

**2011 MASTER PLAN, LAND USE PLAN ELEMENT**  
**MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

- Highway-oriented commercial and office land uses should comport with HD bulk standards;
- For smaller commercial, office and mixed-use land uses bulk standards should be flexible to create a downtown village feel – additional study is needed prior to developing bulk standards for the zoning ordinance that regulates the VC Overlay;
- Parking and loading areas for smaller commercial, office and mixed-use land uses should be restricted to the rear and sides of buildings to provide for pedestrian-friendly front yards and small front yard setbacks to create a downtown village feel;
- For freestanding residential buildings bulk standards should be flexible to create a village feel – additional study is needed prior to developing bulk standards for the zoning ordinance that regulates the VC Overlay; and
- Height limitations: Three (3) stories of occupied space in all commercial, office, and one hundred percent (100%) affordable housing buildings; and two-and-one half (2-1/2) stories for townhouses and multifamily dwellings.
- Height requirements: Three (3) stories of occupied space in mixed-use buildings with residential units in upper floors.
- Townhouse and condominium type dwellings should have the following setbacks for: front yards to entrance of buildings and sides of buildings a minimum of six (6) feet and a maximum of eighteen (18) feet; rear yard a minimum of fifteen (15) feet; between ends of residential buildings a minimum of twenty five (25) feet; and to accessory buildings, e.g., detached garage, a minimum distance of fifteen (15) feet. Additional study is needed to refine bulk standards for permitted residential buildings in order to create a village feel.

Design requirements for the VC Overlay should include:

- A primary access road in the form of boulevard with a treed center median that interconnects Applegarth Road through the VC Overlay zone area with Route 33 at a signalized intersection at the main entrance for the existing Renaissance age-restricted development;
- On-street parking along the “downtown” section of the treed boulevard;
- A substantial landscaped buffer along Route 33, one that matches the heavily landscaped and bermed buffer constructed along the highway frontage of Renaissance;
- Adequate internal buffering between residential and non-residential uses, particularly for screening parking lots, loading areas and refuse enclosures;
- Multi-purpose sidewalks and paths linking all sections of development within the overlay zone;

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- Formal public spaces, i.e., sitting areas and pocket parks, within the “downtown”;
- Preserved conservation areas along the Millstone River;
- Walking trails through open space areas, particularly along the Millstone River;
- Freestanding identification signs are monument signs restricted to a size and scale that are appropriate for the type of road from which the signs are viewed;
- Incorporation of “green” building and site design techniques and technology, i.e., solar panels on roofs and in parking areas, “green” roofs for lowering energy consumption and improving stormwater management, rain gardens for improving water quality and reducing quantity from stormwater runoff, and other innovations.

***Office Land Uses***

Office land use designations are provided in essentially three main locations: the northeastern and southwestern corners of Forsgate Drive and Applegarth Road; the intersection of Applegarth Road and Prospect Plains-Hoffman Station Road; and along the western side of Applegarth Road north of Cranbury Station-Union Valley Road. All of the office land use areas are designated PO/CD Planned Office/Commercial Development or OP Office Professional. The first area has developed into a professional office park. The second area is much smaller in size and has developed with numerous individual offices, some of which are converted residential dwellings and historic buildings, on small lots, most of which contain less than five (5) acres. The last area is largely undeveloped and underdeveloped and therefore has the potential for larger-scale office development.

*PO/CD Planned Office/Commercial and OP Office Professional*

Recommendations:

1. No changes to the zoning regulations for the PO/CD district are recommended except for removing houses of worship as permitted conditional uses and including satellite antennas as conditional uses.
2. Lot 15.01 in Block 25, which is located at the northwest corner of Applegarth Road and Cranbury Station-Union Valley Road is recommended to be changed from PO/CD land use category to NC land use category. The rationale is to create a small-scale commercial node at this intersection. A bank and an automotive repair facility are located on the corners opposite the site along eastern side of Applegarth Road. The inclusion of Block 25, Lot 15.01 would complement this land use pattern.
3. The OP Office Professional designations for the small-scale offices and lots in the vicinity of the intersection of Applegarth Road and Prospect Plains-Hoffman Station Road are recommended to be

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changed to NC. The service-based land uses permitted in the OP zones are similar to those permitted in NC zones, such as offices, banks, etc. The NC zone allows for more flexibility in permitted uses. This area of Monroe functions as one node of commercial and office activities and therefore should be changed to NC.

***Industrial Land Uses***

Industrial development has occurred in three (3) areas designated LI Light Industrial in the northwestern portion of the Township. One area is located east of Cranbury-South River Road and south of Docks Corner Road. Large-scale warehousing and distribution facilities have developed in this area. Another area with smaller-scale light industrial development is located east of Cranbury-South River Road and south of Forsgate Drive. The largest area designated LI is located between Applegarth Road, Prospect Plains-Hoffman Station Road and Jamesburg-Half Acre Road. A mix of distribution and logistics-based development exist in this area.

Recommendations:

1. For the LI Light Industrial zoning regulations remove the term "altering" materials or products from permitted principal uses in order to prohibit offensive or objectionable operations.
2. For the LI zoning regulations remove hospitals and lumberyards from the permitted conditional uses, and add public utility installations and hotels and motor inns.
3. As recommended by the 2009 Reexamination Report the lands that include Block 3, Lots 12.01, 13, 27 and 28 which are designated HD Highway Development along the southern side of Route 33 should be changed to LI Light Industrial. The purpose of making this change is to concentrate light industrial uses in one of the last large, undeveloped areas of the Township that has direct access to a major state highway. Designating this area LI will help to expand the Township's tax ratable base and employment base.

**Mixed-Use Land Uses**

The master plan identifies three (3) areas within Monroe Township for a mix of residential and non-residential uses. Two (2) areas are located in the southern portion of the Township along the northern side of Route 33, and the third area is located at the crossroads of Mounts Mills Road and Spotswood-Englishtown Road in the southeastern corner of the municipality.

*AHMUD/HD Affordable Housing Mixed Use/Highway Development*

The lands designated AHMUD/HD Affordable Housing Mixed Use/Highway Development, which are located between Bentley Road and Perrineville Road, are planned for mixed-use development that would consist of residential and non-residential

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land uses as an overlay zone. The residential land uses would comprise market-rate townhouses and apartments, affordable housing in the form of apartments. The affordable housing component consists of 295 units for veterans and their families and 187 units for families and households that are not age-restricted. The non-residential land uses would include commercial and retail uses, hotels, offices and similar type uses permitted in the HD Highway Development zoning district. The AHMUD/HD category is designed to be an overlay zone placed upon the underlying HD zone. The AHMUD/HD land use category was created in response to Monroe Township's third-round COAH obligation for providing affordable housing and, therefore, is one of the methods for meeting the Township's affordable housing obligation that is set forth in Monroe's 2009 Housing Element and Fair Share Plan (HEFSP). The HEFSP was submitted to COAH in December 2009, and, as of the writing of this master plan, the plan is under the mediation review process facilitated by COAH.

Recommendation:

No changes to the AHMUD/HD land use category zoning are recommended. At the time of writing this master plan, the HEFSP is under COAH review and is subject to changes required by the state agency.

*VC-1 Village Center Overlay*

The crossroads of Mounts Mills Road and Spotswood-Englishtown Road that is designated R-3A is situated next to a recommended affordable housing overlay zone PRD-AH-AR Planned Residential Development-Affordable Housing-Age Restricted, an existing NC zone and an existing PRC-2 Planned Retirement Community zone. This area has the potential to be developed as a crossroads "village" consisting of a mix of commercial and more compact residential development that would serve the surrounding residential development, existing and planned, and the pass-by traffic occurring on the two crossroads. The R-3A lands located at the north- and southwestern corners of the crossroads should have a VC-1 Village Center overlay zone that would permit the development of a crossroads village. Furthermore, the existing NC zone located at the northeastern corner of the crossroads should have a VC-1 Village Center overlay to complement the two other corners in the R-3A district. For more discussion about this overlay refer to the Rural Residential (R-3A) section set forth above.

Recommendation:

Create a VC-1 Overlay in the R-3A district as set forth above in the Rural Residential land use category section of this element of the master plan.

*VC-2 Village Center Overlay*

A VC-2 Village Center Overlay zone is recommended for Block 4 in the HD zone that is

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located along the northern side of Route 33 that extends from Applegarth Road to the municipal boundary shared with East Windsor Township in Mercer County. A development known as Twin Rivers adjoins the recommended overlay zone in neighboring East Windsor. Twin Rivers has been developed with a mix of higher density residential and non-residential land uses.

The purpose for the VC-2 Overlay is to promote a full range of commercial, office and residential land uses within a newly created, pedestrian-friendly, mixed-use environment that will serve a local, community-wide and regional needs and create new employment opportunities. Pedestrian movement is encouraged to flow throughout the overlay zone area by generally permitting stores and shops and personal service establishments on the ground floor of buildings and promoting the use of upper floors for office and, in certain circumstances, residential dwelling units. Land uses within the overlay zone should be arranged to provide for highway-oriented commercial and office uses along Route 33. In order to create a neo-traditional downtown, less-intensive commercial and office uses mixed with residential uses on upper floors should be oriented toward the interior of the area along a primary access road that runs from Route 33 to Applegarth Road. The bulk of the residential uses should be developed in areas that are in the vicinity of the less intensive "downtown" and extend toward the edge of woods along the Millstone River.

Recommendation:

Create a VC-2 Overlay in the HD district as set forth above in the Commercial land use category section of this element of the master plan.

**Public and Environmentally Sensitive Lands**

***Public Lands***

Within Monroe Township there are numerous publicly owned lands consisting of state, county and municipal land and facilities. Table 1 indicates that the total amount of publicly owned land in Monroe Township is 5,564.9 acres, which is about 20.7 percent of the Township's total land mass. The master plan recommends acquiring additional lands for public open space and recreational purposes. The Open Space and Farmland Preservation Plan Element provides detail on recommended acquisitions.

In addition, Table 1 includes non-public lands that are preserved, such as homeowner association lands that are part of residential developments and open lands that contain stormwater management basins and facilities. These lands total 981.7 acres.

When combined publicly owned lands and non-public preserved lands total 6,546.6 acres, which is about 24.4 percent of Monroe's total land mass.

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Table 1 – Public Land in Monroe Township<sup>1</sup>

<u>Type of Public Land</u>		<u>Area (acres)</u>
Preserved Farmland		1,164.7
Parks and Open Space		2,781.6
Municipal	226.2 acres	
County	1,808.1 acres	
Miscellaneous	<u>747.3 acres</u>	
Subtotal	2,781.6 acres	
Government		1,618.6
Municipal	580.4 acres	
Board of Ed.	211.8 acres	
State	<u>826.4 acres</u>	
Subtotal	1,618.6 acres	
Total		5,564.9
Non-Public Miscellaneous Preserved Lands		981.7
Homeowner Assoc.	870.6 acres	
Stormwater Basins	<u>111.1 acres</u>	
Subtotal	981.7 acres	
Total Public and Non-Public Lands		6,546.6

***Environmentally Sensitive Land***

Environmentally sensitive lands in Monroe Township are essentially associated with the major streams that flow through the municipality. These streams include: the Millstone River and its tributaries and Cranbury Brook and its tributaries in the southern portions of the Township, both flowing east to west; the Manalapan Brook and its tributaries that flows south to north through the center of the municipality and then northeasterly forming a portion of the municipal boundary; and the Matchaponix Brook and its tributaries that form the eastern municipal boundary with Old Bridge Township. The environmentally sensitive lands consist of the stream corridors that contain freshwater wetlands and 100-year floodplains. Development in the environmentally sensitive lands is to be avoided, with the understanding that a road or utility crossing may be necessary. Trails and hiking paths should be provided where appropriate and in the form of “soft” walking surfaces such as woodchips or gravel.

Recommendations:

1. All FHC Flood Hazard Conservation areas should be adjusted to reflect more recent Federal Emergency Management Area maps and Flood

<sup>1</sup> Source: Monroe Township Environmental Officer.

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- Insurance Rate Maps. As these maps become available from the federal government the FHC areas should be changed accordingly.
2. Development in the environmentally sensitive lands should be avoided and discouraged. These lands should be preserved in their natural state through the creation of conservation easements and other methods of permanent preservation.
  3. Disturbance in environmentally sensitive lands should be limited to road and utility crossings when no other practical alternative to extending such infrastructure is available.
  4. Access to and through environmentally sensitive lands should be provided by means of trails and hiking paths that are constructed of "soft" walking surfaces such as woodchips or gravel. The trails and paths should be managed to avoid being overly used and erosion of soils.

**Other Land Use Policies and Recommendations**

Monroe Township is impacted by previous land use activities that involved open pit mining for sand and gravel and a current one that creates an airport hazard zone which extends from neighboring Old Bridge Township into Monroe. This land use plan addresses these land use issues below.

***Mine Reclamation Program***

Over the years there were eight (8) active sand and gravel mines in Monroe Township. The 2003 Master Plan discussed the mine reclamation program in the following manner:

The 1998 Master Plan the Township's desire to close the mines in order to reduce major truck traffic throughout the Township, further reduce degradation of the un-mined areas and reclaim the fallow and unsightly land area [created by mining activities]. In order to encourage the cessation of the mining operations and the reclamation of the land, the Township offered residential density incentives in order to encourage sound development of the sites. Given the extreme topography and other site characteristics of the mined areas, flexible-zoning techniques were a prerequisite in order to properly develop the mine areas. The zoning and density program for each mining use was determined on a case-by-case basis and depended on the unique characteristics of each site, and the availability of utilities. The Township also used two sites in order to meet Housing Fair Share obligation as discussed under the Housing Plan Element (13).

Of the eight (8) original mines seven (7) were reclaimed by development and the Warren mine still requires reclamation. In addition, the Cardell mine, which was used as a shooting range and is now abandoned, requires reclamation. Recommendations for the two (2) mines are provided below.

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Recommendations:

1. The Warren mine should be acquired as open space.
2. The Cardell mine is recommended for residential development under the R-3A district and PRD-AH-AR overlay.

***Airport Hazard Zone***

According to N.J.A.C. 16:62 The Air Safety and Hazardous Zoning Act of 1983 as amended, all municipalities are required to adopt ordinances that provide for safe land use and vertical development control for the area immediately surrounding a State of New Jersey recognized airport regardless of whether it is located within or adjacent to the municipality. In the instance of Monroe Township an airport is located in neighboring Old Bridge and Manalapan Townships thus warranting the creation of an airport hazard zone in the southwestern corner of Monroe in the vicinity of Old Bridge-Englishtown Road and Union Hill Road. The clear zone extends into Monroe Township for a distance of about 2,400 feet and a width ranging about 400 to 1,000 feet.

The lands in Monroe Township that are located within the airport hazard zone is designated NC Neighboring Commercial. Commercial uses are permitted to be constructed within the airport hazard zone to a limited height of 35 feet, which is the maximum height restriction of the NC zone. The airport hazard zone has been incorporated into Monroe's land development ordinance.

Recommendation:

No changes are recommended to the master plan or zoning ordinance with regard to the airport hazard zone.

**Comparison of Current Zoning Districts and Recommended Land Use Categories**

Map 1 is the current zoning map that indicates the geographic locations of Monroe Township's twenty one (21) zoning districts with overlay zones. Map 2 indicates the recommended twenty two (22) land use categories and overlay zones. Table 2 provides the amount of acres of current zoning districts and recommended land use categories, as well as the percentages of zoning districts and land use categories that they represent in terms of Monroe's total area. This table also provides net area and percentage changes due to recommendations.

**COMPARISON WITH OTHER PLANNING DOCUMENTS**

The Municipal Land Use Law requires municipal master plans to be prepared with



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consideration of the relationship of their relationship to plans of contiguous municipalities, county plans and the New Jersey State Development and Redevelopment Plan (SDRP). This section of the master plan reviews the relationship of Monroe Township's master plan with plans of contiguous municipalities, the *Middlesex County Growth Management Strategy Report* and the 2001 SDRP.

#### **Contiguous Municipalities**

Ten (10) municipalities border Monroe Township of which seven (7) are located in Middlesex County, two (2) are in Monmouth County and one (1) is in Mercer County. A summary of the relationships of Monroe Township's master plan with these surrounding municipalities is provided below.

##### ***Cranbury Township, Middlesex County***

A portion of Monroe Township's western border in the vicinity just south of the New Jersey Turnpike Exit 8A extending to the vicinity of Wyckoffs Mills-Applegarth Road is shared with Cranbury Township. From the north the lands in Cranbury are zoned Light Industrial, which is adjacent to the western boundary of Rossmoor, a Planned Retirement Community. The Light Industrial zone is incompatible with Rossmoor. A Consent Order from Superior Court in Middlesex County settled litigation that involved a proposed warehouse in the Light Industrial zone resulted in the following requirements:

- Limit warehouse use to not more than 500,000 square feet.
- Require a sixteen (16)-foot high earthen berm with an effective sound and filtered visual barrier between the warehouse and the Rossmoor border.
- Require evergreen landscape planting on both the top and sides of the berm.
- Enforce a four hundred (400)-foot wide "warehouse exclusion zone" parallel to the Rossmoor border, approximately 2,371 feet long, within which there shall be no warehouse building.
- Enforce a one hundred thirty (130)-foot wide "non construction zone" west of the entire Monroe Township boundary with the subject site, excluding all uses other than a guardhouse or utility uses.

Farther south the Light Industrial zone is adjacent to a mix of residential zones (Planned Retirement Community, Planned Residential Development-Affordable Housing and R-60 Residential) and non-residential zones (Planned Office Commercial Development) in Monroe. Extensive environmental constraints may limit the degree to which Light Industrial uses can be developed within close proximity to Monroe. Notwithstanding, it is important to ensure that proper buffering and screening are provided for any residential development in these areas.

In the vicinity of Cranbury Station Road an R-60 Residential zone in Monroe is adjacent to a Village/Hamlet Residential zone in Cranbury. These residential zones are compatible.

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#### ***East Brunswick Township, Middlesex County***

East Brunswick Township borders Monroe Township's northwestern corner between Helmetta Borough and South Brunswick Township. The adjoining area in East Brunswick is zoned Rural Preservation, which is compatible with lands zoned residential in Monroe.

#### ***Helmetta Borough, Middlesex County***

Helmetta Borough is situated between Spotswood Borough to the north and East Brunswick to the south along a portion of Monroe Township's northwestern corner. The residential zones for single-family dwellings (R-10) and garden flat condominiums (RM-GF) in Helmetta are compatible with R-10 Residential zone in Monroe. The B-1 Retail Business zone in Helmetta differs from the NC Neighborhood Commercial zone in Monroe because the B-1 zone permits general businesses whereas the NC zone permits daily-needs type commercial uses. Notwithstanding this difference, the amount of available land and the size of lots in the B-1 zone are limited and therefore do not pose significant incompatibilities.

#### ***Jamesburg Borough, Middlesex County***

Within its northern central portion Monroe Township completely circumscribes Jamesburg Borough. Jamesburg is a traditional community with a downtown central business district with surrounding residential development. The residential zones in Jamesburg are compatible with land zoned residential in Monroe. Along the southwestern border of Jamesburg is an industrial zone in Monroe. Buffering is important to ensure industrial development in Monroe avoids creating conflicts with residential development in Jamesburg.

#### ***Old Bridge Township, Middlesex County***

Old Bridge Township shares Monroe's eastern boundary south of Spotswood Borough and north of Manalapan Township in Monmouth County. The lands in Old Bridge are zoned R-120 Low Density/Severe Environmental Constraints Residential, which are compatible with the residential zones (R-30, R-60 and R-3A) and Flood Hazard Conservation districts in Monroe.

The Airport Safety Zone in Monroe, which is established for the Old Bridge Airport that is adjacent to Monroe, comports with federal and state requirements.

#### ***South Brunswick Township, Middlesex County***

The section of Monroe's western boundary south of East Brunswick Township and north of Cranbury Township is shared with South Brunswick Township. A portion of Exit 8A of the New Jersey Turnpike is located within South Brunswick. The lands in South Brunswick are zoned for light industrial uses (I-3 and LI-4), which are compatible with

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the Light Industrial district in Monroe.

North of the LI zone in Monroe is the R-30 Residential district. The light industrial zones in South Brunswick are incompatible with the R-30 district. Extensive buffers should be required for any residential development in Monroe because of the light industrial uses in South Brunswick and the heavy truck traffic on adjacent Cranbury-South River Road that serves the industrial development in the surrounding area and leads to Exit 8A.

#### ***Spotswood Borough, Middlesex County***

Spotswood Borough is adjacent to the northern most portion of Monroe Township between Old Bridge Township to the east and Helmetta Borough to the west. This area of Monroe is zoned higher density residential (R-7.5), conservation (FHC) and commercial (NC), which are compatible with the residential zone (R-10), conservation (C) and PE (Parks and Education) in Spotswood.

#### ***Manalapan Township, Monmouth County***

Southeast of Monroe Township is Manalapan Township in Monmouth County. Manalapan lies south of Old Bridge Township in Middlesex County and north of Millstone Township in Monmouth County. The lands in Manalapan are zoned for single-family residential development (R-40, R-40/20, R-20 and Rural Agriculture), which are compatible with the RR-FLP Rural Residential/Farmland Preservation and R-3A Residential districts in Monroe.

#### ***Millstone Township, Monmouth County***

Millstone Township is located along Monroe Township's southeastern corner and south of Manalapan Township. The BP Business Park zone in Millstone coincides with Monroe's HD Highway Development zone. The residential zones in Millstone (R-80 and R-120) are compatible with Monroe's residential zones (R-3A, R-60, R-20 and PD-AH).

#### ***East Windsor Township, Mercer County***

The southwestern corner of Monroe Township borders East Windsor Township in Mercer County. The adjoining area in East Windsor is developed as a large planned development consisting of a mix of residential and commercial development known as Twin Rivers. The HD Highway Development and PRC-2 Planned Retirement Community districts are compatible with Twin Rivers.

#### **Middlesex County**

Middlesex County prepared the *Middlesex County Growth Management Strategy Report* that identified, under its Phase I, the need to provide infrastructure in the form of sanitary sewers and roads to accommodate existing and future development in Monroe Township.

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Under Phase II, the report identified alternate approaches to managing growth in Middlesex County. A case study for the area around Exit 8A of the New Jersey Turnpike was included in the report. Zoning in Monroe comports with the study that includes residential development to the north of the exit and office and residential development to the south.

The report recommended the construction of Route 92. At the time of writing this master plan Route 92 is no longer viable due to the extent of wetlands and other environmental constraints that exist along the proposed highway route.

Furthermore, Middlesex County is in the process of preparing a new wastewater management plan. The draft plan recommends reducing sewer service areas along Route 33; this recommendation conflicts with Monroe's planned commercial and light industrial development along the highway. Monroe must ensure that sanitary sewers to meet planned expectations of development along this highway serve these areas along Route 33.

#### **New Jersey State Development and Redevelopment Plan**

The current New Jersey State Development and Redevelopment Plan (SDRP) was adopted by the State Planning Commission in 2001. Most of Monroe Township is designated Planning Area 2 Suburban (PA2), which coincides with the areas of the community planned for development that will be served by public sanitary sewers and water lines. Smaller areas in the northern portion of Monroe are designated Planning Area 1 Metropolitan (PA1) that is planned for more intensive, compact development. PA1 coincides Monroe's zoning districts for more compact development (R-7.5 and R-5 Residential and NC Neighborhood Commercial), which are served by sanitary sewers and water lines.

The southern-central portion of Monroe is designated Planning Area 4 Rural (PA4), which coincides with the rural residential areas (RR-FLP Rural Residential-Farmland Preservation).

The area along Manalapan Brook is designated Planning Area 5 Environmentally Sensitive, which coincides with the FHC Flood Hazard Conservation district in Monroe.

A new SDRP is long overdue. As of writing this master plan it is uncertain whether the State Planning Commission will adopt a new SDRP soon. Monroe Township must be vigilant in ensuring that any changes to the SDRP advance the Township's master plan.

#### **BACKGROUND STUDIES**

The Township of Monroe is located in the southeastern portion of Middlesex County, New Jersey. Along Monroe's northern boundary are East Brunswick Township,

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Helmetta Borough and Spotswood Borough, all in Middlesex County. To the east are Old Bridge Township in Middlesex County and Manalapan Township in Monmouth County. Millstone Township, Monmouth County shares the southern boundary. Along Monroe's western boundary are East Windsor, Mercer County and Cranbury Township and South Brunswick Township in Middlesex County. Jamesburg Borough is a small municipality surrounded by Monroe Township in the northwestern quadrant of the Township.

When it was founded in 1838, Monroe Township was largely a farming community. During the late 19<sup>th</sup> century, several more densely-developed neighborhoods including Helmetta, Jamesburg and Spotswood seceded. The balance of the Township landscape remained rural consisting of farmland and woodland. Between 1960 and 1968, the Township's largely agrarian landscape started to change when suburban development that consisted of the age-restricted community of Rossmoor was constructed near Exit 8A of the New Jersey Turnpike. A new era for Monroe Township was ushered in transforming the municipality with several new age-restricted communities, new housing developments, shopping centers and other service-based establishments. Since the municipality had excellent access to Exit 8A of the New Jersey Turnpike, Monroe Township experienced significant industrial growth consisting primarily of warehouses and distribution facilities. The southern and southeastern portions of Monroe remain rural with farmland and woodland.

Some general facts about Monroe Township are provided below.

Size: 42.0 square miles

Population: 27,999<sup>2</sup>

Density: 666.6 persons per square mile

Monroe Township is determined by COAH to be located within Housing Region 3 that consists of Hunterdon, Middlesex and Somerset Counties.

### **HOUSING CHARACTERISTICS<sup>3</sup>**

#### *General Housing Data*

According to the 2000 U.S. Census, Monroe Township had a total of 13,259 housing units of which 12,536 units or 94.5% were occupied. Of the number of units that were occupied 11,883 or 94.8% were owner-occupied and 653 or 5.2% were renter-occupied. Table 1 provides general housing data for Monroe Township.

<sup>2</sup> Population is based on the 2000 U.S. Census.

<sup>3</sup> Housing characteristics are based on the 2000 U.S. Census.

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<b>Table 1 – General Housing Data, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Total Housing Units	13,259/100.0
Total Occupied Units	12,536/94.5
Tenure of Occupied Units:	12,536/100.0
Owner-occupied	11,883/94.8
Renter-occupied	653/5.2

*Age of Housing*

The bulk of the Township's housing stock was built after 1960. Thirty-one percent (4,111) was built between 1980 and 1989, and almost one-quarter (3,240 or 24.4%) was built between 1990 and 1994. More than one-fifth of its housing stock (2,869 or 21.6%) was constructed between 1970 and 1979. The median year of structures built in Monroe Township is 1983. Table 2 provides more detail about the age of housing in Monroe Township.

<b>Table 2 – Age of Housing, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Total Housing Units	13,259/100.0
Built 1995 to March 2000	493/3.7
Built 1990 to 1994	3,240/24.4
Built 1980 to 1989	4,111/31.0
Built 1970 to 1979	2,869/21.6
Built 1960 to 1969	1,580/11.9
Built 1950 to 1959	496/3.7
Built 1940 to 1949	233/1.8
Built 1939 or earlier	237/1.8
Median year structure built	1983

*Condition of Housing*

Within Appendix B of COAH's third-round rules are data regarding three conditions that define substandard housing which were based on an analysis of the 2000 U.S. Census. With regard to the three housing conditions for defining substandard housing, Table 3 shows that 24 housing units or 0.19% of the total occupied housing units lacked complete plumbing facilities, 116 units or 0.93% lacked complete kitchen facilities and 6 units or 0.05% were crowded in units built prior to 1950.

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<b>Table 3 – Housing Conditions, 2000</b>	<b>Monroe Twp.</b>
Total occupied housing units/% total units	12,536/100.00
Lacking complete plumbing facilities	24
% Lacking complete plumbing facilities	0.19
Lacking complete kitchen facilities	116
% Lacking complete kitchen facilities	0.93
Crowded, Built Pre 1950	6
% Crowded, Built Pre 1950	0.05

*Purchase and Rental Value of Housing*

In 2000, Monroe Township had 11,884 owner-occupied housing units. The median value of owner-occupied units was \$174,100. For the total of owner-occupied units housing values were almost evenly distributed among three value ranges: \$100,000-\$149,999 (21.4%); \$150,000-\$199,999 (25.2%); and \$200,000-\$299,999 (24.7%). Of the total number of owner-occupied units 2,190 (18.4%) had a value less than \$100,000, and 1,156 (9.7%) had a value of \$300,000 or more. Approximately 41.9% of the owner-occupied housing units (4,979) had no mortgage. Table 4 provides a summary of the purchase value of housing in 2000.

<b>Table 4 – Purchase Value of Housing, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Total Owner-Occupied Units	11,884/100.0
Less than \$50,000	218/1.8
\$50,000-\$99,999	1,972/16.6
\$100,000-\$149,999	2,548/21.4
\$150,000-\$199,999	2,997/25.2
\$200,000-\$299,999	2,939/24.7
\$300,000-\$499,999	1,104/9.3
\$500,000 or more	52/0.4
No Mortgage	4,979/41.9
Median Value	\$174,100

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Within Monroe Township there were a total of 642 renter-occupied housing units in 2000. Two ranges of monthly rents comprised more than one-quarter each of all renter-occupied units: \$200-\$499 comprised 25.7%, and \$1,000-\$1,999 comprised 25.4%. Approximately 11.1% of the units were distributed about the median contract rent of \$877. Rents in the range of \$500-\$699 and \$900-\$999 were almost evenly distributed at 6.4% and 6.7%, respectively. Approximately 18.8% of the units (121) had no cash rent. Table 5 provides a summary of rental value of housing in 2000.

<b>Table 5 – Rental Value of Housing, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Total Renter-Occupied Units	642/100.0
Less than \$200	24/3.7
\$200-\$499	165/25.7
\$500-\$699	41/6.4
\$700-\$899	71/11.1
\$900-\$999	43/6.7
\$1,000-\$1,999	163/25.4
\$2,000 or more	14/2.1
No Cash Rent	121/18.8
Median Contract Rent	\$877

*Occupancy Characteristics*

According to the 2000 U.S. Census, Monroe Township had a total of 13,259 housing units of which 12,536 or 94.6% were occupied and 723 or 5.3% were vacant. Of the housing units within the vacancy status 4 (0.5%) were for rent, 165 (22.8%) were for sale, 44 (6.1%) were rented or sold but not occupied, 453 (62.75) were for seasonal, recreational or occasional use and 57 (7.9%) were classified as “other vacant.” No vacant units were for migrant workers. Table 6 provides a summary of occupancy characteristics for Monroe Township.

<b>Table 6 – Occupancy Characteristics, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Total Housing Units	13,259/100.0
Occupied	12,536/94.6
Vacant	723/5.3



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The occupancy characteristics for housing units that have vacancy status are provided in Table 7

<b>Table 7 – Occupancy Characteristics, Vacancy Status, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Vacancy Status	723/100.0
For rent	4/0.5
For sale only	165/22.8
Rented or sold, not occupied	44/6.1
For seasonal, recreational, or occasional use	453/62.7
For migrant workers	0/0.0
Other vacant	57/7.9

*Housing Type*

The majority of the housing stock in Monroe Township is single-family dwelling units. In 2000, there were 6,273 single-family detached dwellings that represent 47.3% of the housing stock and 5,161 single-family attached dwellings that represent 38.9%. Other types of housing represent approximately 13% of the housing stock in Monroe Township. Table 8 provides a summary of housing types for dwelling units in Monroe.

<b>Table 8 – Housing Type, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Units in Structure	
Total Units	13,259/100.0
1 Unit, Detached	6,273/47.3
1 Unit, Attached	5,161/38.9
2 Units	400/3.07
3 or 4 Units	693/5.2
5 to 9 Units	232/1.7
10 to 19 Units	12/0.1
20 or More Units	481/3.6
Mobile Home	7/0.1
Boat, RV, Van, etc.	0/0.0

Table 9 provides a summary of housing sizes for dwelling units in Monroe Township. More than half of the dwelling units (57.2% or 7,608) had 5 to 6 rooms. The amount of units with 8 and 9 rooms or more per dwelling were almost evenly distributed between

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the two housing sizes at 1,577 (8.7%) and 1,151 (8.7%), respectively. Similarly, units with 4 rooms and 7 rooms were almost evenly distributed at 1,349 (10.2%) and 1,281 (9.7%), respectively. The balance of the units had 3 rooms or less (707 or 5.3%).

<b>Table 9 – Housing Size, 2000</b>	<b>Monroe Twp. No. Units/Percent</b>
Rooms in Structure	
Total Units	13,259/100.0
1 Room	115/0.9
2 Rooms	45/0.3
3 Rooms	547/4.1
4 Rooms	1,349/10.2
5 Rooms	3,665/27.6
6 Rooms	3,943/29.6
7 Rooms	1,281/9.7
8 Rooms	1,577/8.7
9 or More Rooms	1,151/8.7
Median Number of Rooms	5.7

*Housing Units Affordable to Low- and Moderate-Income Households*

The supply of owner-occupied (for-sale) and rental housing units is analyzed in terms of affordability for low- and moderate-income households in Region 3 (Hunterdon, Middlesex and Somerset Counties). A three-person household, which approximates the average household size in Middlesex County (2.74), and the 1999 median income for a three-person household in Region 3 (\$69,030) are used in the analysis to establish baselines.

The 1999 upper limits for low- and moderate income households for a three-person household in Region 3 are \$34,515 (50% of the median) and \$55,224 (80% of the median), respectively.<sup>4</sup> Accepted general practice within the mortgage lending industry for determining affordable housing purchase price is the ability to pay 28% of gross monthly household income toward monthly housing costs. COAH utilizes the 28% rule for determining housing affordability: for low-income households, \$805 =  $(\$34,515 \times 0.28)/12$  months, or \$9,664 per annum; and for moderate-income households, \$1,288.56 =  $(\$55,224 \times 0.28)/12$  months, or \$15,462.72 per annum.

In 1999 maximum affordable housing mortgage for low- and moderate-income households are \$119,930 and \$191,878, respectively. This estimate is based on the Capital Recovery Factor formula with the assumptions of annual returns (28% of gross income) of \$9,664 for low-income household and \$15,462 for moderate-income

<sup>4</sup> Source: 1999 Regional Income Limits adopted by NJ COAH on April 7, 1999.

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household, a mortgage interest rate of 7.00% (1999 average rate), and a 30-year mortgage. This means that in 1999 with a 10% downpayment, a low-income household could afford to purchase a house worth \$133,255 (\$119,930/0.90) and a moderate-income household could afford to purchase a house worth \$213,197, using the following formula:

$$R = P[i(1+i)^n/[(1+i)^n-1]] \text{ or } P=R/[i(1+i)^n/[(1+i)^n-1]]$$

Where,

P = Principal, or Approximate 90% Purchase Price of House, assuming 10%  
Downpayment

R = Annual Return or Yearly Mortgage Payment (\$9,664 & \$15,462)

i = Interest Rate (7.00%, 1999 Average Rate)

n = Years (30-year Mortgage)

Given the foregoing analysis and the data provided in Table 4 – Purchase Value of Housing, 2000, there are 2,190 housing units (18.4% of all owner-occupied housing units) priced at amounts that are affordable to low-income households of three persons (\$99,999 or less) and 7,735 housing units (65.1% of all owner-occupied housing units) priced at amounts that are affordable to moderate-income households of three persons (\$199,999 or less).

COAH has established the maximum affordable rent as 30% of a household's monthly gross income. For three-person, low-income households in Region 3, the maximum rent is \$863 [(\$34,515 x 0.30)/12 months]. The maximum monthly rent for three-person, moderate-income households is \$1,381 [(\$55,224 x 0.30)/12 months]. Based on this analysis and Table 5 – Rental Value of Housing, 2000, Monroe Township has 230 housing units (35.8% of all rental units) that have rents (\$699 or less) that are affordable to low-income households of three persons and 344 housing units (53.6% of all rental units) that have rents (\$999 or less) that are affordable to moderate-income households of three persons.

The U.S. Census identifies five "selected conditions" for housing affordability of which two pertain to owner and renter costs: (1) selected monthly owner costs as a percentage of household income in 1999 greater than 30%, and (2) gross rent as a percentage of household income in 1999 greater than 30%. Table 10 shows the number of units that have owner and renter costs greater than 30% household incomes: 2,561 owner-occupied units (21.6% of all owner-occupied units) have owner costs in excess of 30% of household incomes; and 213 rental units (32.6% of all rental units) have renter costs in excess of 30% of household incomes.

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<i>Table 10 – Owner &amp; Renter Costs Greater than 30% of Household Incomes, 1999</i>	Monroe Twp.
Total Occupied Units:	12,536
Owner Occupied:	11,883
% Owner Occupied	94.8
Owner Occupied w/ monthly costs > 30% HH income	2,561
% of Owner Occupied units w/ this selected condition	21.6
Renter Occupied:	653
% Renter Occupied	5.2
Renter with monthly costs > 30% HH income	213
% of Rental Units with this selected condition	32.6

*Substandard Housing Units Affordable to Low- and Moderate-Income Households Capable of Being Rehabilitated*

Substandard housing has “selected conditions” that are defined by the U.S. Census as units having at least one of the following conditions: (1) lacking complete plumbing facilities, (2) lacking complete kitchen facilities, (3) with 1.01 or more occupants per room. Table 3 – Housing Conditions, 2000 provides a summary of the three selected conditions for housing in Monroe Township. There is a total of 146 units or 1.16% of all occupied units that have one or more of these selected conditions. Appendix B of COAH’s rules indicate that 101 housing units with substandard conditions are occupied by low- and/or moderate-income households.

**DEMOGRAPHIC CHARACTERISTICS<sup>5</sup>**

*Population Trend*

From 1930 to 1940 Monroe Township, Middlesex County and New Jersey experienced little growth (see Table 11). Growth in the three geo-political entities increased significantly from 1940 to 1950, with Monroe Township having the greatest percentage increase of 34.5%, Middlesex County growing 22.0% and New Jersey experiencing 16.2% growth. For the next two decades Monroe Township, Middlesex County and New Jersey grew at robust rates. From 1950 to 1970 Monroe Township more than doubled its population growing from 4,082 to 9,328. During the same period of time, Middlesex County’s population grew by about 120% and New Jersey’s residents increased by more than 48%. While the growth rates of Middlesex County (2.0%) and New Jersey (6.5%) slowed significantly from 1970 to 1980, Monroe Township continued to grow at a robust rate of 73.5% reaching a population of 15,858. Monroe Township’s growth rates from 1980 to 1990 (40.3%) and 1990 to 2000 (25.8%) outpaced the growth

<sup>5</sup> Demographic characteristics are based on 1930-2000 U.S. Censuses as related to the years presented in the text and tables.

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rates of Middlesex County (12.7% and 11.6%, respectively) and New Jersey (5.0% and 8.9%, respectively).

<i>Table 11 – Population Trend, 1930-2000</i>									
Year	Monroe Township			Middlesex County			New Jersey		
	Pop.	Change		Pop.	Change		Population	Change	
		No.	%		No.	%		No.	%
1930	2,894	-	-	212,208	-	-	4,041,334	-	-
1940	3,034	140	4.8	217,077	4,869	2.2	4,160,165	118,831	2.9
1950	4,082	1,048	34.5	264,872	47,795	22.0	4,835,329	675,164	16.2
1960	5,831	1,749	42.8	433,856	168,984	63.8	6,066,782	1,231,453	20.3
1970	9,138	3,307	56.7	583,813	104,957	17.9	7,171,112	1,104,330	18.2
1980	15,858	6,720	73.5	595,893	12,080	2.0	7,365,011	463,899	6.5
1990	22,255	6,397	40.3	671,780	75,887	12.7	7,730,188	365,177	5.0
2000	27,999	5,744	25.8	750,162	78,382	11.6	8,414,350	684,162	8.9

*Household Size and Type*

In 2000 Monroe Township had a total of 12,536 households of which 8,233 were family households that represented 65.7% of total households (see Table 12). By comparison Middlesex County had 71.8% of its total households as family households. In Monroe Township 60.6% were married-couple family households; in the County 57.0% were of the same category. The percentage of married-couple family households with children under 18 years of age differed in the Township and the County: 14.6% in Monroe Township, and 27.6% in Middlesex County. For female householder with no husband and the same household type with children under 18 years, Monroe Township's percentages were significantly less than the County's: Township – 3.9% and 1.0, respectively; and County – 10.8% and 5.1%, respectively.

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*Table 12 – Household Size and Type, Monroe Township & Middlesex County, 2000*

Description	Monroe Township	Middlesex County
Average household size - All Units	2.15	2.74
Average household size - Owner occupied	2.17	2.86
Average household size - Renter occupied	1.87	2.50
Total households	12,536	265,815
Family households	8,233	190,930
% Family households	65.7	71.8
Married-couple family	7,601	151,461
% married couple family	60.6	57.0
Married-couple family with children under 18 years	1,836	73,317
% Married-couple family with children under 18 years	14.6	27.6
Female householder, no husband present	483	28,812
% Female householder, no husband present	3.9	10.8
Female householder, no husband present with children under 18 years	130	13,598
% Female householder, no husband present children under 18 years	1.0	5.1
Nonfamily households	4,303	74,885
% Nonfamily households	34.3	28.2
Householder living alone	4,006	59,544
% Householder living along	32.0	22.4
Householder 65 years and over	3,510	23,226
% Householder 65 years and over	28.0	8.7

Nonfamily households represented 34.3% of Monroe's total households; such households represented 28.2% in the County. Nonfamily householders living alone represented 32.0% of the total households in Monroe Township and 22.4% in Middlesex County. Nonfamily householders 65 years and over represented 28.0% of the total households in the Township, thus reflecting the preponderance of age-restricted housing developments in Monroe. In comparison, the same type of householder represented only 8.7% of the total households in the County.

Regarding household size, the average household size in Monroe Township was

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significantly less than the average household size in Middlesex County: 2.15 in Monroe versus 2.74 in the County. Similarly, the average household size for owner-occupied units in the Township was less than that for the County: 2.17 in Monroe versus 2.86 in the County. Similar data was observed for average household size for rental units: 1.87 in the Township versus 2.50 in the County.

*Age Characteristics*

Monroe Township's population that is 65 years and over experienced the greatest increase in terms of absolute value and percentage change from 1990 to 2000, 4,145 and 51.5%, respectively. In 1990 this age group represented 36.1% (8,040) of the Township's population.

**Table 13 – Population by Age, Monroe Township, 1990 to 2000**

Age of Pop. (Years)	1990		2000		Change	
	Number	%	Number	%	Number	%
Under 5	914	4.1	1,109	3.9	195	21.3
5 to 14	2,035	9.1	2,408	8.6	373	18.3
15 to 24	2,340	10.5	2,136	7.6	-204	-8.7
25 to 34	1,822	8.1	1,751	6.2	-71	-3.8
35 to 44	2,474	11.1	2,805	10.0	331	13.3
45 to 54	1,920	8.6	2,685	9.5	765	39.8
55 to 64	2,710	12.1	2,920	10.4	210	7.7
65 and Over	8,040	36.1	12,185	43.5	4,145	51.5
Total	22,255	100.0	27,999	100.0	5,744	25.8

With 12,185 persons it comprised 43.5% of the Township's population in 2000. The second largest age group in 1990 and 2000 was 55 to 64 years consisting of 2,710 and 2,920, respectively. This age group grew by only 210 or 7.7%. From 1990 to 2000 the age group 45 to 54 years experienced the second greatest absolute and percentage increases, growing by 765 and 39.8%. From 1990 to 2000 children under 5 years and children 5 to 14 years experienced significant growth in terms of percentages: 21.3% for the former and 18.3% for the latter. The age groups 15 to 24 years and 25 to 34 years experienced declines from 1990 to 2000: -204 or -8.7% for the former and -71 or -3.8%

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for the latter. Table 13 provides a summary of the Township's population by age from 1990 to 2000.

Table 14 summarizes Middlesex County's population by age from 1990 to 2000. As Monroe Township did Middlesex County experienced losses in population for the age groups 15 to 24 years and 25 to 34 years. The County had significant growth in the 5 to 14-year age group (31.3%), 35 to 44-year age group (23.6%) and 45 to 54-year age group (42.0%) in a manner similar to Monroe Township. While Middlesex County experienced a significant increase in the age group 65 years and over, it did not experience the explosive growth in this age group as Monroe Township did. As a matter of fact, Monroe's growth in the 65 years and over age group represented almost one-third (4,145 of 13,773 or 30.1%) of the County's growth in this age group. Furthermore, the age group 65 years and over in Monroe represented 13.2% (12,185 of 92,590) of Middlesex County's 65 years and over age group in 2000. The other age groups in Monroe ranged between 1.5% (25 to 34 years) to 4.7% (55 to 64 years) of the Middlesex County's various age groups.

<i>Table 14 – Population by Age, Middlesex County, 1990 to 2000</i>						
Age of Pop. (Years)	1990		2000		Change	
	Number	%	Number	%	Number	%
Under 5	44,943	6.7	49,390	6.6	4,447	9.9
5 to 14	76,292	11.4	100,140	13.3	23,848	31.3
15 to 24	104,092	15.5	99,392	13.2	-4,700	-4.5
25 to 34	131,557	19.6	117,105	15.6	-14,452	-11.0
35 to 44	104,231	15.5	128,839	17.1	24,608	23.6
45 to 54	70,643	10.5	100,323	13.4	29,680	42.0
55 to 64	61,205	9.1	62,383	8.3	1,178	1.9
65 and Over	78,817	11.7	92,590	12.3	13,773	17.5
Total	671,780	100.0	750,162	100.0	78,382	11.7

The median age for persons in Monroe Township in 2000 was 58.9 years. In 2000 the median age for Middlesex County's population was 35.7 years. The median age in Monroe exceeded the median age in the County by 23.2 years. Another way to look at this age difference is that Monroe's median age is 165% of the County's median age.



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<i>Table 15 – Median Age, Monroe Township and Middlesex County, 2000</i>		
	<b>Monroe Twp.</b>	<b>Middlesex County</b>
Median Age (Years)	58.9	35.7

*Income Level*

In 1999 Monroe had a per capita income of \$31,772, which was higher than the per capita incomes of Middlesex County (\$26,535) and New Jersey (\$27,006). Monroe's median household income in 1999 was \$53,306, which was less than the median household incomes of Middlesex County (\$61,446) and New Jersey (\$55,146). The higher per capita income of Monroe can most likely be explained by the fact that the Township's household size (2.15) was significantly less than the County's (2.74) and the State's (2.68) which means that in Monroe there are fewer persons per household among which household income is distributed. The lower median household income in Monroe is most likely explained by the fact that the Township has a disproportionately higher percentage of persons 65 years and over who are most likely retired and relying on fixed incomes than the County and State that have lower percentages of persons in this age group. Table 16 shows 1999 median household income for Monroe Township and Middlesex County.

<i>Table 16 – Median Household Income Monroe Township and Middlesex County, 1999</i>		
	<b>Per Capita Income</b>	<b>Median Household Income</b>
Monroe Township	\$31,772	\$53,306
Middlesex County	\$26,535	\$61,446
New Jersey	\$27,006	\$55,146

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Table 17 shows the distribution of 1999 household incomes by brackets for Monroe Township and Middlesex County. In terms of percentages, both had similar distributions of household incomes under \$14,999: 9.1% of households for Monroe and 8.6% for the County. Monroe had a greater percentage of households with incomes between \$15,000 and \$34,999 (21.9%) than the County (16.9%). The \$50,000 to \$74,999 income bracket represented the greatest percentages in Monroe and the County, 19.2% and 21.6%, respectively. Notwithstanding, the second greatest percentage in Monroe (15.6%) was represented by the \$35,000 to \$49,999 income bracket. For the County the \$75,000 to \$99,999 income bracket was the second greatest percentage (16.0%). Monroe had 20.7% of its households with incomes greater than \$99,999; Middlesex County had 22.8% of its households with similar incomes.

**Table 17: Household Income by Brackets, 1999**

Household Income (\$)	Monroe Township		Middlesex County	
	No. of Households	% of Total	No. of Households	% of Total
Less than 10,000	448	3.6	13,102	4.9
10,000 - 14,999	684	5.5	9,965	3.7
15,000 - 24,999	1,266	10.1	20,603	7.7
25,000 - 34,999	1,483	11.8	24,398	9.2
35,000 - 49,999	1,955	15.6	37,097	14.0
50,000 - 74,999	2,404	19.2	57,308	21.6
75,000 - 99,999	1,696	13.5	42,599	16.0
100,000 - 149,999	1,724	13.7	40,544	15.2
150,000 - 199,999	493	3.9	11,823	4.4
\$200,000 or more	387	3.1	8,459	3.2
<b>Total</b>	12,540	100.0	265,898	100.0

The COAH regulations define low (those earning up to 50% of the median household income) and moderate-income households (those earning from more than 50% to 80% of the median household income). The figures are adjusted for household size and the municipality's housing region. Monroe Township is part of Region Three, which includes Hunterdon, Middlesex and Somerset Counties. Table 18 provides a breakdown of the maximum 1999 income figures by household size that COAH uses to

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determine affordability.

Income	Family Size									
	1	1.5	2	3	4	4.5	5	6	7	8
Median	\$53,690	\$57,525	\$61,360	\$69,030	\$76,700	\$79,7688	\$82,836	\$88,972	\$95,108	\$101,244
Moderate	\$42,952	\$46,010	\$49,088	\$55,224	\$61,360	\$63,814	\$66,269	\$71,178	\$76,086	\$80,995
Low	\$26,845	\$28,763	\$30,680	\$34,515	\$38,350	\$39,884	\$41,418	\$44,486	\$47,554	\$50,622

Source: COAH, adopted April 7, 1999.

**Employment Status of Residents<sup>6</sup>**

*Employment Status*

In 1999 there were 24,193 persons aged 16 years and over. Those in the civilian labor force (10,058) represented 41.6% of the population of persons aged 16 years and over; 58.4% (14,135) was not in the civilian labor force. Of those aged 16 years and over 9,555 (39.5%) were employed, and 503 (2.1%) were unemployed. Table 19 summarizes the employment status of residents in Monroe Township.

Description	Monroe Township	
	Number	Percent
Population 16 years and over	24,193	100.0
In labor force	10,058	41.6
Civilian labor force	10,058	41.6
Employed	9,555	39.5
Unemployed	503	2.1
Percent of civilian labor force	5.0	N/A
Armed Forces	-	-
Not in labor force	14,135	58.4

<sup>6</sup> Employment characteristics are based on 2000 U.S. Census.

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*Occupation*

The occupations of Monroe Township residents in 1999 are shown in Table 20. Of those in the employed civilian labor force almost 40% of the residents (3,794) worked in management, professional and related occupations. Sales and office occupations represented 30.8% of the employed civilian labor force followed by service occupations at 10.5%. Production, transportation and material moving occupations totaled 961 or 10.1% of the employed civilian labor force. Construction, extraction and maintenance occupations represented 8.5% of the employed civilian labor force. There were 34 persons employed in the farming, fishing and forestry occupations, which represented 0.4% of the employed civilian labor force.

<b>Table 20: Occupation, 1999</b>		
<b>Description</b>	<b>Monroe Township</b>	
	<b>Number</b>	<b>Percent</b>
Employed civilian population 16 years and over	9,555	100.0
Management, professional and related occupations	3,794	39.7
Service occupations	1,006	10.5
Sales and office occupations	2,945	30.8
Farming, fishing and forestry occupations	34	0.4
Construction, extraction and maintenance occupations	615	8.5
Production, transportation and material moving occupations	961	10.1

**ECONOMIC CHARACTERISTICS**

*Employment by Industry Sector*

Table 21 shows the industries in which the employed civilian labor force of Monroe Township worked in 1999. The educational, health and social services industry employed the most at 1,711 or 17.9% of the employed civilian labor force. Manufacturing employed 1,296 or 13.6% of the employed civilian labor force. The next three industries that employed the most workers in Monroe Township were professional, scientific, management, administrative and waste management services (1,146 or 12.0%), finance, insurance, real estate and rental and leasing (1,055 or 11.0%), and retail trade (1,017 or 10.6%), respectively. Five industries employ percentages of the civilian labor force ranging from 4.7% to 6.8%: arts, entertainment, recreation,

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accommodation and food services (4.7%); information (5.1%); wholesale trade (5.1%); construction (5.2%); and transportation and warehousing and utilities (6.8%). The industries employing the least amount of workers were agriculture, forestry, fishing and hunting and mining (24 or 0.3%), other services (355 or 3.7%), and public administration (372 or 3.9%).

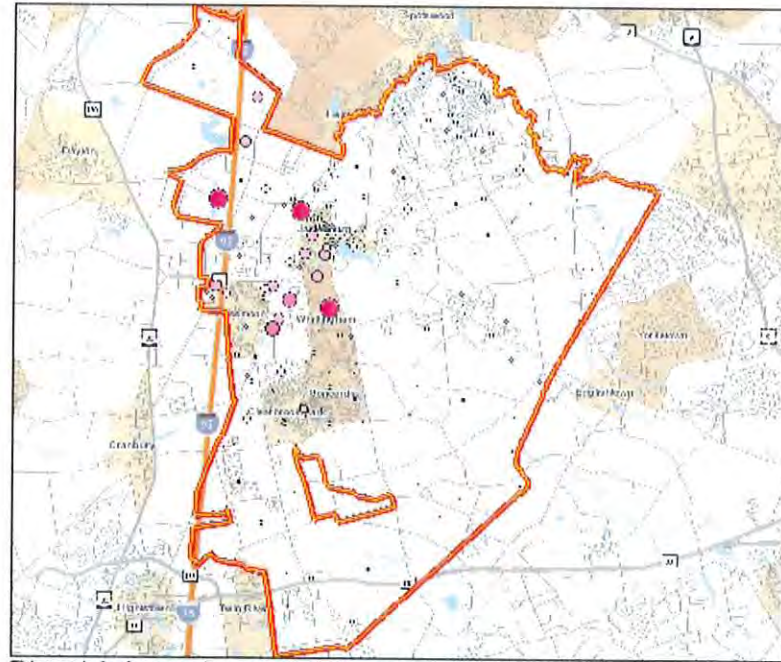
<b>Table 21: Industry, 1999</b>		
<b>Description</b>	<b>Monroe Township</b>	
	<b>Number</b>	<b>Percent</b>
Employed civilian population 16 years and over	9,555	100.0
Agriculture, forestry, fishing and hunting and mining	24	0.3
Construction	500	5.2
Manufacturing	1,296	13.6
Wholesale trade	491	5.1
Retail trade	1,017	10.6
Transportation and warehousing, and utilities	652	6.8
Information	483	5.1
Finance, insurance, real estate, and rental and leasing	1,055	11.0
Professional, scientific, management, administrative, and waste management services	1,146	12.0
Educational, health and social services	1,711	17.9
Arts, entertainment, recreation, accommodation and food services	453	4.7
Other services (except public administration)	355	3.7
Public administration	372	3.9

*In-Place Employment by Industrial Sector and Employment Trends*

The availability of current information about employment in Monroe Township is limited. The U.S. Census Bureau provides local employment information for second quarter 2002, 2003, 2004, 2005 and 2006 by means of its LED Origin-Destination Data Base. The employment information for Monroe Township and parts of surrounding communities, which is based on the LED Origin-Destination Data Base, is provided below.

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**Work Area Profile Report**



This map is for demonstration purposes only. For a more detailed and customizable map output, please use the "Print Map" tool located above the Map Viewer.

- 7000
- 1 - 8 Workers
- 9 - 20 Workers
- 21 - 50 Workers
- 51 - 100 Workers
- 101 - 200 Workers
- 201 - 500 Workers
- 501 - 1000 Workers
- 1001 - 10000 Workers

A study area was delineated by using the ZIP Codes (ZCTA) selection layer for the zip code 08831. The map on the previous page shows the study area. It is imperative to recognize that this zip code is not completely coincident with Monroe Township's municipal boundary, includes Jamesburg Borough and small parts of South Brunswick Township and excludes a small rural area in the southern portion of Monroe Township. Regardless, it is a rough approximation of Monroe Township's geographical area.

## **2011 MASTER PLAN, LAND USE PLAN ELEMENT**

### **MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

The map of the study area shows concentrations of workers represented by various sized colored circles for the year 2006. The greatest concentrations of workers ranging from 1085 to 1874, 556 to 1084, 235 to 555 and 70 to 234 are located in the western portions of Monroe Township in the vicinity of Interchange 8A of the New Jersey Turnpike that are zoned for office and industrial uses. Smaller concentrations of less than 70 employees are located in the northeastern portion of Monroe near Spotswood, which has older neighborhoods and commercial areas. Few employment concentrations are located along Route 33.

The following tables provide employment information about the study area for 2002, 2004, 2006. In 2002 employment in the study area totaled 9,793; in 2004 it declined slightly to 9,744; and then grew significantly to 13,297 in 2006 (+35.8% growth since 2002). Industries that contributed significantly toward this growth jobs were wholesale trade (65.5% growth; 563 new jobs), transportation and warehousing (90.6% growth; 1,055 new jobs), real estate and rental and leasing (700.0%; 154 new jobs), administration and support, waste management and remediation (74.0%; 191 new jobs), arts, entertainment and recreation (441.4% growth; 309 new jobs) and management of companies and enterprises (increasing from 0 in 2002 to 201 in 2006).

Declines in employment from 2002 to 2006 were experienced in retail trade (-8.3%; loss of 153 jobs), professional, scientific and technical services (-7.6%; loss of 50 jobs), and accommodation and food services (-5.8%; loss of 12 jobs).

Modest to almost no growth in employment was felt in the remaining industrial sectors.

The second following table indicates that the number of employers increased from 529 in 2002 to 713 in 2006, which reflects an increase of 184 or 34.8%.

**2011 MASTER PLAN, LAND USE PLAN ELEMENT**  
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<u>Total Primary Jobs</u>	2006		2004		2002	
	Count	Share	Count	Share	Count	Share
Total Primary Jobs	13,297	100.0%	9,744	100.0%	9,793	100.0%

<u>Jobs by Worker Age</u>	2006		2004		2002	
	Count	Share	Count	Share	Count	Share
Age 20 or younger	2,915	21.9%	2,128	21.8%	2,203	22.5%
Age 21 to 54	7,935	59.7%	5,979	61.4%	6,087	62.2%
Age 55 or older	2,447	18.4%	1,637	16.8%	1,503	15.3%

<u>Jobs by Earnings Paid</u>	2006		2004		2002	
	Count	Share	Count	Share	Count	Share
\$1,200 per month or less	1,971	14.8%	1,603	16.5%	1,627	16.6%
\$1,201 to \$3,400 per month	5,810	43.7%	3,720	38.2%	4,241	43.3%
More than \$3,400 per month	5,516	41.5%	4,421	45.4%	3,925	40.1%

<u>Jobs by Industry Type (2-digit NAICS)</u>	2006		2004		2002	
	Count	Share	Count	Share	Count	Share
Agriculture, Forestry, Fishing and Hunting	29	0.2%	16	0.2%	24	0.2%
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%	0	0.0%	0	0.0%
Utilities	0	0.0%	2	0.0%	0	0.0%
Construction	708	5.3%	648	6.7%	664	6.8%
Manufacturing	1,360	10.2%	838	8.6%	1,197	12.2%
Wholesale Trade	1,423	10.7%	908	9.3%	860	8.8%
Retail Trade	1,701	12.8%	899	9.2%	1,854	18.9%
Transportation and Warehousing	2,219	16.7%	1,273	13.1%	1,164	11.9%
Information	229	1.7%	170	1.7%	154	1.6%
Finance and Insurance	244	1.8%	241	2.5%	169	1.7%
Real Estate and Rental and Leasing	176	1.3%	111	1.1%	22	0.2%
Professional, Scientific, and Technical Services	601	4.5%	629	6.5%	651	6.6%
Management of Companies and Enterprises	201	1.5%	2	0.0%	0	0.0%
Administration & Support, Waste Management and Remediation	449	3.4%	422	4.3%	258	2.6%
Educational Services	966	7.3%	812	8.3%	686	7.0%
Health Care and Social Assistance	957	7.2%	1,021	10.5%	813	8.3%
Arts, Entertainment, and Recreation	379	2.9%	329	3.4%	70	0.7%
Accommodation and Food Services	236	1.8%	156	1.6%	248	2.5%
Other Services (excluding Public Administration)	560	4.2%	466	4.8%	371	3.8%
Public Administration	859	6.5%	801	8.2%	588	6.0%



**2011 MASTER PLAN, LAND USE PLAN ELEMENT  
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QWI Indicators - Private Sector Jobs	2006		2004		2002	
	Count	Share	Count	Share	Count	Share
Number of Employers	713	100.0%	596	100.0%	529	100.0%
Employment (Beginning-of-2nd quarter)	8,928	100.0%	6,049	100.0%	6,465	100.0%
Employment, Stable Jobs	8,094	100.0%	5,489	100.0%	5,823	100.0%
Separations, Stable Jobs	566	100.0%	360	100.0%	476	100.0%
New Hires, Stable Jobs	760	100.0%	722	100.0%	536	100.0%
Firm Job Gain	663	100.0%	1,521	100.0%	382	100.0%
Firm Job Loss	286	100.0%	177	100.0%	324	100.0%
Employment (reference quarter)	10,796	100.0%	8,301	100.0%	7,433	100.0%
Average Monthly Earnings, Stable Jobs	3,004	100.0%	3,087	100.0%	2,991	100.0%
Average Monthly Earnings, Separations from Stable Jobs	1,689	100.0%	1,453	100.0%	1,848	100.0%
Average Monthly Earnings, New Hires, Stable Jobs	2,339	100.0%	2,789	100.0%	2,206	100.0%

*Quarterly Workforce Indicators (QWI) in On!bemap are considered to be experimental. For the latest and most accurate QWI statistics, use the QWI Online application at <http://bts.dhs.gov>.*

*Job counts and average earnings measures that are subject to item suppression at the block-level do not contribute to estimates for the selected area in this report. To the extent that the selected area in the QWI Report is affected by item suppression, job counts in the QWI Report will be lower than the corresponding job counts in the Shed Report.*

Report Settings	
Year(s):	2006,2004,2002
Job Type:	Primary Jobs
Labor Market Segment:	All Workers
Study Selection Layer:	ZIP Codes (ZCTA)
Study Selection Features:	08831
Advanced Area Selection:	Ignored
Map Precision:	Blocks
Selected Block Count:	658
Query ID:	122659996028536

Data Sources
US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2002, 2003, 2004, 2005, and 2006)

**2011 MASTER PLAN, LAND USE PLAN ELEMENT**  
**MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**  
**AVAILABILITY OF EXISTING AND PLANNED INFRASTRUCTURE**

The majority of land in Monroe Township is located within Metropolitan Planning Area (PA1) and Suburban Planning Area 2 (PA2) that are coincident with sewer service areas. Monroe Township has an extensive sanitary sewer and water system. Sanitary sewage is collected and transported to Middlesex County Sewerage Authority's regional treatment plant located in Sayreville, New Jersey. Treated effluent is then discharged into the Raritan Bay. Water service in Monroe Township is provided by the Monroe Township Municipal Utilities Authority (MTMUA). The potable water supply is provided by a combination of groundwater sources and one surface water source. Groundwater is drawn from six potable wells and two irrigation wells owned by MTMUA. The surface supply is purchased in bulk from Elizabethtown Water Company.

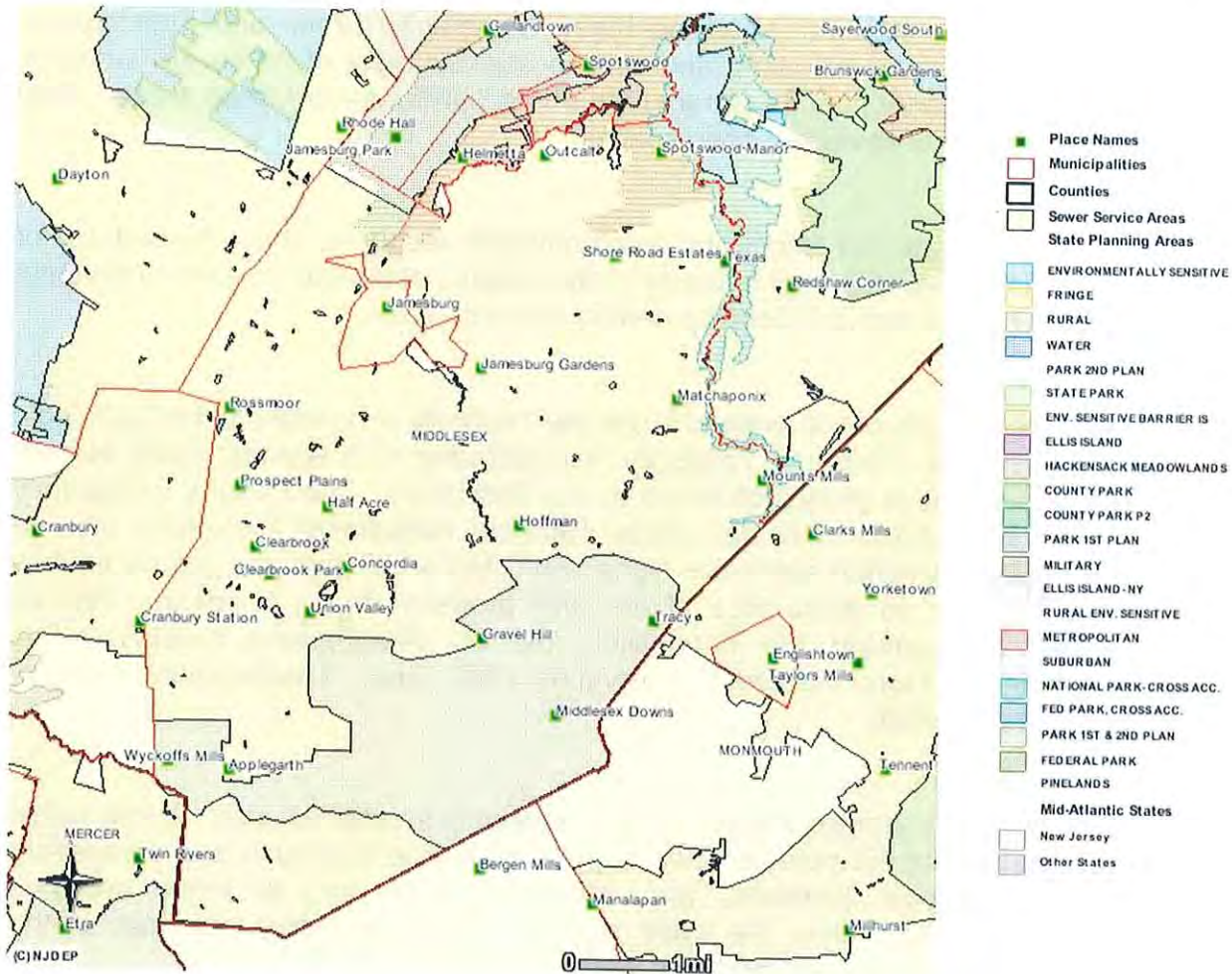
All lands located within PA 1 and PA2 are intended to be served by public sanitary sewers and water; however, some of the areas will require extensions of such utilities as well as upgrades to accommodate future development. All areas where affordable housing is proposed are located in PA2 and sewer service areas.

Lands located outside sewer service areas are located in Rural Planning Area 4 (PA4) and Environmentally Sensitive Planning Area 5 (PA5) where individual septic systems and wells will serve future development. No affordable housing is planned in PA4 and PA5.

The following map shows the sewer service areas and State Planning Areas for Monroe Township (I-Map, New Jersey Department of Environmental Protection). As of writing this master plan background study Middlesex County is in the process of updating the County's wastewater management plan.

**2011 MASTER PLAN, LAND USE PLAN ELEMENT  
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Map Showing Sanitary Sewer and State Planning Areas for Monroe Township



Source:  
[http://njgin.state.nj.us/OIT\\_GISTOOLS/mapstream?url=http://gis10.sa.state.nj.us/gisimages/NJ\\_DEP\\_gis...](http://njgin.state.nj.us/OIT_GISTOOLS/mapstream?url=http://gis10.sa.state.nj.us/gisimages/NJ_DEP_gis...) 11/21/2008

**CONSTRAINTS ON DEVELOPMENT**

Monroe Township has a number of areas that are environmentally constrained and important in terms of conservation and preservation. Such areas include: wetlands, woodlands, watershed areas, aquifer recharge, wellhead areas, surface and sub-surface water resources, flood-prone areas and steep-slope areas. The Township's ordinances provide for protection and conservation of these environmentally sensitive areas and flexible zoning to avoid such areas while allowing for development, i.e., clustering.

## **2011 MASTER PLAN, LAND USE PLAN ELEMENT MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

About one-third (8,600 acres) of the Township's land mass is covered by freshwater wetlands. Wetlands are important for providing critical habitat for flora and fauna (see following map showing wetlands). The majority wetlands in Monroe Township are associated with major streams (Millstone River, Manalapan Brook and Matchaponix Brook), tributaries to these streams, and stream corridor most of which are wooded. The wetlands are important flood control areas and groundwater recharge areas. They constitute the majority of Monroe's open spaces.

Since the wetlands are an important environmental resource, they present major constraints on future development because of the federal, state and local environmental regulations that restrict and limit development in and near them.

As indicated above many of the wetland areas are integrally connected to the hydrologic and hydraulic systems of Monroe Township (see following map showing water bodies, watersheds and wellhead protection areas in the Township). The Federal Emergency Management Administration has delineated 100-year floodplains throughout Monroe Township. These delineated areas are highly restricted prohibiting and greatly limiting development in order to avoid loss of life and property during flooding. Monroe Township has incorporated the floodplains into its development regulations by designating them as Flood Hazard Conservation FHC zone. Development is highly constrained in these areas.

Wellhead protection areas are shown on the previously mentioned map. Wells within these areas are part of the potable water supply in Monroe Township and Jamesburg Borough. Development (setbacks and impervious coverage) in these areas is constrained in order to protect the water supply. Wellhead protection areas in the Township are shown on the map following wetlands map.

In addition to being associated with wetlands, aquifer recharge outcrop areas exist within the Township, the best of which are located in the northern portion of the municipality. Lower density residential development is planned in these areas. Development in aquifer recharge areas is limited to lower density residential development.

Known contaminated sites and areas in Monroe Township are shown on the third following map. Contaminated sites present obstacles for development, depending on the type and extent of contamination. Such constraints may include, but not be limited to, costs for cleanup outstripping the economic feasibility of a project, types of contamination that prohibit residential development, and others.

Other constraints include the cost to extend sanitary sewers and water lines to sites

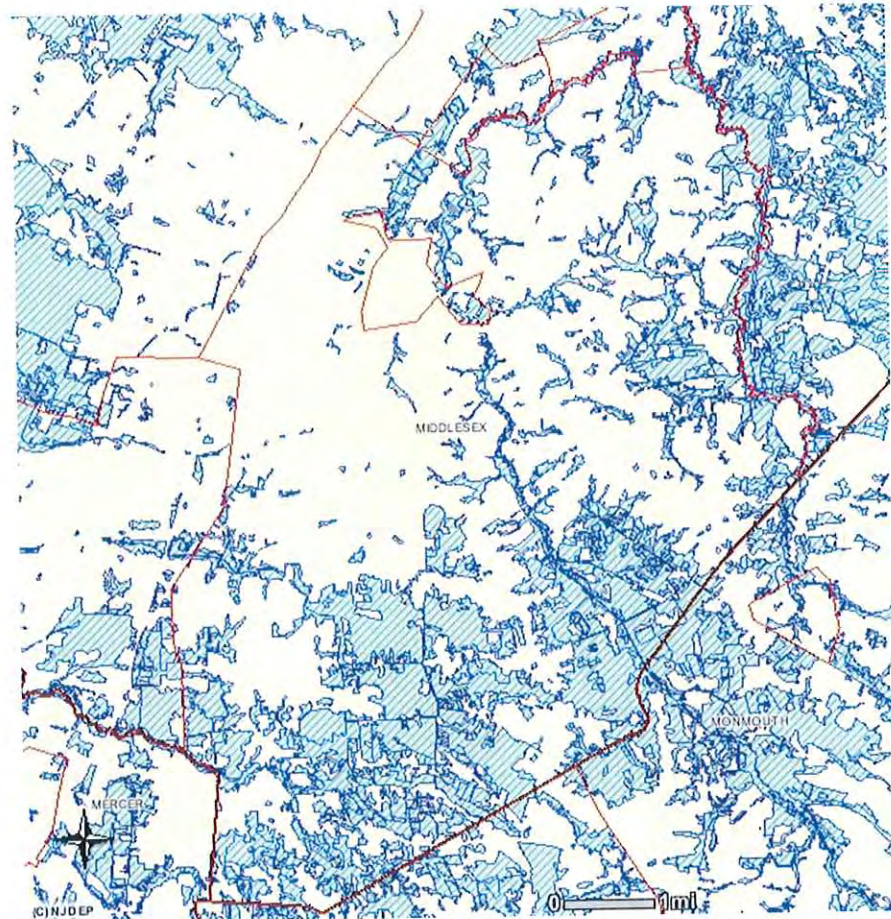
**2011 MASTER PLAN, LAND USE PLAN ELEMENT**  
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within PA2 and sewer service areas. Such constraints are monetary, meaning that they add cost to projects.

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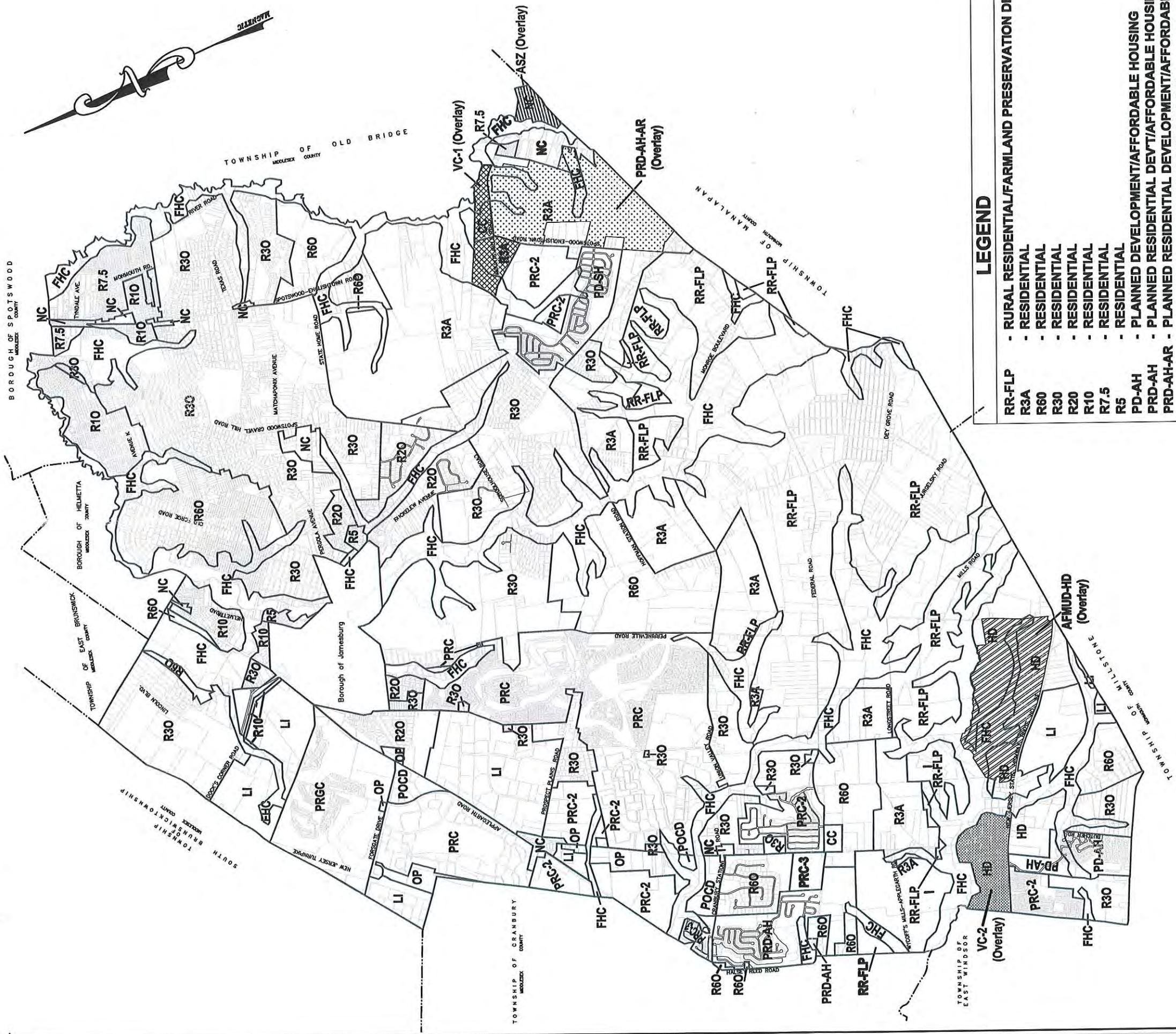
Map Showing Wetlands in Monroe Township

Source: [http://njgin.state.nj.us/OIT\\_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP ...](http://njgin.state.nj.us/OIT_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP...) 11/23/2008



Legend

-  Municipalities
-  Counties
-  WETLANDS
-  Mid-Atlantic States
-  New Jersey
-  Other States



**LEGEND**

RR-FLP	- RURAL RESIDENTIAL/FARMLAND PRESERVATION DIST.
R3A	- RESIDENTIAL
R60	- RESIDENTIAL
R30	- RESIDENTIAL
R20	- RESIDENTIAL
R10	- RESIDENTIAL
R7.5	- RESIDENTIAL
R5	- RESIDENTIAL
PD-AH	- PLANNED DEVELOPMENT/AFFORDABLE HOUSING
PRD-AH	- PLANNED RESIDENTIAL DEVT/AFFORDABLE HOUSING
PRD-AH-AR	- PLANNED RESIDENTIAL DEVELOPMENT/AFFORDABLE HOUSING/AGE RESTRICTED (OVERLAY)
PD-SH	- PLANNED RESIDENTIAL DEVT/SENIOR HOUSING
PRC	- PLANNED RETIREMENT COMMUNITY
PRC-2	- PLANNED RETIREMENT COMMUNITY
PRC-3	- PLANNED RETIREMENT COMMUNITY
PRGC	- PLANNED RESIDENTIAL GOLF COMMUNITY
OP	- OFFICE PROFESSIONAL
CC	- COMMUNITY COMMERCIAL
POCD	- PLANNED OFFICE COMMERCIAL DEVELOPMENT
NC	- NEIGHBORHOOD COMMERCIAL
HD	- HIGHWAY DEVELOPMENT
LI	- LIGHT IMPACT INDUSTRIAL ZONE
FHC	- FLOOD HAZARD CONSERVATION DISTRICT
VC-1	- VILLAGE CENTER (OVERLAY)
VC-2	- VILLAGE CENTER (OVERLAY)
ASZ	- AIRPORT SAFETY OVERLAY ZONE
AFMUD-HD	- AFFORDABLE HOUSING/MIXED USE DEVT.HIGHWAY DEVELOPMENT (OVERLAY)

# TOWNSHIP OF MONROE LAND USE PLAN

REVISION 1 - 11/09/10 - GENERAL CORRECTIONS  
 REVISION 2 - 04/25/11 - REMOVED NC AREA ON MAP  
 REVISION 3 - 10/24/11 - EXTENDED VC-2 OVERLAY

ORIGINAL BASED ON A MAP BY HEYER, GRUEL & ASSOCIATES,  
 DATED AUGUST 4TH, 2003 AND REVISED SEPTEMBER 29TH, 2006.



OCTOBER 24, 2011





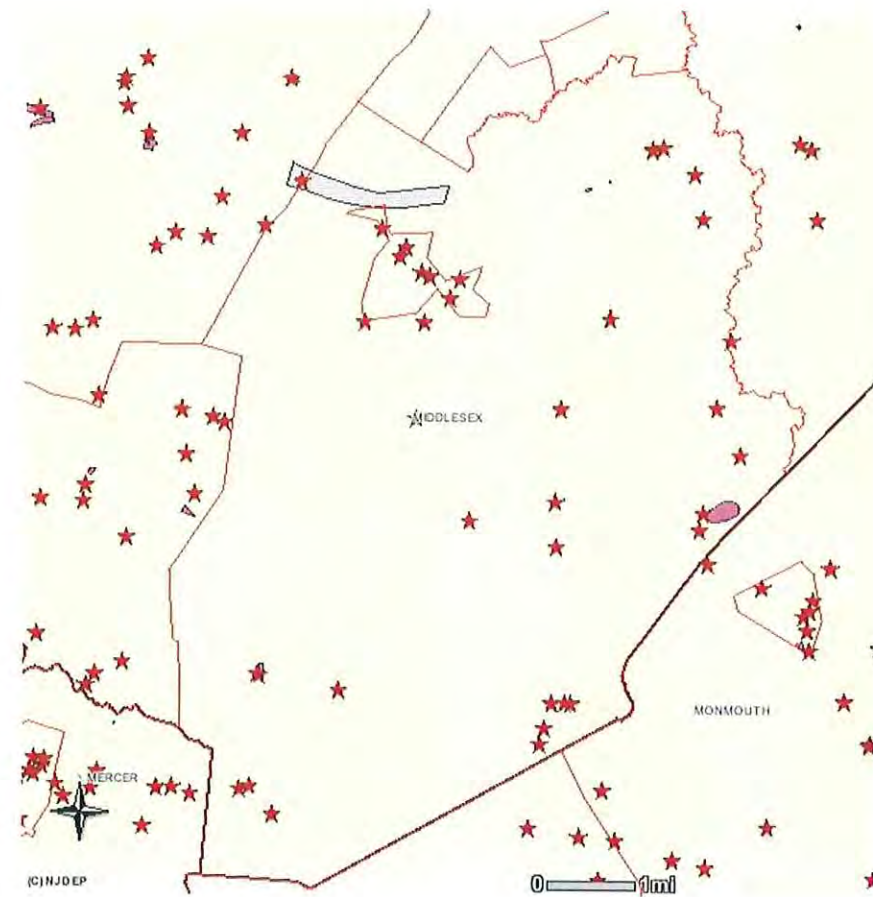




**2011 MASTER PLAN, LAND USE PLAN ELEMENT  
MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

Map Showing Contaminated Sites and Areas in Monroe Township

Source: [http://njgin.state.nj.us/OIT\\_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP ...](http://njgin.state.nj.us/OIT_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP...) 11/23/2008



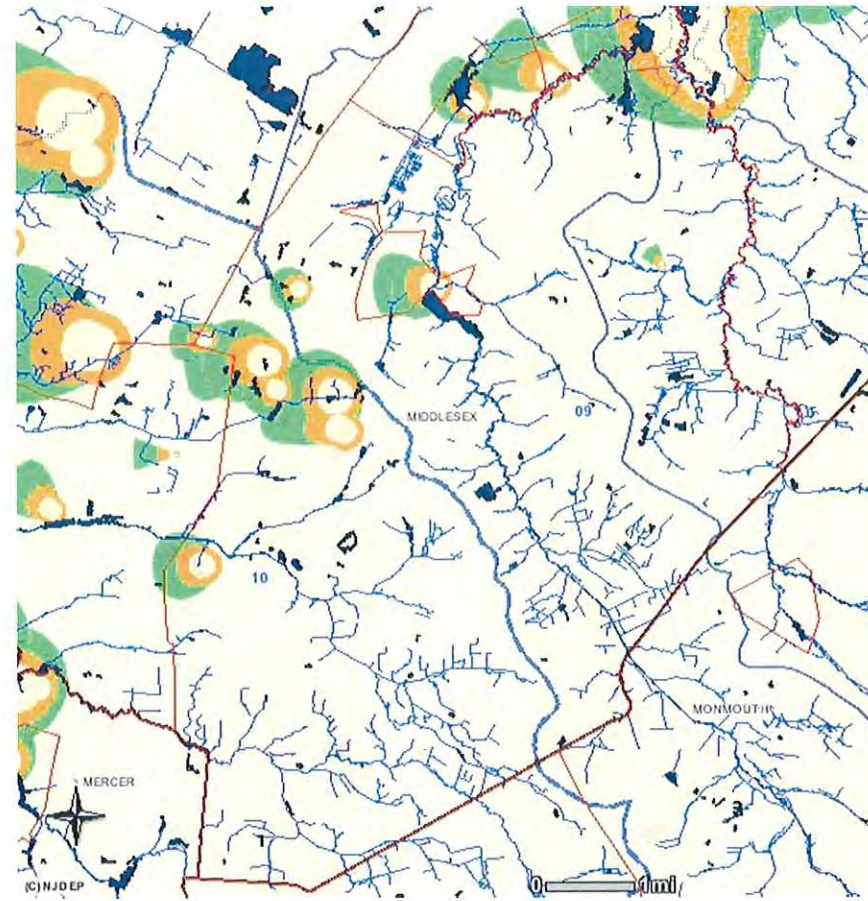
**Legend**

- ★ Known Contaminated Sites List
- Municipalities
- Counties
- Groundwater Contamination Areas (CEA)
- Groundwater Contamination Areas (CKE)
- Mid-Atlantic States
  - New Jersey
  - Other States

**2011 MASTER PLAN, LAND USE PLAN ELEMENT  
MONROE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY**

Map Showing Water Bodies, Watersheds & Wellhead Protection Areas in Monroe Twp.

Source: [http://njgin.state.nj.us/OIT\\_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP...](http://njgin.state.nj.us/OIT_GISTOOLS/mapstream?url=http://cedar20.sa.state.nj.us/gisimages/NJDEP...) 11/23/2008



**Legend**

-  Municipalities
-  Counties
-  Streams
-  Water Bodies
-  Well Head Protection Areas (Community)
-  Tier 1: 2-Year
-  Tier 2: 5-Year
-  Tier 3: 12-Year
-  Watersheds by Name (HUC11)
-  Watershed Management Areas
- Mid-Atlantic States**
-  New Jersey
-  Other States