. Residential Site Improvement Standards (RSIS)

New Jersey's RSIS requirements (NJAC 5:21) have been updated since the last Master Plan Reexamination, most recently in 2009 and 2011. The Borough should take note of these changes and adjust their building code accordingly.

21. Camden County Public Works Cooperation

The Borough should encourage additional cooperative efforts with the Camden County Department of Public Works on future initiatives. The Borough should continue to strive for improved traffic circulation along the numerous County Highways within the Borough.

22. Parking Ratio

The Somerdale joint Planning & Zoning Board should analyze the current parking ratio to determine if the current amount of required parking is too high or low for commercial properties.

23. Fee and Escrow Provisions There are various fee and escrow provisions in the Zoning Ordinance, the Subdivision Ordinance and the Site Plan Ordinance. These should be reviewed to determine whether or not the fees and escrows are appropriate. Some of the fees may or may not need to be increased. **It is recommended that all fees are reviewed annually and that they are added to the ordinance.**

VIII. Redevelopment Plans Recommendations

NJSA 40:55D-89e. The reexamination report shall state:

- e. The recommendations of the Planning Board concerning the incorporation of Redevelopment Plans adopted pursuant to the "Local Redevelopment and Housing Law," P.L.1992, c.79 (C.40A:12A-1 et al.) into the land use plan element of the municipal Master Plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

Name	Block	Lot
Lion's Head Plaza MODUTEC REPORT: Resolution No. 2003-01	Block 1	Lot 3, 7, 17 & 18
Property Investigation	Block 111	Lot 3.01
	Block 102.01	Lots 9, 10, 10.01, 11, 12, 12.01 & 13
	Block 130.01	Lot 1
Former School Building Site MODUTEC REPORT: Resolution No. 2007-23	Block 127	Lot 1
Kennedy Boulevard Redevelopment Area	Block 1	Lots 8 & 15
	Block 1.01	Lots 1.01, 1.02, 1.03, 2 & 3
	Block 2	Lots 1, 1.02, 2, 3, 3.01, 4, 5, 6, 7, 8, 9, 10, 11 & 12
	Block 10	Lots 2, 3, 4, 5, 6, 7, 8, 9 & 10
	Block 23	Lots 1, 1.01, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13 & 14
	Block 24	Lots 1, 1.01, 1.02, 1.03, 1.04, 1.05, 1.07 & 1.08
	Block 26	1
	Block 27	1
	Block 28	1
	Block 29	1
	Block 30	1
	Block 31	1, 2, 2.01 & 3
	Block 33	1
	Block 34	1
	Block 35	1
	Block 36	1 & 1.01
	Block 37	1
	Block 41	1, 1.01, 1.02 & 1.03
	Block 42	1
	Block 43	1 & 1.01
	Block 44	1, 1.01 & 1.02
	Block 49	1 & 2
	Block 52	1 & 7

Redevelopment Plans Recommendations

Lion's Head Plaza

The Redevelopment Area commonly known as the Lion's Head Plaza redevelopment has undergone major redevelopment in recent years. The former Lion's Head Plaza was renamed the Cooper Towne Center which now serves as the primary public gathering space for the Borough and includes a mix of uses including new retail and residential areas. The retail spaces range in size from 2,000 SF shops to a new 220,000 SF Walmart and have facades designed as smaller main street shops. Two new residential neighborhoods named Gateway Village have been added, with 122 affordable and 30 market-rate units, to serve as connectors between the Center and the adjacent neighborhoods and streets. This redevelopment has been a major success story for the Borough and has been a catalyst for change in the Borough.

Kennedy Boulevard Area Redevelopment and Revitalization Plan

On September 10th, 2009, the Borough of Somerdale adopted the Kennedy Boulevard Area Redevelopment and Revitalization Plan. The context of this study and plan started with the defunct Lion's Head Plaza. Lions Head Plaza was a large shopping center that was constructed in the 1980s and was 70 percent vacant by 2005. The site, which had been identified as a greyfield straddles the boundary between Somerdale Borough and Magnolia Borough, though the majority of the site is within Somerdale. In cooperation with the Lion's Head Plaza property owner, and neighboring Magnolia Borough, Somerdale officials established the Lion's Head site as a redevelopment area and adopted a new zoning scheme for the site, known as the Planned Commercial Residential District (PC-RD). The intent of the district was to allow big-box retail as well as specialty retail, professional offices, age-restricted residential units, and affordable housing while also creating a "town center" atmosphere with the creation of public spaces and special design.

The PC-RD ordinance set forth requirements for site design, landscaping, circulation, lighting, architecture, and signage. As the plans for the revitalization and redevelopment of the Lion's Head Plaza were coming together, the Borough recognized that the project could be a catalyst for further land use changes in the area and determined that the Borough should take a proactive approach to guiding the evolution of land use and design. Since the adoption of the 2009 Redevelopment and Revitalization Plan, the Borough has been making positive strides toward redeveloping and revitalizing this section of town. The Borough has worked towards improving the streetscape, removing and redeveloping obsolete parcels and working towards creating a vibrant neighborhood.

It is in the Borough's best interest to continue working towards redeveloping and revitalizing this section of the Borough as well as to work with local businesses on creating a vibrant and healthy business community in conjunction with the nearby residents.

2009 Property Investigation for Potential Redevelopment

In 2009, Modutec performed a property investigation report of several lots for potential development. They identified multiple sites as candidates for redevelopment and include the following:

The site known as Block 111; Lot 3.01 is a gravel parking lot used for excess vehicle capacity. The lot serves the Little Spot Tavern located across Harvard Avenue. The lot has no landscaping amenities stormwater management facilities or improvements and contained an overflowing 3 cubic yard commercial trash at the time of the Modutec Inspection. There is no delineated driveway along Harvard Avenue for the parking lot. Access to the lot is random along the depressed gutterline of the road. Access to the White Horse Pike is through a drive opening within 20 feet of the opening for Harvard Drive.

They identified this lot as meeting the criteria found at NJS 40A:12A-5d specifically because of its excessive land coverage, lack of stormwater management, obsolescent design, including a driveway access to the White Horse Pike in close proximity to Harvard Avenue that creates potential traffic conflicts with turning movements for Harvard Avenue. Finally, there is the inherent risk of having patrons of the Tavern cross Harvard Avenue in the late evening to return to their vehicles. It is noted that there is no pedestrian signage and no delineated pedestrian crosswalks on Harvard Avenue.

The site known as Block 102.01; Lots 9, 10, 10.01, 11, 12, 12.01 & 13 is currently an older building with a very small setback from the White Horse Pike. They mentioned that the combination of physical characteristics, including limited unit frontages (16 feet in most cases) and the lack of off-street parking for would-be patrons and even tenants, resoundingly illustrates the terms of obsolescence, fault arrangement and obsolete layout found at NJS 40A:12A-5d. During their investigation, the Public Works Director, Donald Wharton, confirmed that the sanitary sewer infrastructure in the alley behind these lots is in dire need of replacement due to root intrusion, infiltration and misalignment. The sewer system was approximately 73 years old (81 years as of now) and Mr. Wharton stressed that potential redevelopment of all or part of the block would mandate replacement of the sewer main serving all properties in the block.

The site known as Block 130.01; Lot 1 is in the redevelopment process of becoming a Dunkin Donuts fast food/ coffee establishment. This site should be removed from any future Redevelopment studies or plans.

All sites but Lot 1; Block 130.01 should remain redevelopment areas and the Borough should work towards redevelopment of those properties in the future.

Redevelopment Plans Recommendations

Former School Building Site: Block 127, Lot 1 Redevelopment Area

During interviews with public officials, it was mentioned that there has been little success with redeveloping the former school building site with new commercial, office or residential space due to various opposition from community groups and neighboring organizations. During these conversations, it was mentioned that this site could become a valuable site for active recreational purposes.

The current property is, like many abandoned and vacant properties, remains aesthetically unpleasing to the community and uses up Borough resources while offering no ratable in return. According to the United States Department of Housing and Urban Development (HUD), vacant and abandoned properties have negative spillover effects that impact neighboring properties and, when concentrated, entire communities and even towns. Research links foreclosed, vacant, and abandoned properties with reduced property values, increased crime, increased risk to public health and welfare, and increased costs for municipal governments. According to HUD, studies attempting to quantify the effect of foreclosures on surrounding property values find that foreclosures depressed the sales prices of nearby homes by as little as 0.9 percent to as much as 8.7 percent. Research also suggests that the longer a property remains vacant, the greater its impact on surrounding property values and the larger the radius of this effect.

Vacant and abandoned properties are widely considered to attract crime because of the “broken windows theory” — that one sign of abandonment or disorder (a broken window) will encourage further disorder. Increased vacancies leave fewer neighbors to monitor and combat criminal activity. Boarded doors, unkempt lawns, and broken windows can signal an unsupervised safe haven for criminal activity or a target for theft of, for example, copper and appliances. Local governments bear the cost of maintaining, administering, and demolishing vacant and abandoned properties as well as servicing them with police and fire protection and public infrastructure. One study calculated that the city of Philadelphia spends more than \$20 million annually to maintain some 40,000 vacant properties, which cost a conservatively estimated \$5 million per year in lost tax revenue to the city and school district.

Because of the mounting costs and difficulties that vacant and abandoned properties place on communities, government, nonprofit, and community stakeholders are taking measures to stem and even reverse the tide of foreclosure, vacancy, and abandonment. In some cases, the scale of



the problem — and the data infrastructure, code enforcement staff, expertise, and funding required to tackle it — overwhelms the capacity of local governments to manage it.

It would be in the best interest of the Borough of Somerdale to redevelop and “turn-over” as many vacant properties as it can, but the vacant former school building which is owned by the Borough should be one of the top priorities for the municipality. This property has been vacant for ____ years and has failed to see redevelopment via private market efforts. At this time, it would be prudent for the municipality to work on redeveloping the property into a productive use. Seeing how over the past ____ years, there has been resistance to redeveloping the site with a dense use, passive or active recreation would be another good option.

Discussing this option with Borough staff, it was mentioned that both the municipality and residents would like to see part of the building preserved if economically feasible. It is our recommendation that if possible, part of the building be preserved and the rear section be demolished to reduce the buildings footprint and increase the available green space. As for future use, this space could be very valuable to the community and provide missing services.

Some services could include a farmers market, organization and community meeting space with conference rooms, a section of the building could be used to showcase local history or local achievements, it could be used for special and community events, it could house some books and literature and act as a small de facto library, could offer computers and internet services for residents that cannot afford or do not have them, could offer classes by local organizations, could host a “Repair Café” where residents learn/ teach repair skills to each other.

Outside the building, there could be active recreation resources built into the site including popular games and activities. Working with the Fire Marshal, barbeque pits and fire pits, along with picnic tables could offer residents a place to host family reunions, parties and events. This would be beneficial for many who do live in smaller residences or cannot have open fires in their backyards. As part of an economic development profile, local businesses, restaurants and breweries could sponsor larger events or bring in food carts/ food trucks. A small stage for acts could also be incorporated into the overall design.

These are just some of the many recreational options the Borough could act upon in planning a reuse for this abandoned and vacant parcel. These options would foster community cohesion and interaction, provide a missing recreational element, promote economic development and make sure municipal resources aren’t wasted on a maintaining and policing a vacant parcel. Instead, resources should be put to work for the benefit of the community.

Redevelopment Plans Recommendations

New White Horse Pike Redevelopment/ Rehabilitation Area

The following Blocks and Lots appear to be have undergone increased deterioration since the last reexamination and many of these stagnant sites have become underperforming, underutilized or unproductive. Some lots are known to have environmental contamination or show a persistent pattern of property tax delinquencies and without this public effort are not likely to be corrected or ameliorated by private effort. Since the beginning of this reexamination, the Borough has moved forward with a resolution authorizing the planning board to undertake an investigation to determined whether certain areas are in need of redevelopment. The following list includes lots included in the Borough resolution and additional lots that may also be added to the investigation:

Block	Lots
10	2, 3, 4, 5, 6 & 7
55	8, 9, 9.01, 9.02, 10, 11.01
62	2, 3, 3.01, 4
63	3, 4, 6
112	1, 2, 2.01
113	1.01 & 2
114	1
117	1, 2
118	4, 5, 6, 7, 8, 9, 13, 13.01, 13.02, 14.01

*See map on page 115 for more detail

The New Jersey State Legislature has, by various enactments, empowered and assisted local governments in their efforts to arrest and reverse these conditions and to promote the advancement of community interests through programs of redevelopment, rehabilitation and incentives to the expansion and improvement of commercial, industrial, residential and civic facilities.

A delineated area may be determined to be in need of redevelopment if, after investigation, notice and hearing as provided in section 6 of P.L. 1992, c.79 (C.40A:12A-6), the governing body of the municipality by resolution concludes that within the delineated area any of the following conditions is found:

- a) The generality of buildings are substandard, unsafe, unsanitary, dilapidated, or obsolescent, or possess any of such characteristics, or are so lacking in light, air, or space, as to be conducive to unwholesome living or working conditions.
- b) The discontinuance of the use of buildings previously used for commercial, manufacturing, or industrial purposes; the abandonment of such buildings; or the same being allowed to fall into so great a state of disrepair as to be untenable.
- c) Land that is owned by the municipality, the county, a local housing authority, redevelopment agency or redevelopment entity, or unimproved vacant land that has remained so for a period of ten years prior to adoption of the resolution, and that by reason of its location, remoteness, lack of means of access to developed sections or portions of the municipality, or topography, or nature of the soil, is not likely to be developed through the instrumentality of private capital.

- d) Areas with buildings or improvements which, by reason of dilapidation, obsolescence, overcrowding, faulty arrangement or design, lack of ventilation, light and sanitary facilities, excessive land coverage, deleterious land use or obsolete layout, or any combination of these or other factors, are detrimental to the safety, health, morals, or welfare of the community.
- e) A growing lack or total lack of proper utilization of areas caused by the condition of the title, diverse ownership of the real property therein or other conditions, resulting in a stagnant or not fully productive condition of land potentially useful and valuable for contributing to and serving the public health, safety and welfare.
- f) Areas, in excess of five contiguous acres, whereon buildings or improvements have been destroyed, consumed by fire, demolished or altered by the action of storm, fire, cyclone, tornado, earthquake or other casualty in such a way that the aggregate assessed value of the area has been materially depreciated.

Example of underutilized, unproductive or vacant properties along the WHP.



Potential WHP Redevelopment Area



Redevelopment Planning in New Jersey

New Jersey's Local Redevelopment and Housing Law (LRHL) empowers municipalities and local governments with the ability to initiate a process that transforms underutilized or poorly designed properties into healthier, more vibrant, or economically productive land areas.

Moving Forward in the Redevelopment Process

The LRHL requires municipalities to perform a number of steps before it may exercise its redevelopment powers. This process is meant, in part, to ensure that the Governing Body acts in concert with the goals and objectives of the municipality's Master Plan. Recognizing the Planning Board's role as the steward of the Master Plan, these steps require the Planning Board to make recommendations to the Governing Body. The required steps are as follows:

1. The Governing Body must adopt a resolution directing the Planning Board to perform a preliminary investigation to determine whether a specified area is in need of redevelopment according to criteria set forth in the LRHL (N.J.S.A. 40A:12A-5).
2. The Planning Board must prepare and make available a map delineating the boundaries of the proposed redevelopment area, specifying the parcels to be included in it. This map should be accompanied by a statement setting forth the basis of the investigation.
3. The Planning Board must then conduct the investigation and produce a report presenting the findings. The Board must also hold a duly noticed hearing to present the results of the investigation and to allow interested parties to give testimony. The Planning Board then may adopt a resolution recommending a course of action to the Governing Body.
4. The Governing Body may act on this recommendation by adopting a resolution designating the area an "Area in Need of Redevelopment." The Governing Body must make the final determination as to the Redevelopment Area boundaries, although these are typically accepted as recommended by the Planning Board.
5. A Redevelopment Plan must be prepared establishing the goals, objectives, and specific actions to be taken with regard to the "Area in Need of Redevelopment."
6. The Governing Body may then act on the Plan by passing an ordinance adopting the Plan as an amendment to the municipality's Zoning Ordinance.

Only after completion of this process the municipality is able to exercise the powers granted to it under the State Redevelopment Statute. The process has been used successfully across the state to creatively improve properties meeting statutory redevelopment criteria. Projects approved for redevelopment are often eligible for certain types of technical and financial assistance from the State.



APPENDIX

APPENDIX A:

AERIAL MAP OF SOMERDALE BOROUGH

APPENDIX B:

MAP OF LAND USE THROUGHOUT BOROUGH OF SOMERDALE

APPENDIX C:

MAP OF EXISTING ZONING IN BOROUGH OF SOMERDALE

APPENDIX D:

TOPOGRAPHICAL MAP OF SOMERDALE BOROUGH

APPENDIX E:

MAP OF BICYCLING & MULTI-USE TRAILS IN SOMERDALE

APPENDIX F:

MUNICIPAL ASSETS AND CONSTRAINTS MAP

APPENDIX G:

CAMDEN COUNTY COMPREHENSIVE PLAN

APPENDIX H:

CAMDEN COUNTY COMPLETE STREETS POLICY & NJDOT GUIDE TO
COMPLETE STREETS POLICY DEVELOPMENT

APPENDIX I:

BOROUGH RESOLUTION & SUSTAINABLE JERSEY ACTIONS LIST

APPENDIX J:

FUNDING SOURCES AND OPPORTUNITIES

APPENDIX K:

MODEL BEEKEEPING ORDINANCE

APPENDIX L:

COMMUNITY FORESTRY MANAGEMENT PLAN BROCHURE

APPENDIX M:

MUNICIPAL SMART GROWTH SCORECARD

APPENDIX N:

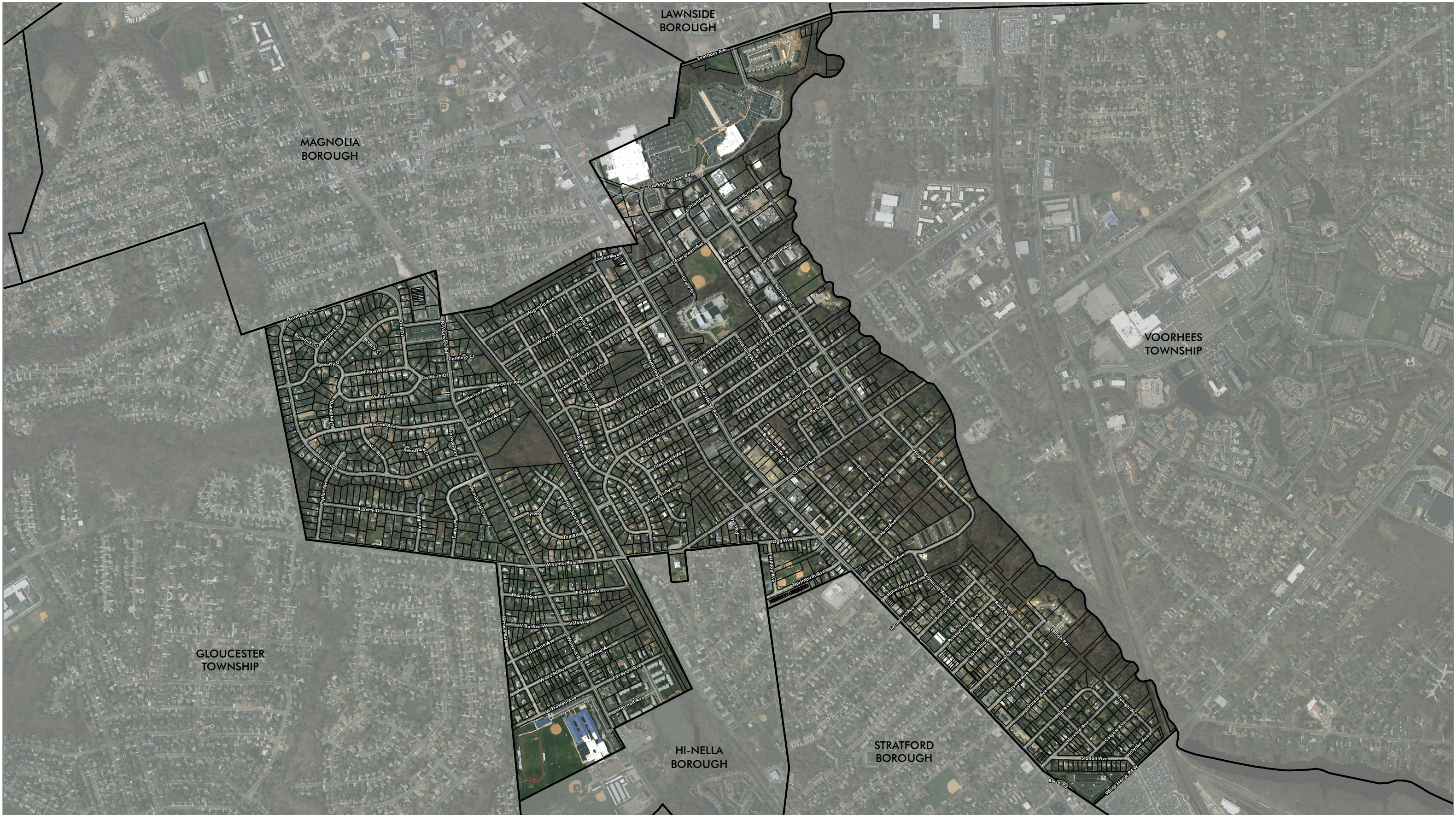
CCIA PLAN IMPLEMENTATION AGENDA FROM 2006 WHITE HORSE PIKE
STUDY



APPENDIX A

AERIAL MAPS OF BOROUGH OF SOMERDALE

The following appendix consists of aerial maps of Borough of Somerdale.



Aerial Map

Borough of Somerdale
Camden County, NJ

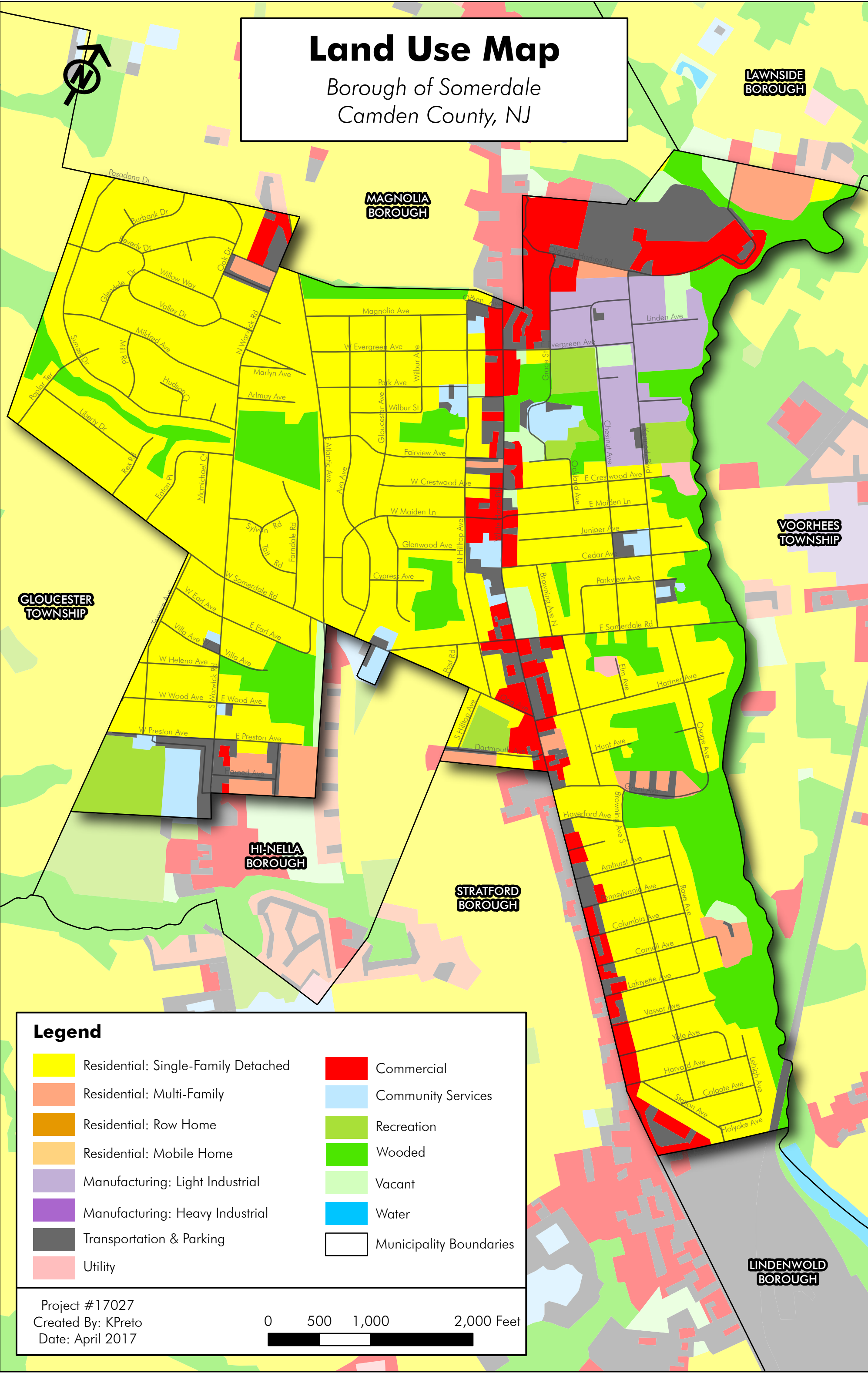




APPENDIX B

BOROUGH OF SOMERDALE LAND USE MAP

The following appendix consists of a map depicting the existing land use in the
Borough of Somerdale.





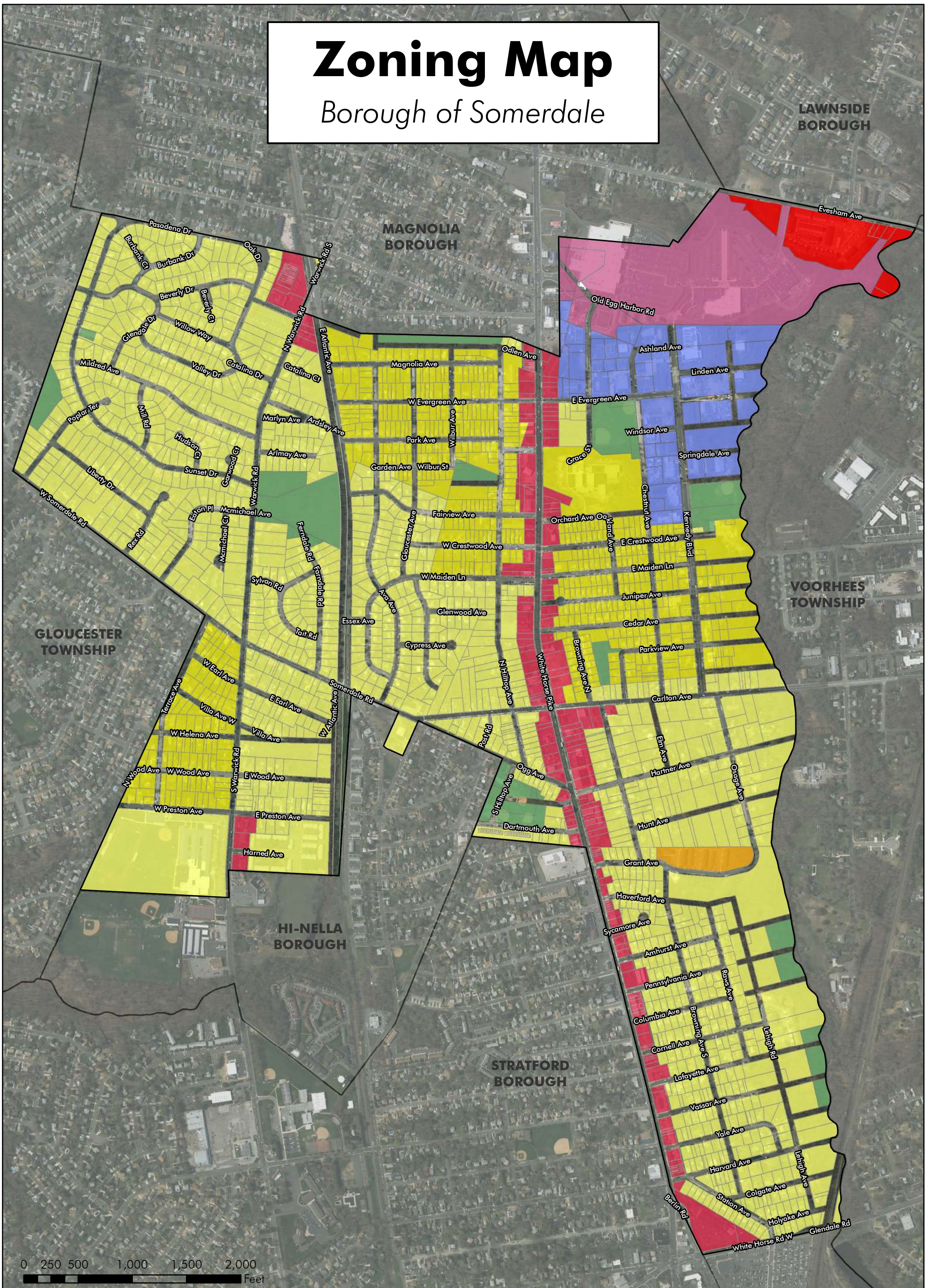
APPENDIX C

MAP OF EXISTING ZONING IN BOROUGH OF SOMERDALE

The following appendix consists of zoning maps that were recreated in color from the existing zoning maps for Somerdale.

Zoning Map

Borough of Somerdale



Legend

R-1	B-1	Recreation
R-2	B-2	Planned Commercial - Residential District
R-3	Industrial	Municipality Boundaries

Project #17052
Created By: KPreto
Date: June 2017



APPENDIX D

TOPOGRAPHIC MAP OF THE BOROUGH OF SOMERDALE

The following appendix consists of a map showing the existing topographic conditions throughout the Borough of Somerdale.

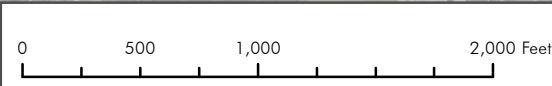
Topographic Map

Borough of Somerdale
Camden County, NJ

Legend

Elevation

- 35 - 40
- 40.000001 - 45
- 45.000001 - 50
- 50.000001 - 55
- 55.000001 - 60
- 60.000001 - 65
- 65.000001 - 70
- 70.000001 - 75
- 75.000001 - 80
- 80.000001 - 85
- 85.000001 - 90
- 90.000001 - 95
- 95.000001 - 100
- Streams
- Lakes
- Municipal Boundaries



Project #17022
Created By: KPreto
Date: March 2017



APPENDIX E

MAP OF BICYCLING & MULTI-USE TRAILS IN THE BOROUGH OF SOMERDALE

The following appendix consists of a map recreated from the Camden County
Bicycling & Multi-Use Plan that depict the existing conditions and facilities as
well as recommended potential facilities.



Bicycling & Multi-Use Trails

Borough of Somerdale
Camden County, NJ

LAWNSIDE BOROUGH

MAGNOLIA BOROUGH

GLOUCESTER TOWNSHIP

VOORHEES TOWNSHIP

HI-NELLA BOROUGH

STRATFORD BOROUGH



Network Recommendations

Off-Road Multi-Use Facilities:

- Other Trail - Existing
- Other Trail - To Be Considered
- Circuit Trail - To Be Considered
- County-Identified Trail - To Be Considered

On-Road Facilities

- Bicycle Lane - Existing
- Bike Facilities - To Be Considered
- Recommended Route - To Be Considered



camden county
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0 250 500 1,000 Feet

Project #17023
Created By: KPreto
Date: March 2017
Source: DVRPC / Camden County Parks



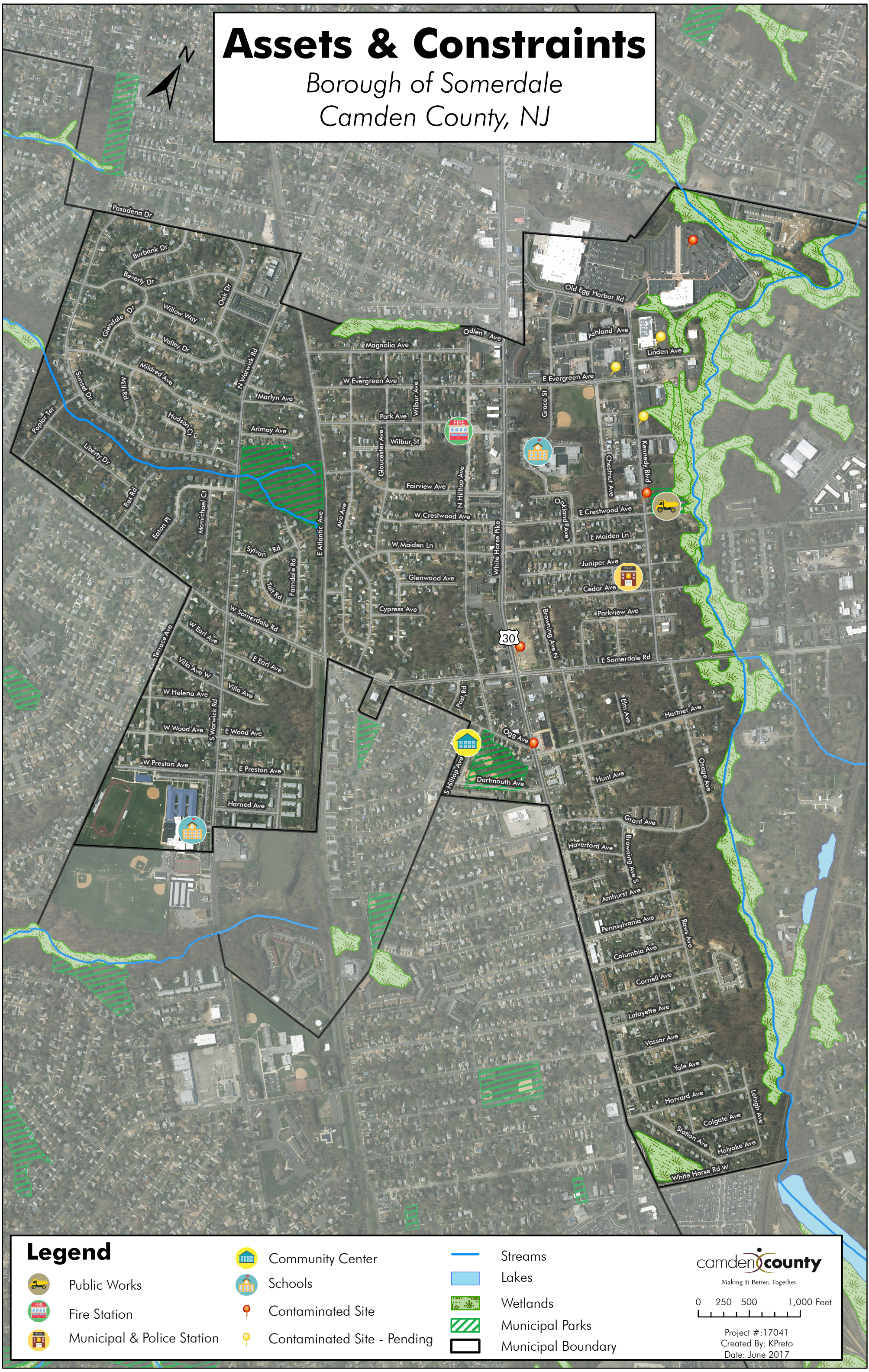
APPENDIX F

BOROUGH OF SOMERDALE MUNICIPAL ASSETS AND CONSTRAINTS

The following appendix consists of a map depicting the existing municipal assets and constraints in the Borough of Somerdale.

Assets & Constraints

Borough of Somerdale
Camden County, NJ



Legend

- Public Works
- Fire Station
- Municipal & Police Station
- Community Center
- Schools
- Contaminated Site
- Contaminated Site - Pending
- Streams
- Lakes
- Wetlands
- Municipal Parks
- Municipal Boundary

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0 250 500 1,000 Feet

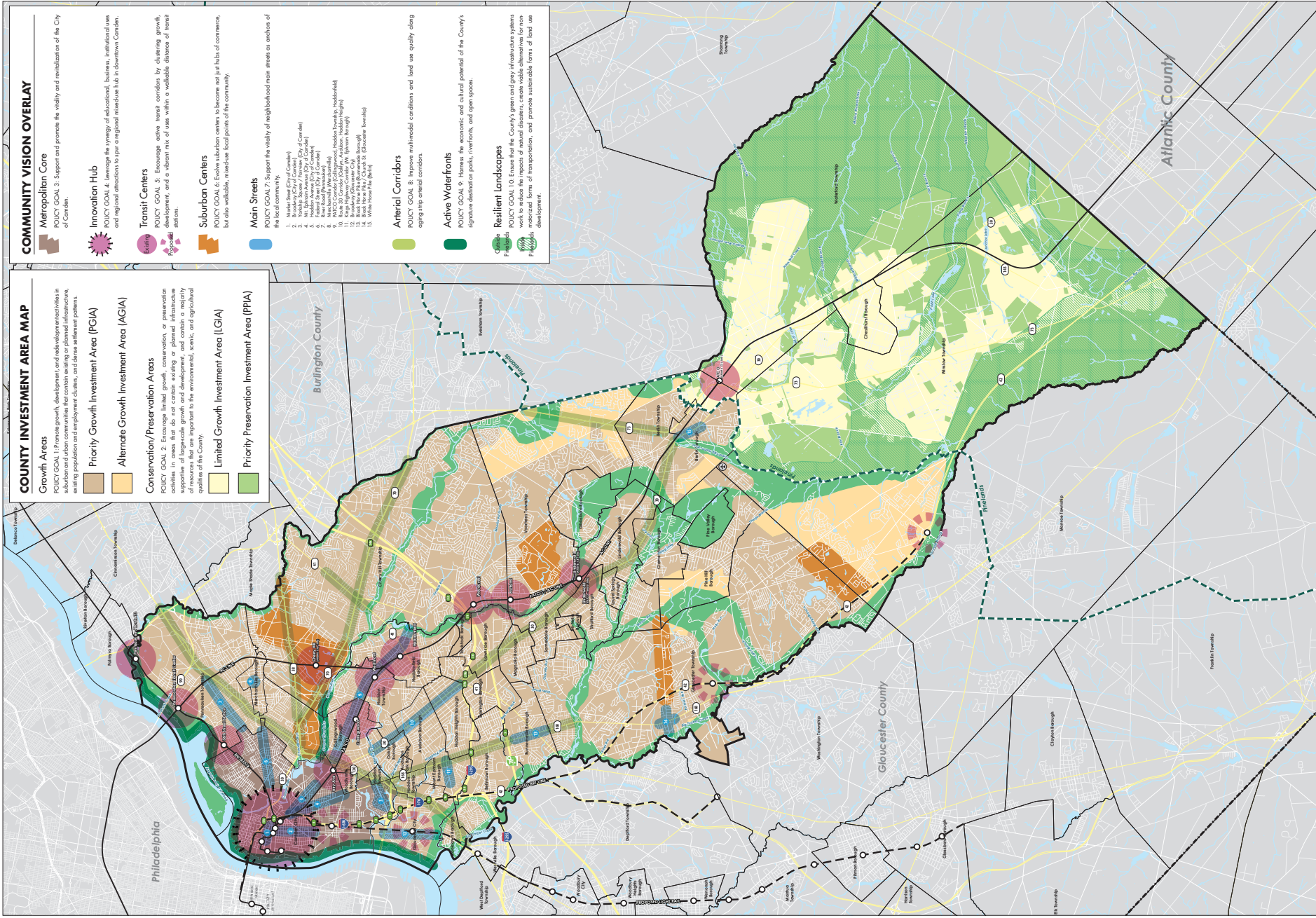
Project #:17041
Created By: KPreto
Date: June 2017



APPENDIX G

CAMDEN COUNTY COMPREHENSIVE PLAN

The following appendix consists of the Camden County Comprehensive Plan.



Camden County Planning Board Chairman

Very truly yours,

October 2014

Camden County Planning Board Chairman

Very truly yours,

September 2014

Camden County Planning Board Chairman

Very truly yours,

September 2014

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2014

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Edward T. McDonnell, Deputy Director

Michelle Genek

Ian K. Leonard

Scott N. McCray

Jeffrey L. Nash

Carmen G. Rodriguez

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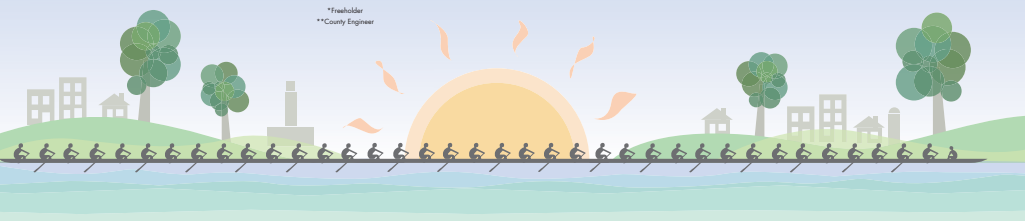
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Catherine Binowski, Planning Board Solicitor

Andrew Levecchia, Planning Director

*Freeholder

**County Engineer



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Very truly yours,

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Camden County Planning Board Chairman

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*Freeholder

**County Engineer



APPENDIX H

CAMDEN COUNTY COMPLETE STREETS POLICY & NJDOT GUIDE TO COMPLETE STREETS POLICY DEVELOPMENT

The following appendix consists of the NJDOT Guide to Complete Streets Policy Development as well as the Camden County Complete Streets Policy.



APPENDIX C: MODEL COMPLETE STREETS POLICY TEMPLATE

Introduction

The New Jersey Department of Transportation's (NJDOT) Complete Streets policy, adopted in December, 2009, has been recognized nationally as the strongest statewide policy in the nation.⁽¹⁷⁾ While some of the specifics of the state policy may differ from that of a typical local resolution or ordinance, the NJDOT's policy provides a good example of an effective Complete Streets policy that can be used as a reference at the municipal or county level as well.

The National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN) has developed model Complete Streets policies that can also be used as a template to guide the drafting of new ordinances or resolutions, both at the state and municipal level. The model policies are publicly available and are the product of researching and surveying existing Complete Streets policies across the country.⁽¹⁸⁾ They provide a useful starting point for New Jersey municipalities interested in developing their own Complete Streets resolutions.

As of May 2012, 27 municipalities and three counties in New Jersey have adopted their own Complete Streets policies.⁽¹⁹⁾ These local examples can also provide valuable guidance to neighboring municipalities that may have similar mixes of roadway users, land uses, or local needs. Building on the experiences of and collaborating with neighbors can help build a Complete Streets network across the state.

The following model policy template organizes excerpts from NJDOT's policy, NPLAN's model municipal resolution, and a mix of New Jersey municipal examples around the six key ingredients of a Complete Streets policy, as defined and described in this Guide and NJDOT's Complete Streets training curriculum:

- 1. Purpose and Intent**
- 2. Definition of Users and Modes**
- 3. Types of Projects**
- 4. Exemptions**
- 5. Implementation Plan**
- 6. Design Standards**

This blend of model policy ingredients is intended for informational purposes only, and does not constitute legal advice. Local context is vital to building a strong Complete Streets policy, and the policy examples should be adapted to meet the unique needs of the enacting municipality.



Using the Model Complete Streets Policy Template

The template is intended as a guide for developing a Complete Streets policy that is consistent with the jurisdiction's master plan and reflects the unique local context, conditions, and user needs. Examples are provided from various sources, including NJDOT's Complete Streets policy, NPLAN's model policies, and an assortment of New Jersey municipal policies.

Step 1 – Review the Master Plan

It is critical to ensure that the proposed Complete Streets Policy is consistent with the findings, guidance, and actions set forth in the Master Plan. Begin by reviewing the goals and objectives of the Master Plan, in particular as they relate to land use, safety, mobility, and circulation; relevant portions of the various Master Plan Elements, including Land, Use, Circulation, and Sustainability, should also be examined.

Step 2 – Understand the Local Context

Understanding context includes both land use and infrastructure considerations. Many municipalities include a variety of land use types, development patterns, and streets classifications. The ingredients of the Complete Streets policy should be tailored to reflect both the unique aspects, and the overall diversity, of land use and the streets system.

Step 3 – Understand Transportation and Mobility Needs

Consistent with the Circulation Element, the Complete Street policy should address the mobility needs of the municipality and the local business community: those who live, work, and do business here; their demographic makeup; and special needs groups and those with mobility limitations. The Complete Streets policy should also reflect the mobility needs of the municipality, and the makeup and performance of the local transportation system.

Step 4 – Define Each Ingredient

The policy should be brief and concise, with an appropriate level of detail. Steps 1-3 should provide a clear understanding of what is suitable and applicable based on local goals, needs and context. This template provides examples of the minimum requirements; additional details and specificity may be appropriate when, for example, the context, objectives, roadway users, or exemptions require special consideration or merit.



Guide to Complete Streets Policy Development

Ingredients of the Model Policy

1. Purpose and Intent

The *Purpose and Intent* is a concise statement of the goals and vision for the Complete Streets policy; it should be consistent with the municipal Master Plan and reflect the local context. The resolution begins with a preamble, typically a series of WHEREAS clauses, that provide facts supporting the resolution and characterizing the *Purpose* of the resolution. These may define the concept of Complete Streets; cite precedents in other municipalities or jurisdictions; and cite the major transportation, equity, economic, environmental, safety, and/or health benefits of Complete Streets. The following are some select examples that illustrate the variety of information available to articulate the *Purpose and Intent* of a Complete Streets policy. Many of the local examples acknowledge or reference NJDOT's policy as part of the support for their own initiative. Additional examples can be found in the NPLAN's Appendix Findings⁽²⁰⁾ and existing policies in New Jersey.⁽²¹⁾

Most Complete Streets policies separate the first ingredient into two sections: the first introduces the purpose, or reason, for adopting the policy; the second is the intent, or how it will be accomplished. NJDOT, for example, first states the **purpose**: *to provide safe access for all users*, and then the **intent**: *to implement a Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities*.

1a. Purpose of the Complete Streets Policy

NJDOT Policy Example

A Complete Street is defined as means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options.

The benefits of Complete Streets are many and varied:

- Complete Streets improve safety for pedestrians, bicyclists, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free.
- Provide connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities.
- Promote healthy lifestyles.
- Create more livable communities.
- Reduce traffic congestion and reliance on carbon fuels thereby reducing greenhouse gas emissions.
- Complete Streets make fiscal sense by incorporating sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project, thus sparing the expense of retrofits later.



NPLAN National Template Examples

WHEREAS, the term “Complete Streets” describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, motor vehicle drivers, public transportation riders and drivers, *[insert other significant local users if desired, e.g. drivers of agricultural vehicles, emergency vehicles, or freight]* and people of all ages and abilities, including children, youth, families, older adults, and individuals with disabilities;

WHEREAS, [Municipality / State / Regional body] wishes to encourage walking, bicycling, and public transportation use as safe, convenient, environmentally friendly, and economical modes of transportation that promote health and independence for all people;

WHEREAS, streets that are not designed to provide safe transport for all users present a danger to pedestrians, bicyclists, and public transportation riders, particularly children, older adults, and people with disabilities;⁽²²⁾ more than 110,000 pedestrians and bicyclists are injured each year on roads in the United States,⁽²³⁾ with children and older adults at greatest risk and disproportionately affected;⁽²⁴⁾ many of these injuries and fatalities are preventable, and the severity of these injuries could readily be decreased by implementing Complete Streets approaches;⁽²⁵⁾ and [Municipality / State / Regional body] wishes to ensure greater safety for those traveling its streets;

WHEREAS, [Municipality / State / Regional body] recognizes that the careful planning and coordinated development of Complete Streets infrastructure offers long-term cost savings for local and state government, benefits public health, and provides financial benefits to property owners, businesses, and investors, while yielding a safe, convenient, and integrated transportation network for all users;⁽²⁶⁾ in contrast, streets that are not conducive to travel by all impose significant costs on government and individuals, including the cost of obesity, which may amount to \$147 billion in direct medical expenses each year, not including indirect costs;⁽²⁷⁾

WHEREAS, numerous states, counties, cities, and agencies have adopted Complete Streets policies and legislation in order to further the health, safety, welfare, economic vitality, and environmental well-being of their communities;

WHEREAS, [Municipality / State / Regional body] acknowledges the benefits and value for the public health and welfare of [reducing vehicle miles traveled and] increasing transportation by walking, bicycling, and public transportation in order to address a wide variety of societal challenges, including pollution, climate change, traffic congestion, social isolation, obesity, physical inactivity, limited recreational opportunities, sprawl, population growth, safety, and excessive expenses;⁽²⁸⁾



Guide to Complete Streets Policy Development

Local NJ Examples

WHEREAS, the New Jersey Department of Transportation supports complete streets policies and adopted its own such policy on 3 December, 2009; *[City of Hoboken]*

WHEREAS, the New Jersey Department of Transportation's Complete Streets policy states "A Complete Street is defined as means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options;" *[Township of West Windsor]*

WHEREAS, the New Jersey Department of Transportation has established incentives within the Local Aid Program for municipalities and counties to develop a Complete Streets policy; *[Township of Denville]*

WHEREAS, the Township of Lawrence is committed to creating a pedestrian and bikeway system that makes walking and cycling a viable alternative to driving and which improves bicyclist and pedestrian safety by creating street corridors that safely accommodate all road users of all abilities and disabilities; *[Township of Lawrence]*

WHEREAS, a Complete Streets Policy would advance the City's Sustainable Jersey Resolution, Safe Routes to Schools Program, County Open Space Study, County Rails to Trails Plan and Downtown Parking, Circulation and Landscape Study; *[Township of Vineland]*

WHEREAS, Complete Streets are supported by the Institute of Traffic Engineers, the American Planning Association and other transportation, planning and health officials; *[Township of Maplewood]*

1b. Intent of the Complete Streets Policy

Following the WHEREAS clauses describing the *Purpose* is the statement of *Intent*, which clearly and strongly defines the policy. NJDOT strongly states where Complete Streets concepts will be applied, and encourages other jurisdictions in New Jersey to follow similar principals. The example from Jersey City is a common format for the statement of *Intent* used in several other municipalities in the state, defining the policy as applicable to all public street projects (with reasonable exemptions defined in subsequent clauses) to accommodate all users. Atlantic City's policy provides a unique example where the statement of *Intent* acknowledges that Complete Streets need to be context sensitive, implemented in different ways throughout the city to accommodate and balance different needs.

NJDOT Policy Example

The New Jersey Department of Transportation shall implement a Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities, enabling safe access and mobility of pedestrians, bicyclists, transit users of all ages and abilities.



This includes all projects funded through the Department’s Capital Program. The Department strongly encourages the adoption of similar policies by regional and local jurisdictions who apply for funding through Local Aid programs.

NPLAN National Template Example

NOW, THEREFORE, LET IT BE RESOLVED that [Municipality / Adopting body] hereby recognizes the importance of creating Complete Streets that enable safe travel by all users, including pedestrians, bicyclists, public transportation riders and drivers, *[insert other significant local users if desired, e.g. drivers of agricultural vehicles, emergency vehicles, freight, etc.]* and people of all ages and abilities, including children, youth, families, older adults, and individuals with disabilities.

Local NJ Examples

NOW, THEREFORE, LET IT BE RESOLVED, by the Municipal Council of the city of Jersey City that all public street projects, both new construction and reconstruction (excluding maintenance) undertaken by the city of Jersey City shall be designed and constructed as “Complete Streets” whenever feasible to do so in order to safely accommodate travel by pedestrians, bicyclists, public transit, and motorized vehicles and their passengers, with special priority given to pedestrians safety. *[City of Jersey City]*

NOW, THEREFORE, be it resolved that the City Council of the city of Atlantic City adopts the following Complete Streets Policy:

Purpose: To adopt a Complete Streets Policy that acknowledges and implements the concept that streets should be designed, built and retrofitted for all users: motor vehicles, pedestrians, bicyclists, transit users and people with disabilities. The City recognizes that this policy must be flexible and that all streets are different and user needs must be balanced and fit into the context of the community. Implementation of this policy will integrate the needs of all users into everyday transportation and land use decisions making, and will take place through the following methods: *[City of Atlantic City]*

2. Definition of Users and Modes

The *Definition of Users and Modes* of transportation is an essential element of a Complete Streets policy, and can be included within the WHEREAS clauses that define the concept of Complete Streets and/or within the statement of *Intent*, as shown in the above examples. The discussion of users and travel modes can be as simple as “all ages and abilities” or present a more detailed list based on the unique local population, vehicles (i.e. heavy trucks, farm vehicles, etc.), and mix of local business and industry. For example, rural communities may have different user needs than their more urban and suburban counterparts. Two additional local examples of a detailed *Definition of Users and Modes* are provided below.

Local NJ Examples

NOW, THEREFORE, LET IT BE RESOLVED that the Borough of Netcong hereby recognizes the importance of creating Complete Streets that enable safe travel by all users, including pedestrians, bicyclists, public transportation riders and drivers, emergency vehicles, and people of all ages and abilities, including children, youth, families, older adults, and individuals with disabilities. *[Borough of Netcong]*



Guide to Complete Streets Policy Development

WHEREAS, “Complete Streets” are defined as roadways that enable safe and convenient access for all users, including bicyclists, children, persons with disabilities, motorists, seniors, movers of commercial goods, pedestrians, and users of public transport; *[Borough of Frenchtown]*

3. Types of Projects

After defining the *Intent* of the policy, the resolution must define the *Types of Projects* for which Complete Streets shall be enacted. This is a key ingredient. By taking a cradle-to-grave approach and stipulating that the policy is applied to all project phases, Complete Streets becomes a standard component of how the municipality conducts business, from planning, design, and capital programming through construction, maintenance, and operations. This ensures a comprehensive approach that limits the potential for critical roadways and facilities to be overlooked. Transportation facilities, especially bridges, have a long life cycle, so any missed opportunity could mean generations of mobility and/or safety limitation for residents and businesses. NJDOT is particularly strong on this element, having included an expansive listing of projects up front within the statement of intent, as shown above. Within municipal ordinances, it is common to include this element in subsequent clauses, as shown in the NPLAN example below, or within the statement of intent, as in the local New Jersey examples below and the previous *Intent* example.

NPLAN National Template Example

BE IT FURTHER RESOLVED that [Municipality / Adopting body] affirms that Complete Streets infrastructure addressing the needs of all users should be incorporated into all planning, design, approval, and implementation processes for any construction, reconstruction, retrofit, maintenance, alteration, or repair of streets, bridges, or other portions of the transportation network, including pavement resurfacing, restriping, and signalization operations if the safety and convenience of users can be improved within the scope of the work;...

Local NJ Examples

WHEREAS, the Borough Council of the Borough of Raritan, County of Somerset, desires to implement a Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities within the public rights-of-way... *[Borough of Raritan]*

WHEREAS, it is in the intent of the City, to the extent practicable, to apply the Complete Streets Policy to all road, bridge, and building projects funded through the City’s Capital Program and Federal and State grants. *[City of Vineland]*

4. Design Standards

Within the Implementation Plan, a clause should be included that stipulates that the most recent *Design Standards* will be followed in implementing the policy. This may be a general statement that the latest local and national standards will be followed, or explicitly reference specific documents and standards. Adherence to applicable standards is necessary for liability protections and demonstrates that improvements have been planned and designed according to accepted practice and process. In New Jersey, the New Jersey Tort Claims Act, N.J.S.A. 59:1-1 et seq. provides immunity from Tort liability when the conditions for Plan and Design immunity have been met and documented.



NJDOT Policy Examples

Design bicycle and pedestrian facilities to the best currently available standards and practices including the New Jersey Roadway Design Manual, the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's Guide for the Planning, Design and Operation of Pedestrian Facilities, the Manual of Uniform Traffic Control Devices and others as related.

Improvements must comply with Title VI/Environmental Justice, Americans with Disabilities Act (ADA) and should complement the context of the surrounding community.

Local NJ Examples

BE IT FURTHER RESOLVED that bicycle and pedestrian facilities shall be designed and contracted to the best currently available standards and practices including the New Jersey Roadway Design Manual, the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's Guide for the Planning, Design and Operation of Pedestrian Facilities, the Manual of Uniform Traffic Control Devices and others as related. *[Borough of Red Bank. different or additional standards may be cited as applicable; or a general statement that the "latest local and national design standards and criteria" will be followed may be used in lieu of specific citations.]*

While complete streets principles are context sensitive, it would be appropriate to consider these features during the design, planning, maintenance and operations phases and incorporate changes into some retrofit and reconstruction projects. Departments shall reference New Jersey Roadway Design Manual; the AASHTO Guide for the Development of Bicycle Facilities; AASHTO's Guide for the Planning, Design and Operation of Pedestrian Facilities; the Manual of Uniform Traffic Control Devices; the NACTO Urban Bikeway Design Guide and other design criteria as necessary, striving to balance all needs, when repaving or reconstructing streets. *[City of Trenton]*

5. Exemptions

Beyond defining the instances in which the Complete Streets policy must be implemented, the resolution should also clearly define reasonable and legitimate *Exemptions*, define a transparent application and review process, and designate an authority responsible for reviewing and approving exemptions to the Complete Streets policy. This ingredient helps ensure consistent and appropriate granting of exemptions, and that the decision has been documented and based on reliable and accurate information. NJDOT provides a logical list of acceptable exemptions that require thorough review and approval, including sign-off by the Commissioner of Transportation, which demonstrates strong support for Complete Streets within NJDOT at the very highest level of authority in the Department. Examples from New Jersey municipalities illustrate similar, specific exemptions, requiring approval from the municipal engineer or top elected officials, such the town council or mayor.

NJDOT Policy Example

Exemptions to the Complete Streets policy must be presented for final decision to the Capital Program Screening Committee in writing and documented with supporting data that indicates the reason for the decision and are limited to the following:



Guide to Complete Streets Policy Development

1. Non-motorized users are prohibited on the roadway.
2. Scarcity of population, travel and attractors, both existing and future, indicate an absence of need for such accommodations.
3. Detrimental environmental or social impacts outweigh the need for these accommodations.
4. Cost of accommodations is excessively disproportionate to cost of project, more than twenty percent (20%) of total cost.
5. The safety or timing of a project is compromised by the inclusion of Complete Streets.

An exemption other than those listed above must be documented with supporting data and must be approved by the Capital Program Committee along with written approval by the Commissioner of Transportation.

Local NJ Examples

...Bicycle and pedestrian ways shall be established in new construction and reconstruction project unless one or more of the following conditions are met:

- Bicyclists and pedestrians are prohibited by law from using the roadway.
- The cost of accommodations is excessively disproportionate to cost of the project, at more than twenty percent (20%) of total cost.
- Where sparse population, travel or other factors indicate an absence of need as defined by any street with a paved roadway width greater than 28 feet and less than 100 vehicles per day.
- Detrimental environmental or social impacts outweigh the need for these accommodations.
- The safety or timing of a project is comprised by the inclusions of Complete Streets.

Exceptions to this policy are permitted and are contingent upon the presence of specific safety concerns and approval by the City Engineer prior to granting exceptions. *[City of Atlantic City]*

...subject to the following conditions:

- Pedestrian and bicycle facilities shall not be required where they are prohibited by law.
- Public transit facilities shall not be required on streets not serving as transit routes.
- In any project, should the cost of pedestrian, public transit, and/or bicycle facilities cause an increase in project costs in excess of 15%, as determined by engineering estimates, that would have to be funded with local tax dollars, then and in that event, approval by the Borough Council must be obtained for same prior to bidding of the project. *[Princeton Borough]*



6. Implementation Plan

The *Implementation Plan* outlines the process for putting the policy into action. An effective *Implementation Plan* seeks to reach all who will plan, design, and implement appropriate transportation facility improvements and networks. It may include a number of elements, such as reviewing existing policies, design standards, procedures, regulations, etc. and revising them as needed to integrate Complete Streets; staff training; performance measures to track progress; or a reporting process to provide policy accountability. This is another opportunity to tailor the Complete Streets policy to local needs, land uses, and context. NJDOT includes an implementation provision for rural roads. Monmouth County and several other municipalities include similar language to accommodate rural areas under their jurisdiction. NJDOT also emphasizes outreach to local and county officials as part of their implementation plan. By codifying this goal, the policy defines explicitly a broad and expansive application of Complete Streets policies among all levels and jurisdictions responsible for the planning, design, construction, operation, and maintenance of transportation facilities. Developing Complete Streets training and incentives through the Local Aid Program helps ensure that Complete Streets becomes standard practice throughout the state. The example from Trenton includes a detailed implementation plan with a reporting schedule, which adds a level of accountability to the policy that assists in quickly putting the policy into practice.

NJDOT Policy Examples

Create a comprehensive, integrated, connected multi-modal network by providing connections to bicycling and walking trip generators such as employment, education, residential, recreational and public facilities, as well as retail and transit centers.

Establish a checklist of pedestrian, bicycle and transit accommodations such as accessible sidewalks curb ramps, crosswalks, countdown pedestrian signals, signs, median refuges, curb extensions, pedestrian scale lighting, bike lanes, shoulders and bus shelters with the presumption that they shall be included in each project unless supporting documentation against inclusion is provided and found to be justifiable.

Additionally, in rural areas, paved shoulders or a multi-use path shall be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day. Paved shoulders provide safety and operational advantages for all road users. Shoulder rumble strips are not recommended when used by bicyclists, unless there is a minimum clear path of four feet in which a bicycle may safely operate. If there is evidence of heavy pedestrian usage then sidewalks shall be considered in the project.

Establish a procedure to evaluate resurfacing projects for complete streets inclusion according to length of project, local support, environmental constraints, right-of-way limitations, funding resources and bicycle and/or pedestrian compatibility.

Establish an incentive within the Local Aid Program for municipalities and counties to implement a Complete Streets policy.

Implement training for Engineers and Planners on Bicycle/Pedestrian/Transit policies and integration of non-motorized travel options into transportation systems.



Guide to Complete Streets Policy Development

Establish Performance Measures to gauge success.

NPLAN National Template Examples

BE IT FURTHER RESOLVED that *[insert appropriate agency]* should evaluate how well the streets and transportation network of [Municipality] are serving each category of users, and *[insert appropriate agencies]* should establish performance standards with measurable benchmarks reflecting the ability of users to travel in safety and comfort.

BE IT FURTHER RESOLVED that *[insert appropriate agencies, such as Department of Transportation, Department of Public Works, Department of Planning]* should review and either revise or develop proposed revisions to all appropriate plans, zoning and subdivision codes, laws, procedures, rules, regulations, guidelines, programs, templates, and design manuals, including *[insert name of Municipality's comprehensive plan equivalent as well as all other key documents by name]*, to integrate, accommodate, and balance the needs of all users in all projects.

BE IT FURTHER RESOLVED that *[insert appropriate agencies, such as Department of Transportation, Department of Public Works, Department of Planning]* should make Complete Streets practices a routine part of everyday operations, should approach every transportation project and program as an opportunity to improve public [and private] streets and the transportation network for all users, and should work in coordination with other departments, agencies, and jurisdictions to achieve Complete Streets.

BE IT FURTHER RESOLVED that trainings in how to integrate, accommodate, and balance the needs of all users should be provided for planners, civil and traffic engineers, project managers, plan reviewers, inspectors, and other personnel responsible for the design and construction of streets, bridges, and other portions of the transportation network.

BE IT FURTHER RESOLVED that procedures should be established to allow increased public participation in policy decisions and transparency in individual determinations concerning the design and use of streets.

BE IT FURTHER RESOLVED that all initial planning and design studies, health impact assessments, environmental reviews, and other project reviews for projects requiring funding or approval by [Municipality] should: (1) evaluate the effect of the proposed project on safe travel by all users, and (2) identify measures to mitigate any adverse impacts on such travel that are identified.

BE IT FURTHER RESOLVED that the head of each affected agency or department should report back to the [Adopting body] [annually / within one year of the date of passage of this resolution] regarding: the steps taken to implement this Resolution; additional steps planned; and any desired actions that would need to be taken by [Adopting body] or other agencies or departments to implement the steps taken or planned.

BE IT FURTHER RESOLVED that a committee is hereby created, to be composed of *[insert desired committee composition]* and appointed by [the Mayor / President of adopting body / other], to recommend short-term and long-term steps, planning, and policy adoption necessary to create a



comprehensive and integrated transportation network serving the needs of all users; to assess potential obstacles to implementing Complete Streets in [Municipality]; and to suggest revisions to the [insert name of Municipality's comprehensive plan equivalent], zoning code, subdivision code, and other applicable law.

BE IT FURTHER RESOLVED that the committee should report on the matters within its purview to the [Adopting body] within one year following the date of passage of this Resolution, and upon receipt of this report the [Adopting body] will hold a hearing to determine further implementation steps.

Local NJ Examples

To facilitate the implementation of the new policy, the following steps shall be taken:

- A memorandum outlining this new policy will be distributed to all department heads within 90 days of this resolution.
- At least one training session about complete streets will be conducted for appropriate staff within 180 days of this resolution.
- The Train Station Linkage Plan, completed in 2006, shall be revisited, with a specific focus on designating appropriate routes for pedestrians, dedicated bike lanes and preferred bicycle routes (shoulders or shared travel lanes with appropriate signage and/or pavement markings). The City Engineer (or other designee as determined by the Council) shall coordinate this effort in collaboration with the Traffic Analysis and update City Council within 180 days of this resolution.
- Oversight of the new complete streets policy will be handled by the Principal Planner, or other appropriate cabinet officials approved by City Council. [City of Trenton]

BE IT FURTHER RESOLVED that municipal departments and professionals, such as Department of Public Works, municipal planner, engineer, and Zoning Officer, should review and either revise or develop proposed revisions to all appropriate plans, zoning and subdivision codes, laws, procedures, rules, and regulations, including subsequent updates to the Borough of Netcong Master Plan, to integrate, accommodate, and balance the needs of all users in all projects. Information and education will be provided to the municipal planning and zoning (combined) board to enhance understanding and implementation of Complete Streets concepts as part of design and plan review. [Borough of Netcong]

RESOLUTION SUPPORTING THE ESTABLISHMENT AND ADOPTION OF A "COMPLETE STREETS" POLICY

WHEREAS, the County of Camden is committed to improving the quality of life of residents and visitors and to the creation of street corridors that accommodate all road users of all ages and abilities for all trips; and

WHEREAS, a "Complete Street" is defined by the New Jersey Department of Transportation under Policy No. 703 as a "means to provide safe access for all users by designing and operating a comprehensive, integrated, connected multi-modal network of transportation options"; and

WHEREAS, the full integration of all modes of travel in the design of streets and highways will increase capacity and efficiency of the road network, reduce traffic congestion by improving mobility options, limit greenhouse gases, improve air quality; and

WHEREAS, the benefits of complete street include improving safety for pedestrian, bicyclist, children, older citizens, non-drivers and the mobility challenged as well as those that cannot afford a car or choose to live car free; providing connections to bicycling and walking trip generators such as employment, education, residential, recreation, retail centers and public facilities; promoting healthy lifestyles; creating more livable communities; reducing traffic congestion and the reliance on carbon based fuels; and saving money by considering the incorporation of sidewalks, bike lanes, safe crossings and transit amenities into the initial design of a project, thus sparing the expense of later retrofits; and

RESOLUTION

Res-Pg: 33-2

WHEREAS, the Board of Chosen Freeholders of the County of Camden wishes to implement a Complete Streets policy through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities, to safely accommodate the access and mobility of pedestrians, bicyclists, public transit users of all ages and abilities; and

WHEREAS, it is the intent of the Board of Chosen Freeholders that to the extent practicable the Camden County Complete Streets policy shall include all roads, bridges, parks and building projects undertaken by Camden County; now, therefore,

BE IT RESOLVED by the Board of Chosen Freeholders of the County of

Camden that:

1. The above recitals are incorporated herein.
2. The Board consents to the establishment and adoption of the following as the Camden County "Complete Streets Policy", and those goals and objectives contained therein.
 - A. Provide safe and accessible accommodations for existing and future pedestrian, bicycle and public transit facilities.
 - B. Establish a checklist of pedestrian, bicycle and public transit accommodations such as accessible sidewalk curb ramps, crosswalks, countdown pedestrian signals, signs, curb extensions, pedestrian scale lighting, bike lanes, or bicycle markings, and shoulders for consideration in each project where county jurisdiction applied.
 - C. All County transportation projects shall be evaluated for Complete Streets inclusion with consideration of local support, environmental constraints, right-of-way availability, funding resources, and bicycle and/or pedestrian compatibility.
 - D. Complete Streets policies shall support the goals of the Camden County Master Plan.

RESOLUTION

Res-10. 33-3

- E. Transportation facilities constructed for long term use shall anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements.
- F. Bicycle and pedestrian facilities shall be designed and constructed to the best currently available guides, standards and practices from the New Jersey Department of Transportation & American Association of State Highway and Transportation Officials.
- G. Provisions shall be made for pedestrians and bicyclists when closing roads, bridges or sidewalks for construction projects consistent with NJDOT policy.
- H. Improvements shall also consider connections for Safe Routes to Schools, Safe Routes to Transit, Transit Villages, Parks and areas or population groups with limited transportation options.
- I. Improvements shall be "complete" for all mobile participants; not severely affect the operations of a mode of transportation for the benefit of another; and complement the context of the surrounding community.
- J. All municipalities, private developers and other entities must obtain prior approval from the County Engineer of any complete streets related construction on its County roadways.
- K. Exemptions to the Complete Streets policy shall be presented for final decision to the County Engineer in writing and documented with supporting data that indicates the reason for the decision and are limited to the following:
 - A. Where non-motorized users are prohibited by law.
 - B. Scarcity of population, travel and attractors, both existing and future, indicate an absence of need for such accommodations. Public Transit facilities shall not be required on streets not serving as transit routes and its need will be determine on a project basis.
 - C. Detrimental environmental or social impacts outweigh the positive effects of accommodations.

RESOLUTION

Res-Pg: 33-4

- D. Cost of accommodations is excessively disproportionate to cost of project.
- E. The safety or timing of a project is compromised by the inclusion of Complete Streets.
- F. An exemption other than those listed above must be documented with supporting data and must be approved by the County Engineer.

JAF/emc

File No. 4076-#23 Highway Misc. 2013

Files General/Highway Dept./Resolutions 2013\Resol.supporting/establishment of Complete Streets -

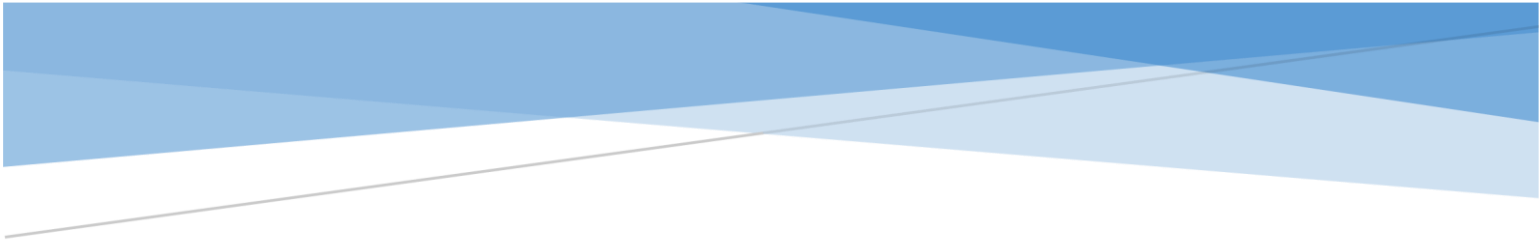
12-19-13

CERTIFICATION
I HEREBY CERTIFY THE ABOVE TO BE A TRUE
COPY OF A RESOLUTION ADOPTED BY THE
BOARD OF CHOSEN FREEHOLDERS OF THE
COUNTY OF CAMDEN AT A MEETING HELD
December 19, 2013
Maureen DiGiovanna
CLERK OF THE BOARD

Introduced on: December 19, 2013

Adopted on:

Official Resolution#:



APPENDIX I

SUSTAINABLE JERSEY ACTIONS LIST & BOROUGH RESOLUTION

The following appendix consists of a brochure/ checklist for Sustainable Jersey with associated points for each action line item as well as the Borough Resolution regarding Sustainable Jersey.



A FREE certification program for municipalities that want to go green, save money and take steps to sustain their quality of life over the long term.

Benefits of Participation

Sustainable Jersey certification is a prestigious designation for municipal governments in New Jersey. Registered communities:

- Work towards completing program actions to address sustainability issues and become certified
- Receive guidance, tools and free training to enable progress
- Are eligible to apply for Sustainable Jersey small grants

Sustainable Jersey encompasses the three equal, interrelated components of sustainability:

Prosperity: Support local economies and use community resources

Planet: Practice responsible environmental management and conservation

People: Contribute to a strong civil society that provides opportunity for all

Getting Started

To start the program, a municipality adopts a resolution of participation and then registers on the Sustainable Jersey website.

About Sustainable Jersey

Sustainable Jersey is a nonprofit organization dedicated to assisting local governments and public schools pursue sustainability initiatives. Participation is voluntary. Certification actions are developed through an ongoing process of discussion and research that includes the participation of over 150 New Jersey leaders and experts from federal and state agencies, universities, non-profit organizations and the business sector. If you are interested in Sustainable Jersey for Schools, the free certification program for New Jersey public schools, visit www.SustainableJerseySchools.com.

For inquiries or to join our e-list please contact info@sustainablejersey.com



Sustainable Jersey Supporters

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A Better Tomorrow,
One Community at a Time

SUSTAINABLE
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• CERTIFIED •

www.SustainableJersey.com

Actions for Sustainable Communities

To become Sustainable Jersey Certified, municipalities must complete and document actions from this list.

BRONZE

Mandatory **Green Team**
2 out of 11 PRIORITY ACTIONS*
150 points across 6 of 18 categories.

SILVER

Mandatory **Green Team**
3 out of 11 PRIORITY ACTIONS*
350 points across 8 of 18 categories.

PROSPERITY

	Points
ENERGY EFFICIENCY	
Energy Tracking & Management*	10-20
Implement Energy Efficiency Measures*	5-30
Energy Audits	5-20
Sustainable Energy Transition Plan	10-20
Direct Install Outreach Campaign to Local Businesses	10-20
High Performance Buildings	10-20
Home Performance with Energy Star Municipal Program	20-30
FOOD	
Farmland Preservation Plans	10
Community or School Gardens	10
Buy Fresh Buy Local® Programs	10
Farmers Markets	10
Making Farmers Markets Accessible	5
LOCAL ECONOMIES	
Green Business Recognition Program*	10-20
Buy Local Campaign	10
Green Jobs/Economic Development	10
Support Local Businesses	10
OPERATIONS AND MAINTENANCE	
Fleet Inventory*	10
Driver Training	10
Meet Target for Green Fleets	30
Purchase Alternative Fuel Vehicles	10
Adopt a Green Purchasing Policy	5-10
Adopt Behavioral Policies	5
Energy Efficient Appliances or Equipment	10
Green Cleaning Products	10
Green Maintenance Equipment and Materials	10
Recycled Paper	10
Create a Green Grounds and Maintenance Policy	10
Efficient Landscape Design	10
Integrated Pest Management	10
Minimize Water Consumption	10
Recycled Materials and Composting	10

PLANET

	Points
ANIMALS IN THE COMMUNITY	
Animals in the Community Education	10
Companion Animal Management Pledge	5
Companion Animal Management Plan	10
Enhanced Licensing Compliance	5-10
Pledge Supporting NJ Wildlife Action Plan	10
Wildlife Interaction Plan	10
BROWNFIELDS	
Brownfields Inventory & Prioritization	10
Brownfields Reuse Planning	15
Brownfields Marketing	10
GREEN DESIGN	
Green Building Policy/Resolution	5
Green Building Training	5
Create Green Development Checklist	10
Green Building Education	5
Site Plan Green Design Standards	20
Construction Waste Recycling	10
New Construction	20
Upgrade/Retrofit-Light Pollution	10
Upgrade/Retrofit-Water Conservation	10
INNOVATION & DEMONSTRATION PROJECTS	
Buy Electricity from a Renewable Source	10
Renewable Government Energy Aggregation	5-50
Make Your Town Electric Vehicle Friendly	15
Public Electric Vehicle Charging Infrastructure	15
Green Roofs	10
Raingardens	10
Geothermal Energy	10
On-Site Solar System	10-40
Wind Ordinance	10
Wind	10
Innovative Community Projects (up to three)	10-30
LAND USE & TRANSPORTATION	
Sustainable Land Use Pledge*	10
Build-Out Analysis	10
Green Building & Environmental Sustainability Element	10
Historic Preservation Element	10
Bicycle and/or Pedestrian Audit	5
Bicycle and/or Pedestrian Plan	10
Complete Streets Policy	10
Institute Complete Streets	10-15
Effective Parking Management	10
Smart Workplaces	5-10
Transit Oriented Development Supportive Zoning	20

PEOPLE

	Points
NATURAL RESOURCES	
Natural Resource Inventory*	20
Water Conservation Ordinance*	20
Environmental Commission	10
Environmental Commission Site Plan Review	10
Open Space Plans	10
Water Conservation Education Program	10
Easement Inventory and Outreach	10
Easement Inspections and Evaluations	15
Clustering Ordinance	10
Environmental Assessment Ordinance	10
Habitat Conservation Ordinance	10
Stormwater Management Ordinance	10
Tree Protection Ordinance	10
Community Forestry Plan and Canopy Goal	20
Tree Hazard Inventory	10
Tree Maintenance Programs	10
Tree Planting Programs	10
i-Tree Assessment of Municipal Trees	10
WASTE MANAGEMENT	
Prescription Drug Safety and Disposal*	10
Bulky Rigid Plastics	10
Carpet and Foam Padding	10
Commercial & Institutional Recycling	10
Community Paper Shredding Day	5
Construction & Demolition Waste Recycling Ordinance	10
Food Waste	10
Non-Mandated Materials Recycling	10
Recycling Depot	10
Recycling Education & Enforcement	5
Shrink Wrap	10
Backyard Composting Program	5
EPA WasteWise Partner	5
Grass - Cut It and Leave It Program	5
Materials Reuse Program	10
Pay-As-You-Throw Program	10
Reusable Bag Education Program	5
Waste Audit of Municipal Buildings and Schools	10
ARTS & CREATIVE CULTURE	
Establish a Creative Team	10
Creative Assets Inventory	10
Creative Placemaking Plan	10
Utilizing Your Creative Assets	10-30
COMMUNITY PARTNERSHIP & OUTREACH	
Create Green Team - MANDATORY	10
Community Education & Outreach	10

	Points
Education for Sustainability Programs	10
Energy Education & Outreach	10
Green Challenges & Community Programs	10
Hold a Green Fair	10
“Green” Your Green Fair	10
School-Based Energy Conservation Programs	10
DIVERSITY & EQUITY	
Diversity on Boards & Commissions*	10
Environmental Justice in Planning & Zoning	10
Lead Education & Outreach Programs	10
Lead-Safe Training Programs	10
EMERGENCY MANAGEMENT AND RESILIENCY	
Climate Adaptation: Flooding Risk*	20
Coastal Vulnerability Assessment	20
Extreme Temperature Event Plan	10
Community Wildfire Protection Plan	10
Firewise Community	5-15
Ready Set GO! Fire Company	10
Wildfire Safety Council	10
Emergency Communications Planning	15
Vulnerable Populations Identification for Emergencies	10
HEALTH & WELLNESS	
Anti-Idling Education & Enforcement Program	10
Building Healthier Communities	20
HIA Professional Development	10
Safe Routes to School	10
Smoke-Free and Tobacco-Free Public Places	10
PUBLIC INFORMATION & ENGAGEMENT	
Improve Public Engagement in Municipal Government	10-15
Improve Public Engagement in Planning and Zoning	10-15
Municipal Communications Strategy	10
Online Municipal Public Service Systems	10-15
Digitizing Public Information	10
Open Data Inventory and Management	10-15
SUSTAINABILITY & CLIMATE PLANNING	
Municipal Carbon Footprint*	10
Community Asset Mapping	10
Community Visioning	10
Community Sustainability Plan	25
Climate Action Plan	10
Community Carbon Footprint	10



APPENDIX J

FUNDING SOURCES AND OPPORTUNITIES

The following appendix consists of a list of funding sources that Somerdale could utilize to fund various programs, initiatives and projects.

Potential Funding Sources

	Funding Source	Awarding Agency	Description
Transportation	National Highway Performance Program (NHPP)	New Jersey Department of Transportation	The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS. The construction of bicycle facilities within NHS rights of way, interstate highways included, is explicitly stated as eligible for funding under this program. Interested municipalities should work with the county to apply and secure funding for this program. More information can be found at the website: http://www.fhwa.dot.gov/map21/factsheets/nhpp.cfm
	Surface Transportation Program and Surface Transportation Program Urban (STP/STU)	New Jersey Department of Transportation	STP is a block grant program that may be used for many types of transportation projects: specifically, bicycle transportation and pedestrian walkways, and the modification of public sidewalks to comply with the Americans with Disabilities Act. Projects on roads functionally classified as Local or Rural Minor Collector are ineligible for funding under this program. Of the STP funds apportioned to a state, 10 percent must be set aside for safety construction activities. STU funds are set aside specifically for urban areas. Current and historical information can be found at the Federal Highway Administration (FHWA) website: http://www.fhwa.dot.gov/map21/factsheets/
	Safe Routes to School Program (SRTS)	New Jersey Department of Transportation	The SRTS Program is funded through the FHWA's Federal Aid Program and is being administered by NJDOT, in partnership with DVRPC, North Jersey Transportation Planning Authority and the South Jersey Transportation Planning Organization. The objectives of the SRTS Program are: • to enable and encourage children, including those with disabilities, to walk and bicycle to school; • to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and • to facilitate the development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of New Jersey's primary and middle schools (Grades K–8). Projects proposals must be located within two miles of a school that serves students in grades K–8. For reference purposes the funding for the 2014 SRTS Program was available for the construction of infrastructure projects only. Infrastructure projects included the installation of sidewalks, crosswalks, bicycle lanes, multi-use paths, traffic-calming measures, and other means to ensure the ease and safety of children walking or biking to school. More information can be found at the website: http://www.state.nj.us/transportation/business/localaid/safe.shtm
	Safe Streets to Transit (SSTT)	New Jersey Department of Transportation	This program provides funding to counties and municipalities in improving access to transit facilities and all nodes of public transportation. The objectives of the SSTT program are: • To improve the overall safety and accessibility for mass transit riders walking to transit facilities. • To encourage mass transit users to walk to transit stations. • To facilitate the implementation of projects and activities that will improve safety in the vicinity of transit facilities. More information can be found at the website: http://www.state.nj.us/transportation/business/localaid/safe.shtm
	Bikeway Grant Program	New Jersey Department of Transportation	This program provides funds to counties and municipalities to promote bicycling as an alternate mode of transportation in New Jersey. The primary objective is to reach a state goal of constructing 1,000 new miles of dedicated bike paths that are physically separated from motorized vehicular traffic. More information can be found at the website: http://www.state.nj.us/transportation/business/localaid/bikewaysf.shtm
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Delaware Valley Regional Planning Commission	DVRPC's Competitive Congestion Mitigation and Air Quality Improvement Program (CMAQ) seeks to fund transportation projects that will improve air quality and reduce traffic congestion in the DVRPC Region. CMAQ eligible projects will demonstrably reduce air pollution emissions and will help the DVRPC region meet the federal health based air quality standards. More information can be found on their website: http://www.dvrpc.org/CMAQ/

Transportation	Hazard Elimination Program (Section 1112)	New Jersey Department of Transportation	Bicycling and walking hazards are now specifically included in the list of eligible activities for this program. In addition, the definition of a public road now includes a publicly owned bicycle or pedestrian pathway or trail and traffic-calming measures. More information can be found on the website: http://www.state.nj.us/njoem/programs/opb_mitigation.html
	Transportation and Community Development Initiative (TCDI)	Delaware Valley Regional Planning Commission	TCDI provides a mechanism for local governments to undertake locally-directed actions to improve their communities, which in turn implements their local and county comprehensive plans and supports the goals and vision of the region's long-range plan. Pennsylvania and New Jersey, as well as a number of counties within the region, have current programs to support community development. TCDI seeks to support and leverage those state and county programs, by providing funding to undertake planning, analysis or design initiatives which implement the long-range plan and enhance or improve the efficiency of the regional transportation system. Grants are up to \$75,000 for single projects and \$100,000 for multi-municipal projects; 20 percent local match is required. Deadline is approximately every two years. More information can be found on their website at: http://www.dvrpc.org/TCDI/
	Community Transportation Development Fund (CTDF)	Community Transportation Association of America	Eligibility: Nonprofit transit providers, public agencies, local and state governments and community organizations Purpose: To promote better transportation options Deadline: Varies Phone: 800.891.0590 I: http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=23&z=2
Redevelopment	Community Development Block Grants (CDBG)	U.S. Department of Housing and Urban Development (HUD)	The CDBG program works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses. CDBG is an important tool for helping local governments tackle serious challenges facing their communities. The CDBG program has made a difference in the lives of millions of people and their communities across the Nation. Over a 1, 2, or 3-year period, as selected by the grantee, not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons. In addition, each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available. More information can be found at: http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs
	Brownfields Development Area (BDA) Initiative	New Jersey Department of Environmental Protection	Eligibility: New Jersey community groups and municipalities Purpose: Project management assistance for communities impacted by multiple brownfield sites Terms: Project manager is assigned from the Office of Brownfield Reuse Deadline: Annual C: New Jersey Department of Environmental Protection P: 609-292-1251 I: www.state.nj.us/dep/rsp/brownfields/bda
	Brownfield Redevelopment Incentive Program	New Jersey Economic Development Authority	Eligibility: New Jersey business owners and developers Purpose: To finance Brownfield site remediation Terms: Interim financing up to \$750,000 at below-market interest rates Deadline: Varies C: New Jersey Economic Development Authority P: 609-777-4898 I: www.njeda.com
	Environmental Equity Program	New Jersey Redevelopment Authority	Eligibility: New Jersey government entities and developers Purpose: Provides loans for site acquisition, remediation, and demolition costs for brownfield redevelopment Terms: Vary Deadline: Varies C: New Jersey Redevelopment Authority P: 609-292-3739 I: www.njra.us
	Fund for Community	NJEDA	Eligibility: New Jersey Community Development Organizations and developers Purpose: To finance feasibility studies or other predevelopment activities Terms: Vary Deadline: Varies C: New Jersey Economic Development Authority P: 609-777-4898

	Economic Development		I: www.njeda.com
Redevelopment	Innocent Party Grants	NJEDA	Eligibility: New Jersey municipalities, counties, redevelopment entities, and homeowners Purpose: Applicant must not be responsible for contamination Terms: Vary Deadline: Open C: New Jersey Economic Development Authority P: 609-777-0990 I: www.njeda.com
	Municipal Grants	NJEDA	Eligibility: New Jersey municipalities, counties, redevelopment entities, and homeowners Purpose: Returns contaminated and underutilized properties to productive reuse Terms: Up to \$3 million, per municipality, per year, for 100 percent of costs of preliminary assessment, site investigation, remedial investigation, and remedial action Deadline: Open C: New Jersey Economic Development Authority P: 609-777-0990 I: www.njeda.com
	Redevelopment Investment Fund (NJRIF)	NJRA	Eligibility: New Jersey municipalities, counties, nonprofits, and corporations Purpose: Flexible investment fund that provides debt and equity financing for business and real estate ventures Terms: Vary Deadline: Varies C: New Jersey Redevelopment Authority P: 609-292-3739 I: www.njra.us
	Redevelopment Area Bond Financing	NJDEA	Eligibility: New Jersey municipalities with designated redevelopment areas Purpose: Tax-exempt bonds to fund the infrastructure and remediation components of redevelopment projects Terms: Vary Deadline: Varies C: New Jersey Economic Development Authority P: 609-777-4898 I: www.njeda.com
	Smart Futures Grant	NJDCA	Smart Futures Grant Eligibility: New Jersey local governments, counties, and nonprofits Purpose: Funds projects that balance development with the preservation of open space and environmental resources Terms: Vary Deadline: Annual C: New Jersey Department of Community Affairs P: 609-292-7156 I: www.state.nj.us/dca
	Smart Growth Redevelopment Funding	NJEDA	Eligibility: New Jersey developers undertaking mixed-use development projects Purpose: To finance site preparations costs such as demolition, removal of debris, or engineering Terms: Low-interest loans and loan guarantees up to \$1 million Deadline: Varies C: New Jersey Economic Development Authority P: 609-777-4898 I: www.njeda.com
	Special Improvement Districts: Loans and Grants	NJDCA	Eligibility: New Jersey municipalities Purpose: To finance capital improvements within a designated business improvement zone Terms: Loans up to \$500,000 for capital improvements; grants up to \$10,000 for technical support Deadline: Open C: New Jersey Department of Community Affairs P: 609-633-9769 I: www.state.nj.us/dca

	Assessment Grants	U.S. Environmental Protection Agency	Eligibility: State, local, and tribal governments; land clearance authorities, quasi-governmental entities, regional councils, and redevelopment agencies Purpose: Support site inventories and assessment for brownfield reclamation activities Terms: Grants up to \$200,000 for site assessments; additional funding may be secured if hazardous substances are present on the site Deadline: Varies Contact: U.S. Environmental Protection Agency Phone: 202-566-2758 Web: www.epa.gov/brownfields
Redevelopment	Historic Site Management Grants	NJDCA	Eligibility: New Jersey municipalities, counties, and nonprofits Purpose: Awards range from \$5,000 to \$50,000 Terms: Vary Deadline: Varies C: New Jersey Department of Community Affairs P: 609-292-7156 I: www.state.nj.us/dca
	Public Works and Economic Development Program	US Department of Commerce	Eligibility: Economic Development Districts, states, municipalities, and tribal governments, and institutions of higher learning Purpose: Supports brownfield redevelopment Terms: Vary Deadline: Open Contact: U.S. Department of Commerce Phone: 215-597-7883
	Economic Development Administration Assistance Programs	U.S. Department of Commerce	Eligibility: Varies with program Purpose: Provides funds needed infrastructure improvements to spur redevelopment Terms: Varies Deadline: Annual Contact: U.S. Department of Commerce Phone: 215-597-4603 Web: www.eda.gov
Environmental	Green Acres	NJDEP	The Green Acres program was created by a ballot initiative in 1961 and has subsequently been renewed through 12 additional ballot measures. The program funds a range of activities through its five program areas: State Park and Open Space Acquisition, Local and Nonprofit Funding, Stewardship and Legal Service, Planning and Information Management, and Office of Natural Resource Restoration. Generally, all Green Acres funding is for the support of outdoor recreation and conservation and must provide public access to these resources. More information can be found at: http://www.nj.gov/dep/greenacres/
	Cleanup Grants	U.S. Environmental Protection Agency	Eligibility: State, local, and tribal governments, land clearance authorities, and redevelopment agencies Purpose: To provide cleanup activities at brownfield sites Terms: Maximum grants for \$1 million for cleanup of more than five sites; 20 percent match is required Deadline: Varies Contact: U.S. Environmental Protection Agency Phone: 202-566-2758
	Targeted Brownfield Assessments (TBAs)	U.S. Environmental Protection Agency	Eligibility: States, tribal governments, and municipalities Purpose: Grants and technical assistance for environmental assessment at brownfield sites Terms: EPA will not fund TBAs at properties where the owner is responsible for the contamination Deadline: Varies Contact: U.S. Environmental Protection Agency Phone: (215) 814-3129 Web: www.epa.gov/reg3hwmd/bf-lr/index.htm

Environmental	Community Stewardship Incentive Program	NJDEP Division of Parks & Forestry	The Green Communities Grant helps a municipality or county hire a forestry consultant to assist them in writing a Community Forestry Management Plan. Then the Community Stewardship Incentive Program (CSIP) Grant is offered to communities who have Approved Status under the Act to implement goals and objectives directly from their management plan. The "Treasure Our Trees" license plates fund these grants. The grant is for \$3,000 with a 100% match for Green Communities Grant. Reaching and maintaining Approved Status offers many benefits and opportunities to a municipality or county. These benefits include liability protection from hazardous tree situations for your municipality or county including its volunteers, promotion of training and tree related educational opportunities, and sets a foundation for the proper care and management your tree resource. Having Approved Status opens the door for valuable Community Stewardship Incentive Program (CSIP) Grants to assist in plan implementation. Approved Status provides maximum liability protection under the Act for your municipality. It will ensure that if the courts seek information from the New Jersey Forestry Service concerning the status of your municipality or county under the Act that a case can be made that your municipality or county is participating in the program and in full compliance with the New Jersey Shade Tree and Community Forestry Assistance Act. Your shade tree resource is a resource worthy of investment in time and money. Involvement in the Community Forestry Assistance Act program is a worthy investment as well. Each municipality and county in New Jersey is encouraged to get involved with this program, at whatever pace and scope possible, and work toward reaching and maintaining Approved Status under the New Jersey Shade Tree and Community Forestry Assistance Act. CSIP Grant applications will be posted on this site when available to apply. For more information regarding the CSIP Grant email carrie.sargeant@dep.nj.gov
	Municipal / Local Government Energy Audit Program	Board of Public Utilities/ NJCEP	All across New Jersey, residents and business owners are looking for ways to save energy and the environment. Now local government, as well as state contracting agencies, public agencies, NJ State Colleges and State Universities, and 501(c)(3) non-profit agencies can take a leadership role by participating in the Local Government Energy Audit Program (LGEA) offered as part of New Jersey's Clean Energy Program. They'll help identify cost-justified energy-efficiency measures - as well as subsidize the full cost of the audit. The LGEA Program targets buildings owned by local governments, New Jersey State Colleges and State Universities, and 501(c)(3) non-profit agencies. Such facilities may include, but are not limited to: offices, courtrooms, town halls, police and fire stations, sanitation buildings, transportation structures, schools and community centers. All local governments, New Jersey State Colleges or State Universities, and non-profit agencies exempt from federal tax under section 501(c)(3) of the Internal Revenue Code that are located within the service territory of at least one of the state's regulated utilities are eligible. The Program requires that participating local government agencies pass a resolution enabling submittal of the program application. Sample Resolutions that may be used by your governing body are included in the complete package of guidelines and application forms provided in the link at the top of this page. Participants will prepare a Request for Proposal in order to select one of the pre-qualified auditing firms who will follow the strict parameters of New Jersey's Clean Energy Program to deliver an energy audit. The Program will subsidize 100% of the cost of the audit. http://www.njcleanenergy.com/commercial-industrial/programs/local-government-energy-audit/local-government-energy-audit

	Sustainable NJ Small Grants Program		The Sustainable Jersey grants are intended to help local governments make progress toward a sustainable future in general, and specifically toward Sustainable Jersey certification. The projects serve as practical models for the rest of the state while making measurable contributions toward the long-term goal of a sustainable New Jersey. Eligible projects include actions that would score a municipality points toward Sustainable Jersey certification. This includes projects addressing issues from renewable energy and green building design, waste reduction, a sustainable master plan, water conservation, natural resources management, energy management, and transportation issues. Most projects also include public outreach campaigns and many have involved school children and community organizations. The Small Grants program also gives capacity building awards to municipalities to support local green teams and their programs, and are not project specific. On November 18th, 2015, Sustainable Jersey announced that \$200,000 in grant money is now available to New Jersey municipalities. Funded by the PSEG Foundation, this cycle of the Sustainable Jersey Small Grants Program will support thirty-two local projects that leverage resources to make communities more livable, environmentally friendly and prosperous. The PSEG Foundation is also contributing \$100,000 to support another cycle of the Sustainable Jersey for Schools Small Grants Program to fund projects that help schools gain points needed for Sustainable Jersey for Schools certification and make progress toward a sustainable future For questions regarding the Sustainable Jersey Small Grants Program e-mail grants@sustainablejersey.com or call 609-771-2271.
	Private Foundation Funding	VARIES	In recent years, regional philanthropic organizations like the William Penn Foundation have been both generous and ambitious in providing financial support for building the regional trails network. This has occurred both through the creation of new, temporary discretionary funding programs like the DVRPC-facilitated Regional Trails Program, and on an individual basis to specific grantees in response to individual project proposals. Sponsors with project ideas should consider reaching out to the William Penn Foundation and others to explore funding opportunities that may become available from time to time.

Additional Resources: Governmental and Non-Profit Partners

Cross County Connection TMA

Cross County Connection, a nonprofit organization, partners with the North Jersey Transportation Planning Authority (NJTPA), the New Jersey Department of Transportation (NJDOT), NJ TRANSIT, the Delaware Valley Regional Planning Commission (DVRPC), the South Jersey Transportation Planning Organization (SJTPO), member organizations and the U.S. Federal Highway Administration, to provide solutions to complex transportation problems for counties, municipalities, employers and in the southern New Jersey region encompassing Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem counties

Cross County Connection is a Transportation Management Association works to “Improve the quality of life in southern New Jersey through transportation solutions.” They offer assistance with Bicycle and Pedestrian Planning Services, Complete Streets Services, Sustainable Jersey Certification Services, Safe Routes to School Services, GIS Mapping Services, Traffic Alert Services and more. They have a program called TDM Reimbursements which makes monies available to member organizations to reward them for expanding their use of Transportation Demand Management (TDM) strategies. This money can be used for the purchase and installation of pedestrian and bicycle-related enhancements such as bicycle racks, crosswalks to enhance safety and visibility, and other improvements.

Delaware Valley Regional Planning Commission

Serving the Greater Philadelphia region for more than 40 years, DVRPC works to foster regional cooperation in a nine-county, two state area. City, county and state representatives' work together to address key issues, including transportation, land use, environmental protection and economic development. DVRPC provides services to member governments and others through planning analysis, data collection, and mapping services. Aerial photographs, maps and a variety of publications are available to the public and private sector.

As the designated MPO for the nine-county service area, DVRPC's mission is to proactively shape a comprehensive vision for the region's future growth and stability. DVRPC works to achieve this mission by providing technical assistance and services; conducting high-priority studies that meet the demands of its local governments; fostering cooperation among various constituencies to forge consensus on regional issues; and continuing public outreach efforts that enhance awareness of regional issues. DVRPC's land use and transportation plans and policies affect citizens, businesses, and institutions in the Delaware Valley and beyond.

DVRPC is also responsible for allocating federal funds for transportation and transportation-related improvements in the region. The current federal surface transportation act, MAP-21, Moving Ahead for Progress in the 21st Century Act, directs MPOs to program and prioritize projects on a regional basis. The projects are drawn from DVRPC's long-range land use and transportation plan, and include a broad range of activities, including roadway improvements, transit facilities, pedestrian services, goods movement, and parking enhancements. DVRPC will also be responsible for allocating federal funds out of the new FAST, Fixing America's Surface Transportation Act, which was signed into law in December of 2015 and authorizes approximately \$305 billion in federal highway and transit spending over the next five years for transportation projects.

In January of 2016, DVRPC released an updated *Municipal Resource Guide* that can assist local governments, community groups, and non-profit organizations in the Delaware Valley Region to identify federal, state, regional, county, and private sources of funding for locally initiated planning and development projects. The programs are listed in alphabetical order and cover topical areas of disaster and pollution mitigation, energy conservation, historic preservation, housing, infrastructure, infill and brownfields, open space and recreation, smart growth and community revitalization, transportation, and private resources. The guide and online searchable database can be found on the DVRPC website or at the following link:

<http://www.dvrpc.org/asp/MCDResource/>

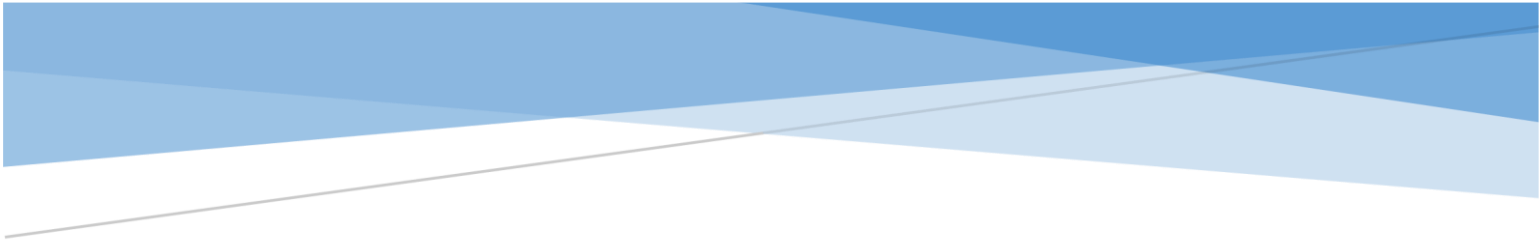
South Jersey Transportation Authority

The South Jersey Transportation Authority (SJTA) was established by the Legislature in June 1991 to assume operational responsibilities for the Atlantic City Expressway, Atlantic City International Airport terminal, and parking facilities in Atlantic City. As a successor to the New Jersey Expressway Authority and Atlantic County Transportation Authority (ACTA), the SJTA serves six counties --- Atlantic, Camden, Cape May, Cumberland, Gloucester, and Salem.

Legislation (N.J.S.A. 27:25A-1 et seq.) charged the Authority with coordinating South Jersey's transportation system, including addressing the region's highway network, aviation facilities and transportation needs. The Authority's transportation network encompasses public highways, and transportation projects, parking facilities and functions once performed by ACTA; other public transportation facilities; and related economic development facilities in New Jersey.

The Atlantic City Expressway (ACE), the Atlantic City International Airport (ACY), Transportation Services, and Tourist Services are the Authority's core components. These entities are divided into eight departments: Executive, Airport, Engineering & Operations, Finance, Information & Tolls Technology, Marketing & Communications, Business Administration, Tourist Services, and Transportation Services. Each department contributes to the Authority's focus of using transportation facilities to stimulate economic development within its six-county service area.

The Mission of the South Jersey Transportation Authority is to provide the traveling public with safe and efficient transportation through the acquisition, construction, maintenance, operation, and support of expressway, airport, transit, parking, other transportation projects and services that support the economies of Atlantic, Camden, Cape May, Cumberland, Gloucester and Salem Counties.



APPENDIX K

MODEL BEEKEEPING ORDINANCE

The following appendix consists of a model beekeeping ordinance for Borough
of Somerdale.

Model Beekeeping Ordinance for Local and Municipal Governments

Whereas, honeybees are of benefit to mankind, and to the Township of Berlin, Camden County and New Jersey in particular, by providing agriculture, fruit and garden pollination services and by furnishing honey, wax and other useful products; and

Whereas, New Jersey is among the leading states in honey production and agricultural byproducts associated with beekeeping throughout the United States; and

Whereas, domestic strains of honeybees have been selectively bred for desirable traits, including gentleness, honey production, tendency not to swarm and nonaggressive behavior, characteristics that are desirable to foster and maintain; and

Whereas, gentle strains of honeybees can be maintained within populated areas in reasonable densities without causing a nuisance if the bees are properly located and carefully managed and maintained;

Now, Therefore, Be It Ordained and Enacted By

(Insert name of governmental entity)

Section 1. That the findings contained in the preamble of this ordinance are hereby adopted as a part of this ordinance.

Section 2. That Chapter No. _____ (Health) of the Code of Ordinances, _____ (city), _____ (state), is hereby amended by adding a new article No., which reads as follows:

Definitions

As used in this article, the following words and terms shall have the meanings ascribed in this section unless the context of their usage clearly indicates another meaning:

1. "Apiary" means the assembly of one or more colonies of bees at a single location.
2. "Beekeeper" means a person who owns or has charge of one or more colonies of bees.
3. "Beekeeping equipment" means anything used in the operation of an apiary, such as hive bodies, supers, frames, top and bottom boards and extractors.
4. "Colony" or "hive" means an aggregate of bees consisting principally of workers, but having, when perfect, one queen and at times many drones, including brood, combs, honey and the receptacle inhabited by the bees.
5. "Honeybee" means all life stages of the common domestic honey bee, *Apis mellifera* species.
6. "Tract" means a contiguous parcel of land under common ownership.
7. "Undeveloped property" means any idle land that is not improved or actually in the process of being improved with residential, commercial, industrial, church, park, school or governmental facilities or other structures or improvements intended for human use occupancy and the grounds maintained in association therewith. The term shall be deemed to include property developed exclusively as a street or highway or property used for commercial agricultural purposes.

Certain Conduct Declared Unlawful

(a) The purpose of this article is to establish certain requirements of sound beekeeping practice that are intended to avoid problems that may otherwise be associated with the keeping of bees in populated areas.

(b) Notwithstanding compliance with the various requirements of this article, it shall be unlawful for any beekeeper to keep any colony or colonies in such a manner or of such disposition as to cause any unhealthy condition, interfere with the normal use and enjoyment of human or animal life of

others or interfere with the normal use and enjoyment of any public property or property of others.

Hive Registration

All honey bee colonies shall be registered annually with the New Jersey Department of Agriculture.
IT IS THE LAW!

Hive Type

On and after July first, one thousand nine hundred and thirty-nine, it shall be unlawful for any person, firm or corporation to keep or to maintain honey bees in any hives other than modern, movable, frame hives which permit the thorough examination of every comb in order to detect the presence of bee diseases. All other types of boxes or receptacles for bees which are in use after July first, one thousand nine hundred and thirty-nine, are hereby declared to be a public nuisance, and a menace to the community, and the Department of Agriculture may seize and destroy the same without remuneration to the owner. All honey bee colonies shall be kept in Langstroth-type hives with removable frames, which shall be kept in sound and usable condition.

Fencing of Flyways

In each instance in which any colony is situated within 25 feet of a public or private property line of the tract upon which the apiary is situated, as measured from the nearest point on the hive to the property line, the beekeeper shall establish and maintain a flyway barrier at least 6 feet in height consisting of a solid wall, fence, dense vegetation or combination thereof that is parallel to the property line and extends 10 feet beyond the colony in each direction so that all bees are forced to fly at an elevation of at least 6 feet above ground level over the property lines in the vicinity of the apiary. It is a defense against prosecution under this section that the property adjoining the apiary tract in the vicinity of the apiary is undeveloped property for a distance of at least 25 feet from the property line of the apiary tract.

Water

Each beekeeper shall ensure that a convenient source of water is available to the bees at all times during the year so that the bees will not congregate at swimming pools, bibcocks, pet watering bowls, bird baths or other water sources where they may cause human, bird or domestic pet contact.

General Maintenance

Each beekeeper shall ensure that no bee comb or other materials that might encourage robbing are left upon the grounds of the apiary site. Upon their removal from the hive, all such materials shall promptly be disposed of in a sealed container or placed within a building or other bee-proof enclosure.

Queens

All colonies shall be maintained with marked queens. In any instance in which a colony exhibits unusual aggressive characteristics by stinging or attempting to sting without due provocation or exhibits an unusual disposition toward swarming, it shall be the duty of the beekeeper to promptly re-queen the

colony with another marked queen. Queens shall be selected from European stock bred for gentleness and nonswarming characteristics. A person in this State engaged in the rearing of queen bees for sale shall have his apiary inspected at least twice during each summer and a person who shall fail to comply with this requirement shall be liable to a penalty of \$200.00. The department shall inspect all such apiaries at least twice each season, when requested by the owner.

Colony Densities

(a) It shall be unlawful to keep more than the following number of colonies on any tract within the city, based upon the size or configuration of the tract on which the apiary is situated:

1. One-quarter acre or less tract size – two colonies.
2. More than one-quarter acre but less than one-half acre tract size – four colonies.
3. More than one-half acre but less than 1 acre tract size – six colonies.
4. One acre or larger tract size – eight colonies.
5. Regardless of tract size, where all hives are situated at least 200 feet in any direction from all property lines of the tract on which the apiary is situated, there shall be no limit to the number of colonies.
6. Regardless of tract size, so long as all property other than the tract upon which the hives are situated – that is, within a radius of at least 200 feet from any hive – remains undeveloped property, there shall be no limit to the number of colonies.

(b) For each two colonies authorized under Colony Densities [subsection (a)] there may be maintained upon the same tract one nucleus colony in a hive structure not exceeding one standard 9 5/8 inch depth 10-frame hive body with no supers attached as required from time to time for management of swarms. Each such nucleus colony shall be disposed of or combined with an authorized colony within 30 days after the date is acquired.

Marking Hives, Presumption of Beekeeping

(a) In apiaries the beekeeper shall conspicuously post a sign setting forth his name and telephone number. It is a defense against prosecution under this subsection that a colony is kept upon the same tract upon which the owner resides.

(b) Unless marked in accordance with subsection (a) it shall be presumed for purposes of this article that the beekeeper is the person or persons who own or otherwise have the present right of possession and control of the tract upon which a hive or hives are situated. The presumption may be rebutted by a written agreement authorizing another person to maintain the colony or colonies upon the tract setting forth the name, address and telephone number of the other person who is acting as the beekeeper.

Inspection

The health officer shall have the right to inspect any apiary between 8 a.m. and 5 p.m. Where practicable, prior notice shall be given to the beekeeper if he resides at the apiary or if his name is marked on the hives. The Department of Agriculture has the right to and shall study and investigate or cause to be studied and investigated, outbreaks of any bee disease and other conditions unfavorable to the development of bees within the state.

Infested colonies or apparatus as nuisance

A colony of honey bees, or apparatus used in bee-keeping, known to be infested with American foulbrood or European foulbrood or other serious, discoverable, contagious or infectious bee disease is hereby declared a public nuisance and subject to abatement as provided in this chapter.

Right of entry to inspect; Interference with officers

For the purpose of making the investigations and inspections specified in this chapter and to enforce the provisions of the same, the officers and agents of the department shall have free entry upon or into any apiaries or premises where bees are kept or hives or combs or other bee-keeping equipment and appliances are stored. Any interference with or obstruction made to such officers or agents while engaged in the performance of the duties imposed by this chapter shall subject the offender to punishment as a disorderly person under the general laws of the state, upon a charge made against him by the officer interfered with.

Abandoned apiaries; written notice; Steps to protect neighboring apiaries

When an apiary is deemed to be an abandoned apiary, written notice shall be given by certified mail to the owner or operator thereof, if he can be located, that the apiary is an abandoned apiary. If he cannot be located, such notice shall be served on the owner of the land on which the apiary is located. If such apiary continues to be so abandoned for 60 days thereafter, the agent may take whatever steps are necessary to protect the welfare of neighboring apiaries, including the removal or destruction of apiaries deemed abandoned.

Penalty enforcement; Hearing

Any penalty imposed by this act shall be collected or enforced in a summary manner, without a jury, in any court of competent jurisdiction according to the procedure provided by "the penalty enforcement law" (N.J.S.2A:58-1 et seq.). The Superior Court and municipal court shall have jurisdiction to enforce the provisions of this act. Any violation of this chapter or any of the orders or rules or regulations of the department made pursuant to this act may be restrained by the Superior Court in an action brought for such purpose by the department.

The State Police, county and municipal law enforcement officers are authorized and directed to assist in the enforcement of the provisions of this chapter upon request by the department.

Any person aggrieved by an order of this department pursuant to this act shall have 15 days from the date of delivery of said order to petition the department for administrative hearing.

The department shall, within 30 days of such petition, schedule said hearing in accordance with the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.).

Section 3. If any provisions, section, subsection, sentence, clause or phrase of this ordinance or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this ordinance or their application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the city council in adopting this ordinance that no portion hereof or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality, voidness or invalidity of any other portion hereof, and all provisions of this ordinance are declared to be servable for the purpose.

Section 4. This ordinance shall become effective at _____ (hour) on _____ (date).

Section 5. There exists a public emergency requiring that this ordinance be passed finally on the date of its introduction as requested in writing by the mayor; therefore, this ordinance shall be passed finally on such date and shall take effect as provided in Section 4, above.

Passed and approved this _____ day of 20_____.



APPENDIX L

COMMUNITY FORESTRY MANAGEMENT PLAN BROCHURE

The following appendix consists of a Community Forestry Management Plan
Brochure for the Borough of Somerdale

TREASURE OUR TREES

For Commercial and Passenger Vehicles



Support shade tree planting and care on New Jersey Streets.

Purchase the “Treasure Our Trees” plates for your PASSENGER and COMMERCIAL vehicles. These plates show you care about trees in New Jersey.

Contact the Motor Vehicle Commission
www.TreasureOurTrees.com
1-888-486-3339

A **Community Forestry Management Plan** (CFMP) is an essential guide to successfully achieving a healthy, economically efficient, and safe community forest. A CFMP may lead to increased community safety, lower tree hazard problems, decreased tree maintenance and removal costs, less emergency tree calls, increased tree benefits, reduced municipal cost (not just tree related), and develop a proactive, not reactive approach to tree/forest management. It also helps communities prioritize limited financial resources to optimize goals, objectives, and results.

Every community in the State is unique in its tree needs from our urban towns and centers to our rural farm communities; from the mountains, to New Jersey's coastal shores. The CFMP guidelines (based on the Act), take into account the diversity of our State so every municipality or county will have an effective CFMP that is specifically tailored to their needs.

Communities that need assistance in creating a CFMP are eligible for the Green Communities grant. The grant is offered every year for municipalities and counties. Currently the grants are up to \$3,000 with a 50% match, than can be made of in-kind and volunteer hours at the federal volunteer rate.

For additional information, contact us:
**Division of Parks and Forestry
Community Forestry Program**
Mail Code 501-04
PO Box 420
Trenton, NJ 08625-0420
Telephone 609-292-2532
Fax 609-984-0378

www.CommunityForestry.NJ.gov



Department of Environmental Protection
Division of Parks and Forestry
NJ Forest Service
Community Forestry Program

COMMUNITY FORESTRY MANAGEMENT PLANS

Your community needs a State approved Community Forestry Management Plan for:

- ✓ **Liability Protection** under the New Jersey Shade Tree and Community Forestry Assistance Act
- ✓ **Grant Opportunities** from the Community Stewardship Incentive Program
- ✓ **Environmental & Economic Benefits** that trees give your community





Grant Opportunities

from the
**Community Stewardship
Incentive Program (CSIP)**



Municipalities with an approved Community Forestry Management Plan (CFMP), and Approved Status under the New Jersey Shade Tree and Community Forestry Assistance Act are eligible for CSIP grant funding. These grants aid municipalities and counties in implementing forestry goals and objectives directly from their 5 year CFMP, and can be up to \$25,000 each.

15 management categories of the CSIP Grant:

1. Training
2. Community Forestry Ordinance Establishment
3. Public Education & Awareness
4. Arbor Day
5. Tree Inventory
6. Hazard Tree Assessment
7. Storm Damage Assessment
8. Tree Maintenance and Removals
9. Insect and Disease Management
10. Wildfire Protection
11. Tree Planting
12. Tree Recycling
13. Sidewalk Maintenance Program
14. Storm Water Management
15. Other

Liability Protection under the New Jersey Shade Tree and Community Forestry Assistance Act (the Act)

Street trees in many of New Jersey's communities have declined due to budget cuts, lawsuits, disease, improper tree selection and maintenance methods, and lack of awareness. Under the Act, municipalities and counties with a State approved Community Forestry Management Plan, and Approved Status under the Act will reduce or eliminate liability associated with hazardous tree situations.

The 1996 Shade Tree and Community Forestry Assistance Act can be found on the website, with other relevant information.

www.CommunityForestry.nj.gov

Environmental & Economic Benefits that trees give your community

The Community Forest Management Plan shows that community trees are a valuable resource and worthy of investment.

Studies have shown that trees:

- **Improve neighborhood appeal**
Trees attract businesses, shoppers, and homeowners.
- **Increase property value**
Homes with trees sell 4-6 weeks faster, and for 20% more.
- **Increase sales**
People shop longer, and will pay 20% more for an item in a treed shopping center.
- **Cool our cities and towns in summer**
Trees reduce heat generated by hard surfaces by about 12°F.
- **Save on utility costs**
Three properly placed shade trees save an average household up to \$250 annually in energy costs.
- **Purify the air**
Trees convert and absorb pollutants.
- **Reduce pollutants in sewer systems**
Trees absorb water which prevents sewer overflow and saves communities millions of dollars in water treatment costs.
- **Protect roads**
Trees reduce road maintenance costs by 50% and can help roads last 20-30 years longer.
- **Improve the quality of education**
In schools with trees outside, students score 1-2 grades higher on report cards, and are more attentive in class.
- **Keep our neighborhood safe**
Treed communities have a reduced level of domestic violence and foster safer, more sociable neighborhood environments.



APPENDIX M

Municipal Smart Growth Scorecard

The following appendix consists of a scorecard and chart for use by the
Borough of Somerdale.

COMMUNITY GOALS SCORECARD

About This Scorecard

Why Should You Use the Scorecard?

This scorecard is as much a conceptual model as it is a practical tool. Scores do not matter - it should only be used as a way to gauge what your community is currently doing well, and identify the areas where improvements can be made. This process should be viewed as a way to help communities evaluate how existing policies and regulations facilitate developing in a way that supports their economic, environmental and community goals. As a result, some of the questions in this survey may require a look at local planning documents and/or the zoning ordinance; others can be answered by observation. It may also be necessary to speak directly with your local planning and zoning office.

When Should You Use the Scorecard?

This scorecard can be used at the beginning stages of a planning process to help assess how well existing regulations help to implement the community's goals. Once this baseline assessment is completed, you should be able to identify priority areas where changes can be made.

Who Should Use the Scorecard?

- Planners
- Elected/Appointed Officials
- Citizens
- Anyone involved or interested in development decisions in the community

General Smart Growth Principles:

1. Mix Land Uses
2. Take Advantage of Compact Building Design
3. Create a Range of Housing Opportunities and Choices
4. Create Walkable Communities
5. Foster Distinctive, Attractive Communities with a Strong Sense of Place
6. Preserve Open Space, Farmland, Natural Beauty, and Critical Environmental Areas
7. Strengthen and Direct Development Toward Existing Communities
8. Provide a Variety of Transportation Choices
9. Make Development Decisions, Predictable, Fair, and Cost Effective
10. Encourage Community and Stakeholder Collaboration in Development Decisions

Directions:

The scorecard is broken up into ten sections, one for each of the 10 principles above plus a section to establish a general planning profile of the community. Read through the sections and circle the best answer for each measurement listed. The measurements are weighted differently so that the maximum score for each measurement reflects its importance to a community's goals. Keep in mind that you may choose to weigh the measurements differently depending on their importance to your community. To calculate the score, multiply the points for a given answer by the measurement's weight and enter it into the score column. Add up the scores for each measurement and write that number (subtotal) in the space provided. Compare each section's number to the scoring ranges shown at the bottom of the section: Looking Good, In Transition, or Needs Attention.

How do you Use the Scores?

The final number does not matter; the score should simply be used as a gauge to determine those areas where your community is doing well in terms of implementing alternative development patterns, and areas where improvements can be made. In terms of the range of scores, consider the following ideas:

“Looking Good”: if your score falls within this range, it shows that your community has already taken steps towards changing policies/regulations that foster conventional development. Even though improvements can still be made within this category, it might be useful to concentrate on other areas.

“In Transition”: if your score falls within this range, it seems like your community is moving in a positive direction, although improvements can still be made. Identify the “effortless opportunities” that can keep the momentum towards change – what changes can be made with the fewest resources that can keep your community moving in this direction?

“Needs Your Attention”: if your score falls within this range for certain sections, this identifies key areas where your community can make positive changes. First, carefully examine the results of the score to determine the specific areas that need improvements. Second, go through a process to identify the next steps that can be successfully taken towards moving your community towards managing growth in sustainable ways.

I. Community Planning Profile; Encourage Collaboration in Planning Process:

A snapshot of your community's land use plans and development processes. This helps to get a sense of municipal commitment to land use planning in general, as well as municipal sophistication about land-use issues.

Measurement	Answer	Points	Weight	Score
Comprehensive Plan is current; it is thoroughly examined, revised, and amended at least every 6 years.	Yes No	1 0	x 2	
Community has a designated center (a defined area intended to accommodate growth).	Yes No	1 0	x 1	
Community actively engages the public in its planning activities.	Yes No	1 0	x 2	

Section I Score
Looking Good 5
In Transition 3-4
Needs Your Attention! 0-2

Subtotal

II. Mix of Uses:

Creates a vibrant community where places to work, shop, live and play are integrated. This includes provision for maintaining working waterfronts within coastal communities.

Measurement	Answer	Points	Weight	Score
Most daily shopping and service needs can be met in a central location or business district, without the use of a car to get between shops and services.	All needs met Some needs met No needs met	2 1 0	x 2	
Zoning code allows and encourages mixed-use development (commercial and residential uses in the same building and/or district), especially in a Community center.	Required Encouraged Allowed Not mentioned	3 2 1 0	x 2	
Local parking regulations support smart growth by allowing shared parking, credit for parking provided off-site, reduced parking requirements for mixed-use development and credit for on-street parking.	Yes No	1 0	x 1	
Community has a Special Improvement District or economic development plan to attract new businesses and housing options to a city center.	Yes No	1 0	x 1	
Community has provisions to protect working waterfronts and traditional vocations, such as tax incentives for water dependent uses, "Right to Fish" ordinance to establish prior rights, etc.	Yes No	1 0	x 1	

Section II Score

Looking Good 10-13

In Transition 5-9

Needs Your Attention! 0-4

Subtotal

III. Compact Building Design:

Build with smaller footprint on the land in order to preserve critical natural areas.

Measurement	Answer	Points	Weight	Score
Zoning regulations have minimum density requirements where applicable.	Yes No	1 0	x1	
Zoning regulations allow (and encourage) clustering development in order to preserve natural areas and open space.	Yes No	1 0	x 2	
Zoning regulations do not contain minimum parking standards, or they allow shared parking.	Yes No	1 0	x 1	
Regulations allow smaller street widths, depending on the character of the area, traffic volume, and speed of traffic.	Yes No	1 0	x2	

Section III Score

Looking Good 5-6

In Transition 3-4

Needs Your Attention! 0-2

Subtotal

IV. Range of Housing Options:

This principle offers a range of housing types and sizes. It also strives to increase the choices available to households of all income levels, which is especially important in coastal communities in order to support the local workforce.

Measurement	Answer	Points	Weight	Score
Zoning allows for a mix of housing types (not separated into single-use districts), including single-family homes, affordable housing, multi-family housing, apartments, and senior homes.	A good mix Limited mix No mix	2 1 0	x 1	
Community encourages affordable housing as a fixed percent (at least 10%) of new development.	Required Encouraged Not Mentioned	2 1 0	x 1	
Community has an affordable housing strategy that includes inclusionary zoning, new construction and rehabilitation programs for low- and moderate-income households. (<i>Inclusionary Zoning refers to the allowance of lot sizes [usually greater than 8 dwelling units/acre] that make the provision of affordable units by private developers feasible.</i>)	Yes No	1 0	x 2	
Affordable housing opportunities are distributed throughout the community, integrated into market-rate communities.	Yes No	1 0	x 1	
Community has planned for future housing needs (amount and types of housing such as seasonal housing or "age in place") and has outlined specific methods for meeting those needs.	Yes No	1 0	x2	

Section IV Score

Looking Good 8-9

In Transition 4-7

Needs Your Attention! 0-3

Subtotal

V. Walkable, Safe, Designed for Personal Interaction, and Provides Public Access to Water:

Designed for the human, rather than for the automobile. Helps to reduce traffic and create places with increased potential for social interaction, walking and sense of community. Also protects public access to water.

Measurement	Answer	Points	Weight	Score
Community has a good network of sidewalks and safe pedestrian/bike paths, interconnecting the town.	Yes No	1 0	x 3	
Zoning requires buildings to be close enough to each other to encourage walking and pedestrian activity (<i>Average residential density greater than 8 dwelling units per acre; commercial floor area ratio (FAR) exceeding 1.0</i>).	Yes No	1 0	x 3	
Community is designed with the pedestrian in mind; curb cuts favoring vehicular access are minimized, parking lots in the front of buildings are avoided and there are many crosswalks.	Yes No	1 0	x 2	
The majority of parking for commercial, retail, and civic uses is required to be located to the rear of buildings.	Yes No	1 0	x1	
Community has taken steps to protect and preserve public access to water (through easements, access inventory, viewshed ordinance, etc.)	Yes No	1 0	x1	

Section V Score

Looking Good 9-10

In Transition 5-8

Needs Your Attention! 0-4

Subtotal

VI. Foster Distinctive, Attractive Communities, with a Strong Sense of Place:

Growth is in keeping with the local architecture, especially if in historically significant area. This principle helps to enhance the overall quality and values of the community. It also protects and enhances the community's character and desirability as a place to live, work, shop and recreate.

Measurement	Answer	Points	Weight	Score
Zoning has specific design guidelines, including graphic images, to ensure new development is in keeping with coastal community character, especially in historic districts.	Yes No	1 0	x 3	
Community has a historic district and/or historic preservation commission to protect important structures.	Both Commission None	2 1 0	x 2	
Community has pedestrian-friendly amenities such as benches, lighting, street trees and trash cans, as well as windows at street level.	Yes No	1 0	x 1	
Community has clean, well-lit community spaces such as public plazas, squares, parks, etc.	Yes No	1 0	x 1	

Section VI Score

Looking Good 8-9

In Transition 4-7

Needs Your Attention! 0-3

Subtotal

VII. Protects Open Space, Farmland, and Critical Environmental Areas:

Benefits the general public as it spares watersheds, protects water quality, scenic vistas, and agricultural areas needed for drinking water, farm, and tourism revenues and strong quality of life.

Measurement	Answer	Points	Weight	Score
Community has plans to ensure future access to parks, open space, and coastal resources.	Yes No	1 0	x 2	
Community has regulations that steer development away from unsuitable land, including (if applicable) steep slopes greater than 20%, floodplains, stream corridors, aquifers and aquifer recharge areas (protect water quality).	Yes No	1 0	x 2	
Community has adopted an open space plan to strategically identify and preserve open lands, including public parks and recreation areas, farms, natural habitats and forests.	Yes No	1 0	x 2	
Community has an active Environmental Commission.	Yes No	1 0	x 1	
Community has tools available to protect farmland, open space, and riparian buffers (Transfer of development rights, cluster zoning, tax abatements, dedicated funds to purchase).	Yes No	1 0	x3	

Section VII Score

Looking Good 8-10

In Transition 4-7

Needs Your Attention! 0-3

Subtotal

VIII. Near Existing Development and Infrastructure:

Makes the most of limited public resources and builds on public investments already made by encouraging new development where infrastructure and services already exist. Creates opportunity for infill or redevelopment of under-utilized, abandoned and brownfield sites.

Measurement	Answer	Points	Weight	Score
Community has identified service areas for public water and sewer adjacent only to existing Community center(s). No new development is allowed outside service area.	Yes No	1 0	x 2	
New development is occurring within 1/2 mile (walking distance) of existing development in a community center (Community centers are compact, walkable places intended to accommodate growth and include a variety of community services, employment, and shopping, housing and public spaces).	Yes No	1 0	x 4	
Public facilities (schools, libraries, etc.) are located centrally, within walking distance for most users.	Yes No	1 0	x 4	
Community has looked into the capacity of its infrastructure and environment to accept new growth (carrying capacity analysis, build-out analysis).	Yes No	1 0	X2	
Community has redeveloped, or has plans to redevelop vacant, under-utilized, and/or brownfield properties.	Yes No	1 0	x 2	
Community has assistance available to redevelop brownfields (financial, pre-permitting, etc.).	Yes No	1 0	x 2	
Community's comprehensive plan has specific language that describes a desired pattern of development.	Compact Center w/ lower density as you move outward Plan is not specific on desired pattern of development, or no comp plan	1 0	x2	
Zoning encourages business development – especially those that meet businesses' and residents' daily needs – in the town center by offering regulatory incentives such as reduced parking, setbacks, and/or by offering public-financed improvements such as street and sidewalk repairs, street trees, etc.	Yes No	1 0	x2	

Section VIII Score

Looking Good 15-20

In Transition 7-14

Needs Your Attention! 0-6

Subtotal

IX. Encourage Multiple Transportation Choices:

Maximizes use of existing transit service (if it exists) and encourages other transportation options in order to decrease dependency on the automobile, thereby reducing traffic and encouraging walkability.

Measurement	Answer	Points	Weight	Score
Community encourages multiple modes of transportation, as evidenced by on-street parking, bike lanes, sidewalks and frequent crosswalks in the community.	Yes No	1 0	x3	
Community has convenient access to public transit (bus, rail).	Yes No	1 0	x2	
Community has a recent circulation plan element as part of its Comprehensive Plan.	Yes No	1 0	x 2	
Zoning encourages more compact, higher-density development within 1/2 mile of transit stops (bus, train, shuttle, etc.).	Yes No	1 0	x 2	
Streets within the community are interconnected, in a clear pattern for getting around, with few cul-de-sacs or dead end streets that encumber traffic flow.	Yes No	1 0	x 3	
Circulation plan with multiple transportation options must be considered in all new development proposals, and implemented when applicable.	Yes No	1 0	x2	
Community encourages and preserves waterborne transportation options (Provide access and/or tax incentives for shore to shore ferry, tour boat).	Yes No	1 0	x1	

Section IX Score

Looking Good 13-15

In Transition 5-12

Needs Your Attention! 0-4

Subtotal

X. Make Development Decisions Predictable, Fair, and Cost Effective:

This principle allows developers to know the process and resources required ahead of time to propose a development project. It also allows other members of the community to know the process by which the development decisions are made by elected and appointed officials.

Measurement	Answer	Points	Weight	Score
An up-to-date, printed guide regarding the regulatory framework and procedures a citizen, developer, etc. is required to go through is available.	Yes No	1 0	x 3	
The Community budgets funds for professional development opportunities such as training and conferences for Board members and other personnel involved in the planning process.	Yes No	1 0	x 1	
Community contains a mechanism for communication and coordination with utility providers regarding growth and development issues.	Yes No	1 0	x2	

Section X Score

Looking Good 5-6

In Transition 3-4

Needs Your Attention! 0-2

Subtotal

Final Calculations:

1. Starting with Table 1 below, enter the subtotals for each section into the column "Section Scores".
2. Using Table 2, examine each section score to see where it falls on the scale (LG, IT, or NYA). Write this in Column 2.
3. Add all of the section scores together to determine what the total score is.

Once the calculations are complete, take a look at the areas in need of improvement. Does the community score well in terms of efficient use of infrastructure, but poorly in terms of providing access to public transit and other choices for getting around? Are the building design standards in keeping with the local architectural style, but inaccessible to pedestrian traffic? Making determinations of this nature, and asking the right questions will help guide planning and new development in the right direction.

Table 1

	Column 1	Column 2
Criteria	Section Scores	LG, IT, NYA
I. Municipal planning profile/Encourage collaboration		
II. Mix of uses		
III. Encourage compact development		
IV. Range of housing options		
V. Walkable, designed for personal interaction		
VI. Respectful of community character, design and historic features		
VII. Protects open space, farmland and critical environmental areas		
VIII. Near existing development and infrastructure		
IX. Provides choices for getting around		
X. Make development decisions, predictable, fair, and cost effective		
TOTAL SCORE		

LG = Looking Good
IT = In Transition
NYA = Needs Your Attention

Table 2

Section Score	LG	IT	NYA
I. Municipal planning profile/Encourage collaboration	5	3-4	0-2
II. Mix of uses	10-13	5-9	0-4
III. Encourage compact development	5-6	3-4	0-2
IV. Range of housing options	8-9	4-7	0-3
V. Walkable, designed for personal interaction	9-10	5-8	0-4
VI. Respectful of community character, design and historic features	8-9	4-7	0-3
VII. Protects open space, farmland and critical environmental areas	8-10	4-7	0-3
VIII. Near existing development and infrastructure	15-20	7-14	0-6
IX. Provides choices for getting around	13-15	5-12	0-4
X. Make development decisions, predictable, fair, and cost effective	5-6	3-4	0-2
Overall Score	85-104	45-84	0-44

How do you Use the Scores?

The final number does not matter; the score should simply be used as a gauge to determine those areas where your community is doing well in terms of implementing alternative development patterns, and areas where improvements can be made. In terms of the range of scores, consider the following ideas:

“Looking Good”: if your score falls within this range, it shows that your community has already taken steps towards changing their methods of conventional development. Even though improvements can still be made within this category, it might be useful to concentrate on other areas to change.

“In Transition”: if your score falls within this range, it seems like your community is moving in a positive direction, although improvements can still be made. Identify the “low hanging fruits” that can keep the momentum towards change – what changes can be made with a few amount of resources that can keep your community moving in this direction?

“Needs Your Attention”: if your score falls within this range for certain sections, this identifies key areas where your community can make positive changes. First, carefully examine the results of the score to determine the specific areas that need improvements. Second, go through a process to identify the next steps that can be successfully taken towards moving your community towards managing growth in sustainable ways.

This scorecard was created using information from the following scorecards:

- New Jersey Future – Smart Growth Scorecard for Municipal Review
- Vermont Forum on Sprawl – The Vermont Smart Growth Scorecard: A Community Assessment Tool
- Eco-City Cleveland Smart Growth Tool
- SEMassachussetts.org: Vision 2020: A Partnership for Southeastern Massachusetts